Effectiveness of accrual basis accounting system in state budget and treasury system in TAM 3 framework

Ratih Kusumastuti,[1] Derist Touriano,[2] Sry Rosita,[3] Raja Sharah Fatricia[4]

[1,3]Universitas Jambi, Indonesia
[2]Universitas Adiwangsa Jambi, Indonesia
[4]Lancaster University, United Kingdom
email: ratihkusumastuti@unja.ac.id

Abstract

Purpose - This study establishes a basic theoretical model developed using Technology Acceptance Model (TAM 3) with several critical factors on the effectiveness of accrual basis accounting systems in the State Budget and the Treasury System.

Method - This basic research uses a causal model with primary data collected quantitatively and presented descriptively. The study population was users of the State Budget and Treasury System in the Regional Office V of Jambi Province using the convenience sampling method.

Result - The results of this study stated that all TAM variables were correlated with each other and TAM 3 variables were correlated with the effectiveness of the accrual-based accounting system in SPAN. It was proven that there was a significant relationship between all variables. However, the accrual-based accounting system in SPAN practically does not provide convenience and tends to have low intensity of use and low effectiveness.

Implication - The result of this research states that all variables of TAM are correlated to each other and TAM 3 variables are correlated to the effectiveness of accrual basis accounting system in SPAN.

Originality - This study focuses on the effectiveness of accrual basis accounting system in State Budget and Treasury System: migration of the Indonesian Islamic banking system of BSI.

Keywords: TAM 3; effectiveness; accrual basis accounting; BSI system

Journal of Islamic
Accounting and
Finance Research

Introduction

The main challenge in capital budgeting and public treasury is to define investment and wealth in accordance with international standard. Many countries have not fully and formally integrated accrual basis accounting into financial report and financial records (Jacobs, 2008). Like any other countries, financial management in Indonesia did not recognize public budget accountability accounting. In the government budget balance, only proposed revenues and spending were presented. On May 17, 2003, Law No.17/2003 on State Finance was ratified and became a milestone in national budget accountability in which national budget making process and presentation adjust to governmental accounting standards, requiring budget realization report, balance, cash flow statement, and notes to financial statements with attachment of financial report from public companies or agencies. However, this policy started to be fully implemented in 2015 so that the effectiveness of policy implementation cannot be assessed yet (Conteh & Hamidah, 2021; Olola, 2019; Zelmiyanti, 2015).

Research regarding Technology Acceptance Model 3 (TAM 3), according to Davis (1989) is needed in the future because perceived usefulness and ease of use are assessed subjectively and the assessment does not always represent objective reality. The ideal is to assess each actual step, although this approach is not practical (Adams et al., 1992). Moreover, complex psychological construct of perceived ease of use and usefulness needs further research to make theoretical concepts more accurate (Karahanna & Straub, 1999). In an applied system, perceived usefulness does not always positively affect behavioral intentions. This condition is related to the main task carried out by users who represent various service systems which are able to make financial forecast, predict financial risks, and create financial schedule at once (Mathieson, 1991). Also in several research, relative advantage of perceived usefulness as significant predictor of behavior intention in e-government has not been discovered (Carter et al., 2016; Carter & Bélanger, 2005; Lund & Nielsen, 2018).

One of the obstacles in the process is high-level information system/information technology (IS/IT) as prerequisite which will reduce behavioral intentions because IS/IT development tends to accentuate the executive (Arnott et al., 2017; Namahoot & Laohavichien, 2018; Wang et al., 2015). Previously, Awwaliyah et al. (2019) and Waemustafa & Abdullah (2016) have criticized that use behavior does not significantly affect the effectiveness of financial system model. This situation merely tends to be cosmetic reason for the idea initiated by the regulators and policy makers. Furthermore, use behavior of large-scale IS/IT in an institution requires large investment on human resources so that they can accept and adopt latest IS/IT (Arnott et al., 2017; Shet et al., 2021). The difference between the previous research and current research is that it does not analyze new systems or systems that have been running well but examines user behavior and the effectiveness of accrual-based accounting systems in State Treasury and Budget System (*Sistem Perbendaharaan dan Anggaran Negara*/SPAN) when there are sudden large data changes related to the process of migrating salary payments and channeling government employee pensions from conventional banks to Islamic banks. However, the similarity with previous researchers is that they still use the TAM 3 approach as an analytical tool.

Research related to system implementation using TAM approach gave different results. Research gap occurred because previous research only observed factors influencing individual behavior in accepting system implementation, without considering input in the implementation process (Anouze & Alamro, 2019). Complex psychological construct of perceived ease of use and usefulness needs to be studied any further so that theoretical concepts will become more accurate (Davis et al., 1989; Karahanna & Straub, 1999) and can fully represent various service systems which are able to make financial forecast, predict financial risks, and create financial schedule at once (Mathieson, 1991). Moreover, in several research, relative advantage of perceived usefulness as significant predictor of behavior intention has not been discovered (Carter et al., 2016; Carter & Bélanger, 2005; Lund & Nielsen,

2018). Another obstacle in the process is high-level information system as prerequisite which will reduce the success of IS/IT adoption in an organization (Awuku, 2020; Yang et al., 2015).

From research gap that was obtained from literature study, research questions are formulated as follows: (1) What is the correlation between perceived ease of use and perceived usefulness of accrual basis accounting?, (2) Is there any correlation between perceived usefulness and behavioural intentions?, (3) Is there any correlation between perceived ease of use and behavioural intentions? (4) Is there any correlation between behavioural intentions and use behaviour, and (5) Is there any correlation between use behaviour and effectiveness of accrual basis accounting system in State Budget and Treasury System?

The specific objective of this research is to investigate critical factors that affect perceived ease of use toward perceived usefulness, perceived usefulness toward behavioural intentions, perceived ease of use toward behavioural intentions, behavioural intentions toward use behaviour, and factors that affect use behaviour toward system effectiveness of accrual basis accounting in State Budget and Treasury System. Therefore, this research will consider variable related to process of system utilization implementation, namely, accounting information quality. By considering this variable, it is expected that this research will help government to improve performance in presenting financial report.

Based on explanations above, research problem addressed in this research will be focused on degree of implementation effectiveness of accrual basis accounting in State Budget and Treasury System in Regional Office V of Directorate General of State Treasury of Jambi Province. The problem will be assessed by Technology Acceptance Model 3 approach.

Literature Review

Behavior Theory

Behavior theory can refer to information that is absorbed, processed, and maintained during the learning process of human life (Cartwright, 2018), especially in situations of considering various alternative choices that arise spontaneously (Leone et al., 2019), even without internal physiological events or hypothetical constructions of a thought and beliefs (Strickland & Johnson, 2021) that are closely related to the influence of one's political views, ideology, and level of political participation in organizations (Valenzuela et al., 2019) or one's attitude towards behavior, subjective norms, and perceived behavioral control to shape behavioral intentions or individual behavior (Ajzen, 1991).

Behavior is acquired through training, personal experience or mere habituation (Pittig, 2019). Changes in a person's behavior will be strengthened when given a stimulus such as an award and will disappear when subjected to punishment (Kozunova et al., 2019). According to Kumar Jha & Varkkey (2018), someone who adheres to the flow of behaviorism tends not to question whether humans are good or bad, rational or emotional. They just want to know how their behavior is controlled by environmental factors. Continuous training, learning and experience will shape their behavior. Therefore, Thorndike (1933) created the concept of homo mechanicus or what is known as a human machine. The characteristic of homo mechanicus is an individual who focuses on elements and small parts related to his work, is mechanistic, follows the role of his environment, emphasizes the formation of reactions or responses, and emphasizes the importance of training or learning outcomes to achieve the desired behavior (Zhu et al., 2020).

Davis et al. (1989) explain that the Technology Acceptance Model (TAM) is a psychological theory to explain the behavior of information technology users based on beliefs, attitudes, intentions, and user behavior relationships from formation of reactions or responses as a result of training, learning and

everyday experiences. Davis et al. (1989) assert that the TAM framework is able to describe user behavior with two main variables, namely usefulness, ease of use, attitude, behavior intention to use and usage behavior (Straub & Karahanna, 2017) where each has a high determinant and empirically tested validity.

Technology Acceptance Model

Since 2003, replication of research related to TAM has continued to grow. Previous research has provided valuable insight into how and why employees make decisions about adopting the use of information technology in the workplace, but the main issue from an organizational point of view is how managers make decisions about interventions that lead to effective utilization (Moqbel & Bartelt, 2016; Venkatesh & Bala, 2008). TAM itself is a framework that can explain the reasons or attitudes of a person's intention in using or adopting certain technologies (spreadsheets, voice mail and object-oriented technology) when carrying out their daily activities in an organizational context (Lule et al., 2012; Shaw et al., 2018; Venkatesh & Bala, 2008). The theoretical framework in TAM 3, according to Venkatesh & Bala (2008), is the result of a synthesis of TAM research which was developed to represent the accumulation of existing TAM research. Previously, Venkatesh & Davis (2000) proposed an extension of TAM to TAM2 (Figure 1).

Perceived usefulness is defined as a phase where a person believes that the use of certain information systems will improve their performance (Rahi et al., 2018), Venkatesh & Bala (2008) proxies with perceived usefulness, namely subjective norm, image, job relevance, output quality, result demonstrability.

Perceived ease of use, according to Davis (1989), is the degree to which a person believes that the use of a particular information system or technology is able to reduce the user's effort in doing something, both in terms of frequency of use and interaction between users and systems that are able to provide convenience. Perceived ease of use is defined as the extent to which a person believes that using a system or information technology can facilitate

work, reduce hard work effort and will continue to be applied by institutions (Hansen et al., 2018), Venkatesh & Bala (2008) proxies with computer self-efficacy, perception of external control, computer anxiety, computer playfulness, perceived enjoyment, objective, and usability.

Behavioral intention is the behavior of users who have a desire to continue using a system or technology (Davis, 1989). In addition, Venkatesh & Bala (2008) explained that the level of use of a computer technology in a person can be predicted from the attitude of using it, user attention to technology and plans to use this system in the future. Use behavior is the behavior faced by users in real conditions of system or information technology application (Davis, 1989) and the measurement of use behavior used by Venkatesh & Bala (2008) is by measuring how often and duration of actual usage of the system or technology information.
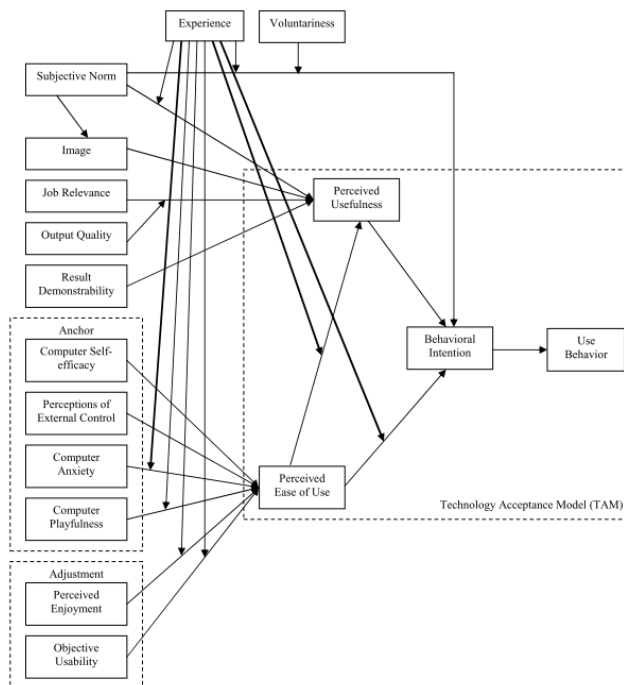

Figure 1. Technology Acceptance Model by Venkatesh & Bala (2008)

Accrual Accounting Base

International Financial Reporting Standard (IFRS) has defined accrual accounting base as an accounting methodology in which transactions are recognized when revenue is received and expenses are recorded on the date they are incurred. In addition, the recognition of an economic event is not related to the date of the actual cash flows or has flexibility in the timing of the receipt and payment of cash. Similar to IFRS in Government Accounting Standards (SAP), accrual accounting base is defined as an accounting guideline in which economic transactions and other events are recognized and presented in the financial statements at the time the transactions occur, regardless of when cash or cash equivalents are received or paid (Zelmiyanti, 2015).

The specific purpose of presenting the Accrual Accounting Base Financial Statements at the Public Service Agency (*Badan Layanan Umum*/BLU) in Indonesia is to provide information that is useful for decision making, showing the accountability of the reporting entity for the resources entrusted to it by providing information on the position of economic resources, liabilities, and equity of the BLU, compliance with the realization of the budget. Based on the description above, the components of the BLU financial report consist of a) Budget Realization Report, b) Changes in Budget Balance Report, c) Balance Sheet, d) Operational Report, e) Cash Flow Report, f) Changes in Equity Report and g) Notes on the Financial Statements (Riyanto, 2016).

However, according to Barker & Teixeira (2018), the accrual accounting base has several drawbacks, such as costs that have not been paid in cash will be recorded effectively as costs so as to reduce the company income. There is a risk of uncollected income so that it can reduce the company income. With the formation of reserves, it will reduce the company income and the company does not have an accurate estimate of when cash that has not been paid by other parties can be received.

Hypothesis Development

Correlation between Perceived Ease of Use and Usefulness of Accrual Basis Accounting System in State Budget and Treasury System

Many research related to the relation between perceived ease of use and ease of use have been conducted, but according to Davis (1989), further research is still needed in the future because perceived usefulness and ease of use are assessed subjectively and the assessment does not always represent objective reality. The ideal is to assess each step of actual utilization although this approach is not practical (Adams et al., 1992). Moreover, complex psychological construct of perceived ease of use and usefulness needs further research in order to make theoretical concepts more accurate (Karahanna & Straub, 1999).

Different degree of interest of perceived ease of use is strongly related to nature of work. Perceived ease of use is related to IS/IT intrinsic characteristics assessment, such as convenience to use, convenience to learn, flexibility, and clear interface (Singh & Srivastava, 2018). Research regarding perceived ease of use in accrual basis accounting system is still rarely conducted, but if it is tracked by broader literature setting, there are actually some findings that show positive impact of perceived ease of use on perceived usefulness. The indication of this proposition is supported by previous research results which have stated that perceived ease of use and perceived usefulness are valid construct in M-government (Althunibat et al., 2014; Singh & Srivastava, 2018). Perceived ease of use is one of important factors in E-Tax (Megarani et al., 2019; Yusup et al., 2015), that has strong impact on the context of e-government service (Carter et al., 2016; Veeramootoo et al., 2018). It is also the main incentive for perceived usefulness in the context of economic transition (Keszey, 2017). Therefore, the first hypothesis can be formulated as follows:

H_1: *There is significant relation between perceived ease of use and perceive usefulness variable*

Correlation between Perceived Usefulness and Behavioral Intentions of Accrual Basis Accounting System in State Budget and Treasury System

In an applied system, perceived usefulness does not always positively affect behavioral intentions. This condition is related to the main task carried out by users. According to Mathieson (1991), the low degree of perceived usefulness toward intention to use of a system is caused by tasks of the users that do not represent various service systems which are able to make financial forecast, predict financial risks, and create financial schedule at once. However, according to Mutahar et al. (2018), characteristics of business model will become critical consideration in deciding interaction pattern between perceived usefulness and behavior intentions in a system. Nevertheless, this opinion needs to be studied any further because several research have not discovered relative advantage of perceived usefulness as significant predictor for behavior intention in e-government service (Carter et al., 2016; Carter & Bélanger, 2005; Lund & Nielsen, 2018).

Latest research regarding the relation of perceived usefulness in a system, according to Sharma et al. (2014) and Farzin et al. (2020) should be able to represent extrinsic and intrinsic motivation of user interface and to prioritize functionality of both online and offline service as these concepts are important in the process of new system adoption. Perceived usefulness tends to positively affect behavior intention as long as system can accomplish routine activity of its users (Chen & Tsai, 2019; Khan & Alshare, 2015). Although it might not represent subjective reality (Carter et al., 2016), perceived usefulness has a strong correlation and can predict e-government service behavior intention (Chen & Aklikokou, 2020; Hamid et al., 2016) establish long-term foundation of behavior intention in utilizing a system (Hariguna et al., 2017). Therefore, the second hypothesis can be formulated as follows:

H_2: *There is significant relation between perceived usefulness and behavioral intention variable*

Correlation between Perceived Ease of Use and Behavioral Intentions of Accrual Basis Accounting System in State Budget and Treasury System

Characteristics of business model become crucial considerations in deciding interaction pattern between a system and external entity of this case (Hanelt et al., 2021). Research regarding IS/IT valuably contribute to future design and by IS/IT measurement, success factors of implementation in an organization can be assessed and set.

Prerequisite of high-level IS/IT will reduce behavioral intentions. It is because information system development tends to accentuate the executive although it the is key for success in adopting IS/IT in an organization (Namahoot & Laohavichien, 2018; Yang et al., 2015). However, several research show that perceived ease of use can predict intentions by using continuance intention of e-government service, although according to Chen & Aklikokou (2020) correlation between perceived ease of use and behavioral intentions of financial information system is low. It is because respondents tend to have high intentions due to features that can simplify their tasks (Alalwan et al., 2016; Hamid et al., 2016). Therefore, the third hypothesis can be formulated as follows:

H₃: *There is significant relation between perceived ease of use and behavioral intention*

Correlation between Behavioral Intentions and Use Behavior of Accrual Basis Accounting System in State Budget and Treasury System

Intention is usually employed to predict behavioral outcome. It can also explain various dispositional personality factors. Personality positively affects the relation between behavioral intention and IS/IT use behavior (Shropshire et al., 2015). Shropshire et al. (2015) stated that automation of behavioral intentions in public service offices has directly contributed to use behavior of its users. Improvement of behavior intention degree is caused by the improvement of IS/IT ability to perform tasks, like sorting data, making report, compiling graphs, attaching document in an email, and many more.

Behavioral intention of users significantly has impact on IS/IT use behavior so it emphasizes previous research which has shown that users with higher intentions will adopt latest IS/IT and tend to be users of IS/IT in the future (Oliveira et al., 2016). Nevertheless, Susanto et al. (2016) argued that behavioral intentions of users do not always have significant impact on use behavior of IS/IT adoption in an institution. This condition is possible because users perceive higher level of risks and uncertainty than in previous IT/IS implementation (Veeramootoo et al., 2018). Therefore, the fourth hypothesis can be formulated as follows:

H_4: *There is significant relation between behavioral intentions and use behavior*

Correlation between Use Behavior and Effectiveness of Accrual Basis Accounting System in State Budget and Treasury System

A series of studies reveal that the effectiveness perceived by IS/IT users is affected by compatibility between strategy and use behavior of users (Dehghani, 2018). In particular, compatibility between strategy and regulation in institutions might create more accurate prediction of use behavior degree in IS/IT user effectiveness (Hamstra et al., 2014; Singh & Srivastava, 2018). Non-accounting supervision and control, especially personal control, contribute to organizational effectiveness (Rikhardsson et al., 2021), mainly in performing high-precision task like complex financial management which requires compatible type of accounting or user behavior without exception (Arnott et al., 2017; Kromann & Sørensen, 2019).

Previously, Awwaliyah et al. (2019) and Waemustafa & Abdullah (2016) have criticized use behavior which does not significantly affect effectiveness of financial system model. This condition tends to be cosmetic reason for the idea initiated by regulators and policy makers. Besides, use behavior of large-scale information system in an institutions requires large investment on human resources so that they can accept and adopt latest information system (Arnott et al., 2017; Shet et al., 2021). Therefore, the fifth hypothesis can be formulated as follows:

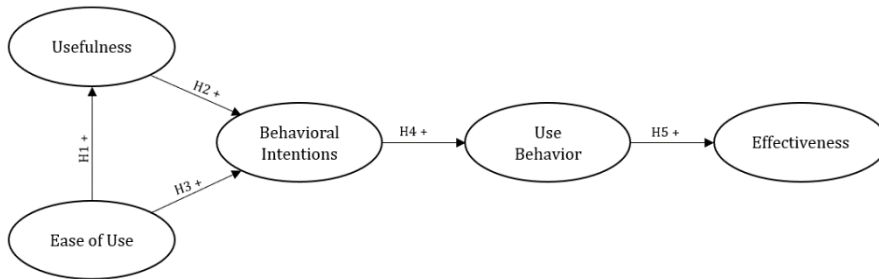*H₅: There is significant relation between use behavior and effectiveness*

Figure 2. Research Conceptual Framework

Research Methods

This research is a basic research and uses a causal model as an explanation model. Primary data collected qualitatively and presented descriptively by providing facts that have been interpreted to solve the problem. The research population is the users of the State Budget and Treasury System at Regional Office V of the Directorate General of State Treasury of Jambi Province which is divided into 5 Treasury Service Offices in each district/city in Jambi Province. Samples were taken based on convenience sampling method. The number of samples required with the maximum possible estimate is between 200-400 (Latan & Ghozali, 2014).

The data were collected from 231 respondents. The data that could be processed were 156 respondents and sorted based on the origin of the State Treasury Service Office (*Kantor Pelayanan Perbendaharaan Negara*/KPPN office where they work. The analysis of the research model used Structural Equation Modeling with the application of WarpPLS version 6.0 in order to identify and estimate the relationship between linear and non-linear latent variables. In addition, this study was designed using closed-ended questions of the type of ordinal data that have been classified into categories of a sequence. While the technique for obtaining ordinal data uses a summated

scale. All variables were measured using a Likert scale using a 7-point positive question form (Augusty, 2011).

Table 1. Respondents by Work Area

		f	%	Valid %	Cumulative Percent
	Regional Office	27	17,3	17,3	17,3
	Jambi City	63	40,4	40,4	57,7
	Sungai Penuh	15	9,6	9,6	67,3
Valid	Muara Bungo	11	7,1	7,1	74,4
	Kuala Tungkal	24	15,4	15,4	89,7
	Bangko	16	10,3	10,3	100,0
	Total	156	100,0	100,0	

Effectiveness as a dependent variable - Effectiveness itself is defined as an attempt to achieve a programmed target in a system by using certain resources and means to meet its goals and objectives without placing heavy pressure on its implementation (Islami et al., 2018; Steers, 2014), which is proxied using independence, transparent, and accountability (Awwaliyah et al., 2019; Waemustafa & Abdullah, 2016) which is explained as follows:

Table 2. Effectiveness Proxies

Proxies	Definition
Indepedency	A state of being free from influence, not controlled by other parties, not dependent on other people in carrying out their duties for the public interest.
Transparent	Provide open and honest financial information based on consideration of the community's rights in managing the resources entrusted to them and their compliance with laws and regulations.
Accountability	Accountable for the management of resources and the implementation of the policies entrusted to him in achieving the goals that have been set periodically.

Perceived usefulness and perceived ease of use as independent variables - Perceived usefulness is defined as a phase where a person believes that the use of certain information systems will improve their performance (Rahi et al., 2018), Venkatesh & Bala (2008) proxies with perceived usefulness, namely subjective norm, image, job relevance, output quality, and result demonstrability.

Table 3. Perceived Usefulness Proxies

Proxies	Definition
Subjective Norm	The extent to which a person perceives the importance of using IS/IT in supporting his work.
Image	The extent to which a person feels that the use of an IS/IT innovation will increase his status in the social sphere.
Job Relevance	The extent to which a person believes that job targets are achieved by adopting IS/IT.
Output Quality	The extent to which a person believes that by adopting IT/IS they get quality output.
Result Demonstrability	The extent to which a person believes that the results of using the system are real, observable, and presentable.

Perceived ease of use is defined as the extent to which a person believes that using a system or information technology can facilitate work, reduce hard work effort and will continue to be applied by institutions (Hansen et al., 2018), Venkatesh & Bala (2008) proxies with computer self-efficacy, perception of external control, computer anxiety, computer playfulness, perceived enjoyment, objective, and usability.

Table 4. Perceived Ease of Use Proxies

Proxies	Definition
Computer Self-Efficacy	The extent to which a person believes that he/she has the ability to perform a specific task/job using a computer.
Perception of External Control	The degree to which a person believes that organizational and technical resources exist to support the use of the system
Computer Anxiety	A person's level of concern about various possibilities when

	using a computer.
Computer Playfulness	The level of cognitive spontaneity of a person in interactions with computers.
Perceived Enjoyment	The extent to which a person's activity using a particular system is considered enjoyable for him or her, regardless of the performance consequences resulting from using the system.
Objective Usability	Comparison of systems based on the actual level of effort required to complete specific tasks.

Behavior intention and use behavior as mediating variables - Behavioral intention is defined as the degree of desire of users who have the desire to continue using a system or technology (Davis, 1989). Venkatesh & Bala (2008) measure behavior intention with attitude, attention and plan to use.

Table 5. Behavior Intention Proxies

Proxies	Definition
Attitude	The degree of a person's attitude in using information systems or technology.
Attention	The extent to which the user's attention to the system or technology that has been and will be implemented.
Plan to use	The extent to which a person plans to use the system or technology in the future.

Meanwhile, use behavior is the behavior faced by users in real conditions of system or information technology application (Davis, 1989) and the measurement of use behavior used by Venkatesh & Bala (2008) is the actual usage of the system or information technology.

Results and Discussion

Reliability test in this research was conducted to measure participant response consistency toward a question from time to time reliable. Measurement employed in this research was Cronbach's alpha, in which according to Latan & Ghozali (2014), a construct is considered reliable if Cronbach's alpha is greater than 70% (> 0.7). From Table 6, it can be seen

that the mean value of standardized Cronbach's alpha is above 80%. It indicates high consistency of respondents in answering questions in the questionnaire, thus making the data highly reliable.

Table 6. Reliability Test

Variable	n Item	Cronbach's Alpha Standardized	Conclusion
Effectiveness	3	0.920	Reliable, Excellent
Perceived Usefulness	19	0.916	Reliable, Excellent
Perceived Ease of Use	20	0.855	Reliable, High
Behavior Intention	3	0.849	Reliable, High
Use Intention	1	0.724	Reliable, Moderate

Table 7. Validity Test

Indicator	Person Corr.	*r*Table	Conclusion
Effectiveness			
EF1	0.922	0.131	Valid
EF2	0.928	0.131	Valid
EF3	0.944	0.131	Valid
Perceived Usefulness			
SN1	0.145	0.131	Valid
SN2	0.212	0.131	Valid
SN3	0.372	0.131	Valid
SN4	0.773	0.131	Valid
IMG1	0.559	0.131	Valid
IMG2	0.827	0.131	Valid
IMG3	0.755	0.131	Valid
REL1	0.783	0.131	Valid
REL2	0.676	0.131	Valid
REL3	0.680	0.131	Valid
RES1	0.629	0.131	Valid
RES2	0.683	0.131	Valid
RES3	0.732	0.131	Valid
RES4	0.709	0.131	Valid
Behavior Intention			
BH1	0.825	0.131	Valid
BH2	0.899	0.131	Valid

BH3	0.908	0.131	Valid
Perceived Ease of Use			
CSE1	0.492	0.131	Valid
CSE2	0.648	0.131	Valid
CSE3	0.722	0.131	Valid
CSE4	0.686	0.131	Valid
PEC1	0.402	0.131	Valid
PEC2	0.646	0.131	Valid
PEC3	0.744	0.131	Valid
PEC4	0.574	0.131	Valid
CANX1	0.720	0.131	Valid
CANX2	0.449	0.131	Valid
CANX3	0.546	0.131	Valid
CANX4	0.608	0.131	Valid
CPLAY1	0.534	0.131	Valid
CPLAY2	0.281	0.131	Valid
CPLAY3	0.338	0.131	Valid
CPLAY4	0.133	0.131	Valid
ENJ1	0.337	0.131	Valid
ENJ2	0.360	0.131	Valid
ENJ3	0.550	0.131	Valid
OU	0.648	0.131	Valid
Use Intention			
USE	0.811	0.131	Valid

Validity test (Table 7) was conducted to measure the capability of questionnaire to reveal the validity of question items (Latan & Ghozali, 2014). Validity was measured by conducting bivariate correlation on each indicator score with total score of the construct. If the correlation between each indicator and total score of the construct is significant, it can be concluded that each indicator is valid. From the two tables, the correlation between each indicator and the total score of each variable construct can be stated as significant.

This data, according to descriptive statistics, have given description for each variable: Mean (M), Median (Me), Mode (Mo), standard deviation (SD) along with frequency distribution table, frequency distribution histogram,

central tendency or tendency of respondents in answering questions in the questionnaire (Gupta et al., 2005).

Effectiveness variable was measured using 3 questions or indicators which showed acceptance of accrual basis accounting system in State Budget and Treasury System by government officials as respondents at Regional Office V of Directorate General of State Treasury of Jambi Province and at 5 Treasury Service Offices in every regency. Measurement used was 7-point Likert scale, resulting in actual range of effectiveness variable of 5 – 21, while the mean of theoretical variables is 4.96 with standard deviation (σ) of 4.24. So, it can be concluded that σ tends to verge into actual mean of theoretical indicators.

Table 8. Descriptive Statistics

Variable	n Item	Actual Range	Actual Average		Std. Deviation (σ)
			Variable	Theoretical	
Effectiveness	3	5 - 21	14.87	4.96	4.24
Perceived Usefulness	19	45 - 133	94.48	18.90	17.20
Perceived Ease of Use	20	51 - 140	96.40	18.90	15.54
Behavior Intention	3	5 - 21	14.75	4.92	3.76
Use Intention	1	1 - 7	4.69	4.69	1.56

Perceived usefulness variable is measured using 19 question/indicator items about accrual basis accounting system in Public Budget and Treasury System. The scale used was 7-point Likert scale, resulting in actual range of perceived usefulness variable 45 – 133, while the mean of theoretical variables is 18.90 with standard deviation (σ) of 17.20. So, it can be concluded that σ tends to verge into actual mean of theoretical indicators. Meanwhile, perceived ease of use variable was measured using 20 question/indicator items about accrual basis accounting system in Public Budget and Treasury System. The scale used was 7-point Likert scale, resulting in actual range of perceived ease of use variable 51 – 140, while the mean of theoretical

variables is 18.90 with standard deviation (σ) of 15.40. So, it can be concluded that σ tends to verge into actual mean of theoretical indicators.

Behavior intention variable was measured using 3 question/indicator items about accrual basis accounting system in Public Budget and Treasury System. The scale used was 7-point Likert scale, resulting in actual range of behavior intention variable 1 – 7, while the mean of theoretical variables was 4.92 with standard deviation (σ) of 3,76. So, it can be concluded that σ tends to verge into actual mean of theoretical indicators. Meanwhile, use behavior variable was measured using 1 question/indicator item about accrual basis accounting system in Public Budget and Treasury System. The scale used was 7-point Likert scale, resulting in actual range of use behavior variable 5 – 21, while the mean of theoretical variables was 4.69 with standard deviation (σ) of 1.56. So, it can be concluded that σ tends to deflect from actual mean of theoretical indicators.

This research used cross-tabulation analysis to examine the relation between two categorical variables in column and row in an early analysis, functioning to help finishing research related to relation determination of variables or factors obtained from qualitative data and having a role to determine association form. Cross-tabulation analysis in this research used Chi-square test, with decision making basis as follows: 1) If the score of Asymp.Sig < 0.05, there is a significant relation between row and column. 2) If the score of Asymp.Sig > 0.05, there is no significant relation between row and column.

Table 9. Cross-Tabulation Test in Accrual Basis Accounting System

Perceived Ease of Use and Perceived Usefulness	Asymp.Sig of 0.000, or less than 0.05, so it can be concluded that H_0 is nullified and H_1 **accepted**; or in other words, there is significant relation between perceived ease of use variable and perceived usefulness variable.	Odd ratio of risk estimation of respondents was 17.919, which means that there were 18 people who **did not feel the convenience and tended to not enjoy** the application.
Perceived Usefulness and Behavioral Intentions	Asymp.Sig of 0.000, or less than 0.05. So, it can be concluded that H_0 is nullified and H_2 **accepted**; or in other words, there is significant relation between perceived usefulness variable and behavioural intention variable.	Odd ratio of risk estimation of respondents was 42.514, which means that there were 43 people **who did not feel the convenience and tended to have low intensity** in using application.
Perceived Ease of Use and Behavioral Intentions	Asymp.Sig of 0.000, or less than 0.05. So, it can be concluded that H_0 is nullified and H_3 **accepted**; or in other words, there is significant relation between perceived ease of use variable and behavioral intention variable.	Odd ratio of risk estimation of respondents was 15.060, which means that there were 15 people who **did not feel the convenience and tended to have low intensity** in using accrual application.
Behavioral Intentions and Use Behavior	Asymp.Sig of 0.000, or less than 0.05. So, it can be concluded that H_0 is nullified and H_4 **accepted**; or in other words, there is significant relation between behavioural intention variable and use behaviour variable.	Odd ratio of risk estimation of respondents was 8.335, which means that there were 8 people who tended to **have low intensity** and **did not find the benefit** in using application.
Use behavior and Effectiveness	Asymp.Sig of 0,000, or less than 0,05. So, it can be concluded that H_0 is nullified and H_5 **accepted**; or in other words, there is significant relation between use behaviour variable and effectiveness variable.	Odd ratio of risk estimation of respondents was 4.546, which means that there were 5 people who tended to perceive that accrual basis accounting system in Public Budget and Treasury System is **useless and ineffective**.

Confirmatory factor analysis was conducted to see the value of the validity and reliability of the indicators forming the latent construct. The overall result is that the loading factor value of all indicator variables is above 0.40 with a p value of less than 0.05 (Table 10). Therefore, it can be concluded

that the indicators are able to explain the variables well (Latan & Ghozali, 2014). In addition, the average variance extracted value is above 0.50 and the Cronbach's alpha and composite reliability values are also above 0.70. So, it can be concluded that the accuracy, consistency and accuracy of the instrument in measuring each construct is proven.

Table 10. Confirmatory Factor Analysis

Indicator	Loading Factor	AVE	Cronbach's Alpha	Composite Reliability	p Value	Conclusion
USEFUL	0,736	0,597	0,769	0,854	<0,001	
ESYUSE	0,694	0,685	0,845	0,896	<0,001	Valid & Reliable
BEINTEN	0,676	0,564	0,934	0,943	<0,001	
USEBE	0,617	0,543	0,947	0,953	<0,001	
EFFECT	1,000	0,630	0,914	0,931	<0,001	

Confirmatory factor analysis was conducted to see the value of the validity and reliability of the indicators forming the latent construct. The overall result is that the loading factor value of all indicator variables is above 0.40 with a p value of less than 0.05 (Table 10). Therefore, it can be concluded that the indicators are able to explain the variables, or it can be said that the indicators are valid and reliable (Latan & Ghozali, 2014).

Table 11. Model Fit and Quality Indices

Average path coefficient (APC)	0.578	P<0.001
Average R-squared (ARS)	0.523	P<0.001
Average adjusted R-squared (AARS)	0.520	P<0.001
Average block VIF (AVIF)	2.292	Ideally <= 3.3
Average full collinearity VIF (AFVIF)	3.258	Ideally <= 3.3

Tenenhaus GoF (GoF)	0.723	Large >= 0.36
Sympson's paradox ratio (SPR)	1.000	Ideally = 1
R-squared contribution ratio (RSCR)	1.000	Ideally = 1
Statistical suppression ratio (SSR)	1.000	Acceptable if >= 0.7
Nonlinear bivariate causality direction ratio (NLBCDR)	1.000	Acceptable if >= 0.7

Table 11 describes the results of average path coefficient, average R-squared, average adjusted R-squared, average block VIF, average full collinearity VIF, Tenenhaus GoF, Symson's paradox ratio, R-squared contribution ratio and statistical suppression ratio have good values so that they can concluded that this research model is feasible.
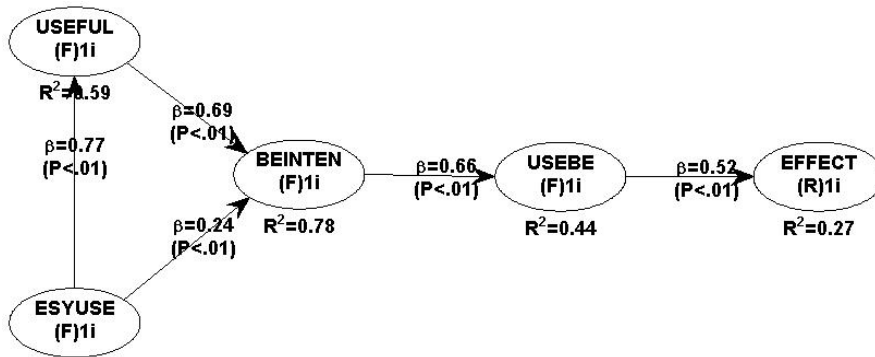

Figure 3. Full Model Analysis

The relationship between perceived ease of use and perceived usefulness has been proven to have a positive effect and is supported empirically with a coefficient value 0.77 (p value <0.001). This study is in accordance with Davis' (1989) previous research which in the development of IS/IT should be beneficial for front line users in addition to convenience to use, features for flexibility, and a clear interface (Althunibat et al., 2014; Megarani et al., 2019; Singh & Srivastava, 2018) and has a strong impact on the context of e-government services (Carter et al., 2016; Veeramootoo et al., 2018).

The relationship between usefulness and behavioral intentions has been proven to have a positive effect and is supported empirically with a coefficient value 0.69 (*p* value <0.001). In the applied system, perceived usefulness does not always positively affect behavioral intentions, where users do not feel comfortable and tend to have low intensity in using the Accrual Basis Accounting System in Public Budget and Treasury System related to the main tasks performed by the user. This situation is in line with previous research by Mathieson (1991). The low level of perceived usefulness of the intention to use a system is caused by the tasks of users who are not representative of various service systems in order to be able to make financial forecasts, predict financial risks, and make financial schedules at one time (Farzin et al., 2020; Sharma et al., 2014). Perceived usefulness tends to positively influence behavioral intentions as long as the system can complete the routine activities of its users (Chen & Tsai, 2019; Khan & Alshare, 2015) although it may not represent subjective reality (Carter et al., 2016).

The relationship between perceived ease of use and behavioral intentions has been proven to have a positive effect and is supported empirically with a coefficient value 0.24 (*p* value <0.001). It is in line with the research of Hanelt et al. (2021) that the characteristics of an institution's business model need to be carefully considered in determining the pattern of interaction between a system and external entities in the development of the Accrual Basis Accounting System in Public Budget and Treasury System and focus more on frontline users than the executive so that IS/IT implementation is successful in the future (Namahoot & Laohavichien, 2018; Yang et al., 2015).

The relationship between behavioral intentions and use behavior has been proven to have a positive effect and is supported empirically with a coefficient value 0.66 (*p* value <0.001). Intentions are usually used to predict behavioral outcomes. It can also explain various dispositional personality factors. In the same breath, Shropshire et al. (2015) state that behavioral intentions will appear when there is an implementation or sudden changes in the automation system in public service offices that directly contribute to the use behavior of users. Susanto et al. (2016) and Veeramootoo et al. (2018)

highlight those frontline users will perceive a higher level of risk and uncertainty when faced with sudden changes or when implementing a new IS/IT.

The relationship between use behavior and effectiveness has been proven to have a positive effect and is supported empirically with a coefficient value 0.52 (*p* value <0.001). This study agrees with Dehghani (2018) explaining that the perceived effectiveness of IS/IT users is influenced by the compatibility between the strategy and the user's use behavior. In addition, the compatibility between strategy and regulation in institutions can make a more accurate prediction of the level of usage behavior in the effectiveness of IS/IT users (Hamstra et al., 2014; Singh & Srivastava, 2018). However, non-accounting supervision and control is needed, especially personal control (Rikhardsson et al., 2021) particularly in performing tasks that require high accuracy and high precision without exception (Arnott et al., 2017; Kromann & Sørensen, 2019). Although it cannot be denied that there are some conditions in which the development or development of IS/IT is just a cosmetic for regulators (Awwaliyah et al., 2019; Waemustafa & Abdullah, 2016). They do not care about the large amount of investment even though the results are disappointing (Arnott et al., 2017; Shet et al., 2021).

Conclusion

The conclusion of this research states that all variables of TAM are correlated to each other and TAM 3 variables are correlated to the effectiveness of accrual basis accounting system in SPAN. Based on the results of data analysis, it is evident that there is a significant relationship between perceived ease of use and perceived benefits of the accrual-based accounting system at SPAN. It is proven that there is a significant relationship between perceived usefulness and behavioral intention in the accrual-based accounting system at SPAN. There is a significant relationship between perceived ease of use and behavioral intentions in the accrual-based accounting system at SPAN. It is proven that there is a significant relationship

between the behavioral intention variable and use behavior in the accrual-based accounting system at SPAN.

However, accrual basis accounting system in SPAN has not practically provided convenience and utility. It also tends to have low intensity and to be not effective, one of which is related to the merger system of three Islamic banks in Indonesia which has an impact on disbursement of state budget to work units, where the BSI merger has the potential to increase SP2D yields due to the process of migrating customer accounts. Therefore, this matter must be handled seriously in the system so that KPPN's performance remains optimal because the lack of SP2D returns shows the effectiveness of the distribution of state budget considering that since September 2021 around 90% of the total customers already have an account in that bank. The new BSI system is the result of the migration to the BSI system in September 2021.

Based on the results of the research analysis, actions that have been taken to minimize SP2D returns include, among others, if the account (supplier) has previously been registered with SPAN at KPPN and there is a change in account number and/or the central bank code, then PPK will be guided by the registration mechanism.

In the future, it is necessary to develop an accrual-based accounting system at SPAN that can anticipate all forms of change because Islamic banks are the choice of the State Civil Apparatus (*Aparatur Sipil Negara*/ASN) to receive salary payments. The trend is increasing every year. Now, there are 160,000 ASN spread over 3,000 work units who choose Islamic banks for salary distribution. The distribution of Taspen pension benefits through BSI also reaches around 90 thousand ASN retirees.

Regarding to overall result which tends to be low in each measurement variable, accrual basis accounting system in SPAN is expected to be improved, especially in the intrinsic aspect of IS/IT, such as convenience to use, convenience to learn, flexibility, and clear interface (Rikhardsson et al., 2021; Singh & Srivastava, 2018). It is because perceived ease of use is one of crucial factors (Megarani et al., 2019; Yusup et al., 2015), strongly affecting context of

service (Carter et al., 2016; Chen & Aklikokou, 2020). It is also the main incentive for perceived usefulness in the context of economic transition (Keszey, 2017; Veeramootoo et al., 2018). Therefore, accrual basis accounting system in SPAN should be able to represent extrinsic and intrinsic motivation of user interface and to prioritize functionality of both online and offline service as these concepts are important in the process of new system adoption (Rikhardsson et al., 2021; Singh & Srivastava, 2018).

References

Adams, D. A., Nelson, R. R., & Todd, P. A. (1992). Perceived Usefulness, Ease of Use, and Usage of Information Technology: A Replication. *MIS Quarterly*, *16*(2), 227. https://doi.org/10.2307/249577

Ajzen, I. (1991). The theory of planned behavior. *Orgnizational Behavior and Human Decision Processes*, *50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Alalwan, A. A., Dwivedi, Y. K., Rana, N. P. P., & Williams, M. D. (2016). Consumer adoption of mobile banking in Jordan. *Journal of Enterprise Information Management*, *29*(1), 118–139. https://doi.org/10.1108/JEIM-04-2015-0035

Althunibat, A., Alrawashdeh, T. A., & Muhairat, M. (2014). The Acceptance of Using M-Government Services in Jordan. *Journal of Theoretical and Applied Information Technology*, *63*(3), 733–740.

Anouze, A. L. M., & Alamro, A. S. (2019). Factors affecting intention to use e-banking in Jordan. *International Journal of Bank Marketing*, *38*(1), 86–112.

Arnott, D., Lizama, F., & Song, Y. (2017). Patterns of business intelligence systems use in organizations. *Decision Support Systems*, *97*, 58–68. https://doi.org/10.1016/j.dss.2017.03.005

Augusty, F. (2011). *Metode Penelitian Manajemen: Pedoman Penelitian untuk Penulisan Skripsi, Tesis dan Disertasi Ilmu Manajemen*. Badan Penerbit Universitas Diponegoro.

Awuku, E. T. (2020). Awuku, E. T. (2020). Is Downward Accountability Essential? Facets of Accountability Dimensions in Non-Governmental Organisation with Lessons from Ghana. *International Journal for*

Research in Applied Science and Engineering Technology, *8*(6), 2056–2061.

Awwaliyah, N., Agriyanto, R., & Farida, D. (2019). The effect of regional original income and balance funding on regional government financial performance. *Journal of Islamic Accounting and Finance Research*, *1*(1), 25–46. 10.21580/jiafr.2019.1.1.3745

Barker, R., & Teixeira, A. (2018). Gaps in the IFRS conceptual framework. *Accounting in Europe*, *15*(2), 153–166.

Carter, L., & Bélanger, F. (2005). The utilization of e-government services: citizen trust, innovation and acceptance factors. *Information Systems Journal*, *15*(1), 5–25.

Carter, L., Weerakkody, V., Phillips, B., & Dwivedi, Y. K. (2016). Citizen Adoption of e-government Services: Exploring citizen perceptions of online services in the United States and United Kingdom. *Information Systems Management*, *33*(2), 124–140.

Cartwright, E. (2018). *Behavioral Economics* (3rd Editio). Routledge. https://doi.org/10.4324/9781315105079

Chen, C.-C., & Tsai, J.-L. (2019). Determinants of behavioral intention to use the Personalized Location-based Mobile Tourism Application: An empirical study by integrating TAM with ISSM. *Future Generation Computer Systems*, *96*, 628–638.

Chen, L., & Aklikokou, A. K. (2020). Determinants of E-government adoption: testing the mediating effects of perceived usefulness and perceived ease of use. *International Journal of Public Administration, 43(10)*, *43*(10), 850–865.

Conteh, S., & Hamidah, H. (2021). Audit Expectation GAP in The Public Sector of The Gambia. *The Indonesian Accounting Review*, *11*(2), 127–141.

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13*(3), 319. https://doi.org/10.2307/249008

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, *35*(8), 982–1003. https://doi.org/10.1287/mnsc.35.8.982

Dehghani, M. (2018). Exploring the motivational factors on continuous usage intention of smartwatches among actual users. *Behaviour & Information Technology*, *37*(2), 145–158.

Farzin, M., Sadeghi, M., Yahyayi Kharkeshi, F., Ruholahpur, H., & Fattahi, M. (2020). Extending UTAUT2 in M-banking adoption and actual use behavior: Does WOM communication matter? *Asian Journal of Economics and Banking*, *5*(2), 136–157.

Gupta, M., Cazzanti, L., & Srivastava, S. (2005). Minimum expected risk probability estimates for nonparametric neighborhood classifiers. *Statistical Signal Processing*, 631–636.

Hamid, A. A., Razak, F. Z. A., Bakar, A. A., & Abdullah, W. S. W. (2016). The Effects of Perceived Usefulness and Perceived Ease of Use on Continuance Intention to Use E-Government. *Procedia Economics and Finance*, *35*, 644–649. https://doi.org/10.1016/S2212-5671(16)00079-4

Hamstra, M. R., Van Yperen, N. W., Wisse, B., & Sassenberg, K. (2014). On the perceived effectiveness of transfor- mational–transactional leadership: The role of encouraged strategies and followers' regulatory focus. *European Journal of Social Psychology*, *44*(March), 643–656.

Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2021). A systematic review of the literature on digital transformation: Insights and implications for strategy and organizational change. *Journal of Management Studies, 58(5)*, *58*(5), 1159–1197.

Hansen, J. M., Saridakis, G., & Benson, V. (2018). Risk, trust, and the interaction of perceived ease of use and behavioral control in predicting consumers' use of social media for transactions. *Computers in Human Behavior*, *80*, 197–206.

Hariguna, T., Lai, M.-T., Hung, C.-W., & Chen, S.-C. (2017). Understanding information system quality on public e-government service intention : an empirical study. *International Journal of Innovation and Sustainable Development*, *11*(2–3), 271–290.

Islami, X., Mulolli, E., & Mustafa, N. (2018). Using Management by Objectives as a performance appraisal tool for employee satisfaction. *Future Business Journal, 4(1)*, *4*(1), 94–108.

Jacobs, M. D. F. (2008). *A review of capital budgeting practices (No. 8-160). International Monetary Fund.* (No. 8–160).

Karahanna, E., & Straub, D. W. (1999). The psychological origins of perceived usefulness and ease-of-use. *Information & Management*, *35*, 237–250.

Keszey, T. (2017). Information Systems in Transition Economies : Does Ownership Matter ? *Information Systems Management*, *34*(1), 65–84. https://doi.org/10.1080/10580530.2017.1254456

Khan, H. U., & Alshare, K. (2015). Factors influence consumers ' adoption of mobile payment devices in Qatar. *International Journal of Mobile Communications*, *13*(6), 670–689. https://doi.org/10.1504/IJMC.2015.072100

Kozunova, G. L., Voronin, N. A., Venediktov, V. V., & Stroganova, T. A. (2019). Learning with reinforcement: the role of immediate feedback and the internal model of the situation. *Neuroscience and Behavioral Physiology*, *49*(9), 1150–1158.

Kromann, L., & Sørensen, A. (2019). Automation, performance and international competition: a firm-level comparison of process innovation. *Economic Policy*, *34*(100), 691–722.

Kumar Jha, J., & Varkkey, B. (2018). Are you a cistern or a channel? Exploring factors triggering knowledge-hiding behavior at the workplace: evidence from the Indian R&D professionals. *Journal of Knowledge Management*, *22*(4), 824–849.

Latan, H., & Ghozali, I. (2014). *Partial Least Squares: Konsep, Teknik dan Aplikasi WarpPLS 4.0*. BP Universitas Diponegoro.

Leone, A. J., Minutti-Meza, M., & Wasley, C. E. (2019). Influential observations and inference in accounting research. *The Accounting Review*, *94*(6), 337–364.

Lule, I., Omwansa, T. K., & Waema, T. M. (2012). Application of technology acceptance model (TAM) in m-banking adoption in Kenya. *International Journal of Computing and ICT Research*, *6*(1), 31–43.

Lund, M., & Nielsen, C. (2018). The concept of business model scalability. *Journal of Business Models, 6(1), 6*(1), 1–18.

Mathieson, K. (1991). Predicting user intentions: Comparing the technology acceptance model with the theory of planned behavior. *Information Systems Research*, *2*(3), 173–191. https://doi.org/10.1287/isre.2.3.173

Megarani, N., Warno, & Fauzi, M. (2019). The effect of tax planning, company value, and leverage on income smoothing practices in companies listed

on Jakarta Islamic Index. *Journal of Islamic Accounting and Finance Research*, *1*(1), 139–162.

Moqbel, M. A., & Bartelt, V. L. (2016). Consumer Acceptance of Personal Cloud: Integrating Trust and Risk with the Technology Acceptance Model. *AIS Transactions on Replication Research*, *2*(1), 1–5.

Mutahar, A. M., Daud, N. M., Thurasamy, R., Isaac, O., & Abdulsalam, R. (2018). The mediating of perceived usefulness and perceived ease of use: the case of mobile banking in Yemen. *International Journal of Technology Diffusion (IJTD)*, *9*(2), 21–40.

Namahoot, K. ., & Laohavichien, T. (2018). Assessing the intentions to use internet banking: The role of perceived risk and trust as mediating factors. *International Journal of Bank Marketing*, *36*(2), 256–276. https://doi.org/10.1108/IJBM-11-2016-0159 Marketing.

Oliveira, T., Thomas, M., Baptista, G., & Campos, F. (2016). Mobile payment: Understanding the determinants of customer adoption and intention to recommend the technology. *Computers in Human Behavior*, *61*(August), 404–414. https://doi.org/10.1016/j.chb.2016.03.030

Olola, O. A. (2019). Effects of international public sector accounting standards on financial accountability in Nigeria public sector. *European Journal of Accounting, Auditing and Finance Research*, *7*(3), 41–54.

Pittig, A. (2019). Incentive-based extinction of safety behaviors: Positive outcomes competing with aversive outcomes trigger fear-opposite action to prevent protection from fear extinction. *Behaviour Research and Therapy*, *121*(103463), 1–10.

Rahi, S., Ghani, M., Alnaser, F., & Ngah, A. (2018). Investigating the role of unified theory of acceptance and use of technology (UTAUT) in internet banking adoption context. *Management Science Letters*, *8*(3), 173-186.

Rikhardsson, P., Rohde, C., Christensen, L., & Batt, C. E. (2021). Management controls and crisis: evidence from the banking sector. *Accounting, Auditing & Accountability Journal*, *34*(4), 757–785.

Riyanto. (2016). *Standar Akuntansi Pemerintah (SAP) Berbasis Akrual pada Badan Layanan Umum menurut Peraturan Menteri Keuangan Terbaru*. https://bppk.kemenkeu.go.id/id/publikasi/artikel/150-artikel-keuangan-umum/22944-standar-akuntansi-pemerintah-sap-berbasis-

akrual-pada-badan-layanan-umum-menurut-peraturan-menteri-keuangan-terbaru

Sharma, G., Shakya, S., & Kharel, P. (2014). Technology acceptance perspectives on user satisfaction and trust of e-government adoption. *Journal of Applied Sciences*, *14*(9), 860–872.

Shaw, H., Ellis, D. A., & Ziegler, F. V. (2018). The Technology Integration Model (TIM). Predicting the continued use of technology. *Computers in Human Behavior, 83, 83*, 204–214.

Shet, S. V., Poddar, T., Samuel, F. W., & Dwivedi, Y. K. (2021). Examining the determinants of successful adoption of data analytics in human resource management–A framework for implications. *Journal of Business Research*, *131*, 311–326.

Shropshire, J., Warkentin, M., & Sharma, S. (2015). Personality, attitudes, and intentions: Predicting initial adoption of information security behavior. *Computers and Security*, *49*, 177–191. https://doi.org/10.1016/j.cose.2015.01.002

Singh, S., & Srivastava, R. K. (2018). Predicting the intention to use mobile banking in India. *International Journal of Bank Marketing*, *36*(2), 357–378.

Steers, R. M. (2014). *Organizational Effectiveness* (Erlangga).

Straub, D., & Karahanna, E. (2017). Measuring System Usage : Implications for IS Theory Testing. *Management Science*, *41*(8), 1328–1342. https://doi.org/10.1287/mnsc.41.8.1328

Strickland, J. C., & Johnson, M. W. (2021). Rejecting impulsivity as a psychological construct: A theoretical, empirical, and sociocultural argument. *Psychological Review*, *128*(2), 336–361.

Susanto, A., Chang, Y., & Ha, Y. (2016). Determinants of continuance intention to use the smartphone banking services: An extension to the expectation-confirmation model. *Industrial Management and Data Systems*, *116*(3), 508–525. https://doi.org/10.1108/IMDS-05-2015-0195

Thorndike, B. Y. E. L. (1933). A theory of the action of the after-effects of a connection upon it. *Psychological Review*, *40*(5), 434–439.

Valenzuela, S., Halpern, D., Katz, J. E., & Miranda, J. P. (2019). The paradox of participation versus misinformation: Social media, political

engagement, and the spread of misinformation. *Digital Journalism*, *7*(6), 802–823.

Veeramootoo, N., Nunkoo, R., & Dwivedi, Y. K. (2018). What determines success of an e-government service? Validation of an integrative model of e-filing continuance usage. *Government Information Quarterly, 35(2), 161-174., 35*(2), 161–174.

Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Sciences, 39*(2), 273–315. https://doi.org/10.1111/j.1540-5915.2008.00192.x

Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science, 46*(2), 186–204. http://pubsonline.informs.org/doi/abs/10.1287/mnsc.46.2.186.11926

Waemustafa, W., & Abdullah, A. (2016). Mode of Islamic Bank Financing: Does Effectiveness of Shariah Supervisory Board Matter? *Australian Journal of Basic and Applied Sciences, 9*(37), 458–465.

Wang, D. H., Chen, P., Yu, T. H., & Hsiao, C. (2015). The effects of corporate social responsibility on brand equity and fi rm performance. *Journal of Business Research, 68*(11), 2232–2236. https://doi.org/10.1016/j.jbusres.2015.06.003

Yang, Z., Sun, J., Zhang, Y., & Wang, Y. (2015). Understanding SaaS adoption from the perspective of organizational users: A tripod readiness model. *Computers in Human Behavior, 45*, 254–264. https://doi.org/10.1016/j.chb.2014.12.022

Yusup, M., Hardiyana, A., & Sidharta, I. (2015). User Acceptance Model on E-Billing Adoption : A Study of Tax Payment by Government Agencies. *Asia Pacific Journal of Multidisciplinary Research, 3*(4), 150–157.

Zelmiyanti, R. (2015). Perkembangan akuntansi berbasis akrual pada sektor pemerintah di indonesia. *Jurnal Riset Akuntansi Dan Komputerisasi Akuntansi, 6*(1), 68–72.

Zhu, Y., Zhang, J. H., Au, W., & Yates, G. (2020). University students' online learning attitudes and continuous intention to undertake online courses: A self-regulated learning perspective. *Educational Technology Research and Development, 68*(3), 1485–1519.