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To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v12-i11/15109 DOI:10.6007/IJARBSS/v12-i11/15109

Received: 03 September 2022, Revised: 06 October 2022, Accepted: 24 October 2022

Published Online: 08 November 2022

In-Text Citation: (Yusoff et al., 2022)

To Cite this Article: Yusoff, Y. H., Yusof, R. M., Razak, M. A. A., Aziz, H., & Khir, M. H. F. M. (2022). Limitations on Digital Communication in Malaysia: Concept Paper. *International Journal of Academic Research in Business and Social Sciences*, *12*(11), 1507 – 1517.

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Vol. 12, No. 11, 2022, Pg. 1507 – 1517

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Limitations on Digital Communication in Malaysia: Concept Paper

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Abstract

Nowadays digital communications have become an essential part of our daily lives and this has become even more prevalent since the Covid-19 pandemic outbreak. To ensure their market sustainability and relevance, most organizations must adapt and even accelerate the implementation of digital communication in their daily operations. However, not all organizations can keep up at the same rate as others. Therefore, this concept paper aims to identify and analyse the limitations of digital communication along with risk mitigation strategies for organizations. These findings emphasise the importance of researching risk mitigation strategies for organisations. There are five limitations of digital communication which are (1) Ethics via ethical communications may improve business performance and minimize exposure to risk (2) Retention of traditional communication methods may be shifted by the availability of social media channels (3) Organization and Individual Readiness and Competency on digital communication determines the efficiency of organizational performance (4) Digital Communication Tools such as augmented reality and virtual reality will help organization achieve greater heights in delivering their products to customers (5) Government rules and regulations have a significant impact on encouraging digital innovation and new technologies. The study focused on critical governance elements required for digital communications, which are qualitative in nature and difficult to measure. Even though quantitative methods have been used in previous studies, there is still a need for a global empirical study to generalise findings. This paper adds to the limited literature on the limitations of digital communications by conducting Theory-Based studies that can assist organisations in emphasising the importance of researching risk mitigation strategies for organisations.

Keywords: Digital Communication, Ethical, Government Rules, Traditional Comunication, Readiness.

Introduction

In this ever-evolving environment, digital communication is always vital and the most important as it helps to connect people near and far, linking people and business from different geographical locations, helps assists business manager to derive into faster decision making and also helps to improve business processes. This has become even more important during the Covid-19 pandemic as most business has to resort to digital platform as compared to their conventional method. Based on a report from International Telecommunication Union, it is estimated about 53.6% of the world's population (equivalent to 4.1 billion people) were reported to be using the internet in 2019. As people from developing countries have gained access to digital technology through various means such as lower mobile prices, increase in community-based ICT centers, there exists a digital divide between those who have access and those that cannot despite the pace of innovation (Adam & Alhassan, 2021). Further explained from Adam and Alhassan (2021), there are several benefits that can be achieved by reducing the divide such as personal and professional growth, easier access to knowledge, connecting with family and friend and also accessing daily services.

However, we have to recognize there are several challenges in digital communication and one of the significant concerns are those related to ethics. As per (Meng, Kim, & Reber, 2022), the need and the interest in exploring the multifaceted ethics viewpoints continue to grow with an emphasis on care and respect for others through proactive social engagement. Further explained by (Meng et al., 2022), issues related to ethical conduct and practice are often discussed in public relations and communication management, however it has yet to be fully inculcated into programs in training and development with the purpose to cope with the emerging ethical challenges for communication professionals and organizations in today's digital communication environment. Ever since the pandemic of Covid-19, digital communication has been a necessity hence demanding for a rapid change and accelerated evolution of digital technology hence transforming our way of living as our daily life are now packed with various social media platforms, digital tools and services. As digitalization does not only affect private corporations, government sectors are no exceptions either. As per discussion by Ramadani et al (2022), one of the challenges that exists are governance issues of nationwide digitization from the perspective of asymmetries of power relations that lie beneath gaps among local entities with decision-makers. Further from Ramadani et al (2022), there is increasing importance of study to be conducted on governance of the nationwide digitization agenda by investigating the underlying power and structural inequity responsible for generating the various issues and undesirable consequences that emerge at local levels.

Purposes Access to digital communications and the capacity to use those technologies for daily chores are prerequisites for digital engagement in a society that is becoming more and more digital. People run the danger of becoming digitally excluded if they are unable to access and utilize it on a daily basis. As per Adam & Alhassan (2021) mentioned, digital communication can be enhanced via Information Communication Technology (ICT) usage. This in turn will improve digital inclusion. Giving citizens access to ICTs will allow them to develop the skills needed to use them. Individuals will be able to connect with members of the larger society through the use of these ICTs, promoting digital inclusion. However, in regards to this, one must never ignore not all are having the same access, especially those that are in the rural areas and the local economy surrounding it.

In recent years, the push for the Fourth Industrial Revolution, or Industry 4.0, digital competencies and readiness are still heavily discussed across various social sectors, including but not limited to governments, mass media and expert groups in corporate fields. Further

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from Lee and Meng (2021), unlike the prior industrial revolutions, the fourth one, Industry 4.0 is acknowledged as being vastly different from the previous revolutions according to experts and academic scholars. Industry 4.0's technological advancements and the numerous ways that technologies interact with one another can improve human performance and produce solutions that range from the ordinary to the fantastic (WEF, 2016).

Big data also makes it possible for industry-relevant elements like resources, machinery, products, supply chains, and customers to be connected, which means that these agents will be able to communicate with one another and operate independently. However, as with all of these advancements happening not limited to industrial revolutions, have we managed to somehow reduce or eliminate constraints which were previously uncontrollable such as ethics, tendency to remain with traditional way of communications, users' individual competency and rules and regulations imposed by the governments.

The focus of prior research, which was focused on positive implementation of digital communication in the organization, which identified a gap in that field of study. Challenges or limitations of digital communication have not yet been more thoroughly investigated. Therefore, limitations of digital communication in the organization are researched for this paper.

Research Method

This paper will use Theory-Based Studies related to digital communication in targeted articles which consume nine (9) articles from various backgrounds of studies. The goal of adapting theory-based studies is to explain occurrences, discover connections, and make predictions. They are based on previous studies that acquired information, observations, and thoughts. The data analysis will be based on the secondary data by referring to previous studies. The study will focus on limitations of digital communication in the organization.

Limitation and Challenges of Digital Communication

First article from Kovaite et al (2020) in their study, the expert judgment method has been used to acquire information in a methodical and theoretically sound manner from 12 experts who met the stated eligibility requirements to assess significance of each digital communication channel in their working environment. The outcome from the study stated that traditional communication such as face-to-face meeting and discussions should be retained, however digital communication channels should be prioritized due to the changes of digitalization. In this manner it shows that maintaining physical interaction is still beneficial in the organization because it may lead to human relationships. The research gap here, the study focuses on a certain industry that is the manufacturing sector. Therefore, the outcome can be different from other industries. Refer to Taiminen et al (2014); Lee & Meng (2021) seek the same approach like Kovaite et al (2020) whereas traditional communication needs to be retrained in the organization for efficient performance and culture.

Meanwhile, in the second article (Taiminen et al., 2014) uses a Single Case study method that concentrates on how multinational firms use digital communication platforms for internal communication and their challenges in implementing it. The results from the studies indicate that there may be certain problems in planning digital communication technologies and it may widely facilitate internal communication in a multinational corporation. The research gap here, it is only focus on one segmentation and different point view may receive if the study is open to others segmentation. Digital Communication in the view of top management is a task-oriented and formal platform. Disadvantages of digital communication is lack of clarity and

diverse behaviors across employees in the organization and its agreeable in (Meng et. al., 2022). The challenge here is the employee accepting the changes in communication and it will be the challenges to the organization to transform the culture to accept digital communication.

Next article by Lee & Meng (2021) stated that the grounded theory approach and in-depth interviews were employed as part of a mixed design in research methodology that focuses on investigating how communication experts understand Industry 4.0 Readiness in communication management. From the studies, mentally prepared is needed for the changes ahead in adapting digital communication and recognising the necessity for communication professionals to continue to study and develop their abilities from a variety of viewpoints. Despite the fact that ICT increases workplace productivity and communication options, it also lays new adaptation demands on the individual and the jobs they perform as well as on the physical and organizational setting. The fact that work is no longer restricted to a certain place or time is likely to have a detrimental impact on employees' health. This might result in worry and irritation, which could eventually lead to burnout. Hence, this shows individual efforts and personality will be the challenges in adapting digital communication.

Forth article by Adam & Alhassan (2021) focuses on 121 nations' hypothetical model based on structuration theory and secondary evidence from several archive sources that focus on examining globally the effects of information communication technology (ICT) access and use on digital inclusion. The studies indicate that, it will not be enough to just provide individuals with access to ICT in order to influence or enhance their use. A person must have the necessary digital skills to use them effectively. The challenges are the readiness and knowledge of a person to adapt to digital communication. As businesses transitioned from having physical headquarters to adopting a digital HQ concept, the need for digital capabilities was also impacted. For organizations to survive and become more secure, digital adoption and the corresponding digital skills required to embrace the shift are crucial. Therefore, it's an organizational effort to increase the knowledge and fully prepare its employees to use digital communication as a daily operation. According to Meng et al (2022), the study uses Qualtrics as an online and questionnaire approach to look at the ethical issues that PR professionals face in today's digital communication. The findings show that the digital communication context introduces new means of distributing material in organizational communication while also posing new ethical problems. Although ethical issues are frequently discussed in public relations and communication management, they have not been fully incorporated into training and development programmes created to address new ethical challenges facing communication professionals and organizations in the current digital communication environment. Empirical ethics research in public relations has struggled to stay current and pertinent since ethical viewpoints shift frequently as a result of the influence of digital technologies. Considerations can be made about the following topics: online identity, online language, online consent, and confidentiality for future research. As a result, organizations need to adapt the challenges of rapid changes in digital technology but also in terms of accepting ethical behavior. Hence the unethical behavior may give a negative impact towards the implementing digital communication if it cannot be retrained. Refer to article by Ramadani et al (2022), methods that use here are an in-depth exploratory case study carried out at a municipal health government analyzing the circumstances of local players in response to several national health digitization imperatives. Study results indicate that the lack governance feature has had severe implications at the local level, potentially impeding the successful digitization process. The government can create particular legislation, support and

counseling activities, tailored training programmes, and cooperative ecosystems to reinforce policies and programmes that promote digital transformation objectives. Government resources, particularly in the developing world, are needed to create a technology infrastructure that provides the bare minimum support for new and emerging businesses to take advantage of and transition to new technologies in order to keep up with the rapidly changing technological landscape.

The challenges here, is the support from Government are crucial in adapting the digital communication in the organization. The resources, policies, rules and regulations need to be compliance accordingly to avoid any legal action from authorities. Following research by Hilken et al (2022), 79 papers are evaluated to facilitate the transition of digital communication from AR and VR to NeR by reviewing prior studies on augmented reality (AR), virtual reality (VR), and neuro-enhanced reality (NeR). The development of AR and VR is hailed as Neuro-enhanced Reality (NeR), which makes use of neuroscientific techniques to facilitate communication through brain-computer connection. NeR provides opportunities for improved service delivery and value outcomes, but because technology can also have a negative impact on user wellbeing, it is important to identify the types of control that will improve convenience and decision-making while preventing neural overload, interference with other brain functions, or potential misalignments. This highlights significant challenges and the particular ethical issues that surround this technology that the company needs to overcome. According to Bowen & Pennaforte (2017), the method that uses is Exploratory survey and articles review to examine the shifts in work culture brought about by remote working give crucial points on the transitions experienced by students through WIL programme. The objective of WIL is to help students to discover new ways of doing work through both real and virtual connections, expose them to the most recent communication technology trends, and employ collaborative project creation tools. However, the absence of face-to-face contact results in many students lacking the knowledge necessary to explain complicated issues and addition to their real labor, which they can learn from and apply the skills they have acquired via experience and observation. Although the WIL can give the readiness to the student but on the other hand it may give challenges in developing the student characteristics.

The last article by Camilleri (2021) uses Grounded Theory with Inductive Approach to on corporate digital communications. Modern digital communications allow for real-time information flow between internet users, making them synchronous and dynamic. The corporate digital communications use has significantly changed how people communicate with one another and with businesses, as well as how knowledge and information are shared in the organization. The reliable information will be questioned when crisis scenarios and severe occurrences with significant hazards and uncertainty. The company may face obstacles in communicating in a way that is as trustworthy and open as feasible in order to foster confidence. The challenges of negative response or information may lead to a bad image towards the organization.

As a conclusion, all articles indicate that there is a limitation of adapting digital communication despite it may give more benefits to the organization. The limitations consist of the infrastructure, readiness, acceptance of changes, behavior of an individual, transparent information and support from the government in adapting digital communication. The judgment above has been supported by the previous article whereby there is factors that may influence the implementation of digital communication in the organization.

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Research Framework Findings

Internal communication plays a big part in the process of the implementation of digital communication. These results highlight the significance of researching risk mitigation strategies for organizations. There are 5 limitations identified for digital communication as follows: a. Ethical b. Retention of traditional communication method c. Organization and Individual Readiness & Competency d. Digital Communication tools. e. Government Rules and Regulations Ethical Ethics is defined as a norm that guides normal behavior. Acceptable ethics means the behavior that one will emulate given it is perceived to be socially rewarded and desirable by others (O'Hara, 1998). A communication style known as ethical communication is one that is based on specific commercial principles, including being accurate, succinct, and accountable with one's words and the actions that follow. Previous study on digital communication also revealed there are various ethical challenges that arose from it (Meng et al., 2022). Based on the study, 59% of respondents acknowledged that they are facing ethical dilemmas in their daily digital communication at the workplace. The identified ethical challenges found based on the study inclusive of cost to appoint and maintain social media influencers, using automated bots to get followers and response in social media platforms, obtaining users surfing data via big data analytic capabilities (BDAC), using organization official social media platform to post any sponsored content and to let the employee share organizational message on the personal social media accounts. Maintaining a strong culture of compliance in the workplace requires ethical communication. When carried out properly, ethical communications may improve business performance and lower total risk. However, organizations may incur significant financial, legal, and reputational penalties when ethics are neglected. Therefore, most of the organization provided training to ensure the digital communication practitioners are well equipped with the knowledge and ethically communicated required information for their stakeholders. The study also found that 49% of the respondents had received either internal training from their organization or professional firm (Meng et. al., 2022). Hence, the training is required to ensure the digital communication is conducted in an ethical manner to avoid any serious repercussions towards an organization. Retention of traditional communication method Previously, an organization's communication relied on a top-down approach which required clearance from the top management to disseminate the information to the ground level. However, the current communication which relies on digital communication is considered a horizontal approach where employees are communicating between each other and relaying required information among themselves without hierarchical consideration. Due to the frequent usage of the term "traditional" as a qualification when describing communication systems, there is sometimes some degree of semantic and conceptual ambiguity and misinterpretation regarding what traditional communication is. The issue with information sharing via the traditional method is that many people inside the business are unable to communicate and share intelligence efficiently and in real time as a result of legacy technology, which can impede the development and implementation of reaction strategies. Implementing digital communication tools that enable immediate cooperation and improved security and compliance help reduce these issues. No matter how good digital communication is, the study did recommend that physical face to face meeting and engagement shall be maintained as well (Kovaite et al., 2020). There are 6 identified digital communication channels inclusive of instant messaging, streaming audio or video, internal blog, online employee profiles, social networks and electronic media. The study has explored this digital communication effectiveness during an organization change specifically in the awareness, understanding, acceptance, action and follow up processes

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(Kovaite et al., 2020). The findings suggested that social media is the most effective digital communication channel that is being used by the organization employees on every process. Therefore, to shift the traditional communication method to digital communication, it is suggested that social media channels should be made available by organizations to disseminate any critical information towards their employees. Organization and Individual Readiness & Competency In the wake of industry revolution 4.0, the organization and employee are expected to equip themselves with sufficient digital skills inclusive of digital communication ability. There are 5 dimensions identified in term of organization and individual readiness in digital communication inclusive of cognitive analytics, data management, literacy for information and communication technology (ICT), digital making skills for digital transformation and digital competency in crisis management (Lee & Meng, 2021). The study found that 13 out of 16 respondents mentioned organization readiness in terms of Artificial Intelligence (AI) and Big Data perspectives inclusive of blockchain technology. The respondents also found that the digital communication at their organization still does not suffice but pointed out that the changes have been started to adapt with digital communication. The individual readiness towards implementing digital communication within an organization is defined as a set of abilities that a person possesses in order to properly complete a task or activity while doing a certain profession. In order to accomplish organizational outcomes, an organization's workforce has to have a clear grasp of the behaviors to be displayed and the performance standards required. However, some peoplereferred to as Luddites—disapprove of technology, especially when it endangers their present occupations or invades their privacy. According to Lee & Meng (2021), the study also found that communication professionals have a lack of technical expertise and understanding when it comes to integrating big data in current communication practices, as well as a restricted ability to take advantage of chances for data analysis. Therefore, without a proper skill and knowledge will lead to inefficiency for the organizational performance. In light of this, we can define competence as a concept characterizing personal conduct that combines knowledge and skills and yields greater performance. Referring to Blanka et al (2022), employees may aid in the transition by becoming proactive and promoting corporate (digital) initiatives because digital transformation has an impact on businesses beyond organizational boundaries. The idea of entrepreneurial competencies may be shown by a person's appropriate action in particular circumstances. Consequently, intrapreneurial skills contribute significantly to digitization, and more specifically, to digital transformation. Digital Communication Tools Off late, we have seen most of the organizations adopting Artificial Intelligence (AI) and Machine Learning (ML) in digital communication either with their internal or external stakeholders. This is inclusive of using the bot to act as a first response in their social media channels or automated reply from an organization electronics mail (e-mail). Is this the tool that every organization is looking at to shift towards digital communication? The existing AI and ML are used as part of the digital communication tools but it can be further enhanced to ensure the internal and external stakeholders from augmented reality (AR) and virtually reality (VR) technology (Hilken et al., 2022). According to the study, AR and VR are used by organizations especially when interacting with their customers. There is also the insurgence of Neuro-Enhanced Reality (NeR) capability that is expected to further understand the customers' needs and demands from the digital communication instead of having a routine reply from the bot. The NeR is using a neuroscientific method to enable computer-brain communication which was led by Elon Musk's Neuralink company. Hence, the organization should implement AR, VR and NeR in order to achieve greater heights in delivering their goods and services to their

customers in the wake of the digital communication era. Government Rules and Regulations One of the distinguishing characteristics of the 21st century is the growth of the digital economy. New forms of communication and cooperation are only two of the numerous ways that digital technologies have an impact on economies and society. Governments and regulators have a significant impact on fostering digital innovation and motivating the development of new technologies for societal benefit.

Research Limitations

This study has certain limitations that might lead to additional research in the future. To begin, our study has emphasized the important governance elements that are necessary in digital communication. Future research might therefore be used to create an instrumental governance framework tailored to the digitization agenda, which would be useful to organizations that are still trying to implement the technology. Second, this research looked at the viewpoint on management approach towards adapting digital communication. Future study should expand on the methodological element by using a multilevel inquiry to give a more full examination of all levels' circumstances, as well as various case studies to strengthen the generalizability analysis of the adapting Digital Communication as example the industrial business's digital channels of communication different from those in the service, financial, and other industries. There are few researchers that have used quantitative methods to experimentally examine this digital communication in the organization. Furthermore, previous research has largely focused on individual nations, industries, and institutions, necessitating the need for studies to empirically analyze this link at the global level in order to get generalizable findings. Besides that, the qualitative research method does not allow for statistical analysis. It will only show study findings from a variety of angles. Responses to this type of research are rarely measurable. It's very hard to accept the findings of qualitative research because it's dependent on individual opinions. Even the same individual tomorrow may have a different viewpoint than they had today. As a result, the data gathered through qualitative research might be difficult to verify, leading some to doubt the results reached through this method.

Conclusion

Our main purpose of the study is to understand the limitation on digital communication and possible alternative solutions available to overcome the limitation. Previous studies which mostly rely on the interviews from professionals across the industries indicate that the shift towards digital communication has started but there are concerns raised in terms of readiness, capabilities, tools, resistance to change and government roles in this transformation.

From the study, this research found many companies facing a big issue or problem in digital communication because of the limitation. These limitations need to be overcome during the pandemic covid-19 which is a very challenging company to sustain a business. The control the covid-19, the government implemented a Moving Control Order (MCO) and this is a major effect to business including in Malaysia. Therefore, the study suggest to business must understand challenge of digital communication and economics. In consistently, businesses must upgrade the knowledge and facilities to help proses of change can be completely done. Perhaps the future study should focus on the specific country readiness such as Malaysia in terms of digital communication limitation at government and private sector level. This is important considering the benefits that an organization will obtain through digital

communication platforms with their respective stakeholders even during crucial moments like COVID19 pandemic.

Acknowledgements

The Authors would like to express their gratitude to the Faculty of Accountancy, Universiti Teknologi MARA, Malaysia, for funding and facilitating this research project.

References

- Adam, I. O., & Alhassan, M. D. (2021). Bridging the global digital divide through digital inclusion: the role of ICT access and ICT use. *Transforming Government: People, Process and Policy*, 15(4), 580-596. https://doi.org/10.1108/TG-06-2020-0114
- Blanka, C., Krumay, B., & Rueckel, D. (2022). The interplay of digital transformation and employee competency: A design science approach. *Technological Forecasting and Social Change*, 178. https://doi.org/https://doi.org/10.1016/j.techfore.2022.121575
- Bowen, T., & Pennaforte, A. (2017). The impact of digital communication technologies and new remote-working cultures on the socialization and work-readiness of individuals in WIL programs. In *Work-integrated learning in the 21st century*, 32, 99-112. https://doi.org/10.1108/S1479-367920170000032006
- Camilleri, M. A. (2021). Strategic dialogic communication through digital media during COVID-19 crisis. In *Strategic corporate communication in the digital age*. http://dx.doi.org/10.1108/978-1-80071-264-520211001.
- Hilken, T., Chylinski, M., de Ruyter, K., Heller, J., & Keeling, D. I. (2022). Exploring the frontiers in reality-enhanced service communication: from augmented and virtual reality to neuro-enhanced reality. Journal of Service Management, 33(4/5), 657-674. https://doi.org/10.1108/JOSM-11-2021-0439
- Kovaite, K., Sumakaris, P., & Stankeviciene, J. (2020). Digital communication channels in Industry 4.0 implementation: The role of internal communication. *Management: Journal of Contemporary Management Issues*, 25(1), 171-191. https://doi.org/10.30924/mjcmi.25.1.10
- Lee, J. J., & Meng, J. (2021). Digital competencies in communication management: a conceptual framework of Readiness for Industry 4.0 for communication professionals in the workplace. *Journal of Communication Management*, 25(4), 417-436. https://doi.org/10.1108/JCOM-10-2020-0116
- Meng, J., Kim, S., & Reber, B. (2022). Ethical challenges in an evolving digital communication era: coping resources and ethics trainings in corporate communications. *Corporate Communications:* An International Journal, 27(3), 581-594. https://doi.org/10.1108/CCIJ-11-2021-0128
- O'Hara, S. U. (1998). Economics, ethics and sustainability: redefining connections. International Journal of Social Economics, 25(1), 43-62. http://dx.doi.org/10.1108/03068299810194893
- Ramadani, L., Yovadiani, A., & Dewi, F. (2022). When innocence is no protection: governance failure of digitization and its impact on local level implementation. *Transforming Government: People, Process and Policy*, 16(1), 68-80. https://doi.org/10.1108/TG-09-2021-0142
- Taiminen, H., Karjaluoto, H., & Nevalainen, M. (2014). Digital channels in the internal communication of a multinational corporation. *Corporate Communications: An International Journal*, 19. https://doi.org/10.1108/CCIJ-07-2012-005.

WEF. (2016). *World Economic Forum Annual Meeting.* https://www.weforum.org/events/world-economic-forum-annual-meeting-2016