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The role of trust and attitude on behavioral intention to use regional government information system applications Empirical study in Semarang city government – Indonesia

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Abstract

The purpose of this research is to determine the role of trust and attitude on behavioral intention to use the Regional Government Information System (SIPD) application. This research proposes an original model that has never been used before, namely combining the Dwivedi, et al. [1] UTAUT model (2019) with the Hooda, et al. [2] UTAUT model (2022) and adding the perceived usefulness as an independent variable. This study uses survey method. The object of the study is SIPD application provided by the Ministry of Home Affairs of the Republic of Indonesia. The location of the study is in the Semarang City Government. Data analysis using The PLS method. The research findings are: 1) trust is able to mediate the relationship between social influence and behavioral intention, but is unable to mediate the relationship between facilitating conditions and behavioral intention; and 2) attitude is able to mediate the relationship between performance expectancy and effort expectancy on behavioral intention. This research model is able to increase the r2 of the behavioral intention variable to 67.00%. The practical implication of this research finding is the regional government encourages its civil servants to have a positive trust and attitude towards implementation of the SIPD application in order to achieve success.

Keywords: Attitude, Behavioral Intention, Original Model, Perceived Usefulness, SIPD, Trust, UTAUT.

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1. Introduction

To understand the success of using the Regional Government Information System (SIPD) application as a form of government electronic service, it is necessary to understand the factors that influence the adoption of information technology. In the study of government electronic service adoption based on the *Unified Theory of Acceptance and Use of*

Technology (UTAUT) model, the trust variable is an important variable to include in the research model considering the sensitive personal data of users [3]. Research conducted by Gupta, et al. [4]; Ahmad and Khalid [5]; Mansoori, et al. [6]; Mensah and Adams [7]; Almaiah and Nasereddin [8] and Zorali and Kanipek [9] include the trust variable in research based on the UTAUT model. The results of this study confirm that the trust variable is an independent variable in the UTAUT model.

Hooda, et al. [2] built a UTAUT-based research model that no longer uses trust as an independent variable but uses trust as a mediating variable. The results of Hooda, et al. [2] study show that trust mediates the relationship between social influence and facilitating conditions with behavioral intention. The results of Hooda, et al. [2] study are different from the results of Kurfalı, et al. [10] and Al Nidawy, et al. [11] studies.

The research model of Hooda, et al. [2] is different from the research model of Al Nidawy, et al. [11] regarding the variables influenced by the trust variable. The Hooda, et al. [2] model is also different from the research models of Kurfalı, et al. [10] regarding the direction of the influence of the trust variable. The research model of Al Nidawy, et al. [11] describes the trust variable as influencing the use behavior variable. The research model of Kurfalı, et al. [10] describes the trust variable as influencing the main UTAUT variables.

The conflicting research results (*research gap*), different research models and conflicting directions of influence of trust variable as described above make it important to develop the research model of Hooda, et al. [2] with the hope of being useful in obtaining a model with greater explanatory power and being able to confirm the direction of influence of trust variable.

This study is a development of the research model of Hooda, et al. [2]. The development was carried out by combining the research model of Davis [12] with the research model of Hooda, et al. [2]. The combination of the two models is also based on the consideration that the role of attitude variable as mediating variable is rarely studied. In addition, the perceived usefulness variable is also added to this model as an independent variable.

The object of this research is the SIPD application as an information technology compiled by the Ministry of Home Affairs of the Republic of Indonesia as an electronic government service that must be used by local governments in order to manage more complete and integrated information in one system. The SIPD application can be called an application with a new paradigm.

The implementation of SIPD application as an electronic government service is expected to encourage the achievement of participatory, transparent and accountable public administration services and improve services to the community [13]. However, the facts show a high failure rate in the implementation of electronic government service applications [14, 15]. The high failure rate in the implementation of electronic government services illustrates the importance of conducting research on the adoption of SIPD applications as electronic government services.

This study is expected to obtain a UTAUT model with greater explanatory power (r^2) of behavioral intention variables through the combination of two research models and the addition of one independent variable. The research questions that arise are:

RQ1. whether trust and attitude are able to become mediating variables?

RQ2. whether perceived usefulness is able to influence behavioral intention?

2. Literature Review and Hypothesis Development

2.1. Theory of Planned Behavior (TPB)

Theory of Planned Behavior (TPB) Ajzen [16] is an extension of the previous theory, namely *the Theory of Reasoned Action* (TRA) [17]. TRA concluded that the intention to do something is caused by 2 (two) factors, namely attitudes towards behavior and subjective norms [17]. Developed the TPB by adding constructs that do not yet exist in TRA namely perceived behavioral control.

2.2. Technology Acceptance Model (TAM)

The technology adoption used in this study is based on the renewal of the model, namely TAM (*Technology Acceptance Model*). According to Davis [12] the main purpose of TAM is to provide a basis for tracing the influence of external factors on user beliefs, attitudes and goals. TAM assumes that 2 (two) individual beliefs, namely perceived usefulness and perceived ease of use, are the main influences on computer acceptance behavior. Perceived usefulness focuses on the intrinsic value of a technology/system.

2.3. Unified Theory of Acceptance and Use Technology (UTAUT) *Model*

Venkatesh, et al. [18] built a model of information technology measured by the intention to use technology and the level of actual use of the technology. The initial UTAUT model consists of four variables as determinants in the use of information technology, namely Performance expectancy, effort expectancy, social influence and facilitating conditions [18]. UTAUT is a technology adoption model that is based on basic theories about technology user behavior and models of adoption or behavior and acceptance of developing technology users.

2.4. Regional Government Information System (SIPD) Application

The Regional Government Information System (SIPD) application is a mandate from Article 391 of the Republic of Indonesia Law Number 23 of 2014 concerning Regional Government. Instructions for implementing SIPD are stated in the Regulation of the Minister of Home Affairs of the Republic of Indonesia Number 70 of 2019 concerning the Regional Government Information System.

The SIPD application is an information technology-based application to manage regional development information, regional financial information and other interconnected regional government information. The SIPD application provides information to the public regarding the implementation of regional government. The SIPD application produces interconnected and integrated electronic-based regional government information services, as well as improving accountable, effective and efficient governance.

2.5. Hypothesis Development

2.5.1. Performance Expectancy

Performance expectancy is defined as an individual's perception that using information technology will improve their job performance [18]. Performance expectancy reflects an individual's expectation that the information technology used supports achieving their overall job performance. According to Farooq, et al. [19] performance expectancy influences a person's intention to use information technology.

H_1: Performance expectancy have a positive effect on behavioral intention to use the SIPD application.

2.5.2. Effort Expectancy

Effort expectancy is the user's perception that information technology is easy to use and free from complications [18]. Effort expectancy can be interpreted as the user's belief that it will be easy to use information technology and free from problems that may arise due to interacting with information technology [18].

H_2: Effort expectancy have a positive effect on behavioral intention to use the SIPD application.

2.5.3. Social Influence

Social influence is the level of user confidence that the user will implement information technology as expected by society. Social influence reflects the user's intention to use information technology influenced by people around them, such as friends, colleagues or relatives [18]. Previous studies provide empirical evidence that social influence has a positive effect on behavioral intention to use government electronic services.

H_3: Social influence has a positive effect on behavioral intention to use the SIPD application.

2.5.4. Facilitating Conditions

Facilitating conditions refer to individual perceptions of the availability and adequacy of organizational and technical infrastructure to support the use of technology [18]. Facilitating conditions reflect the quality of applications used by users, including reliable internet networks, error-free software and capable hardware, and prompt resolution of technical issues that arise.

H_4: Facilitating conditions have a positive influence on behavioral intention to use the SIPD application.

2.5.5. Perceived Usefulness

Davis [12] through the *Technology Acceptance Model* (TAM) describes the perceived usefulness variable as a person's belief that an information technology will help him or her in carrying out certain jobs more effectively . The perceived usefulness variable reflects an individual's experience of the benefits of using information technology to complete certain tasks. Based on the TAM model, it is suspected that perceived usefulness has a positive effect on behavioral intention to use information technology.

H_5: Perceived usefulness has a positive effect on behavioral intention to use the SIPD application.

2.5.6. Behavioral Intention

Behavioral intention reflects a person's psychological state before adopting an information technology. *The Theory of Reaction Actions* (TRA) asserts that a person's actions are based on behavioral intention. According to Davis [12] behavioral intention refers to the user's readiness to behave in accepting and using or adopting a particular information technology.

H_6: Behavioral intention has a positive effect on use behavior the SIPD application.

2.5.7. Social Influence and Trust

Social influence means that users believe information from their environment that users should adopt certain information technologies [18]. In the context of government e-services, social influence describes the influence of the office environment where ASN work, such as colleagues and leaders. The results of research by Hooda, et al. [2] show that social influence has an effect on trust in government electronic services.

$H_{7:}$ Social influence has a positive effect on trust in the SIPD application.

Empirical analysis conducted by Hooda, et al. [2] shows that trust in government e-services plays a central role in behavioral intention to use government e-services. The results of research by Zorali and Kanipek [9] confirm the significant influence of trust variables on behavioral intention to use government e-services.

$H_{8:}$ Trust has a positive effect on behavioral intention to use the SIPD application.

Hooda, et al. [2] integrated trust variables in government e-services with the UTAUT model, which aims to clarify the influence of trust variables on behavioral intention and the factors that form trust variables. Integrating the significance of social influence variables on trust with the significance of the influence of trust variables on behavioral intention means developing trust variables into mediating variables.

$H_{9:}$ Trust mediates the relationship between social influence and behavioral intention to use the SIPD application.

2.5.8. Facilitating Conditions and Trust

Facilitating conditions are defined as the extent to which a person believes that the organizational infrastructure and technical conditions are capable of supporting the implementation of information technology [18]. In the context of government e-services, facilitating conditions describe the provision of facilities for the adoption of government e-services. If the government provides adequate facilities, it will increase user trust in the government e-services. The results of the study by Hooda, et al. [2] show that facilitating conditions have an effect on trust in government e-services.

$H_{10:}$ Facilitating conditions have a positive influence on trust in the SIPD application.

Mansoori et al. (2018) stated that trust has an effect on behavioral intention to use government e-services in Abu Dhabi. The results of Mensah [20] study confirmed that trust has an effect on behavioral intention of foreign students and Chinese students to use government e-services in China. Likewise, the results of Almaiah and Nasereddin [8] study also confirmed that trust has an effect on behavioral intention to use e-services in Jordan.

$H_{11:}$ Trust has a positive effect on behavioral intention to use the SIPD application.

Hooda, et al. [2] stated that trust plays an important role in the relationship between facilitating conditions and behavioral intention to use government e-services.

$H_{12:}$ Trust mediates the relationship between facilitating conditions and behavioral intention to use the SIPD application.

2.5.9. Performance Expectancy and Attitude

Performance expectancy reflect users' perceptions that the use of government e-services provides benefits in improving their overall job performance. These performance expectancy will shape positive attituds towards government electronic services. The results of research by Alryalat [21] provide empirical evidence that performance expectancy influence attitude towards government electronic services.

$H_{13:}$ Performance expectancy have a positive effect on attitude towards SIPD application.

Attitude is defined as a person's positive or negative feelings to do something [12]. A positive attitude towards information technology or government electronic services will increase behavioral intention to use information technology or government electronic services. The results of research by García Botero, et al. [22] and Afrizal and Wallang [23] show that attitude influences behavioral intention to use government electronic services.

$H_{14:}$ Attitude has a positive influence on behavioral intention to use the SIPD application.

Davis [12] built a research model that emphasizes the factors that shape attitude and the role of attitude variable in behavioral intention. The results of their empirical analysis show that attitude plays an important role in the relationship between performance expectancy and behavioral intention. The empirical analysis also shows attitude as a mediating variable in the relationship between performance expectancy and behavioral intention.

$H_{15:}$ Attitude mediates the relationship between performance expectancy and behavioral intention to use the SIPD application.

2.5.10. Effort Expectancy and Attitude

Effort expectancy describe the ease of use of government electronic services. Users of government electronic services expect ease in using information technology and ease in learning and operating information technology so that it does not require heavy effort. The level of ease in learning and operating information technology will affect user attitude towards government electronic services. If it is easy to learn and operate an information technology, the user's attitude will be positive towards the information technology, conversely, if it is difficult to learn and operate an information technology, the

user's attitude will be negative. Muhammad and Kaya [24] provide empirical evidence that effort expectancy influence attitude towards government electronic services.

$H_{16:}$ Effort expectancy have a positive effect on attitude towards SIPD application.

Ajzen [16] defines attitude as the degree to which a person evaluates or assesses positively or negatively the behavior in question. A positive attitude towards government electronic services will increase behavioral intention to use government electronic services. The results of research by Moya M. et al [25] and Nasri [26] confirmed that attitude influences the intention to use government electronic services.

$H_{17:}$ Attitude has a positive influence on behavioral intention to use the SIPD application.

The research models of Rai, et al. [27]; Xin, et al. [28] and Muhammad and Kaya [24] integrate attitude variable with the UTAUT model. These research models develop attitude variable as mediating variable.

$H_{18:}$ Attitude mediates the relationship between effort expectancy and behavioral intention to use the SIPD application.

3. Research Methodology

3.1. Population and Sample

The population in this study was the State Civil Apparatus (ASN) of the City Government who served as administrators and functional implementers totaling 3,204 employees [29]. The sample was taken using *purposive sampling technique* based on the criteria, namely ASN who serve in the Administration Section (Secretariat) of the Regional Work Unit (SKPD) and in the Field of the Regional Finance and Asset Management Agency in the Semarang City Government with a minimum work period of 2 (two) years. The sample size taken is at least 270 (two hundred and seventy) respondents.

The research data is primary data. The data was obtained directly in the field from respondents through questionnaire distribution. Respondents' answers were in the form of rejection or agreement options for the statements submitted in the questionnaire using a 5-level Likert scale, namely from a score of 1 to 5 in the order of strongly disagree to strongly agree. The number of questionnaires distributed was 380 bundles, 334 bundles of questionnaires were received back and 306 bundles of questionnaires were processed.

3.2. Data Analysis Methods

The research data will be processed and analyzed based on the Partial Least Square Structural Equation Model (PLS-SEM) approach using the SmartPLS application version 4.1.1.2. Data analysis includes: 1) descriptive statistics; 2) evaluation of the measurement model; and 3) evaluation of the structural model. Descriptive statistical analysis describes the minimum value, maximum value, average and standard deviation. Data analysis based on PLS-SEM describes the testing of the outer model and inner model.

3.3. Research Model

Figure 1 describes research model.

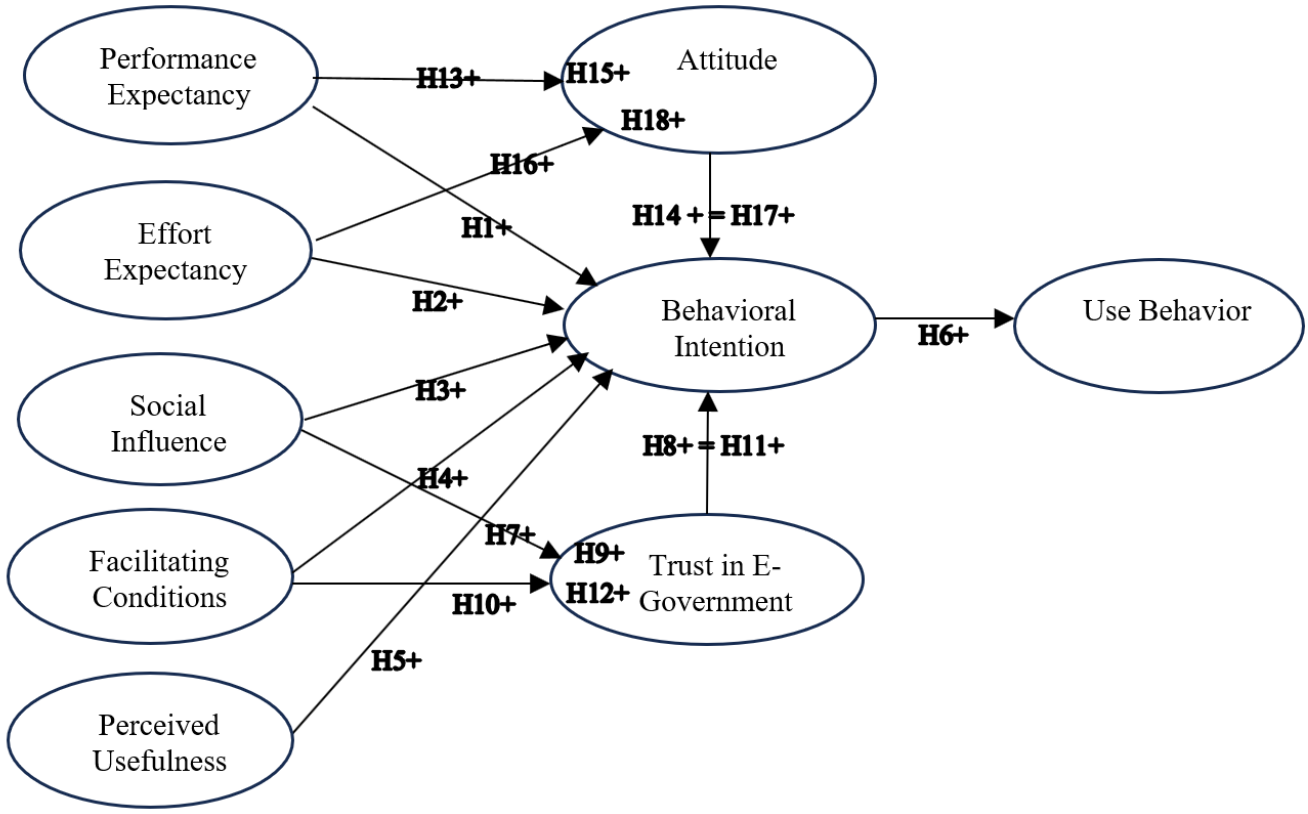

Figure 1.
Research Model.

4. Data Analysis and Hypothesis Testing

4.1. Preliminary Study

A preliminary study was conducted to assess respondents' understanding of the questionnaire. The preliminary study will ensure that the statements in the questionnaire are clear and simple. The indicators or statements of the questionnaire are said to be valid if the indicator has a Pearson correlation coefficient of more than 0.7. The indicator is said to be reliable if the Cronbach Alpha value is more than 0.7 with a significance figure below 5%. The number of respondents in the preliminary study was 30 respondents.

4.2. Respondent Demographics

The number of male respondents was 112 people and female respondents were 194 people. The distribution of respondents' ages is as follows: 56 people are in the 18-28 age group, 140 people are in the 29-39 age group, 80 people are in the 40-50 age group and 30 people are in the 51-60 age group. A total of 79 respondents have less than 5 years of work experience and 227 respondents have more than 5 years of work experience (Table 1).

Table 1.
Respondent Demographics.

Demographics	Category	Amount	Percentage
Gender	Male	112	36.60%
	Female	194	63.40%
Age	18-28 years old	56	18.30%
	29-39 years old	140	45.75%
	40-50 years old	80	26.15%
	52-60 years old	30	9.80%
Experience	< 5 years	79	25.82%
	>= 5 years	227	74.18%

4.3. Response Rate Testing

The number of distributed questionnaires was 380 questionnaires, while those processed were 306 (Table 2). *The response rate* was 80.53% which means the category is very good [30].

Table 2.
Response Rate.

Questionnaires	N	Respon Rate
Distributed	380	
Processed	306	80.53%

4.4. Data Analysis

4.4.1. Descriptive Statistics

Descriptive statistics describe a comprehensive summary of research data, including metric figures such as minimum, maximum, average and standard deviation. The average value of the research data shows a number that is in the middle range. A standard deviation lower than the average value indicates that respondents' perceptions are clustered around the average value (Table 3).

Table 3.
Descriptive Statistics.

Variable	N	Min	Max	Mean	Standard Deviation
Perfomance Expectancy (PE)	306	7,00	20,00	15,14	2,61
Effort Expectancy (EE)	306	4,00	15,00	11,13	2,01
Social Influence (SI)	306	6,00	15,00	11,56	1,88
Facilitating Conditions (FC)	306	4,00	10,00	8,01	1,14
Perceived Usefulness (PU)	306	4.00	20.00	14.42	3.21
Trust in E-Government (TeG)	306	4.00	15.00	11.04	1.93
Attitude (Att)	306	6.00	15.00	11.28	1.69
Behavioral Intention (BI)	306	5.00	20.00	15.47	2.29
Use Behavior (UB)	306	2.00	5.00	4.18	0.65

4.4.2. Evaluation of Reflective Measurement Model

4.4.2.1. Outer Loading and Convergent Validity Testing

The results of the outer loading test show that the 3rd indicator of the social influence variable and the 3rd indicator of the behavioral intention variable have outer loading values below 0.7. However, these indicators are maintained because the AVE and CR values of the social influence variable and the behavioral intention variable meet the requirements, namely AVE> 0.5 and CR> 0.7 (Table 4 and Figure 2).

Table 4.
Outer Loading and Convergent Validity Testing.

Variable		Outer Loading	AVE	CR
Perfomance Expectation (PE)	PE 1	0.781	0.648	0.880
	PE 2	0.807		
	PE 3	0.799		
	PE 4	0.832		
Effort Expectation (EE)	EE 1	0.872	0.671	0.859
	EE 2	0.836		
	EE 3	0.744		
Social Influence (SI)	SI 1	0.939	0.739	0.893
	SI 2	0.928		
	SI 3	0.688		
Facilitating Conditions (FC)	FC 1	0.909	0.806	0.893
	FC 2	0.887		
Perceived Usefulness (PU)	PU 1	0.929	0.781	0.934
	PU 2	0.939		
	PU 3	0.930		
	PU 4	0.717		
Trust in E-Government (TeG)	TeG 1	0.890	0.674	0.860
	TeG 2	0.851		
	TeG 3	0.712		
Attitude (Att)	Att 1	0.710	0.594	0.814
	Att 2	0.790		
	Att 3	0.809		
Behavioral Intention (BI)	BI 1	0.902	0.681	0.893
	BI 2	0.879		

	BI 3	0.626		
	BI 4	0.862		
Use Behavior (UB)	UB	1.000	1.000	1.000

Outer Loading

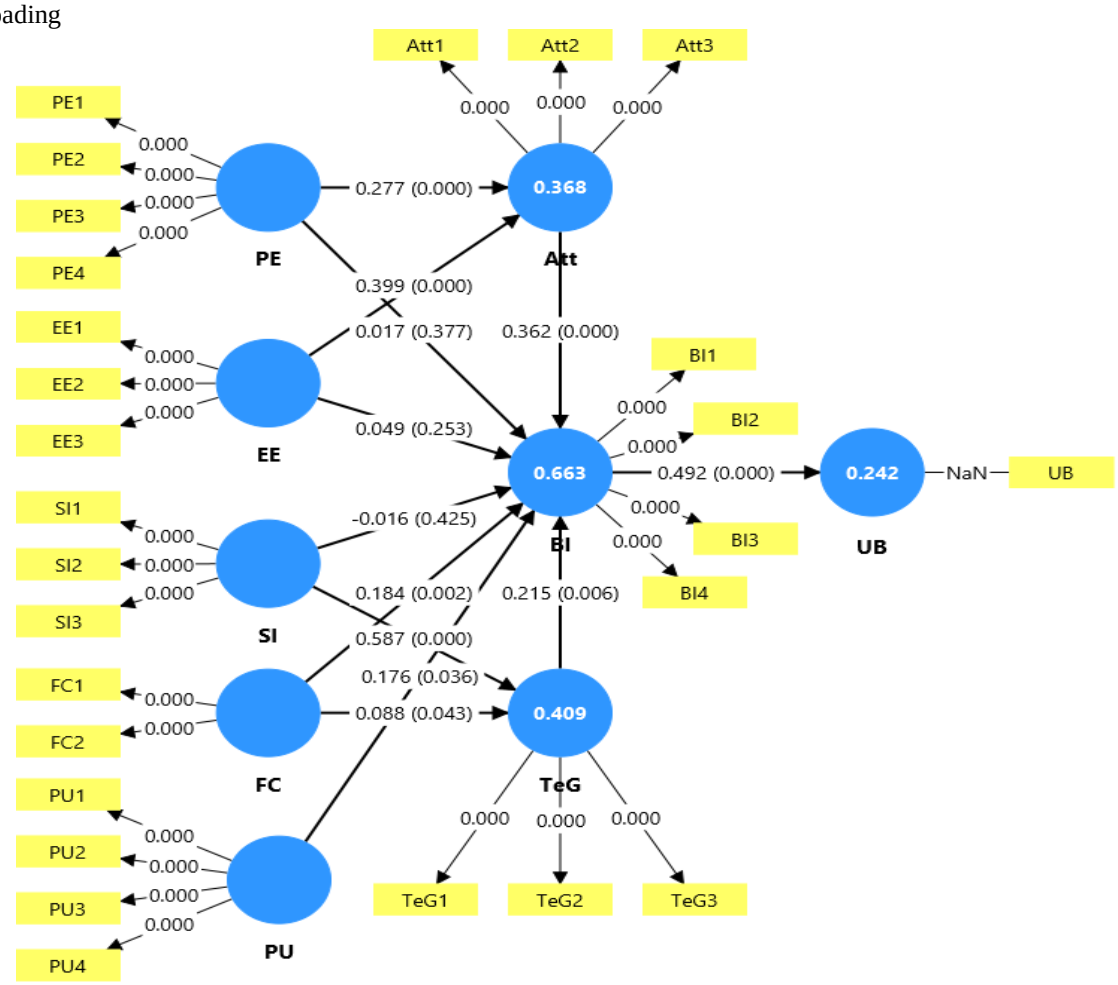

Figure 2.
Outer Loading.

4.4.2.2. Discriminant Validity Testing

Discriminant validity testing using the Heterotrait-Monotrait (HTMT) ratio. The test results show that the HTMT ratio between the trust variable (TeG) and the attitude variable (Att) is higher than 0.90. Also, the HTMT ratio between the attitude variable (Att) and the behavioral intention variable (BI) is higher than 0.9 (Table 5). In order for the research model to be free from the problem of an excessively high HTMT ratio, the Trust variable indicator (TeG) or the Attitude variable indicator (Att) that has the highest average correlation will be removed. The 1st indicator of the attitude variable is removed from the variables because it has the highest average correlation of 0.360185 (Table 6). The results of the HTMT ratio test after the 3rd indicator of the attitude variable is removed show that all indicators have HTMT ratio values that meet the criteria, namely below 0.9 (Table 7).

Table 5.
HTMT Ratio Value.

Variable	PE	EE	SI	FC	PU	TeG	Att	BI	UB
PE									
EE	0.754								
SI	0.757	0.761							
FC	0.468	0.570	0.709						
PU	0.790	0.819	0.770	0.588					
TeG	0.744	0.783	0.811	0.546	0.876				
Att	0.697	0.805	0.874	0.684	0.753	1.003			
BI	0.649	0.731	0.734	0.685	0.773	0.885	0.981		
UB	0.344	0.371	0.557	0.462	0.404	0.441	0.569	0.529	

Table 6.
Correlation of Trust Variable Indicators with Attitude Variable Indicators.

Indicators	TeG1	TeG2	TeG3	Mean
Att1	0.329167	0.295833	0.455556	0.360185
Att2	0.320139	0.312500	0.172917	0.268519
Att3	0.335417	0.361806	0.196528	0.297917
Mean	0.328241	0.323380	0.275000	

Table 7.
HTMT Ratio Value (1st Indicator of Attitude Variable Issued).

Variable	PE	EE	SI	FC	PU	TeG	Att	BI	UB
PE									
EE	0.754								
SI	0.757	0.761							
FC	0.468	0.570	0.709						
PU	0.790	0.819	0.770	0.588					
TeG	0.744	0.783	0.811	0.546	0.876				
Att	0.494	0.649	0.643	0.538	0.557	0.774			
BI	0.649	0.731	0.734	0.685	0.773	0.885	0.839		
UB	0.344	0.371	0.557	0.462	0.404	0.441	0.468	0.529	

4.4.3. Structural Model Evaluation

4.4.3.1. Inner Model Collinearity Testing

The collinearity test uses *the Variance Inflation Factor* (VIF) number. The VIF value is considered good if it is less than 5 [31]. If the VIF value is greater than 5, it can be concluded that there is significant collinearity among the independent variables in the model. The results of the inner model collinearity test show a VIF value below 5, which shows that there is no multicollinearity between the variables (Table 8). Because the measurement model (outer model) is reflective, no outer model collinearity test was carried out.

Table 8.
Inner Model Collinearity Test Results.

Variable	TeG	Att	BI	UB
PE		1.560	2.161	
EE		1.560	2.145	
SI	1.447		2.462	
FC	1.447		1.550	
PU			3.143	
TeG			2.682	
Att			1.630	
BI				1.000

4.4.3.2. Testing the Coefficient of Determination and Predictive Ability of the Model

Testing the coefficient of determination using the R^2 and Adjusted R^2 values. Table 9 shows the R^2 value of the behavioral intention (BI) variable of 0.670 (moderate) and the R^2 value of the use behavior (UB) variable 0.244 (low). The test of the predictive ability of the model uses the predictive relevance value (Q^2). The Q^2 value of the behavioral intention (BI) variable is 0.494 or > 0 and the Q^2 value of the use behavior (UB) variable 0.201 or > 0 which means the model has good predictive ability.

Table 9.
Testing the Coefficient of Determination and Predictive Ability of the Model.

Variable	R-square	Adjusted R-square	Q-square
TeG	0.409	0.406	0.398
Att	0.238	0.233	0.221
BI	0.670	0.662	0.494
UB	0.244	0.241	0.201

4.4.3.3. Hypothesis Testing

Hypothesis 1 is rejected because *the t statistic* is 0.658 which means it is smaller than the t table of 1.645 and *the p-value* is 0.255 which means it is greater than 0.05 and *the path coefficient* is 0.036. The results of the hypothesis 1 test provide empirical evidence that performance expectancy do not have a positive effect on behavioral intention to use the SIPD application. Hypothesis 2 is rejected because *the t statistic* is 0.610 which means it is smaller than the t table of 1.645

and *the p-value* is 0.271 which means it is greater than 0.05 and *the path coefficient* is 0.041. The results of the hypothesis 2 test provide empirical evidence that effort expectancy do not have a positive effect on behavioral intention to use the SIPD application. Hypothesis 3 is also rejected because *the t statistic* is 0.270 which means it is smaller than the t table of 1.645 and *the p-value* is 0.393 which means it is greater than 0.05 and *the path coefficients* are 0.022. The results of hypothesis 3 test provide empirical evidence that social influence (SI) does not have a positive effect on behavioral intention to use the SIPD application. While hypothesis 4 is accepted because *the t statistic* is 3.039 which means it is greater than the t table of 1.645 and *the p-value* is 0.001 which means it is smaller than 0.05 and *the path coefficients* are positive at 0.193. The results of hypothesis 4 test provide empirical evidence that facilitating conditions have a positive effect on behavioral intention to use the SIPD application. Hypothesis 5 is also accepted because *the t statistic* is 1.927 which means it is greater than the t table of 1.645 and *the p-value* is 0.027 which means it is smaller than 0.05 and *the path coefficients* are positive at 0.179. The results of hypothesis 5 test provide empirical evidence that perceived usefulness has a positive effect on behavioral intention to use the SIPD application. Likewise, Hypothesis 6 is also accepted because it shows *a t statistic* of 8.450 which means it is greater than the t table of 1.645 and *a p-value* of 0.000 which means it is smaller than 0.05 and a positive *path coefficient* of 0.494. The results of the hypothesis 6 test provide empirical evidence that behavioral intention (BI) has a positive effect on the use behavior (UB) the SIPD application.

Hypothesis 7 states that the social influence has a positive effect on the trust, hypothesis 8 states that the trust has a positive effect on the behavioral intention and hypothesis 9 states that the trust mediates the relationship between the social influence and the behavioral intention. Hypothesis 7 is accepted that social influence has a positive effect on trust. Hypothesis 8 is also accepted that trust has a positive effect on behavioral intention. Likewise, hypothesis 9 is accepted that trust mediates the relationship between the social influence variable and the behavioral intention.

Hypothesis 10 states that the facilitating conditions variable has a positive effect on the trust variable, hypothesis 11 states that the trust has a positive effect on the behavioral intention and hypothesis 12 states that the trust mediates the relationship between the facilitating conditions and the behavioral intention. Hypothesis 10 is accepted that the facilitating conditions has a positive effect on trust. Hypothesis 11 is also accepted that trust has a positive effect on behavioral intention. However, hypothesis 12 is rejected because trust does not mediate the relationship between the social influence and the behavioral intention.

Hypothesis 13 states that the performance expectancy has a positive effect on the attitude, hypothesis 14 states that the attitude has a positive effect on the behavioral intention and hypothesis 15 states that the attitude mediates the relationship between the performance expectancy and the behavioral intention. Hypothesis 13 and hypothesis 14 are accepted that performance expectancy has a positive effect on attitude and attitude has a positive effect on behavioral intention. Likewise, hypothesis 16 is accepted that attitude mediates the relationship between the performance expectancy and the behavioral intention.

Hypothesis 16 states that the effort expectancy has a positive effect on the attitude, hypothesis 17 states that the attitude has a positive effect on the behavioral intention and hypothesis 18 states that the attitude mediates the relationship between the effort expectancy and the behavioral intention. Hypothesis 16 and hypothesis 17 are accepted that effort expectancy has a positive effect on attitude and attitude has a positive effect on behavioral intention. Likewise, hypothesis 18 is accepted that attitude mediates the relationship between the effort expectancy and the behavioral intention.
Table 10 and Figure 3 explain the results of the hypothesis testing.

Table 10.
Hypothesis Testing Results.

Hypothesis		Original sample	t statistic	p values	Result	Mediation
H_1	PE -> BI	0.036	0.658	0.255	Rejected	
H_2	EE -> BI	0.041	0.610	0.271	Rejected	
H_3	SI -> BI	0.022	0.270	0.393	Rejected	
H_4	FC -> BI	0.193	3.039	0.001	Accepted	
H_5	PU -> BI	0.179	1.927	0.027	Accepted	
H_6	BI -> UB	0.494	8.450	0.000	Accepted	
H_7	SI -> TeG	0.587	9.927	0.000	Accepted	
H_8	TeG -> BI	0.251	3.362	0.000	Accepted	
H_9	SI ->TeG ->BI	0.147	3.373	0.000	Accepted	Full Mediation
H_{10}	FC -> TeG	0.088	1.717	0.043	Accepted	
H_{11}	TeG -> BI	0.251	3.362	0.000	Accepted	
H_{12}	FC->TeG->BI	0.022	1.518	0.065	Rejected	No Mediation
H_{13}	PE -> Att	0.157	2.404	0.008	Accepted	
H_{14}	Att -> BI	0.319	5.389	0.000	Accepted	
H_{15}	PE->Att->BI	0.050	2.100	0.018	Accepted	Full Mediation
H_{16}	EE -> Att	0.377	5.419	0.000	Accepted	
H_{17}	Att -> BI	0.319	5.389	0.000	Accepted	
H_{18}	EE->Att->BI	0.120	3.770	0.000	Accepted	Full Mediation

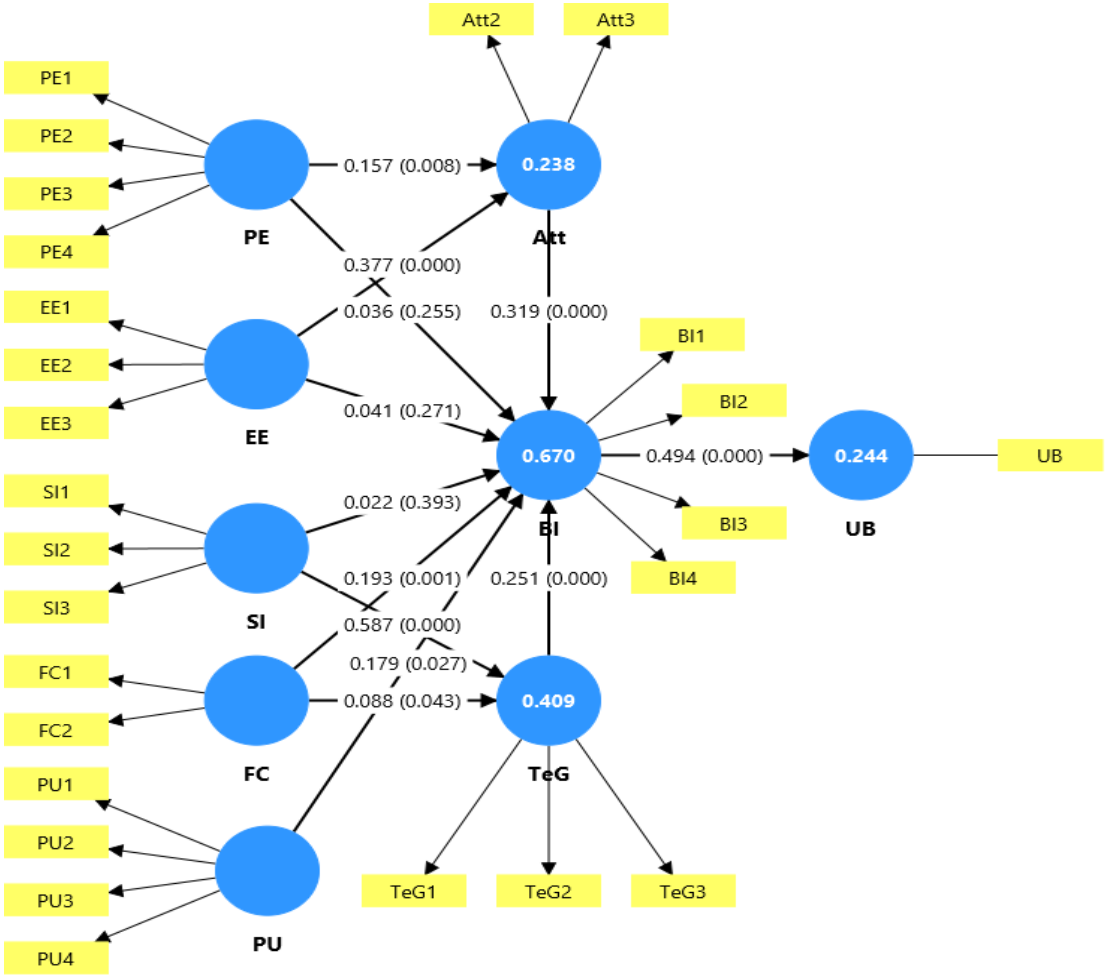

Figure 3.
Structural Model Testing Results.

4.4.3.4. The Influence of Trust and Attitude on Use Behavior

The Extended UTAUT model of this study provides empirical evidence regarding the influence of trust variables and attitude variables on use behavior variables. The empirical evidence shows that trust and attitude influence use behavior through behavioral intention (Table 11).

Table 11.
The Influence of Trust and Attitude on Use Behavior.

Variable	Original Sample	t statistic	p values	Mediation
TeG -> BI -> UB	0.086111111	3.427	0.000	Mediation
Att -> BI -> UB	0.109027778	4.921	0.000	Mediation

5. Discussion

5.1. Results

The UTAUT model in this study combines the UTAUT model of Davis [12] with the UTAUT model of Hooda, et al. [2]. The UTAUT model of Davis [12] uses attitude as a mediating variable while the UTAUT model of Hooda, et al. [2] uses the trust as a mediating variable. Both UTAUT models use the same dependent variable, namely behavioral intention. The test results also show that the UTAUT model of this study is able to increase the r^2 value of the behavioral intention variable which was originally 45.00% in the Dwivedi et al. research model and 52.30% in the Hooda et al.'s research model to 67.00% in this research model.

Performance expectancy has no effect on behavioral intention. The results of testing hypothesis 1 are in accordance with the results of research conducted by Sutanto, et al. [32]. Effort expectancy has no effect on behavioral intention. The results of testing hypothesis 2 are in line with the results of research conducted by Kurfalı, et al. [10]. Social influence has no effect on behavioral intention. The results of testing hypothesis 3 are supported by the results of research by Ashari and Sukri [33] Facilitating conditions have a positive effect on behavioral intention. The results of testing hypothesis 4 are supported by the results of research by Gupta, et al. [4]. Perceived usefulness has a positive effect on behavioral intention. The results of testing hypothesis 5 are supported by the results of research by Hamid, et al. [34] and Chatterjee, et al. [35]. Behavioral intention has a positive effect on use behavior. The results of testing hypothesis 6 are supported by the results of research by Kusumawardani, et al. [36] and Ashari and Sukri [33].

Social influence has a positive effect on trust. The results of testing hypothesis 7 are supported by the results of research by Al Nidawy, et al. [11]. Trust has a positive effect on behavioral intention. The results of testing hypothesis 8 are supported by the results of research by Gupta, et al. [4]. The trust variable is able to mediate the relationship between the social influence and behavioral intention using the SIPD application. The results of testing hypothesis 9 are in line with the UTAUT model Hooda, et al. [2].

Facilitating conditions have a positive effect on trust. The results of testing hypothesis 10 are supported by the results of research by Al Nidawy, et al. [11]. Trust has a positive effect on behavioral intention. The results of testing hypothesis 11 are supported by the results of research by Moya M. et al [25]. The trust is not a mediating variable in the relationship between the facilitating conditions and the behavioral intention using the SIPD application. The results of testing hypothesis 12 are not in line with the UTAUT model Hooda, et al. [2].

Performance expectancy have a positive effect on attitude. The results of testing hypothesis 13 are supported by the results of research by Afrizal and Wallang [23]. Attitude have a positive effect on behavioral intention to use the SIPD application. The results of testing hypothesis 14 are supported by the results of research by Kusumawardani, et al. [36]. The attitude is able to mediate the relationship between the performance expectancy and the behavioral intention using the SIPD application. The results of testing hypothesis 15 support the UTAUT model of Davis [12].

Effort expectancy have a positive effect on attitude. The results of testing hypothesis 16 are supported by the results of research by Rana, et al. [37]. Attitude have a positive effect on behavioral intention to use the SIPD application. The results of testing hypothesis 17 are supported by the results of research by Kusumawardani, et al. [36]. The attitude is able to mediate the relationship between the effort expectancy and the behavioral intention using the SIPD application. The results of testing hypothesis 18 support the UTAUT model of Davis [12].

Specific indirect effects test on the influence of trust and attitude on use behavior show that trust and attitude have a positive effect on use behavior through behavioral intention. The results of the *specific indirect effects test* support the UTAUT model of Davis [12] and the UTAUT model of Hooda, et al. [2].

This study obtained empirical evidence regarding the role of trust and attitude on behavioral intention, namely: 1) trust acts as a mediating variable in the relationship between social influence and behavioral intention; 2) trust does not act as a mediating variable in the relationship between facilitating conditions and behavioral intention; 3) attitude acts as a mediating variable in the relationship between performance expectancy and behavioral intention; 4) attitude acts as a mediating variable in the relationship between effort expectancy and behavioral intention; 5) perceived usefulness influences behavioral intention; 6) trust influences use behavior through behavioral intention; and 7) attitude influences use behavior through the behavioral intention.

5.2. Practical Implications

The practical implication of this research finding is the regional government encourages its civil servants to have a positive trust and attitude towards implementation of the SIPD application in order to achieve success.

6. Conclusion

Trust and attitude are mediating variables in the relationship between the main UTAUT variables and behavioral intention. This research model is able to increase the r^2 of the behavioral intention variable to 67.00%. User trust and attitude play a role in determining in succes of The SIPD application implementation. This means that research model, which is a combination of two previous models and never used before is the novelty of this research.

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