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TECHNOLOGICAL STEWARDSHIP: ADVANCING ORGANIZATIONAL COMMUNICATION THROUGH IT GOVERNANCE

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Organizations need to develop innovative IT governance strategies to achieve more effective and sustainable communications. However, challenges continue to arise in optimizing the role of IT in the context of organizational communications. This research aims to investigate how the concept of technological stewardship can be key in advancing organizational communication through the implementation of sophisticated IT governance. This research uses a qualitative approach with descriptive methods. The results of this research confirm that Technological Stewardship and Information Technology (IT) governance play a central role in improving organizational communication. With good IT governance, organizations can create an efficient technology infrastructure, enabling rapid exchange of information and reducing technical barriers. The choice and implementation of the right communications platform through IT governance supports better collaboration between organizational members, while strict information security policies create a secure environment for sharing sensitive data. An integrated IT infrastructure also has a positive impact on the speed and accuracy of information delivery, preventing communication errors. Meanwhile, IT governance adaptability supports responsiveness to technological change, keeping organizations relevant in a rapidly changing business environment.

1. INTRODUCTION

Until 2018, the flow of globalization has flowed at an extraordinary speed, having a profound impact on various sectors, especially in the realm of technology. Increasingly sophisticated technological advances are not only directed at enriching human life, but also at simplifying various aspects of work and human interaction (Ritzer & Dean, 2019). In the dynamics of globalization, technological developments are one of the main drivers of change. Discovery and innovation continue to advance at a rapid pace, forming the foundation for revolutions in areas such as telecommunications, artificial intelligence and bioinformatics (Anton et al., 2001).

It cannot be denied that globalization has been a catalyst for dramatic changes in the technological landscape. The process of globalization facilitates the exchange of ideas and knowledge around the world, accelerating the pace of innovation (Herstad et al., 2008). Countries, companies, and individuals are becoming increasingly connected and interdependent, creating an environment where cross-border collaboration is a necessity. This is what has given birth to a dynamic global technology ecosystem, where companies and innovators from various parts of the world contribute to technological development (Mytelka, 2000).

In the modern business era, organizational communication has become an inevitable and very important aspect. The main goal of communication in a business context is to prevent misunderstandings between individuals and groups, so that the potential for errors can be minimized and problems can be avoided (Clampitt, 2016). Organizational communication can be defined as the exchange of various elements such as ideas, ideas, information, instructions, opinions, and so on. Sending messages can be done personally or non-personally, through various mediums such as symbols, emblems or signals, with the aim of achieving predetermined business targets (Te'Eni, 2001).

Organizational communication in business is crucial because it is closely related to achieving business goals itself. The success of a company not only depends on the products or services offered, but also on the company's ability to communicate effectively with its various stakeholders (Yates &

Orlikowski, 1992). An organization that has good communication can create a harmonious work environment, minimize the risk of conflict, and increase employee productivity (Cornelissen, 2020).

One of the reasons why business communication is so important is because of its role as a bridge between various levels in an organization. Messages delivered clearly and precisely can ensure that every individual in the organization has the same understanding regarding the company's vision, mission and goals (Wehmeier & Winkler, 2013). Therefore, effective communication can lead to consistency in the implementation of business strategies and decision making. Furthermore, business communication also plays a role in maintaining the company's image in the eyes of the public and building good relationships with customers, business partners and other related parties (Dooley & Garcia, 2015). Companies that can communicate transparently and responsively will be more appreciated by customers and other stakeholders.

The smoothness of organizational communication basically depends on how effectively and efficiently Information Technology (IT) Governance is implemented. IT Governance can be defined as a series of processes designed to ensure that the use of information technology runs optimally, in accordance with security standards, and can support the achievement of company goals (Van Grembergen, 2004). The importance of IT Governance lies in its function as a bridge between IT initiatives and the organization's business goals. In other words, this governance seeks to provide a structured and measurable framework for integrating IT strategy with business strategy. The processes in this governance include planning, implementation, monitoring and evaluation of information technology (Wu et al., 2015).

With good IT Governance, companies can ensure that investments in technology provide the desired results. This includes aligning technology with business needs, managing information security risks, and ensuring the availability and performance of IT systems (Alreemy dkk, 2016). More than that, IT Governance also helps create an environment where organizational communication can take place smoothly. It is important to remember that this governance does not only include technical aspects, but also involves policies, procedures and organizational structures. Through the implementation of a formal framework, companies can achieve transparency in technological information stewardship, minimize the risk of failure, and increase responsiveness to changes in the business environment (Luftman et al., 2017).

In order to advance organizational communication through effective IT governance, the role of Technological Stewardship plays a key role (Plotkin, 2020). Technological Stewardship can be understood as a form of leadership that can be carried out by practitioners at various levels of the organization. In this role, technology managers collaborate with communities of practice to encourage the adoption and optimal use of digital technologies in the context of communication, training and knowledge transfer (Lajoie et al., 2020).

A Technology Steward needs to deeply understand how to engage community members to identify opportunities and challenges that may arise. This includes the ability to embrace multiple perspectives and motivate active participation in brainstorming innovative solutions (Tarnai-Lokhorst, 2019). They are also expected to have the skills to select and configure Digital Information and Communication Technology (ICT) platforms that suit the needs of innovative practices within the organization. More than just technology support, the Technological Stewardship role involves the ability to openly evaluate and report the results of efforts to the community and organizational sponsors (Gow et al., 2020). In this context, evaluation is not only limited to technical aspects, but also includes its impact on communication practices and knowledge exchange within the organization.

Technological Stewardship is not simply about providing IT support, but rather a leadership role aimed at helping members of a community of practice to better understand and make informed choices in using ICT (Waidayanatha et al., 2015). This involves a proactive approach in facilitating collaboration, encouraging creativity, and building internal capacity so that an organization is able to leverage technology in a way that supports its vision and strategic goals (Perez-Lopez et al., 2004). Through effective Technological Stewardship, organizations can optimize the potential of technology to support effective communication and knowledge exchange, creating an innovative and adaptive environment in the face of continuously developing business dynamics.

2. METHOD

In this research, the author uses a qualitative approach to obtain detailed information regarding Technological Stewardship and Information Technology (IT) Governance. This approach is in keeping with the descriptive aims of the research, allowing the authors to explore the complex context and dynamics involved. Data collection involved interviews as a primary data collection method and direct observation at relevant agencies, as well as document collection as secondary data. The data analysis process uses data condensation techniques, presenting information, and drawing conclusions. This methodology is expected to provide an in-depth understanding of the role of Technological Stewardship in advancing organizational communication through IT Governance, contributing to the understanding of this concept and its potential in increasing the effectiveness of organizational communication in the era of continuously developing information technology.

3. RESULTS AND DISCUSSION

The role of Technological Stewardship in IT governance to promote organizational communication

The role of Technological Stewardship in IT governance is very important to advance organizational communication. Technological Stewardship encapsulates leadership responsibilities in managing and directing the use of information technology (IT) so that it is in line with organizational strategy and goals. In the context of organizational communications, this role has several dimensions that drive progress:

a. Encouraging the Adoption of Innovative Technology

In the role of Technological Stewards, his responsibilities include stimulating the adoption of innovative technologies in the context of organizational communications. This not only includes the implementation of existing technology, but also requires an in-depth understanding of the latest trends and developments in Information Technology (IT). Technological Stewards need to actively follow and analyze developments in the IT industry, including the latest discoveries and innovations, in order to identify opportunities to increase the effectiveness of organizational communications.

A deep understanding of the latest IT trends is key to determining Technological Stewards' success in creating a dynamic and efficient communications environment. They need to understand how new technology can be integrated with existing systems and align with the organization's communications needs. This involves the ability to apply innovative and relevant technology solutions in support of the organization's overall communications objectives. In addition, Technological Stewards also need to act as vision bearers, conveying the benefits and potential of innovative technology to organizational members. They must be able to design technology adoption strategies that provide significant added value to communication effectiveness, while mitigating challenges that may arise.

b. Ensure Conformity to Communication Needs

The Technological Stewards role demands a deep understanding of the unique needs of an organization's communications context. They must have comprehensive insight into the internal dynamics of the organization, including organizational structure, work culture, and the specific needs of various sections or departments. This in-depth understanding is a key foundation for Technological Stewards in designing and implementing Information Technology (IT) infrastructure that can effectively support a variety of communications needs.

In addition to understanding, Technological Stewards are also responsible for ensuring that the IT infrastructure adopted meets the characteristics and level of communication complexity required. This includes selecting and configuring systems, platforms, and software that suit an organization's specific needs. Technological Stewards must be able to identify IT solutions that can provide maximum support for internal and external information exchange, team collaboration, and other communication mechanisms that are essential for the smooth operation of the organization.

c. Managing Security Risks in Communications

The sustainability and success of organizational communication through Information Technology (IT) cannot be separated from information security issues which are the main focus of the

role of Technological Stewards. Their primary responsibility is to identify and manage security risks to ensure that communications through IT remain protected and sustainable. To achieve this, Technological Stewards need to have a deep understanding of the potential security threats that the organization may face, both internally and externally.

Security risk identification involves a thorough analysis of the IT infrastructure used in organizational communications. Technological Stewards must be able to identify weak points and potential vulnerabilities, while also understanding the consequences of these potential risks for operational continuity and communication success. Preventive and protective measures can then be implemented to reduce the impact of potential security threats.

Apart from identification, Technological Stewards also have a central role in managing security risks. This involves implementing strict information security policies, using strong encryption technologies, and regular monitoring of security activities. They must always be at the forefront of identifying and responding quickly to changes in the information security landscape, as well as ensuring that the systems and data involved in organizational communications remain safe and secure.

d. Skills and Capacity Development

The important role of Technological Stewards is not only limited to technical aspects, but also includes developing the skills and capacity of organizational members in adopting and using technology. They are responsible for designing and implementing relevant training programs to ensure that the organization's personnel have a deep understanding of the use of technology in the context of organizational communications. In this context, training is not only focused on basic understanding of technology, but also on implementing best practices in optimizing available IT tools and platforms.

The importance of developing these skills and capacities includes providing the necessary support to ensure personnel can utilize technology effectively in their daily work. Technological Stewards must be proactive in providing guidance and solutions to overcome obstacles that individuals or teams may face in adopting technology. This support not only involves technical aspects, but also provides the necessary context and understanding so that organizational members can see the added value of using technology in communications.

In addition to technical training, Technological Stewards also act as mentors, guiding organizational members in developing skills that can increase productivity and efficiency in communication. In doing so, they not only facilitate technical understanding, but also ensure that personnel have the necessary skills to adapt to ever-evolving technological changes. Through this role, Technological Stewards contribute directly to strengthening the organization's capacity to utilize technology to improve internal and external communications.

e. Performance Evaluation and Monitoring

The role of Technological Stewards includes the crucial responsibility of conducting continuous evaluation of the performance of technology applied in organizational communications. They have the task of continuously monitoring the effectiveness and efficiency of the Information Technology (IT) solutions that have been implemented, with a focus on how the technology impacts the communication process. This evaluation involves monitoring system performance, analyzing user responses, and assessing the extent to which the technology supports the achievement of the organization's communication goals.

Effective technology should not only create seamless communication but also be measurable quantitatively and qualitatively. In this evaluation role, Technological Stewards must have the skills to identify performance indicators, collect relevant data, and analyze the results. If discrepancies or areas of improvement are discovered, they are responsible for designing and implementing the necessary improvements to ensure that the technology supports organizational communications optimally.

Additionally, this ongoing evaluation also includes monitoring the latest trends and developments in technology that can be applied to improve organizational communications. Technological Stewards must keep their knowledge of the latest IT innovations and solutions up to date in order to provide relevant repair or upgrade recommendations. By carrying out careful and proactive evaluations, they not only maintain the continuity of communication through IT, but also direct the organization to continue to develop following the changing dynamics of technology.

Evaluation of the Impact of IT Governance on Communication Effectiveness

Information Technology (IT) Governance has a significant impact on the effectiveness of organizational communications. The following are some of the key impacts that can be identified:

a. Increased Operational Efficiency

Optimal Information Technology (IT) Governance has a crucial role in compiling and managing efficient technological infrastructure for an organization. With good IT governance, organizations can ensure that their technology infrastructure is well designed and optimized to support communications needs. Efficient infrastructure allows organizations to communicate more quickly and efficiently, reducing the risk of technical barriers that can hinder the exchange of information. By adapting technology well, organizations can ensure that the flow of information between organizational members becomes smoother, supports productivity, and speeds up decision making. Thus, efficient IT governance provides a solid foundation to support optimal communication within the organization, creating an environment where information can flow smoothly and effectively.

b. Communication Platform Optimization

Through the implementation of effective Information Technology (IT) governance, organizations have the ability to carefully select, implement and manage communications platforms that suit their specific needs. This process involves selecting software, applications, and collaboration tools designed to improve interaction and information exchange between members of an organization. With the ability to choose the right platform, organizations can improve the quality of internal and external communications, ensuring that the flow of information aligns with organizational goals and policies. Careful management of communications software and applications also enables adaptability to changing organizational needs and the latest technological developments, creating an environment where communications are more dynamic, effective and well integrated into daily operations.

c. Enhanced Information Security

Information Technology (IT) Governance plays a central role in establishing strict information security policies and practices for an organization. With a strong security system implemented through good IT governance, the risk of information leakage can be significantly minimized. This security policy covers measures to prevent, detect, and respond to potential threats to the integrity and confidentiality of an organization's data. By recognizing and managing security risks effectively, IT governance creates an environment where organizational members feel safer and more confident about sharing sensitive data. Success in implementing this security policy involves not only the technical infrastructure, but also the education and awareness of organizational members about good information security practices. Thus, deep IT governance in information security not only provides protection against potential threats, but also creates a comprehensive security culture within the organization.

d. Facilitate Collaboration Between Teams and Departments

A solid Information Technology (IT) infrastructure plays a crucial role in facilitating effective collaboration among teams and departments in an organization. With an integrated collaboration platform and digital communication tools, organizational members can work together synergistically without being limited by geographic boundaries. Good IT infrastructure creates an environment where the exchange of ideas and information can occur quickly and efficiently, supporting productivity and innovation. This better collaboration not only speeds up the decision-making process but also strengthens coordination between teams, increases organizational flexibility in responding to change, and stimulates innovative growth. Thus, investment in advanced IT infrastructure not only improves operational efficiency but also provides a strong foundation for improving the quality of collaboration and information exchange across the organization.

e. Fast and Accurate Delivery of Information

By implementing effective Information Technology (IT) governance, organizations can substantially increase the speed and accuracy in delivering information. A well-integrated IT system allows efficient flow of information from the source to the right recipient in less time. This not only speeds up the communication process but also prevents potential errors that may occur in conveying information. With careful IT governance, the risk of information being lost or scattered can be

minimized, creating an environment where each party can access the required data in a timely manner. This speed and accuracy not only supports operational efficiency, but also helps organizations make better and faster decisions, optimizing overall performance. Thus, effective IT governance is the key to achieving precise, fast and accurate information delivery in the organizational context .

f. Adaptation to Technological Changes

Adaptive Information Technology (IT) governance plays a key role in enabling organizations to be more responsive to dynamic technological changes. The ability to adapt quickly to new innovations allows organizations to adopt the latest technologies that can significantly improve communication effectiveness. By staying at the forefront of technological change, organizations can keep from being left behind in an ever-evolving business environment. Adaptive IT governance includes continuous monitoring of technology trends, evaluation of potential benefits, and implementation of solutions that suit the organization's needs. Thus, adaptability in IT governance is not just a response to change, but also a proactive strategy to increase organizational competitiveness through the use of the latest technology in the context of communication and collaboration.

g. Improving Decision Quality

Effective communication within an organization is highly dependent on fast and accurate access to necessary information. Good Information Technology (IT) governance plays a crucial role in providing infrastructure that enables organizational members to access data efficiently and in a timely manner. With a well-structured IT system, organizational members can easily retrieve relevant data, supporting better and faster decision-making processes. Seamless access to this information not only improves operational efficiency but also strengthens collaboration between teams and departments. By providing adequate tools to manage, store and access information, good IT governance creates a solid foundation to support effective communication and data-driven decision making within the organization.

4. CONCLUSION

This research highlights the crucial role of Technological Stewardship and Information Technology (IT) governance in improving organizational communication. Good IT governance has been proven to create efficient technology infrastructure, reduce technical barriers, and enable faster exchange of information across organizations. By selecting the right communication platform and implementing it through effective IT governance, collaboration between teams and departments is enhanced, creating an environment that supports the synergistic exchange of ideas and information. The importance of strict information security policies is also revealed in this research, where IT governance provides the foundation for creating a secure environment for organizational members to share sensitive data. An integrated IT infrastructure positively influences the speed and accuracy of information delivery, prevents communication errors, and empowers better and faster decision-making processes. Additionally, IT governance adaptability is proven to provide superior responsiveness to technological change, ensuring that organizations remain relevant and competitive in an ever-evolving business environment. Overall, this research provides a deep understanding of how Technological Stewardship and IT governance play a role in advancing organizational communications, forming a solid foundation for organizational success and competitiveness in the digital era.

REFERENCES

1. Alreemy, Z., Chang, V., Walters, R., & Wills, G. (2016). Critical success factors (CSFs) for information technology governance (ITG). *International Journal of Information Management*, 36(6), 907-916.
2. Anton, P. S., Silberglitt, R., & Schneider, J. (2001). *The global technology revolution: bio/nano/materials trends and their synergies with information technology by 2015*. Rand Corporation.
3. Clampitt, P. G. (2016). *Communicating for Managerial Effectiveness: Challenges| Strategies| Solutions*. Sage Publications.



4. Cornelissen, J. P. (2020). Corporate communication: A guide to theory and practice. *Corporate Communication*, 1-336.
5. Doorley, J., & Garcia, H. F. (2015). *Reputation management: The key to successful public relations and corporate communication*. Routledge.
6. Gow, G., Chowdhury, A., Ramjattan, J., & Ganpat, W. (2020). Fostering effective use of ICT in agricultural extension: participant responses to an inaugural technology stewardship training program in Trinidad. *The journal of agricultural education and extension*, 26(4), 335-350.
7. Herstad, S. J., Bloch, C., Ebersberger, B., & van de Velde, E. (2008). Open innovation and globalisation: Theory, evidence and implications. *Vision: EraNet*, 19(9), 1-96.
8. Lajoie, J., Roter, G., & Abbott, M. (2020, November). Cultivating Technological Stewardship to Change the Culture of Engineering. In *2020 IEEE International Symposium on Technology and Society (ISTAS)* (pp. 358-360). IEEE.
9. Luftman, J., Lyytinen, K., & Zvi, T. B. (2017). Enhancing the measurement of information technology (IT) business alignment and its influence on company performance. *Journal of Information Technology*, 32, 26-46.
10. Mytelka, L. K. (2000). Local systems of innovation in a globalized world economy. *Industry and innovation*, 7(1), 15-32.
11. Pérez López, S., Manuel Montes Peón, J., & José Vázquez Ordás, C. (2004). Managing knowledge: the link between culture and organizational learning. *Journal of knowledge management*, 8(6), 93-104.
12. Plotkin, D. (2020). *Data stewardship: An actionable guide to effective data management and data governance*. Academic press.
13. Ritzer, G., & Dean, P. (2019). *Globalization: the essentials*. John Wiley & Sons.
14. Tarnai-Lokhorst, K. V. (2019). Instilling engineering students with social responsibility: Technological stewardship. *Proceedings of the Canadian Engineering Education Association (CEEA)*.
15. Te'eni, D. (2001). A cognitive-affective model of organizational communication for designing IT. *MIS quarterly*, 251-312.
16. Van Grembergen, W. (Ed.). (2004). *Strategies for information technology governance*. Igi Global.
17. Waidyanatha, N., Gow, G., Jayathilake, C., Barlott, T., Hambly, H., & Anwar, M. (2015). Technology Stewarding method for Knowledge Mobilization in Agriculture Communities of Practice. *Communications Policy Research South (CPRsouth 2015)*, Innovation Center for Big Data and Digital Convergence, Yuan Ze University, Taiwan.
18. Wehmeier, S., & Winkler, P. (2013). Expanding the bridge, minimizing the gaps: Public relations, organizational communication, and the idea that communication constitutes organization. *Management Communication Quarterly*, 27(2), 280-290.
19. Wu, S. P. J., Straub, D. W., & Liang, T. P. (2015). How information technology governance mechanisms and strategic alignment influence organizational performance. *MIS quarterly*, 39(2), 497-518.
20. Yates, J., & Orlikowski, W. J. (1992). Genres of organizational communication: A structural approach to studying communication and media. *Academy of management review*, 17(2), 299-326.

DIGITAL LEADERSHIP: DESIGNING A COMMUNICATIONS-CENTERED IT GOVERNANCE FRAMEWORK FOR ORGANIZATIONS

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Abstract. Organizations need to reinvent strategies to face rapid changes in the digital era. A key challenge for companies is how they can take advantage of the opportunities emerging from this digital disruption by accelerating the company's digital transformation, which should be led by digital leadership capabilities. This research aims to analyze and design an IT governance framework that focuses on communication as a critical element in supporting effective digital leadership. This research uses a qualitative approach with descriptive methods. The research results highlight the importance of digital leadership and the integration of communication-centered IT governance in facing the challenges of digital transformation. Research shows that digital leaders need to articulate a vision focused on leveraging technology to improve the effectiveness and efficiency of organizational communications. Forming cross-departmental teams or committees is key to integrating efforts between IT and communications. In addition, IT policy designs that cover communication aspects need to pay attention to security standards and data governance, in accordance with the organization's communication values. Policy dissemination and regular training are essential to ensure the necessary understanding and skills across the organization. Regular evaluation of the implementation of the IT governance framework shows that adaptability and responsiveness to changes in the organization and the external environment are the keys to long-term success.

Keywords.

Digital Leadership, IT Governance, Organizational Communication, Digital Transformation.

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INTRODUCTION

Digital transformation has a very real impact on organizations in the digital era. Driven by the availability of data and digital technology, companies are now actively innovating in all aspects, including business processes, business models, products and services. This innovation is further accelerated by continuous developments in the field of Information and Communication Technology (ICT) (Hamelink & Hamelink, 1997). With the decline in the cost of communications tools, the widespread use of the internet, and the growth of options for data handling, new ways to collaborate, increase efficiency, store and transmit data more effectively are emerging. The technologies used no longer stand alone, but rather contribute to a connected information systems landscape, opening up new opportunities for better and more integrated digital transformation (Al Fuqaha et al., 2015).

These changes create an environment where organizations can dynamically develop innovation and respond to market changes more quickly. As a result, businesses can optimize their operations, provide better service to customers, and create competitive advantages through intelligent use of technology (Liao et al., 2009). Digital transformation is not just about adopting new technologies, but also about fundamentally changing the way we think and operate, creating a strong foundation for sustainable growth in an ever-evolving digital era (Gong & Ribiere, 2021).

In the dynamics of leadership as a process of social influence, the complexity increases and demands an interdisciplinary perspective. The digital era has changed the entire landscape of the leadership phenomenon, forcing us to view it through a

new lens that integrates multiple disciplines (Sheninger, 2019). Today, leadership studies can easily be conducted in virtual contexts, or in non-virtual contexts that still utilize digital technologies such as machine learning and topic modeling. Additionally, computing and computational modeling are becoming invaluable tools for analyzing and understanding complex aspects of leadership (Kutz, 2013).

Digital leadership broadens the scope of potential by providing new possibilities for informal leadership expression, especially through the media. In this context, the ability to leverage digital technologies, such as social media platforms or online collaboration tools, opens the door to a more dynamic and connected leadership style (Li et al., 2016). Leadership is no longer limited to influence in traditional physical spaces, but is evolving in a virtual world that leverages digital innovation to achieve greater social impact. Thus, digital leadership not only reflects the natural evolution of leadership, but also creates new space for the exploration and development of leadership concepts in an ever-evolving digital era (Uzunoglu & Kip, 2014).

According to Upper Echelon theory, the results or output of an organization are greatly influenced by managerial leadership decisions which are based on the interpretation and cognition of business people (Hambrick, 2007). Therefore, leadership becomes a key element in managing resources to maintain business sustainability in the future. In facing the disruptive challenges of digital transformation, companies are expected to develop effective digital leadership capabilities. Digital leadership capability is defined as a combination of leadership skills, such as visionary leadership and transformational leadership, with digital attitude capabilities that include digital knowledge and experience (Magesa & Jonathan, 2022).

In the context of information technology (IT) governance, digital leadership plays a central role in ensuring that IT strategy and implementation are aligned with the company's digital transformation goals (McCarthy et al., 2022). Digital leadership is not only related to the human side, but also to the effective management and application of information technology. Strong digital leadership requires good IT governance, which includes policies, procedures and organizational structures that support sound decision making regarding technology (Kiron et al., 2016). Good IT governance provides a foundation for transparency, accountability and security in the management of a company's technology assets. This also includes determining strategic direction for technology use, managing technology risks, and monitoring and measuring technology performance (Damianides, 2005).

By integrating digital leadership and IT governance, organizations can achieve a more holistic digital transformation. Digital leaders who understand and are able to navigate the technological aspects can ensure that investments in IT align with the organization's vision and transformation goals (Kohnke, 2017). Additionally, effective IT governance can help manage information security risks and ensure compliance with regulations related to the use of technology. Therefore, integration between proactive digital leadership and good IT governance is a crucial step to ensure the company's success in facing the dynamics of digital transformation (Calder, 2008).

One form of Information Technology (IT) governance that is expected to support digital leadership in organizations is IT governance that is centered on communication. As discussed previously, digital leadership requires understanding and integrating leadership skills with digital attitude capabilities, including digital knowledge and experience. In this context, IT governance that focuses on communication is crucial

because it allows for effective interaction between leaders and members of the organization (Weill & Ross, 2004).

Through a good communication approach, leaders can clearly communicate the digital transformation vision and strategy to team members (Kazim, 2019). In the previous description, it has been emphasized that digital leadership includes the ability to manage volatility, uncertainty, complexity and ambiguity (VUCA) in digital transformation. Effective communication is key to facilitating shared understanding and minimizing ambiguity amidst change. Communication-centric IT governance also accommodates collaboration through digital technology, ensuring that information and knowledge is shared optimally across the organization. With the integration of digital leadership, communication-oriented IT governance, and sustainable digital transformation, companies can achieve an optimal balance between innovation, efficiency, and resilience in the ever-evolving digital era (Arias et al., 1997).

METHOD

This research is qualitative research with a descriptive analysis approach. The aim of this study is to analyze the role of digital leadership in designing Information Technology (IT) governance that focuses on communication within organizations. Secondary data is used as the main data source for analysis. The method used is a literature review with an effort to identify the concept of digital leadership, which will be used to analyze the ability to design communication-oriented IT governance in the organizational environment. The data collection process was carried out using the Google search engine, and keywords such as digital leadership, digital transformation, digital era, and technology were used to search on the internet. Only websites that were relevant and provided information about the characteristics of digital leaders were taken for data analysis. Information from various sources is then synthesized and analyzed comprehensively to explain this research topic. This approach is expected to provide a deep understanding of the role of digital leadership in the context of designing IT governance that focuses on communication in organizations.

RESULTS AND DISCUSSION

Integrating IT Governance with Communication

Integrating Information Technology Governance (IT governance) with Organizational Communication is an important step in ensuring that information technology management is in line with the organization's strategic objectives and communication policies. Below are some steps that can be taken to achieve such integration. First, it is important to ensure that the organization's policies and strategies regarding information and communication technology are clearly identified. A deep understanding of the organization's vision and mission is key in determining how technology and communication can optimally support the achievement of these goals. Well-structured policies and focused strategies form the basis for the integration of information and communications technology in line with the organization's desired direction. With a clear understanding of the vision and mission, organizations can design policies and strategies that ensure the use of information and communication technology is in accordance with the values and principles to be implemented, creating a harmonious synergy between organizational goals and the use of information technology.

Second, it is important to form a joint committee or team consisting of representatives from the IT team and the organizational communications team as a strategic step in integrating information technology policies and strategies with organizational communications. This structure is expected to have clear authority and responsibility to oversee the implementation of information technology policies and strategies that support organizational communications. By involving representation from both teams, this committee or team can ensure effective coordination between technology and communication aspects. By having firm responsibilities, they can ensure that information technology use not only complies with IT security and sustainability standards, but also supports effective organizational communications efforts. This step aims to create synergy between the two teams, optimizing the use of information technology to support and strengthen organizational communication as a whole .

Third, an important step in integrating Information Technology Governance (IT Governance) with Organizational Communication is to design an information technology policy that explicitly covers aspects of organizational communication. This policy must be carefully designed to ensure that it not only meets technology security and efficiency standards, but also specifically supports the organization's desired communication values and norms. By highlighting the communication aspect, the policy can guide the use of information technology in line with the organization's communication strategy, including information exchange, team collaboration, and improving internal and external communication. This step aims to create synergy between information technology management and the organization's communication needs, ensuring that the use of this technology optimally supports the goals and values that the organization wishes to achieve in the communication context.

Fourth, the next step in integrating Information Technology Governance (IT Governance) with Organizational Communication is to select and implement an information system that specifically supports the organization's communication needs. These systems must be designed to enable effective collaboration between organizational members, facilitate rapid exchange of information, and optimally support internal and external communication processes. Thus, the information system selected should take into account features such as collaboration platforms, real-time information exchange tools, and the ability to support effective communication among various units and levels within the organization. Implementing these systems not only provides the necessary technical support but also ensures that the technological tools used directly support the organization's overall communications strategy and goals. Good integration between information technology policies and information system choices will provide a solid foundation for improving the efficiency and effectiveness of communications throughout the organization.

Fifth, integration of aspects of information security and risk management in the two fields, Information Technology Governance (IT Governance) and Organizational Communication, is a strategic step to ensure data security and the smooth flow of information. In this context, information security measures must be carefully designed, referring to applicable security standards, to protect sensitive data from potential threats. These two areas must support each other in determining and implementing adequate security policies, as well as managing risks that may arise from the use of information technology and communication processes. Information security must not only involve protection against unauthorized access, but also involve

efforts to maintain the integrity, confidentiality, and availability of information. Thus, the integration of information security and risk management aspects in these two areas will create a safe and reliable environment, minimize potential risks, and ensure the smooth flow of information that is critical for the operational continuity and effectiveness of organizational communications.

And finally sixth, socializing policies and practices related to Information Technology Governance (IT Governance) and Organizational Communication to all members of the organization is a key step in ensuring consistent understanding and implementation. This process involves clearly conveying the organization's IT governance policies and communication strategies to all members of the organization. In addition, regular training needs to be carried out to continue to improve understanding and skills related to the use of information technology in the context of organizational communication. This training should cover aspects of information security, data governance, as well as best practices in using information technology tools and platforms that support effective communication. By holding regular outreach and training activities, organizations can ensure that team members have the knowledge and skills necessary to integrate information technology in daily communication activities, support operational efficiency, and achieve organizational communication goals more effectively.

The Role of Digital Leadership in Designing a Communication-Centered IT Governance Framework

Designing an IT governance framework centered on organizational communication through digital leadership involves a number of strategic steps. Below the author explains the guidelines for designing the framework:

a. Understand the Organization's Communication Needs

A deep understanding of an organization's communication needs is an essential first step in designing an effective communication strategy. Identifying an organization's communications goals, such as building brand awareness, increasing employee engagement, or supporting a specific initiative, helps shape the direction and focus of communications. Next, it is important to identify the stakeholders involved, both internal (such as employees, management, and the board of directors) and external (such as customers, business partners, and the media). A deep understanding of the needs, desires and expectations of various stakeholders forms the basis of a more targeted and relevant communications strategy. Additionally, identifying the type of information that needs to be conveyed, whether it is strategic information, regular updates, or responses to specific events, allows organizations to adjust communication methods and channels accordingly. Thus, a holistic understanding of goals, stakeholders, and types of information is key to designing successful communication strategies in an organizational context.

b. Form a Special Team or Committee

To ensure effective integration between IT and communications departments in designing a communications-focused IT governance framework, an important step to take is to form a dedicated team or committee that includes representatives from various departments. This team will be the bridge connecting these two strategic areas and play a key role in aligning their efforts. By involving representatives from the IT department, who bring a deep understanding of technology infrastructure, information security, and systems, along with representatives from the communications department who have a detailed understanding of the organization's communications

needs, the team can design a holistic solution. Apart from designing, this team is also responsible for implementing the resulting initiatives and continuing to monitor the IT governance framework that has been created. With inclusive team collaboration and a focus on shared goals, organizations can ensure that IT governance implementation not only meets technical needs, but also supports the overall communications strategy.

c. Articulate a Digital Leadership Vision:

Digital leaders play a key role in articulating a vision regarding the role of information technology in supporting organizational communications. In this effort, they must be able to clearly convey a vision that reflects the values and goals of the organization. This vision not only involves the use of technology as a tool, but also emphasizes the importance of technology to increase effectiveness and efficiency in communication. Digital leaders need to envision how technology can be a key driver in supporting openness, collaboration and engagement across the organization. By connecting their vision to the organization's core values and strategic goals, digital leaders create a clear direction for the use of information technology, providing a foundation for designing innovative and targeted communications strategies towards organizational success in the digital era.

d. Technology and Communication Integration

It is important to ensure that the technology adopted in the organization is in line with the established communication strategy. This involves carefully identifying technology tools and platforms that can support collaboration, information exchange, and communication internally and externally. The choice of technology must take into account the unique needs of the organization, including the characteristics of stakeholders and the type of information to be delivered. For example, implementing an internal collaboration platform can speed up the exchange of ideas and information between teams, while the use of social media or external platforms can strengthen relationships with customers or business partners. By ensuring alignment between technology and communications strategy, organizations can maximize technology's potential to increase engagement, efficiency and communications effectiveness, creating an ecosystem that supports long-term growth and sustainability.

e. Develop Integrated Policies

Designing IT policies that cover organizational communication aspects requires a holistic approach to ensure alignment between technology and communication goals. This policy should detail strict security standards, ensuring the protection of sensitive organizational data and information. In addition, efficient and planned data governance also needs to be included in the policy to ensure the integrity and availability of information. Guidelines for the use of technology in a communications context, such as the use of collaboration platforms or social media, need to be explained in detail to minimize risks and increase effectiveness. It is also important that these policies reflect the communication values and norms desired by the organization, so that the use of technology supports a healthy communication culture and is consistent with the organization's identity. By designing a comprehensive and integrated IT policy, organizations can create a strong foundation for managing information technology effectively to support efficient and targeted communications.

f. Facilitate Training and Skills Improvement

Socializing policies and practices related to IT governance and organizational communication to all members of the organization is an important step in ensuring consistent implementation. Through this socialization, every member of the

organization can understand in depth the policies that have been established to manage information technology and how it interacts with communication strategies. In addition, holding regular training is the key to increasing understanding and skills related to the use of information technology in a communication context. This training may involve aspects such as information security, utilization of collaboration tools, or use of specific communication platforms. By involving all members of the organization through outreach and training, organizations can build a culture that supports the effective use of information technology, optimizes internal and external communications, and increases collaboration at all levels.

g. Encourage a Culture of Openness and Engagement:

Digital leaders have a crucial role in encouraging and shaping a progressive organizational culture through the use of technology. They are expected to be a catalyst in creating an atmosphere that supports openness and engagement throughout the organization. One effective way that can be taken is by facilitating a communication platform that allows employees to actively participate. Digital leaders can introduce online collaboration tools, discussion forums, or cloud-based platforms that make it easier to exchange ideas, provide real-time feedback, and improve overall team collaboration. In this way, not only does communication become more open and accessible, but it also encourages the creation of a culture where every member of the organization feels valued and empowered to contribute proactively. Through facilitating innovative communications platforms, digital leaders can help shape a dynamic, responsive, and growth-focused work environment, creating a strong foundation for digital transformation and long-term organizational success.

h. Continuous Evaluation and Adjustment

Regular evaluation of the implementation of the IT governance framework is a critical need for organizational continuity and resilience in the digital era. Through this evaluation, organizations can pinpoint areas that require further attention, whether they relate to policies, procedures, or technology infrastructure. Digital leaders and IT teams can use the results of this evaluation to consider necessary policy changes or technology adjustments that can improve the effectiveness of IT governance. It is also important to ensure that the IT governance framework continues to be relevant to the changing dynamics within the organization and the external environment. By involving relevant stakeholders and responding quickly to developments, organizations can keep IT governance adaptive and able to support ongoing transformation amidst constant change.

CONCLUSION

Implementing digital leadership and integrating IT governance that focuses on communication is a crucial foundation for organizations that want to succeed and adapt in the digital era. Digital leaders are responsible for articulating a clear vision regarding the role of information technology in supporting organizational communications, while fostering a culture that supports openness and engagement through technology. Forming a special team or committee involving representatives from various departments is a strategic step to align efforts between IT and communications. The design of an IT policy that covers aspects of organizational communication must pay attention to security standards, data governance, and guidelines for the use of technology so that it is in accordance with the desired

communication values and norms. Policy socialization and regular training provide the necessary understanding and skills to all members of the organization. Digital leaders also need to conduct regular evaluations of the implementation of the IT governance framework, identify areas for improvement, and ensure its relevance to changes in the organization and the external environment. With these steps, organizations can build a solid foundation to harness the potential of digital transformation. The integration of technology with organizational communications not only improves operational efficiency, but also creates an environment that is innovative and responsive to change, enabling organizations to remain competitive and successful in the ever-evolving digital era.

REFERENCES

- Al-Fuqaha, A., Guizani, M., Mohammadi, M., Aledhari, M., & Ayyash, M. (2015). Internet of things: A survey on enabling technologies, protocols, and applications. *IEEE communications surveys & tutorials*, 17(4), 2347-2376.
- Arias, E., Eden, H., & Fisher, G. (1997, August). Enhancing communication, facilitating shared understanding, and creating better artifacts by integrating physical and computational media for design. In *Proceedings of the 2nd conference on Designing interactive systems: processes, practices, methods, and techniques* (pp. 1-12).
- Calder, A. (2008). *IT governance: A manager's guide to data security and ISO 27001/ISO 27002*. Kogan Page Publishers.
- Damianides, M. (2005). Sarbanes-Oxley and IT governance: New guidance on IT control and compliance. *Information Systems Management*, 22(1), 77-85.
- Gong, C., & Ribiere, V. (2021). Developing a unified definition of digital transformation. *Technovation*, 102, 102217.
- Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of management review*, 32(2), 334-343.
- Hamelink, C. J., & Hamelink, C. J. (1997). *New information and communication technologies, social development and cultural change* (Vol. 86). Geneva: United Nations Research Institute for Social Development.
- Kazim, F. A. (2019). Digital transformation and leadership style: a multiple case study. *The ISM journal of international business*, 3(1), 24-33.
- Kiron, D., Kane, G. C., Palmer, D., Phillips, A. N., & Buckley, N. (2016). Aligning the organization for its digital future. *MIT sloan management review*, 58(1).
- Kohnke, O. (2017). It's not just about technology: The people side of digitization. *Shaping the digital enterprise: Trends and use cases in digital innovation and transformation*, 69-91.
- Kutz, J. N. (2013). *Data-driven modeling & scientific computation: methods for complex systems & big data*. OUP Oxford.
- Li, W., Liu, K., Belitski, M., Ghobadian, A., & O'Regan, N. (2016). e-Leadership through strategic alignment: An empirical study of small-and medium-sized enterprises in the digital age. *Journal of Information Technology*, 31, 185-206.
- Liao, J., Kickul, J. R., & Ma, H. (2009). Organizational dynamic capability and innovation: An empirical examination of internet firms. *Journal of small business management*, 47(3), 263-286.

- Magesa, M. M., & Jonathan, J. (2022). Conceptualizing digital leadership characteristics for successful digital transformation: the case of Tanzania. *Information Technology for Development*, 28(4), 777-796.
- McCarthy, P., Sammon, D., & Alhassan, I. (2022). Digital transformation leadership characteristics: A literature analysis. *Journal of Decision Systems*, 32(1), 79-109.
- Sheninger, E. (2019). *Digital leadership: Changing paradigms for changing times*. Corwin Press.
- Uzunoglu, E., & Kip, S. M. (2014). Brand communication through digital influencers: Leveraging blogger engagement. *International journal of information management*, 34(5), 592-602.
- Weill, P., & Ross, J. W. (2004). *IT governance: How top performers manage IT decision rights for superior results*. Harvard Business Press.

THE IMPACT OF ARTIFICIAL INTELLIGENCE TECHNOLOGY ON THE FUTURE OF COMMUNICATION

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Abstract

Artificial intelligence has become an integral component in the development of information and communications technology, influencing human interactions on a significant scale. This research aims to investigate the impact of the use of artificial intelligence (AI) on various aspects of communication in various contexts. This research uses a qualitative approach with descriptive methods. The research results show that the application of artificial intelligence in communications, such as virtual assistants, chatbots, and AI translation tools, has brought about significant changes in the ease and effectiveness of human interaction. In a business context, the use of artificial intelligence to personalize communications has increased customer engagement, satisfaction and reduced churn rates. Apart from that, AI has also opened up more inclusive communication access for people with disabilities through text-to-speech and speak-to-text technology. Even though the results are positive, it is important to remember that challenges related to ethics, privacy and data security are still major concerns in implementing this technology. With wise understanding, the development of artificial intelligence in the field of communications can provide sustainable benefits for society.

Artificial Intelligence, Digital Communication, Virtual Assistant, Chatbots, Personalization of Communication	Information Correspondance Harjono Padmono Putro Universitas Krisnadwipayana, Jakarta, Indonesia harjonopputro@unkris.ac.id
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INTRODUCTION

In the sophisticated digital era, communication has become a crucial component that is more important than before (Prasanti, 2016). Advances in technology and the internet have changed dramatically the way we interact and communicate (Ibrahim & Akhmad, 2014). In the midst of this development, communication has not only become a tool for exchanging information, but also the foundation for success in various aspects of life. People now have extraordinary opportunities to connect with other people, share information, build relationships, collaborate, and occupy a leading role in social dynamics, all thanks to developments in technology and the internet (Fahyuni (2017).

Therefore, in this context, the ability to communicate effectively becomes a highly valued skill. Understanding how to utilize various digital platforms and

communication technologies is the key to gaining maximum benefit from the ever-evolving digital transformation (Avita et al, 2023). Individuals and communities who are able to optimize their communications in the digital environment will be able to take full advantage of the opportunities on offer, while remaining relevant and connected in a world that continues to change rapidly (Lubis & Nasution, 2023).

Communication has become an inseparable aspect of everyday life, and this is due to easy access via the internet. The Internet has accelerated and simplified the way people connect with each other, not limited by geographic boundaries (Effendi, 2009). Instant messaging, video calls, and social media are becoming key tools that enable real-time communication, allowing people to stay connected wherever they are (Alimin & Islami, 2022). Daily interactions with friends, family and colleagues can occur easily, forming a stronger communication network and enabling the exchange of information quickly and efficiently (Riwayadi, 2013).

This convenience also opens the door to cross-border collaboration and the global exchange of ideas. With the internet, people can engage in discussions, joint projects and cultural exchange without having to physically meet face to face (Hartatik et al, 2023). Therefore, the existence of the internet not only facilitates interpersonal communication, but also expands the scope of collaboration and information exchange at the global level, creating a more connected and virtual world (Armus, 2018).

Communication not only functions as a means to stay connected in the digital era, but is also the main key to building and maintaining deep relationships (Ismandianto, 2021). Although technology has simplified the process of connecting with others, it is important to highlight that communicating effectively and meaningfully remains a crucial aspect (Rukmana et al, 2023). In this context, artificial intelligence and intelligent digital platforms can become important allies. With increasingly sophisticated algorithms, chat applications, and virtual assistants, we can optimize our communication experiences, simplify schedule coordination, and ensure our messages are delivered clearly (Sulartapi, 2023).

However, it is also important to remember that the human aspect of communication must not be forgotten. Emotional involvement, empathy, and a deep understanding of the nuances in human interactions remain at the core of quality relationships (Sutikno, 2007). Therefore, while the digital era provides the means to connect instantly, values such as honesty, respect and caring remain irreplaceable foundations for building meaningful relationships. By aligning artificial intelligence with these aspects, we can create digital spaces that are not only efficient, but also full of meaning, supporting the growth and sustainability of human relationships (Savitri, 2019).

Effective communication is the main foundation for achieving common goals, both in the framework of working together on projects with colleagues and collaborating with other businesses (Fathy, 2019). In a work or business environment, the ability to convey ideas, listen actively, and establish good coordination through communication is the key to achieving the desired results. At the team level, clear and open communication helps overcome differences in views, minimizes uncertainty, and ensures that each member can contribute optimally to common goals (Mangundjaya, 2022).

Additionally, when collaborating with other businesses, effective communication plays an important role in building mutually beneficial partnerships. Smooth exchange of information and good coordination between the parties involved can optimize the collaboration process, minimize obstacles and increase efficiency. Therefore, effective communication is not only a tool for conveying information, but also a means of building trust, strengthening cooperation, and directing joint energy towards achieving common goals.

METHOD

This research uses a descriptive qualitative approach. Qualitative research aims to reveal phenomena surrounding the experiences of research subjects, such as behavior, perceptions, motivations and actions (Sugiyono, 2011). In this approach, descriptive data focuses more on presenting information verbally and explanatorily without using numerical data, coefficients, or relationships between variables. The main data source comes from observations of human behavior, with literature reviews as a secondary data source (Nazir, 1988). Data collection methods include observation, interviews, documentation and literature study. The data analysis process involves categorizing field data sources, developing findings from each category, establishing categorization of findings, and discussing findings using a relevant theoretical framework. This analysis technique allows presenting findings in an in-depth and contextual way, explaining the complexity of the observed phenomena.

RESULTS AND DISCUSSION

Artificial Intelligence (AI) has revolutionized the way we communicate. With advances in Natural Language Processing and Machine Learning, AI has made communication easier, faster and more efficient. Some of the ways AI is revolutionizing communication are as follows:

Virtual Assistant

Virtual assistants such as Siri, Alexa, and Google Assistant have changed the way people interact with their devices, providing incredible convenience in

communication and technology use. These developments create a more intuitive and responsive environment, allowing users to control their devices with voice commands without having to touch the screen or type (Jones, 2022).

The main advantage of virtual assistants is the convenience and practicality they offer. By using voice commands, users can easily access various functions, from searching for information, setting schedules, to playing music, without having to move from their place or hold the device. This not only increases efficiency, but also allows users to multitask without being distracted by other physical activities (Jones, 2022).

Additionally, virtual assistants also create personalized experiences. They can learn a user's habits, preferences, and unique needs, enabling the presentation of information or services that are more appropriate to the individual's context. This adds a dimension of intimacy and engagement to human-machine interactions, creating a more dynamic relationship between users and technology.

However, challenges related to privacy and security have also emerged as the popularity of virtual assistants increases. With the ability to listen to and record user conversations, care needs to be taken in managing personal data. Therefore, while pursuing convenience and innovation, developers and users need to continue to consider and address issues related to privacy and security to ensure optimal and safe utilization of virtual assistants in communicating with devices.

Chatbots

Chatbots, as artificial intelligence (AI)-powered tools, have become a vital component in the digital transformation of businesses with their ability to communicate in real-time with customers. They present innovative solutions in providing support, information and assistance to customers non-stop, 24/7. The main advantage of chatbots lies in automating routine tasks, allowing businesses to increase operational efficiency and focus resources on aspects that require human intervention (Paliwal et al., 2020).

In the context of customer experience, chatbots have accelerated and simplified the interaction process. Customers can quickly get answers to their questions, resolve problems, or obtain product information without having to wait long or experience operational time constraints. This creates a high level of responsiveness, which is key in building positive relationships with customers.

Apart from that, chatbots also have the potential to reduce operational costs and increase productivity. By being able to handle a large number of requests non-stop, they provide consistent and reliable support. Businesses can automate repetitive customer service tasks, freeing up human labor to focus on tasks that are more complex and require emotional intelligence.

However, challenges in implementing chatbots include the need to ensure that they can provide relevant and contextual responses. Developers need to pay attention to the design and setup of chatbots to suit business needs and audience characteristics. By utilizing chatbots effectively, businesses can strengthen customer relationships, increase satisfaction, and benefit from a combination of technological innovation and user-oriented service.

Translation

Translation tools powered by artificial intelligence (AI) have become an important support in facilitating communication between individuals who speak different languages. Through the application of real-time translation technology, people can bridge language gaps, opening the door to communicating across borders without significant linguistic barriers. The ability to interpret conversations instantly expands the scope of social and professional interactions, making the world more connected and potentially reducing inequalities in access to information (Kessler, 2018).

Real-time translation powered by AI not only provides practical benefits in communication, but also represents a positive impact in strengthening global cooperation. Businesses, organizations and individuals can collaborate without being limited by language, creating a more inclusive working and networking environment. International projects, cultural exchanges and collaborative initiatives can develop more efficiently and effectively, resulting in more diverse and profound innovation.

However, it should be noted that AI translation tools still have limitations, especially in capturing language nuances and complex cultural contexts. Emotional and cultural understanding is often difficult to transmit through translation algorithms. Therefore, while utilizing this technology, it is important for users to still understand the context and communicate consciously to avoid misunderstandings or distortion of meaning.

In the journey towards globalization, AI translation tools are making significant contributions in creating more inclusive communication networks. While not yet perfect, the continued development of this technology marks an important step towards a vision of a more unified and co-existent world, where language differences are no longer a barrier to sharing knowledge, ideas and experiences.

Personalized Communication

Artificial Intelligence (AI) has brought a revolution in the way businesses communicate with customers. With its ability to analyze a person's communication style, preferences, and behavior, AI opens the door to more effective communication personalization. Implementing this technology allows businesses to better

understand customer needs and expectations, creating more immersive and relevant experiences (Sima dkk, 2020).

Personalizing communications is key to increasing customer engagement. AI can automatically craft messages and content to suit individual preferences, increasing the likelihood of a positive response. For example, an AI recommendation system can provide product or service suggestions that match your purchase history or previous activity, creating a customized shopping experience.

More than just increasing engagement, personalizing communications can also contribute to increased customer satisfaction. When customers feel individually cared for and understood, they are more likely to experience added value in their relationship with the business. Customizing messaging, special offers, or relevant information can make customers feel valued, increase trust, and create stronger bonds.

Additionally, the use of AI in personalizing communications can also help reduce churn rates. By understanding the factors that drive customers to switch, businesses can take preventative action proactively. Presenting more tailored offers, providing solutions to problems that may arise, or providing experiences that meet customer expectations can help maintain loyalty.

However, in implementing personalized communication with AI, it is important to pay attention to privacy policies and ethics of data use. Ensuring that customers feel comfortable and safe in sharing their personal information is key to the long-term success of a personalization strategy driven by artificial intelligence. By combining AI technology with an ethical approach, businesses can create unique, personalized and sustainable customer experiences.

Accessibility Improvements

Artificial Intelligence (AI) has opened up new opportunities to facilitate communication for people with disabilities, providing wider and more inclusive access to information and social interactions. Through text-to-speech technology, blind people can convert written text into sound, helping them access various online materials, documents or messages without relying on their visual impairment. In contrast, speak-to-text technology allows hearing people to convert spoken speech into text, giving them a means to communicate with others more efficiently and effectively (Kazimzade

These AI-based tools also have a positive impact in supporting inclusivity in the workplace. For people with disabilities who may face challenges in verbal interactions or writing, this technology allows them to participate more actively in the exchange of ideas, meetings, or collaborative projects. This helps create a friendlier work environment for all individuals, promotes diversity, and gives every employee an equal opportunity to contribute.

Apart from that, developments in AI technology have also created mobile applications and software that can help people with disabilities on a daily basis. Voice guidance apps, for example, can help blind people navigate their environment, provide location information, and support their mobility. Meanwhile, voice transcription applications can convert spoken conversations into text in real-time, providing a solution for hearing people to follow talks or presentations.

While these advances have positive impacts, it is important to be aware of challenges such as translation inaccuracies or situations where AI tools may not completely replace human interactions. It is important to continue developing this technology with a focus on responsiveness to individual needs and long-term sustainability of use. By continuing to explore the potential of AI in supporting people with disabilities, we can create a more inclusive and equal society for all.

CONCLUSION

Artificial intelligence (AI) has changed the landscape of human communication and interaction. Virtual assistants, chatbots and AI translation tools make a significant contribution to making communication easier, both in personal and business contexts. The application of AI in communications not only increases efficiency, but also enables better personalization, especially in understanding and responding to customer preferences. AI's ability to analyze individual communication styles and behavior opens up deeper personalization opportunities, leading to better customer experiences. In addition, AI-powered tools also open up access to more inclusive communication for people with disabilities, helping them overcome barriers and actively participate in various activities. Although the success of AI in improving the quality of communication is very significant, it still requires attention to aspects of ethics, privacy and data security in its application. Overall, the development of artificial intelligence in the context of communications opens up opportunities to create a more connected, inclusive and efficient world. However, to achieve its full benefits, awareness and wise handling of certain aspects is needed, so that this technology can continue to develop by providing a positive impact on individuals and society as a whole.

REFERENCES

1. Alimin, F., & Islami, A. N. (2022). Teknologi Digital dalam Komunikasi.
2. Arnus, S. H. (2018). Computer Mediated Communication (CMC), pola baru berkomunikasi. *Al-Munzir*, 8(2), 275-289.
3. Avita, D. N., Aditya, R., Fakhruddin, A., Tohir, N. I., & Anshori, M. I. (2023). Maximizing Strategies for Developing Business in The Digital Transformation Era. *Gudang Jurnal Multidisiplin Ilmu*, 1(4), 56-61.

4. Effendi, M. (2009). Peranan internet sebagai media komunikasi. *KOMUNIKA: Jurnal Dakwah Dan Komunikasi*, 3(2), 130-142.
5. Fahyuni, E. F. (2017). Teknologi, Informasi, dan Komunikasi (Prinsip dan Aplikasi dalam Studi Pemikiran Islam).
6. Fathy, R. (2019). Modal sosial: Konsep, inklusivitas dan pemberdayaan masyarakat. *Jurnal Pemikiran Sosiologi*, 6(1), 1-17.
7. Ginting, D. C. A., gusti Rezeki, S., Siregar, A. A., & Nurbaiti, N. (2024). Analisis Pengaruh Jejaring Sosial Terhadap Interaksi Sosial di Era Digital. *PPIMAN: Pusat Publikasi Ilmu Manajemen*, 2(1), 22-29.
8. Hartatik, H., Rukmana, A. Y., Efitra, E., Mukhlis, I. R., Aksenta, A., Ratnaningrum, L. P. R. A., & Efdison, Z. (2023). *TREN TECHNOPRENEURSHIP: Strategi & Inovasi Pengembangan Bisnis Kekinian dengan Teknologi Digital*. PT. Sonpedia Publishing Indonesia.
9. Ibrahim, I. S., & Akhmad, B. A. (2014). *Komunikasi dan komodifikasi: Mengkaji media dan budaya dalam dinamika globalisasi*. Yayasan Pustaka Obor Indonesia.
10. Ibrahim, M., Nasir, J., Komarudin, A., Maulana, A., & Akbar, M. H. (2023). Integrasi Kecerdasan Buatan dalam Desain Aplikasi Seluler: Peningkatkan Pengalaman Pengguna di Era Ekonomi Digital. *Nusantara Computer and Design Review*, 1(1), 31-39.
11. Ismandianto, I. (2021). Konvergensi Radio dalam Mempertahankan Eksistensi di Era Digital dan Covid-19. *Jurnal Riset Komunikasi*, 4(1), 130-142.
12. Jones, V. K. (2022). Why people use virtual assistants: Understanding engagement with Alexa. *Journal of Brand Strategy*, 11(1), 80-101.
13. Kazimzade, G., Patzer, Y., & Pinkwart, N. (2019). Artificial intelligence in education meets inclusive educational technology—the technical state-of-the-art and possible directions. *Artificial Intelligence and Inclusive Education: Speculative Futures and Emerging Practices*, 61-73.
14. Kessler, G. (2018). Technology and the future of language teaching. *Foreign language annals*, 51(1), 205-218.
15. Lubis, N. S., & Nasution, M. I. P. (2023). Perkembangan Teknologi Informasi Dan Dampaknya Pada Masyarakat. *Kohesi: Jurnal Sains dan Teknologi*, 1(12), 41-50.
16. Mangundjaya, W. L. (2022). *Psikologi komunikasi di tempat kerja*. Penerbit Qiara Media.
17. Nazir, M. (1988). Metode Penelitian. *Jakarta: Ghalia Indonesia*.
18. Paliwal, S., Bharti, V., & Mishra, A. K. (2020). Ai chatbots: Transforming the digital world. *Recent trends and advances in artificial intelligence and internet of things*, 455-482.

19. Prasanti, D. (2016). Perubahan media komunikasi dalam pola komunikasi keluarga di era digital. *Jurnal Commed*.
20. Riwayadi, P. (2013). Pemanfaatan Perkembangan Teknologi Informasi Dan Komunikasi Untuk Kemajuan Pendidikan Di Indonesia. *available at PLS-UM Database*.
21. Rukmana, A. Y., Astuti, S. W., Syaras, D., Misnawati, D., Hutauruk, B. S., Putri, T. D., ... & Ramadhan, A. M. (2023). *Etika Dan Komunikasi Efektif*. Get Press Indonesia.
22. Savitri, A. (2019). *Revolusi industri 4.0: mengubah tantangan menjadi peluang di era disrupsi 4.0*. Penerbit Genesis.
23. Sima, V., Gheorghe, I. G., Subić, J., & Nancu, D. (2020). Influences of the industry 4.0 revolution on the human capital development and consumer behavior: A systematic review. *Sustainability, 12*(10), 4035.
24. Sulartopo, S., Kholifah, S., Danang, D., & Santoso, J. T. (2023). Transformasi Proyek Melalui Keajaiban Kecerdasan Buatan: Mengeksplorasi Potensi AI Dalam Project Management. *Jurnal Publikasi Ilmu Manajemen, 2*(2), 363-392.
25. Sutikno, R. B. (2007). *The power of empathy in leadership*. Gramedia Pustaka Utama.

Aligning IT Governance with Organizational Communication Strategies for Enhanced Connectivity

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ABSTRACT

In today's dynamic business landscape, effective communication and seamless connectivity are critical to organizational success. This research explores the intersection between Information Technology (IT) governance and organizational communication strategy, aiming to uncover synergies that can increase connectivity within an organization. This study explores current IT governance practices and communications strategies, identifying potential misalignments and areas for improvement. Through qualitative descriptive analysis, this research seeks to develop a framework that aligns IT governance with communications strategy, thereby fostering a more cohesive and connected organizational environment. Research shows that aligning the way information technology (IT) is managed with an organization's communication strategy has a positive impact on connections between organizational members. Creating a culture of open communication, aligning organizational messages with IT governance issues, and involving organizational leaders, particularly in IT, have proven crucial in achieving this balance. An approach that takes into account the differences in communication preferences of organizational members, supported by training and the use of modern communication technology, provides a strong basis for understanding and implementing IT governance. As a result, organizations can increase member engagement, create a responsive environment, and support innovation. Thus, this research emphasizes that aligning IT governance with organizational communication strategies is not only a response to technological developments, but also a strategic step for organizational success and sustainability amidst continuous change.

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INTRODUCTION

In an era that continues to change rapidly in the business world, an organization's ability to communicate effectively and establish seamless connectivity is a key element in achieving success. Dynamic changes in the business environment require rapid response and efficient coordination, which can only be achieved through targeted communication strategies and sophisticated information technology (Tan et al., 2002). On the other hand, Information Technology (IT) governance has become an integral part of modern organizational operations, providing the foundation for data management, information security and technological innovation. A harmonious combination of effective IT governance and a well-planned communications strategy is the foundation for supporting the organization's internal and external relations (Ali & Green, 2012).

The importance of IT governance does not only lie in operational aspects, but also in ensuring organizational sustainability and providing a solid foundation for the implementation of effective communication strategies (Huang et al., 2010). The current challenge is understanding the extent to which existing IT governance practices are organically integrated with an organization's communications strategy. Developing better synergies between the two is the main topic of discussion, with the ultimate goal of increasing organizational connectivity so that it can be more responsive to market dynamics and the ever-changing business environment (Selig, 2015).

Information technology can no longer be considered a black box managed only by IT professionals. Along with the development of business dynamics, understanding of the important role of information technology in supporting key business decisions is increasingly widespread at various levels in an organization (Melville dkk, 2004). Traditionally, decision making in the realm of information technology has often been the exclusive responsibility of IT professionals, primarily due to the high complexity of systems and limited technical experience of company board-level executives (Mun et al., 2006). However, with the increasingly developing concept of IT governance, there is now a system that involves all stakeholders, including directors, commissioners and internal users from various departments.

Modern organizations today find themselves faced with a number of stringent regulations and requirements related to information protection, financial accountability, data retention, disaster recovery, and various other aspects (Dewett & Jones, 2001). In addition, the increasing demands from shareholders, stakeholders and customers force organizations to uphold the highest standards in information technology management. To ensure compliance with these increasingly complex internal and external requirements, many organizations are adopting information technology governance programs (Kayworth & Whitten, 2010).

IT governance provides a framework that allows all stakeholders to provide relevant input in the decision-making process regarding information technology. This not only prevents misperceptions that may occur due to limited technical understanding at the board level, but also avoids situations where one party, such as the IT team, becomes the scapegoat for decisions that may be deemed inappropriate (Peterson, 2004). Thus, an IT governance approach not only mitigates the risk of wrong decisions, but also builds a stronger basis for the participation of all stakeholders in formulating information technology policies and strategies that support the achievement of the organization's business goals (Brown & Grant, 2005).

Top of Form

Information technology (IT) governance provides an important structure for integrating and aligning IT strategy with the organization's overall communications strategy. By adopting a formal framework, organizations can ensure that the steps in IT management are aligned with the organization's vision, mission and goals. In other words, IT governance is not simply viewed as a separate entity, but as an integral part of overall corporate governance (Ratham et al., 2005).

Following this formal framework, organizations can establish measurable performance indicators, so that they can systematically assess the results of achieving organizational strategies and goals through the implementation of information technology. Involving stakeholders from various levels, including directors, commissioners and employees, IT governance takes into account the various interests that may arise (Tallon et al., 2000). Overall, the big picture of IT governance is that it is not an isolated entity, but rather an integral part of the overall corporate governance mechanism. With integrated IT governance, organizations can achieve synergy between technology and communications, creating an environment that supports the achievement of business goals while paying attention to the needs of all stakeholders involved (Svenden, 1998).

In the current era of business dynamics, an in-depth understanding is needed regarding the extent to which Information Technology (IT) governance practices go hand in hand with organizational communication strategies (Reich & Benbasat, 2000). The success of an organization not only depends on the effectiveness of the information technology it has, but also the extent to which this integration supports and properly aligns the communication strategy being promoted (Wu et al., 2015). This deep understanding emerged from a paradigm shift that IT is not a separate entity that operates on its own, but must be viewed as an element that supports and facilitates organizational communication.

By exploring the relationship between IT governance and communications strategy, we can understand how they complement each other to achieve better connectivity within the organization. It is important to align IT governance practices with the needs of a communication strategy that focuses on internal and external stakeholders. In doing so, organizations can strengthen their connectivity, ensuring that vital information can flow effectively across hierarchies and departments. Therefore, focusing on synergy between IT governance and communication strategy is a necessity to create an organizational ecosystem that is connected and responsive in facing dynamic changes in the business environment.

METHOD

According to Patton (1987), a qualitative approach in research is a process that produces descriptive data in the form of words or statements from individuals, as well as observable behavior. In

this context, qualitative data sources can come from various forms, such as interviews, systematic observation, and documentation. Patton (1987) explains that qualitative data can be obtained through the display of spoken or written words witnessed by researchers, and involves in-depth observation of certain objects to gather the meaning contained in the document or item.

The data collection process in a qualitative approach, as explained by Patton (1987), involves observation, interview and documentation techniques. Observation involves systematic monitoring and recording of the symptoms being studied, while interviews are oral question and answer sessions between the researcher and the respondent. The documentation approach, on the other hand, includes data recovery from various relevant documents. It is important to note that the documentation approach tends to collect secondary data, while observation and interviews tend to collect primary data obtained directly from the first party.

RESULTS AND DISCUSSION

IT Governance Practices in Organizations

In the face of the complexity of the modern business environment, organizations are given increasing responsibility to comply with various regulations governing critical aspects such as information protection, financial accountability, data retention and disaster recovery. Along with this, demands from shareholders, stakeholders and customers increasingly put pressure on organizations to maintain and improve quality and security standards in information technology management. To address these challenges, many organizations are adopting information technology governance programs that provide a framework of best practices and controls (Bin-Abbas & Bakry, 2014).

This information technology governance program not only answers the need for compliance with internal and external requirements, but also provides a solid foundation for maintaining the integrity and reliability of information systems. By detailing best practices, this program ensures that organizations have effective procedures in place to manage risk, protect sensitive data, and mitigate the impact of potential disasters. Implementing the best controls in information technology governance also plays an important role in providing confidence to shareholders and stakeholders that the organization acts responsibly in carrying out operations and utilizing information technology to support business strategy. Thus, information technology governance programs are not only a response to rules and regulations, but also as a strategic investment in building trust, security and operational sustainability of the organization (Bin-Abbas & Bakry, 2014).

Organizations, whether operating in the public or private sector, must ensure that their Information Technology (IT) function always supports the established business strategies and objectives. Information technology governance programs are crucial in various industries and organizational settings, because they are able to provide a solid foundation for maintaining integrity, security and operational effectiveness. While these sectors may have different contexts and demands, both still need to comply with regulations related to financial and technological accountability. In implementing a comprehensive information technology governance program, both public and private sector organizations need to recognize that this requires a significant commitment of time and effort. However, this investment opens up opportunities to improve operational efficiency, sustainability and reliability, which in turn will support the achievement of long-term business strategies and goals. The easiest way is to start with a framework that has been created by industry experts and used by thousands of organizations. Many frameworks include implementation guides to assist the organizational phase of an information technology governance program (Wessels & Loggerenberg, 2006).

COBIT, published by ISACA, emerged as a comprehensive framework for corporate Information Technology (IT) governance and management. Globally renowned, COBIT provides best practices, analytical tools, and models that support IT governance. With its roots in IT auditing, this framework has evolved over time, with the latest version, COBIT 5, taking center stage for organizations that emphasize risk management and mitigation. ITIL, or Information Technology Infrastructure Library, is focused on IT service management with the goal of ensuring that IT services support key business processes. Involving five best practices for strategic service management, design, transition, operations, and continuous service improvement, ITIL serves as an essential guide for organizations looking to improve the efficiency of their IT services (Mangalaraj et al., 2014).

Meanwhile COSO, implemented by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), evaluates internal controls with a focus on enterprise risk management (ERM) and fraud prevention. Differentiating COSO from other frameworks is its emphasis on business aspects that go

beyond IT services. CMMI, or Capability Maturity Model Integration, developed by the Software Engineering Institute, is an approach to performance improvement using a 1 to 5 scale to measure organizational performance, quality, and level of profitability maturity. By enabling collaboration between modes and objective measurements, CMMI provides a powerful method for measuring qualitative risk (Basu & Desiraju, 2017).

FAIR, or Factor Analysis of Information Risk, is a relatively new model that aims to help organizations measure risk, especially in the domains of cybersecurity and operational risk. With a focus on making more informed decisions, FAIR offers an in-depth approach to understanding and managing information risk more effectively (Freund & Jones, 2014).

The Information Technology (IT) governance framework is designed to provide comprehensive guidance in managing the overall IT function. COBIT and COSO, with their focus on risk management, offer an in-depth approach to identifying, assessing, and managing organizational risks. COBIT, a publication of ISACA, provides practical direction for IT governance involving audit and control, while COSO, from the Committee of Sponsoring Organizations of the Treadway Commission, places emphasis on internal controls and enterprise risk management (ERM).

On the other hand, ITIL, or Information Technology Infrastructure Library, provides specific guidance in the context of services and business operations. Primarily focused on ensuring that IT services support key business processes, ITIL provides workflows and best practices that assist organizations in improving the efficiency and effectiveness of their IT services.

While CMMI, or Capability Maturity Model Integration, was originally developed for software engineering, it has now evolved to cover the processes of hardware development, delivery, and purchasing services. CMMI provides a broad framework for assessing and improving an organization's maturity in executing processes and ensuring the quality of outcomes. Lastly, FAIR, or Factor Analysis of Information Risk, is specifically focused on assessing cybersecurity risks. Designed to help organizations better assess and understand information security risks, FAIR offers a more specific method of addressing unique cybersecurity threats and weaknesses. With these various frameworks, organizations can choose the approach that suits their needs to achieve effective and sustainable IT governance.

Organizational Communication Strategy

Organizational communication strategies are a necessity in changing the knowledge, attitudes and behavior of audiences or targets. Arifin (1994) suggests that to ensure the effectiveness of message delivery, organizations need to design structured communication strategy steps. This process begins with determining clear communication objectives, identifying the audience or target audience, and detailing the key messages to be conveyed. Next, choose a communication channel that suits the organization's communication strategy. These steps are as follows:

a. Get to know the audience

The first step in selecting communication channels that suit the organization's communication strategy is to understand and select the audience carefully. Determining the audience that will be the target of communication is a crucial step because it will influence the entire communication strategy that is implemented. Organizations need to understand the characteristics, preferences and needs of their target audiences. This involves identifying factors such as demographics, education level, cultural values, and media preferences. By understanding who the target audience is, organizations can design messages and select the most effective communication channels to reach them.

Once an audience has been identified, the next step is to choose a communication channel that suits that audience's preferences and habits. For example, if your audience tends to be active on social media, channel choices could include platforms like Instagram, Twitter, or LinkedIn. If audiences are more responsive to direct communication, using email or face-to-face meetings may be a more effective option. By combining a deep understanding of the audience and knowledge of the diversity of communication channels available, organizations can create communication strategies that are not only relevant but also reach the audience in the most meaningful way.

b. Determine goals

The second step in selecting communication channels that suit the organization's strategy is to establish clear communication objectives. Communication objectives are the foundation that drives all communication strategies and activities. Organizations need to critically formulate what they want to achieve through this communication. This could involve increasing brand awareness, changing audience attitudes, increasing knowledge about a product or service, or even a driver for a specific action such as a

purchase or participation in a particular program. By setting specific, measurable goals, organizations can measure the success of communications campaigns and adjust strategies if necessary.

Next, once the communication objectives have been established, the organization needs to ensure that the messages to be conveyed through these communication channels are in line with these objectives. Messages that are consistent and fit for purpose can strengthen communication effectiveness. In this context, the choice of words, tone and communication style are also important aspects that must be considered so that the message can be received and understood well by the audience. By setting clear goals and crafting appropriate messages, organizations can direct their communications energy more purposefully and have a more significant impact.

c. Composing messages

The third step in compiling messages for an organization's communication strategy involves a creative and strategic process in formulating the content that will be conveyed to the audience. First of all, the organization needs to detail the key messages it wants to convey. These messages should reflect previously established communication objectives. Each key message must be designed to be clear, sharp, and relevant to the intended audience. Furthermore, in crafting messages, organizations must consider the diversity of audiences and ensure that messages can be accessed and understood by all intended parties. The language used must be appropriate to the characteristics of the audience, and the presentation of the message can be adjusted to the media preferences used by the audience.

Apart from that, the message must also take into account the emotions and values that you want to convey to the audience. The choice of words, tone and communication style will greatly influence how the message is received and interpreted by the audience. Messages that can arouse emotions or attract attention in a positive way can be more effective in achieving communication goals. When crafting a message, it is also important to consider the context of the communication, including the time and situation in which the message will be delivered. Messages designed with context in mind can be more effective in capturing attention and maintaining audience interest

d. Determine the method and select the media

The fourth step in an organization's communication strategy is to determine the method and select the media that will be used to convey messages to the audience. Determining the communication method involves deciding whether the communication will be one-way or interactive. Whether it is through presentations, discussions, training, or face-to-face meetings depends on the characteristics of the message and the audience. Understanding audience preferences and habits is also an important factor in determining the most effective method.

Next, media selection is a crucial aspect. Organizations need to consider the different types of media available, including print media, electronic media, and digital media. This decision should be based on audience characteristics, message type, and communication objectives. For example, for a more visual audience, using visual media such as infographics or videos can be more effective. Additionally, logistical considerations, such as location and technology availability, also play a role in media selection.

Alignment of IT governance with communication strategies to improve connectivity

Aligning IT governance with an organization's communications strategy is an important step to improving connectivity within an organization. Here are some steps you can take to achieve this alignment:

a. Open and Transparent Communication

Creating a culture of open and transparent communication is a key foundation in efforts to align IT governance with the organization's communication strategy. Organizations need to clearly communicate to all members regarding IT governance policies, technological changes to be implemented, and related strategic decisions. By providing good visibility into these steps, employees become more actively involved and feel connected to the evolution of information technology management. This openness creates an environment where information regarding IT governance is not only accessed by a few people, but is understood and recognized by all members of the organization. In this way, a strong engagement is established, enabling better collaboration, and building trust and a shared understanding of the role of technology in achieving overall organizational goals.

b. Integration of Organizational Messaging and IT

The messages in the organization's communication strategy and IT governance must be integrated harmoniously, creating a consistent and mutually supporting narrative. For example, if the focus of IT governance is on information security, the communications strategy should specifically highlight the urgency and importance of that security. In this context, the message conveyed must explain not only the

steps taken to maintain security, but also invite every member of the organization to actively contribute to maintaining and increasing the level of security. By unifying these messages, organizations can create a deep understanding of the importance of information security and, at the same time, encourage the active participation of organizational members in maintaining the integrity and security of information systems. As a result, alignment is created between the security vision of IT governance and overall organizational goals, providing a strong foundation for mutual engagement and commitment.

c. Organizational and IT Leadership Involvement:

The active involvement of organizational leaders, especially those from the IT department, has a central role in ensuring the successful alignment of IT governance with the organization's communication strategy. The leader is not only responsible for clearly supporting communication regarding IT governance, but also for providing clear explanations regarding the policies implemented. By providing a clear vision of the benefits of IT governance policies for the organization and individuals, leaders create a strong shared understanding across members of the organization. More than simply conveying information, a leader's active involvement plays a role in inspiring trust among team members. By demonstrating commitment and direct support, leaders establish an organizational culture that is open, innovative, and responsive to developments in IT governance. In this way, actively involved leaders are not only messengers, but also catalysts for strengthening connectivity and commitment to IT governance principles throughout the organization.

d. Adapt Communication Style to Audience Needs:

In designing an effective organizational communication strategy, it is important to recognize that each member of the organization has varying communication preferences. Therefore, aligning various communication styles and channels is key to achieving optimal connectivity. This strategy includes the use of multiple channels such as face-to-face meetings, email, text messaging, social media platforms, and others, to meet a diversity of communication preferences. Apart from that, choosing words that are easy to understand and relevant to the audience's background is a determining factor in building in-depth understanding. This strategy not only facilitates the transmission of clear messages, but also increases levels of engagement and connectivity by aligning communication approaches with the individual needs and preferences of organizational members. In this way, organizations can achieve better alignment in communication, strengthen bonds between members, and create a work environment that supports effective collaboration and information exchange.

e. Education and training:

Providing education and training programs for employees regarding IT governance, technological change and information security policies is a strategic step to increase understanding and involvement of organizational members. By providing employees with access to the basic principles of IT governance and the latest technological developments, organizations create a strong foundation of knowledge. Well-educated employees have the ability to contribute more effectively to the implementation of IT governance, reduce uncertainty, and feel more confident in facing technological change. In addition, a deep understanding of information security policies through training can help shape proactive behavior in maintaining organizational security. Thus, investments in education and training create skilled and engaged employees, create an environment in which organizational members can better adapt to technological change and support the effectiveness of IT governance.

f. Use Modern Communication Technology:

The use of modern communication technology, such as webinars, video conferences, or online collaboration platforms, opens up new opportunities in conveying information about IT governance in an innovative and effective manner. Through webinars, organization members can attend interactive presentations virtually, allowing for a direct exchange of ideas and real-time questions and answers. Video conferencing brings a stronger personal dimension by facilitating face-to-face communication without physical presence. Online collaboration platforms enable team members to work together virtually, share information, and easily access IT governance materials. By leveraging this technology, organizations create a more dynamic and interactive communications experience, which not only increases member participation, but also builds greater connectivity within the organization. By strengthening collaboration through modern communications technology, organizations can ensure that information regarding IT governance is delivered in an engaging and relevant manner, motivating members to actively engage in IT governance initiatives.

By taking these steps, organizations can ensure that IT governance and communications strategies work together to improve understanding, engagement, and connectivity across the organization. In doing

so, organizational members will feel more connected to a shared vision and goals, creating a more collaborative and efficient work environment.

CONCLUSION

This research underscores the importance of aligning IT governance with organizational communications strategy as a key to improving connectivity within an organization. It was found that creating a culture of open and transparent communication, integrating organizational messages with IT governance messages, and actively involving organizational leaders, especially from the IT department, were important factors in achieving this alignment. Communication strategies that take into account the diversity of preferences of organizational members, supported by education and training programs, and utilize modern communication technology, form a strong foundation for understanding and implementing IT governance principles. With this approach, organizations can achieve optimal levels of connectivity, build shared understanding, increase active employee participation, and create a work environment that supports innovation, collaboration, and adaptation to technological change. Overall, this research highlights that harmonization between IT governance and organizational communication strategies is not only a necessity, but also a strategic investment to achieve organizational success and sustainability in an era of rapid change.

REFERENCES

1. Ali, S., & Green, P. (2012). Effective information technology (IT) governance mechanisms: An IT outsourcing perspective. *Information systems frontiers*, 14, 179-193.
2. Basu, P., & Desiraju, L. P. (2017). Enhancing Effectiveness of OFC and IFC FR by Integration of COSO and CMMI. *The Management Accountant Journal*, 52(2), 16-22.
3. Bin-Abbas, H., & Bakry, S. H. (2014). Assessment of IT governance in organizations: A simple integrated approach. *Computers in Human Behavior*, 32, 261-267.
4. Brown, A. E., & Grant, G. G. (2005). Framing the frameworks: A review of IT governance research. *Communications of the Association for Information Systems*, 15(1), 38.
5. Dewett, T., & Jones, G. R. (2001). The role of information technology in the organization: a review, model, and assessment. *Journal of management*, 27(3), 313-346.
6. Freund, J., & Jones, J. (2014). *Measuring and managing information risk: a FAIR approach*. Butterworth-Heinemann.
7. Huang, R., Zmud, R. W., & Price, R. L. (2010). Influencing the effectiveness of IT governance practices through steering committees and communication policies. *European Journal of Information Systems*, 19(3), 288-302.
8. Kayworth, T., & Whitten, D. (2010). Effective information security requires a balance of social and technology factors. *MIS Quarterly executive*, 9(3), 2012-52.
9. Mangalaraj, G., Singh, A., & Taneja, A. (2014, August). IT Governance Frameworks and COBIT-A Literature Review. In *AMCIS*.
10. Melville, N., Kraemer, K., & Gurbaxani, V. (2004). Information technology and organizational performance: An integrative model of IT business value. *MIS quarterly*, 283-322.
11. Mun, Y. Y., Jackson, J. D., Park, J. S., & Probst, J. C. (2006). Understanding information technology acceptance by individual professionals: Toward an integrative view. *Information & management*, 43(3), 350-363.
12. Patton, M. Q. (1987). *How to use qualitative methods in evaluation* (No. 4). Sage.
13. Peterson, R. R. (2004). Integration strategies and tactics for information technology governance. In *Strategies for information technology governance* (pp. 37-80). Igi Global.
14. Rathnam, R. G., Johnsen, J., & Wen, H. J. (2005). Alignment of business strategy and IT strategy: a case study of a fortune 50 financial services company. *Journal of Computer Information Systems*, 45(2), 1-8.
15. Reich, B. H., & Benbasat, I. (2000). Factors that influence the social dimension of alignment between business and information technology objectives. *MIS quarterly*, 81-113.
16. Selig, G. J. (2015). *Implementing effective IT governance and IT management*. Van Haren.
17. Svendsen, A. (1998). *The stakeholder strategy: Profiting from collaborative business relationships*. Berrett-Koehler Publishers.

18. Tallon, P. P., Kraemer, K. L., & Gurbaxani, V. (2000). Executives' perceptions of the business value of information technology: a process-oriented approach. *Journal of management information systems*, 16(4), 145-173.
19. Tan, X., Yen, D. C., & Fang, X. (2002). Internet integrated customer relationship management a key success factor for companies in the e-commerce arena. *Journal of computer information systems*, 42(3), 77-86.
20. Wessels, E., & Loggerenberg, J. V. (2006, September). IT governance: theory and practice. In *Conference on Information Technology in Tertiary Education, Pretoria, South Africa*.
21. Wilkin, C. L., & Chenhall, R. H. (2020). Information technology governance: Reflections on the past and future directions. *Journal of Information Systems*, 34(2), 257-292.
22. Wu, S. P. J., Straub, D. W., & Liang, T. P. (2015). How information technology governance mechanisms and strategic alignment influence organizational performance. *MIS quarterly*, 39(2), 497-518.

Harmonization of Communication Channels: The Impact of IT Governance on Organizational Interactions

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Article Info (9 pt)	ABSTRACT(9 pt)
Corresponding Author: (9 pt) Name : Harjono Padmono Putro E-mail: harjonopputro@unkris.ac.id	<p>Harmonization of communication channels is a critical factor in achieving efficiency and effectiveness of internal communication in an organization. This research will explore how good IT governance can improve the overall harmonization of communication channels within an organization, as well as how this impacts interactions between organizational members. This research uses a qualitative approach with descriptive methods. The results of this research reveal that effective Information Technology (IT) governance contributes significantly to the harmonization of communication channels within the organization. Good integration between various communication platforms, maintained information security, and flexibility in responding to changing communication needs are the main points that strengthen the effectiveness of organizational interactions. In addition, careful risk management and compliance with technology policies and regulations also support the continuity of communication channels, creating an environment that is safe, adaptive, and in accordance with applicable ethical and legal standards. The results of this research provide further insight into the important role of IT governance in forming a solid foundation for harmonious and effective internal communication.</p> <p>Keywords: Harmonization, Communication Channels, IT Governance, Organizational Interaction.</p>

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INTRODUCTION

In the era of globalization and ever-growing business dynamics, the importance of effective internal communication cannot be underestimated as the foundation for the success of an organization. Good internal communication is the foundation that enables an organization to adapt to change, maintain cohesion among its members, and respond to complex challenges (Garcia-Morales et al., 2011). Harmonization of communication channels, as harmonious coordination between various internal communication means, is a key element in maintaining a healthy and consistent flow of information throughout the organizational hierarchy (Quirke, 2017). In this context, the importance of the role of Information Technology (IT) is increasingly emerging, with technology becoming the operational backbone of modern organizations.

Developments in information technology not only reflect the evolution of the way business is conducted but also underscore the urgent need for good IT governance. Effective IT governance ensures that systems, data and technology infrastructure are used optimally and safely (Van Grembergen, 2004). In the context of harmonizing communication channels, IT governance is not only a supporter, but also a catalyst in ensuring that information can flow efficiently and can be easily accessed throughout the organization. Therefore, harmonization of internal communication and IT governance are two inseparable elements that work together to achieve organizational success in facing the challenges that continue to develop in this global era (Fan et al., 2012).

Harmonization of internal communication contains the essence of effective integration between the various communication channels available within an organization. This includes, but is not limited to, efficient email management, holding well-coordinated meetings, and utilizing online collaboration platforms (Dolphin, 2005). Through good harmonization of these channels, organizations can create a positive and productive communication climate. Unified and coordinated communication not only creates a harmonious work atmosphere, but also improves coordination among teams and departments, minimizes the risk of misunderstandings, and strengthens the sense of involvement of organizational members (Garicano & Wu, 2012).

Furthermore, harmonization of internal communications paves the way for rapid and accurate exchange of information across the organization. With well-coordinated communication channels, information can flow smoothly, ensuring that all parties involved have access to relevant and up-to-date data (Xu et al., 2021). This not only contributes to more timely decision making, but also strengthens the organization's adaptability in the face of changing business environments. Therefore, harmonization of internal communications is not just about unifying communication channels, but also about creating an environment where information can be a driving force for innovation, collaboration and mutual success (Smith & Mounter, 2008).

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The role of Information Technology (IT) governance is becoming increasingly crucial in the context of harmonizing internal communications in modern organizations (Grunig, 2013). As a comprehensive management framework, IT governance is not only related to technical aspects, but also includes resource management, risk mitigation, and maintaining compliance with applicable policies and regulations (Veiga & Eloff, 2007). In an era where technology is the main pillar in organizational operations, IT governance provides a solid foundation to ensure that investments in technology provide optimal added value.

Efficient IT governance ensures that technology resources, such as hardware, software, and network infrastructure, are managed in a way that supports organizational goals. This includes monitoring and managing system performance, timely updates, and wise resource allocation (Peterson, 2004). In addition, IT governance also plays a role in identifying and managing risks associated with the use of technology, whether related to information security, data privacy, or system resilience. Good IT governance also plays an important role in maintaining organizational compliance with various policies and regulations, including privacy and data security regulations. With strong IT governance in place, organizations can ensure that their use of technology complies with industry standards and applicable laws (Selig, 2016).

This research will explore the factors that influence the harmonization of communication channels, especially in the context of IT governance. Through in-depth analysis of effective IT governance practices, this research aims to provide insight into how organizations can improve the effectiveness of their internal communications and, as a result, strengthen overall organizational interactions. The results of this research are expected to make a significant contribution to the practical and theoretical understanding of the complex relationship between communication channel harmonization and IT governance.

Literature Review

IT Governance

Information Technology Governance (IT Governance) according to Weill & Ross (2004) is the responsibility of the board of directors and executive management, which consists of leadership, organizational structure and processes that ensure that the company's IT supports and expands the company's strategy and goals. Symons (2005), stated that IT governance is one of the most important parts of the successful implementation of good corporate governance. IT Governance ensures measuring the effectiveness and efficiency of improving the company's business processes through IT-related structures towards the company's strategic goals. IT Governance combines best practices in planning, management, implementation and execution

processes, and performance monitoring to ensure that IT properly supports company achievements.

Even though there are many definitions regarding IT Governance and experts provide various arguments regarding IT Governance, in each understanding they always mention five things related to:

- a) Information technology accountability
- b) Compliance with information technology rules and regulations
- c) Fulfilling needs and interests
- d) Managing risk
- e) Provide value to the business and control of the work performed.

Organizational Interaction

Organizational interaction is a complex phenomenon involving relationships, communication, and dynamics between individuals within an organizational entity. Some experts have a deep understanding of the concept of organizational interaction and describe it from various perspectives (Dignum, 2004). According to Geser (1992), a famous organizational theorist, organizational interactions can be understood through the concept of sensemaking or meaning formation. Weick argues that individuals in organizations interact with each other to make sense or meaning out of complex situations. This process involves collecting, interpreting, and giving meaning to information to create shared understanding within the organization.

Henderson & Mitchell (1997) view organizational interactions through the lens of collective action theory. They emphasize the importance of coordination and cooperation among organizational members to achieve common goals. In this perspective, organizational interactions are not just relationships between individuals, but also collaboration that involves coordinating actions to achieve desired results. In general, organizational interactions include complex dynamics between individuals, groups, and organizational structures. It involves processes of communication, collaboration, and meaning creation that contribute to the formation of organizational culture and the achievement of shared goals. A holistic understanding of organizational interactions is essential in the context of understanding how an organization operates and adapts in an ever-changing environment.

Communication Harmonization

Communication harmonization is a concept that includes efforts to align and integrate the various communication channels that exist in an organization. The main goal is to create optimal harmony between the communication methods used, such as email, meetings, online collaboration platforms, and direct communication. In this context, harmonization refers not only to the technical coordination of communication channels, but also to the creation of a positive and effective communication climate throughout the organization (Holzinger et al., 2008).

The communication harmonization process includes identifying, evaluating, and adapting to the unique needs of various communication channels so that they can work together efficiently. This can include unifying formats, clarifying communication direction, and integrating technology so that channels support each other (Rozina & Karapetjana, 2020). By achieving good harmonization, organizations can increase the effectiveness and efficiency of internal communications, reduce communication barriers, and open pathways for a smoother and more coordinated exchange of information throughout the organizational structure. Thus, harmonizing communication is the key to creating a responsive and adaptive organizational environment in facing business dynamics and external environmental demands.

METHOD

The qualitative approach adopted in this research gives the author the freedom to detail information in depth from the various parties involved, in line with the descriptive nature of this research (Sugiyono, 2011). The advantage of this approach lies in its ability to explore complex

social contexts in the field, so as to better understand the dynamics of relationships between individuals and organizations. Through this approach, the author can reach a level of depth of understanding that is difficult to find through quantitative methods. Collecting primary data, especially through interviews, allows the author to gain direct views and experiences from stakeholders. Meanwhile, secondary data collection through direct observation at relevant agencies and document analysis supports the validity and accuracy of the information obtained. This combination of methods creates a holistic approach that involves the researcher's active participation in the organizational environment under study. The data analysis process uses data condensation techniques, presenting information, and drawing conclusions, ensuring that research results are presented in a systematic and easy to understand way. Overall, these approaches and methods are designed to provide a comprehensive and in-depth picture of the impact of IT governance on organizational interactions, with a focus on achieving harmonization of communication channels. It is hoped that the findings from this research will make a significant contribution to practical and theoretical understanding in this area.

RESULTS AND DISCUSSION

Information Technology (IT) governance has a significant impact on organizational interactions, forming a crucial foundation for the harmonization of communication channels. Here are some key impacts:

Communication Channel Integration

Information Technology (IT) governance has a substantial impact on the integration of communication channels in an organization. This integration becomes more possible with effective management of IT infrastructure and systems. For example, the use of email, online collaboration platforms, and other communication tools can be aligned so that these channels do not operate in isolation. In an integrated system, data and information can flow more smoothly between various platforms, creating a more unified communications ecosystem.

The importance of communication channel integration lies in its ability to reduce internal communication barriers in organizations. In an integrated environment, organizational members can more easily communicate and collaborate without being constrained by technological limitations. As a result, relevant information can be exchanged more efficiently, speeding up work flow and decision making. Continuity between platforms also minimizes the risk of communication errors or ambiguities that may arise when using isolated communication channels.

It is important to note that integration of communication channels through IT governance is not just about technical alignment, but also involves a holistic management strategy. Careful planning and careful implementation are required to ensure that each communication channel supports overall organizational goals. In other words, the integration of communication channels is not just about technology, but also about how that technology can be directed to support the organization's overall vision, values and communication policies.

Information Accessibility

With the implementation of effective Information Technology (IT) governance, there is a significant transformation in information accessibility throughout the organization. A well-managed IT system allows members of an organization to easily access the data they need, anytime and anywhere, without being constrained by geographic or time constraints. This creates an environment that supports productivity, where information becomes an asset that can be accessed quickly and efficiently by all members of the organization.

Another advantage of good IT governance is its ability to facilitate efficiency in information sharing. With an integrated system, the data exchange process becomes smoother and can be done quickly. This not only optimizes internal workflows, but also ensures that every member of the organization has access to the latest updates, management decisions, and other

key information. As a result, collaboration between departments and teams becomes more effective, creating a solid foundation for harmonization of communication channels.

Transparency resulting from easy access and sharing of information supports the realization of harmonization within the organization. Organizational members have better visibility into various aspects of operations and decision making, enabling shared understanding. In this way, transparency creates a solid foundation for coordination and cooperation throughout the organization, supporting efforts to harmonize internal communications as a whole.

Security and Privacy

A crucial aspect of Information Technology (IT) governance is information security and privacy. Information security is a top priority as organizations store and manage large amounts of valuable data. By having good IT governance in terms of security, organizations can protect sensitive data and avoid various security threats that may be detrimental, such as cyber attacks, data theft or information leaks.

Trust in communications security is an important foundation in building a healthy work environment within an organization. When organizational members feel confident that the information they share through communication channels is kept secure, they tend to be more open to interaction and collaboration. This creates an atmosphere of trust among organizational members, motivating them to share ideas, experiences, and information that may be critical to the organization's success.

In addition to maintaining trust, IT governance that focuses on security can also prevent legal and reputation risks that may arise due to information security breaches. By complying with applicable security standards and regulations, organizations can demonstrate their commitment to protecting the information and privacy of their members. This not only creates security in daily interactions, but also strengthens the organization's positive image in the eyes of external stakeholders.

Risk Management

In the context of Information Technology (IT) governance, risk management is an essential approach to identifying, assessing and managing potential risks related to technology and communications. Risk identification is carried out by identifying potential threats and vulnerabilities in the IT infrastructure and communication channels used by the organization.

By assessing these risks, organizations can identify mitigation priorities necessary to maintain the continuity and security of communications channels. Risk mitigation involves a series of proactive actions to reduce the negative impact that can arise from a particular risk. Examples of risk mitigation actions in the context of communications channels involve implementing strict security policies, continuous security monitoring, and employee training to identify and avoid potential security threats.

System disruptions and security breaches are two types of risks that are often the focus of risk management in IT governance. System disruptions, such as hardware or software failure, can suddenly stop the flow of communications. By planning backup and disaster recovery solutions, organizations can mitigate the impact of system disruptions on communications channels. Meanwhile, security breaches can include unauthorized access to data or cyberattacks that can damage an organization's reputation. Mitigation strategies involve implementing sophisticated security systems, active monitoring of potential threats, and engaging employees in good security practices.

Flexibility and Innovation

Adaptive Information Technology (IT) governance is a key element in supporting organizational responsibility to changing communication needs. In an ever-changing business world, the ability of organizations to adapt their communications strategies has become a necessity. Adaptive IT governance enables organizations to quickly adapt their communications

technology infrastructure and systems to market dynamics, industry developments and internal needs.

The flexibility gained from adaptive IT governance gives organizations the freedom to explore and adopt innovative new communications technologies. This includes exploring the latest collaboration platforms, integrating more efficient communication tools, and adopting new communication methods that are more responsive to changes in the business environment. By keeping up with the latest technology trends, organizations can increase the effectiveness of their communications, create more modern communication channels, and ensure that communication processes remain relevant.

In the context of innovation, adaptive IT governance encourages organizations to become more open to cultural and operational change. By leveraging advanced communications technology, organizations can increase collaboration, increase the exchange of ideas, and facilitate more efficient decision-making processes. This creates an environment where innovation is driven by the ability to communicate effectively, promoting harmonization between different levels of the organization.

Conformity with policies and regulations

Information Technology (IT) governance plays a key role in maintaining organizational compliance with policies and regulations relating to the use of technology. By having a good IT governance system, organizations can ensure that every technology-related action is carried out in accordance with applicable legal norms. This includes compliance with data privacy laws, information security and industry sector regulations that may impact how the organization operates.

Sustainability of communication channels is a direct result of compliance with norms and rules. By remaining compliant with applicable regulations, organizations can minimize potential risks related to legal sanctions, fines, or reputational losses that could arise as a result of policy violations. In managing communication channels, organizations must ensure that every step taken complies with the guidelines set by regulatory authorities, creating a safe and reliable environment for interaction and exchange of information.

The importance of IT governance in maintaining compliance also involves a deep understanding of regulatory changes that may occur over time. Organizations need to have effective monitoring mechanisms in place to capture the latest developments in technology regulations and adapt their policies and procedures according to these changes. Therefore, intelligent IT governance is not just about compliance today, but also about being ready to adapt to the ever-changing regulatory environment.

CONCLUSION

Governance plays an integral role in establishing and maintaining harmonization of communication channels within an organization. In the era of globalization and business complexity, the effectiveness of internal communication is the key to success, and IT governance is the foundation that ensures optimal organizational interactions. By harmonizing communication channels, organizations can achieve effective integration between various communication platforms, such as email, online collaboration platforms, and other communication tools. This creates a positive communication climate, improves coordination, and facilitates the rapid and accurate exchange of information. Additionally, good IT governance ensures that information security and privacy are maintained, creating a safe environment for organizational members to interact and share information freely. In the context of innovation, adaptive IT governance gives organizations the ability to respond quickly to changing communication needs. This flexibility supports the exploration and adoption of new communication technologies that can improve the harmonization and effectiveness of organizational interactions. Furthermore, careful IT governance also involves risk management, mitigating potential technology and communications-related risks such as system disruptions or

security breaches. Compliance with policies and regulations is an important aspect of IT governance, ensuring that the organization remains in accordance with applicable norms and rules. Thus, all aspects of IT governance support the sustainability of organizational communication channels, creating an environment that is adaptive, innovative, safe, and complies with applicable ethical and legal standards. In an effort to achieve organizational goals and success, harmonization of communication channels becomes a strong foundation, and IT governance becomes a catalyst that supports this achievement.

REFERENCES

1. Dignum, M. V. (2004). *A model for organizational interaction: based on agents, founded in logic*. SIKS.
2. Dolphin, R. R. (2005). Internal communications: Today's strategic imperative. *Journal of marketing communications*, 11(3), 171-190.
3. Fan, Z., Kulkarni, P., Gormus, S., Efthymiou, C., Kalogridis, G., Sooriyabandara, M., ... & Chin, W. H. (2012). Smart grid communications: Overview of research challenges, solutions, and standardization activities. *IEEE Communications Surveys & Tutorials*, 15(1), 21-38.
4. García-Morales, V. J., Matías-Reche, F., & Verdu-Jover, A. J. (2011). Influence of internal communication on technological proactivity, organizational learning, and organizational innovation in the pharmaceutical sector. *Journal of Communication*, 61(1), 150-177.
5. Garicano, L., & Wu, Y. (2012). Knowledge, communication, and organizational capabilities. *Organization science*, 23(5), 1382-1397.
6. Gerring, J. (2017). Qualitative methods. *Annual review of political science*, 20, 15-36.
7. Geser, H. (1992). Towards an interaction theory of organizational actors. *Organization Studies*, 13(3), 429-451.
8. Grunig, J. E. (2013). Symmetrical systems of internal communication. *Excellence in public relations and communication management*, 531-575.
9. Henderson, R., & Mitchell, W. (1997). The interactions of organizational and competitive influences on strategy and performance. *Strategic management journal*, 18(S1), 5-14.
10. Holzinger, K., Knill, C., & Sommerer, T. (2008). Environmental policy convergence: The impact of international harmonization, transnational communication, and regulatory competition. *International Organization*, 62(4), 553-587.
11. Peterson, R. (2004). Crafting information technology governance. *Information systems management*, 21(4), 7-22.
12. Quirke, B. (2017). *Making the connections: Using internal communication to turn strategy into action*. Routledge.
13. Roziņa, G., & Karapetjana, I. (2020). Harmonization of Communication in Professional Setting. *Baltic Journal of English Language, Literature and Culture*, 10, 134-148.
14. Selig, G. J. (2016). IT governance-an integrated framework and roadmap: How to plan, deploy and sustain for improved effectiveness. *Journal of International Technology and Information Management*, 25(1), 4.
15. Smith, L., & Mounter, P. (2008). *Effective internal communication*. Kogan Page Publishers.
16. Symons, C. (2005). IT governance framework. *FORrester research*.
17. Van Grembergen, W. (Ed.). (2004). *Strategies for information technology governance*. Igi Global.
18. Veiga, A. D., & Eloff, J. H. (2007). An information security governance framework. *Information systems management*, 24(4), 361-372.
19. Weill, P., & Ross, J. W. (2004). IT governance on one page. Available at SSRN 664612.
20. Xu, Z., Liu, W., Wang, Z., & Hanzo, L. (2021). Petahertz communication: Harmonizing optical spectra for wireless communications. *Digital Communications and Networks*, 7(4), 605-614.

The future of communications in the 5G era

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Article Info	ABSTRACT
Keywords: Future, Communication, Digital Transformation, Technology, 5G Technology	With much higher speed and capacity compared to previous generations, 5G technology is expected to provide a new paradigm in human interaction and communication between devices. This research aims to describe and analyze the impact and potential of communication transformation with the adoption of 5G network technology. This research uses a qualitative approach with descriptive methods. The results of this research reveal that the implementation of 5G technology has a significant impact on transforming the way we communicate and interact with the surrounding environment. Incredible internet speeds and better connectivity are opening up new opportunities in various sectors, such as healthcare, education and industry. Nonetheless, it was found that security and privacy challenges emerged as critical aspects that needed serious attention. Therefore, to ensure the successful implementation of 5G technology, collective efforts are needed in developing effective security solutions, so that the benefits of this technological revolution can be enjoyed without compromising data integrity and privacy.
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INTRODUCTION

Technological developments have become one of the main drivers of social and economic transformation in the modern era. Telecommunication technology continues to develop rapidly, and currently, the world is ready to welcome the next technological revolution: 5G (Zulpratita, 2018). The 5G network, which is considered an important milestone in the evolution of wireless communications, promises extraordinary internet speeds, better connectivity, and various new opportunities for various sectors (Hendraningrat & Setiawan, 2017).

5G technology brings the ability to transform the way we communicate, work and interact with the world around us (Day et al, 2023). Ultra-fast download and upload speeds, as well as stable network availability, open the door to new innovations such as the Internet of Things (IoT), augmented reality and virtual reality. This will not only accelerate the growth of the technology industry, but also reshape the foundations of the global digital economy (Muhammad Wali, 2023).

Despite the various potential benefits, this article will also discuss the challenges that may arise with the implementation of 5G technology. Data security issues, required infrastructure, and environmental impacts are some aspects that need to be carefully considered (Munawar, 2021). However, with a deep understanding of these potential risks,

we can take proactive steps to minimize the negative impacts and maximize the positive benefits of this increasingly advanced era of communication (Putra et al, 2023).

5G technology is the fifth generation of wireless network technology, which is considered a significant evolutionary step from its predecessor, 4G technology (Wibowo et al., 2023). As an upgrade to the infrastructure that is currently widely used, 5G offers fundamental changes in telecommunications network capabilities (Savitri, 2019). Much higher internet speeds and lower latency are the main characteristics of 5G networks, providing a more responsive and efficient experience in transferring data between devices (Asari, 2023).

Higher internet speeds open up new opportunities for demanding applications and services, such as streaming high-definition content, sophisticated online games, and technology implementations that require instant data access (Saputra et al., 2023). Additionally, lower latency also results in faster response times, providing more effective use in scenarios where delay can be a critical factor, such as in autonomous vehicles and telemedicine (Niki, 2023).

The advantages of the 5G network are not only limited to speed, but also the ability to support more connected devices simultaneously in one area (Fachrurazi et al, 2023). This opens the door to a broader Internet of Things (IoT) ecosystem, where various devices, from smart devices in the home to industrial sensors, can operate simultaneously without sacrificing service quality (Wibowo, 2023). Thus, 5G technology is not only be a renewal of network technology, but also a catalyst for a profound transformation in the way we connect with the digital world.

With speeds up to 100 times faster than 4G technology, 5G brings revolutionary changes in the way we interact with the digital world (Yuniarto, 2019). The ability to download content in seconds is changing the landscape of information access, paving the way for a faster, smoother and more dynamic internet experience. Video streaming, video conferencing and online gaming, which are an integral part of everyday digital life, will experience significant improvements in terms of quality and responsiveness (Aksenta et al., 2023).

In addition, the high data speed and availability of 5G networks creates a foundation for the development of more advanced technologies. Mobility will experience major advances with the emergence of autonomous cars, which will require very fast and stable connectivity to communicate effectively (Purbo et al, 2021). Internet of Things (IoT) technology will also advance rapidly, enabling a wide range of connected devices, from household devices to industrial sensors, to operate efficiently in an integrated ecosystem. Apart from providing advantages in terms of speed, 5G also creates a stronger and more reliable network (Lorinsa, 2020).

The future of 5G technology will enable new developments in healthcare and education. Telemedicine will become more accessible, with doctors and patients able to communicate via high-quality video without lag. This will increase the accessibility of medical care, especially in remote areas (Lazawardi et al, 2022). In the education sector, 5G will support distance learning with better quality. Students will be able to access online lectures with high-quality videos, collaborate with classmates virtually, and access

educational resources in real-time. This transformation will help create a more educated and healthy society (Sutopo, 2022).

With the arrival of 5G technology, we are on the verge of a major transformation that will fundamentally change the way we communicate, work and live. The extraordinary speed and high connectivity of the 5G network opens the door to amazing developments in various sectors (Erwin et al., 2023). Health and education services can experience significant progress with the adoption of 5G technology, enabling more efficient remote medical consultations and more interactive online-based education (Sri Adiningsih, 2019).

Additionally, the expected impact of the industrial revolution involves greater automation, real-time monitoring, and increased operational efficiency. Security will also benefit with 5G networks, which can provide more sophisticated solutions for protecting data and infrastructure (Wahyuni, 2021). Despite the various potential benefits, security and privacy challenges must also be addressed seriously. The successful implementation of 5G depends not only on technological advances, but also on effective risk mitigation efforts to protect users and their data (Prahendratno et al, 2023).

This research aims to describe the impact of transformation on the way we communicate, work and live with the adoption of 5G technology. We will closely analyze the incredible speed and connectivity of 5G networks and how these changes impact human interaction and connectivity. The benefits of this research involve better understanding how 5G shapes the future of communications, providing a foundation for informed decision-making across sectors, and helping design effective adaptation to these changes.

METHOD

The research method applied in this study is a descriptive method with a qualitative approach. According to Yulianah (2022), qualitative research methods are based on postpositivism philosophy and are used to study the condition of natural objects, different from experimental methods. In this approach, the researcher acts as the main instrument, data collection is carried out using triangulation techniques, data analysis is inductive/qualitative, and focuses on meaning rather than generalizations in research results. The choice of descriptive research method with a qualitative approach was driven by the hope of obtaining more comprehensive, in-depth and meaningful data and information. Thus, it is hoped that the research objectives can be achieved through a deep understanding of the context studied.

RESULTS AND DISCUSSION

5G technology has paved the way for a revolutionary communications future in Indonesia. As a key driver of transformation, the arrival of 5G brings significant advancements in wireless connectivity across the country. With incredible internet speeds and stronger connectivity, Indonesians can now enjoy faster and smoother access to various digital services. This revolution not only influences the way we communicate, but also supports the development of key sectors, including education, health and industry. 5G has emerged as the backbone of communications infrastructure in Indonesia, bringing positive impacts

that will form the foundation for a more sophisticated and connected communications era in the future.

5G technology promises major changes in the communications landscape in Indonesia, with a significant impact on various aspects of people's lives. One of the main advantages of 5G technology is internet speeds that reach gigabits per second. It provides an exceptional user experience with seamless content downloading and streaming capabilities, changing the way we access information and communicate online. In addition, 5G connectivity opens wide doors for the development of the Internet of Things (IoT). With the ability to support millions of interconnected IoT devices, such as autonomous cars, smart cities, and industrial automation systems, 5G creates an ecosystem that supports a variety of applications that can improve efficiency, safety, and convenience in everyday life.

In the healthcare and education sectors, 5G technology brings significant innovation. Remote health services and online learning are becoming more accessible and efficient. It opens the door to access to quality healthcare and education worldwide, overcoming geographic barriers and increasing accessibility for remote or hard-to-reach communities. Meanwhile, industry and manufacturing also benefit greatly from 5G connectivity. The application of technologies such as robotics and augmented reality (AR) is becoming more possible, increasing efficiency and productivity in production processes. With low latency and high data availability, 5G provides a solid foundation for digital transformation in various economic sectors.

As a pillar of future communications in Indonesia, 5G technology brings hope for the realization of a more connected, efficient and highly competitive society. Although implementation challenges need to be overcome, the positive potential brought by 5G offers a promising picture of the future of communications for the country. The challenges are :

a. Infrastructure and Investment

The implementation of 5G technology requires the development of infrastructure that is much more sophisticated than its predecessor. 5G networks require infrastructure that can handle higher frequencies, denser access points, and ongoing hardware maintenance. Therefore, the government and telecommunications operators in Indonesia are faced with a big challenge to align and modernize existing telecommunications infrastructure, as well as build new structures that support the needs of 5G technology. Building more frequent base stations, using a wider frequency spectrum, and investing in more advanced data transmission technologies are essential steps to ensure 5G networks can operate optimally.

It cannot be denied that 5G implementation also requires significant financial investment. The government and telecommunications operators need to provide sufficient funds to initiate and implement this project. Massive investments are required to purchase and integrate 5G hardware, build a robust backhaul infrastructure, and ensure sufficient frequency spectrum is available. Therefore, the successful implementation of 5G in Indonesia depends not only on technical capabilities, but also on the willingness and ability to allocate significant resources to meet the demands of this technology. Through a joint commitment between the government and telecommunications operators, this massive

infrastructure development and investment is expected to accelerate the adoption of 5G technology and bring its revolutionary benefits to the Indonesian people.

b. Data Privacy and Security

With the growth in broader connectivity brought by 5G technology, challenges related to data security and user privacy become increasingly significant. High network speeds and capacities can lead to an increase in the volume of data exchanged, increasing their potential vulnerability to cyber threats. Therefore, the protection of personal data is of paramount concern, given the potential for serious consequences if personal information falls into the wrong hands.

Proactive efforts are needed to mitigate these risks. Implementing advanced cybersecurity measures, such as data encryption, two-factor authentication, and intensive network monitoring, is crucial in protecting the integrity and confidentiality of sensitive information. In addition, the involvement of relevant parties, including governments, regulators and telecommunications service providers, is necessary to establish a strict regulatory framework and ensure compliance with high security standards.

It is important to recognize that successful adoption of 5G technology must be balanced with effective data protection measures. With awareness of potential risks and active collaboration between various stakeholders, we can build a secure connectivity environment, where speed and innovation are not sacrificed for user privacy and security.

c. Access Equal Connectivity

Ensuring equitable 5G access across regions, including remote and inland areas, is a significant challenge, especially for developing countries . While 5G technology promises advanced connectivity and empowering various sectors, its implementation outside urban centers and less accessible areas faces complex obstacles.

Remote and inland areas often have limited telecommunications infrastructure and are difficult to reach, which makes it difficult to deploy 5G networks. Apart from that, difficult geographical aspects and high infrastructure development costs are the main obstacles. Therefore, governments and telecommunications operators in developing countries need to design inclusive and sustainable strategies to align 5G adoption across regions.

Strategic measures, such as fiscal incentives for investment in remote areas, cooperation between the private and public sectors, and the development of low-power distribution technologies, are important to overcome these challenges. In addition, community-based and participatory approaches can help identify the specific needs of local communities and devise solutions that fit their context. Ensuring equitable 5G access across regions is not just a matter of connectivity, but is also an important step to ensure that the benefits of this technological revolution can be enjoyed equally by all levels of society, without leaving behind areas that may be marginalized.

d. Regulatory Policy

Regulatory and policy challenges are one of the critical obstacles in implementing 5G technology. Complex and slow regulatory processes can cause delays in setting standards, frequency spectrum allocation, and approval of 5G infrastructure development. The government needs to develop a flexible and responsive regulatory framework to support

the development of this technology without compromising aspects of user security and privacy. Effective coordination is needed between regulatory bodies, telecommunications operators and the private sector so that regulations can support 5G development needs without compromising data integrity and security.

Apart from that, the government must also pay attention to the need to involve the public in the regulatory process. Public involvement and transparency in developing and implementing 5G policies can help address societal concerns regarding health, privacy and environmental impacts. Building strong public understanding and gaining community support can be key to overcoming regulatory barriers and ensuring successful and sustainable adoption of 5G technology in society. Therefore, the government needs to prioritize open and constructive dialogue, as well as create a regulatory framework that supports innovation without neglecting its responsibilities towards the interests of society and data security.

e. Frequency Spectrum Limitations

The frequency spectrum required for a 5G network is a crucial part of ensuring optimal performance and coverage. However, the challenge faced is the limited spectrum available. Effective coordination and optimal spectrum allocation is a complex task, especially in countries competing for limited spectrum resources.

Competition for adequate frequency allocation can create obstacles to 5G development at the national and global level. The importance of the frequency spectrum in supporting 5G capacity and speed makes the struggle to obtain adequate "chunks" of spectrum increasingly fierce. Effective coordination between the government, telecommunications regulatory bodies and telecommunications operators is key to ensuring fair and sustainable spectrum allocation.

Apart from that, there needs to be innovation in spectrum management to increase the efficiency of its use. An adaptive approach and the ability to share spectrum between operators or between service categories can be a solution to overcome these resource limitations. Apart from that, technology development that supports increasing spectral efficiency needs to be implemented to maximize the use of limited spectrum. Thus, careful coordination and innovation in spectrum management are important aspects to overcome spectrum allocation challenges which are the main obstacles in the implementation of 5G technology.

As we enter an increasingly connected era, security and privacy are gaining increasing urgency. 5G technology is expected to bring significant advances in security and privacy by enabling the use of stronger encryption technology and more secure networks. This is a positive step in protecting personal and business data from increasingly sophisticated cyber threats.

Implementing stronger encryption technology on 5G networks can provide more effective protection against potential cyber attacks. Additionally, the speed and low latency of 5G networks enable rapid response to threats, minimizing the possible impact. However, while paying attention to the potential for greater security, we also need to be aware of the challenges that may arise as this technology develops.

With 5G technology, we are witnessing not just an evolution, but a revolution in the way we communicate and live our daily lives. Incredible speed and hyper-connectivity open the door to profound transformation across sectors. Health and education services have experienced significant progress, providing easier and more efficient access for the community. The industrial revolution, with the application of technologies such as the Internet of Things (IoT) and artificial intelligence, is opening up new opportunities for unprecedented efficiency and innovation.

However, in undertaking this journey, we must not ignore the challenges that can arise, especially regarding security and privacy. In the face of an increasingly connected future, it is important to develop robust security systems and keep privacy a priority. The role of enhanced security will be key in optimizing the benefits of 5G technology without compromising data integrity and security.

Thus, 5G technology is not just another step in the evolution of communications, but an important milestone that will take us to a more connected and efficient world. As we face a future filled with innovation, expanded connectivity, and profound transformation, safeguarding security and privacy must remain at the center of our attention. With concerted efforts to address these challenges, we can build a strong foundation for a better, more connected communications future.

CONCLUSION

5G technology plays a crucial role in changing the paradigm of our communication, work and life in a more sophisticated and connected direction. The incredible speed and connectivity of 5G networks opens the door to a variety of positive impacts, including advances in healthcare, education and the industrial revolution. Nonetheless, security and privacy challenges are major concerns that must be addressed to ensure successful implementation. 5G technology not only speeds up data transfer, but also drives comprehensive transformation in various sectors of life. By supporting remote healthcare, more inclusive education, and a revolution in the industrial world, 5G is the backbone of an era of more connected communications. It is important to recognize that successful 5G deployment depends not only on technical advances, but also on effective security and privacy solutions. In facing the 5G era, it is important for the government, telecommunications operators and society to jointly respond to this challenge. Through collaboration and commitment to addressing higher security risks, we can ensure that 5G technology provides maximum benefits without compromising user security and privacy. By striking a balance between technological innovation and data protection, we can steer the world towards a more connected, efficient and secure future.

REFERENCES

1. Aksenta, A., Irmawati, I., Ridwan, A., Hayati, N., Sepriano, S., Herlinah, H., ... & Ginting, T. W. (2023). *LITERASI DIGITAL: Pengetahuan & Transformasi Terkini Teknologi Digital Era Industri 4.0 dan Sociaty 5.0*. PT. Sonpedia Publishing Indonesia.
2. Asari, A., Syaifuddin, E. R., Ningsi, N., Maria, H. D., Adhicandra, I., Nuraini, R., ... & Murti, S. (2023). *Komunikasi Digital*.

3. Erwin, E., Datya, A. I., Nurohim, N., Sepriano, S., Waryono, W., Adhicandra, I., ... & Purnawati, N. W. (2023). *Pengantar & Penerapan Internet Of Things: Konsep Dasar & Penerapan IoT di berbagai Sektor*. PT. Sonpedia Publishing Indonesia.
4. Fachrurazi, F., Rukmana, A. Y., Syamsulbahri, S., Murthada, M., & Sudarmanto, E. (2023). Transformasi Bisnis dan Manajemen: Dampak Implementasi Teknologi 5G di Era Konektivitas Cepat. *Jurnal Bisnis dan Manajemen West Science*, 2(03), 226-238.
5. Hari, N. H., Putra, F. P. E., Hasanah, U., & Sutarsih, S. R. (2023). Transformasi Jaringan Telekomunikasi dengan Teknologi 5G: Tantangan, Potensi, dan Implikasi. *Jurnal Informasi dan Teknologi*, 146-150.
6. Hendraningrat, D. K., & Setiawan, D. (2017). *Roadmap Broadband Indonesia Menuju Era Teknologi 5G*. Elex Media Komputindo.
7. Lazawardi, E., Ramadani, L., & Al Anshary, F. M. (2022). Perancangan User Interface Sistem Telemedicine Berbasis Mobile App Menggunakan Metode Goal-Directed Design. *eProceedings of Engineering*, 9(2).
8. Lorinsa, D. (2020). Penggunaan Wearable Internet of Things (WIoT) Oleh Kaum Milenial. *SOURCE: Jurnal Ilmu Komunikasi*, 6(2), 190-205.
9. Muhammad Wali, S. T., Efitra, S., Kom, M., Sudipa, I. G. I., Kom, S., Heryani, A., ... & Sepriano, M. (2023). *Penerapan & Implementasi Big Data di Berbagai Sektor (Pembangunan Berkelanjutan Era Industri 4.0 dan Society 5.0)*. PT. Sonpedia Publishing Indonesia.
10. Munawar, Z. (2021). Manfaat Teknologi Informasi di Masa Pandemi Covid-19. *J-SIKA/ Jurnal Sistem Informasi Karya Anak Bangsa*, 3(02), 53-63.
11. Niki, A. (2023). Analisis Performa Jaringan 5G dalam Mendukung Layanan Telemedis: Studi Kasus pada Layanan Kesehatan Online. *Jurnal Ilmu Komputer (JILKOM)*, 1(8).
12. Prahendratno, A., Aulia, M. R., Erwin, E., Setiawan, Z., Rijal, S., Rosdaliva, M., ... & Rahmawati, E. (2023). *STRATEGI BISNIS DIGITAL: Optimalisasi & Otomisasi Sebuah Bisnis Menggunakan Media Digital*. PT. Sonpedia Publishing Indonesia.
13. Purbo, O. W., Muludi, K., & Kurniawan, T. C. (2021). *Jaringan Nirkabel 5G Berbasis Cloud: Reability, Mobility, Energy Efficiency, Latency*. Penerbit Andi.
14. Putra, F. P. E., Riski, M., Yahya, M. S., & Ramadhan, M. H. (2023). Mengenal Teknologi Jaringan Nirkabel Terbaru Teknologi 5G. *Jurnal Sistim Informasi dan Teknologi*, 167-174.
15. Putro, A. N. S., Wajdi, M., Siyono, S., Perdana, A. N. C., Saptono, S., Fallo, D. Y. A., ... & Setiyatna, H. S. (2023). *Revolusi Belajar di Era Digital*. Penerbit PT Kodogu Trainer Indonesia.
16. Saputra, A. M. A., Kharisma, L. P. I., Rizal, A. A., Burhan, M. I., & Purnawati, N. W. (2023). *TEKNOLOGI INFORMASI: Peranan TI dalam berbagai bidang*. PT. Sonpedia Publishing Indonesia.
17. Savitri, A. (2019). *Revolusi industri 4.0: mengubah tantangan menjadi peluang di era disrupsi 4.0*. Penerbit Genesis.
18. Sri Adiningsih, S. E. (2019). *Transformasi ekonomi berbasis digital di Indonesia: lahirnya tren baru teknologi, bisnis, ekonomi, dan kebijakan di Indonesia*. Gramedia Pustaka Utama.

19. Sutopo, A. H. (2022). *Pengembangan Bahan Ajar berbasis Metaverse*. Topazart.
20. Wahyuni, S. (2021). SOFTWARE DEFINED EVERYTHING (SDx/SDE): Paradigma Automasi Jaringan Infrastruktur Teknologi Informasi. *JINTECH: Journal Of Information Technology*, 2(2), 125-137.
21. Wibowo, A. (2023). Internet of Things (IoT) dalam Ekonomi dan Bisnis Digital. *Penerbit Yayasan Prima Agus Teknik*, 1-94.
22. Wibowo, A., Wangsajaya, Y., & Surahmat, A. (2023). *Pemolisian Digital dengan Artificial Intelligence*. PT. RajaGrafindo Persada-Rajawali Pers.
23. Yulianah, S. E. (2022). *Metodelogi Penelitian Sosial*. CV Rey Media Grafika.
24. Yuniarto, T. (2019). Masa Depan Jaringan 5G dan Perilaku Komunikasi Digital. *Warta Ikatan Sarjana Komunikasi Indonesia*, 2(01), 1-7.
25. Zulpratita, U. S. (2018). Kunci teknologi 5g. *Jurnal Ilmiah Teknologi Infomasi Terapan*, 4(2).

Digital Communication as a Tool for Improving Organizational Performance

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Keywords

Digital Communication,
Performance,
Organization,
Technology, Digital Era.

Abstract. In an era of ever-evolving information technology, modern organizations increasingly rely on digital communications to facilitate internal and external interactions. This research aims to investigate the role and impact of digital communication as a tool for improving organizational performance. This research uses a qualitative approach with descriptive methods. The research results show that the application of digital communication has a positive impact on organizational performance. Factors such as adequate technological infrastructure, digital literacy of organizational members, clear policies and protocols, leadership level support, appropriate communication context and objectives, and information security, contribute significantly to the success of digital communications. Research highlights benefits such as rapid exchange of information, efficient coordination, strengthening internal networks, transparency, overcoming geographic barriers, and increased engagement of organizational members. However, challenges such as security risks and information overload also need to be considered. Therefore, understanding and managing these factors is key in maximizing the role of digital communications to achieve organizational goals more effectively.

1. INTRODUCTION

Communication, as a series of processes of transferring and exchanging messages, is the main basis for human interaction in various aspects of daily life. Messages communicated can be facts, feelings, ideas or thoughts, as well as data or information that aims to influence other people (Kustini, 2017). Communication activities are a necessity in human life, manifested in interactions between individuals and themselves, between individuals, individuals and groups, and in organizational contexts that involve many individuals (Furqon, 2003).

Humans are categorized as social creatures because their existence cannot be separated from the need for interaction and relationships with other people. Communication, as the main tool, is used to establish relationships, interact and understand each other with the aim of achieving various goals in everyday life (Mailani et al, 2022). The importance of communication also includes the role of the media as an intermediary in conveying messages. Although initially communication was formed directly without media intermediaries, the increasing number of human beings spread throughout the world requires media as a means of conveying messages (Tosepu, 2018). Along with the digital era, the development of information and communication technology has become a catalyst for change in the dynamics of human communication.

In the digital era, media transformation not only acts as an intermediary, but also as a catalyst for fundamental changes in the dynamics of human communication. The development of information technology, especially via the internet, presents unlimited capabilities for individuals to connect and communicate across regions (Suryani, 2017). This phenomenon shifts the communication paradigm from previously limited to a certain area to become global. Now, every individual has instant access to various information, views and interactions from all corners of the world without any geographical barriers (Zamroni, 2009).

The digital era not only provides facilities for global connections, but also opens up opportunities for changes in human communication patterns as a whole. The use of digital media not only makes communication easier, but also expands the scope of human interaction (Mahendra, 2017). Through social platforms, online forums, and communication applications, individuals can exchange ideas, share experiences, and build relationships virtually. Thus, the digital era creates a dynamic communications landscape, connecting global society in a vast and ever-expanding information network.

Digital Communication is a form of interaction that utilizes technology to communicate without direct physical presence. This involves the use of digital tools such as computers or smartphones with various applications or social media platforms such as Facebook, Instagram, and WhatsApp (Fauzi, 2017). With digital communication, individuals can connect with other people without having to meet in person, overcoming the barrier of geographic distance. Social media and instant messaging applications facilitate the exchange of information, updates and social interactions through text, images and videos (Prasanti, 2016).

More than just changing the way we interact, Digital Communication opens the door to innovation in delivering messages and exchanging information in the digital era. The potential of Digital Communication became the main focus during the pandemic (Syarif, 2019). Businesses that do not have a Digital Communication strategy fail to survive at that time. Video conferencing is becoming the dominant communication channel, while email is evolving into a new way of conveying messages. Digital Communication also plays an important role for reasons such as increasing worker involvement, providing a comfortable and enjoyable experience, being universally accepted, increasing transparency in the organization, and saving time, energy and costs (Ginting et al, 2021).

Organizations, as formal union systems, show the structure and coordination of a group of people who unite to achieve certain goals (Eggendhie, 2011). In this context, an organization is not just a collection of individuals, but is an organized entity with a clear division of tasks and defined authority, so that it is able to carry out joint functions in achieving common goals (Irawan, 2019). The existence of this structure and coordination is the basis for the success of an organization (Sunandar, 2012). Muhammad (2004), defines organizational communication as the process of sending and receiving various organizational messages within formal and informal groups of an organization. In other words, organizational communication involves a complex flow of messages between organizational members, both through formal channels such as meetings or official instructions, and through informal channels such as daily conversations (Kuswarno, 2001).

The importance of organizational communication lies not only in carrying out tasks, functions and authority, but also in building good relationships within the organization. Through effective communication, organizational members can understand each other's shared goals, create synergy, and overcome potential obstacles. Organizational communication is not only a functional tool, but also a foundation for strengthening ties and cohesion within an organization. By leveraging digital communications, organizations can achieve higher levels of efficiency, improve coordination among teams, and stimulate innovation. Therefore, understanding and strategic implementation of digital communication within the organizational structure is the key to achieving optimal performance in this modern era

2. METHOD

This research uses a qualitative descriptive research approach with a post-positivist research paradigm. This paradigm is characterized as research that is deterministic, reductionist, empirical observation and measurement, and accompanied by theory verification (Creswell, 2002). Qualitative research or naturalistic inquiry is a method of research intended to understand actuality, social reality and existing human perceptions (Lincoln & Guba, 1985). In this research there are no hypotheses determined from the start, there is no treatment, and there are no restrictions on the final product. In this research, key informants were determined based on the snowball sampling technique, which is a method for identifying, selecting and taking samples in a continuous network or chain of relationships (Creswell, 2002). Data collection was carried out by observation, interviews and documentation. Next, the data was tested for data validity using triangulation carried out on the data source (informant). After being tested, the data will be analyzed descriptively, which aims to describe the research data according to the focuses studied, without testing the relationship between variables through hypothesis testing, because in this research the author did not make a hypothesis.

3. RESULTS AND DISCUSSION

Digital Communication as a tool in Improving Organizational Performance

In the dynamics of an organization, the role of managers or leaders is very important and cannot be separated from communication activities. Managers actively communicate to convey vision, mission and direction to all team members. They use verbal interactions as a tool to coordinate tasks, provide feedback, and provide necessary motivation and direction. Communication, especially in the form of verbal interaction, is the backbone that helps smooth and harmonize the organization's progress towards achieving the desired goals or targets (Zahra, 2018).

With the development of technology, especially in the form of digital communication, the role of managers in communicating is increasingly open and expanding their reach. Digital communication allows managers to interact quickly and efficiently with their team members, without being constrained by time constraints or physical location. Through digital communication tools, such as electronic mail, collaborative platforms, or video conferencing, managers can ensure that key messages are delivered clearly and on time to all members of the organization (Aripradono, 2020). Thus, the adoption of digital communication not only enriches the quality of communication, but also increases effectiveness and involvement in carrying out organizational functions more efficiently. The following will explain the role of digital communication as a tool in improving organizational performance.

a. Fast exchange of information

Digital communication, as the main pillar in the modern era, makes a major contribution to accelerating information exchange within organizations. In this context, speed is one of the main advantages made possible by digital communications. Through the use of tools such as electronic mail, instant messaging, and collaborative platforms, organizations can overcome delays in information dissemination. This speed plays a central role in supporting faster decision making. By having instant access to data and updates, organizational leaders can respond quickly to market changes, industry trends, or internal events that require immediate action.

Additionally, digital communication not only focuses on speed in information exchange, but also opens the door to better engagement and collaboration among organizational members. Social media platforms, collaborative tools, and video conferencing enable team members to interact directly regardless of geographic boundaries. This creates space for deeper discussions, sharing ideas, and building shared understanding. With digital communication, organizational members can be involved in the decision-making process, contribute to joint projects, and feel more connected to the organization's vision and mission. However, despite all the potential positives, it is important for organizations to understand the challenges and risks associated with digital communications. Sustainability and security of information, the potential for information to be spread without supervision, as well as the possibility of misunderstandings due to ambiguity in digital messages are several aspects that need to be managed carefully.

b. Efficient coordination

Digital communication tools, such as email, collaborative platforms, and instant messaging, not only make things easier, but also become the main foundation in supporting effective coordination among organizational members. In an era where mobility and flexibility are highly valued, email has become an irreplaceable tool for communicating in writing regardless of physical location. Organization members can easily share information, provide instructions, or provide feedback via email, supporting smooth communication among teams that may be spread across different locations.

Meanwhile, collaborative platforms, such as Google Workspace or Microsoft Teams, provide virtual spaces for effective collaboration. In it, organizational members can collaborate directly on documents or projects, minimizing delays in the exchange of ideas and contributions. Features such as live comments or real-time updates speed up the decision-making process and ensure that every team member stays informed about the latest developments. Instant messaging, on the other hand, provides a fast and direct communication channel, enabling instant interaction and exchange of information that supports daily tasks more efficiently.

While these digital communication tools provide significant benefits, organizations also need to consider the challenges associated with their use. The risk of inappropriate information management, confusion due to unclear messages, and the potential for information overload need to be addressed through appropriate policies and training. With a thorough understanding of the positive potential and associated risks, organizations can optimize the use of digital communication tools to increase efficiency and coordination within the scope of daily tasks.

c. Strengthening Internal Networks

Through advances in digital communication technology, especially through social media platforms and collaborative tools, organizations can build strong and dynamic internal networks. Corporate social media, such as Yammer or Workplace by Facebook, provide a space for organizational members to share information, ideas and achievements in real-time. This opens up opportunities for informal interactions, strengthens interpersonal relationships within the team, and creates a more open work atmosphere. This network not only connects team members, but also creates opportunities to spread organizational culture, create a sense of shared ownership, and build communities focused on shared goals.

Along with this, collaborative tools like Google Workspace or Slack speed up cross-departmental collaboration. Through features such as shared documents and organized communication channels, organizational members can collaborate on cross-functional projects more effectively. Digital communication enables the dynamic exchange of ideas and input, reduces communication barriers between departments, and promotes synergy between different parts. Thus, digital communication is not only a practical tool for information exchange, but also a key driver in strengthening the engagement of organizational members and increasing collaboration across departments.

d. Information Transparency and Accessibility

Digital communication is the main pillar in creating organizational transparency by providing easier information accessibility for all members. Through digital platforms, such as a company intranet, organizational members can quickly access up-to-date information on policies, projects and the latest developments. This clarity and openness of information creates an open work environment, ensuring that every member has visibility into the steps taken by the organization. Therefore, each member can feel more involved in the decision-making process, understand the strategic direction, and feel like they have a significant role in achieving common goals.

In addition, digital communication also contributes to strengthening the understanding of the goals and strategies adopted by the organization. Through consistent and transparent delivery of information, organizational members can better understand the context, recognize the urgency of change, and see how their individual contributions impact shared goals. Apart from that, the existence of forums or online discussion rooms also allows members to ask questions, provide input, and collaborate in optimizing organizational strategies. Thus, digital communication not only functions as a means of conveying information, but also as a means of building mutual understanding and active involvement in achieving the organization's vision and mission.

e. Overcome Geographical Barriers

Digital communication, especially through video conferencing and various online communication tools, has provided a revolutionary solution in overcoming geographical barriers in the context of organizational work and collaboration. Video conferencing enables virtual meetings that are similar to physical meetings, removing the barrier of distance and enabling participation from multiple locations around the world. Team members or coworkers can interact directly, share ideas, and collaborate on projects without having to be together in one physical place. This innovation opens the door to global collaboration, connecting individuals across different time zones and locations, increasing response speed, and supporting business continuity.

Additionally, online communication tools, such as collaborative platforms and instant messaging, enable real-time collaboration among geographically separated teams. With this platform, team members can share documents, provide feedback, and coordinate in real time, without

experiencing delays caused by time zone differences. The use of these tools also provides flexibility for individuals to work asynchronously, considering different work times around the world. By removing geographic barriers, digital communications not only accelerates the decision-making process, but also optimizes overall team productivity, creating a globally connected and adaptive work environment.

f. Increasing Organizational Member Involvement

A measurable and appropriate digital communication strategy can have a significant positive impact on the engagement of organizational members. Through digital media, organizations can convey inspirational messages, organizational goals, and collective achievements in a way that motivates and raises the enthusiasm of members. Utilizing social media platforms, internal blogs, or digital newsletters provides opportunities to celebrate successes, introduce new initiatives, and stimulate enthusiasm among organizational members.

Apart from that, an effective digital communication strategy also creates a dynamic and open work environment. Organization members can participate in online discussions, voice creative ideas, and respond directly to changes or developments within the organization. Utilizing interactive features, such as polls or discussion forums, can encourage active participation and give organizational members a sense of ownership of the direction and policies adopted by the organization. By adopting digital communication strategies that motivate and focus on member engagement, organizations can create a work environment that is not only productive, but also full of enthusiasm and dynamic, which in turn will bring positive benefits for achieving common goals.

Factors that influence digital communication in improving organizational performance

The application of digital communication in organizations to improve organizational performance can also be influenced by several factors. These factors include:

a. Technology Infrastructure

The availability and quality of technological infrastructure is the main foundation in ensuring the effectiveness of digital communication in an organization. Adequate internet speed and quality hardware support the smooth exchange of information, ensuring that organizational members can connect quickly and without obstacles. Good infrastructure ensures stable accessibility, so that organizational members can access digital platforms whenever needed. These conditions create an environment where messages can be delivered in real-time, online collaboration can occur without interruption, and decisions can be made with rapid response. Therefore, investment and attention to adequate technological infrastructure is not only a practical necessity, but also a strategic step to increase the efficiency and effectiveness of digital communications, and support the achievement of overall organizational goals.

b. Digital Literacy

The digital literacy level of organizational members is a critical aspect in determining the extent to which digital communication can play a role in supporting organizational performance. An individual's proficiency in using digital communication tools, such as email, collaborative platforms, or corporate social media, determines the extent to which they can effectively participate in information exchange and collaboration via those digital platforms. Individuals who have a high level of digital literacy tend to be better able to understand technological features, manage information efficiently, and adapt to new technological developments. Conversely, low levels of digital literacy can be a barrier to understanding and fully exploiting the potential of digital communications. Therefore, investing in increasing the digital literacy of organizational members through training and education can open the door to more active participation, increase the effectiveness of digital communications, and in turn, support the achievement of organizational goals.

c. Policies and Protocols

Adoption of clear policies and protocols related to the use of digital communications is a crucial step in establishing a framework that supports the effectiveness and security of communications within an organization. This policy includes ethical usage guidelines that govern the behavior of organizational members in communicating digitally, ensuring that interactions are

conducted with professionalism and respect for organizational values. In addition, information security aspects are the main focus in this policy, by establishing data protection measures involving the storage, transmission and access of information. Privacy-related guidelines are also an integral part, providing direction on how individual data is managed and protected in the realm of digital communications. By adopting clear policies, organizations create an environment where members can use digital communications with confidence, minimize risk, and maintain integrity and trust in the exchange of digital information across the organization.

d. Leadership and Organizational Culture:

Leadership level roles and support have a substantial impact on the successful implementation of digital communications within an organization. Leadership that supports and encourages the use of digital communication technology not only provides positive signals related to innovation, but also stimulates changes in organizational culture towards faster adaptation to technological developments. When leaders demonstrate their interest and involvement in the use of digital communications, this permeates all levels of the organization, encouraging active participation and acceptance of digital communications solutions. Leadership-level support creates an atmosphere where organizational members feel supported to experiment, understand the added value of the technology, and integrate it into daily work routines. Therefore, the positive and exemplary role of leadership is the main driver in building an organizational culture that is responsive to advances in digital communication technology

e. Context and Purpose of Communication

Factors that encompass desired communication characteristics, such as whether it is formal information, open discussion, or project collaboration, are key elements in designing an effective digital communications strategy. The success of digital communication in an organization depends not only on the technology used, but also on the extent to which the strategy matches the communicative needs and preferences of members. By clearly defining the context and purpose of the communication, organizations can design an appropriate approach, ensuring that each message is delivered according to specific needs. Whether it is in the form of an official announcement, an open discussion for the exchange of ideas, or a collaborative platform for a joint project, understanding the characteristics of desired communications becomes the foundation for creating a digital communications strategy that is relevant and supportive of achieving organizational goals.

f. Information Security

Information security plays a crucial role, especially in the context of organizational communication via digital platforms. In an era where information exchange occurs digitally, implementing adequate security measures is a must to protect organizational data from potential security risks. Actions such as using encryption to protect data integrity and strict access management to control who has access to information are essential steps. Through this approach, organizations can ensure that information communicated via digital platforms remains secure, not exposed to threats from unauthorized parties. Good information security not only protects against security breaches and data leaks, but also provides an important foundation of trust between members of an organization who communicate digitally, ensuring that sensitive and strategic data remains well protected.

4. CONCLUSION

Digital communication has a crucial role in improving organizational performance. In modern organizational dynamics, digital communication technology makes a major contribution to efficiency, engagement, and collaboration among organizational members. Several factors influence the successful implementation of digital communications in an organizational context, including technology infrastructure, digital literacy, policies and protocols, leadership, communication context and goals, and information security. Adequate technological infrastructure is the main foundation for the smooth exchange of information, while the digital literacy of organizational members determines the extent to which they can utilize the potential of digital communication. Clear policies and protocols provide ethical and security guidance, while leadership-level support stimulates organizational cultural adaptation to technology. The context and purpose of communications must be

taken into account in designing appropriate strategies, while information security becomes imperative to protect organizational data. Digital communication also provides significant benefits, such as rapid exchange of information, efficient coordination, strengthening internal networks, transparency, overcoming geographic barriers, and increasing involvement of organizational members. However, challenges such as security risks, confusion due to unclear messages, and information overload need to be managed wisely.

REFERENCES

1. Aripadono, H. W. (2020). Penerapan Komunikasi Digital Storytelling Pada Media Sosial Instagram. *Teknika*, 9(2), 121-128.
2. Creswell, J. W. (2002). Desain penelitian. *Pendekatan Kualitatif & Kuantitatif*, Jakarta: KIK, 121-180.
3. Damastuti, R. (2020). Adopsi inovasi media komunikasi pemasaran UMKM batik jumputan di era digitalisasi. *SOURCE: Jurnal Ilmu Komunikasi*, 6(2), 160-170.
4. Effendhie, M. (2011). Pengantar Organisasi. *Organisasi Tata Laksana Dan Lembaga Kearsipan*, 1-90.
5. Fauzi, R. (2017). Perubahan Budaya Komunikasi pada Pengguna Whatsapp di Era Media Baru. *Jurnal Ilmu Komunikasi Efek*, 1(1), 265273.
6. Furqon, C. (2003). Hakikat komunikasi organisasi. *Hakikat Komunikasi Organisasi*, 2(15), 1-9.
7. Ginting, R., Purwati, E., Arumsari, N., Pujiastuti, N. S., Kussanti, D. P., Dani, J. A., ... & Sari, A. A. (2021). *Manajemen Komunikasi Digital Terkini*. Penerbit Insania.
8. Irawan, B. (2019). Organisasi formal dan informal: tinjauan konsep, perbandingan, dan studi kasus. *Jurnal Administrative Reform*, 6(4), 195-220.
9. Kustini, H. (2017). *Communication Skill*. Deepublish.
10. Kuswarno, E. (2001). Efektivitas Komunikasi Organisasi. *Mediator: Jurnal Komunikasi*, 2(1), 55-61.
11. Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. sage.
12. Mahendra, B. (2017). Eksistensi sosial remaja dalam Instagram (sebuah perspektif komunikasi). *Jurnal Visi Komunikasi*, 16(1), 151-160.
13. Mailani, O., Nuraeni, I., Syakila, S. A., & Lazuardi, J. (2022). Bahasa sebagai alat komunikasi dalam kehidupan manusia. *Kampret Journal*, 1(2), 1-10.
14. Muhammad, A. (2004). Komunikasi organisasi.
15. Prasanti, D. (2016). Perubahan media komunikasi dalam pola komunikasi keluarga di era digital. *Jurnal Commed*.
16. Sunandar, A. (2012). Keterhubungan Struktur dan Budaya Organisasi. *Manajemen Pendidikan*, 23(6), 403-410.
17. Suryani, I. (2017). "Republik Hot Ngelesot" Sebagai Wujud Penerapan Program Cyber City Pemerintah Daerah Istimewa Yogyakarta (Studi Kasus Pada Program Cyber City Pemerintah Daerah Istimewa Yogyakarta). *Communication*, 8(1), 36-50.
18. Syarif, D. N. (2019). *Komunikasi kontemporer: Bisnis Islam di era digital*. Deepublish.
19. Tosepu, Y. A. (2018). *Media Baru dalam Komunikasi Politik (Komunikasi Politik I Dunia Virtual)*. Jakad Media Publishing.
20. Widyaningrum, A. Y. (2021). Kajian Tentang Komunitas Virtual: Kesempatan dan Tantangan Kajian di Bidang Ilmu Komunikasi. *Komunikatif: Jurnal Ilmiah Komunikasi*, 10(2), 141-152.
21. Zahara, E. (2018). Peranan komunikasi organisasi bagi pimpinan organisasi. *Warta Dharmawangsa*, (56).
22. Zamroni, M. (2009). Perkembangan teknologi komunikasi dan dampaknya terhadap kehidupan. *Jurnal Dakwah Vol. X No. 2 Juli-Desember 2009*.



Building Digital Communication Effectiveness in Organizations

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ABSTRACT

In facing this digital era, organizations are faced with the challenge of understanding and fully utilizing the potential of digital communications in order to achieve optimal effectiveness. Digital communication includes a variety of tools, such as online collaboration platforms, email, social media, and other technology-based applications. The success of an organization not only depends on the adoption of this technology, but also on the extent to which the organization is able to manage and build the effectiveness of communication through these digital media. Therefore, this research aims to establish the effectiveness of digital communication in an organization. This research uses a qualitative approach with descriptive methods. The research results show that the implementation of digital communication in organizations has a positive impact on operational efficiency and productivity. Respondents highlighted that the use of digital communication tools, such as email and collaborative platforms, overcomes distance and time constraints, speeds up the exchange of information, and facilitates faster decision making. Employee engagement also increases through interactive communication channels, creating a more open and collaborative work environment. Despite this, challenges related to technological inadequacy and digital security issues remain major concerns that require strategic action in optimizing the benefits of digital communications within organizations.

Keywords: Effectiveness, Digital Communication, Organization, Information and Communication Technology

INTRODUCTION

Organizations are living dynamic entities, where individuals unite to achieve various goals, with a focus on achieving desired results (Effendhie, 2011). Effective communication is a crucial element in ensuring that an organization can mobilize all its resources to achieve its stated targets (Asriadi, 2020). Essentially, organizational communication includes a series of communication activities that occur within the organization (intra-organization) and also communication interactions between one organization and another organization (inter-organization) (Furqon, 2003)

Communication is not only a means of transmitting information, but also the foundation underlying cooperation, mutual understanding and coordination among organizational members (Harapan et al, 2022). An effective communication system is needed to ensure that the organization's vision, mission and strategy can be translated clearly to each member. Furthermore, intra-organizational communication plays an important role in building a healthy organizational culture and motivating employees to contribute optimally (Kuswarno, 2001). Meanwhile, communication between organizations is key in forming partnerships, carrying out collaboration, and ensuring alignment of goals amidst the dynamics of inter-organizational relationships in a complex business ecosystem (Rahmanto, 2004).

Organizational communication is essentially different from group communication, especially in terms of its formal nature, organized structure, and emphasis on the principle of efficiency in the course of communication (Nurdin, 2014). In contrast to group communication which tends to be functional, organizational communication has more formal structural characteristics, is bound by certain rules, and involves providing rewards and sanctions for its members. Organizational communication occurs all the time, involving at least one individual who occupies a certain position and members who are members of an organization (Ambarwati, 2021).

The main focus of organizational communication is the interactions that occur between members of an organization, and the emphasis is on analyzing interactions that take place within the organizational structure simultaneously (Mulawarman & Rosilawati, 2014). Organizational communication systems are quite complex because they involve the exchange of messages between





tens or even hundreds of individuals who have different duties and responsibilities within the organization (Ardiyanti, 2020). In this context, individual thoughts, decisions and behavior are regulated by the policies, regulations and ethical norms that apply within the organization. Thus, a deep understanding of organizational communication is crucial in understanding the dynamics that occur in a structural and organized work environment (Luthfie, 2018).

The development of technology and information, especially in the digital realm, is progressing rapidly every day, becoming the main driver in the transformation of society today. The digital era has become the main force that helps people overcome various difficulties in carrying out daily tasks (Putra & Irwansyah, 2020). Digital is not just a method, but a complex and flexible system that is at the core of human life (Aji, 2016). Nowadays, digital presence not only provides solutions for individuals in completing routine tasks, but also becomes an important tool in speeding up and simplifying organizational communications. Through digital media, or what is familiarly known as digital communication, organizations can easily and quickly convey information to the public, creating efficiency and effectiveness in disseminating important messages that support organizational goals (Kurmia, 2005).

Digital communication is a form of interaction that utilizes technology to communicate without direct physical presence. This includes the use of digital tools such as computers or smartphones equipped with various applications or social media platforms such as Facebook, Instagram and WhatsApp (Fauzi, 2017). With digital communication, individuals can connect with other people without having to meet in person, making geographic distance no longer an obstacle. Social media and instant messaging applications facilitate the exchange of information, updates and social interactions in text, image and video formats (Prasanti, 2016).

Furthermore, Digital Communication also refers to communication in a network context, where the sending and receiving of messages is carried out via the internet. This interaction allows for real-time communication, video conferencing, and sharing multimedia content very efficiently and effectively (Prabowo & Irwansyah, 2018). The main advantage of digital communication lies in its ability to overcome space and time barriers, allowing individuals and organizations to communicate quickly and easily without being constrained by geographical boundaries (Priyono, 2022).

Digital communication not only changes the way we interact, but also opens the door to innovation in delivering messages and exchanging information in this digital era. The potential of Digital Communication was in the spotlight during the pandemic (Syarif, 2019). Businesses without a Digital Communication strategy fail to survive at that time. Video conferencing becomes a communication channel, email becomes a new way of conveying messages. Digital Communication is also important for various other reasons given such as better employee engagement, comfortable and enjoyable experience, universal acceptance, transparency in the organization, and saving time, effort and money (Ginting et al, 2021).

The problem formulation in this research includes identifying obstacles that may occur in implementing digital communication within an organization. The main focus of this research is to identify the importance of digital communication in organizations, the obstacles that may hinder the effectiveness of digital communication and the extent to which it is related to achieving organizational goals. By understanding these obstacles, this research aims to provide in-depth insight into the effectiveness of digital communication and how it can influence the overall achievement of organizational goals. It is hoped that this research will contribute to the understanding of digital communication in an organizational context and provide recommendations for organizations to increase the effectiveness of digital communication.

METHOD

The research methodology employed in this study adopts a qualitative approach with descriptive methods, as outlined by Moleong (2014). A qualitative approach involves the collection of descriptive data through words or statements obtained from individuals and observations of their behavior. Qualitative data sources include verbal or written expressions witnessed by researchers, as well as in-





depth examination of objects to extract their conveyed meanings. The research falls under the category of descriptive research, which seeks to elucidate solutions to existing problems based on gathered data, aiming to identify, analyze, and address specific issues. The qualitative descriptive research design chosen for this study aims to gather insights into the effectiveness of digital communication within organizations. The researcher employs observational techniques, encompassing systematic observation and documentation, to collect data. Interviews, involving oral question-and-answer sessions between two individuals, are used as another data collection method. Documentation involves retrieving information from various documents and tends to gather secondary data, while observations and interviews focus on obtaining primary data directly from the parties involved (Anggito & Setiawan, 2018). Following data collection, the analysis proceeds through several steps: 1) Collating all collected data from both primary and secondary sources; 2) Organizing data into problem units based on the stated issues; 3) Analyzing the components of the argument used to address the problems; and 4) Drawing conclusions based on the results of the problem analysis.

RESULTS AND DISCUSSION

The Importance of Digital Communication in Organizations

Digital communication has a very important role in the organizational context, especially in this modern era. Here are some reasons why it is important:

a. Distance and time efficiency

Digital communication brings a revolution in terms of time and distance efficiency in the organizational context. By using digital tools such as email, instant messaging, or online collaborative platforms, organizations can overcome time and geographic barriers that may hinder traditional communications. For example, the use of email or chat groups enables instant messaging, speeds up the exchange of information, and allows employees to respond quickly without waiting for a face-to-face meeting. Additionally, video conferencing platforms facilitate virtual meetings and discussions, eliminating the need to be physically present, which becomes crucial especially during a pandemic or in emergency situations.

b. Accelerate handling of problems and making organizational decisions

By adopting digital communications, organizations are able to increase efficiency in handling problems and making decisions. Digital platforms such as email, instant messaging, and video conferencing allow stakeholders to connect and communicate instantly, speeding up workflows in responding to emerging issues. This speed in communication provides significant benefits in the context of decision making, where information can be conveyed quickly and in a timely manner. As a result, organizations become more responsive to changes in the dynamic business environment. The ability to quickly respond to new problems or opportunities opens up opportunities for organizations to remain adaptive and competitive amidst rapid change.

c. Employee Engagement

Digital communications plays a central role in increasing employee engagement by creating more interactive and accessible communication channels. Through digital platforms such as internal social media, online discussion forums, or team collaboration tools, organizations can facilitate a more active exchange of ideas, feedback, and participation from all team members. The ability to share information in real-time builds a sense of engagement and bonding among employees, regardless of physical location or time zone. Additionally, digital communication provides an opportunity to celebrate team achievements, stimulate collaboration, and increase individual motivation. However, to achieve optimal employee engagement, organizations need to pay attention to the importance of conveying messages clearly, creating an environment that supports the open exchange of ideas, and providing a platform that allows employees to contribute comfortably.

d. Organizational transparency

Digital communication is the main pillar in creating transparency in the organizational structure. By utilizing digital platforms, organizations can provide open access to information to all team members, opening more direct lines of communication between management and employees. Internal





social media or digital information portals allow information about organizational goals, strategies and developments to be easily accessed by all team members, without the barriers of traditional hierarchies. This transparency creates an open work environment that supports collaboration, reduces information gaps, and provides clarity regarding the organization's direction and goals.

e. Flexibility and Scalability

The importance of digital communications in an organizational context is reflected through its ability to provide flexibility and scalability. Digital communications enable organizational members to interact via multiple devices and platforms, including computers, smartphones, or tablets, without compromising communication efficiency. The existence of a digital platform that can be accessed flexibly allows team members to communicate and collaborate anywhere, anytime. Additionally, an organization's ability to quickly scale digital communications according to growth or changing needs is key to maintaining adaptability. With flexible and customizable digital communications, organizations can maximize communication effectiveness, increase productivity, and ensure that team members can stay connected without being constrained by physical boundaries or specific infrastructure.

Barriers that Disrupt the Effectiveness of Digital Communication in Organizations

The effectiveness of digital communication in organizations can be hampered by several things. Some obstacles that are generally faced include:

a. Technological Inadequacy

Technical barriers can pose significant challenges to the effectiveness of digital communications within an organization. Network disruptions or software instability can result in communication breakdowns, slow response, and even harm smooth workflow. In addition, dependence on complex technology or lack of understanding of digital communication tools is a serious obstacle. When organizational members do not have sufficient understanding of how to use or maximize the features of a digital communications platform, this can reduce efficiency and hinder the optimal potential of the tool. Therefore, organizations need to prioritize training and technical support to ensure that employees have an adequate understanding of the technology used and can overcome technical obstacles more effectively.

b. Security and privacy

Concerns related to data security and privacy play a crucial role as major barriers in the adoption of digital communications within organizations. In an era where information exchange occurs digitally, these concerns include potential threats such as data leaks, cyber attacks, or misuse of personal information. Organizations are required to address these security challenges by implementing careful measures to protect the integrity and confidentiality of communicated information. This includes the use of encryption, strict access control settings, and the implementation of clear data security policies. Therefore, organizational efforts to maintain security and privacy are key factors in building organizational members' trust in the use of digital communications, thereby minimizing risks and facilitating wider adoption.

c. Lack of engagement and training

Low employee involvement or lack of training in the use of digital communication technology can be a serious obstacle in optimizing the potential of these tools within the organization. Employees unfamiliar with technology may have difficulty mastering digital communication tools, limiting their ability to actively participate in those interactions. Additionally, a lack of understanding of the specific features offered by digital communication platforms can be detrimental to communication effectiveness. Not only can it hinder productivity, but it can also create a gap between employees who are skilled in using technology and those who are less experienced. Therefore, it is important for organizations to provide adequate training to employees, build digital literacy, and provide continuous support so that employees can better integrate digital communication technology in their work routines, making it a useful asset in achieving organizational goals.

d. Information Overload

Large fluctuations in the volume of information received in the digital communications era can have a significant impact on the effectiveness of communications within organizations. When





employees or team members are flooded with excessive amounts of information, especially through various digital platforms, the risk of information overload increases. This information overload can cause difficulties in processing the messages received, so that key messages are often overlooked or distorted. Information overload can also cloud priorities and urgency, leading to inappropriate decision making or less efficient problem handling. Therefore, organizations need to develop an effective information management strategy, including the application of filters or information curation, to ensure that the messages conveyed remain focused, relevant, and can be processed well by team members. Thus, judicious handling of volumes of digital information can improve communication effectiveness and help prevent the negative impacts of information overload.

e. Cultural and linguistic differences

Cultural or linguistic diversity within organizational teams, although bringing the potential for a richness of ideas and perspectives, often presents obstacles to understanding and interpreting messages. Organizations with culturally diverse teams can experience challenges in managing cultural differences that include different communication norms, use of body language, or even symbolic understanding. Language differences can also be a significant barrier affecting collaboration and communication effectiveness. Misunderstandings may arise due to differences in interpretation or different cultural contexts, which in turn can slow progress and hinder project success. Therefore, to overcome these barriers, organizations need to foster an inclusive culture, provide cross-cultural training, and utilize tools such as translators or cross-language communication resources. In this way, organizations can maximize the potential of team diversity and make it an enriching asset, not an obstacle, in achieving common goals.

Strategy to improve Digital communication in Organizations

Improving the effectiveness of digital communication in an organization is an effort to improve the flow of information, understanding and collaboration between organizational members. This aims to create a more efficient, productive and harmonious work environment. The following are several strategies to increase the effectiveness of digital communication in organizations:

a. Open communication

The first strategy to increase the effectiveness of digital communications in an organization is to ensure clear and open communication. This involves conveying the message in a way that is easy to understand, avoiding ambiguity or technical terms that may be confusing. Additionally, encouraging an open culture that welcomes questions, feedback, and discussion helps create a two-way communication channel that builds trust. Using simple language and transparency in conveying information can help avoid misunderstandings and maintain openness among team members. By emphasizing clear and open communication, organizations can ensure that information conveyed via digital media is well understood by all team members, helping to create a more coherent and efficient work environment.

b. Active listening

The second strategy to increase the effectiveness of digital communications in organizations is through the practice of active listening. Listening is not just about receiving information, but also understanding the meaning behind it. By focusing attention on messages conveyed by coworkers or leaders, team members can respond more appropriately and provide more meaningful feedback. Active listening involves understanding the context of the message, asking relevant questions, and providing confirmation to ensure correct understanding. In the context of digital communications, this includes quick responses to messages, demonstrating presence via online communication platforms, and creating space for deeper discussions. By integrating active listening practices, organizations can improve the quality of digital interactions, strengthen team relationships, and build the foundation for more effective communication within the work environment.

c. Two-way communication

The third strategy to increase the effectiveness of digital communication in organizations is to promote two-way communication. Two-way communication creates a channel of interaction that allows team members to not only receive information, but also actively participate by providing feedback, asking questions, or proposing ideas. Through digital platforms, such as online forums, group





chats, or video conference sessions, organizations can create a space for team members to contribute, share views, and feel heard. Two-way communication not only strengthens bonds between team members, but also helps prevent misunderstandings or ambiguities. By rewarding individual contributions and facilitating open dialogue, organizations create an environment where each team member feels like they have an active role in the communication process, creating better collaboration and increasing the effectiveness of working together.

d. Openness and transparency

The fourth strategy to increase the effectiveness of digital communications in organizations is to promote openness and transparency. Openness involves clarity in conveying information, while transparency involves providing open access to team members regarding organizational policies, goals, and developments. By implementing openness and transparency in digital communications, organizations can create an environment where team members feel given enough information to understand the context and goals of their work. This can include providing regular updates, communicating management decisions, and opening discussion channels for questions or clarification. This openness creates a foundation of trust among team members and motivates more active engagement, while transparency helps build an organizational culture that is open to the innovative ideas and solutions that can emerge from team collaboration. Thus, openness and transparency in digital communications not only helps strengthen relationships among team members, but also strengthens the overall health of the organization.

e. Training and development of organizational skills

The fifth strategy to increase the effectiveness of digital communication in organizations is through training and developing communication skills. Providing targeted and ongoing training to team members in using digital communication tools, understanding the nuances of online communication, and practicing digital etiquette can help significantly improve their communication skills. This training not only covers the technical aspects of using digital platforms, but also focuses on developing listening skills, providing effective feedback, and conveying messages clearly and persuasively. By empowering team members with strong digital communication skills, organizations can improve their ability to communicate effectively, minimize the risk of misunderstandings, and ensure that the information conveyed is well understood by the entire team. This training also helps create an environment where digital communication becomes a more effective tool in achieving organizational goals and supports the growth of individual skills in this digital era.

CONCLUSION

In the modern era, the role of digital communication is very crucial for the success of an organization. Success is no longer determined only by products or services, but also by the extent to which internal communications are effective. Digital communication provides efficiency in overcoming distance and time constraints, speeds up problem handling, and facilitates fast decision making. Additionally, employee engagement is enhanced through interactive communication channels, while organizational transparency is realized through open access to information. However, several barriers arise, such as technological inadequacies, security and privacy issues, and lack of engagement and training. Strategies such as ensuring open communication, active listening, promoting two-way communication, and increasing openness and transparency, are key to overcoming these barriers. By adopting this approach, organizations can increase the effectiveness of digital communications, creating a more efficient, productive and adaptive work environment in the face of dynamic business changes. Digital communication is not just a tool to convey messages, but a foundation for building trust and strong collaboration in facing challenges in an ever-evolving work environment.

REFERENCES

1. Aji, R. (2016). Digitalisasi, Era Tantangan Media (Analisis Kritis Kesiapan Fakultas Dakwah dan Komunikasi Menyongsong Era Digital). *Islamic Communication Journal*, 1(1).
2. Ambarwati, A. (2021). *Perilaku dan Teori Organisasi*. Media Nusa Creative (MNC Publishing).





3. Anggito, A., & Setiawan, J. (2018). *Metodologi penelitian kualitatif*. CV Jejak (Jejak Publisher) karya.
4. Ardiyanti, H. (2020). Komunikasi Media Yang Efektif Pada Pandemi Covid-19. *Info Singkat: Kajian Singkat Terhadap Isu Aktual Dan Strategis DPR RI*, 12(7), 25-30.
5. Asriadi, A. (2020). Komunikasi Efektif Dalam Organisasi. *RETORIKA: Jurnal Kajian Komunikasi dan Penyiaran Islam*, 2(1), 36-50.
6. Effendhie, M. (2011). Pengantar Organisasi. *Organisasi Tata Laksana Dan Lembaga Kearsipan*, 1-90.
7. Fauzi, R. (2017). Perubahan Budaya Komunikasi pada Pengguna Whatsapp di Era Media Baru. *Jurnal Ilmu Komunikasi Efek*, 1(1), 265273.
8. Furqon, C. (2003). Hakikat komunikasi organisasi. *Hakikat Komunikasi Organisasi*, 2(15), 1-9.
9. Ginting, R., Purwati, E., Arumsari, N., Pujiastuti, N. S., Kussanti, D. P., Dani, J. A., ... & Sari, A. A. (2021). *Manajemen Komunikasi Digital Terkini*. Penerbit Insania.
10. Harapan, E., Ahmad, S., & MM, D. (2022). *Komunikasi antarpribadi: Perilaku insani dalam organisasi pendidikan*. PT. RajaGrafindo Persada-Rajawali Pers.
11. Kurmia, N. (2005). Perkembangan teknologi komunikasi dan media baru: Implikasi terhadap teori komunikasi. *Mediator: Jurnal Komunikasi*, 6(2), 291-296.
12. Kuswarno, E. (2001). Efektivitas Komunikasi Organisasi. *Mediator: Jurnal Komunikasi*, 2(1), 55-61.
13. Luthfie, M. (2018). Jaringan Komunikasi Organisasi Masyarakat Dalam Pembangunan. *Jurnal Sosial Humaniora*, 9(1), 17-33.
14. Moleong, L. J. (2014). Metode penelitian kualitatif edisi revisi. *Bandung: PT Remaja Rosda*
15. Mulawarman, K., & Rosilawati, Y. (2014). Komunikasi organisasi pada Dinas Perijinan Kota Yogyakarta untuk meningkatkan pelayanan. *Jurnal Ilmiah Komunikasi Makna*, 5(1), 31-41.
16. Nurdin, A. (2014). Komunikasi kelompok dan organisasi.
17. Prabowo, T. L., & Irwansyah, I. (2018). Media komunikasi digital polisiku: pelayanan publik polri kepada masyarakat. *Jurnal Studi Komunikasi*, 2(3), 382-402.
18. Prasanti, D. (2016). Perubahan media komunikasi dalam pola komunikasi keluarga di era digital. *Jurnal Commed*.
19. Priyono, P. E. (2022). *Komunikasi dan komunikasi digital*. Guepedia.
20. Putra, R. S., & Irwansyah, I. (2020). Media komunikasi digital, efektif namun tidak efisien, studi media richness theory dalam pembelajaran jarak jauh berbasis teknologi di masa pandemi. *Global Komunika: Jurnal Ilmu Sosial dan Ilmu Politik*, 3(2), 1-13.
21. Rahmanto, A. F. (2004). Peranan komunikasi dalam suatu organisasi. *Komunikologi: Jurnal Ilmiah Ilmu Komunikasi*, 1(2).
22. Syarif, D. N. (2019). *Komunikasi kontemporer: Bisnis Islam di era digital*. Deepublish.

