

Understanding using of audit software by auditor with unified theory of acceptance and use of technology construct

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ABSTRACT

The purpose of this research is to find out about how the acceptance of audit software by auditor. This research used Public Accountant Firm in Bali as the location there are 17 Firm. The sample in this study was 95 respondents based on purposive sampling technique with the calculation of the Lemeshow formula. The type of data in this study is quantitative data uses primary data sources that collected using a questionnaire. The analytical technique used is Structural Equation Modeling using Partial Least Square (SEM PLS). The results show that the auditors at the Public Accountant Firm in Bali can accept the use of audit software well which is based on the UTAUT model. UTAUT, namely performance expectancy, expectation of a more optimal performance by utilizing technology. Although aspects of social influence and voluntariness of use are not able to influence the acceptance of audit software for auditors at the Public Accountant Firm in Bali.

Keywords: acceptance, software audit, UTAUT

ABSTRAK

Tujuan dari penelitian ini adalah untuk mengetahui bagaimana penerimaan software audit oleh auditor. Penelitian ini menggunakan Kantor Akuntan Publik di Bali sebagai lokasi terdapat 17 Firma. Sampel dalam penelitian ini adalah 95 responden berdasarkan teknik purposive sampling dengan perhitungan rumus Lemeshow. Jenis data dalam penelitian ini adalah data kuantitatif menggunakan sumber data primer yang dikumpulkan dengan menggunakan kuesioner. Teknik analisis data yang digunakan adalah Structural Equation Modeling menggunakan Partial Least Square (SEM PLS). Hasil penelitian menunjukkan bahwa auditor di Kantor Akuntan Publik di Bali dapat menerima penggunaan software audit dengan baik yang didasarkan pada model UTAUT. UTAUT, yaitu harapan kinerja, mengharapkan kinerja yang lebih optimal dengan memanfaatkan teknologi. Meskipun aspek pengaruh sosial dan kesukarelaan penggunaan tidak mampu mempengaruhi penerimaan perangkat lunak audit bagi auditor di Kantor Akuntan Publik di Bali.

Kata kunci: penerimaan, audit software, UTAUT

INTRODUCTION

Electronic data is one type of audit evidence (Wijayanto, 2008). At this time, many companies have made accounting records using computerized accounting programs or software rather than doing it manually. The increasing use of computerized accounting software will certainly have an impact on auditors working in Public Accounting Firm. Auditors must understand how companies use information technology to record, process and report transactions in financial statements in a computer system. In addition, the existence of technology is expected to improve the auditor's ability to conduct analysis. The use of sophisticated technology aims to facilitate human work because it has the benefits of effectiveness and efficiency of work which are expected to provide benefits both financially and non-financially.

Technology in auditing is a set of tools in the form of computer software that can facilitate the work of auditors in collecting and evaluating audit evidence. With this software, auditors can carry out audit work more quickly and accurately and can understand the client's business processes better (Yani, 2009). The various uses of computer technology in auditing techniques are known as Computer Assisted Audit Techniques (CAATs). Computer Assisted Audit Techniques are the implementation and collection of audit evidence using computer software. Some examples of computer software in auditing include: Audit Command Language (ACL), Interactive Data Extraction and Analysis (IDEA), and Audit Tool and Archive System (ATLAS).

In how audits are handled, auditors are required to comply with audit standards inaugurated by the Association of Public Accountants (Ismail & Kurniawan, 2018). One of the audit standards that must be met by independent auditors is the Standards of Field Work. Not only that, in the application of audit standards, auditors are also required to think about the audit risks to be experienced. Audit information on financial information means for each consumer because it shares an auditor's opinion on the fairness of the items in the financial statements according to audit standards. Therefore, to fulfill the audit process according to standards and because of the audit risks faced by auditors requires a longer time in the process of completing the audit so that this will have an impact on the timeliness of financial reporting. Basically, the accuracy of the duration of handling audit obligations proves that the auditor must be in charge in an effective manner

without giving up the reliability of the data obtained in financial information (Abdillah et al., 2019).

To ensure that all memos have been prepared in an accurate and balanced form, auditors would like to encourage using software features to check and validate these financial memos. Conventional systems can no longer support auditors to check and validate the accuracy of financial memos because a lot of information has been stored electronically in recent years. Intensive use of IT by consumers increases internal control, risk of fraud discovery and use by employees and the manner in which it is used and the generality of financial information intended for auditors makes ERP Software features in the audit industry. The selection, implementation, and usefulness of software by accounting firms have received close attention for firm performance in a rapidly changing global digital environment (Moss & Sandhu, 2020). The importance of auditing the account related to corporate social responsibilities of companies were highlighted (Thottoli, 2020, 2021). Information Communication Technology (ICT) enabled auditing to have become crucial while accomplishing audit tasks in an electronic environment (Veerankutty et al., 2018).

CAATs are one of the technologies developed in the auditing industry designed to assist and facilitate the performance of internal and external auditors in carrying out audit work. With CAATs, auditors can improve their work performance as they can perform manual intensive tasks quickly. Technology not only provides benefits to users but can also cause problems for users. One example is that not all users can accept or adapt to technological developments that occur. Previous research has shown that industry audits in Kerala are limited to knowing problems such as the lack of availability of expert audit assistants, lack of insight into audit software that is matched or generalized, lack of insight into the experience experienced from using audit software features, and lack of understanding of software features. ICT-enabled auditing among audit administrators (Thottoli, 2020, 2021).

Various well-known GAS applications (such as Ms. Excel, ACL and IDEA) also have many important features for a company. In contrast, other powerful software feature packages, such as ACL or Interactive Information Extraction and Analysis (IDEA), have other advantages that Ms. Excel reads the information in read-only form, renaming the substitute information sings. Elastic information on Ms. Excel has a fairly large inherent

risk for auditors because it can affect the validity of audit results. On the other hand, especially for IDEA, this application is a perfect information mining tool for describing fraud detection methods (Lehmann, 2012).

Research problems from this research is that there is a research priority from research first. Previous research on the factors that influence auditing to use CAATs by (Bierstaker et al., 2014) suggests that the use of CAATs in auditing is very small. The results of the study to prove the dimensions of the Public Accounting Firm influence the use of CAATs in the way of auditing. Not only that, the latest fact relates to agencies that use CAAT more often because they have a more professional energy base and audit larger consumers with the support of IT complexity. In 2012 (Ahmi & Kent, 2013) in his research found that 73% of auditors do not use CAAT because they are considered useless when auditing small entities and face challenges in using it. Although CAATs are not widely used, auditing standards suggest that using CAATs can increase the effectiveness and capability of the auditor. But in other research (Sari, 2019) shows that some conclusions. First, this study provides empirical evidence that perceived usefulness and perceived convenience will increase the positive attitude of users. Second, in this study subjective norms have a negative impact on user interest. This research is also supported by (Alvin, 2019) which shows the results where the use of audit software and the use of audit software has an effect on auditor acceptance.

Based on this research gap, researchers were attracted to examine the Generalized Audit Application (GAS) application in small and medium-sized Public Accounting Firms in Bali, using the Unified Theory of Acceptance and Use of Technology (UTAUT) as the basis. UTAUT uses 4 aspects that contribute to the use of system data, namely performance expectations, business expectations, social consequences, and facilitation situations. From the explanations above, research problem arranged in this research is how acceptance of audit software by auditor.

LITERATURE REVIEW

UTAUT (The unified theory of acceptance and use of technology)

The unified theory of acceptance and use of technology (UTAUT) was formulated by Venkatesh according to the theory of the Technology Acceptance Model. UTAUT is a useful form of assessing the success of recent IT or IS revenue (Venkatesh et al., 2003).

The UTAUT theory explains that technology is influenced by 6 aspects (performance expectations, effort expectancy, social influence, facilitating condition, behavioural intention, and usage behaviour). Performance expectations, namely the UTAUT construct in measuring a person's level of confidence if using a system can help someone achieve their professional abilities. According to (Williams et al., 2013) performance expectations are representations of five constructions including perceived usefulness, external encouragement, activity relationships, relative profit, and expectations to achieve.

Effort expectancy are the level of effort of everyone in using something to support carrying out their profession. In the success of welcoming a technology, (Williams et al., 2013) explained that the concept of a system such as a virtual program can allow consumers to navigate easily or not while making the application accessible to consumers when the application is easy to use. Social influence is the degree to which a person considers it important for others to make themselves available to use a new system. According to (Venkatesh et al., 2012) social consequences, there are three representations of three constructs, namely subjective norms, audience views, and social aspects.

Situations that provide a level of use when industrial and technical infrastructure exist to support the system (Venkatesh et al., 2003). The facilitating condition is a representation of three behavioural constructs, among others, conscious control (technology acceptance model and theory of planned behaviour), condition (personal computer utilization model) and (Venkatesh et al., 2003). In the basic concept of the user acceptance model that has been developed, attitude desire becomes a construct between the use of data technology and the factual use (attitude of use). The position of attitudes as predictors of usage behaviour has been widely accepted in various user acceptance models (Algharibi & Arvanitis, 2011).

Usage behaviour can be defined as how often consumers use technology data. A data technology that will be used if consumers have an interest in using the data system, because someone's belief in using a system can improve work results (Venkatesh et al., 2012). The behavioural measurement variable is how often the seriousness of the duration of use is spent and the consumer's perception of the acceptance of the technology used (Venkatesh et al., 2012).

Auditing

According to (Arens et al., 2015) auditing is the collection and evaluation of evidence about information to determine and report the degree of conformity between information and established criteria. Auditing must be carried out by a person who is competent, independent, with integrity and objective. Auditors must also exercise professional wisdom in planning and implementing financial statement audits (ISA 200; in Hayes et al., 2017). The purpose of the audit is to provide an idea or finding that is defined in such a way as to facilitate a manager in making decisions so that his company continues to run. The audit is the duty of an auditor to examine the company's operational processes and provide analysis, assessment, input and follow-up in the management control system (Tunggal, 2000).

Computer assisted audit techniques (CAATs)

According to (Ashari, 2018), computer-assisted audit techniques are the implementation of and collection of audit evidence using computer software, both software packages and general software. According to (Hayes et al., 2017) use of CAATs allows for more extensive testing of a number of transactions electronic and accounting records. CAATs can also be used to select samples transactions from the primary electronic record for classifying those transactions into certain criteria, or testing the entire population rather than a sample.

METHODS

This research conducted on public accountant firm which running their services in Denpasar according to Indonesian Institute of Certified Public Accountants Directory 2021, there are 17 firm. The population used in this study is all auditors in Public Accountant Firm in Bali especially in Denpasar, there are 17 firm. However, the number of auditors is unknown. This research uses non-probability method (non-random sampling) by using purposive sampling technique, and uses the Lemeshow formula to determine the number of samples. The Lemeshow formula is used because the population is unknown, then in this study the author used 95 auditors as a sample. The type of data used in this research is quantitative data and using primary data source. The data collection technique that used in this study is questionnaire with a Likert scale of 1-5 where a score of 1 indicates the range of the lowest value and 5 is the range of the highest

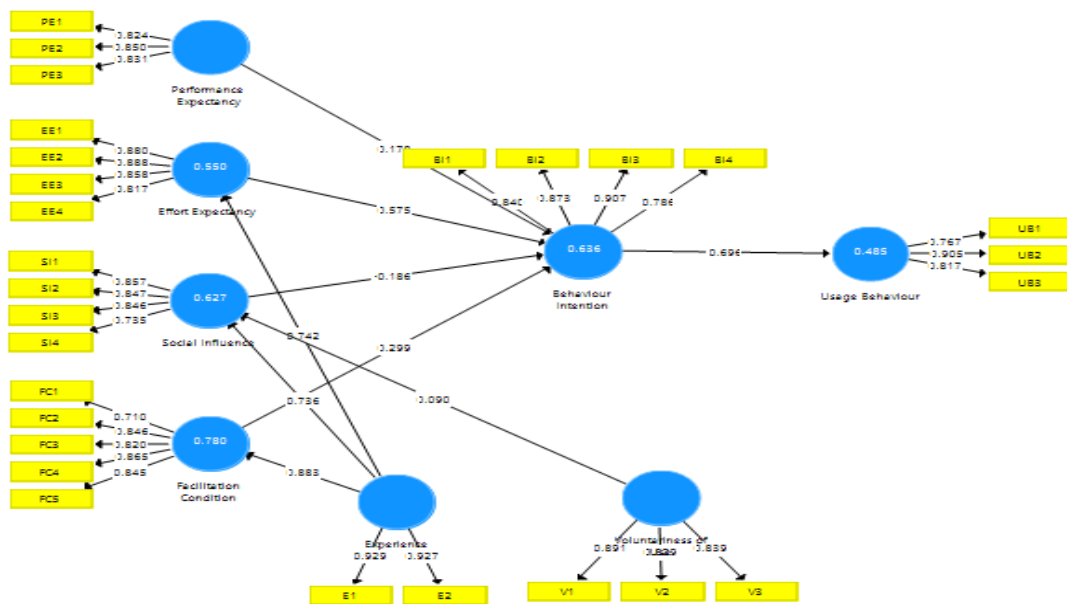
value. All of instrument on this research are Structured Structural Equation Modelling (SEM) and will be tested using Partial Least Square (PLS) software. Data analysis was carried out using the Partial Least Square (PLS) method using the Smart PLS version 3 software.

RESULTS

Evaluation results of the measurement model (outer model)

Measurement model or outer model is used to describe the relationship between latent variables/constructs with each indicator block 5 (Hair et al., 2013). This measurement model is used to test the validity and construct reliability of the research instrument. The results of the Measurement Model can be seen in Figure 1.

Figure 1. PLS outer model



Validity Test

The validity test was applied to determine the ability of the research instrument to measure what should be measured. There are two validity tests used in this analysis, namely convergent and discriminant validity.

The measurement basis for convergent validity can be seen from the value of outer loading and Average Variance Extracted (AVE). If the value of outer loading > 0.7 and $AVE > 0.5$ then the indicator of the latent construct/variable used is valid and consistent. Based on validity test, the outer loading results of each indicator used in this study are

greater than 0.7. This indicates that the data has met convergent validity. Then, based the Average Variance Extracted (AVE) of each construct used in this study is above the expected value of 0.5, so it can be said that the construct used in this study has good convergent validity.

Discriminant validity is used to test the extent to which a construct is really different from other constructs assessed based on the measurement of cross loading. Based on discriminant validity test, it can be seen that the cross-loading value indicates a good discriminant validity, which can be seen from the correlation value of the indicator to the construct which is higher than the correlation value of the indicator with other constructs. The calculation of discriminant validity can also be seen through the results of the Fornell-Larcker Criterion, where the square root value of AVE is higher than the correlation between latent variables. Therefore, it can be said that the data has met the requirements of discriminant validity. Therefore, it can be concluded that this research data is valid.

Reliability Test

The measurement basis used to determine the reliability of research variables in PLS is carried out by two methods, namely Cronbach's Alpha and Composite Reliability. If the value of Cronbach's alpha and composite reliability is greater than 0.7, but if the value is 0.6 it is still acceptable and all latent variables are said to be reliable.

Table 1. Results of Cronbach's Alpha and Composite Reliability

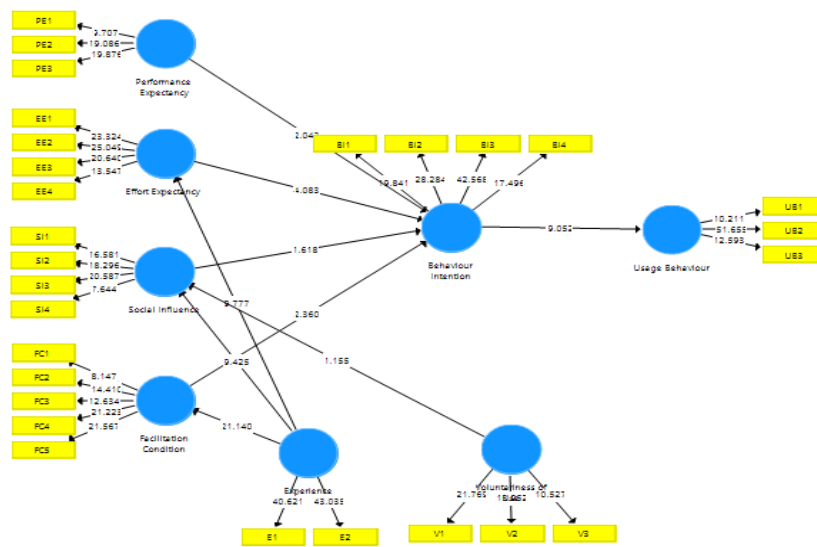
	Cronbach's Alpha	Composite Reliability
Behaviour Intention	0,874	0,914
Effort Expectancy	0,884	0,920
Experience	0,839	0,925
Facilitation Condition	0,876	0,910
Performance Expectancy	0,786	0,873
Social Influence	0,840	0,893
Usage Behaviour	0,775	0,870
Voluntariness of Use	0,813	0,889

Based on the results of the Cronbach's Alpha and Composite Reliability analysis presented in Table 1. the Cronbach's Alpha and Composite Reliability values in each research construct has a value greater than 0.7 so it can be concluded that all research variables are reliable.

Results of evaluation of the structural model (inner model)

After evaluating the measurement model (outer model), then the structural model evaluation (inner model) is carried out using bootstrapping. Structural model is a model used to test the relationship between latent constructs/variables that have been hypothesized previously. The Inner Model in PLS is evaluated by looking at the R-squared value (R^2) or the coefficient of determination and the t-value or the path coefficient value 5 (Hair et al., 2013).

Figure 2. Inner Model PLS



R-square (coefficient of determination)

According to Hair et al., (2013) the determination of the R-square value is applied to explain the effect of a dependent variable on other variables, whether in the research construct or not. The measurement criteria with R-square are seen from the R-square value, namely 0.75; 0.50; 0.25 respectively indicates a strong, medium, and weak model.

Table 2. R-square coefficient of determination results

	R Square	R Square Adjusted
Behaviour Intention	0.636	0.620
Effort Expectancy	0.550	0.545
Facilitation Condition	0.780	0.778
Social Influence	0.627	0.619
Usage Behaviour	0.485	0.479

Based on Table 2, The coefficient of determination R^2 for the behavioral intention variable is 0.636 where this result means that 63.6% of the behavioral intention variable can be influenced or explained by the variables of performance expectancy, effort expectancy, social influence, and facilitation conditions, while the rest is 36, 4% is influenced by other factors outside the research model. The coefficient of determination R^2 for the effort expectancy variable is 0.550 where this result means that 55% of the effort expectancy variable can be influenced or explained by the experience variable, while the remaining 45% is influenced by other factors outside the research model.

The coefficient of determination R^2 for the facilitation condition variable is 0.780 where this result means that 78% of the facilitation condition variable can be influenced or explained by the experience variable, while the remaining 22% is influenced by other factors outside the research model. The value of the coefficient of determination R^2 for the social influence variable is 0.627 where this result means that 62.7% of the social influence variable can be influenced or explained by the experience variable and voluntariness of use while the remaining 37.3% is influenced by other factors outside Research Model. The coefficient of determination R^2 for the usage behavior variable is 0.485, where this result means that 48.5% of the usage behavior variable can be influenced or explained by the behavior intention variable, while the remaining 51.5% is influenced by other factors outside the research model.

t-value (Path Coefficient Value)

The path coefficient value (t-value) or used to test the significance of a construct or latent variable is done through the estimation of the path coefficient value (t-value) obtained by the bootstrapping procedure with a value that is considered significant if the t-statistic value is greater than $t\text{-table} = t(n-k-1) = t(87)$ which is 1.663 for the one-tailed hypothesis (one-way) for alpha (α) testing 10% or 0.10.

Table 3. Bootstrapping Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Behaviour Intention -> Usage Behaviour	0.696	0.690	0.077	9.052	0.000
Effort Expectancy -> Behaviour Intention	0.575	0.570	0.141	4.083	0.000
Experience -> Effort Expectancy	0.742	0.738	0.076	9.777	0.000
Experience -> Facilitation Condition	0.883	0.882	0.042	21.140	0.000

Experience -> Social Influence	0.736	0.733	0.078	9.425	0.000
Facilitation Condition -> Behaviour Intention	0.299	0.289	0.127	2.360	0.019
Performance Expectancy -> Behaviour Intention	0.178	0.196	0.087	2.043	0.042
Social Influence -> Behaviour Intention	-0.186	-0.189	0.115	1.618	0.106
Voluntariness of Use -> Social Influence	0.090	0.085	0.078	1.155	0.249

Based on the results of the bootstrapping analysis presented in Table 3. it can be explained that the influence of the independent variable and the dependent variable used in this study is as follows. The path coefficient value obtained is positive, namely 0.178 with $t\text{-statistic} = 2.043 > t\text{-table} = 1.663$ and $p\text{-values} = 0.042 < 0.10$, so H_1 is accepted. This means that performance expectancy has a positive and significant effect on behaviour intention.

Based on Table 3. it can be seen that the path coefficient value obtained is positive, namely 0.575 with $t\text{-statistic} = 4.083 > t\text{-table} = 1.66256$ and $p\text{-values} = 0.000 < 0.10$, so H_2 is accepted. This means that effort expectancy has a positive and significant effect on behaviour intention. Based on Table 3. it can be seen that the path coefficient value obtained is negative, namely -0.186 with $t\text{-statistic} = 1.618 < t\text{-table} = 1.66256$ and $p\text{-values} = 0.106 > 0.10$, so H_3 is rejected. This means that social influence has no effect on behaviour intention.

Based on Table 3. it can be seen that the path coefficient value obtained is positive, namely 0.299 with $t\text{-statistic} = 2.360 > t\text{-table} = 1.66256$ and $p\text{-values} = 0.019 < 0.10$, so H_4 is accepted. This means that the facilitation condition has a positive and significant effect on behaviour intention. Based on Table 3. it can be seen that the path coefficient value obtained is positive, namely 0.742 with $t\text{-statistic} = 9.777 > t\text{-table} = 1.66256$ and $p\text{-values} = 0.000 < 0.10$, so H_5 is accepted. This means that experience has a positive and significant effect on effort expectancy.

Based on Table 3. it can be seen that the path coefficient value obtained is positive, namely 0.736 with $t\text{-statistic} = 9.425 > t\text{-table} = 1.66256$ and $p\text{-values} = 0.000 < 0.10$, so H_6 is accepted. This means that experience has a positive and significant effect on social influence. Based on Table 3. it can be seen that the path coefficient value obtained is positive, namely 0.883 with $t\text{-statistic} = 21.140 > t\text{-table} = 1.66256$ and $p\text{-values} = 0.000$

<0.10, so H₇ is accepted. This means that experience has a positive and significant effect on the facilitation condition.

Based on Table 3. it can be seen that the path coefficient value obtained is positive, namely 0.090 with t-statistic = 1.155 < t-table = 1.66256 and p-values = 0.249 > 0.10, so H₈ is rejected. This means that voluntariness of use has no effect on social influence. Based on Table 3. it can be seen that the path coefficient value obtained is positive, namely 0.696 with t-statistic = 9.025 > t-table = 1.66256 and p-values = 0.000 < 0.10, so H₉ is accepted. This means that behaviour intention has a positive and significant effect on usage behaviour.

CONCLUSION

Based on the results of the analysis and discussion described in the previous chapter, it can be concluded that auditors at Public Accountant Firm in Bali can accept the use of audit software well which is based on the UTAUT model. The intensity of the use of this audit software is determined by the intention to use audit software which is influenced by aspects that exist in the UTAUT model, namely performance expectancy, expectation of a more optimal performance by utilizing technology, an auditor tends to have a higher intention to use software audits. In addition, effort expectancy also affects the auditor's intention to use audit software. Although social influence and voluntariness of use which are aspects of UTAUT are not able to influence the acceptance of audit software for auditors at Public Accountant Firm in Bali, however, through the condition of facilities that support the use of audit software and the experience possessed by an auditor can determine his intention in using audit software which then has an influence on the intensity of using audit software. This shows that, by using the UTAUT model, it can be understood that the acceptance of technology in auditing, namely the use of audit software for auditors at Public Accountant Firm in Bali can be explained well.

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