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THE INFLUENCE OF THE UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY (UTAUT) MODEL ON THE APPLICATION OF INFORMATION AND COMMUNICATION TECHNOLOGY AT ELEMENTARY SCHOOLS

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PENGARUH MODEL *UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY* TERHADAP PRAKTEK PENERAPAN TEKNOLOGI INFORMASI DAN KOMUNIKASI DI SEKOLAH DASAR

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ABSTRACT

Abstract: *This paper examines the effect of applying Information and Communication Technology (TIK) in the learning process through the UTAUT model. There are four components seen from the UTAUT model, namely Performance Improvement Expectations, Business Improvement Expectations, Social Influence, and Supporting Conditions. The population used in the research were teachers at three schools in Jambi, namely SDN 47/IV, SDN 66/IV, and SDIT Al Azhar. The sample in the research involved 130 teachers in the three schools. The research is quantitative research. Research data were obtained through survey methods and questionnaires. The data analysis used in the research is PLS-SEM. The results indicate that the four components of the UTAUT model had a significant influence on the use of Information and Communication Technology (TIK) applied by teachers in the learning process. The most influential component of UTAUT through Information and Communication Technology applied by teachers is the Supporting Conditions. Based on the results of the research, it can be concluded that the unified theory of acceptance and use of technology model has an influence on the use of Information and Communication Technology (TIK) applied by elementary school teachers in the learning process.*

Keywords: TIK, model UTAUT, PLS-SEM, elementary school

Abstrak: Tulisan ini melihat pengaruh penggunaan TIK dalam proses pembelajaran ditinjau dengan menggunakan model *UTAUT*. Terdapat 4 komponen yang dililhat dari model *UTAUT* yaitu Harapan Peningkatan Kinerja, Harapan Peningkatan Usaha, Pengaruh Sosial, dan Kondisi yang Mendukung. Populasi pada penelitian merupakan guru yang ada di tiga sekolah di Kota Jambi, yaitu SDN 47/IV, SDN 66/IV, dan SDIT Al Azhar Kota Jambi. Sampel pada penelitian melibatkan 130 seluruh guru yang ada ditiga sekolah tersebut. Penelitian merupakan penelitian kuantitatif. Data penelitian didapat dengan metode survey dan penyebaran angket. Analisis data yang digunakan dalam penelitian adalah PLS-SEM. Hasil penelitian menunjukkan bahwa 4 komponen model *UTAUT* memiliki pengaruh yang signifikan terhadap penggunaan TIK oleh guru di dalam proses pembelajaran. Komponen *UTAUT* yang paling sangat berpengaruh terhadap penggunaan TIK oleh guru yaitu kondisi yang mendukung. Berdasarkan hasil penelitian dapat disimpulkan bahwa model *unified theory of acceptance and use of technology* memiliki pengaruh terhadap penggunaan teknologi informasi dan komunikasi oleh guru sekolah dasar dalam proses pembelajaran.

Kata Kunci: ***TIK, model UTAUT, PLS-SEM, sekolah dasar***

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INTRODUCTION

At present the development of technology is progressing very rapidly. Information and communication technology plays an important role in the world of education. Education is a person's process of preparing themselves to be able to adapt to the environment. Education plays an important role in national development, this is because education can make a competent individual.

According to Ki Hajar Dewantara (Sugihartono, 2007:20) stated that education is a way of life for the growth of children. Every child will process until adulthood, in this process the child needs guidance so that when he is in the process he can grow well. This cannot be avoided because teachers hold a very heavy responsibility. Not only required to be able to provide but it is prioritized to be able to educate and guide children so that one day they become quality individuals. So that the teacher has a great responsibility for achievement in the learning process.

At the implementation level, teachers as the main component in learning must be able to prepare themselves for various challenges in the era of globalization and the era of technology. At this level, various policies issued by the government must be able to be understood and implemented by teachers during the learning process, besides that teachers must also be able to compete in facing various problems and challenges in the world of education, and teachers are also required to be able to improve their professionalism as teachers. and educators.

This demand is stated in Permendiknas Number 16 of 2007 concerning academic qualification standards and teacher competence. In the pedagogic competence sub-chapter point five, teachers are required to be able to utilize ICT for the benefit of organizing educational development activities.

Besides the professionalism of teachers, namely in mastery in the field of technology, teachers also have to face several keywords in the world of education, namely, competition, transparency, efficiency, and high quality. The use and utilization of the right technology by teachers will give birth to the creativity of teachers and students when carrying out the learning process. One of the activities of using information and communication technology by teachers can be seen when teachers are able to properly utilize various media and learning resources sourced from internet and computer technology during the learning process.

Ministry of Education and Culture (2014) in Nur Hudayati et al, (2021:85) explains that, the function of ICT integration in learning is to develop learning resources and learning media, lesson preparation, learning process, learning assessment and reporting of learning outcomes. This is done to improve the quality and quality of learning.

Teachers must be able to develop teaching and learning processes in accordance with the progress of the times, namely information and communication technology. One of the models in the acceptance of information and communication technology is the Unified Theory of Acceptance and Use of Technology (UTAUT). The main purpose of using UTAUT is to assist an organization in interpreting how a user responds when introduced to a new technology (Wang, 2005 in Trie Handayani and Sudiana, 2015).

Based on the results of observations and interviews with 3 public elementary schools in Jambi, namely SD Negeri 47/IV Jambi City, SD Negeri 66/IV Jambi City and SDIT Al Azhar Jambi City, these are schools where all teachers carry out an integrated learning process with ICT. Teachers are required to use ICT so that teachers are accustomed and proficient in using ICT in the learning process. Departing from the problems above to determine the factors that influence the behavioral intention to use ICT by teachers in elementary schools by using the model of acceptance and use of technology (Unified Theory Of Acceptance and Use Of Technology) developed by Venkatesh, et al, 2003. Therefore this study aims to find out

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what factors influence teachers in elementary schools, especially in the three schools using the UTAUT model.

METHOD

This study uses a survey research design. Cohen, Manion, & Marrison, 2002; Cresswell, 2017) explains that a survey is a system for collecting information (data) from or about people to describe, compare, or explain their knowledge, attitudes, and behavior. Survey research is quantitative research in which research systematically asks large numbers of people the same questions and then records their answers.

This research was carried out in 3 elementary schools in Jambi, namely SDN 47/IV Jambi City, SDN 66/IV Jambi City, and SDIT Al Azhar Jambi City. The population in this study were all teachers in the three schools. This research will use total sampling. Total sampling is a type of sampling where the number of samples is the same as the population (Sugiyono, 2019).

The steps in this study can be seen in the research model below, where there is 1 dependent variable, namely the use of ICT and 4 independent variables, namely HPK, HPU, PS, and KM which are described in the form of the relationships to be analyzed. For the Likers scale used in the research questionnaire, there are 5 points with (1) Strongly Disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly Agree.

The data processing technique used in this study is PLS-SEM. Structural Equation Model (SEM) is a branch of statistics that focuses on relative relationships and is challenging to measure simultaneously. According to Santoso (2014), SEM is a multivariate analysis method that combines regression analysis and factor analysis (correlation). The aim is to see how indicators and their constructs or constructs and the relationships between them relate to the variables in a model.

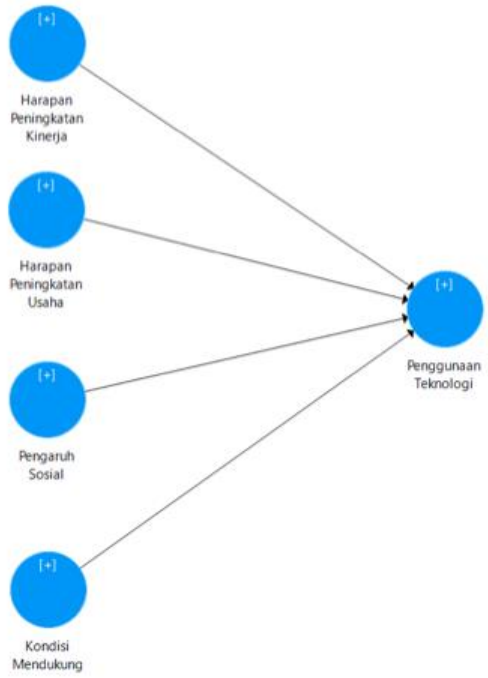

Figure 1. Research Model

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RESULTS AND DISCUSSION

This research went through one stage, namely the research stage was the survey stage, this stage was also carried out using a questionnaire instrument with a total of 130 respondents who were teachers in the three elementary schools. At this stage the analysis used is PLS-SEM (Measurement model) and PLS-SEM (Structural model). This stage is used to answer the formulation of the problem or research question. In addition, this stage is also used to test all hypotheses that have been made.

Before conducting PLS-SEM analysis, this study also used content validity. Content validity is the validity that is estimated through testing the appropriateness or relevance of the test content through rational analysis by a competent panel or through expert judgment. Content validity, which aims at the efforts of researchers to evaluate the usefulness and feasibility of tests for specific purposes that require multiple sources of evidence. This is necessary if the use of the test is to be defended for a particular purpose, so that sufficient evidence can be presented to defend the use of the test for that purpose. In addition, validity evaluation is not a one-time static event, but is a continuous process (Sireci, 2007). This questionnaire was validated by Dr. Muhammad Sofwan, S.Pd., M.Pd, Ahmad Habibi, Ph.D, Dr. Robin Pratama, S.Pd., M.Pd. This proposed research focuses on aspects of attitudes and behavior at the individual level in using ICT which is linked to the Unified Theory of Acceptance and Use of Technology (UTAUT) model.

The number of items in the questionnaire in this study totaled 24 questions consisting of 1 variable, namely the Unified Theory of Acceptance and Use of Technology (UTAUT) model. In the Unified Theory of Acceptance and Use of Technology (UTAUT) variable, there are 4 sub-variables that will be measured, namely Performance Improvement Expectations (HPK), Business Improvement Expectations (HPU), Social Influence (PS) and Supporting Conditions (KM). All of these variables will be used to see causality or influence on the use of ICT by elementary school teachers in the three schools.

PLS-Algorith Construct Validity and Reliability Testing

At this stage it can be seen from the results of the construct validity test and discriminant validity test. The construct validity test is carried out. After evaluating the loading factor assessment, where each indicator must be > 0.5, statistical output data is obtained which is used to assess the construct validity of the variable. Based on the PLS-SEM construct validity research method proposed by Hair et al (2016), Cronbach's Alpha (CA) and Composite Reliability (CR) were used to check and test reliability, while convergent and discriminant validity tests were used to check the level of instrument consistency.

In this study the evaluation results using the PLS Algorithm model analysis in the SmartPLS software produce factor loading for all statements. As shown in table 1, all factor loadings are above 0.5 except for the statement that there are items on the Supporting Conditions variable with the KM3 subvariable with the statement "Training to use ICT (computers, learning applications, LCD projectors, ppt, etc.) in doing the learning process will be available to me". KM3 (I item statement dropped) due to factor loading (<0.5). In addition, construct reliability is calculated using Cronbach's Alpha (CA) (Cronbach, 1971) and Composite Reliability (CR) (Straub, Boudreau & Gefen, 2004) whose values are accepted if above 0.7 (Babin et al. 2010). Meanwhile, the AVE value must be equal to or more than 0.500 (Hair et al. 2017). In the study, the highest AVE was produced in the Effort Expectation variable, namely 0.843 and the lowest AVE was produced in the ICT Use variable, namely 0.591.

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As shown in table 1, all Cronbach's Alpha and Composite Reliability are greater than 0.7 (Hair et al. 2019) and the AVE exceeds an acceptable value of 0.5. Thus the questionnaire statement can fulfill and ensure the reliability of the instrument. The table below shows the value of Cronbach's Alpha ranging from 0.756 to 0.917 which is considered by respondents to assess the statements that are considered to be in the "good" category and consistently provide an assessment.

Tables 1. Construct Reliability Test Results

Variabel construct	Kode Item Soal	Loading Factor	Cronbach's Alpha	rho_A	Composite Reliability	AVE
	HPK1	0,889				
performance	HPK2	0,847				
expectance	HPK3	0,891	0,891	0,893	0,924	0,754
	HPK4	0,845				
effort	HPU1	0,833				
ekspectance	HPU2	0,904				
	HPU3	0,916	0,917	0,919	0,942	0,801
	HPU4	0,924				
social influence	PS1	0,949				
	PS2	0,912				
	PS3	0,686	0,912	0,848	0,904	0,657
	PS4	0,714				
	PS5	0,755				
facilitating	KM1	0,815				
condition	KM2	0,751	0,756	0,839	0,843	0,643
	KM4	0,836				
	PTIK1	0,783				
use of	PTIK2	0,812				
information and	PTIK3	0,810				
communication	PTIK4	0,770				
technology	PTIK5	0,716	0,884	0,887	0,910	0,591
	PTIK6	0,712				
	PTIK7	0,772				

The results of construct reliability testing based on discriminant validity can be done by looking at the AVE value to indicate the magnitude of the indicator variance contained in each construct. The discriminant criterion refers to Forrel-Larcker (1981), where the AVE value limit is greater than or equal to 0.5. The results in table 2 below show all the Squared Root of AVE's and Correlation values are above 0.5. In addition, the square root value of AVE shows a high value of discriminant validity and is acceptable because the value of the square root of the AVE of all variable constructs has a value above the correlation value between the other construct values.

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Tables 2. Result of Squared Root Value of AVE's and Correlation

Variable UTAUT	HPK	HPU	KYM	PS	PTK	√AVE
performance expectations	0,868					0,868
effort expectations	0,772	0,895				0,895
Facilitating condition	0,530	0,545	0,802			0,802
Sosial influence	0,090	0,219	0,321	0,810		0,810
use of information and communication technology	0,706	0,697	0,727	0,102	0,769	0,769

Furthermore, discriminant validity is known from the measurement test of all related variables that meet the criterion value if the construct formed has a higher value than the cross loading in other columns and rows. Therefore, if these criteria are met, the reliability of discriminant validity can be determined. From the test results in table 3 below it shows that the cross loading value criterion has a higher value than other columns and rows. Thus the form of construct data can meet the criteria of discriminant validity. So it can be concluded that the construct data of this study is reliable and valid.

Tables 3. Cross Loading

Item	HPK	HPU	KYM	PS	PTIK
HPK1	0,889	0,664	0,426	0,061	0,639
HPK2	0,847	0,631	0,457	0,035	0,573
HPK3	0,891	0,684	0,462	0,087	0,582
HPK4	0,845	0,696	0,496	0,125	0,650
HPU1	0,665	0,833	0,410	0,179	0,595
HPU2	0,736	0,904	0,550	0,183	0,670
HPU3	0,669	0,916	0,525	0,242	0,625
HPU4	0,688	0,924	0,457	0,179	0,599
KYM1	0,580	0,397	0,815	0,335	0,465
KYM2	0,219	0,206	0,751	0,347	0,338
KYM4	0,580	0,573	0,836	0,178	0,774
PS1	0,125	0,250	0,284	0,949	0,109
PS2	0,015	0,123	0,321	0,912	0,069
PS3	0,028	0,146	0,146	0,686	0,030
PS4	-0,012	0,105	0,178	0,714	-0,019
PS5	0,028	0,095	0,210	0,755	0,002
PTIK1	0,576	0,515	0,596	0,042	0,783
PTIK2	0,598	0,555	0,555	0,034	0,812
PTIK3	0,567	0,498	0,587	0,048	0,810
PTIK4	0,534	0,542	0,634	0,148	0,770
PTIK5	0,447	0,477	0,532	0,122	0,716
PTIK6	0,488	0,485	0,434	-0,009	0,712
PTIK7	0,574	0,666	0,554	0,156	0,772

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Structural Model Measurement with PLS-Bootstrapping

The next stage is the measurement of the structural model using PLS-Bootstrapping analysis. Structural model measurements with PLS-Bootstrapping on the UTAUT variable can be seen in Figure 1 and Table 4 which inform path values and significance. The results of this study indicate that all hypotheses have a significant influence and are accepted.

The resulting hypothesis testing is first Ha1: There is a significant effect of performance improvement expectations on the use of ICT by teachers in teaching. The second hypothesis is Ha2: There is a significant effect of expectations of increasing effort on the use of ICT by teachers in teaching. The third hypothesis is Ha3: There is a significant influence of social influence on the use of ICT by teachers in teaching, and the fourth hypothesis is Ha4: There is a significant influence of supportive conditions on the use of ICT by teachers in teaching.

Tables 4. Total influence UTAUT

	Path coefisien	T value	P value	Significance
performance expectations-> use of information and communication technology	0,256	2,830	0,005	√
effort expectations-> use of information and communication technology	0,261	2,969	0,003	√
Facilitating condition-> use of information and communication technology	0,492	6,024	0,000	√
Sosial influence-> use of information and communication technology	-0,135	2,320	0,021	√

Based on table 4 Path Coefficients above, the results of hypothesis testing are found as follows: The first hypothesis Ha1: Performance Improvement Expectations -> ICT Use, with a statistical t value of 2.830 ≥1.96 so it can be concluded that there is a significant effect of Performance Improvement Expectations on ICT Use, in other words the hypothesis proposed by the researcher is accepted.

The second hypothesis Ha2: Expectations of Increased Business -> Use of ICT, with a statistical t value of 2.969 ≥ 1.92 so it can be concluded that there is a significant effect of Expectations of Increased Business on the use of ICT, in other words the hypothesis that has been proposed by researchers is accepted.

The third hypothesis Ha4: Supporting Conditions -> Use of ICT, with a statistical t value of 6.024 ≥ 1.92 so it can be concluded that there is a significant influence of Supporting Conditions on the use of ICT, in other words the hypothesis is accepted.

The fourth hypothesis Ha3: Social Influence -> ICT Use, with the result that the t statistic value is 2.320 ≥ 1.92 so it can be concluded that there is a significant effect of Social Influence on ICT Use, in other words the hypothesis is accepted.

This study aims to find out the effect of the use of the Unified Theory of Acceptance and Use of Technology on the use of information and communication technology (ICT) in elementary school teachers in Jambi City. This study has 1 research question, namely Is there an influence of the Unified Theory of Acceptance and Use Of Technology model on the practice of implementing ICT by teachers? From these questions, the researcher

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also compiled 4 hypotheses from 1 variable used. First, in terms of the perspective of the path coefficient with 4 hypotheses, there are 4 hypotheses accepted. In the case of UTAUT, the findings of this study support the notion that the Enabling Conditions have the most significant influence on the use of ICT in the learning process. The results of this study indicate that the application of ICT-based learning is closely related to the provision of the necessary equipment, laws and regulations in schools, school support and commitment to ICT-based learning. This view aligns with UNESCO's (2018) recommendations for regional strategies that the Asia-Pacific Region needs to improve basic education systems, highlighting differences in ICT infrastructure in schools and the percentage of individuals using the internet varies widely between within sub-regions. The same thing was also elaborated on by previous studies where the conditions that supported had a positive and significant effect on teachers using ICT in learning (Gunasinghe et al., 2020; Hu et al., 2020; Milosevic et al., 2015; Shukla., 2020.

This study found that Social Influence has a significant influence on the use of ICT in the learning process. In line with previous research (Hossain et al., 2020; Hu et al., 2020; Kim & Lee., 2020) which found that social influence influences technology use or intentions to use technology. A plausible reason for this is possible because teachers recommend each other to use technology in learning and also teachers share knowledge about using ICT both for learning and for assessment. In addition, teachers also share seminar links related to information and communication technology. So it is in line with the theory (Venkatesh et al., 2003) which states that social influence is the degree to which a person considers it important for other people to convince themselves in using the new system. It can be interpreted that social influence among fellow teachers at school has an important role in forming a person's interest in using something.

In this study, it was also found that Effort Improvement Expectations had a significant effect on teachers' use of ICT. It is known that the positive effects of expected increased performance on teachers to utilize ICT include that teachers are willing to use ICT when there is a level of ease of use that allows teachers to put more time into assignments and other activities. This is in accordance with previous research which states that Expectations of Improved Performance are the most important variable for predicting the use of ICT in teaching (Gunasinghe et al., 2020; Milosevic et al., 2015; Shukla, 2020).

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the most important variable for predicting the use of ICT in teaching (Gunasinghe et al., 2020; Milosevic et al., 2015; Shukla, 2020).

This study also found that Expectations of Business Improvement have a significant effect on the use of ICT in the learning process. Venkatesh et al (2003) explained that Effort Expectation is the level of ease of behavior using ICT which will reduce the effort (effort and time) of individuals in doing their work. If ICT is easy to use, the effort will not be too high and vice versa if an ICT is difficult to use, high effort is required to use it. The results of this study are also in line with previous studies where it was explained that Expectations for Increased Effort have a significant effect on the use of ICT in teaching (Marchewka et al., 2007; Raman and Jambulingam, 2012).

CONCLUSIONS AND RECOMMENDATIONS

From the results of research on the use of information and communication technology by teachers in terms of the Unified Theory Of Acceptance and Use Of Technology (UTAUT) model in the learning process at SD Negeri 47/IV Jambi City, SD Negeri 66/IV Jambi City, and Al Integrated Islamic Elementary School Azhar can be concluded that there are performance expectations, business expectations, social influence and conditions of facilities in the use of ICT.

There are performance expectations seen from 4 indicators, namely; Information and communication technology provides benefits in the learning process, learning objectives are achieved using ICT, teachers become more productive using ICT and teacher collaboration increases in using ICT.

There are business expectations from 4 indicators, namely; the use of ICT in learning becomes more effective and efficient, learning becomes clearer and easier to understand, learning becomes flexible and easy when using ICT, and interaction and learning activities between students will be easier to understand.

There is social influence from 2 indicators, namely; there is someone who gives recommendations on using ICT in the learning process, and provides recommendations in the form of seminar training using ICT in the learning process.

The condition of facilities that support the use of ICT can be seen from 3 indicators, namely; there are teachers who help in using ICT, there is assistance given to teachers if they find obstacles, there are supporting facilities for carrying out learning using ICT.

So it can be concluded again that the four components of UTAUT significantly influence teachers' behavioral intentions in using ICT and the habits of using ICT teachers directly affect their adoption of instructions using ICT.

By following the times, teachers should always utilize and use ICT in teaching so that the learning process is more effective and efficient and attractive to students. In addition, teachers also have to take part in a lot of training on the use of ICT in learning so that it becomes an inspiration in doing even better learning. Facilities and infrastructure in schools should be used more often by teachers as a support for ICT learning which makes students easier to understand.

The school should conduct more training or seminars on the use of ICT by teachers so that teachers are more trained and creative. School support facilities must also be increased so that all teachers can use them.

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REFERENCES

Aka, K. A. (2017). Utilization of Information and Communication Technology (ICT) as an Innovative Form of Learning Resources in Elementary Schools. *ELSE (Elementary School Education Journal):* Jurnal Pendidikan Dan Pembelajaran Sekolah Dasar, 1(2a).

Abdillah, L. A., et al., 2007. The effect of compensation and information technology on lecturer performance (KIDO) remains at Bina Darma University. *Jurnal Ilmiah Matrik*, 9, 1-20.

Batubara, D. S. (2018). SD/MI teacher information and communication technology competency (portrait, factors, and efforts to improve it). *Muallimuna: Jurnal Madrasah Ibtidaiyah*, *3*(1), 48-65.

Bendi, R. K. J. B., & Andayani, S. (2013). Analysis of information system usage behavior using the UTAUT model. *Semantik*, *3*(1), 277-282.

Destaningrum, D., & Suprapto, N. H. W. (2018). Factor analysis of public high school e-learning user acceptance in the city of Blitar using the Unified Theory Of Acceptance And Use Of Technology (UTAUT) model. *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer* e-ISSN, 2548, 964X.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, *5*(1), 1-4.

Gunasinghe, A., Hamid, J. A., & Azam, S. F. (2020). The viability of UTAUT-3 in understanding the lecturer's acceptance and use of virtual learning environments. *International Journal of Technology Enhanced Learning*, 12(4), 485-481.

Hair, J. F., Hult, G. T. M., Ringle, C., & Sartedt, M. (2017). *A primer on partial least squares structural equation modelling (PLS-SEM).* Sage Publications.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: a global perception.* Pearson, Upper saddle River, NJ.

Hair, J. F., & Hult, G. T. M. (2016). *A primer on partial least square structural equation modeling (PLS-SEM).* US: Sage Publication.

Handayani, T., & Sudiana, S. (2015). Analysis of the application of the UTAUT (Unified Theory of Acceptance and Use of Technology) model to information system user behavior (case study: academic information system at STTNAS Yogyakarta). *Angkasa: Jurnal Ilmiah Bidang Teknologi*, *7*(2), 165-180.

Hossain, G. M. S., Islam, M. N., Hossesn, M. N., Rahman, M. S., Famanna, M. N., & Sarmin, J. F. (2020). Empirical study on the factors influenching technology acceptance decision to use of information system (IS) services in academic profession: Integration of UTAUT & EEM Model. *International Journal of Recent Engineering Research and Development*, 5(1), 1-20.

Hu, S., Laxman, K., & Lee, K. (2020). Exploring factors affecting academics adoption of emerging mobile technologies-an extended UTAUT perspective. *Education and Information Technologies*, 25(5), 4615-4635.

Kim, J., & Lee, K. S. S. (2020). Conceptual model to predict filipino teachers adoption of ICT-based instruction in class: using the UTAUT model. *Asia Pacific Journal of Education.*

Marchewka, J. T., & Kostiwa, K. (2017). An application of the UTAUT model for understanding student perceptions

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using course management software. *Communications of the IIMA*, 7(2), 10.

Milosevic, I., Zivkovic, D., Manasijevic, D., & Nikolic, D. (2015). The effects of the intended behaviour of students in the use of M-learning. *Computers in Human Behavior*,51, 207-215.

Mutiani, M., Supriatna, N., Abbas, E. W., Rini, T. P. W., & Subiyakto, B. (2021): Technological, pendagogical, content knowledge (TPACK): A discursions in learning innovation on social studies. *The Innovation of Social Journal*, *2*(2), 135-142.

Noor, S. M., Rasoolimanesh, S. M., Jaafar, M., & Barghi, R. (2018). Inscription of a destination as a world heritage site and residents perceptions. *Asia Pacific Journal of Tourism Reserch*, 24, 1-17.

Shukla, S. (2020). M-learning adoption of management students : A case of India. *Education and Information Technologies*, 1-32.

Sofwan, M., Pratama, R., Muhaimin, M., Yusnaidar, Y., Mukminin, A., & Habibi, A. (2021). Contribution of technology innovation acceptance and organizational innovation climate on innovative teaching behavior with ICT in indonesian education. *Qwerty-Open and Interdisciplinary Journal of Technology, Culture and Education*, *16*(1), 33-57.

Sofwan, M. (2021). Determinant Mapping Model of the Use of Information and Communication Technology in the Learning Process of Elementary Schools in Jambi City.