

The Influence of Information Technology Utilization and Work Effectiveness on Work Culture with Competence as a Variable Intervening at the Medan Religious Education and Training Center

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Abstract

Based on this research, researchers want to see the influence of the use of information technology and work effectiveness on work culture with competency as an intervening variable. This type of research is quantitative research with the research location being at the Medan Religious Education and Training Center office. The entire population was sampled, totaling 60 employees. The results of this research are that work effectiveness has a positive and significant effect on work culture. Work effectiveness has a positive and significant effect on competence. Competency has a positive and significant effect on work culture. The use of Information Technology has a positive and significant effect on Competency. The use of Information Technology has a positive and significant effect on Work Culture. Work effectiveness has a positive and significant effect on work culture through competence. The use of information technology has a positive and significant effect on work culture through competence at the Medan Religious Education and Training office.

Keywords: Utilization of Information Technology, Work Effectiveness, Competence, Work Culture

INTRODUCTION

The development of technology and information is very rapid, technology develops according to user needs, and has an impact on HR management and planning in an organization. Implementing information technology in organizations is a crucial aspect in the current digital era, and the development of information and communication technology provides a solution for effective and efficient company management. Organizations need an appropriate and effective HR information system in order to improve performance in the organization which enables quality, quantity, effectiveness and independence to be achieved with maximum work results, as well as HR empowerment and employee competency can be higher. Human resources (HR) are very crucial for the development of a company, therefore HR management must be developed and directed to achieve the desired goals. To realize the vision and mission of an organization or company, you can make maximum use of your human resources. One way to develop human resources is to improve performance, empower human resources, and individual employee competencies in the company.

Employee work effectiveness is the beginning of organizational success, because individual effectiveness will result in group level effectiveness. This group effectiveness moves within an organization that has a common goal or can be said to be the level of organizational effectiveness. The effectiveness of employee

performance cannot be far from performance management to achieve success in an organization or individual. Work effectiveness is an encouragement in developing and optimizing the quality of human resources. In this case, work effectiveness is an indicator in the development and optimization of human resources as an encouragement to manage government institutions or agencies effectively and efficiently through good work effectiveness. Work effectiveness is a condition where employees can complete all tasks and work in accordance with previously determined plans.

Competency is a characteristic that underlies a person and is related to the effectiveness of an individual's performance in his or her work or the basic characteristics of an individual that has a causal relationship or as a cause and effect with the criteria that are used as a reference, effective or excellent or superior performance in the workplace or in certain situations (Spencer & Spencer in Moeheriono, 2019). Departing from this understanding, an individual's competency is something inherent in him or her that can be used to predict his or her level of performance. Something in question can relate to motives, self-concept, traits, knowledge or abilities/skills. Work culture is one of the most important factors in the success of an industry where it is reflected in the behavior of its employees, the people involved, and the regulations in the industry. Work culture is the values instilled by an industry continuously which are expected to advance industrial performance.

In everyday life it cannot be separated from the cultural ties that are created. Cultural ties are created by people interacting with each other, whether in families, organizations or in business. Culture is what differentiates one society from another in terms of interacting, behaving and acting in completing a job. Culture binds groups of people into one unified view in creating uniformity of action or behavior. The phenomenon that occurs at the Medan Religious Education and Training Center is that poor use of technology makes work more difficult because employees' understanding of technology is still minimal, resulting in a lack of work effectiveness, which some employees feel even prefer manual work, but like it or not, employees who Still clueless in technology, they have to learn more to use applications installed by the organization to create ease of work and there are still many employees who are not yet competent with technological issues because their work culture is usually still manual and when working using applications, employees must follow developments and advances in information technology.

LITERATURE REVIEW

Utilization of Information Technology

Utilization of information technology is the benefit expected by information system users in carrying out their duties or behavior in using technology when

doing work. The measurement is based on utilization intensity, frequency of utilization and number of applications or software used." According to Jogiyanto (2017) the use of information technology is as follows: "Use of information technology is the behavior of technology employees with their duties, measurement, based on frequency of use in the diversity of applications used." Meanwhile, Jurnal and Supomo (2017) argue that: "Use of technology is related to behavior in using the technology to carry out their duties."

Information Technology Utilization Indicators

According to Jurnal and Supomo (2017) the use of information technology is the level of information integrity in the implementation of management tasks. The construction of information technology utilization is measured by indicators:

1. Device, is an indicator to describe the equipment that supports the implementation of the use of information technology, including software, hardware and network systems.
2. Financial Data Management, is an indicator to describe the use of information technology to manage financial data systematically and comprehensively.
3. Maintenance is an indicator to describe the existence of a regular equipment maintenance schedule for information technology devices to support the smooth running of work.

Work Effectiveness

The understanding of work effectiveness was also put forward by several other experts, according to Hasibuan (2013) work effectiveness is a condition that shows the level of success of management activities in achieving goals including work quantity, work quality and timeliness in completing work. The opinion expressed by Gibson (2010), effectiveness is the achievement of agreed goals and targets to achieve joint business goals. The level of goals and objectives shows the level of effectiveness.

Work Effectiveness Indicators

There are several indicators for measuring work effectiveness according to Hasibuan (2013), namely:

1. Work Quality Work quality is an attitude shown by employees in the form of work results in the form of neatness, thoroughness, and relevance of results without ignoring the volume of work in carrying out the work.
2. Work Quantity Work quantity is the volume of work produced under normal conditions. This can be seen from the large workload and conditions that one gets or experiences while working.
3. Time Utilization Time utilization is the use of work periods that are adjusted to company policy so that work is completed on time.

Competence

Competence is one of the important components that individuals must have so that the implementation of work tasks can run well. According to Sutrisno & Zuhri (2019), competency is defined as an ability based on skills and knowledge supported by work attitudes and their application in carrying out tasks and work in the workplace which refers to the specified work requirements. According to Triastuti (2019) competence is better defined as a person's underlying characteristics which are related to the effectiveness of an individual's work in their work.

Competency Indicators

In this research, the indicators used to measure how much competence employees have, especially employees of the Medan Religious Education and Training Center, are in accordance with the indicators used by Triastuti (2019), namely:

1. Achievement or proactive behavior A person's drive or desire to act beyond what is required or required by the job and has an effect on improving his or her performance.
2. Service or social awareness Contains the essence of seriousness in understanding the desires, interests and needs of other people and including the needs of the people to be served.
3. The ability to influence other people contains the essence of a person's ability to persuade, convince, and influence or create a good impression on other people so that other people want to support their ideas.
4. Managerial abilities include competence in developing other people, directing abilities, teamwork and leadership in groups.
5. Cognitive abilities / thinking patterns The ability of the system to think and recognize patterns. Cognitive ability has been the best general predictor of performance across a variety of occupational professions.
6. Self-awareness The ability to recognize and understand one's own moods, emotions and their effects on others. This ability includes self-control, self-confidence and flexibility which influence performance.

Work Culture

According to Wibowo (2013) work culture is productivity, which is in the form of work behavior which is reflected in, among other things: hard work, tenacity, discipline, productivity, responsibility, motivation, benefits, creative, dynamic, consistent, consistent, responsive, independent, getting better, and others. Furthermore, Robbins (2015) stated that work culture leads to a unified system of shared meaning held by members of an organization which differentiates that organization from other organizations.

Indicators and dimensions of Work Culture

According to Wibowo (2013), the indicators and dimensions of work culture that every organization must have are:

1. Professionalism means being competent in one's field and continuously developing oneself to produce the best performance and provide added value to the company.
2. Collaboration is building sincere and open relationships with all employees and all parties based on mutual trust and respect to achieve common goals.
3. Excellent Service is providing service that exceeds customer expectations (internal and external).
4. Innovation is always developing new ideas and continuous improvements that add value to the company.
5. Exemplary is starting from yourself becoming a role model in behavior that reflects the work culture values of an organization or company.

Conceptual Framework and Research Hypotheses

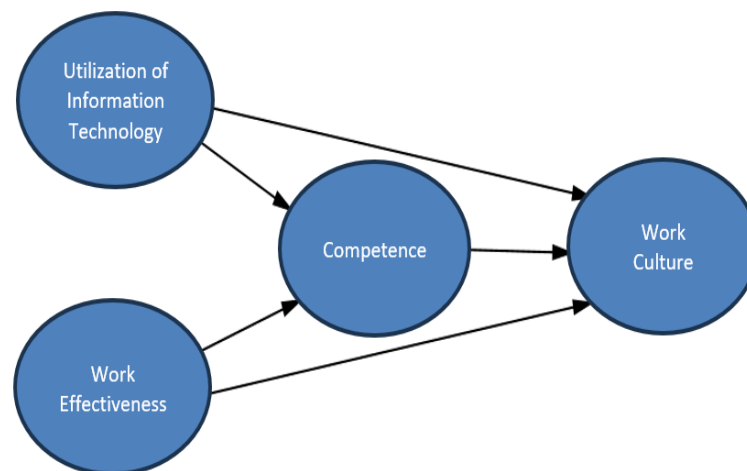


Figure 1. Conceptual Framework

Research Hypothesis

1. The use of information technology has a positive and significant effect on the work culture at the Medan Religious Education and Training Center.
2. The use of information technology has a positive and significant effect on competence at the Medan Religious Education and Training Center.
3. Work effectiveness has a positive and significant effect on work culture at the Medan Religious Education and Training Center.
4. Work effectiveness has a positive and significant effect on competence at the Medan Religious Education and Training Center.
5. Competence has a positive and significant effect on work culture at the Medan Religious Education and Training Center.

6. The use of information technology has a positive and significant effect on work culture through competency at the Medan Religious Education and Training Center.
7. Work effectiveness has a positive and significant effect on work culture through competency at the Medan Religious Education and Training Center.

METHOD

The type of research used is quantitative research. The location of this research is at the Medan Religious Education and Training Center, Jl. Tahi Bonar Simatupang No.122, Sunggal, Medan Sunggal District, Medan City, North Sumatra 20127. This research was carried out from May 2023 to August 2023. The population in this study was 60 State Civil Apparatus employees and the entire population was used as a sample. Data analysis in this study used Structural Equation Modeling (SEM) based on Partial Least Square (PLS) using SmartPLS 3.3.3 software.

RESULTS AND DISCUSSION

Outer Model Analysis

The outer model testing aims to determine the value of each variable with an influential relationship between the manifest variables. This research model includes convergent validity, discriminant validity and reliability testing as follows:

1. *Convergent Validity*

This test is seen from the loading factor, the limit value is 0.7, and the limit value for Average Variance Extracted (AVE) is 0.5, if above this value it is said to be valid. This means that the value for the indicator is said to be valid, if the indicator explains the construct variable with a value > 0.7.

Table 1. Outer Loadings

	Work Culture	Work Effectiveness	Competence	Utilization of Information Technology
X1.1				0.888
X1.2				0.846
X1.3				0.869
X2.1		0.870		
X2.2		0.862		
X2.3		0.868		
Y.1	0.895			
Y.2	0.963			

Y.3	0.904			
Y.4	0.864			
Y.5	0.801			
Z.1			0.820	
Z.2			0.880	
Z.3			0.797	
Z.4			0.797	
Z.5			0.946	
Z.6			0.725	

Source: Smart PLS 3.3.3

Table 1 shows that the four variables used have a value for each indicator above 0.7, which means that all the indicators used are valid and can be continued with further research.

2. Composite reliability

In composite reliability research to look at each variable with its reliability value and if the variable value is greater than 0.60 then the research is considered reliable and if it is below 0.60 and 0.7 then it is not reliable. There are several blocks to determine whether the research is reliable or not and valid or not, including the Cronbach alpha value, composite reliability and AVE value can be seen in the table below:

Table 2. Construct Reliability and Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Work Culture	0.931	0.948	0.787
Work Effectiveness	0.834	0.900	0.751
Competence	0.908	0.930	0.689
Utilization of Information Technology	0.836	0.901	0.753

Source: Smart PLS 3.3.3

In Table 2 above, it can be seen that in the Cronbach's Alpha column there is a value for each variable greater than 0.7, which means that the reliability data of the variable is reliable. The composite reliability column has a value greater than 0.6 so it can be explained that each variable is considered reliable because the data is greater than 0.6. You can see from the AVE column that each variable has a value greater than 0.7, which means the data is valid in AVE terms. All

variables from the Cronbach alpha column, reliability column and AVE column have values greater than 0.7 and 0.6 so they are considered reliable.

Inner Model Analysis

Evaluation of the structural model (inner model) is carried out to ensure that the basic model created is strong and correct. The inspection stages carried out in the primary model assessment can be seen from several markers, namely:

1. Coefficient of Determination (R²)

Based on data processing that has been carried out using the SmartPLS 3.0 program, the R Square value is obtained as follows:

Table 3. R Square Value

	R Square	R Square Adjusted
Work Culture	0.947	0.945
Competence	0.890	0.886

Source: Smart PLS 3.3.3

In Table 3 above, there is an R square value for the Work Culture variable of 0.947 or 94.7%, meaning that the influence of the variables utilization of information technology, work effectiveness and competence has an effect on work culture of 94.7% and the remaining 5.3% is at other variables. For the competency R square value of 0.890 or 89%, this means that the influence of the information technology utilization variable on competency is 89% and the remaining 11% is on other variables.

2. Hypothesis Testing

Hypothesis testing is carried out by looking at T-Statistics and P-Values. If the T-statistic value is > 1.96 and P-Values < 0.05 then the research hypothesis is accepted and vice versa. Next are the results of hypothesis testing with direct influence between variables and indirect influence between variables.

Table 4. Path Coefficients (Direct Influence)

	Original Sample (O)	T Statistics (O/STDEV)	P Values	Results
Work Effectiveness -> Work Culture	0.327	2,749	0.006	Accepted
Work Effectiveness -> Competence	0.345	2,717	0.007	Accepted

	Original Sample (O)	T Statistics (O/STDEV)	P Values	Results
Competency -> Work Culture	0.460	5,661	0,000	Accepted
Utilization of Information Technology -> Work Culture	0.209	2,067	0.039	Accepted
Utilization of Information Technology -> Competency	0.610	4,878	0,000	Accepted

Source: Smart PLS 3.3.3

In Table 4 above there are five hypotheses with direct influence between variables which will be explained as follows.

1. Work effectiveness has a positive and significant effect on work culture, the t statistic value is 2.749 which is greater than 1.96 and the P value is 0.006 which is smaller than 0.05, meaning that if work effectiveness is increased then work culture will also increase and if work effectiveness decreases too. will reduce work culture, meaning that work effectiveness will be good if employees always complete their work on time and this will become a good habit in completing work so that a good work culture is created for the employees and organization of the Medan Religious Education and Training Center.
2. Work effectiveness has a positive and significant effect on competence with a t statistical value of 2.717 which is greater than 1.96 and a P value of 0.007 which is smaller than 0.05, meaning that if work effectiveness increases then competence also increases and if it decreases then competence will also decrease. decline. This can be explained when employees have high work effectiveness characteristics, employee competence will increase so that organizational goals will be easily achieved.
3. Competence has a positive and significant effect on work culture with a t statistical value of 5.661 which is greater than 1.96 and a P value of 0.000 which is smaller than 0.05, meaning that if competence increases then work culture will also increase and if competence decreases then work culture There will also be a decrease at the Medan Religious Training Center.
4. The use of information technology has a positive and significant effect on competence with a t statistical value of 4.878 which is greater than 1.96 and a P value of 0.000 which is smaller than 0.05, meaning that if the use of information technology increases then competence will also increase and if the use of information technology decreases, competence also decreases. This can be explained by the presence of information technology, which means that

competent employees will increase their knowledge and will work more quickly in completing their tasks.

5. The use of information technology has a positive and significant effect on work culture with a t statistic of 2.067 which is greater than 1.96 and a P value of 0.039 which is smaller than 0.05, meaning that if the use of information technology increases then work culture will also increase and vice versa. So that the use of information technology makes employee work of higher quality.

Apart from the direct influence between variables, there is also an indirect influence through mediating variables. For clarity on the results of data processing from indirect influences, you can see the following table.

Table 5. Indirect Effect Between Variables

	Original Sample (O)	T Statistics (O/STDEV)	P Values	Results
Work Effectiveness -> Competency -> Work Culture	0.159	2,278	0.023	Accepted
Utilization of Information Technology -> Competency -> Work Culture	0.281	3,827	0,000	Accepted

Source: Smart PLS Output, 2023

Table 5 above shows that there is an indirect influence between variables with the following explanation:

1. Work effectiveness has a positive and significant effect on work culture through competence with a t statistical value of 2.278 which is greater than 1.96 and a P value of 0.023 which is smaller than 0.05, meaning that competence is able to mediate work effectiveness on work culture at the Medan Religious Education and Training office .
2. The use of information technology has a positive and significant effect on work culture through competence with a t statistical value of 3.827 which is greater than 1.96 and a P value of 0.000 which is smaller than 0.05, meaning that competence is able to mediate between the use of information technology and work culture in the office. Medan Religious Training and Training.

CONCLUSION

Based on the discussion of the hypotheses above, all hypotheses are accepted with the following explanation:

1. The use of information technology has a positive and significant effect on the work culture at the Medan Religious Education and Training Center.
2. The use of information technology has a positive and significant effect on competence at the Medan Religious Education and Training Center.
3. Work effectiveness has a positive and significant effect on work culture at the Medan Religious Education and Training Center.
4. Work effectiveness has a positive and significant effect on competence at the Medan Religious Education and Training Center.
5. Competence has a positive and significant effect on work culture at the Medan Religious Education and Training Center.
6. The use of information technology has a positive and significant effect on work culture through competency at the Medan Religious Education and Training Center.
7. Work effectiveness has a positive and significant effect on work culture through competency at the Medan Religious Education and Training Center.

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