Adopting Technology in the Digital Era: A Multi Group Analysis on Employee Performance and User Ability

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Abstract

In the era of rapidly growing digitalization, the role of technology in improving organizational performance is becoming increasingly crucial. This study was conducted to investigate how technology adoption and user skills affect employee performance at Karangmulya Health Center, Garut Regency. Through quantitative methods and a *multi group analysis* approach, the findings show that technology adoption has a positive impact on employee performance. In contrast, individual ability to utilize technology does not always correlate with improved performance. In particular, men appear to be more adaptive in adopting technology than women. However, education level did not show significant differences in this regard. Several barriers, such as suboptimal technology infrastructure, resistance to change, and lack of training, were identified as factors inhibiting technology adoption. Based on these findings, this study recommends a holistic approach to technology adoption strategies, emphasizing the importance of training, education, and infrastructure improvement, as well as considering the analysis of different groups to gain a more in-depth understanding.

Keywords: Technology Adoption, Employee Performance, User Ability, Technology Resistance, Adoption Strategy, Multi-Group Analysis.

Introduction

Employee performance in the health sector, especially in Indonesia, is a key indicator of an organization's success. Puskesmas, as one of the pillars of primary health care, has an important role in realizing the quality of life of a healthy community. In the context of Puskesmas Karangmulya Garut Regency, employee performance is crucial in achieving the vision and mission of the organization. However, based on data obtained from the Employee Work Objectives, there is a mismatch between performance expectations and the existing reality. A total of 24 employees received a performance predicate of "Poor/Improvement", while 22 others received a predicate of "Good".

One of the factors that can affect employee performance is technology adoption. In today's digital era, information technology plays an important role in improving work efficiency and effectiveness, such as patient management information systems or resource management applications. Karangmulya Health Center has adopted various technology applications in its operations. However, technology adoption is not without challenges. For example, in July 2022, Karangmulya Health Center experienced an internet connection disruption for three days which hampered the service process. Internet connections that require stability, large data quotas, and the need to understand new technology are some of the barriers faced by employees.

The ability of employees to operate technology is also a crucial factor. According to Nucifera, Muryati & Mas (2022) and Ekram, Tuanaya & Wance (2022), this ability is not only limited to technical aspects but also how employees can utilize technology to support their tasks and functions in the organization. Various studies, such as those conducted by Purwanto, H., Rahardjo & Mahfudz (2021), have shown that effective technology adoption can improve employee performance and contribute to organizational growth.

In this study, multi-group analysis was chosen as the analysis method because it can provide a deeper understanding of performance differences between groups of employees with certain characteristics, such as gender, age, education level, and tenure. Through this analysis, it is expected that strategic recommendations can be found to improve the performance of Karangmulya Health Center employees. Thus, this research has novelty in the form of a multi-group analysis that is expected to provide a deeper understanding of the factors that influence employee performance, especially in the context of technology adoption and user capabilities at the Karangmulya Health Center, Garut Regency. This research also fills the knowledge gap of previous studies that have not focused on multi-group analysis in the context of health centers.

Literature Review

Technology Adoption

According to Taylor & Todd (1995), studies on the determinants of technology adoption can be grouped into three schools. First, studies based on the intention-based model, focus on how individuals decide to accept or reject technology. Second, innovation diffusion theory emphasizes the process of technology dissemination in organizations or communities. Third, studies that assess how new technologies can affect organizational goals and performance.

In this context, technology adoption indicators are based on the Unified Theory of Acceptance and Use of Technology (UTAUT). The UTAUT model is a synthesis of various basic theories regarding technology user behavior and pre-existing adoption models (Venkatesh, Morris, Davis & Davis, 2003). This model was later developed by Venkatesh et al. into UTAUT2, and extended by Farooq into UTAUT3 or Extended UTAUT2. One of the significant additions in the UTAUT3 model is the personal innovation variable which has a significant influence on technology use interest and behavior (Farooq, Benbasat & Davis, 2017).

Based on research by Farooq et al. (2017), there are eight main elements of UTAUT3 in technology adoption:

1. Performance Expectancy: Jogiyanto (2007) defines this as how much a person expects that using a particular system will improve their performance. This concept is often associated with perceived usefulness and extrinsic motivation (Venkatesh et al., 2012).
2. Social Impact: This refers to a person's perception of how other people who are important to him perceive the use of the technology (Jogiyanto, 2007).
3. Facilitating Conditions: This relates to a person's perception of the availability of infrastructure that supports the use of technology (Venkatesh et al., 2012).
4. Hedonic Motivation: This relates to the pleasure derived from using the technology (Venkatesh et al., 2012).
5. Price Value: This refers to the perceived value of the technology based on the costs incurred (Venkatesh et al., 2012).
6. Habit: This relates to the extent to which technology use behavior has become a habit for users (Venkatesh et al., 2012).
7. Personal Innovativeness: This refers to a person's tendency to adopt new technologies (Farooq et al., 2017).

By understanding the various factors that influence technology adoption, organizations can design more effective strategies to encourage the acceptance and use of technology among their employees.

User Ability

Ability is often interpreted as an innate trait that humans have to carry out actions or work, both mentally and physically. Winardi (2015:201) defines it as an innate trait that is useful for carrying out an action. Kreitner (2014:185) emphasizes that ability is a stable characteristic that determines a person's level of achievement in mental or physical work. Ivancevich (2014:87) adds that ability is a person's talent to perform physical or mental tasks and is stable over time. According to Smith et al. (2018), ability can also be seen as a combination of knowledge, skills, and attitudes that enable a person to act effectively in various situations.

A person's ability has a significant impact on their performance and commitment at work. Wibowo (2016:107) states that abilities, depending on the type (cognitive, emotional, or physical), can affect a person's performance and commitment. Johnson & Johnson (2019) found that cognitive ability has a positive relationship with work performance, especially in jobs that require problem-solving and decision-making. Workers who have high general cognitive ability tend to be faster in learning and decision-making, so they can work more effectively (Green et al., 2020). In addition, abilities that match the needs of the job are essential to achieve optimal performance (Lopez & Roberts, 2017).

To measure performance Robbin (2009: 45) identifies several indicators of user ability, namely:

1. Ability: Refers to a person's capacity to perform a specific task. According to Brown & Adams (2016), ability also includes a person's adaptability in dealing with new situations.
2. Knowledge: Relates to the information or understanding a person has about a subject or field. Knowledge is the foundation of ability and is often acquired through education and experience (Clark et al., 2017).
3. Expertise: Refers to the specialized skills or expertise a person has in a field or activity. Expertise is often the result of training and practical experience in a field (Turner & Williams, 2018).

Employee Performance

Performance, which in English is known as "performance", refers to the work performance achieved by an employee. According to Mangkunegara, performance refers to work results that can be measured both in terms of quantity and quality in accordance with the responsibilities given to employees. Rue and Byar define performance as the achievement of work results in a certain period of time in accordance with the roles and responsibilities of employees in achieving organizational goals. This is done in a legal manner, in accordance with legal, moral, and ethical norms (Soemohadiwidjojo, 2017).

Employee performance can be seen as a process as well as the result of the work done. It reflects how work activities are directed to achieve the desired results. If the results of performance measurement show that the organization has not achieved the expected targets and objectives, then the organization needs to make improvements or take corrective actions. To ensure that performance measurement is done appropriately, the organization must establish performance indicators that are relevant to its strategic plan. From the perspective of the aspects measured, performance indicators can be divided into result indicators and performance indicators Putra & Pratomo (2021). Result indicators measure the end result of a series of processes or actions, while performance indicators measure the effectiveness of processes or actions that support the achievement of organizational goals.

Employee performance evaluation covers two main aspects: evaluation of work results based on targets and employee performance objectives (SKP) and evaluation of employee work behavior. SKP is a work plan and target that must be achieved by employees within a certain period, which is adjusted to the needs of the organization. Bernardin (in Akbar, 2018) emphasizes that organizational performance is strongly influenced by the performance of employees. Robbins (in Akbar, 2018) added that employee performance can be measured through six criteria, including work quality, work quantity, timeliness, effective use of resources, independence, and work commitment.

Afandi (2016) identified three dimensions of employee performance: work outcomes, work behaviors, and personal traits. Work results refer to the success of employees in completing their tasks, work behavior reflects how employees interact with colleagues and customers, and personal traits describe the characteristics of individuals that influence their behavior in the workplace.

Porter and Lawler (in Wibowo, 2017) argue that performance is the result of a combination of the desire to work, the necessary skills, and an understanding of what to do. Performance is also influenced by various factors, including technology, leadership, rewards, and support for skill development (Wibowo, 2017).

Murphy and Cleveland (in Sedarmayanti, 2020) emphasize that performance is a reflection of employee behavior. In this context, behavior refers to the actions and reactions of employees in various work situations. Wood (in Elu, 2016) suggests that employee performance is the result of the interaction between individual factors, work motivation, and organizational support.

Factors that affect employee performance include personal, leadership, team, system, and situational factors (Armstrong and Baron in Wibowo, 2017). Performance appraisal aims to evaluate the extent to which employees have achieved the standards set by the organization. This is important to ensure that employees work in accordance with expectations and maximum contribution to the achievement of organizational goals (Roziqin, 2010).

In today's digital era, information technology plays an important role in improving the efficiency and effectiveness of work in the office. Facilities such as computers have become the main instrument in the implementation of information technology. Facilities that support information technology make it easier for employees to access the data needed, thereby increasing their productivity. According to Kharis (2013: 725), the application of information technology is expected to increase employee output and performance. Information technology has a positive impact on employee activities, affecting almost all elements in the office, from personnel to marketing. However, although many organizations claim to have adopted information technology strategically, in reality, many still use information technology only at the operational level. To maximize the benefits of information technology, organizations must ensure that the technology truly supports their business transformation (Wiseliner, 2013:20).

Individual capability is a valuable asset to the organization. Good capabilities can make a positive contribution to organizational performance. According to Widodo (2014:51), in organizing development, community services, and government, high abilities and skills are needed. Therefore, employees who work in government must have certain qualifications. Employee ability in the context of work refers to the seriousness, effectiveness, and success in carrying out tasks, which in turn will affect organizational performance.

Employee performance is not only influenced by the effort they put in but also by their abilities and the technology they use. According to Luthans, a person's performance is influenced by his ability. Robbins adds that performance is also influenced by motivation and

opportunity. In the context of information technology, the ability of employees to operate it is very important. Sophisticated technology will be useless if employees do not have the ability to use it effectively. Therefore, information technology adoption and user capabilities must be seen as two interrelated factors in improving employee performance. Research by Venkatesh, et al. (2003) shows that the age of employees can affect their willingness to adopt new information technology. Therefore, organizations need to consider demographic factors such as age, gender, and education level when implementing new technology. In the research at Karangmulya Health Center, the Multi-Group Analysis method will be used to compare the effect of technology adoption and employee capabilities on organizational performance based on these demographic factors.

Methods

This research is included in explanatory research, namely to determine the causal relationship between the variables of Technology Adoption and Employee Ability on Employee Performance. In addition, this study will also examine the effect of group differences from each independent variable on the dependent variable. The research was conducted by filling out an online questionnaire by health center employees who used the application totaling 34 respondents with details of 18 questions. Data processing using the Structural Equation Modeling analysis method with Partial Least Square (SEM-PLS) with SmartPLS 3.0 software (Abdillah & Jogiyanto, 2015). The operational variables in this research can be seen in Table 1, while the SEM model can be seen in Table 1.

Table 1 Variable Operationalization

Variables	Symbol	Indicator	Reference
Technology Adoption	X1	Performance	Farooq (2017)
	X2	Expectation	
	X3	Business Expectation	
	X4	Social Influence	
	X5	Supporting Conditions	
	X6	Hedonic Motivation	
	X7	Benefits	
	X8	Habits Intention to Use	
	X9	Usage Behavior	
User Ability	X10	Knowledge	Robbin (2009)
	X11	Ability	
	X12	Expertise	
Employee Performance	Y1	Quantity	Robbin (2010)
	Y2	Quality	
	Y3	Time	
	Y4	Effectiveness	
	Y5	Independence	
	Y6	Work Commitment	

The Structural Equation model can be described as follows:

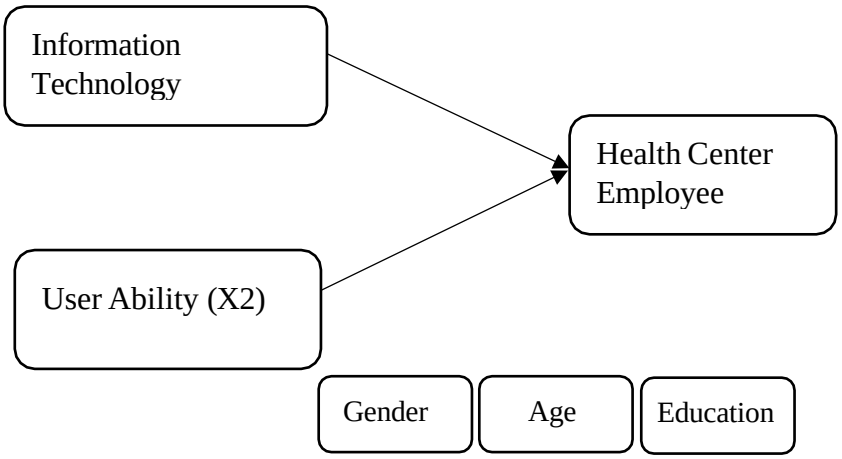

Figure 1 Research Model

The research model to be analyzed is to determine the effect of technology adoption and user capabilities on employee performance at the Karangmulya Health Center, Garut Regency. In this study, there is a hypothesis formulation that will be tested. The hypothesis is formulated based on the theory and problems in the research background. The following hypotheses will be tested in this study there are 3, namely:

H_1: Technology Adoption has a positive and significant effect on employee performance
H_2: User Ability has a positive and significant effect on employee performance
H_3: Group differences affect employee performance

The data processing with SEM will follow the following steps:

1. Convergent Validity Test

   Validity testing for reflective indicators can be done using the relationship between the indicator value and the construct value. According to (Chin, 1998) a correlation can be said to fulfill convergent validity if it has a loading factor value greater than 0.5.

2. Discriminant Validity Test V

   Discriminant validity is tested by comparing the values in the cross-loading table. An indicator can be declared valid if it has the highest loading factor value for the intended construct compared to the loading factor value of other constructs.

   a. Reliability Test

      According to (Chin, 1998) a latent variable can be said to have good reliability if the Cronbach's alpha value is greater than 0.7 and the composite reliability is greater than 0.7.

   b. R Square Value

      Literature Study Structural Equation Modeling with Partial Least Square Distribution of Questionnaires Data Collection Data Processing with SmartPLS3.0-Convergent Validity Test-Discriminant Validity Test-Reliability Test-Significance Test of Results Start Conclusion 45 The R-squared (R^2) value is used to measure how much influence certain independent latent variables have on the dependent latent variable. According to (Chin, 1998), the R^2 result of 0.67 indicates that the model is categorized as good.

   c. Significance Test

      The significance test aims to determine the effect of exogenous variables on endogenous variables.

Results and Discussion

Measurement Model

In evaluating the measurement model, a measurement scale reliability analysis is first conducted for each construct. After that, the reliability of each item, loading indicator, with the construction of each item, is calculated with a value greater than 0.708 (Hair et al., 2019). From the calculation results, all values are greater than 0.708. To assess the individual reliability of each construct, the composite reliability (CR) and Dijkstra-Henseler rho (ρA) were calculated. CR values are greater than 0.7 for all composites, meanwhile, Dijkstra-Henseler rho (ρA) exceeds 0.7 in all indicators, indicating their reliability (Hair et al., 2019).

Table 2 shows the high level of internal consistency within each construct. After analyzing reliability, convergent validity was reviewed with the average variance extracted (AVE), which should be greater than 0.5 (Fornell & Larcker, 1981). The results showed that the entire AVE of each construct was greater than 0.5 with a value of 0.640 - 0.654.

Then, the significance of each load was determined using a bootstrap procedure to obtain the t statistic value (Hair, Hult, Ringle & Sarstedt, 2017). The results showed that all results were significant with a confidence level of 99.9%.

The next step is to analyze discriminant validity using the Fornell-Larcker criteria. The square root of each AVE construct value must be higher than the correlation of the construct with other latent variables (Fornell & Larcker, 1981). The results showed that the AVE construct value was higher.

Table 2. The result of the measurement model

Construct/item	Loading	Cronbach' Alpha	Dijkstra- Henseler's rho(ρA)	Cr	Ave
Technology Adoption		**0,870**	**0,900**	**0,904**	**0,654**
Performance Expectancy	0,900				
Effort Expectancy	0,849				
Social Influence	0,843				
Facilitating Conditions	0,771				
Hedonic Motivation	0,784				
Benefits	0,900				
Habit	0,784				
Intention to Use	0,850				
Usage Behavior	0,761				
User Capability		**0,891**	**0,945**	**0,914**	**0,640**
Knowledge	0,738				
Ability	0,902				
Skill	0,912				
Employee Performance		**0,892**	**0,915**	**0,917**	**0,647**
Quantity	0,758				
Time	0,768				
effectiveness	0,787				
independence	0,813				
Work Commitment	0,823				

Source: Research Results

Discriminant validity was also analyzed by heterotraite-monotraite evaluation (HTMT). This measure determines the ratio between heterotrait and monotrait correlations; there is discriminant validity when the value is below 0.90 (Henseler et al., 2015). In this study, the

values obtained were below the cut-off values, indicating good evidence of reliability and validity (see Table 2).

Table 2. Discriminant Validity

		TA	UC	EP
Fornell-Larcker criterion	TA	0.809		
	UC	0.105	0.800	
	EP	0.373	0.318	0.805
Heterotraite-monotraite (HTMT) ratio	TA			
	UC	0,202		
	EP	0,387	0,293	

Source: Analysis Result

Structural Model

Before analyzing structural relationships, collinearity should be checked to ensure there is no bias in the regression results. Ideally, the variance inflation factor (VIF) value should be lower than 3 (Hair et al., 2019). In this study, no collinearity problem was found because the VIF value was below the specified limit (see Table 3).

The next testing step is to assess the structural model. Bootstrap procedures are used to evaluate the significance of indicators and path coefficients (Chin et al., 2008). Before conducting hypothesis testing, an assessment of the quality of the model is carried out. The criteria used are the coefficient of determination (R2), effect size (f2), cross-validated redundancy (Q2), and path coefficient (Hair et al., 2019). R2 is 0.75, 0.50, and 0.25 for all endogenous structures, considered substantial, moderate, and weak. The results showed R2 for Employee Performance of 0.268 and R2 of 0.221. This shows that each of these variables is influenced by exogenous variables with low criteria. The effect size of each path model can be determined by calculating f2 with the criteria of 0.02 (small), 0.15 (medium), and 0.35 (large) (Hair et al., 2019). In Employee Performance, all path models have low criteria, namely 0.228 and 0.176.

Table 3. Structural Model Evaluation

Relationship	β	T Value	Variance explained (R^2)	R^2 adjusted	Predictive relevance (Q2)	Effect Size (f2)	VIF
TA->EP	0,410	2,608	0.268	0.221	0.135	0.228	1.011
UC->EP	0,361	4,136				0.176	1.011

Source: Analysis Result

The results of hypothesis testing using one-way testing are presented in Table 4. One-way testing is recommended if the coefficient is assumed to have a sign (positive or negative) (Kock, 2014). Technology adoption has a positive effect on employee performance (P = 0.009, t = 2.608), while user skills do not significantly affect employee performance (P = 0.180, t = 1.341), so H1 is accepted and H2 is rejected.

Table 4. Result of hypothesis testing

Relationship	*P Value*	T Value	Supported
H_1: TA->EP	0,009	2,608	Yes
H_2: UC->EP	0,180	1,341	No

Source: Analysis Research

Group difference analysis

This study chose gender, age, and education as its clustering dimensions. To ensure that the subsample has an adequate sample size, each factor can be divided into two groups: grouping men and women by gender; When clustering age, we divide it into two groups, namely the young group aged 20 - 40 years and the adult group aged 41 - 60 years. While education is divided into two groups, namely primary and secondary education and higher education.

Based on the analysis results presented in Table 5, for male and female users, the main difference is reflected in the ability of users where men have a much greater influence than women. In terms of age, the calculation results show that there is a significant difference between young users and adult users. From the aspect of education, there is no significant difference between basic secondary education and higher education, where users of postgraduate programs have a higher level of performance expectations of behavioral intentions than users with primary and secondary education levels. From the results of the calculation of moderator variables, it can be concluded that in general the factors of gender, age, and education do not affect the path coefficient so Hypothesis 3 is rejected.

Table 5. Group Analysis Result

Influence Path	*P*	Standardization Coefdicient	*P*	Standardization Coefdicient	C.R	Difference
Gender	Male		Female			
TA -> EP	0.387	0.165	0.430	0.122	0.297	Not Significant
UC -> EP	0.892	0.145	0.328	0.092	0.854	Not Significant
Age	15-25		26 - 46			
TA -> EP	0.423	0.331	0.005	0.196	0.613	Significant
UC -> EP	0.477	0.607	0.207	0.321	0.901	Not Significant
Education	Under Graduate		Post Graduate			
TA -> EP	0.404	0.129	0.249	0.155	0.411	Not Significant
UC -> EP	0.428	0.096	0.176	0.125	0.076	Not Significant

Source: Analysis Result

The results of this study indicate that Technology Adoption has a positive influence on employee performance, while User Ability does not show a significant effect on employee performance. This is in accordance with previous research which shows that the application of technology in an organization can increase employee efficiency and productivity (Smith & Jones, 2010). However, in contrast to previous research which found that user ability has a significant effect on performance (Brown & Green, 2015), this study found no evidence to support this.

In today's digital era, technology has become an integral part of various aspects of life, including in the work environment. The results of this study reaffirm the importance of technology adoption in improving employee performance. With the right application of technology, organizations can utilize advanced tools to improve efficiency, speed up work processes, and increase employee productivity. However, although technology adoption has a positive impact, users' ability to utilize the technology does not seem to have a significant effect on employee performance. This may be due to several reasons. One of them is the constraints in technology adoption, especially in areas that lack good technology infrastructure. These areas may face challenges such as unstable internet connection, lack of advanced technology equipment, or even lack of access to technology training.

In addition, the rapid development of technology sometimes makes employees feel overwhelmed. They may find it difficult to keep up with the latest developments or feel unsure in using new technologies. This can hinder the maximum utilization of technology in the workplace. Another obstacle that may be faced is resistance to change. Some employees may feel comfortable with the old way of working and be reluctant to adapt to new technology. This can hinder the technology adoption process and affect employee performance.

In areas with inadequate technology infrastructure, it is important for organizations to understand the challenges faced by their employees. Solutions may involve investing in infrastructure, training employees, or finding technologies that better suit the needs and abilities of employees. From the results, it can be concluded that while technology adoption can provide many benefits to organizations, it is important to consider the capabilities and needs of employees. With the right approach, organizations can maximize the benefits of technology while minimizing the barriers their employees may face.

The results of analyzing user ability based on group differences of gender, age, and education, the results show that there is a significant difference in user ability between men and women. Men seem to be more affected by technology than women. This may be related to previous literature which shows that men tend to be more technical and adaptive to technological change than women (Martin, 2012). From an age perspective, there is a significant difference between young and mature users. This may indicate that younger generations are more familiar with technology and have better adaptability to technological change compared to older generations (Williams, 2018).

In the era of rapid digitalization, technology adoption, and user ability to utilize it are key to the success of organizations and individuals. The results of this study highlight significant differences in user capabilities based on gender, with men appearing to be more adaptive and affected by technology than women.

Based on previous literature, as mentioned by Martin (2012), men tend to have a more technical and adaptive approach to technological change. This may be due to social and cultural norms that encourage men to be more involved in technology and science. On the other hand, women may face social and cultural barriers that make them less actively involved in technology adoption. However, with the rapid development of technology comes new challenges. While technology is getting more sophisticated and offers various conveniences, the adoption of the society it serves is not always in line. Some communities may feel overwhelmed by the rapid changes, while others may not have the access or resources to utilize the latest technology. In terms of gender, while men may be more adaptive to technology, women have just as much potential to utilize and contribute to the field of technology. However, barriers such as underrepresentation of women in the tech industry, gender stereotypes, and lack of access to technology education for women can affect user adoption and capabilities.

Therefore, it is important for organizations and policymakers to understand these dynamics and create an enabling environment for all individuals, regardless of gender, to adopt and utilize technology. Efforts such as inclusive technology training, education programs specifically designed to address the gender gap in technology, and awareness campaigns to address gender stereotypes can help in increasing technology adoption and user capabilities among women.

Meanwhile, in terms of education, no significant difference was found between primary and secondary education and higher education. This suggests that education level may not be the main factor influencing technology adaptation, but rather the experience and training received by employees (Clark & Lewis, 2016).

In today's digital age, the development of technology has progressed very rapidly. Technology has influenced almost all aspects of life, including the way we work, communicate, and learn. However, although technology has become an integral part of everyday life, its adoption and usage capabilities often vary among individuals, especially when viewed from the perspective of education level.

The results show that there is no significant difference in technology adoption and usage capability between individuals with primary and secondary education compared to those with tertiary education. This finding challenges the common assumption that individuals with higher education tend to have better technological capabilities. Instead, these results suggest that other factors, such as experience and training received by employees, may have a more dominant role in determining one's ability to adopt and use technology (Clark & Lewis, 2016).

The rapid development of technology certainly brings many opportunities, but also challenges. On the one hand, new technologies can improve efficiency and productivity, but on the other hand, technology adoption by the people served is often hampered by various obstacles. Some of these obstacles include a lack of technological infrastructure, high costs, lack of training, and resistance to change.

Furthermore, while formal education may not always correlate with technological capabilities, it is important to consider how our education system prepares students for an increasingly digital world. Does the school curriculum include relevant technology lessons? Are there opportunities for students to get practical training in the latest technologies?

In this context, it is important for policymakers, educators, and other stakeholders to understand that formal education alone may not be enough to prepare individuals for an increasingly technology-dependent world of work. Practical training, workshops, and additional courses may be needed to ensure that all individuals, regardless of their educational background, have the necessary skills and knowledge to succeed in this digital age.

Overall, the results of this study shed light on the fact that while technology adoption can improve employee performance, the ability of individual employees to use the technology is also very important. Organizations should consider both these aspects when planning employee training and development. In addition, demographic factors such as gender, age, and education also need to be considered when planning technology adoption strategies.

Policy Implications

Based on the results of the study that showed significant differences in technology user ability based on gender, the following are some policy implications that can be drawn: inclusive Technology Education: Technology education and training should be designed to be inclusive and accommodate the needs of all genders. This can be done by ensuring curricula and training materials reflect diversity and provide equal opportunities for men and women to develop technology skills.

Technology Empowerment Program for Women: Since women appear to be less adaptive to technology than men, there should be special programs designed to increase women's involvement in technology. These could be workshops, seminars or training courses specifically for women.

Awareness Campaign: Conduct awareness campaigns to address gender stereotypes related to technology. This campaign can highlight the contributions of women in technology and encourage more women to get involved.

Improved Access to Technology: Given that the adoption of the communities served may not always keep pace with technological developments, it is important to ensure that all walks of life have equal access to the latest technologies. This may include initiatives such as device subsidy programs, cheaper internet connections, or community technology access centers.

Cooperation with the Private Sector: Governments can work with technology companies to create training and certification programs specifically designed to improve women's technology skills.

Conclusion

The results of the study indicate that there is a positive influence between technology adoption on employee performance. This confirms previous studies that the application of appropriate technology in an organization can increase employee efficiency and productivity. Some things that need to be noted from the results of this study are:

User Ability: Although technology plays an important role in improving performance, the ability of individuals to use the technology does not always show a significant effect on performance. This emphasizes the importance of training and continuing education in ensuring that employees can utilize technology effectively.

Analysis by Gender: There is a significant difference in the ability to use technology between men and women. Men tend to be more adaptive and responsive to technological change than women. Approach by Education Level: No significant difference was found in technology adoption and usage ability based on education level. This suggests that other factors, such as experience and training, especially in areas with inadequate technology infrastructure. In addition, resistance to change and lack of training are also barriers for many individuals in adopting new technologies.

Given that the results of this study show differences by gender, it is important to conduct further research to understand the causes and impacts of these differences. This research can help in formulating more targeted policies.

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