

The Relationship Between Technology Capability and Organizational Culture Towards Employee Performance Among Non-Executive Employees in Yayasan Sarawak, Kuching

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Abstract

The purpose of this study is to investigate the relationship between the uses of mobile communication devices and employee performance among non-executive staff in Yayasan Sarawak, Kuching. To find the relationship between communication devices and employee performance, two independent variables are identified namely, technological capability and organization culture. The two variables are tested if there is any significant relationship with the employee performance using statistical data analysis software, SPSS. The study was conducted with the sample size of 76 respondents in which a set of questionnaires was distributed to a sample of non-executive staff in Yayasan Sarawak. The result indicates that majority of the respondents agreed that the uses of mobile communication does have impact on employee performance, and it also shows that there are strong relationships between the variables in the study.

Keywords: - Statistical Package for the Social Sciences (SPSS)

1. Introduction

The ubiquitous nature of mobile phones has made them an integral part of modern life. Since the inception of mobile technology in 1973, the number of mobile phone subscriptions has surpassed 4 billion globally, marking it as the most indispensable device worldwide (Bautista & Lin, 2016). Mobile communication devices facilitate seamless connectivity and enable various tasks such as messaging, calling, emailing, and accessing the internet (Davis et al., 2016). Moreover, mobile phones play pivotal roles across diverse sectors including education, politics, social interactions, and economics. Education institutions worldwide, as exemplified by UNESCO's Mobile Learning Week, recognize the transformative potential of mobile technologies in education (Mobile Learning Week, 2016). Similarly, in the political arena, cell phones have become instrumental tools for disseminating information and engaging voters during elections (NotePage, 2016). Furthermore, mobile phones have permeated into daily life, with studies showing that individuals, especially young adults, rely heavily on them for communication and information exchange.

In Malaysia, mobile phones have facilitated business operations, particularly in industries like agriculture, by enhancing access to information and expanding networking opportunities (Shaffril & Hassan, 2012). The proliferation of mobile technology is mirrored by the increasing number of telecommunication service providers in Malaysia, reflecting its growing significance in the country's economy. The integration of mobile communication

devices into organizational settings has created a new paradigm for conducting business. Forrester's research estimates a substantial increase in the number of smartphone users in workplaces globally, underscoring the pervasive influence of mobile technology (Chen, 2012). Technological capability and organizational culture emerge as critical factors shaping the adoption and utilization of mobile communication devices within organizations (Chidi, 2011). Leveraging resources effectively, guided by theories such as the Resource-Based View (RBV), can confer competitive advantages to organizations in a dynamic business landscape. Despite the benefits associated with mobile communication devices, their usage within organizations presents challenges. The blurring boundaries between personal and professional time, exacerbated by the constant accessibility facilitated by smartphones, can impede employee productivity and well-being (Pitichat, 2013). Moreover, the pervasive use of mobile devices can lead to increased stress levels among employees, affecting their work-life balance (Davis et al., 2016). While studies indicate positive outcomes of mobile device usage, particularly in enhancing job performance and satisfaction, the literature remains sparse, with limited research focusing on non-executive employees in specific contexts (Bautista & Lin, 2016; Jeong et al., 2016). Therefore, this study aims to explore the factors influencing the use of mobile communication devices and their impact on employee performance within Yayasan Sarawak, Kuching. This study seeks to achieve the following objectives:

1. Identify the factors contributing to the use of mobile communication devices and their impact on employee performance.
2. Examine the relationship between the use of mobile communication devices and employee performance.

The findings contribute empirical insights into the relationship between mobile communication devices and employee performance, particularly focusing on technological capability and organizational culture. It serves as a reference for future researchers interested in exploring similar themes and provides a deeper understanding of the factors affecting the use of mobile communication devices on employee performance. The study offers practical insights for managers to optimize the strategic alignment between technological capability, organizational culture, and employee performance within their organizations.

2. Methodology

This study adopts a Non-experimental Research Design to explore the correlation between variables (Salkind, 2014). The population consists of non-executive staff working in Yayasan Sarawak, Kuching, totaling 76 individuals, as confirmed by Mr. Abang Azrianto bin Abang Bohari, the Assistant Director of Human Resources.

The sampling technique that was adapted in this study was convenience sampling method in which the members of the population were conveniently selected to represent the sample (Salkind, 2014). The sample size for the population is determined to be 76. The unit of analysis in this study is non-executive employees from Yayasan Sarawak, Kuching.

A set of questionnaires was used as the main instrument for data collection in the study. The questionnaire consists of 3 separate sections namely Section A, B, and C. For Section A and B, the questions were adapted from Richardson's scale as cited in Chidi, (2011) while for Section C, the questions were dependent variable (employee performance), adopted from Yueh et al., (2015). Section A consists of demographic information such as gender, age, educational level, service period and unit. The level of measurement used was Nominal, in which each observation belongs to its own category while section B, about independent variables (technological capability and organizational culture). The questions for Section B and C used the Likert Scales measurement based on the interval level of measurement of 5 points; 1=strongly disagree, 2=disagree, 3=not sure, 4=agree and 5=strongly agree.

Quantitative data collection involves questionnaire design, content validity checks, and a pilot study. IBM SPSS version 23.0 is utilized for data analysis, focusing on identifying correlations between independent variables and the dependent variable. SPSS offers comprehensive statistical analysis

capabilities, enabling data management, descriptive statistics, and complex statistical analyses.

3. Result and Discussion

There were 40 male respondents (52.6%) and a total of 36 female respondents (47.4%) who answered the survey questions. Therefore, the total number of respondents who answered the survey completely is 76.

According to Pallant (2020), the Cronbach's alpha coefficient of a scale should be above 0.7 ($\alpha > 0.7$) with the internal consistency of "excellent" if α is greater than 0.9 ($\alpha > 0.9$). The first variable of technology capability has 4 items in the questionnaires with the Cronbach's Alpha value of 0.775 ($\alpha = 0.775$). Next variable tested in the reliability analysis is organizational culture with 6 items in the questionnaire and the Cronbach's Alpha value is 0.848 ($\alpha = 0.848$). The last variable in the analysis is employee performance with equal number of items as the previous variable, 6 items, and the α value is 0.959 as the highest among all the variables. Thus, it can be concluded that all the items in the questionnaire are reliable and the consistency of all the items varies from "acceptable" to "excellent".

Table 1 shows the descriptive analysis for variables in mean and standard deviation. Table 3 indicates that majority of the respondents in this study agrees that technological capability with mean = 3.58, and standard deviation = .73791 does have an impact on employee performance. Furthermore, this result also shows that respondents do agree that organizational culture (mean = 3.49) with standard deviation .74904 has an effect towards employee performance. Similarly, employee performance variable with the mean = 4.05 and standard deviation .87534 also affects the employees' performance as indicated by the respondents.

Table 1. Descriptive analysis

Variables	Mean	Std. Deviation
Technological Capability	3.58	.73791
Organizational Culture	3.49	.74904
Employee Performance	4.05	.87534

Skewness and Kurtosis was the method used to test the normality of each variable. The normal value for each variable is when the skewness is between -2 to +2. Firstly, the value of normality analysis for skewness of technology capability is -.933 while the Kurtosis is .835. Next, Skewness value for organizational culture is -1.025 and Kurtosis is .695. Finally, the Skewness value for employee performance variable for is -1.016 and Kurtosis is 1.080. From the table, it can be concluded that all the values for these variables are normal because their range is still in between -2 to +2.

Correlation analysis as in Table 2 is used to describe the strength and direction of the linear relationship between two variables. According to Pallant (2020) the guidelines used to interpret values are small ($r=.10$ to $.29$), medium ($r=.30$ to $.49$), and large ($r=.50$ to 1.0) and to describe the significance correlation between variables is $p\text{-value} < 0.05$.

Based on the result on Table 2, there is a positive, large correlation and significant relationship between technological capability and employee performance ($r=0.526$, $p<0.05$) as well as organizational culture and employee performance ($r=0.722$, $p<0.05$) respectively. Hence, the result showed that there is a positive relationship between these variables.

Table 2. Distribution of Pearson correlation

Variables	1	2	3
Employee Performance	1	.526**	.722**
Technological Capability		1	.648**
Organizational Culture			1

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

Research Question 1 discusses about the level of agreement towards the factors that contribute to the uses of mobile communication devices on employee performance. There are two identified factors which are technology capability and organizational culture.

Table 3. Level agreement

Variables	Mean	Std. Deviation
Technology Capability	3.58	.73791
Organizational Culture	3.49	.74904
Employee Performance	4.05	.87534

Based on the result above, majority of the respondents agreed that level of agreement towards the factors that contribute to the uses of mobile communication devices affects the employee's performance. Analysing the first variable, technology capability, the mean value is 3.58 and the standard deviation is .73791. Additionally, organizational culture variable shows that the mean is 3.49 and standard deviation is .74904. Finally, the dependent variable of employee performance shows that most of the respondents agreed with its effect on employee performance with the mean 4.05 and standard deviation .87534. To conclude, most of the respondents agreed with the factors that contribute to the uses of mobile communication devices on employee performance based on the result above.

According to Pallant (2020), there are several aspects that need to be considered in interpreting the correlation. The first thing is checking the information about the sample, the direction, and the strength of the relationship. Table 4 shows the category of correlation value.

Table 4. Category of correlation (Pallant, 2020)

Correlation Value	Category
$r=.10$ to $.29$	Small
$r=.30$ to $.49$	Medium
$r=.50$ to 1.0	Large

Employees' perceived job relevance in using mobile devices at work positively affects their perceived work performance as well as technology improves employees' task with great convenience, flexibility, and efficiency according to Jeong et al. (2016). Previous study by Yueh et al. (2015), the finding is consistent with findings of a which concluded that usage behaviour has a positive impact on perceived work performance improvement. The employees agreed that they finish work tasks more efficiently with mobile technology and at the same time, improving their knowledge and capabilities as well. Apart from that, the study also focused on organizational culture in using mobile devices as a social influence through positive beliefs.

Based on the study that conducted at Yayasan Sarawak, the uses of mobile communication devices is a platform for the employees to gain information quickly and it makes the completion of every task faster and easier. According to the result from that study, there is positive significant relationship between technology capability and organizational culture towards employee performance ($r=0.522$ and $r=0.722$, $p<0.05$) respectively.

Soyemi et al. (2015) mentioned that learners are uniquely served by mobile learning in which the mobile technology devices allow the user to have connection or relationship with the information in their very own ways. By doing that, it helps the learning experience to become more effective by relating new information to the old ones already known. The previous study by Donya (2011) found that about 47% of the respondents indicated that mobile phone was essential for the performance of their work. Prior to that, the findings from this study indicate that there is a strong positive relationship ($r=.526$, $p<0.05$) between technology capability towards employee performance.

One of the objectives in the study is to find whether there is any relationship between the organizational culture and employee performance. A correlation analysis was computed, and the result indicates that there is a strong relationship between the organizational culture and employee performance ($r=.722$, $p<0.05$). The findings are perpendicular to a previous study by Yueh et al. (2015), in which the researcher mentioned that this situation can create a good culture because it improves communication among employees, customers, and clients when mobile communication devices are used as part to perform their work. Therefore, the findings from previous studies are confirmed by the findings from this study that there is a significant relationship

between the organizational culture and employee performance.

4. Conclusion

In this study, data was gathered from 76 non-executive employees at Yayasan Sarawak, Kuching through questionnaire distribution. Based on the findings, several recommendations are proposed for Yayasan Sarawak to enhance the utilization of mobile communication devices and improve employee performance. Firstly, provide comprehensive training for staff on the importance of using mobile devices for job performance. Equip each unit with computer tablets or mobile devices designated solely for work purposes. Install relevant software on staff mobile devices to facilitate job-related tasks. Foster transparency in communicating the benefits of using mobile devices at work. Upgrade software on mobile devices to the latest versions and enhance device security measures. Second is to remain responsive to customer and colleague inquiries, minimizing excessive mobile device usage. Regularly update application software to streamline work processes and enhance efficiency.

Future research endeavours in this area may benefit from the following recommendations: Expand the scope of study to include various industries such as construction, manufacturing, agriculture, and education. Employ diverse research methodologies, including interviews, observations, and experiments, to deepen understanding of the topic. Increase the sample size to enhance the generalizability of findings. Consider qualitative or mixed-mode studies to obtain comprehensive data insights.

Acknowledgement

The aim of this study is to investigate the relationship between the use of mobile communication devices and employee performance.

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