

THE ROLE OF COMMUNICATION TECHNOLOGY TOOLS IN ENHANCING JOB PERFORMANCE AMONG PROFESSIONALS IN THE TELCO INDUSTRY.

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Abstract

Communication technology is crucial for projecting a positive image, being competitive, and maintaining a company's market reputation. The TAM (Technology Acceptance Model) is a theoretical paradigm that explains how humans embrace and use technology. According to the concept, individual perceptions of a technology's ease of use and utility are primary drivers of its acceptance. To carry out their jobs, professionals in the telecommunications business may use a variety of communication technologies, such as email, instant messaging, video conferencing, and collaboration tools. Acceptance of these communications' technology may have a significant impact on job performance since they promote internal communication and cooperation, boost productivity, and allow for remote work. The goal of this study is to investigate the relationship between acceptance of communication technology and job performance among telecommunications professionals. As a result, this study incorporates two key components of technology acceptance model (TAM): perceived usefulness (PU) and perceived ease-of-use (PE) (PEU). This study employed the quantitative method, which comprised an online-based questionnaire given to telecommunications professionals. According to the research, the use of communication technology has a substantial effect on job performance. As a consequence, the findings of this study may be applied to increase employee performance on a daily basis.

Keywords: Communication Technology, Telecommunications Industry, Job Performance, Professional.

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Introduction

As businesses strive to improve efficiency, cooperation, and job performance, the role of communication technology in the modern workplace is becoming increasingly important. Telecommunications professionals rely heavily on communication technology such as email, instant messaging, video conferencing, and collaboration tools to conduct their tasks. However, it is unclear if the use of communication technologies leads to improved work performance among telecommunications professionals. Communication technology has revolutionized the way we do business and has had a profound impact on how telecom professionals carry out their duties. Professionals may now connect and collaborate more efficiently and effectively thanks to technological advancements, resulting in higher work performance and productivity. Communication technology is the independent variable in the study "The Role of Communication Technology in Enhancing Job Performance Among Professionals in the Telecom Business," whereas job performance among professionals in the telco industry is the dependent variable.

The issue of increasing attention in corporate communication and technology. Malaysia's telecommunications industry makes an important contribution to the country's economic growth and development. Consequently, it's vital to look at how communication technology might help experts in this field perform better. According to current studies, using communication tools can increase job performance by increasing productivity and improving teamwork (Khan, 2018; Ahmad, 2019). The use

of instant messaging and video conferencing tools, in particular, has been shown to assist reduce reaction time and improve communication efficiency (Khan, 2018). Furthermore, professionals in the telecommunications industry have recognized that the use of social media platforms and mobile devices is a useful instrument for networking and information exchange (Ahmad, 2019).

Furthermore, the use of communication technologies can improve telco workers' work-life balance by allowing them to work remotely and manage their time more efficiently (Mustapha et al., 2020). Because of the ability to work from anywhere, professionals in the telecommunications industry may have greater flexibility in their work schedules, which may lead to improved job satisfaction and reduced stress levels (Mustapha et al., 2020). The use of communication technology is crucial in increasing the job performance of Malaysian telecom workers. As the telecommunications industry changes and progresses, it is vital for professionals to stay up to date on the latest technology and techniques in order to remain competitive in the job market.

Purpose of the Study

The study's objectives are to investigate the specific communications technology that is most effective in improving job performance, to understand the role of communication technology acceptance on job outcomes such as job satisfaction and productivity, and to investigate the relationship between communication technology acceptance and job performance among Telco professionals. Professionals will be better able to use the communications technology at their disposal, boost work performance in the telecoms industry, and support organizations in making well-informed technology investment decisions as a result of the knowledge gathered from this study.

Overview of Communication Technology

Communication technology has been crucial in enhancing job performance in Malaysia's telco industry. To meet the rising demand for high-speed internet and mobile connections, telecommunication organizations have developed and adopted new communication technology. Communication technology refers to the means and methods used to transfer information from one location or person to another (Turkle, 2018). Because of the internet and mobile devices, communication technology has experienced considerable transformation in recent years. One example is the implementation of 5G technology, which allows for faster internet speeds and improved network coverage (Huawei, 2018). This technology has significantly improved telecom companies' ability to provide high-quality services to their customers while also allowing them to provide new services such as Internet of Things (IoT)

and virtual reality (VR) applications. Malaysian telco providers have also incorporated contemporary cloud computing and data analytics technologies to enhance their operations, in addition to 5G. According to a Frost & Sullivan (2018) analysis, the introduction of these technologies has increased data management efficiency and allowed telecom operators to assess and enhance their products and services more efficiently. Furthermore, collaboration tools like video conferencing, email, and instant messaging have helped to improve job effectiveness in the telecommunications industry. These tools have enabled teams to interact more effectively regardless of location, and they have significantly enhanced communication and coordination inside organizations.

Overview Of the Telco Industry in Malaysia

Malaysia's rapidly increasing telecommunications sector is an important component of the country's economic development (Ahmad, 2019). The majority of the industry is controlled by a small number of big enterprises that have established themselves as market leaders, notably Celcom, Digi, Maxis, and U Mobile. Offering a variety of services, such as mobile phone services, internet services, and other value-added services, has enabled these businesses to gain a competitive advantage. Celcom, a part of Axiata Group Berhad, was one of Malaysia's early telecommunications firms (Johari, 2020). It provides a variety of services, including internet, mobile phone, and other value-added services. Celcom has built strong brand recognition and customers by providing high-quality services at reasonable prices. (Ahmad, 2019). Digi, a branch of Telenor Group, is another prominent player in Malaysia's telecommunications sector (Zakaria, 2018). It offers internet access, mobile phone service, and other

cvalue-added services.

Digi gained a competitive advantage by focusing on providing affordable and accessible internet services to Malaysia's impoverished people (Johari, 2020). The merger of Malaysia's two major telecom providers, Celcom and Digi, would dramatically change the competitive landscape in the sector (Ahmad, 2020). The merger will create a larger, more effective firm that will be better positioned to compete with other key market competitors (Zakaria, 2021).

This move is expected to benefit both firms due to expanded scale and breadth, as well as the ability to offer consumers a broader range of services (Johari, 2022). Maxis is another key player in Malaysia's telecommunications market (Zakaria, 2018). Among the various services it offers are mobile phone services, internet services, and other value-added services. Maxis has built strong brand recognition and clientele by providing high-quality services at cheap prices (Ahmad, 2019). U Mobile is a newcomer to Malaysia's telecommunications market (Zakaria, 2018). It offers internet access, mobile phone service, and other value-added services. Mobile has gained a competitive advantage by focusing on providing affordable and accessible internet services to Malaysia's poor areas (Johari, 2020).

The sector is dominated by a few significant firms that have established themselves as market leaders, such as CelcomDigi, Maxis, and U Mobile (Zakaria, 2018). These businesses have gained a competitive edge by providing a diverse variety of services, such as mobile phone services, internet services, and other value-added services (Johari, 2020).

Problem Statement

Given the rapid advancement of communication technology, technology is being utilized increasingly often at work, particularly in the telecommunications industry. Professionals in the telecommunications field employ a wide range of communication technologies, including email, instant messaging, video conferencing, and collaboration tools, to carry out their duties. Nonetheless, despite the telecommunications industry's growing reliance on communication technology, experts in the field are unaware of the specific ways in which the adoption of that technology impacts their capacity to perform their duties. Furthermore, little is known about the factors that influence communication technology

acceptance and how they relate to job performance. Furthermore, it is uncertain how company culture and norms influence communication technology acceptance and how it impacts telecom personnel's capacity to perform their tasks. Employees in the telecommunications industry, for example, may use a variety of communication technologies, such as video conferencing, email, instant messaging, and collaboration tools, to carry out their jobs. The use of these technologies may have a substantial impact on how successfully people perform their jobs since they promote greater internal communication and cooperation, increase productivity, and make it simpler to work remotely. However, there is a dearth of understanding among specialists in the industry on how the usage of communication technology leads to improved work performance.

The telecommunications sector and the elements influencing communication technology acceptance. The goal of this research is to bridge this knowledge gap by investigating how communication technology influences job performance among Telco industry professionals. This study will provide useful insights into how communication technology can be used to improve job performance in the telecommunications industry by identifying the specific communication technologies that are most effective in enhancing job performance, comprehending the role of communication technology acceptance on job performance such as job satisfaction and productivity, and examining the relationship between communication technology acceptance and job performance among other things.

Technology Acceptance Model (TAM)

The Technology Adoption Model (TAM) is a frequently used model for assessing and forecasting technology user adoption (Davis, 1989). Davis created the notion in 1986, and it is founded on the assumption that customers' impressions of a technology's usefulness and simplicity of use are ultimately what decide whether or not they would embrace and utilize it (Davis, 1989). According to TAM, perceived utility and perceived ease of use are the two criteria that have the most effect on users' views of usefulness and usability (Davis, 1989). The amount to which a person feels that utilizing a technology would improve their quality of life or professional performance is referred to as perceived usefulness (Davis, 1989).

In contrast, perceived usability refers to how easy a user believes utilizing a technology to be (Davis, 1989). TAM contends that the perceived utility and usability of a technology have an immediate impact on a user's intention to use it and that this intention is then directly influenced by how the technology is used (Davis, 1989). According to the concept, if people believe a technology will be useful and simple to use, they are more likely to intend to use it and utilize it (Venkatesh & Davis, 2000). TAM's ease of use is one of its primary advantages. Academics love the notion since it is simple to apply and implement (Venkatesh, 2018).

TAM has been shown to be sensitive to a variety of technologies, including computer systems, mobile applications, and e-commerce websites, establishing it as a true and trustworthy model for forecasting consumer uptake and use (Venkatesh & Davis, 2000). TAM has also been chastised for excluding various other aspects that might influence consumer acceptance and usage of technology, such as social impact, cultural concerns, and situational factors (Venkatesh, 2018). Despite these disadvantages, the model is extensively used and useful for forecasting customer acceptability and technological usage.

Research Framework

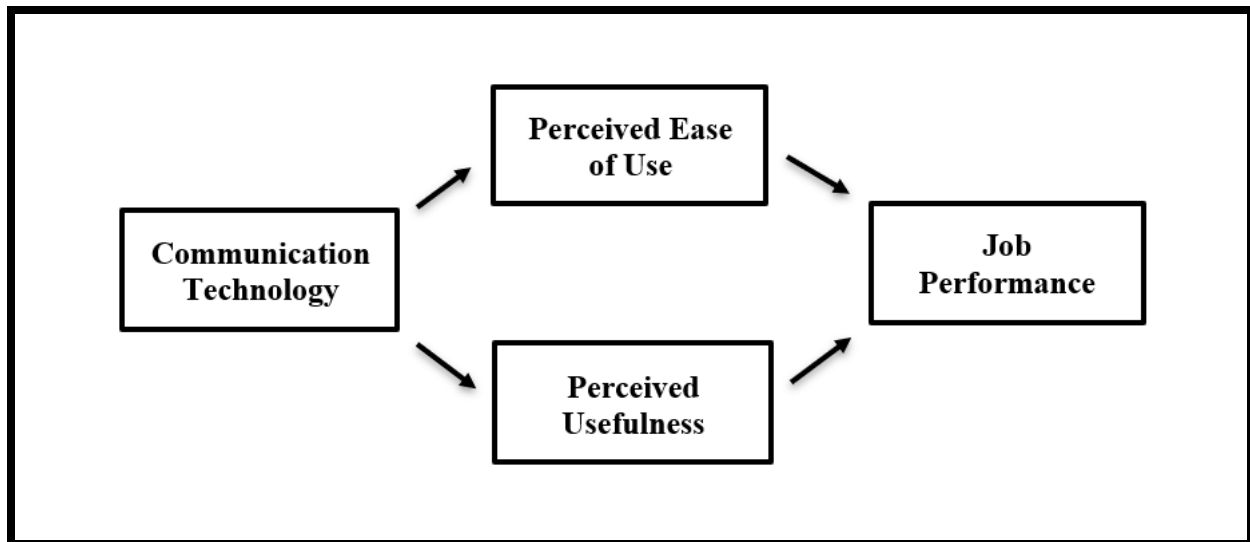


Figure 1. Research Framework.

Methodology

This study aims to investigate how communication technology can improve job performance among professionals in the Telco industry. A sample of professionals from the Lembah Klang telco industry will be chosen for the survey using stratified simple random selection (Krejcie & Morgan, 1970). Online platforms like Facebook, WhatsApp, and Google Mail will be used to collect data (Dillman et al., 2014).

The study will question both job performance and workplace communication technology usage. The findings will offer information on how communication technology might enhance job performance in the telco industry. An online survey was carried out on 120 samples from chosen telecommunication companies in Lembah Klang in January 2023, with the questionnaire disseminated online using Google Mail and WhatsApp. In data collecting, a 7-point Likert scale is an improvement above the 5-point scale and the author uses the Likert scale of 7 points ranging from strongly disagree, disagree, slightly disagree, neither agree nor disagree, agree, and strongly agree.

Result and Discussion

A. Level of Communication Technology That Are Most Effective in Enhancing Job Performance Among Telco Professionals.

According to Table 1, telco professionals feel that communication technology has a key impact and plays a significant role in enhancing job performance. Out of the 120 professionals surveyed, 53.3% said their level of communication technology is high, while 30.8% indicated that it is moderate. However, just 15.8% of respondents said they utilize a low level of communication technology. This implies that most telecommunication professionals have access to modern communication technology, which they perceive improves their job performance and is useful in their work. However, a small percentage of those surveyed may not have access to such technology or may not find it useful in improving their job performance.

Table 1. Level of Communication Technology That Are Most Effective in Enhancing Job Performance Among Telco Professionals.

Communication Technology	Frequency	Percentage
High	64	53.3
Moderate	37	30.8
Low	19	15.8
Total	120	100.0

B. Communication Technology Acceptance on Job Performance Among Telco Industry Professionals.

Result in Table 2 shows that acceptance of communication technology has a considerable favorable influence on job performance among telco industry professionals. The t-value of 163.086 and P value of 0.001 indicate that there is a statistically significant difference between the mean job performance of telecommunication professionals who adopt communication technology and the hypothetical mean job performance of those who do not. Those that adopt communication technology have a mean job performance score of 6.37, with a standard deviation of 0.426. This implies that telco professionals who embrace communication technology have greater work performance scores on average than those who do not. Based on the data, we may reject the null hypothesis and accept the alternative hypothesis, which states that there is a significant difference in the mean job performance of telco professionals who use communication technology against those who do not.

Table 2. Communication Technology Acceptance on Job Performance Among Telco Industry Professionals.

Variable	Mean	SD	t-value	df	P value
Job Performance	6.37	0.426	163.086	118	0.001

C. Relationship between perceived usefulness of communication technology and job performance among professionals in the Telco industry.

Table 3 indicates there is a strong positive relationship between communication technology acceptance (perceived usefulness) and work performance among Telco professionals. The Pearson correlation coefficient of 0.726 and the P value of 0.001 indicate that the two variables have a statistically significant positive linear relationship. The correlation value of 0.726 reveals a strong positive relationship between acceptance of communication technology (perceived usefulness) and job performance. The stronger the correlation, the closer the correlation coefficient is to 1. A correlation value of 0.726 suggests a highly positive association between the two variables in this case. This indicates that when professionals in the telecommunications industry view communication technology to be valuable, their job performance improves. In other words, professionals in the telecommunications industry who believe communication technology is valuable have higher work performance scores than those who do not. The N 119 is due to one question being left out by the responder; hence the sample size is 119. In conclusion, the findings of this study indicate that communication technology acceptance

(perceived usefulness) has a beneficial influence on job performance among Telco professionals. This means that investing in communication technology and ensuring that employees see the technology as beneficial may result in improved job performance among Telco professionals.

Table 3. Relationship Between Perceived Usefulness of Communication Technology and Job Performance Among Professionals in The Telco Industry.

Variable	Perceive Usefulness of Communication Technology	
	r value	ρ value
Job Performance	0.726	0.001

** . Correlation is significant at the 0.01 level (2-tailed)

D. Relationship between perceived ease of use of communication technology acceptance and job performance among professionals in the Telco industry

Table 4 shows that there is a moderately favorable relationship between communication technology acceptance (perceived ease of use) and job performance among Telco professionals. The Pearson correlation coefficient of 0.521 and the P value of 0.001 indicate that the two variables have a positive statistically significant linear relationship. The correlation value of 0.521 reveals a somewhat favorable relationship between the adoption of communication technology (perceived ease of use) and job performance. The higher the connection, the closer the correlation coefficient is to 1. A correlation value of 0.521 suggests a somewhat positive relationship between the two variables in this case. This indicates that when professionals in the telecommunications industry find communication technology easier to use, their job performance improves. In other words, professionals in the telecommunications industry who find communication technology simple to use outperform those who find it difficult to

use. The N 119 is due to one question being left out by the responder; hence the sample size is 119. In conclusion, the findings of this study indicate that communication technology acceptance (perceived ease of use) has a beneficial influence on job performance among Telco professionals. This suggests that investing in communication technology and making sure employees find it easy to use might lead to an improvement in job performance among Telco professionals.

Table 4. Relationship between Perceived Ease of Use of communication technology and job performance among professionals in the Telco industry.

Variable	Perceive Ease of Use of Communication Technology	
	r value	ρ value
Job Performance	0.521	0.001

** . Correlation is significant at the 0.01 level (2-tailed)

Conclusion

Overall, communication technology has played an important role in improving job performance among professionals in Malaysia's telecommunications industry. The fast expansion of the industry, along with government regulations encouraging the use of new technologies, has resulted in extensive usage of communication technology in the telecommunications industry. This has helped businesses to enhance their operations and services, which has resulted in better work performance among professionals. The Technology Acceptance Model (TAM) has been demonstrated to be a useful tool for studying the

relationship between communication technology acceptance and job performance. According to the findings of this study, there is a substantial positive relationship between communication technology acceptance on perceived usefulness and job performance among Telco professionals. Furthermore, the findings show a moderately favorable relationship between communication technology acceptability, perceived ease of use, and job performance. Based on these findings, it is suggested that Malaysian telco professionals continue to invest in communication technology in order to enhance their operations and services. Tasks that are time-consuming and inefficient can be made simple and automated by technology.

Additionally, it is proposed that Malaysian telecommunications providers continue to invest in the development of communication technology that is simple to use and seen as valuable by professionals. This will stimulate continuing acceptance and usage of technology, resulting in enhanced job performance among professionals. To further understand the link between acceptance of communication technology and job performance over time, it would be good to undertake a series of studies as part of future research.

On top of that, it would be beneficial to look into the connection between employment performance and the adoption of communication technology in other businesses and contrast the findings with those from telecommunication companies. Telco industries have been able to quickly boost their productivity and efficiency thanks to the usage of technology in the workplace. Digital tools, programs, and systems allow for the speedy and effective completion of previously laborious and time-consuming processes.

Conclusively, it would be helpful to carry out research to find out how professionals working in the international telecommunications sector are affected by communication technology on job performance.

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Author Contributions

Mohd Hafiz Sufyan - Data Collection, Data Analysis, and Article Writing.
Ahlam Abdul Aziz - Supervision, Article Revisions and Editing.

Conflict of Interest

The author declares that he works for Celcomdigi Berhad, a Malaysian telecommunications company. The author has no financial or personal relationships that may have impacted the research's conduct or interpretation. The author has also taken precautions to ensure that any conclusions from this research do not benefit their job or the telecommunications industry.

References

- Ahmad, R. (2019). The impact of communication technology on job performance among professionals in the telco industry in Malaysia. *International Journal of Innovation, Creativity and Change*, 4(2), 1-14.
- Ahmad, R. (2019). The telecommunication industry in Malaysia: An overview. *Journal of Business and Technology*, 32(1), 12-25.
- Ahmad, R. (2020). The merger of Celcom and Digi: Implications for the telecommunication industry in Malaysia. *Journal of Business and Technology*, 35(1), 12-18.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: the tailored design method*. John Wiley & Sons.
- Frost & Sullivan. (2018). *The Impact of Cloud Computing and Big Data Analytics on the Telco Industry*. Retrieved from <https://ww2.frost.com> [Access online 7 January 2023].
- Huawei. (2018). *5G: The next step in mobile connectivity*. Retrieved from <https://www.huawei.com/en/5g> [Access online 7 January 2023].
- Johari, R. (2020). The impact of digitalization on the telecommunication industry in Malaysia. *Journal of Digital Transformation*, 5(1), 78-89.
- Johari, R. (2022). The benefits of the Celcom-Digi merger for the telecommunication industry in Malaysia. *Journal of Digital Transformation*, 8(1), 78-84.
- Khan, M. (2018). The role of communication technology in enhancing productivity among professionals in the telco industry in Malaysia. *Journal of Business and Technical Communication*, 32(4), 523-544.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610.



Mustapha, N., Razak, A., & Ahmad, R. (2020). The impact of communication technology on work-life balance among professionals in the telco industry in Malaysia. *Journal of Work-Life Integration*, 3(2), 1-12.

Turkle, S. (2018). *Reclaiming conversation: The power of talk in a digital age*. Penguin.

Venkatesh, V. (2018). *Technology acceptance model*. Springer, Cham.

Venkatesh, V. (2018). The Technology Acceptance Model: Past, present and future. In: *Handbook of Information Technology in Organizations and Electronic Markets*. Springer, Singapore.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186-204.

Zakaria, N. (2018). The competitive landscape of the telecommunication industry in Malaysia. *Journal of Industry and Competition*, 15(2), 45-57.

Zakaria, N. (2021). The impact of the Celcom-Digi merger on the competitive landscape of the telecommunication industry in Malaysia. *Journal of Industry and Competition*, 18(2), 45-52.