

## THE EFFECT OF TECHNOLOGY ACCEPTANCE MODEL AND ORGANIZATIONAL CULTURE TO THE EMPLOYEE PERFORMANCE AND ATTITUDE AS MEDIATOR VARIABLE (A STUDY AT AKADEMIK AND LIBRARY EMPLOYEE IN UNIVERSITAS NEGERI MALANG, INDONESIA)

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### ABSTRACT

*The purpose of the research was to apply the theory of Technology Acceptance Model (TAM) and to determine the effect of the Technology Acceptance Model (TAM), organizational culture and attitudes on the performance of academic and library employees. Research subjects were employees who carry out work activities in academic services using information technology including software resources, data devices and network devices. Attitude as a mediator variable to find out whether there was an indirect effect on each variable tested. Data collection using a questionnaire consisting of 50 items statement. The population in this research from seven faculties, postgraduate and library with 323 employees. Sampling used proportional random sampling. The number of samples was 179 of 97 permanent employees (PNS) and 82 temporary employees (PTT). The data analysis technique applied was Path analysis. The results showed the independent variables and mediator variables tested were only organizational cultures which did not significantly influence the dependent variable. Also, the independent variable does not affect the dependent variable through the mediator variable because the influence of the independent variable on the dependent value was greater than the mediator variable. The results of the analysis of permanent employees with a sample of 82 (PNS) and non-permanent employees of a sample of 82 (PTT) showed all independent variables and mediator variables tested were only organizational cultures that were not significant to the dependent variable. While the indirect effect of permanent employees (PNS) and non-permanent employees (PTT) shows that no independent variables are affecting the dependent variable through the mediator variable because the influence of the independent variable on the dependent value was greater than the mediator variable. This research was expected to contribute to the development of conceptual models of employee performance in the context of public sector institutions.*

Key words: Academic and Library Employees, TAM, Organizational Culture, Attitudes, Employee Performance

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### INTRODUCTION

In the 21st century, it is a combination of physical, digital and biological domain elements. This became the forerunner to the disruption in all fields that impact on the changing character of human behaviour so that the success of an organization is strongly influenced by the performance of its employees. Higher education serves the public in the public sphere as to achieve success requires a strong organizational foundation and maximizing competence. Higher education is a complex organization on human resources that are capital intensive, technology and knowledge-intensive. The purpose of higher education is to prepare students to become members of the community who have academic and professional abilities that can apply and develop and create technological and artistic knowledge.

For higher education institutions, information technology has become a necessity to support the education process and increase efficiency and productivity for management in higher education. Information technology is a set of interrelated components that collect, retrieve, process, store and distribute information to support decision making and control in an organization (Laudon & Laudon, 2010). Meanwhile, according to Martin & Omrani (2014), the use of the Internet and computers and positive attitudes among employees are related to the use of the Internet with employee job satisfaction. Performance is the quantity and quality of individual or group work within an organization to carry out tasks and functions whose guidance is to the norms, standard operating procedures, and size criteria set by the organization (Torang, 2014). There are various kinds of factors that influence employee performance in the 21st century today, namely Technology Acceptance Model (TAM), organizational culture and attitude. This is reminiscent of some of these factors can affect employee performance to achieve organizational goals. Research by Muzaki et al., (2016) states that the Technology Acceptance Model (TAM) has an impact on employee performance but the most influential is perceived usefulness (PU) or perceived benefits. As for Pramanda et al., (2016) states the Technology Acceptance Model (TAM) is very positive for employees who work using information technology. According to Lin (2013), the usability test differences in aspects of measurement items Technology Acceptance Model (TAM) is a subjective evaluation and usability testing is the purpose of evaluating the use of systems with TAM measurements used for general-purpose studies and usability testing focusing on measuring the performance of special tasks.

Technology Acceptance Model (TAM) is one of the models that was built to analyze and understand the factors that influence the acceptance of the use of computer technology (Davis, 1986). Technology acceptance model (TAM) is the result of the development of the Theory of reasoned action (TRA) developed by (Fishbein & Ajzen, 1980). Nuskiya (2018) states that information technology has a very positive impact on employee performance because it reduces the level of work and errors and increases the level of satisfaction and work motivation. Whereas Isaac et al., (2017) stated that Technology acceptance model (TAM) influences performance by showing the results of internet self-efficacy having a positive impact on perceived ease of use and perceived usefulness, Perception of ease of use has a major influence on perceived benefits and actual use of the internet.

The perceived usefulness has a strong positive impact on the actual use of the internet and actual usage positively influences the performance impact.

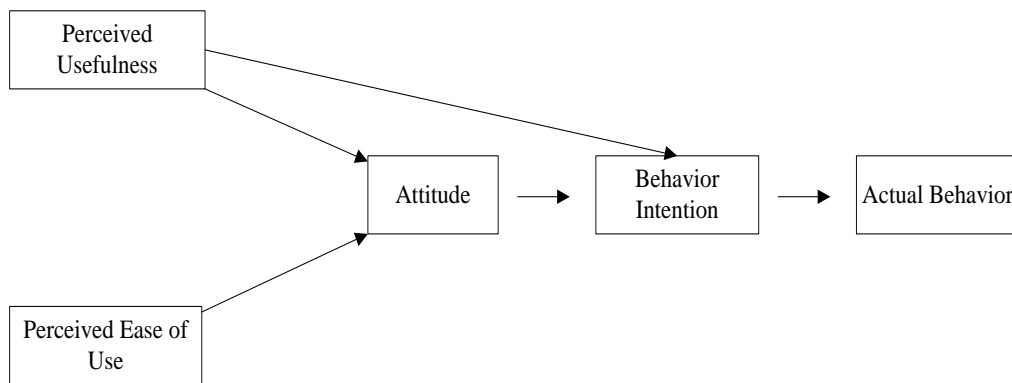
Lee et al., (2015) organizational culture is related to attitudes on work involvement, job satisfaction, and affective organizational commitment and behaviour in work roles and organizational roles. Shahzad (2014) states that organizational culture has a positive influence on employee performance because employee participation is very important to achieve organizational goals. Byarwati & Muslikh (2017) organizational culture is very influential on improving employee performance and organizations that have a good work culture motivate employees to have behaviour under organizational goals so that it will support individual performance. Organizational culture is one that supports or inhibits the adoption of innovation (Martins and Terblanche, 2003). Factors that encourage changes in internal or external factors to the environment and innovation can begin at any level in the organizational structure and may be systematic or local (Zhu, 2012). Alvesson (2002) states that high employee performance, the effect of a strong organizational culture. Atosokhi (2005) states that organizational culture affects employees and can improve their performance. Nasution et al., (2018) stated that employee performance is influenced by organizational culture.

Organizational culture is one that supports or inhibits the adoption of attitudes in using technology defined as a mirror of feelings of like or dislike towards a system of targeted behaviour that has been done (Davis et al., 1989). While Davis (1989) defines the attitude in using technology in the Technology Acceptance Model (TAM) as a level of assessment of the impact experienced by someone when using a particular system in their work. Wang et al., (2011) employee attitudes focus on task behaviours directly related to performance and through attitudes affecting employee performance. If someone has a positive attitude about work then they will work longer and harder. Attitude encourages a person to act in a specific way in a specific context means that attitude influences the behaviour of different levels. Classen et al., (2011) positive relationship with desired employee attitudes, namely job satisfaction, organizational commitment and welfare. While the negative relationship of undesired employee behaviour attitudes namely cynicism, intention to move, work stress and anxiety.

Universitas Negeri Malang is one of the leading and outstanding public sector organizations because in the world of education it is inseparable from information technology, Malang State University also utilizes the development of information technology aimed at improving the performance of its employees. For this reason, it must be supported by a Technology acceptance model (TAM), organizational culture, good attitude and employee performance. Because in the 21st century today must require employees who understand information technology is very important in terms of improving employee performance to achieve organizational goals. Of all the information system technology developments in the current era, one information system designed to support the entire functional unit of the organization is the use of information technology in Universitas Negeri Malang. From observations at the Universitas Negeri Malang, information systems can support the processing of work activities of human resources to be more effective and well-integrated to achieve organizational goals. Information technology systems used by academic and libraries employees are software resources, data devices and network devices. Abbas et al., (2014) state information technology increase employee productivity by saving time affecting employee workloads and ensuring control over errors, quick access to information and ease of use enables employees to provide quality services. There are several information technology functions to support employee performance including information functions, communication functions, data storage functions, learning functions, link functions or links from one object to another. The information function is to provide information such as news on academic services and website usage at Universitas Negeri Malang.

## LITERATURE REVIEW

The technology acceptance model (TAM) was an information technology system acceptance model that will be used by users. The Technology Acceptance Model (TAM) was developed based on the Theory of Reasoned Action (TRA) model (Davis et al., 1989). Technology acceptance as the user's willingness to use technology to support the tasks that have been designed (Teo, 2011). According to Davis (1989) Technology Acceptance Model (TAM) explains the relationship between beliefs (beliefs (usefulness and ease of use) with attitudes or attitudes, goals intention users and real users of the system. Then Rogers (2010) states the behaviour of the use of information technology to the acceptance of information technology is in relative advantage, complexity, can be adjusted can be tested and can be observed. Two factors determine the behaviour of technology users according to Davis (1989) perceived usefulness is the benefits expected by information technology users in carrying out tasks and perceived ease of use as a level where someone believes that the use of certain systems can reduce one's efforts in doing something. Indicators of Technology Acceptance The model (TAM) in this research was the accuracy and completeness where the user reaches the specified goal (efficiency), how fast the user can complete the task when using an application (effectivity), how the user can easily complete the task when using the application for the first time (learnability) and the user's ease of remembering how to use the application after not using it for some time (memorability) (Lin, 2013).



**Figure 1** Technology Acceptances Model (Davis, 1989)

Empowerment of human resources to produce professional employees in the presence of a systematic organizational culture leads employees to increase their performance commitments for the organization. According to Jones (1998), organizational culture is a collection of values and norms that control the interaction between members of the organization and other members with people who are outside the organization. Then Wirawan (2007) states organizational culture as norms, values, assumptions, philosophy, organizational habits, developed over a long time by founders, leaders, and members of the organization that are socialized and taught to new members and applied in organizational activities so that it affects mindset, attitude, and behaviour of members of the organization in producing products, serving consumers and achieving organizational goals. Thus, culture is a very important factor in increasing organizational effectiveness. Organizational culture can be used as an instrument of primary competitive advantage, support organizational strategies and can answer or overcome environmental challenges quickly and accurately. Indicators of organizational culture in this study are innovation and risk-taking, attention to details, outcome orientation, individual orientation, team orientation, aggressiveness, stability (Robbins, 2006)

Attitudes are often difficult to be known and identify because they are still hidden in humans. The attitude of a new person appears to the surface and can be known in the form of behaviour. According to Kreitner and Kinicki (2010) attitude is the tendency to learn to respond in a way that is good or bad, does not change concerning a particular object. Then Schermerhont et al., (2017) attitude a tendency for positive or negative responses to someone or something in their environment. Attitude is also an evaluation statement, both satisfying and unsatisfactory on an object, person or event. (Robbins & Judge, 2011). Thus it can be formulated that attitudes are the basis of one's desires, whether right or wrong, those mirror people, objects and events in the environment. Attitude indicators in this study according to (McShane & Von Glinov, 2010) are perceptions arising about attitude objects, which we believe are true (beliefs), feelings that reflect positive or negative attitudes of objects (feelings) and motivation to be bound in certain behaviours according to the object of attitude (behavioural intention).

Human resources as organizational assets because it is very instrumental in the implementation of the strategy that is as the subject of organizational strategy implementation. Human resources are people who are in organizations related to their work in the organization. According to Armstrong (2006) performance is not the result seen but sees the work process of how people achieve it. Then Ivancevich (2010) states performance as the achievement of the work of employees in a certain period to achieve organizational goals. While Colquiett et al., (2009) performance is the behaviour of employee contributions both positively and negatively for the organization. Performance is the result of work achieved by a person or group in an organization according to their respective authorities and responsibilities to achieve organizational goals legally, morally and ethically (Prawirosentono, 2008). Thus, it can be concluded that employee performance is a work process in a certain period achieved by a person or group morally and ethically to achieve organizational goals. Employee performance indicators of Barnard Chester's model in this study are effectiveness and efficiency, responsibility, discipline and initiative (Prawirosentono, 2008).

**RESEARCH METHODS**

The research model uses four variables and then followed by a development hypothesis. This research applies the Technology Acceptance Theory model which was added by three other variables, organizational culture, employee attitudes and performance. Attitude as a mediator variable to see whether there was an indirect effect of the Technology Acceptance Model (TAM) and organizational culture to the employee performance.

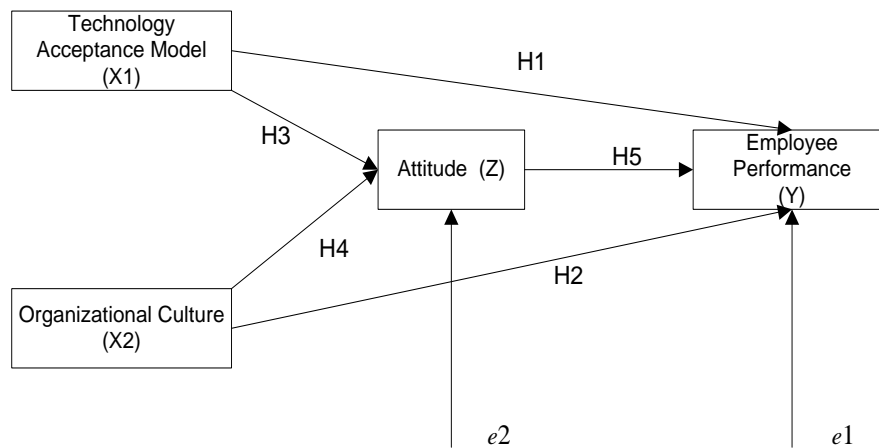


Figure 2. The Framework

Development of variables and hypotheses. Based on the proposed research framework of this research, the following hypothetical research in the context of academic and library employee performance. The independent variable Technology Acceptance Model (TAM) involves efficiency, effectivity, learnability and memorability. Organizational culture includes innovation and risk-taking, attention to details, outcome orientation, individual orientation, team orientation, aggressiveness, stability. Attitudes, beliefs, feelings and behavioural intentions and employee performance, effectiveness and efficiency, responsibility, discipline and initiative.

Table 1: Summary of Hypotheses

Hypothesis	Statement
H1	Technology Acceptance Model (TAM) has a significant effect on employee performance in academic and library employees
H2	Organizational culture has a significant effect on employee performance in academic and library employees
H3	Technology Acceptance Model (TAM) has a significant effect on the attitudes on academic and library employees
H4	Organizational culture has a significant effect on the attitudes on academic and library employees
H5	Attitude has a significant effect on employee performance in academic and library employees

**DATA COLLECTION**

The population was 323 academic and library employees taken from seven faculties, postgraduate and libraries in Universitas Negeri Malang. The sampling technique used was proportional random sampling. Proportional random sampling was sampling that takes into consideration elements or categories in the study population (Slameto, 2007). Determination of the sample using the Slovin formula according to (Sugiyono, 2014). The research was said to be reliable if  $r > 0.60$  and the instrument was declared unreliable if  $r < 0.60$ . So this study the alpha cronbach's value used was  $> 0.60$  (Suliyanto, 2018).

Slovin Formula :  $n = N / (1 + N(e)^2)$

Where: n = Number of samples

N = Total population

e = Error sampling.

The number of academic employees and libraries Universitas Negeri Malang was 323 employees. Then the sample size was calculated based on the Slovin formula as follows:

$$323 / [1 + 323 (0.05)^2] = 179 \text{ employee}$$

The sample used 179 employees from 97 permanent employees (PNS) and 82 temporary employees (PTT). A 5-point Likert scale was used with answers very agrees with the highest number 5 and answers very disagree with the lowest number 1 (Chooper & Schindler, 2014). To test the hypothesis the model used in this research was path analysis.

The model equation in this research as follows:

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_5 Z + e_1$$

$$Z = \beta_3 X_1 + \beta_4 X_2 + e_2$$

Explanation:

X1 = Technology Acceptance Model (TAM)

- X2 = Organizational culture
- Z = Attitude
- Y = Employee performance
- $\beta_1$  = Path coefficient X1 to Y
- $\beta_2$  = Path coefficient X2 to Y
- $\beta_4$  = Path coefficient X2 to Z
- $\beta_5$  = Path coefficient Z to Y
- e1 = Structure Error 1
- e2 = Structure Error 2

**ANALISIS DAN DISCUSSION**

**Table 2: Reliability Test Results**

Variable	Cronbach's Alpha	Explanation
Technology Acceptance Model (TAM)	0,811	Reliabel
Organizational Culture	0,955	Reliabel
Attitude	0,671	Reliabel
Employee Performance	0,827	Reliable

Table 2. Based on the results of the reliability test shows that all instruments of each variable are reliable because they obtain a cronbach's alpha number > 0.60 (Technology Acceptance Model (TAM) = 0.811, Organizational Culture = 0.955, Attitude = 0.671 and Employee Performance = 0.827).

**Table 3: Results of Hypothesis Test Analysis**

Variable	Coefficients <sup>a</sup>				
	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
Constant	8,174	2,367		3,454	0,001
Technology Acceptance Model (TAM)	0,204	0,062	0,178	3,295	0,001
Organizational Culture	0,036	0,026	0,083	1,372	0,172
Attitude	0,980	0,090	0,652	10,890	0,000
R square	0,680				
e1	0,565				
Dependent Variable: Employee Performance					

Table 3. The coefficient of determination (R<sup>2</sup>) of 0.680 which means that the influence of Technology Acceptance Model (TAM), organizational culture and attitudes towards employee performance by 68% while the remaining 32% was influenced by other factors. In other words, employee performance variables can be explained by the Technology Acceptance Model (TAM) variable, organizational culture and attitudes of 68% while the influence of 32% was due to variables outside this model.

In the regression analysis above, the Technology Acceptance Model (TAM) variable has a probability of (sig.) = 0.001 < 0.05. This means that the Technology Acceptance Model (TAM) variable has a significant direct effect on employee performance. The  $\beta$  standardized coefficient value for the Technology Acceptance Model (TAM) variable is 0.178 and has a positive relationship which means that the Technology Acceptance Model (TAM) has a positive influence on the performance of academic and library employees.

Organizational culture variables, probability magnitude (sig) = 0.172 < 0.05. This shows that organizational culture variables do not significantly influence employee performance. The standardized  $\beta$  coefficient value for organizational culture variables is 0.083 which indicates that organizational culture does not significantly influence the performance of academic and library employees.

Attitude variable, has a probability of (sig.) = 0,000 < 0.05. This means that the attitude variable has a significant direct effect on employee performance. The standardized  $\beta$  coefficient value for the attitude variable is 0.652 and has a positive relationship which means that attitude has a positive influence on the performance of academic and library employees.

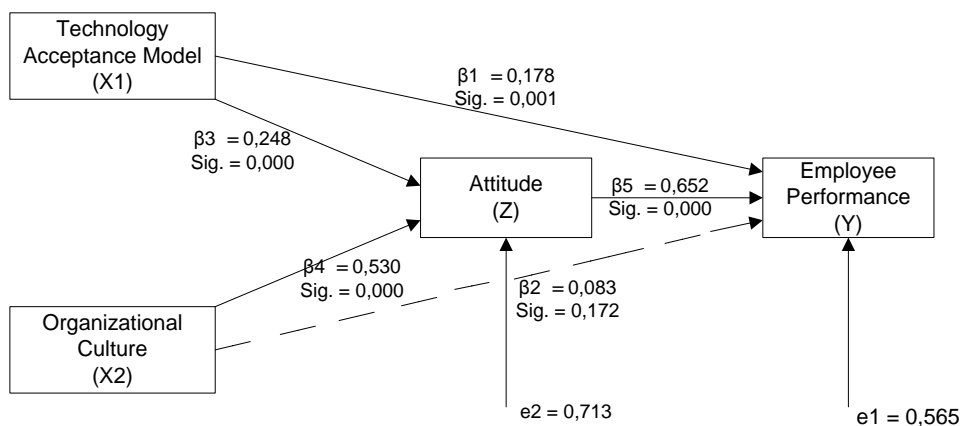
**Table 4: Results of Hypothesis Test Analysis**

Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	2,118	1,976		1,072	0,285
Technology Acceptance Model (TAM)	0,190	0,050	0,248	3,805	0,000
Organizational Culture	0,151	0,019	0,530	8,137	0,000
R square	0,491				
e2	0,713				

Dependent Variable: Attitude

Table 4. The coefficient of determination (R2) of 0.491 which means that the effect of Technology Acceptance Model (TAM) and organizational culture on attitudes is 49.1% while the remaining 50.9% was influenced by other factors. In other words, the attitude variable can be explained by the Technology Acceptance Model (TAM) variable and organizational culture by 49.1% while the effect of 50.9% was due to variables outside this model.

Direct and Indirect Effects Technology Acceptance Model (TAM) and Organizational Culture to the Employee Performance through Attitude



**Figure 3 Direct and Indirect Effects**

The results in Figure 3. Explain the magnitude of the direct effect indicated by the coefficient  $\beta$  and the magnitude of the indirect effect of each variable.

Coefficient of determination:

$$Rm_2 = 1 - Pe_{12} \times Pe_{22} \dots \dots \dots P_{ex2}$$

The interpretation ( $Rm_2$ ) of determination is as follows:

$$Rm_2 = 1 - (0.5652)(0.7132) = 1 - 0.287 = 0.712$$

Based on the coefficient of determination above, shows the direct and indirect effects of (0.712) which means that the direct and indirect influence of Technology Acceptance Model (TAM) variables and organizational culture on employee performance through attitudes of (71.2%) on academic employees and surfaces and the rest (28.8%) are explained by other variables.

Indirect effect:

X1 to Z and Y

$$\beta_1 \times \beta_5 = 0.178 \times 0.652 = 0.116$$

Immediate influence:

X2 to Z and Y

$$\beta_2 \times \beta_5 = 0.083 \times 0.652 = 0.054$$

From the results show the indirect effect of Technology Acceptance Model (TAM) on employee performance through an attitude of (0.116) and a direct effect of (0.178). So it can be said that the Technology Acceptance Model (TAM) does not affect employee performance through attitude, because the value of direct influence is greater than the value of indirect influence. While the indirect effect of organizational culture on employee performance through attitudes of (0.054) and direct influence of

(0.083). So it can be said that organizational culture does not affect employee performance through attitude, because the value of direct influence is greater than the value of indirect influence.

**Table 5. Test Results Sample Analysis Permanent Employee (PNS)**

Hypothesis	Variable	Beta	T	R square	Sig.	Conclusion
H1	X1 to the Y	0,277	2,766	0,654	0,007	Accepted
H2	X2 to the Y	-0,010	-0,105	0,654	0,917	Rejected
H3	X1 to the Z	0,230	2,391	0,484	0,019	Accepted
H4	X2 to the Z	0,544	5,665	0,484	0,000	Accepted
H5	Z to the Y	0,673	7,261	0,654	0,000	Accepted

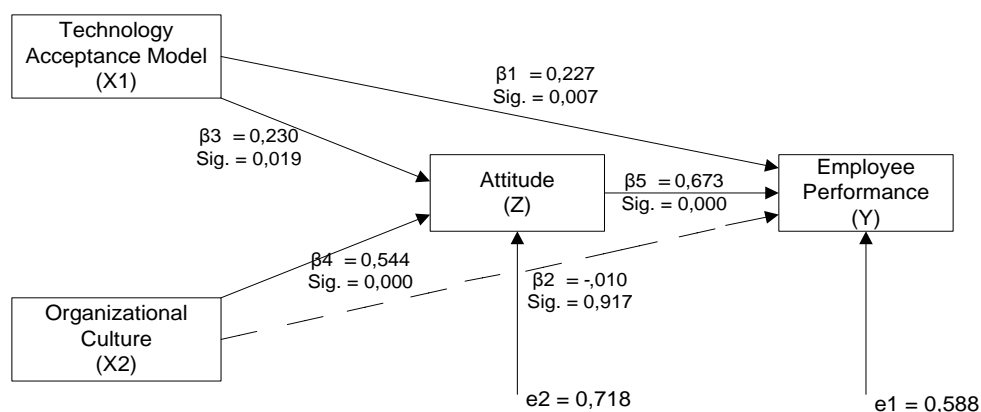
Table 5. coefficient of determination (R<sup>2</sup>) sample of permanent employees (PNS) shows the influence of the Technology Acceptance Model (TAM), organizational culture and attitudes towards employee performance of 0.654. Means that the influence of Technology Acceptance Model (TAM), organizational culture and attitudes towards employee performance by 65.4% while the remaining 34.6% was influenced by other factors. In other words, the variable employee performance on permanent employees (PNS) can be explained by the variable Technology Acceptance Model (TAM), organizational culture and attitudes of 65.4% while the effect of 34.6% is due to variables outside this model.

Regression analysis on permanent employees (PNS) shows the effect of Technology Acceptance Model (TAM) on employee performance has a probability of (sig.) = 0.007 <0.05, organizational culture influences employee performance having a probability of (sig.) = 0.917 > 0.05 and attitude effect on employee performance has a probability of (sig.) = 0.000 <0.05. The results show that the Technology Acceptance Model (TAM) and attitude have a positive and significant effect on employee performance in permanent employees (PNS) while organizational culture has no significant effect on employee performance in academic and library permanent employees (PNS).

The coefficient of determination (R<sup>2</sup>) sample of permanent employees (PNS) shows the effect of the Technology Acceptance Model (TAM) and organizational culture on attitudes of 0.484. Means that the influence of Technology Acceptance Model (TAM) and organizational culture and attitudes was 48.4% while the remaining 51.6% was influenced by other factors. In other words, the variable attitude on permanent employees (PNS) can be explained by the variable Technology Acceptance Model (TAM) and organizational culture by 48.4% while the effect of 51.6% was due to variables outside this model.

Regression analysis results on permanent employees (PNS) show the effect of Technology Acceptance Model (TAM) on attitudes having a probability of (sig.) = 0.019 <0.05, organizational culture influences the attitude of having a probability of (sig.) = 0.000 <0.05. The results show that the Technology Acceptance Model (TAM) and organizational culture have a positive and significant effect on attitudes to academic and library permanent employees (PNS).

Direct and Indirect Effects Technology Acceptance Model (TAM) and Organizational Culture to the Employee Performance through Attitude on the Permanent Employees (PNS)



**Figure 4** Direct and Indirect Effects of Permanent Employees (PNS)

The results in Figure 4. Explain the magnitude of the direct effect indicated by the coefficient  $\beta$  and the magnitude of the indirect effect of each variable.

Coefficient of determination:

$$Rm^2 = 1 - Pe_{12} \times Pe_{22} \dots \dots \dots P_{ex2}$$

Interpretation ( $Rm^2$ ) determines as follows:

$$Rm^2 = 1 - (0,588^2) (0,718^2) = 1 - 0,303 = 0,696$$

Based on the coefficient of determination above, shows the direct and indirect effects of (0.696) which means that the direct and indirect influence of Technology Acceptance Model (TAM) variables and organizational culture on employee performance through attitudes of (69.6%) on permanent employees (PNS) ) academic and surface and the rest (30.4%) explained by other variables.

Indirect effect:

X1 to Z and Y

$$\beta_1 \times \beta_5 = 0,227 \times 0,673 = 0,152$$

Indirect effect:

X2 to Z and Y

$$\beta_2 \times \beta_5 = -0,10 \times 0,673 = -6,73$$

The direct effect of the Technology Acceptance Model (TAM) on the performance of employees in permanent employees (PNS) was (0.227) greater than through attitude (0.152). This means that the Technology Acceptance Model (TAM) affects the performance of permanent employees (PNS) without being influenced by attitude. While the direct influence of organizational culture on employee performance by (-, 010) is greater through attitude (-6.73). This means that organizational culture affects the performance of employees in academic and library permanent employees (PNS) without being influenced by attitude.

**Table 6. Test Results Analysis of Non-permanent Employee (PTT) Sample**

Hypothesis	Variable	Beta	T	R square	Sig	Conclusion
H1	X1 ke Y	0,204	2,473	0,663	0,016	Accepted
H2	X2 ke Y	0,150	1,742	0,663	0,085	Rejected
H3	X1 ke Z	0,326	3,253	0,431	0,002	Accepted
H4	X2 ke Z	0,422	4,215	0,431	0,000	Accepted
H5	Z ke Y	0,578	6,629	0,663	0,000	Accepted

Table 6. The coefficient of determination (R<sup>2</sup>) of the sample of non-permanent employees (PTT) shows the influence of the Technology Acceptance Model (TAM), organizational culture and attitudes towards employee performance of 0.663. Means that the influence of Technology Acceptance Model (TAM), organizational culture and attitudes towards employee performance was 66.3% while the remaining 33.7% was influenced by other factors. In other words, the employee performance variable on non-permanent employees (PTT) can be explained by the Technology Acceptance Model (TAM) variable, organizational culture and attitude by 66.3% while the effect of 33.7% is due to variables outside this model.

Regression analysis on non-permanent employees (PTT) shows the effect of Technology Acceptance Model (TAM) on employee performance has a probability of (sig.) = 0.016 <0.05, organizational culture influences employee performance having a probability of (sig.) = 0.085 > 0.05 and influential attitude to employee performance has a probability of (sig.) = 0,000 <0.05. The results show that the Technology Acceptance Model (TAM) and attitude have a positive and significant effect on employee performance in non-permanent employees (PTT) while organizational culture has no significant effect on employee performance in academic and library non-permanent employees (PTT).

The coefficient of determination (R<sup>2</sup>) sample of non-permanent employees (PTT) shows the effect of the Technology Acceptance Model (TAM) and organizational culture on attitudes of 0.431. Means that the influence of Technology Acceptance Model (TAM) and organizational culture and attitudes is 43.1% while the remaining 56.9% is influenced by other factors. In other words, the variable attitude on non-permanent employees (PTT) can be explained by the variable Technology Acceptance Model (TAM) and organizational culture by 43.1% while the effect of 56.9% is due to variables outside this model.

Regression analysis results on permanent employees (PNS) show the effect of Technology Acceptance Model (TAM) on attitudes having a probability of (sig.) = 0.019 <0.05, organizational culture influences the attitude of having a probability of (sig.) = 0,000 > 0.05. The results show that the Technology Acceptance Model (TAM) and organizational culture have a positive and significant effect on attitudes to academic and library permanent employees (PNS).

Direct and Indirect Effects (TAM) and Organizational Culture to the Employee Performance through Attitude on the Non-Permanent Employees (PTT)



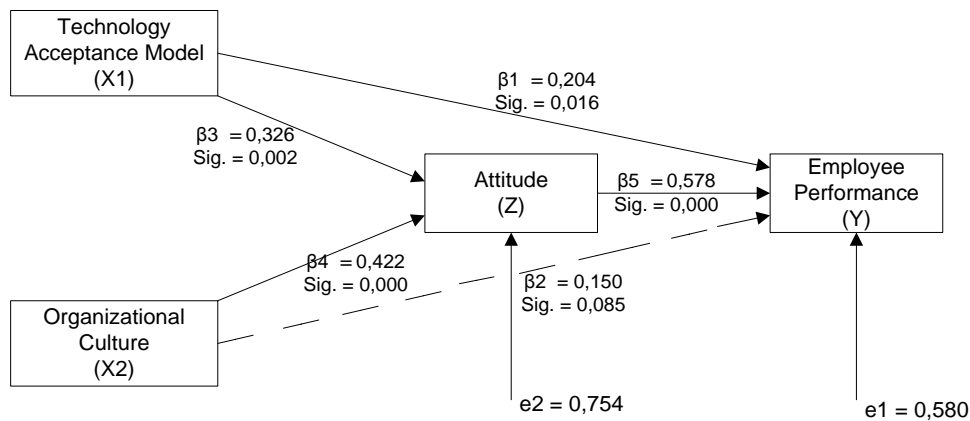


Figure 5 Direct and indirect effects on the non-permanent employees (PTT)

The results in Figure 5 explain the magnitude of the direct effect indicated by the coefficient  $\beta$  and the magnitude of the indirect effect of each variable.

Coefficient of determination:

$$Rm_2 = 1 - Pe_{12} \times Pe_{22} \dots \dots \dots P_{ex2}$$

The interpretation ( $Rm_2$ ) of determination was as follows:

$$Rm_2 = 1 - (0.5802) (0.7542) = 1 - 0.329 = 0.670$$

Based on the coefficient terminated above, shows direct and indirect effects of (0.670) which means that (67%) and the rest (33%) are explained by other variables.

Indirect effect:

X1 to Z and Y

$$\beta_1 \times \beta_5 = 0.204 \times 0.578 = 0.117$$

Indirect effect:

X2 to Z and Y

$$\beta_2 \times \beta_5 = 0.150 \times 0.578 = 0.086$$

The direct effect of the Technology Acceptance Model (TAM) to the performance of employees on non-permanent employees (PNS) of (0.204) was greater than through attitude (0.117). This means that the Technology Acceptance Model (TAM) affects the performance of nonpermanent employees (PTT) without being influenced by attitudes. While the direct influence of organizational culture on employee performance by (0.150) was greater through attitude (0.086). This means that organizational culture influences employee performance in academic and library non-permanent employees (PTT) without being influenced by attitude.

## CONCLUSION

Based on the findings of the analysis, conclusions need to be drawn. Technology Acceptance Model (TAM) and attitude have a positive effect on the performance of academic and library employees. This shows that academic and library employees use information technology to help them complete their work tasks effectively. And attitude directly has a positive effect on academic employees which means that there were behavioural intentions of employees to work using anything. While organizational culture does not have a positive effect on employee performance in academic and library employees this shows the weakness of organizational culture that was applied to employees so that it can hamper organizational goals.

Technology Acceptance Model (TAM) has a significant effect on employee performance in academic and library employees. The perceived benefits have an impact on employee performance indicating that there was a significant impact of the Technology Acceptance Model (TAM) on the performance of academic and library employees. The perceived usefulness was as a person's level of confidence in the use of certain systems to advance their performance and can make individuals feel the benefits of the system. The perceived usefulness was important because it was the main determinant of whether it was easy to conduct services with information technology.

Organizational culture has no significant effect on employee performance in academic and library employees. The findings were also seen from the description of respondents' answers to the risk recovery innovation sub-variables and attention to details. Therefore the influence on the performance of employees may be formed from the unpleasant to carry out the work of every employee on academic and the library of Universitas Negeri Malang.

Technology Acceptance Model (TAM) significantly influences the attitude of academic and library employees. It means that if the higher Technology Acceptance Model (TAM), the attitude directly influences the performance of academic and library employees.

Organizational culture has a significant effect on attitudes on academic and library employees. The relationship between organizational culture and attitude influences academic and library employees. If employee attitudes to the organizational culture properly will affect the performance of academic and library employees.

Attitude has a significant effect on employee performance in academic and library employees. The relationship between employee attitudes and performance was positive because attitudes encourage employees to act specifically. Then attitude directly affects the performance of academic and library employees.

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