

HYBRID BETWEEN PIECES FRAMEWORK AND TECHNOLOGY ACCEPTANCE MODEL (TAM) IN QUALITY TESTING OF MOBILE APPLICATION OFFICE AUTOMATION SYSTEM (KEMENKEU)

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ABSTRACT

Digital transformation is a necessity that must be carried out by the government that provides public services. The success of digital transformation is to innovate the Office Automation System Mobile Application System (eKemenkeu application) based on Android/IOS to support simplification of business processes so that they can be easily accessed via smartphone devices. To get feedback on the quality of the eKemenkeu application, testing was carried out using the PIECES Framework and by selecting the Technology Acceptance Model (TAM) variable, as well as the Smart PLS 3.0 tool. The study analyzed 100 respondent data using 7 hypotheses with the results of 2 accepted hypotheses, namely H1 Original Sample value (0.335) and t-statistics (2.864) and H7 Original Sample (0.748) and t-statistics (10.401), and the second significance level is above 0, 05. Meanwhile, 5 hypotheses were rejected, because the t-statistic value was > 1.96 and the significance level of the p-value was below 0.05. The results of the Discriminate Validity test ranged in value (0.786 - 0.949). Composite Reliability ranges in value (0.828 - 0.949) or is accepted because it is above 0.7. Cronbach's Alpha range of values (0.721-0.920) or satisfactory > 0.7.

Keywords: *Office Automation, eKemenkeu, PIECES Framework, TAM, Smart PLS*

1. Introduction

The era of digital transformation in the government sector is a necessity as well as realizing the implementation of Industry 4.0, as well as in the context of simplifying business processes. The main business process of Government agencies is Government Administration Services in the form of general applications consisting of the Electronic Service Manuscripts (TNDE) module, the Electronic Presence module (e-Presence), the Personnel Information module, and the Agenda Management module as well as other modules as needed. organization or better known as Office Automation (OA). The understanding of OA based on Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE) is included in the general application group. General Application is the same SPBE application, standard, and used for sharing by central agencies and/or local governments.

Government agencies in the financial sector in Indonesia have changed their work patterns accompanied by digital transformation, one of which is the implementation of OA. OA implementation in order to build a Digital Workspace (DW) for Organizational and Human Resources (HR) development and support for Modern Strategic Initiatives (IS) e-learning as the main tool in HR development (Kementerian Keuangan, 2019), which is currently used by all employees up to the top management in the agency. DW is a new way of working in order to be able to work and be productive without being limited by location, connectivity and the use of digital technology. This is in line with the opinion of the National Information and Communication Technology Council (Wantiknas) that digital transformation is not only about technology, but also pays attention to social elements such as culture and society. For this reason, digital transformation requires the collaboration of all parties to make it happen (Nasional, 2020).

The Ministry of Finance is one of the government agencies that implements OA based on mobile applications (Kementerian Keuangan, 2020). This is inseparable from the increase in the use of smartphone devices and the development of the Android operating system which encourages the development of information systems with mobile characteristics as a solution in

the New Normal era in carrying out activities and working in the conditions of the Covid-19 pandemic.

An information system is a system within an organization that brings together the daily transaction processing needs that support managerial organizational functions with strategic activities of an organization in order to provide certain outside parties with the information needed for decision making. (Oktavianti & Buana, 2019)

The mobile application has a User interface with a unique interaction mechanism provided by the mobile platform. Mobile applications have also been designed specifically for mobile platforms (eg IOS, android, or windows mobile) (Afit Muhammad Lukman, 2019). Mobile application, also known as mobile apps, is a term used to describe internet applications that run on smartphones or other mobile devices. Mobile applications can also help users to connect to internet services which are usually accessed on a PC (Personal Computer) to be made easier with devices that are more convenient to carry wherever they are (portable). (Afit Muhammad Lukman, 2019)

Simplifying business processes in government agencies into mobile applications is a challenge for software developers, where development must pay attention to the rules of design, flexibility, user convenience and functionality as well as application compatibility on Android or IOS systems used on users' mobile devices.

According to Nasution (2004), currently, information technology has become a basic need for every agency, especially in carrying out all aspects of organizational activities. In relation to the application of Information Technology, there are three elements that must exist, namely hardware, software and brainware (Yulianingsih, 2016).

Computer technology has the potential to improve the performance of individuals and organizations so that companies invest in various computer applications. Apart from these developments, the potential benefits of computers in assisting managerial decision making have not been fully realized due to the low level of acceptance by users (P.L, 2006).

The development of information technology not only has an impact on business processes but also on information systems within the company (Meidawati, 2002). Today the information system of a business entity cannot be separated from the use of computer technology that involves hardware, software and brainware designed to convert data into useful information (P.L, 2006).

The Ministry of Finance (MoF), has implemented OA since 2018 with a website version and on December 9, 2019 for the first time it was launched in a mobile application version as shown in figure 1. One of the underlying reasons is for easy access, this application is provided in the form of two platforms. , namely mobile pages and applications. This application can be opened via the office.kemenkeu.go.id page or download the eKemenkeu application through the application store on IOS/Android.

To find out the benefits and acceptance of the OA Application, the Ministry of Finance has conducted a survey regarding the implementation of the Digital Workspace, some of which are questions related to the implementation of OA, including the mobile application version, but a special survey has not been conducted on the acceptance of the mobile application version of the OA application with the acceptance model using information system research. . In addition, with the addition of several modules on the OA mobile application and this application as one of the keys to the success of the Strategic Initiative for Bureaucratic Reform and Institutional Transformation (ISRBTk) in Government Agencies in the field of Finance, it is necessary to evaluate, and accept and quality applications from the employee's point of view.

The Ministry of Finance is a government agency in the field of Finance that has quite a number of employees, namely almost 79,000 employees, where the use of the mobile application eKemenkeu is required for all employees. The eKemenkeu Mobile Application is an integrated information system, so that as an information system there are obstacles or disturbances that may occur when using the eKemenkeu mobile application. Potential disturbances include: the user is unable to log in or the login is constrained, the data input process fails, an error occurs when using one of the menus, the service crashes or the process stops, and other things that may occur in certain cases for the user.

In addition, application development or the Developer Team also requires user input and suggestions so that the eKemenkeu mobile application is more tailored to user needs and is user friendly, and continues to innovate in presenting information data needed by users and organizations. To get input and suggestions from users, it is necessary to conduct a study on quality with a general acceptance model carried out on information systems.

The PIECES Framework and Technology Acceptance Model (TAM) are 2 of the acceptance models used in the research, in addition to the DeLone and McLean model, End User Computing Satisfaction (EUCS), Human-Organization-Technology (HOT) FIT, Task Technology Fit (TTF) and other.

Other studies related to the Office Automation System include research on the OA mobile application on the e-Presence module to find out that the e-Presence application can help users, determine the level of satisfaction and the extent to which it can be accepted by users, it is necessary to identify problems and perceptions from the user. This research was conducted on one of the modules in the eKemenkeu mobile application using the PIECES Framework acceptance model (Prayogi et al., 2021). Previous OA user satisfaction research has been carried out using the End User Computing Satisfaction model at the Ministry of State-Owned Enterprises in 2019 (Ramadhan, 2019).

To compile the level of acceptance and satisfaction of using OA mobile applications using a Likert scale. The Likert scale uses several questions to measure individual behavior by responding to 5 choice points on each question item, strongly agree, agree, disagree, disagree, and strongly disagree (Likert 1932) (Budiaji, 2021).

In carrying out data processing and analysis of acceptance and satisfaction will use a structural equation model (Structural Equation Modeling (SEM)). In this study using SmartPLS software, so the SEM model applied is Component Based SEM.

2. Literature Review

This study uses 2 approaches, namely the Technology Acceptance Model (TAM) with 2 factors Perceived Usefulness and Perceived Ease of Use, and the PIECES Framework to test the quality of the Ministry of Finance's Office Automation System mobile application. Based on the previous description, the conceptual framework for testing Hypothesis 2 to Hypothesis 6 uses the PIECES Framework variable, while Hypothesis 7 uses the TAM variable.

Table 1 - List of Research Bases

No	Researcher	Title	Summary
1.	Charlesto Sekundera P.L., 2006	End User Acceptance Analysis Using Technology Acceptance Model (Tam) And End User Computing Satisfaction (EUCs) Towards Implementation Core Banking System at Bank Abc	This study analyzes the banking system using TAM and EUCS. The research object is employees of 48 branch offices of Bank ABC. The data processor uses the PLS Graph application. With a total of 7 hypotheses based on the variable approach used. 6 Hypotheses with satisfactory results, while 1 Hypothesis related to the Content variable is unsatisfactory. With 150 respondents
2	Nurul Intan As Ramadhan, 2019	Evaluation of Office Automation System User Satisfaction Using the End-User Computing Satisfaction Model at the Ministry of State-Owned Enterprises	This study analyzes the Office Automation System (OAS) of the Ministry of State-Owned Enterprises (BUMN). The object of the research is BUMN employees as many as 175 people with questionnaire and interview research methods. The software used is SPSS with the results of hypothesis analysis are 11 hypotheses are accepted or influential. With 175 respondents.
3.	Ade Achmad Zulfahmi, Nufri Wilis, Satria Budi and Rimba	E-Presence Application Acceptance Analysis Using Pieces Framework	study uses the PIECES Framework with a total of 78 respondents in 2021. The level of satisfaction of users of the e-Presence application at government agencies in the financial sector is generated for each variable, namely Performance 4.71, Information and data 4.81, Economic 4.82, Control

	<i>Prasasti, 2021</i>		<i>and security 4.89, Efficiency 4.95, and Service 4.81, so for acceptance on all variables of the e-Presence application, it can be concluded that the average user feels SATISFIED, while in general the e-Presence application gets a value of 4.83 which can be accepted by users with a PUAS perception. There is a PIECES variable that gets a very high perception of user satisfaction, namely Efficiency with a value of 4.95, this shows that changes in work patterns in the context of digital transformation in government agencies have received a very good response and are proven to support simplification of business processes and are an effort to create a new work culture in the future. New normal transition during the Covid-1 pandemic . With 78 respondents.</i>
4.	<i>Nestiara Lidya Kakihary, 2021</i>	<i>Pieces Framework For Analysis Of User Saticfaction Internet Of Things-Based Devices</i>	<i>This study conducted an analysis of satisfaction with the Internet of Things (IoT) smart lamp and smart plug devices from Bardi Smart Home using the PIECES Framework . The object of this research is 10 BUMN employees with usage observation method. The software used is Excel with the results of the analysis of all values of the PIECES Framework variable giving a Satisfied level of satisfaction. With 7 respondents.</i>
5	<i>Rizka Ita Yuanita, 2021</i>	<i>Pieces Framework On The Implementation Of Rapid Enumeration And Evaluation Information System Of 2020 Population Census</i>	<i>This research was conducted in September 2020 with the object of research being the SP2020 Quick Enumeration and Evaluation Information System (Sicepat32 SLS). The results of the research using the PIECES model are as follows the assessment score in the Performance domain is 4.07; Information and Data 4.17; Economy 4.1; Control and Security with a score of 4.03; Efficiency with a score of 4.18 and Service with a score of 4.18. With 30 respondents.</i>

Research on the OA mobile application on the e-Presence module has been carried out to find out that the e-Presence application can help users, determine the level of satisfaction and the extent to which it can be accepted by users, it is necessary to identify problems and perceptions from users (Prayogi et al., 2021).

Meanwhile, previous OA user satisfaction research has been carried out using the End User Computing Satisfaction model at the Ministry of State-Owned Enterprises in 2019 (Ramadhan, 2019).

3. Research Methods

Research methodology

The research method is basically a scientific way to obtain data with a specific purpose and use. The scientific method means that research activities are based on scientific characteristics (knowledge), namely rational, empirical and systematic. Rational means research is carried out in ways that make sense, so that it can be reached by human reasoning (Garaika & Darmanah, 2019).

Developments in the field of information systems research have made it a distinct research tradition. (Baskerville and Myers, 2002). (Lee, 1991) defines the scope of study and perspective in information systems research as more than just examining technological systems, or social systems, or even both, but research in this field also investigates phenomena that arise when the two systems interact. This is what distinguishes the research perspective and the scope of the study of information systems is different from other disciplines. (Davis, 2000) identifies five areas of study that are developing in the field of information systems (Wahid, 2004).

First: The method must be critical, analytical, meaning that the method shows the existence of an appropriate and correct process to identify problems and determine methods for solving these problems. Second: The method must be logical, meaning that there is a method used to provide scientific arguments. Conclusions are made rationally based on the available evidence. Third: The method is objective, meaning that objectivity produces an investigation that can be imitated by other scientists in the same study under the same conditions. Fourth: The method must be conceptual and theoretical.

Therefore, to direct the research process carried out, researchers need to develop concepts and theoretical structures so that the results can be scientifically justified. Fifth: The method is empirical, meaning that the method used is based on reality or facts in the field (Sarwono, 2006).

The development of research models is very important to do. (Belout and Gauvreau, 2004) stated that most research models were developed using previous models and theories (Ramadhan, 2019). Primary research requires data or information from the first source, we usually call the respondent. Data or information obtained through written questions using a questionnaire or verbally using the interview method (Sarwono, 2006).

The research method is a type of descriptive research. Descriptive research is research conducted to determine the value of independent variables, either one or more variables (independent) without making comparisons, or connecting with other variables (Garaika & Darmanah, 2019). The data used in this study is primary data, namely data obtained from research from user sources or first. The data collected and analyzed is the respondent's data which is the object of research by filling out a questionnaire. This questionnaire is closed, namely the filler or respondent is part of the population set and the questionnaire has been given a choice of answers to be answered according to the respondent's perception.

At the stage of selecting the research method using a questionnaire, the respondent population will be selected to obtain relevant and quality respondent data. According to Webster's (Supranto: 1983) data means something that is considered or known to mean that data can provide an overview of a situation or problem associated with place and time (Garaika & Darmanah, 2019). Questionnaire is a data collection technique that is done by giving a set of questions or writing to respondents to answer. The questionnaire is an efficient data collection technique if the researcher knows the exact results of the variables to be measured and knows what the respondents can expect (Garaika & Darmanah, 2019).

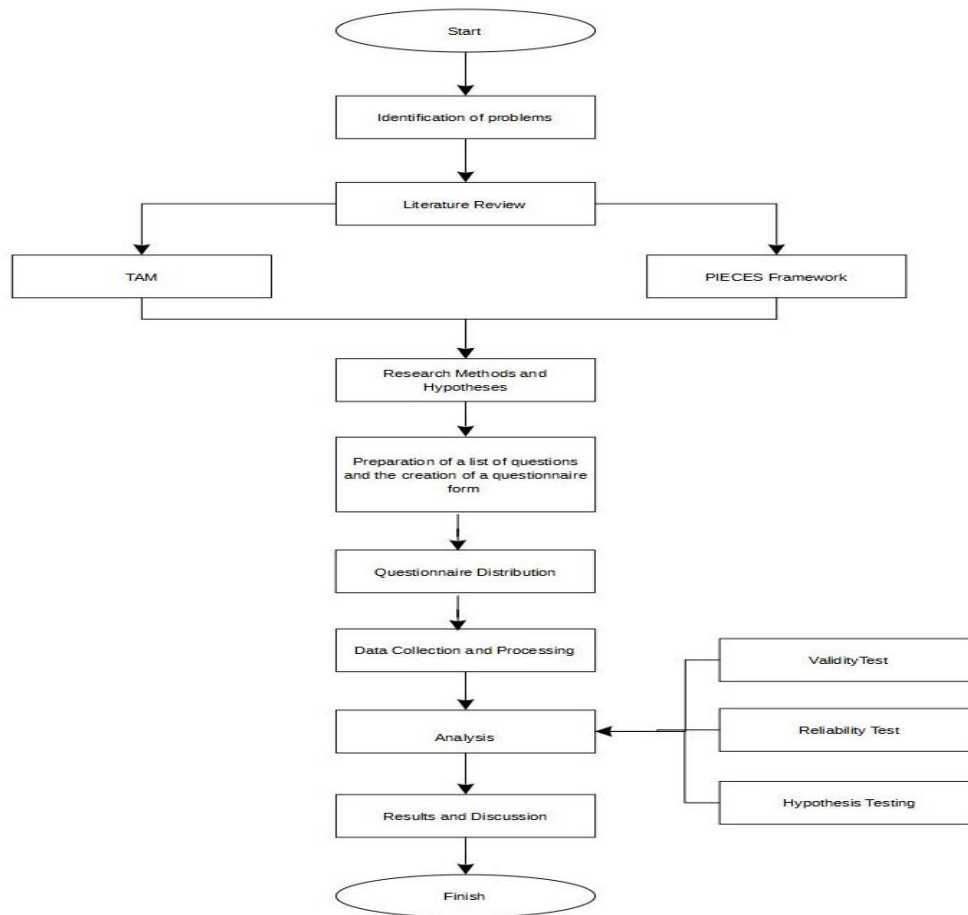


Fig 1. Stages of Research Method

Identification of problems

Based on the recapitulation of reports on problems using the eKemenkeu application recorded on the service ticket application and disturbances, as well as notes based on reports via Online Messaging WhatApps (WA) during the period from April 1 to May 31, 2022. The presentation of the report recapitulation has made modifications to sensitive words/information, improvements editorial or sentence correction, so that some words are changed or coded **xxxx** and qualification or mapping is carried out on the relationship between the report and the menu or module contained in the OAS version of the eKemenkeu application. The recapitulation of disturbance reports is as follows, the number of reports is 26 reports with 16 reports related to menus or modules in the OAS version of the eKemenkeu application, while 10 menu or module reports are only available on the Website version.

Hypothesis Development

The development of the model that will be used in the research uses the PIECES Framework which consists of 6 variables and the addition of 2 TAM variables to obtain the final results of the study, so that the variables used are 8 variables. The following is the model proposed by the researcher as shown in Figure 2 .

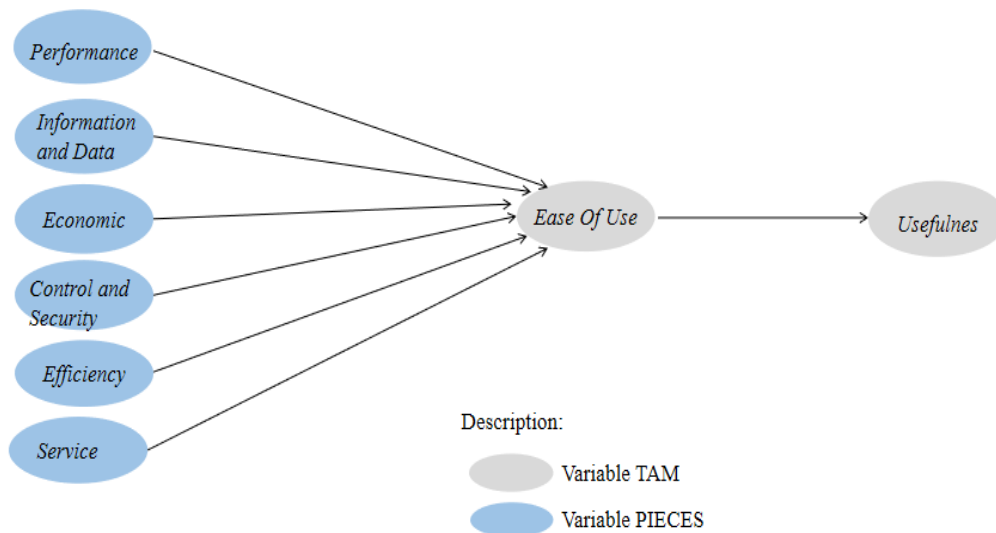


Fig 2. Flowchart of Hypothetical Variables

Based on Figure 2, it can be explained about the scope and influence on the object of research as follows:

- 1) Performance (P): the reliability of the information system will affect the user on the use of the information system.
- 2) Information and Data (ID): the presentation and accuracy of information and data can affect the use of information systems.
- 3) Economic (Ec): The value of the benefits generated by the information system can affect the use of information systems.
- 4) Control and Security (C): Control and security in information systems can affect the use of information systems.
- 5) Efficiency (Ef): Efficient in information systems can attract users of information systems.
- 6) Service (S): Support services on information systems can affect users of information systems.
- 7) Perceived Ease of Use (PEU): Ease of accessing information systems affects the interest of users of information systems.
- 8) Perceived Usefulness (PU): Observation of information system users on the utilization of the information system used.

After studying the PIECES Framework and TAM models, and knowing the menus or features of the eKemenkeu Mobile Office Application System, a hypothesis was developed. Hypothesis development using the PIECES Framework, and TAM perceived Usefulness and Perceived Ease of Use variables are as follows:

- H1: Performance (Reliability) has a positive effect on Ease of Use (Perceived Ease of Use) Office Automation mobile application system.
- H2: Information and Data, (Information and Data) have a positive effect on Ease of Use (Perceived Ease of Use) Office Automation mobile application system.
- H3: Economic (Economics) has a positive effect on Ease of Use (Perceived Ease of Use) Office Automation mobile application system.
- H4: Control and Security has a positive effect on Ease of Use (Perceived Ease of Use) Office Automation mobile application system.
- H5: Efficiency (Efficiency) has a positive effect on Ease of use (Perceived Ease of Use) Office Automation mobile application system.
- H6: Service has a positive effect on Ease of use (Perceived Ease of Use) Office Automation mobile application system
- H7: Ease of use (Perceived Ease of Use) has a positive effect on the usefulness of use (Perceived Usefulness) Office Automation application systems.

Population and Sample

This research has the object of research is the end user of the Mobile Application Office Automation System eKemenkeu at the Ministry of Finance. The Ministry of Finance's eKemenkeu application is used by all employees from both central and regional units. To get responses and responses from the intended application users, it is necessary to do a sampling mechanism.

To determine the number of sampling based on the potential population and according to research needs. According to the definition of Garaika and Darmanah (2019) Population is a generalization area consisting of objects/subjects that have certain qualities and characteristics determined by the researcher to be studied and then conclusions are drawn (Garaika & Darmanah, 2019). While the sample is part of the number and characteristics possessed by the population. (Garaika & Darmanah, 2019). The sampling technique used is probability sampling, which is a sampling technique that provides equal opportunities or opportunities for each element or member of the population to be selected as a sample (Nurtanti, 2017). For sampling data using Cluster Sampling (Sampling Area). Cluster sampling is a regional sampling technique that is used to determine the sample if the object being studied or the data source is very broad (Garaika & Darmanah, 2019).

Based on data from the Ministry of Finance's Human Resources website as of May 1, 2022, the number of employees is 79,971

Each government agency has a staffing structure in accordance with Government Regulation Number 11 of 2017 concerning Civil Servant Management consisting of (Republik Indonesia, 2017):

- 1) High Leadership Position (JPT) is a group of high positions in government agencies
- 2) Administrative Positions (JA) are a group of positions that contain functions and duties related to public services as well as government administration and development.
- 3) Functional Position (JF) is a group of positions that contain functions and duties related to functional services based on certain skills and expertise.

The Ministry of Finance is one of the government agencies in the form of a ministry so that the composition of employees consists of Civil Servants (PNS) or State Civil Apparatuses (ASN) from High Leadership Officials, Administrative Officials and Functional Officials.

The target respondents in this study were Administrative Officers and Functional Officers in the Ministry of Finance's employment population that the group of Administrative Officers and Functional Officers was 86% of the total 79,971 employees of the Ministry of Finance for the period of 1 May 2022. The selection criteria were as follows:

- 1) Active users of the Ministry of Finance's Mobile Application Office Automation System are employees at the Administrative Position and Functional Position levels based on fault ticket reports and the fulfillment of electronic service scripting services.
- 2) The Mobile Application Office Automation System is a mechanism for monitoring employees in stages, both in the Administrative and Functional Position groups, in conducting proof of attendance and independent health assessments.
- 3) The Ministry of Finance employees in composition based on generation or age are the most in the Gen Y, Gen X and Gen Z groups of 78.98% (79,003 people) of the total 79,791 employees.

Based on data on the number of employees of the Ministry of Finance from 14 units as shown in Table 2, the number of employees for the period 1 May 2022, and according to the conditions of the end users of the eKemenkeu application are Administrative Officers and Functional Officers, and based on age in the 24-56 year age range, it is determined sample clusters as follows:

<i>Generation Categorization</i>	<i>Total Population</i>
<i>Gen X (1965-1980)</i>	<i>23,108 people</i>
<i>Gen Y (1981-1996)</i>	<i>32,626 people</i>
<i>Gen Z (1997-2012)</i>	<i>23,269 people</i>
<i>Amount</i>	<i>79,003 people</i>

The technique used for sampling using Taro Yamame (1973,32) is as follows:

$$n = \frac{N}{N \cdot d^2 + 1}$$

Information :

n = Number of Samples

N = Total Population

d² = Precision (set 10%)

Respondent data in the study are as follows:

$$n = \frac{N}{N \cdot d^2 + 1} = n = \frac{79.003}{79.003 \times (0,1)^2 + 1}$$

$n = \frac{79.003}{791,03}$ n = 99,87 rounding to 100, then the number of respondents is 100 people.

Based on the calculation results of determining the number of samples, the study determined that the target respondents were 100 people. Meanwhile, to determine based on the number of respondents, each cluster uses the following calculation or CR:

$$CR = \frac{\text{Populasi Cluster}}{\text{Populasi}} \times \text{Sampe}$$

For respondents, each cluster is based on generational age as shown in Table 3 .

Table 3 - Cluster Sample of Ministry of Finance Employees

<i>Generation Cluster</i>	<i>Population</i>	<i>Sample</i>
<i>Gen X (1965-1980) Age > 42</i>	<i>23,108 people</i>	<i>29 people</i>
<i>Gen Y (1981-1996) 41 > Age > 26</i>	<i>32,626 people</i>	<i>41 people</i>
<i>Gen Z (1997-2012) Age < 25</i>	<i>23,269 people</i>	<i>30 people</i>
<i>Amount</i>	<i>79,003 people</i>	<i>100 people</i>

Data Collection and Processing

Collecting data in this study using a questionnaire. The combination of 2 methods is common in previous studies of the same or different research objects. To get answers to the questionnaire as many as 100 from respondents, the researchers used Google Forms as a medium for dissemination and suggestions for filling out responses.

The process of filling out the questionnaire was given a time limit of 14 calendar days. The questionnaires were distributed through the online messaging application (WhatsApp) by including the website address of the questionnaire application with an age range based on 3 generations X, Y and Z.

Data processing uses the editor provided by Google Forms and Office Excel applications as well as SmartPLS as an analytical tool for measuring Outer Model and Structural Model or Inner Model. Measurement Outer Model defines how each indicator relates to its latent variable. The Outer Model testing includes Validity Test and Reliability Test, while the Inner Model is a continuation test of the prediction of the causal relationship between the variables tested in the model. Indicators in the Inner Model include coefficients.

The reasons researchers use SmartPLS for testing the Outer and Inner Model include (Harahap, 2018):

- 1) Smart Partial Least Square (SmartPLS) is a statistical software that has the same purpose as Lisrel and AMOS, namely to test the relationship between variables.
- 2) SmartPLS is great because it doesn't rely on assumptions.
- 3) SmartPLS can use data processing with relatively less data (small).
- 4) SmartPLS uses bootstrapping method or random multiplication or does not have to have a normal distribution.
- 5) SmartPLS is able to test formative and reflective SEM models with different indicator measurement scales in one model.

Variables according to experts include: (1) Arikunto (1998), an object of research or something that becomes the focus of attention is called a variable. (2) Sugiyono (2009), variables are all that exist and will be determined by researchers and then studied, understood and analyzed to obtain information and draw conclusions. (3) Hatch and Farhady, (1981), variables consist of attributes of knowledge or activities of a person, or an object, which varies from each person or a particular object. (4) Kerlinger (1973), the variable is a construct or behavior determined by the

researcher. For example, expenses, income, education level, social status, employee performance and others. Kerlinger also explained that a variable is a behavior that is taken from different values or it can be said that a variable is something that varies. (5) Bhisma Murti (1996), variable as a phenomenon that has a variety of values. and can be measured qualitatively or quantitatively. (6) Ahmad Watik P (2007), variable as a concept that has variability which is defined as a description or abstraction of a certain phenomenon in any form and has varied characteristics. (7) Soekidjo Notoatmodjo (2002), the variable contains the notion of size, shape or a characteristic possessed by group members who are different from other groups. Variables can be used as a feature, trait or measure in research from a certain concept of understanding (Prof, DR. Rahadi, Dedi Rianto, & Farid, M.Mftah., 2021).

The types of variables based on measurement methods and research models (Ferdinand, 2006) (Liana, 2009) are as follows:

- 1) Latent Variable (Latent Variable) is a variable formed through indicators observed in the real world. Other names for latent variables are factors, constructs, or unobserved variables.
- 2) Measured Variables are variables whose data must be sought through field research, for example through surveys. Other names for measured variables are observed variables, indicator variables, or manifest variables.

Variables based on position or function in research (Nagtino MM, 2015) are as follows:

- 1) Independent Variable (Independent Variable) is a variable that can be measured, manipulated or selected experimentally to determine its relationship with a symptom experienced. The independent variable is also called the variable as the cause (presumed cause variable)
- 2) The dependent variable is the variable that is observed and measured to determine the effect of the independent. The dependent variable is often referred to as the criterion variable (criterion variable).
- 3) Control variables are variables controlled by the experimenter to cancel or neutralize their effects on the observed phenomenon (dependent variable).
- 4) Intervening Variable/Mediating Variable (Intervening Variable/Mediating Variable) is a variable that theoretically affects the observed phenomenon but cannot be seen, measured, or manipulated, the effect must be inferred from the influence of the independent variable on the observed phenomenon, namely that the conceptual variable being influenced by the variable independent and ultimately affect the dependent variable.
- 5) Moderating Variable is a variable that is measured, manipulated, or selected as an experiment to determine whether this variable modifies the relationship of the independent variable to the dependent variable to have a positive or negative effect (stronger or weaker).

The variables used in this study were 8 (eight) variables consisting of 2 (two) variables based on TAM, namely Usefulness and Ease of Use and 6 (six) based on the PIECES Framework variable, namely Performance, Information and Data (Information and Data), Economics (Economy), Control and Security (Control and Security), Efficiency (Efficiency), Service (Service).

Based on these variables, the study compiled a questionnaire for each of 3-4 questions, using the Likert scale method for measuring the perceptions of the respondents. Choice or alternative answers as Table 4 .

Table 4 - Weighted Value

Answer Options	Value Weight	
	Positive	Negative
<i>SS (Sangat Setuju or Strongly Agree)</i>	5	1
<i>S (Setuju or agree)</i>	4	2
<i>R (Ragu-ragu or undecided)</i>	3	3
<i>TS (Tidak Setuju or Disagree)</i> _	2	4
<i>STS (Sangat Tidak Setuju or Strongly Disagree)</i> _ _	1	5

Device And Tools

To support this research activity, tools are needed in the form of computer equipment equipped with office excel applications as a questionnaire data processing tool, Google web forms as a medium for submitting and filling out questionnaires, and the Smart PLS version 3.0 application as a testing tool for Component Based SEM analysis.

Technical Analysis

Structural Equation Model (SEM)

Structural Equation Modeling or better known as SEM has several other names, such as covariance structure analysis, latent variable analysis, confirmatory factor analysis and Linear Structural Relations analysis. Lisrel) (Hair, et al. 1998) (Harahap, 2018)(Rifai, 2015).

There are currently two SEM models, namely covariance-based SEM or known as Covariance Based SEM which uses AMOS and LISREL software and variance-based SEM or often called Component Based SEM which uses SmartPLS software and PLS Graph (P.L, 2006).

In this study using SmartPLS software, so the SEM model applied is Component Based SEM. For research with information systems objects, more use of Component Based SEM, where this technique uses non-parametric statistical concepts so there is no need to follow complicated assumptions. The main thing in the Component Based SEM method is that a minimum sample size of 50 data can be modeled, the measurement scale can be in the form of numbers, and the data does not have to be normally distributed. the prediction model and theoretical basis are not so strong, it is better to use Component Based SEM or also known as Partial Least Square (PLS) (Imam Ghozali, 2006). (P.L, 2006)

SEM has 3 (three) activities simultaneously, namely checking the validity and reliability of the instrument (confirmatory factor analysis), testing the relationship model between variables (path analysis), and getting a suitable model for structural model prediction and regression analysis.

Component Based SEM or PLS Analysis Method

As previously explained, the purpose of Partial Least Square (PLS) is to help researchers find latent variables for prediction purposes. According to Chin, 1998 (in Imam Ghozali, 2006) states that because PLS does not assume a certain distribution for parameter estimation, then parametric techniques to test the significance of parameters are not needed. The PLS evaluation model is based on predictive measurements that have non-parametric properties. PLS-SEM has a higher level of flexibility for regression research that connects theory and data, and is able to perform path analysis with latent variables (Rifai, 2015). In this study, PLS is used to measure or test expectations of satisfaction and acceptance of the use of the eKemenkeu Mobile Application Office Automation System. In the PLS evaluation model there are the following stages:

Outer model analysis

According to (Husein, 2015) analysis of the outer model is carried out to ensure that the measurement used is feasible to be used as a measurement (valid and reliable). There are several calculations in this analysis (Shafa, Pradika Muthiya and Hariyanto, 2008):

- 1) Convergent validity is the value of the loading factor on the latent variable with its indicators. Expected value > 0.7.
- 2) Discriminant validity is a crossloading factor value that is useful whether the construct has an adequate discriminant. The trick is to compare the value of the intended construct to be greater than the value of the other constructs.
- 3) Composite reliability is a measurement if the reliability value > 0.7 then the value of the construct has a high reliability value.
- 4) Average Variance Extracted (AVE) is the average variance of at least 0.5.
- 5) Cronbach alpha is a calculation to prove the results of composite reliability where the minimum amount is 0.6.

Inner Model Analysis

In the analysis of this model is to examine the relationship between latent constructs. There are several calculations in this analysis (Shafa, Pradika Muthiya and Hariyanto, 2008):

- 1) R Square is the coefficient of determination on the endogenous construct. According to Chin (1998) in Sarwono (2015: 30) explains "the criteria for limiting the value of this R square are in three classifications, namely 0.67 as substantial; 0.33 as moderate and 0.19 as weak".
- 2) Effect size (F square) to determine the goodness of the model. According to Chin (1998) in Ghozali (2015: 80) the interpretation of the f square value of 0.02 has a small effect; 0.15 has a moderate effect and 0.35 has a large influence on the structural level.

Variable Moderating Analysis

Based on the opinions of experts regarding moderating variables in the book *Monograph Analysis of Moderating Variables* (Dedi, Rianto R and Farid, Mmftah, 2021) as follows Moderating variables are the core of theory in business and social science (Cohen, Cohen, West, & Aiken, 2003). This symbolizes the maturity and sophistication of the field of inquiry (Aguinis, Boik, & Pierce, 2001. Frazier, Tix, & Barron, 2004). Moderating variables refer to variables that "influence a trait (e.g., magnitude and/or Memon et al., 2019. In statistical terms, moderation is where the relationship between the independent variable and the dependent variable changes according to the value of the moderator variable (Dawson, 2014) (Nagtino MM, 2015).

In another study using moderation analysis, it was stated that the more frequent user involvement would improve the performance of the accounting information system due to a positive relationship between user involvement and the performance of the accounting information system. The existence of user involvement can increase the acceptance of the system by users (Pattiasina et al., 2021). Variable moderation carried out on the independent variables of the study partially succeeded in influencing the dependent variable, thus strengthening the positive influence on other variables.

Organizational culture is able to moderate the effect of the effectiveness of accounting information systems on employee performance. The influence of organizational culture on the relationship between the effectiveness of accounting information systems on employee performance is able to moderate (strengthen or weaken), can be directly related to the effectiveness of accounting information systems and employee performance (Dwi Cahyanti & Suartana, 2018).

The variables used and according to the hypothesis that the independent variables are Performance, Information, Economic, Control, Efficiency, and Service, while the dependent variable is Ease of Use, where the moderating variable will be influenced by other independent variables to see whether the influence given between the independent variables will have an effect. strengthen or weaken the hypothesis.

Hypothesis Testing

The next stage is to test the hypothesis using PLS. The PLS method is a very strong analytical method because it is not based on many assumptions (Imam Ghozali, 2006) (P.L, 2006). T-testing by testing the significance of the constants and independent variables contained in the equation individually whether it affects the value of the independent variable (Imam Ghozali, 2001).

In this test, we compare the output with the help of the SmartPLS 3.0 application program with the bootstrapping method. Bootstrapping is a process to assess the level of significance or probability of direct effects, indirect effects, and total effects. If the value of T count < T table, then the null hypothesis is rejected, (significant regression coefficient), and if the alternative hypothesis stated in this study is accepted at a significance level of 5% (five percent) or 0.05. Measurement of the percentage influence of all independent variables on the value of the dependent variable, indicated by the magnitude of the coefficient of determination R-square (R²) between 1 and zero, where the value of R-square (R²) which is close to one gives a large percentage of influence (Chin, 1998).

4. Results and Discussions

Data Distribution

The results of the questionnaire data collection as in the population sampling design were 100 respondents from 3 generations or age groups who most often used office automation or the eKemenkeu application. The number of questions or statements is 26 items of questions or statements which are distributed to employees at the Ministry of Finance at the level of the Head Office Unit and the Vertical Office or Regional Office. The distribution of questionnaires is carried out with the assistance of related Officials/Employees in Echelon/Non Units within the Ministry of Finance via WhatsApp (WA) starting from July 1 to July 12, 2022.

Based on the calculation of the cluster or CR, the number of sample respondents is 100 people consisting of employees with an age range above or 42 years as many as 29 people, ages less than 41 years and above or equal to 26 years as many as 41 people, and ages equal to or under 25 year as many as 30 people. The total number of respondents is 145 people, but according to the sample design or CR requires 100 people based on the generation or age of the Ministry of Finance employees who most often use the eKemenkeu application and are included in the group of Administrative Positions from Executing to Echelon III Officials or equivalent, and Functional Positions that can be analyzed. The data is 100 respondents.

Evaluation of the Measurement Model or Outer Model

- 1) Convergent validity is the value of the loading factor on the latent variable with its indicators. Expected value > 0.7 .
- 2) Discriminant validity is a cross loading factor value that is useful whether the construct has an adequate discriminant. The trick is to compare the value of the intended construct to be greater than the value of the other constructs.
- 3) Composite reliability is a measurement if the reliability value > 0.7 then the value of the construct has a high reliability value.
- 4) Average Variance Extracted (AVE) is the average variance of at least 0.5.
- 5) Cronbach alpha is a calculation to prove the results of composite reliability where the minimum amount is 0.6.

Convergent Validity

The results of data processing using SmartPLS 3.0 software on the indicators between the correlation with the construct score are as shown in Table 5. The results of the Latent Variable Loading Values for all indicators on the variables get a correlation value above 0.70 with appropriate and acceptable conclusions.

Table 5 - Value of Loading Variables

No	Variable/ Construct	Indicator	Loading Value	Information
1	Performance	P1	0.712	According to convergent validity
		P2	0.905	According to convergent validity
		P3	0.832	According to convergent validity
2	Information	ID1	0.805	According to convergent validity
		ID2	0.859	According to convergent validity
		ID3	0.844	According to convergent validity
		ID4	0.864	According to convergent validity
3	Economic	Ec1	0.878	According to convergent validity
		Ec2	0.744	According to convergent validity
		Ec3	0.728	According to convergent validity
4	Control	C1	0.861	According to convergent validity
		C2	0.922	According to convergent validity
		C3	0.869	According to convergent validity
		C4	0.894	According to convergent validity
5	Efficiency	ef1	0.934	According to convergent validity
		ef2	0.922	According to convergent validity
		ef3	0.844	According to convergent validity
6	Services	S1	0.947	According to convergent validity
		S2	0.900	According to convergent validity
		S3	0.866	According to convergent validity

7	Ease of Use	PEU1	0.908	According to convergent validity
		PEU2	0.938	According to convergent validity
		PEU3	0.940	According to convergent validity
8	Usefulness	PU1	0.889	According to convergent validity
		PU2	0.848	According to convergent validity
		PU3	0.873	According to convergent validity

The following Figure 3 is the indicator correlation for each latent variable and the relationship between the variables analyzed using SmartPls 3.0.

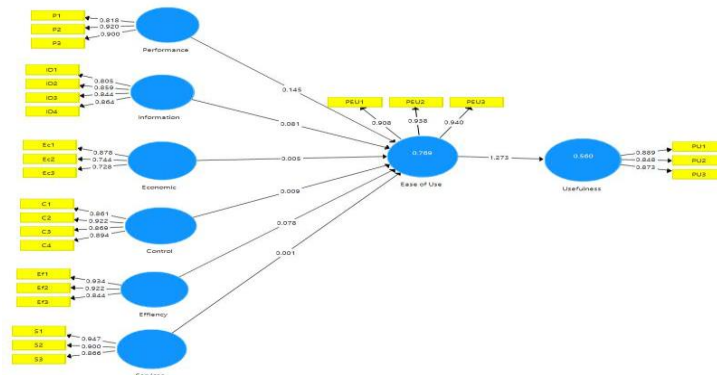


Fig 3. Flowchart of Correlation Between Variables

Discrimination Validity

Discriminant validity is a model of measurement with reflection indicators based on the value of cross loading for measurements with constructs. If the measurement value results that the item is larger than the size of the other constructs, then it indicates that the latent construct predicts the size of the block itself better than the other blocks. The trick is to compare the value of the intended construct to be greater than the value of the other constructs. Another way to measure the discriminant validity value of a construct is to look at the Average Variance Extracted (AVE) value, which is to compare the square root of AVE (\sqrt{AVE}) for each construct with the correlation between the construct and other constructs in the model. The AVE value can be said to meet the requirements of a good model if the construct value is greater than 0.5. Based on the output results in the SmartPls 3.0 software for the correlation results between constructs with Fornell Larcker criteria as shown in Figure 4.

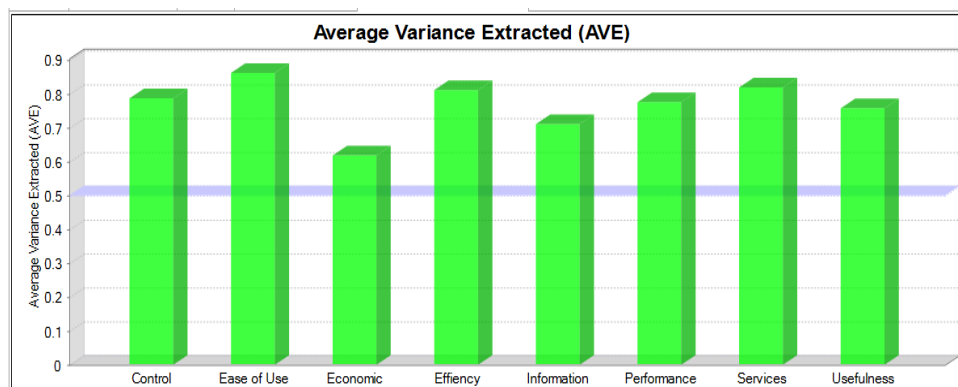


Fig 4. AVE Grafik Graphics

Based on Figure 4. the results of the AVE test are Performance (0.775), Information and Data (0.711), Economic (0.618), Control and Security (0.787), Efficiency (0.812), Service (0.819), Ease of Use (0.862) and Usefulness (0.757). So it can be concluded that all construct variables PIECES Framework and TAM get results above 0.5 or have met. The results of each construct above 0.7 then the discriminant validity requirements can be accepted or fulfilled as in Table 8. Output results on SmartPls 3.0 software obtained for all constructs having a validity value equal to and/or above 0.7. Discriminant validity constructs are Performance (0.843), Information and Data (0.843), Economic (0.786), Control and Security (0.949), Efficiency

(0.901), Service (0.905), Ease of Use (0.929) and Usefulness (0.870) . So it can be concluded that all variables are declared valid and meet the discriminant validity test, because all constructs are greater than 0.7.

Composite Reliability

Software SmartPLS 3.0 to be able to test the reliability by selecting the Composite Reliability menu, which is a way to measure a construct value by evaluating two kinds of measures, namely internal consistency and Cronbach's alpha where a limit value of 0.7 and above is acceptable. The following is Table 6. Composite Reliability & Cronbach's Alpha (α).

Table 6 - Composite Reliability & Cronbach's Alpha (α)

No	Variable	Composite Reliability	Cronbach's Alpha
1	Performance	0.912	0.855
2	Information	0.908	0.864
3	Economic	0.828	0.721
4	Control	0.937	0.910
5	Efficiency	0.928	0.884
6	Services	0.931	0.889
7	Ease of Use	0.949	0.920
8	Usefulness	0.904	0.842

Based on Table 6 for Composite Reliability results the lowest construct value is (0.828), while the highest is (0.949). For the results of Cronbach's Alpha (α) the lowest construct value is (0.721), while the highest is (0.920).

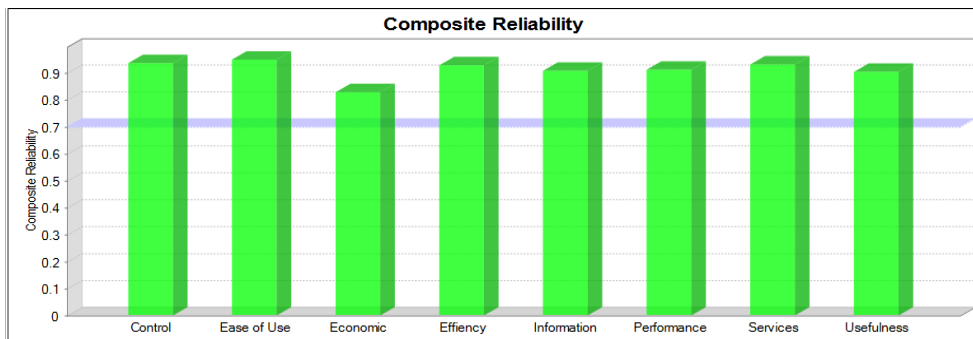


Fig 5. Composite Reliability Graph

Based on Figure 5, the results of testing the composite reliability construct values are Performance (0.912), Information and Data (0.928), Economic (0.828), Control and Security (0.949), Efficiency (0.928), Service (0.931), Ease of Use (0.949) and Usefulness (0.904). So it can be concluded that all PIECES Framework and TAM construct variables get results above 0.7 or satisfactory.

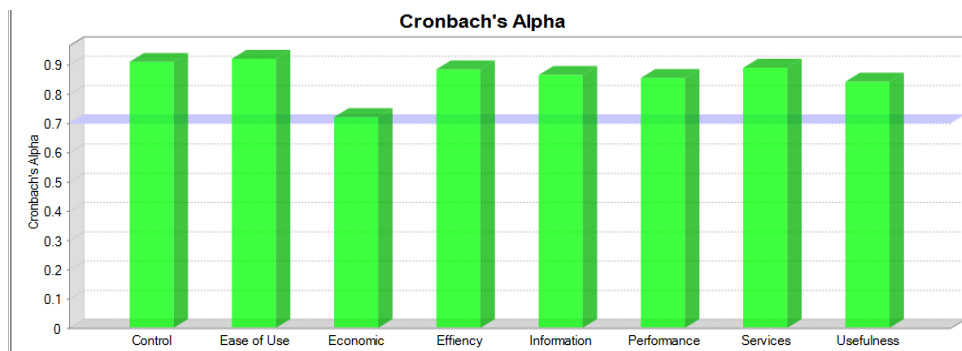


Fig 6. Graph of Cronbach's Alpha

Based on Figure 6 the results of testing the construct values of Cronbach's Alpha are Performance (0.855), Information and Data (0.864), Economic (0.721), Control and Security (0.910),

Efficiency (0.884), Service (0.889), Ease of Use (0.920) and Usefulness (0.842). So it can be concluded that all PIECES Framework and TAM construct variables get results above 0.7 or satisfactory.

Evaluation of Structural Model or Inner Model

Evaluation of the value of the inner model is a process of evaluating the relationship between constructs as proposed by this research hypothesis. R Square is the coefficient of determination on the endogenous construct. According to Chin (1998) in Sarwono (2015: 30) explains "the criteria for limiting the value of this R square are in three classifications, namely 0.67 as substantial; 0.33 as moderate and 0.19 as weak". Effect size (F square) to determine the goodness of the model. According to Chin (1998) in Ghozali (2015: 80) the interpretation of the F square value of 0.02 has a small effect; 0.15 has a moderate effect and 0.35 has a large influence on the structural level. (Shafa, Pradika Muthiya and Hariyanto, 2008). The results of data processing obtained the results of R2 are as follows:

Table 7 - Results of R Square

Variable	R Square
<i>Ease of Use</i>	0.769
<i>Usefulness</i>	0.560

Based on Table 7 the results of R Square have a value on the Ease of Use variable (0.769), while Usefulness (0.560). So the conclusion is that the R Square value for Ease of Use is a substantial category, because the R2 Ease of Use value is greater than 0.67, while Usefulness is in the moderate category, because it is more than 0.33 and less than 0.67.

Table 8 - F Square Results

Relationship Between Variables	F Square
<i>Performance > Ease of Use</i>	0.145
<i>Information > Ease of Use</i>	0.081
<i>Economics > Ease of Use</i>	0.005
<i>Control > Ease of Use</i>	0.009
<i>Efficiency > Ease of Use</i>	0.078
<i>Services > Ease of Use</i>	0.001
<i>Ease of Use > Usefulness</i>	1,273

Based on Table 8 the results of F Square show that the relationship between the PIECES Framework and TAM variables, namely Performance > Ease of Use (0.145) has a moderate effect, Information > Ease of Use (0.081) has a moderate effect, Economic > Ease of Use (0.005) has a moderate effect. moderate, Control > Ease of Use (0.009) has a moderate effect, Efficiency > Ease of Use (0.078) has a moderate effect, Services > Ease of Use (0.001) has a moderate effect, and Ease of Use > Usefulness (1.273) has a large influence at the structural level. So the conclusion on the value of F Square which has a large influence value is the Ease of Use variable on Usefulness of (1,273).

Evaluation of Moderating Variable

The evaluation of the moderating variable is to prove the independent effect on the dependent variable in this study. That the independent variable consists of 6 variables namely Performance, Information, Economic, Control, Efficiency, and Service to the dependent variable, namely Ease of Use with a moderation relationship scheme. The moderating relationship is as follows: Information variable with Performance moderator, Economic variable with Information moderator, Control variable with Economic moderator, Efficiency variable with Control moderator, Service variable with Efficiency moderator, and Performance variable with Service moderator. For the 2 Ease of Use variables as the dependent or affected variables and the moderating effect process was not carried out because it did not meet the requirements for moderating variable analysis, while the Usefulness variable did not carry out the moderating effect process because it did not meet the requirements for moderating variable analysis.

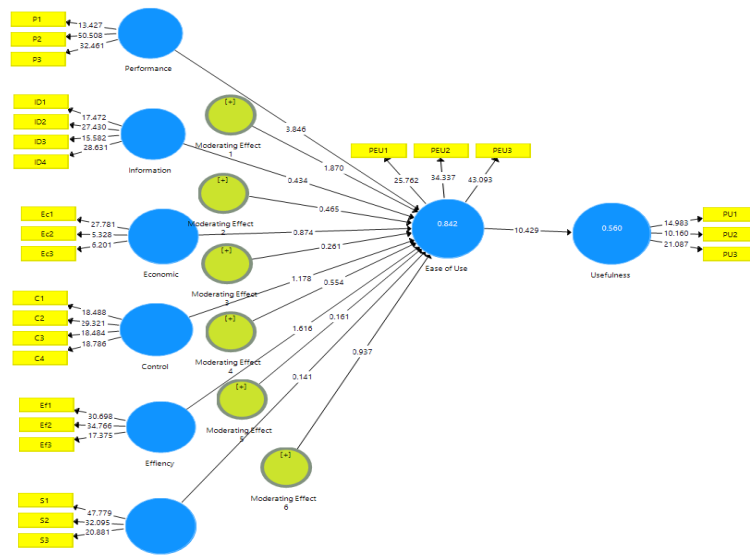


Fig 7. Variable Moderation Flowchart

Based on Figure 7, the moderating results are Moderating Effect 1 (1.870), Moderating Effect 2 (0.465), Moderating Effect 3 (0.261), Moderating Effect 4 (0.554), Moderating Effect 5 (0.161), and Moderating Effect 6 (0.937). all the moderating results of the t-statistical variable value <math>< 1.96</math>, so that the variable moderation process does not positively influence or strengthen the effect on the dependent variable.

Hypothesis Testing Results

The results of this research on the hypothesis using Smart PLS 3.0 software to determine the level of relationship between variables where the independent variable and dependent variable are in one model. This study uses a combination of 2 methods, namely the PIECES Framework and the Technology Acceptance Model (TAM) to obtain interrelated variables and have interactions on the construct, so that there are paths that are interrelated with each other and influence. The hypothesis model is drawn on the Smart PLS 3.0 application as shown in Figure 8.

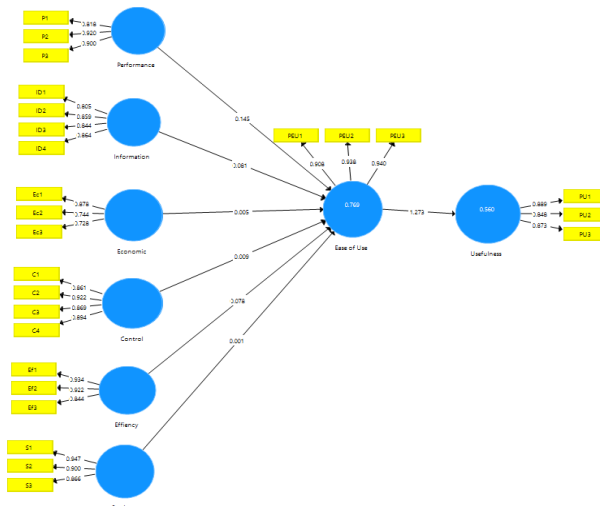


Fig 8. Variable Flowchart

Based on Figure 8 shows the flow of the relationship between the independent variable and the dependent variable using the Smart PLS 3.0 software can be done by running the bootstrapping algorithm (Awalukita et al, 2020). In his book Husein (2015: 21) hypothesis testing can be seen from the t-statistical value and probability value. To test the hypothesis by using statistical values, then for alpha 0.05 the t-statistic value used is 1.96. If the result of the relationship between the independent variable and the dependent variable is t-statistic > 1.96, it is declared to have a significant effect.

Based on the results of the bootstrapping test on the Smart PLS 3.0 software without carrying out the variable moderation process to test the t-statistic value of the relationship between the variables Ease of Use -> Usefulness with results (10.401), Performance -> Ease of Use with results (2.864), Information -> Ease of Use with results (1.699), Efficiency -> Ease of Use with results (1.586), Economic -> Ease of Use with results (0.547), Control -> Ease of Use with results (0.358) and Services -> Ease of Use with the result (0.226). From the results of the t-statistical test that the hypothesis with code H1 has a t-statistical value (2.864) and p-value (0.004), H2 has a t-statistical value (1.669) and p-value (0.090), H3 has a t-statistical value (1.586) and p-value (0.113), H4 has a t-statistical value (0.547) and p-value (0.585), H5 has a t-statistical value (0.358) and p-value (0.720), H6 has a t-value statistic (0.226) and p-value (0.720) and H7 has a t-statistical value (10.401) and p-value (0.000). The conclusion of the t-statistical test results to see whether the test results are accepted or rejected based on the data in Table 15.

The results of bootstrapping using moderating variables did not significantly affect the t-statistics and p-values on all hypotheses, so that the results of hypothesis testing as shown in Table 15 remained the same.

Based on the difference in the statistical t value, there was no significant change after variable moderation was carried out, 2 hypotheses namely Performance had a positive effect on Ease of Use and Ease of Use had a positive effect on Usefulness with t statistic results > 1.96 and p-value < 0.05 .

Table 9 - Hypothesis Testing Results

<i>Hypothesis</i>	<i>Test result</i>
<i>H1: Performance (Reliability) has a positive effect on Ease of Use (Perceived Ease of Use) Office Automation mobile application system.</i>	Received
<i>H2: Information and Data, (Information and Data) have a positive effect on Ease of Use (Perceived Ease of Use) Office Automation mobile application system.</i>	Rejected
<i>H3: Economic (Economics) has a positive effect on Ease of Use (Perceived Ease of Use) Office Automation mobile application system.</i>	Rejected
<i>H4: Control and Security has a positive effect on Ease of Use (Perceived Ease of Use) Office Automation mobile application system.</i>	Rejected
<i>H5: Efficiency (Efficiency) has a positive effect on Ease of use (Perceived Ease of Use) Office Automation mobile application system.</i>	Rejected
<i>H6: Service has a positive effect on Ease of use (Perceived Ease of Use) Office Automation mobile application system</i>	Rejected
<i>H7: Ease of use (Perceived Ease of Use) has a positive effect on the usefulness of use (Perceived Usefulness) Office Automation application systems.</i>	Received

Based on Table 9, it is a summary of the results of the testing of the hypotheses carried out in this study, that of the 7 hypotheses proposed and tested with the conclusion that 2 hypotheses are accepted, namely hypotheses H1 and H7 where the results of the t-statistical test are above 1.96 and the significance level is p. -value below 5% or 0.05. Meanwhile, 5 hypotheses, namely H2, H3, H4, H5, and H6 were rejected, where the t-statistic test results were below 1.96 and the significance level of the p-value was above 5% or 0.05.

Convergent Validity Final Result

Final evaluation of Convergent Validity after a series of t-statistical tests and Original Sample testing and hypothesis testing, where the Path Coefficients value, namely the Original Sample value, must be more than 0.05 ($O > 0.05$) and the t-statistic value must be more than 1, 96 ($t > 1.96$), then based on the Smart PLS bootstrapping process, only 2 hypotheses met the minimum requirements for Original Sample values and t-statistics, namely the Performance variable proposed in the H1 hypothesis and the Ease to Use variable proposed in the H7 hypothesis.

The hypothesis (H1) is that Performance (Reliability) has a positive effect on the Perceived Ease of Use of the mobile application system Office Automation, with an Original Sample (O) value of $0.355 > 0.05$ and a t-statistical value (t) $2.864 > 1,96$. Meanwhile, Perceived Ease of Use has a positive effect on the perceived usefulness of the Office Automation application system, with an Original Sample (O) value of $0.748 > 0.05$ and a t-statistical value (t) $10.401 > 1.96$.

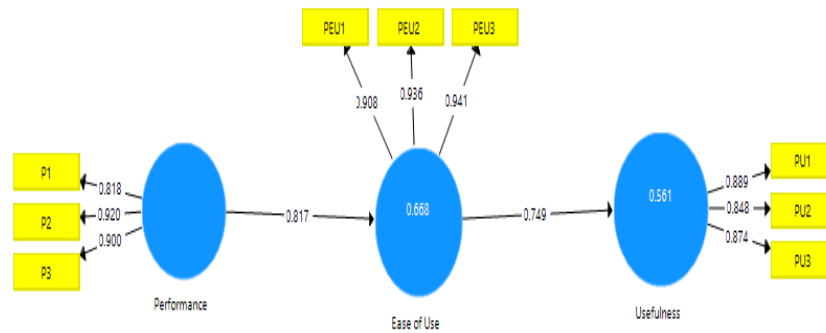


Fig 9. Final Variable Flowchart

Based on Figure 9, it is the final result of the relationship between the independent variable and the dependent variable, namely the Performance variable that affects Ease of Use, then Ease of Use affects Usefulness. So the conclusion in this study regarding the object of research is that the Office Automation System Mobile Application (eKemenkeu) has an aspect that is accepted by users of the eKemenkeu application, namely Performance can have a positive effect on Perceived Ease of Use, thus affecting Perceived Usefulness.

5. Conclusion

Based on the results of data collection, problem identification, data processing and analysis that have been carried out in a series of research activities, it can be concluded that the results have been described as in the chapters above, with a summary as follows:

- 1) This study uses 2 method approaches, namely PIECES Framework and Technology Acceptance Model (TAM) by using 2 variables Ease of Use and Usefulness as the dependent variable, so that there are 8 latent variables.
- 2) The object of the research is an office automation application based on the Android and IOS versions of the Mobile Application, which is used by all employees at the agency. The users or employees are spread from the Head Office in DKI Jakarta and Vertical Offices in DKI Jakarta and outside DKI Jakarta with a total of 79,971 people as of May 1, 2022.
- 3) The data of respondents who were sampled were 100 people based on the distribution of groups of 90% Administrative Positions and 10% Functional Positions. Respondents based on unit level are 57% from the Vertical Office and 43% from the Head Office. Respondents who filled out the questionnaire came from 17 provinces with the most data from DKI Jakarta as much as 46%.
- 4) Access characteristics of respondents in using the eKemenkeu application based on the type of connection used are using personal data packages/private wifi and office wifi as much as 46%, and based on modules or features the most accessed is Administrative Manuscripts (nadine) as much as 96%.
- 5) The results of the Convergent Validity test of all cross loading values of 8 variables get a correlation value above 0.70 so it can be said that all indicators proposed have met the requirements of Convergent Validity. The lowest cross loading value (0.712) is in the Performance variable in the P1 indicator, while the highest (0.947) is in the Service variable in the S1 indicator.
- 6) The results of the Discriminate Validity test with the above requirements are 0.7, while the results of all variables get almost the average value above, namely (0.786 - 0.949). The AVE met the requirements above 0.5, while the results of all variables were above the average, namely (0.618 - 0.862).
- 7) The results of the Composite Reliability test with the conditions accepted are above 0.7, while the results of all variables get values above the average, namely (0.828 - 0.949). Cronbach's Alpha got satisfactory results or results above 0.7, while the results of all variables were above the average (0.721-0.920).
- 8) The R Square test results for the Ease of Use variable greater than 0.67 are substantial, while Usefulness is in the moderate category, because it is more than 0.33 and less than 0.67. F

Square which has a large influence value is the Ease of Use variable on Usefulness of (1,273) or more than 0.35, while the others are moderate and structural.

- 9) The results of hypothesis testing, namely 2 accepted hypotheses, are hypotheses H1 and H7 where the t-statistic test results are above 1.96 and the p-value significance level is below 5% or 0.05. While the 5 hypotheses are H2, H3, H4, H5, and H6 are rejected where the t-statistic test results are below 1.96 and the significance level of p-value is above 5% or 0.05.
- 10) The final result of Convergent Validity is Performance which can have a positive effect on Perceived Ease of Use, thus affecting Perceived Usefulness.

Based on the conclusion, the suggestions that can be considered for further research and the owner of the eKemenkeu application are as follows:

- 1) For further research, other methods or models can be used, so that they can provide a different picture of the results, or develop research objects not only on the eKemenkeu mobile application, but also the Ministry of Finance Office website application as a general core system application at the Ministry of Finance.
- 2) Using more data sampling and reaching respondents in Vertical Office units, especially in remote areas or with minimal access to internet network infrastructure, so that users can get the real conditions expected by users of the eKemenkeu application.
- 3) Evaluating the 7 currently used hypotheses, of which only 2 are accepted, while 5 are rejected, so for future research it is recommended to develop more hypotheses, and to describe user expectations.

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