



Usage Effect of E-Government

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A R Q I C L E I N F O

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A B S T R A C T

This study uses the UTAUT model. The UTAUT model is a model that explains user behavior towards new information technology. This study aims to analyze the influence of performance expectancy, effort expectancy, social influences, facilitating conditions on the use of SIPD. This research was conducted in the North Morowali Regency Government with a total sample of 40 SIPD users. This study uses primary data, the data collection method is done by distributing questionnaires with the *survey method* . The statistical method used to test the hypothesis is to use *the Structural Equation Model (SEM)*, which is a data analysis tool using Smart-PLS 3.0. The results of this study indicate that performance expectancy have a positive effect on SIPD, effort expectancy have a positive effect on the use of SIPD, social influences have a positive effect on the use of SIPD, facilitating conditions have a positive effect on the use of SIPD .

INTRODUCTION

The benefits of information technology in developing an individual, company, even a country have a very big impact. In various sectors of the economy, technology is a solution to ease the world of work (Haryoko, 2009). It is proven that information technology can change an individual, company and even an organization and a country to develop and advance, so that information technology has been widely used by various companies and government institutions around the world. The use of information technology in government processes will increase efficiency, effectiveness, transparency and accountability in government administration.

Technology is one of the things that must be applied by local governments, in supporting administrative processes in a better direction . Regional governments are required to provide information in the form of development and regional financial information. This obligation is mandated in Article 391 paragraph (1) of Law (UU) Number 23 of 2014 concerning Regional Government which has been amended into Law Number 9 of 2015. In its implementation, Minister of Home Affairs Regulation Number 70 of 2019 regarding Regional Regulations Government Information (Permendagri, 2019) . This rule is considered to be able to control local government data in an interconnected system (Balqis & Fadhly, 2021).

The purpose of creating the Regional Government Information System (SIPD) is to make the Regional Revenue and Expenditure Budget (APBD) more transparent, the government hopes that the APBD will be more transparent because the budget functions as a planning tool and as a control tool. SIPD implementation is expected to enable regional governments to immediately integrate all regional development data and regional financial data into the SIPD system. The application of SIPD is carried out to speed up and facilitate the implementation of evaluation and supervision of regional public services, but there must be cooperation and hard work in each agency to implement this program (Nasution & Nurwani, 2021).

The United model theory of Acceptance and Use of Technology (UTAUT) is ideal for investigating various technological applications because the development of the UTAUT technology model is carried out by testing eight models: motivational model, *Technology Acceptance Model (TAM)*, *Theory of reasoned Action (TRA)*, *Utilization Model PC (MPCU)*, *Theory of Planned Behavior (TPB)*, a combination of TAM and TPB, social cognitive theory, and innovation diffusion theory so that UTATUT is better able to explain the behavior of using technology (Mujalli *et al.*, 2022).

THEORETICAL REVIEW

Unified theory of Acceptance and Use of Technology is a model of acceptance and use of technology, this model was designed by Venkatesh *et al.* (2003). The design objective of UTAUT is to analyze the use and acceptance of a technology. There are four constructs that are considered as the main factors in the UTAUT model that significantly influence the behavior of using information technology, as well as behavioral intentions, namely performance expectancy, effort expectancy, social influence, and facilitating conditions (Setyorini and Meiranto, 2021).

In this study, the theory of interpersonal behavior supports *the Unified Model Acceptance theory*. Triandis (1980) defines that behavioral intentions are determined by the expected consequences, what they think they should do, and feelings about the behavior. Subsequent behavior is influenced by the facilitating conditions, behavioral intentions, and what they usually do.

expectancy performance is an important factor for users to accept the technology. Based on the theory of interpersonal behavior states that behavioral intentions are determined by feelings. The performance expectancy factor is proven to have a significant effect on the intention to use a technology (Mujalili *et al.*, 2022; Ayaz & Yanartas, 2020; Mansoori *et al.*, 2018; Oliveira *et al.*, 2014). In fact, research conducted by Mansoori *et al.*, (2018) shows that performance expectations are one of the strongest predictors of the use of *e-Government services* in the Emirate of Abu Dhabi. This shows the same result as that of Venkatesh *et al.* (2003).

Expectancy performance in this study gave meaning that Individuals who use SIPD will have expectations that the SIPD system will provide good value to user. Based on this description, the following hypothesis.

H1: Performance Expectancy has a positive effect on the use of SIPD.

Expectancy effort is the level of comfort associated with using the system. Based on interpersonal behavior theory, if a system is easy to use, then the effort will not be too high. When users feel that SIPD is easy to use and does not require much effort, they will have high expectations of the expected performance.

The UTAUT model shows that effort predictor expectations positively influence individual intentions to use technology (Venkatesh *et al.*, 2003). Research conducted by Mujalili *et al.* (2022) & Mansoori *et al.* (2018) shows the result that expectancy effort has a positive effect on the use of a system. Business expectations are one of the most effective factors influencing someone to adopt *e-learning* (Mujalili *et al.*, 2022). Based on this description, the following hypothesis.

H2: Effort Expectancy has a positive effect on the use of SIPD.

Social influence is the degree to which an individual believes that environmental factors will influence the use of the new system. Social factors provide a significant influence behind behavioral intentions in utilizing a system (Mujalili *et al.*, 2022; Ayaz & Yanartas , 2020). Based on this description, the following hypothesis.

H3: Social influence has a positive effect on the use of SIPD.

Triandisi (1980) in the theory of interpersonal behavior says that behavior cannot occur if objective conditions in the environment prevent it. The facilitating condition is the degree to which a person believes that the infrastructure and techniques are available to support the use of the system (Venkatesh *et al.* , 2003). These conditions can be in the form of technical support, administration, knowledge and other resources (Nikou and Economides, 2017). Research conducted by Mansoori *et al.* 2018 found that the facilitating condition has a significant effect on the use of a system. Based on this description, the following hypothesis.

H4: Facilitating conditions have a positive effect on the use of SIPD.

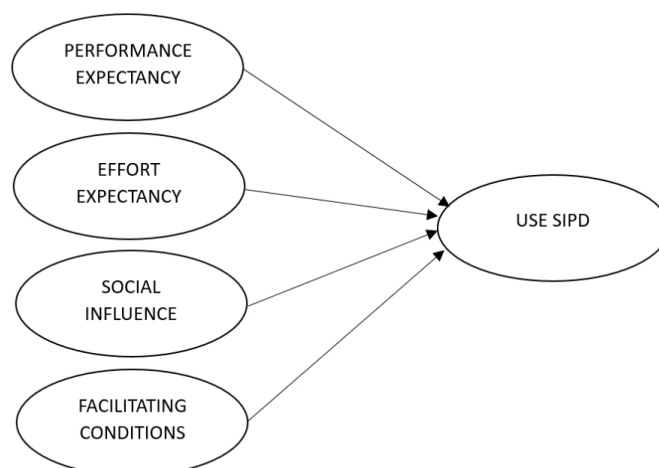


Figure 1. Research Model

METHODOLOGY

Study it uses a deductive approach that aims to test hypotheses. The research was conducted in the North Morowali District Government environment. This study uses primary data by distributing questionnaires directly. The sample in this study amounted to 40 respondents. Respondents in this study were SIPD users. Measurement of question items using a Likert scale, where 1 = "strongly disagree" to 5 = "strongly agree". The statistical method used to test the hypothesis is to use *the Structural Equaton Model (SEM)*, the test is carried out using Smart-PLS 3.0 .

RESEARCH RESULT

Before testing the hypotheses that have been formulated, validity and reliability tests are first carried out. Validity test includes convergent and discriminant validity tests. Convergent validity test using outer score loading. The results showed that the outer loading value of all indicators was above 0.7 so that the constructs for all variables were said to be good. Based on the results of calculations using the PLS Algorithm for the indicators in the table above which are valid, the AVE value is obtained. Table 1.

Table 1. *Average Variance Extracted (AVE)*

Variable	Average Variance Extracted (AVE)
Performance Expectancy	0.739
Effort Expectancy	0.849
Social Influence	0.749
Facilitating Conditions	0.780
SIPD	0.854

Based on the table above, it can be seen that the AVE values for all variables meet the requirements above 0.5. So it can be concluded that all variables meet convergent validity because they have a *factor loading value* of > 0.7 and an AVE value of > 0.5. Table 2

Table 2. Validity Test (*Cross Loading*)

Variable	EP	EE	SI	FC	Use SIPD
PE1	0.814	0.662	0.572	0.614	0.735
PE2	0.875	0.702	0.504	0.660	0.782
PE3	0.878	0.707	0.539	0.422	0.658
PE4	0.870	0.678	0.422	0.474	0.671
EE1	0.736	0.946	0.284	0.412	0.599
EE2	0.695	0.878	0.333	0.433	0.673
EE3	0.789	0.925	0.397	0.485	0.679
EE4	0.725	0.934	0.304	0.420	0.659
SI1	0.509	0.334	0.936	0.558	0.671
SI2	0.659	0.449	0.889	0.323	0.631
SI3	0.320	0.068	0.762	0.327	0.386
FC1	0.526	0.404	0.448	0.872	0.657
FC2	0.559	0.406	0.324	0.882	0.615
FC3	0.536	0.317	0.420	0.889	0.601
FC4	0.561	0.504	0.468	0.874	0.706

FC5	0.635	0.455	0.427	0.898	0.702
USE1	0.759	0.680	0.648	0.679	0.943
USE2	0.740	0.579	0.673	0.702	0.929
USE3	0.808	0.709	0.543	0.688	0.899

Based on the table above, it can be seen that *the loading value factor* for each indicator of each latent variable has *a loading value factor* for the intended construct that is greater than the loading value for other constructs when associated with other latent variables. This means that each latent variable has good *discriminant validity* because the correlation value of the indicator to the construct is higher than the correlation value of other construct indicators. To get discriminant validity good correlation of a model, the AVE root in the construct must be higher than the construct's correlation with other latent variables in the model.

Based on the results in the table above, it can be seen that all the roots of the AVE construct are higher than the correlations of the other latent variable constructs in the model. Thus, *the criterion of cross loading* shows evidence that the constructs in the model have discriminant validity .

Reliability test is used to measure the internal consistency of measuring instruments. This test is based on *Cronbach's alpha value* and *composite reliability* . Cronbach's Alpha measures the lower limit of the reliability value of a variable, while Composite Reliability measures the actual reliability value of a variable. *Rule of thumbs up Cronbach's Alpha* and *Composites Reliability* rating greater than 0.7 (in exploratory research, 0.6 - 0.7 is still acceptable). Table 4 .

Table 4. Reliability Test

Variable	Cronbach's Alpha	rho_A	Composite Reliability
Performance Expectancy	0.882	0.885	0.919
Effort Expectancy	0.940	0.941	0.957
Social Influence	0.834	0.890	0.899
Facilitating Conditions	0.929	0.932	0.947
SIPD	0.914	0.914	0.946

Based on the table above, the results of *the Cronbach's Alpha* and *composites reliability tests* for all variables show a value of > 0.7 .

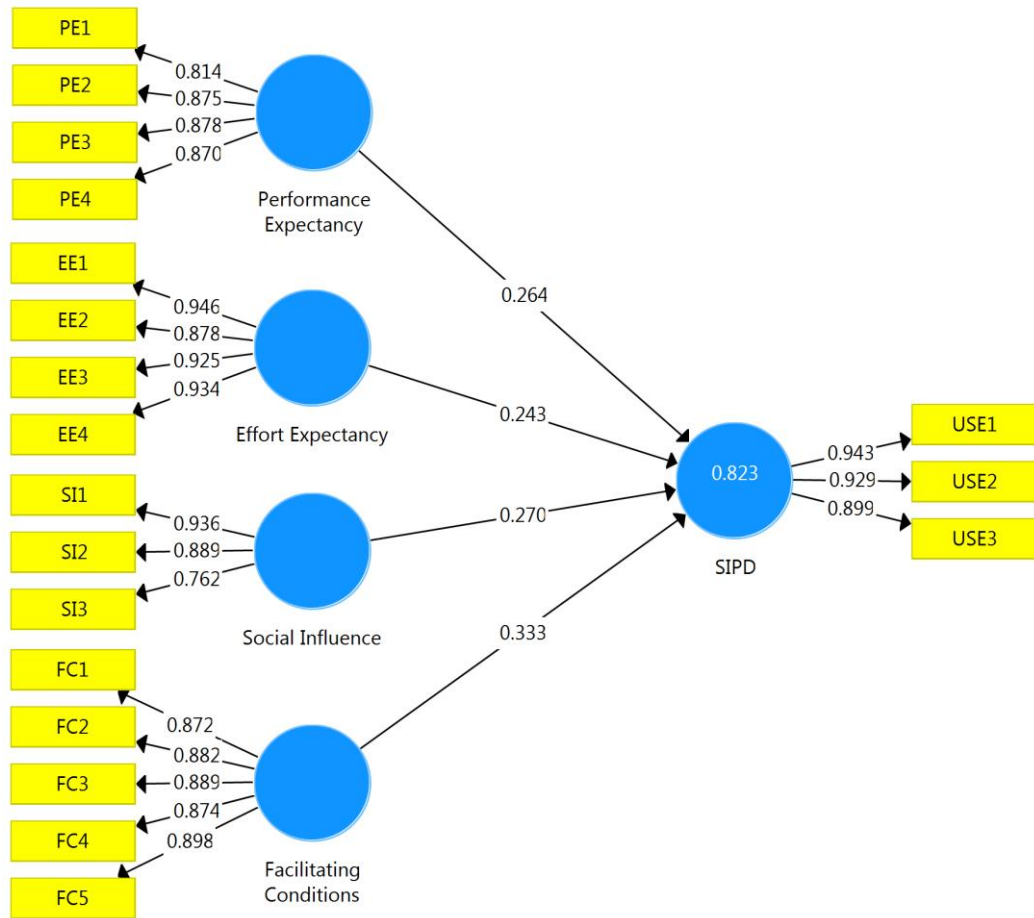


Figure 2. Path Diagrams

Hypothesis testing on PLS is used to measure the probability of a data by using *the menu path coefficient*. The criteria for accepting or rejecting the hypothesis in this study are by looking at *the p-value* and the direction of the hypothesis. Significant value or $p\text{-value} \leq 0.05$. So, the hypothesis is accepted if the results of $p\text{-value} \leq 0.05$ and are in accordance with the specified direction of the hypothesis. Conversely, the hypothesis is rejected if the result is $p\text{-value} > 0.05$ and is not in accordance with the direction of the hypothesis set (Devi, 2018). Table 5.

Table 5.Hypothesis Results

Variable	Coef Line	Q statistics	P value	Results
EK -> SIPD	0.264	2.285	0.023	supported
E U -> SIPD	0.243	2.536	0.012	supported
PS -> SIP	0.270	2.960	0.003	supported
KP -> SIPD	0.333	4,492	0.000	supported

DISCUSSION

The test results show that performance expectancy have a positive effect on the use of SIPD (H1). This shows that employees of the North Morowali Regency Government who use SIPD feel the benefits of SIPD such as increasing productivity, speeding up and facilitating work and can be beneficial for work. The results of this study are consistent with the results of previous studies. Mansoori *et al.* (2018) show that performance expectancy are one of the strongest predictors of *e-Government service usage* in the Emirate of Abu Dhabi. This shows the same result as that of Venkatesh *et al.* (2003).

Results show that effort expectancy have a positive effect on the use of SIPD (H2). This shows that Civil Servants of North Morowali Regency who use SIPD find it easy to use SIPD. The results of this study are in line with Mansoori *et al.* (2018) shows that effort expectancy have a positive effect on the use of e - Government services in the Emirate of Abu Dhabi. Effort expectancy is one of the most effective factors influencing someone to adopt *e-learning* (Mujalili *et al.*, 2022). Devi *et at.* (2019) showed that the ease of use of the Regional Management Information System (SIMDA) has a positive effect on user attitudes. The greater the ease of use of SIMDA, the more positive the user's attitude towards using SIMDA will be.

The test results show that social influence has a positive effect on the use of SIPD (H3). This shows that there is social influence in the use of SIPD. The role of social influence is an important one in the early stages of individual experience with technology. Social factors provide a significant influence behind behavioral intentions in utilizing a system (Mujalili *et al.*, 2022; Ayaz & Yanartas, 2020; Mediaty *et al.*, 2017).

Test results show that facilitating conditions positive effect on the use of SIPD (H4). This indicates the existence of technical support, administration, and other resources in the use of SIPD. This result is in line with the results of research conducted by Mansoori *et al.* 2018 .

CONCLUSIONS AND RECOMMENDATIONS

This study aims to identify and examine the factors that influence the use of e-government . This study uses the UTAUT model. Empirical findings show that performance expectancy, effort expectancy, social influence, facilitating conditions significantly to the use of SIPD . Theoretically, this research can add to the literature related to e-government and the UTAUT model. In addition, the results of this study can help develop SIPD applications so that there is an increase in the quality of the system from before. This research also has limitations. This research only involved one local government, namely the government of North Morowali Regency, so this research cannot be generalized to all local governments. Therefore this research is expected to use a wider scope by using several local governments as research objects.

ADVANCED RESEARCH

This research still has limitations so that further research is still needed on this topic.

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