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The Effect of Digital Literacy and Facilitating Conditions on Increasing Employee Productivity

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ABSTRACT: Increasing employee productivity is certainly not easy and cannot be separated from adaptive efforts to developments and changes that occur. Facing various social and environmental phenomena that occur, of course the role of human resource management must be to be able to determine the right strategy to remain focused on achieving optimal employee productivity. In the current era of digitalization, the need to accelerate the achievement of employee productivity with advances in information technology is absolutely necessary. Changes in employee mindset and culture set regarding the use of various information technology facilities used by the organization must be realized so that the character of employees who are technologically literate and have digital competence can also be formed. The simplification of government bureaucracy, which is also a milestone in efforts to support increasing the competence and expertise of the State Civil Apparatus (ASN), must also be marked by the government's readiness to pay more specific attention to the digital literacy skills of each of its employees. own. Especially in the era of digital transformation and post-pandemic Corona Virus Disease 2019 (Covid-19), ASN are increasingly required to increase their digital literacy in order to increase work productivity which is the unit of measure for organizational success and performance. On the other hand, the strategic step that the government needs to take to increase employee productivity is to strengthen facilitating conditions which are believed to have a very significant influence on employee productivity. Based on the results of this research, it was found that digital literacy and facilitating conditions have a significant effect on employee productivity.

1. INTRODUCTION

The development of information technology has not only increased the efficiency and effectiveness of bureaucratic performance, but has also encouraged the movement of the digital transformation train which underlies the realization of a digitalization order in government work activities. The Covid-19 pandemic certainly cannot always be used as a scapegoat when there is a decline in employee productivity. Organizations should not be weakened just because of social and environmental changes. For this reason, organizations must have strong resilience in facing various changes that occur. The temporal situation during the pandemic, which will continue to be implemented as a new form of normality, has succeeded in instilling the concepts of productivity and self-commodification as tools for measuring one's worthiness and worth.(Grant & Smith, 2021).

Technological advances and digitalization are believed to be able to support increased employee productivity after the Covid-19 pandemic. The organization as a shelter for all employees must be able to carry out digital transformation well in order to facilitate the implementation of mandated duties and functions in accordance with statutory regulations.Digital transformation is essentially the essence that encourages the implementation of various evidence-based policies to address various development issues, including the impact of the Covid-19 pandemic. In this case, the government is required to be able to provide information technology-based services by improving business processes so that services will be faster, easier, cheaper and more transparent while still paying attention to accountability to the community. Digital transformation begins with the adoption and use of digital technology, then develops into an implicit holistic transformation of an organization. However, in the context of the use and adoption of digital technology, holistic organizational transformation is required to create value (Teichert, 2019).

Within the framework of digital transformation, and in the context of realizing e-government, employee productivity is an important factor that needs to be considered so that the impact of increasing employee productivity has a significant impact on increasing the performance of public services provided to the community. In the context of public services, employee productivity is a lever for providing excellent service to the community. However, in practice, sometimes efforts to increase employee productivity are hampered by the low digital literacy of employees and the facilitating conditions that are the driving force. When employees have a good digital experience, their productivity will increase. Employee productivity is the result of a good

relationship between the organization's ability to meet the needs of its employees and employees will work hard and seriously to improve performance.(Tamara et al., 2022). And furthermore, providing support for users is a form of facilitating condition that can influence system utilization in the context of PC useThompson et al. (1991)

2. THEORETICAL BASIS

2.1 Digital Literacy

According to Paul Gilster, digital literacy is a person's ability to utilize information in various forms. Whether it is from a source from a computer device or from a cellphone. Meanwhile, Bawsen emphasized that digital literacy actually emphasizes computer literacy and information literacy. Where computer literacy itself has existed since the 1980s and only became widespread in the 1990s. From here, the development of digital literacy becomes more accessible and more widespread. Within the scope of application, at levelsThe basis of digital literacy is intended as the use of digital technology for everyday life such as searching for information and catthing communication. Then at a deeper level it is defined as cognition and the use of digital technology for careers(Techataweewan and Prasertsin, 2018).

2.2 Condition Facilitate

As one of the main constructs of the UTAUT theory (Unified Theory of Acceptance and Use of Technology), facilitating conditions are an individual's belief in the availability of facilities in their environment including coverage, network and availability of devices to make a person's belief in accepting a technology(Venkatesh et al., 2003). Facilitating conditions are a measure of confidence for individuals who believe that the available technical infrastructure can support the use of the system/technology(Chen and Zhou, 2016).

2.3 Productivity

Productivity is a very important factor in maintaining and developing the success of an organization. As is known, every organization invests vital resources (human resources, materials and money) to produce goods/services. Using these human resources effectively will provide better results. Productivity is theoretically defined as the comparison between output (goods and services) and input (labor, materials and money). Productivity is the efficiency of production of goods or services expressed by some measure. productivity (also referred to as workforce productivity) is broadly defined as the efficiency of a worker, and it is important for organizations and societies (Diener, 2012)

3. RESEARCH METHODOLOGY

3.1 Research design

This research uses a quantitative approach because the observed symptoms are converted into numbers which are analyzed using statistics. Quantitative research requires researchers to explain how variables influence other variables(Creswell, 2014).

3.2 Sampling Method

The sampling method/technique used in this research is stratified proportional random sampling, namely sampling that uses more than one technique, namely stratified, proportional and random. And SThe sample used in this research was 250 respondents consisting of State Civil Apparatus (ASN) in the Bengkulu Provincial Government and 10 Regency/City Governments in Bengkulu Province. Data collection was carried out by distributing questionnaires directly to designated work units.

3.3. MethodData analysis

The data analysis method used in this research is by using*Structural Equation Modelling*(SEM) with analysis tools using the Smart-Partial Least Square (PLS) 3.0 application with testing stages (1) Preliminary consideration, (2) Measurement model assessment (outer model) and (3) structural model assessment (iner model). PLS is an analytical method used to confirm theory, and can also be used to explain whether or not there is a relationship between latent variables(Hair et al, 2017).

4. RESEARCH RESULTS AND DISCUSSION

4.1 Respondent Demographic Analysis

Table 4.1 Respondent Demographic Data

Characteristics	Category	Frequency	Percentage (%)
Age	18 - 30 Years	46	18.4
	31 - 45 Years	110	44
	> 45 Years	94	37.6
Gender	Man	70	28

	Woman	180	72
Last education	high school equivalent	35	14
	Bachelor Degree or equivalent	134	53.6
	Master's degree or equivalent	81	32.4

4.2 Measurement Method

The measurement methods used are Bootstrapping and Blindfolding, which apart from aiming to answer the 2 proposed research hypotheses, includes (1) digital literacy (digital literacy)influence on work productivity (2) facilitating conditions influence work productivity, also starting with testing the quality of the data that has been collected and then providing conclusions as to whether the data is declared valid and reliable in explaining the research model being analyzed.

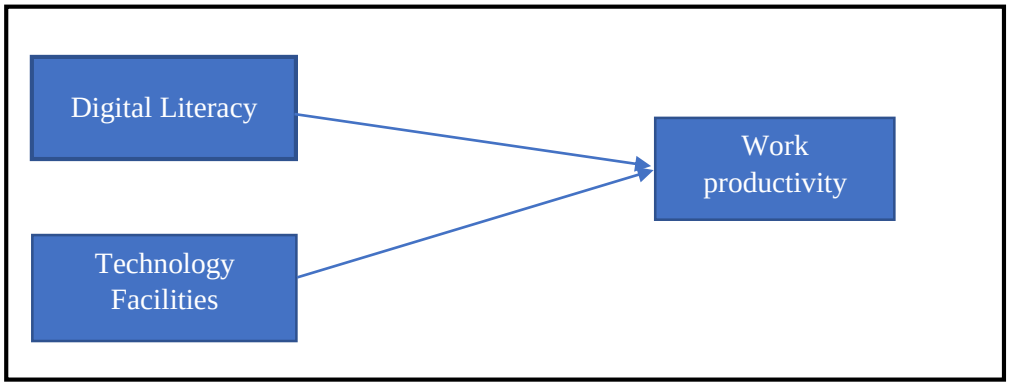

Figure 4.1 Research Framework

Table 4.2 Measurement Constructs

No	Variable	Research question
1	Digital literacy (digital literacy)	I am interested in learning and at the same time using digital tools to improve my work abilities I want to improve my digital communication skills by using application services provided by the agency where I work I feel comfortable using digital devices and will continue to integrate them with my work needs. I feel the need and will evaluate and learn more about the digital technology that I use in my work.
2	Facilitating conditions	The agency where I work has sufficient resources to support the use of the internet and information systems. I have the necessary knowledge to work using information technology devices and computers The integration of job service applications provided by the agency where I work has been done well. I can get help from other people when I have difficulty using application services.
3	Employee Productivity *(employee productivity)*	The quality of my work is in accordance with predetermined standards The quantity of my work is in accordance with the standards set by the company I am thorough in completing every job I am punctual in completing every job

Based on the results of model measurements and hypothesis testing that have been carried out, the following results were obtained:

Table 4.3. Validity and Reliability Test

Latent Variables	Cronbach Alpha	AVE	CR	Square root	Results
Digital Literacy	0.909	0.787	0.936	0.913	All research variables are declared valid and reliable and capable of measuring something that will be measured in this research
Facilitating Conditions	0.942	0.852	0.958	0.942	
Employee Productivity	0.909	0.791	0.938	0.923	

4.3 Evaluation of the Structural Model

Based on the results of the structural model test using SEM-PLS, the following model measurement results were obtained:

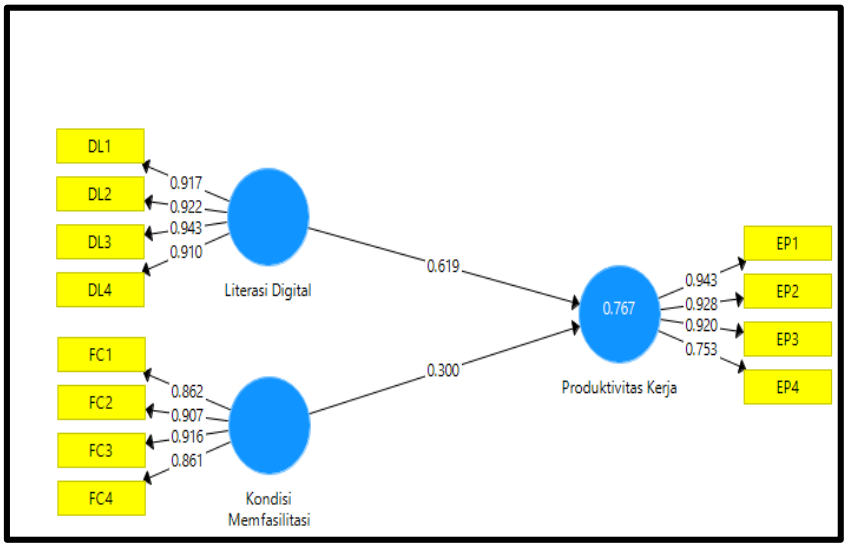

Figure 4.2 Research SEM Path Diagram

Table 4.4 Research Model Measurements

Predictive Relevance Analysis (Q Square)Q^2					
Endogenous Variable	**Q Square**	**Results**			
Employee Productivity	0.599	The prediction accuracy of the variables in this research model is stated to be high.			
Analysis of the Coefficient of Determination (R Square Value)					
Endogenous Variable	**R Square**	***R Square*Adjusted**	***Results***		
Employee Productivity	0.767	0.765	Has high prediction accuracy.		
F Square Analysis					
Latent Variable	**Employee Productivity**		**Results**		
Digital Literacy	**0.611**		Large Effect Size		
Facilitating Conditions	0.144		Small Effect Size		
Predict Analysis					
CONSTRUCT	**PLS-SEM_RMSE**	**PLS-SEM_MAE**	**LM_RMSE**	**LM_MAE**	**RESULT**
EP1	0.393	0.252	0.403	0.250	The proposed PLS model has medium predictive power.
EP2	0.415	0.270	0.431	0.271	
EP3	0.457	0.291	0.472	0.307	
EP4	0.786	0.567	0.814	0.581	
AnalysisSRMR					
	Saturated Model	**Estimated Model**	***Results***		

SRMR	0.044	0.044	The SRMR value is 0.045 <0.08, so it can be concluded that the model has acceptable fit or in other words, empirical data can explain the influence between variables in the model.

4.4 Hypothesis Testing Results

This research uses 3 variables with a total of 250 respondents with a significance level of 5%, and because the testing model in this research is one-tailed, the significance is 0.05. Number of degrees of freedom (df) using the formula (df = nk), so that the value of df = 250-3=247. Taking into account the sample size of more than 200, the t-table value for the one-tailed hypothesis test is 1.64, with a confidence level of 95 percent and an alpha of 5 percent (Hair Jr et al., 2006). Furthermore, it is said that the hypothesis is accepted if sig (p-values) < 0.05.

Table 4.5 Hypothesis Test Results

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Criteria
DL -> EP	0.619	0.603	0.083	7,445	**0,000**	**Support**
FC -> EP	0.300	0.315	0.086	3,504	**0,000**	**Support**
No	**Variable**		**Direction of Influence**	**Coefficient Value Path**	**Mark t count**	**P Value**
	(X)	(Y)				
1	FC	E.P	+	0.603	7,445	0,000
2	D.L	E.P	+	0.315	3,504	0,000

Based on the test results in Table 4.5 above, the following research conclusions were obtained:

1. Hypothesis 1: Digital Literacy has an influence on employee productivity.

The path coefficient value is equal to0.315 showsdigital literacy affects employee productivity by 31.5%. The resulting t-count value (3.504)is greater than the t-table value (1.64), it can be concluded that digital literacyinfluence employee productivity. The p-value significance value of 0.000 is smaller than 0.05, indicating that hypothesis 1, namely digital literacy, has an effect on employee productivity is proven and accepted. These results show that in an organization when employees are equipped with good digital literacy, it also has a significant effect on increasing employee productivity. Employees who are proficient and have good competence in using information technology will have more freedom to create innovations at work, which will directly make them more productive. The results of this research also support the research conclusions put forward byKhin and Ho (2019), that employee productivity is influenced by the newly revealed digital orientation of individual employees, digital orientation is an extension of a more specific technological orientation.

1. Hypothesis 2: Facilitating Conditions Influence Employee Productivity.

The path coefficient value is equal to0.603 indicates that the conditions are facilitating affects employee productivity, namely 60.3%. The resulting t-count value (7.445)is greater than the t-table value (1.64), then it can be concluded that the conditions are facilitating influence employee productivity. The large value of the path coefficient from the results of this study shows thatfacilitating conditionsvery dominantaffect employee productivity. Employees will be increasingly motivated to be more productive if they are supported by resources that are able to facilitate employees' various work needs. Within the scope of using various applications/programs based on information technology, the role of facilitating conditions is very much needed to boost the organization's efforts to increase employee productivity. The results of this research strengthen the previous theory that facilitating conditions are a variable that can explain an individual's belief that the use of information technology will run well if it is supported by good organizational infrastructure and techniques.(Venkatesh et al., 2003).

Furthermore, based on the p-value of 0.000 which is smaller than 0.05, it can be concluded that hypothesis 2 isFacilitating conditions have a proven and accepted effect on employee productivity.

4.5 Theoretical Implications

This research isa form of integration of the constructs of digital literacy and personal innovation used in measuring employee productivity in government organizational environments. In essence, research related to understanding employee productivity has been carried out a lot by previous researchers, but there is still little research that reveals employee productivity from a digital

literacy approach and facilitating conditions which are important domains in technology acceptance theory. For this reason, it is hoped that the expansion of this theoretical model will become new literacy for the benefit of future scientific development.

4.6 Strategic Implications

ResultspIt is hoped that this research can provide input to the government regarding the effectiveness of strengthening digital literacy and facilitating conditions in order to change mindsets and work culture in increasing employee productivity.

In this research, it was found that digital literacy and facilitating conditions very significantly influence employee productivity, for this reason, the strategies and policies that are important for the government to implement are:

1) Improving digital literacy skills for all State Civil Apparatus, especially that facilitating the implementation of technical work for employees must be through the use of applications, so that if good literacy skills are not strengthened for employees, it will hinder increasing employee productivity.
2) It is important for the government to integrate all systems being built so that there is no overlap in system use, making it easier for employees to carry out work activities.
3) Strengthening the basic values of digital transformation within the scope of electronic government implementation. This step is necessary so that all government work tools understand the basics of digitalization of government administration which has become a demand nowadays.

5.CONCLUSION

5.1 Conclusion

To understandIt turns out that employee productivity in the current era of digital transformation is important to measure through the construct of digital literacy and facilitating conditions. Based on the research results, these 2 constructs were found to have a positive and significant effect on employee productivity. Productivity, which is a dimension of efficiency and effectiveness, will become increasingly relevant in its essence when measured from the ability and competence of employees in accepting, studying and using the latest information technology that is currently developing. Apart from that, various readiness and support from organizational resources such as information technology devices (hardware and software) and other adequate digital environments also contribute a huge influence to the realization of increased employee productivity.

The essence that arises from the process of deciphering digital literacy is that every employee is formed to have good digital capability, namely the skills and attitudes that individuals need if they want them to develop in the current digital era. Then, in measuring employee productivity, strong support from the organization is needed in the form of providing various resources needed so that employees' digital literacy can be applied. The essence of this need is in the form of facilitating conditions that will bridge all practices of using digital capabilities inherent in each individual so that together they become a significant lever for realizing increased employee productivity.

5.2 Research Limitations

From the research results, several things were found that were still limitations of the research, namely:

1. Because it is one of the areas of e-government research study, researchers realize that this research has not specifically involved work culture factors as one of the constructs which is believed to also have a moderating effect on digital literacy and facilitating conditions in the review of increasing employee productivity. For this reason, further research needs to involve work culture factors so that stronger and more reliable conclusions are expected to be obtained.
2. This research only measures digital literacy and facilitating conditions in predicting employee productivity using the ASN measurement base in Bengkulu Province. For this reason, it is possible that there will be differences in research results when measured at different research objects and loci.

5.3 Recommendations for Future Research

To increase employee involvement in increasing their work productivity, several actions are considered important to be implemented within government organizations.

1. In the context of digitalization of government system administration, it is important to provide expansion of employee digital literacy as a basis for increasing employee abilities and competencies through various education and competency enhancement training. It is important for employees to strengthen their ability to study, read and run a system if they want to increase the output they want to produce. The dynamics of information technology development must be used as a good momentum for the government to change the mindset and culture of ASN so that they become competitive agents of change for improving organizational performance.

2. In essence, research that reveals employee productivity in the digital transformation concept requires dynamic re-testing in the future. It is believed that developments in information technology over time will greatly influence employee productivity. For this reason, further research is needed in order to improve the quality of research which will dynamically continue to follow the changes in digital transformation that are occurring.

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