

Influence Of E-Government Service Quality, User Satisfaction, Effort Expectancy, And Performance Expectancy On Intention To Use IKD In Temanggung Regency

Pengaruh Kualitas Layanan E-Government, Kepuasan Pengguna, Ekspektasi Usaha, Dan Ekspektasi Kinerja Terhadap Niat Penggunaan IKD Di Kabupaten Temanggung

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ABSTRACT

This research aims to see the influence of E-Government Service Quality, User Satisfaction, Effort Expectancy, and Performance Expectancy on Intention to use Identitas Kependudukan Digital (IKD) Apps. Population used in this research are the people of Temanggung and the sample in this study is 300 respondents who are people of Temanggung who use the IKD application. Primary data was collected through a questionnaire using a Likert scale model which has been tested for validity and reliability. Result shows that E-Government Service Quality (EGSQUAL) influences User Satisfaction (US) with t-statistic value $24.780 > 1.96$, and the p-value is $0.000 < 0.05$, User Satisfaction (US) influences Intention to Use (ITU) with t-statistic value $3.968 > 1.96$, and the p-value is $0.000 < 0.05$, (EGSQUAL) influences the Intention to Use (ITU) with t-statistic $4.269 > 1.96$, and the p-value is $0.000 < 0.05$, Effort Expectancy (EE) influences Intention to Use (ITU) with t-statistic $3.153 > 1.96$, and the p-value is $0.002 < 0.05$, Performance Expectancy (PE) influences the Intention to Use (ITU) with t-statistic $2.655 > 1.96$, and the p-value is $0.008 < 0.05$. Based on that information, it can be concluded that all variables are significant.

Keywords: E-Government Service Quality, User Satisfaction, Effort Expectancy, Performance Expectancy, Intention To Use

Abstrak

Penelitian ini bertujuan untuk melihat pengaruh Kualitas Layanan E-Government, Kepuasan Pengguna, Effort Expectancy, dan Performance Expectancy terhadap Niat untuk menggunakan Aplikasi Identitas Kependudukan Digital (IKD). Populasi yang digunakan dalam penelitian ini adalah masyarakat Temanggung dan sampel dalam penelitian ini adalah 300 responden yang merupakan masyarakat Temanggung yang menggunakan aplikasi IKD. Data primer dikumpulkan melalui kuesioner dengan menggunakan model skala likert yang telah diuji validitas dan reliabilitasnya. Hasil penelitian menunjukkan bahwa E-Government Service Quality (EGSQUAL) berpengaruh terhadap User Satisfaction (US) dengan nilai t hitung $24,780 > 1,96$, dan nilai p-value sebesar $0,000 < 0,05$, User Satisfaction (US) berpengaruh terhadap Intention to Use (ITU) dengan nilai t hitung $3,968 > 1,96$, dan nilai p-value sebesar $0,000 < 0,05$, (EGSQUAL) berpengaruh terhadap Intention to Use (ITU) dengan nilai t hitung $4,269 > 1,96$, dan nilai p-value sebesar $0,000 < 0,05$, (EGSQUAL) berpengaruh terhadap Intention to Use (ITU) dengan nilai t hitung $4,269 > 1,96$. 269>1.96, dan nilai p-value $0.000 < 0.05$, Effort Expectancy (EE) berpengaruh terhadap Intention to Use (ITU) dengan t-statistic $3.153 > 1.96$, dan nilai p-value $0.002 < 0.05$, Performance Expectancy (PE) berpengaruh terhadap Intention to Use (ITU) dengan t-statistic $2.655 > 1.96$, dan nilai p-value $0.008 < 0.05$. Berdasarkan informasi tersebut, dapat disimpulkan bahwa semua variabel signifikan.

Kata Kunci: Kualitas Layanan E-Government, Kepuasan Pengguna, Ekspektasi Usaha, Ekspektasi Kinerja, Niat Penggunaan

1. Introduction

Taking into account about the level of penetration of internet usage in Indonesia, Indonesian Government decided to make significant changes. This is a positive signal and a big challenge for the government to determine the best way to use the Internet to meet the needs of citizens who are willing to use the internet to interact with government agencies. To fulfill this, E-Government needs to be implemented. E-Government itself is a means of increasing interaction between government and society by forming a communication network that is directly connected between society and government. This network increases the information available to the public and facilitates their activities in government activities using Information and Communication Technology (ICT) (Tejodo et al., 2022:2). One of the steps taken is to implement an application named Digital Population Identity or *Identitas Kependudukan Digital* (IKD). The purpose of this apps is to increase the use of population digitalization, make public service transactions easier and faster, and secure identity ownership through an authentication system which is expected to be able to prevent falsification and leakage of people's personal data.

Several evaluation tools have been published to evaluate the quality of e-services, but the general characteristic of some of these evaluation tools is that they tend to be developed for the context of private companies, there are not many studies evaluating the quality of government-owned e-services. However, one tool that meets the standards of a reliable and valid measurement instrument for the government agency context is the Electronic Government Service Quality (EGSQUAL) scale. Considering the importance of rigorous measurement tools in the public sector, and the limited number of literature studies that discuss this, the aim of this research is to measure citizens' perceptions of the quality of government website services using the EGSQUAL scale (Aljukhadar et.al, 2022).

According to Sharma et al., (2021), implementing an E-Government system alone is not enough, the government also needs to improve welfare and increase the positive image of websites related to E-Government which results in user satisfaction. However, not much research pays attention to user satisfaction for business actors who use e-government services.

UTAUT is a combination of several theories from the Technology Acceptance Model (TAM) and is built in such a way as a framework that can study users' behavioral intentions to use an application (Hunde et al., 2023). based on study conducted by Abu-Taieh et al., (2022), UTAUT was first introduced by Venkatesh in 2003 and has four main constructs since it was developed by Fred Davis and Richard. The four consttucts are Performance Expectancy (PE), Effort Expectancy (EE), Facilitating Condition (FC) and Social Influence (SI). According to Erjavec and Manfreda (2021:9), in several previous studies, Social Influence (SI) was not a very important factor, and considering the ubiquity of media, they proposed to reconsider the social influence factor in the UTAUT model and consider possible complementary factors. The same situation occurs based on research conducted by Budi et al., (2021:8) that states Facilitating Conditions (FC) do not significantly influence the Intention to Use variable. Therefore, both SI and FC won't be included in this study.

Apart from the quality offered by the application, the factor that determines whether people will use an application owned by a government agency or not is Intention to Use (ITU) in accordance with the statement by Ong et al., (2023) that Understanding the elements that influence people's intentions to use the system is important knowledge for developing countries. This is based on the fact that the intention to use the system among people in developing countries is still low, where the application is only often used by urban residents. In other words, the success of launching an application depends on the implementation and acceptance of the community to use the application, especially in developing countries where not only the role of urban residents, but also the role of rural residents also plays a role in the success of launching an application.

Previous studies conducted by Jadir et al., (2021), founds that Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions had a significant effect on intention to use, this is in accordance with several other studies conducted by Smyth et al., (2021), and Al-Saedi et al., (2020).

Meanwhile, according to Akinnuwesi et al., (2022), although Performance Expectancy, Facilitating Conditions, and Social Influence have a positive effect on Intention to Use, Effort Expectancy was found to have no significant effect on Intention to use. This is in accordance with several other studies by Ayaz and Yanartas (2020), Kurfali et al., (2017), Al-Shafi and Weerakkody (2010), and Budi et al., (2021).

According to other research conducted by Hunde et al., (2023) shows that Effort Expectancy actually has a significant influence on intention to use and the Performance Expectancy variable does not have a significant influence on intention to use. This is in line with research conducted previously by Arfi et al., (2021), and Garavand et al., (2020).

Several discrepancies that occurred in these studies that became the basis for this research, so another aim of the research was to assess the level of significance of the performance expectancy and effort expectancy variables on the intention to use applications owned by the government. In this context, the application studied was the Identity application. Digital Population (IKD) which represents the population in digital applications. The research conceptual framework and research hypotheses in this study are presented in Figure 1.

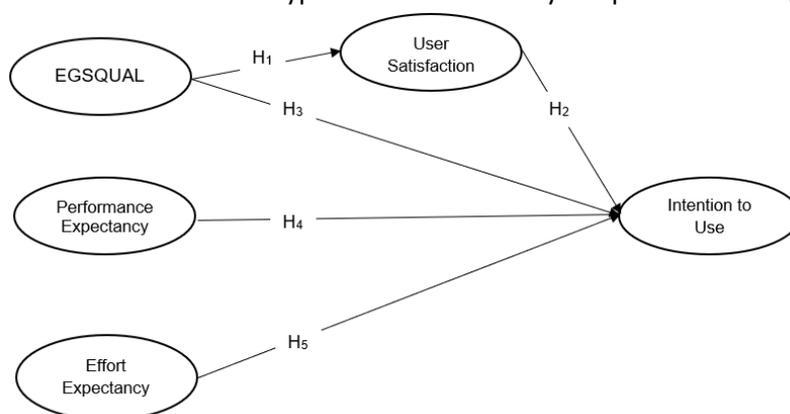


Figure 1. Research Conceptual Framework

Research Hypothesis

- H1: Electronic Government Service Quality (EGSQUAL) influences User Satisfaction (US) of the IKD Apps positively and significantly.
- H2: User Satisfaction (US) influences Intention to Use (ITU) of the IKD apps positively and significantly
- H3: Electronic Government Service Quality (EGSQUAL) influences the Intention to Use (ITU) of the IKD Apps positively and significantly (H3)
- H4: Effort Expectancy (EE) influences Intention to Use (ITU) IKD Apps positively and significantly
- H5: Performance Expectancy (PE) influences the Intention to Use (ITU) of the IKD apps positively and significantly

Review of Literature

Electronic Government Service Quality (EGSQUAL)

Electronic Government Service Quality (EGSQUAL) is an instrument or tool that can be used to measure public perceptions of the quality of services provided by government-owned applications or websites (Aljukhadar et al., 2022). This instrument was developed specifically to measure the level of service quality provided by government websites or applications to the public, where the service recipients, who in this context are the public, do not incur direct costs

and also have no competitors or rivals who influence public expectations. Moreover, public service providers are essentially unconcerned with profitability, retention, or even performance—as is the case in many developing countries.

Study conducted by Aljukhadar et al., (2022) contributes to the e-government literature by ensuring conceptual differences between the dimensions considered to evaluate the service quality of government websites and private websites. First, a striking difference arises from the fact that government websites do not have a commercial purpose. In this regard, it is not surprising that dimensions such as selection appeal, or relative advantage do not contribute to the EGSQUAL scale. In other words, while several other e-service quality instruments widely used in research can be used to assess service quality in the private sector, this instrument can be used to measure service quality in the government sector because what the public expects from a government website or application is different from what consumers expect from a private website or application.

Unified Theory of Acceptance and Use of Technology (UTAUT)

UTAUT was formed so that it could be applied to research, especially in a corporate setting, especially to explain whether an individual can accept and use a technology being offered. Thus, UTAUT was developed as the foundation of various models regarding the acceptance and use of technology through the integration of eight pre-existing theoretical models used to study perception, acceptance, and willingness to adopt technology (Erjavec and Manfreda, 2022).

According to Abu-Taieh et al., (2022), UTAUT was introduced by Venkatesh in 2003 and has four main constructs since it was developed by Fred Davis and Richard. The four used in this research are Performance Expectancy (PE), Effort Expectancy (EE), Facilitating Condition (FC) and Social Influence (SI).

Effort Expectancy (EE)

Effort Expectancy (EE) is one of the important elements of the UTAUT model and this element can answer questions such as "how easy is new elearning technology to use?". The study illustrates that EE influences the user's behavioral intention to use the application system, and that no great effort is required to operate the technology, and the study reveals that EE influences the behavioral intention to use the application (Hunde et al., 2023).

Performance Expectancy (PE)

Performance Expectancy (PE) is the level of confidence that individuals using an application will produce higher performance improvements. From a theoretical point of view, Performance Expectancy (PE) may produce different outputs depending on gender and age. In other words, Performance Expectancy (PE) means that users prefer to use an application because of its benefits or usefulness, such as speeding up business, increasing productivity and generally being useful in carrying out their duties. In many studies using the UTAUT model, the Performance Expectancy (PE) factor has been proven to have a significant influence on the intention to use an application (Ayaz and Yanartas, 2020).

User Satisfaction (US)

According to Cong et al., (2022), User Satisfaction or user satisfaction is a fundamental concept in the quality of a system being built. In other words, the system built must be attractive to use so that users are subjectively satisfied when using the system. User satisfaction itself is a personalized evaluation of a product or service that represents the difference or discrepancy between the perceived results and the user's expectations in using a product or service, where

when the application performance is better than expected, the user will give a positive affirmation, as well as on the contrary.

Intention to Use Website (ITU)

According to Liu et al., (2023) Intention to Use is the intensity of people's desire to carry out certain behavior. Using ITU as a variable also allows researchers to obtain other factors that may not be visible if only studying a person's actual experience. Therefore, the research object of this study includes both users who have used the IKD application, and also potential users who have not.

2. Research Method

Research carried out using quantitative analysis by distributing questionnaires to collect data. The questionnaire itself is a collection of questions that are formulated in such a way that respondents can later answer them. The questionnaire is prepared carefully based on the research objectives and questions that are relevant to the topic being researched. (Sekaran and Bougie, 2016).

The questionnaire that will be distributed to respondents uses a Likert scale from the lowest value of 1 which represents a statement of strongly disagree (STS) and the highest value of 5 which represents the statement of strongly agree (SS). The Likert scale is designed in such a way as to calculate the degree to which the subject agrees or disagrees with a 5-point scale statement (Sugiyono, 2019).

Apart from that, this research uses primary and secondary data sources. Where primary data sources are data sources that can provide data directly to data collectors, and secondary data sources are data sources that indirectly provide data to data collectors such as through other people or through documents or using supporting data originating from institutions. statistics, websites and government data (Sugiyono, 2013).

The population in this study includes the people of Temanggung Regency and the sample in this study is 300 respondents who are people of Temanggung Regency who use the IKD application. This is in accordance with the statement of Hair et al., (2019) where the sample size should be above 100 respondents or the estimated minimum sample is 5 times the variable indicators used in the research, because in this study there are 40 indicators used, so the minimum sample size that should be used is $40 \times 5 = 200$ respondents. In other words, the use of a sample of 300 respondents can be said to be appropriate.

The independent variable used are EGSQUAL, Performance Expectancy, Effort Expectancy, and User Satisfaction, while the dependend variable used is Intention to Use Website/Apps.

The data analysis method consists of Quantitative analysis that was carried out using Structural Equation Modeling (SEM) analysis. SEM analysis itself is divided into 2, namely Covariance-Based SEM (CB-SEM) and Partial Least Squares SEM (PLS-SEM). The main goal of CB-SEM is to confirm the theory by estimating a new covariance matrix that does not differ significantly from the initial observed covariance matrix. In contrast, the primary statistical goal of PLS-SEM is predictions that maximize the variance explained in the dependent variable.

Based on the explanation above, it was decided that the research questions in the research conducted would be answered using the PLS-SEM method using the SmartPLS 3 analysis tool.

Apart from that, instrument tests will also be carried out, both Validity tests and Reliability tests, analysis of the structural model / inner model, coefficient of determination R², size of the influence of F₂, predictive relevance of Q² or blindfolding, and finally an assessment of the size and significance of the path coefficient will also be carried out.

3. Results and Discussion

Measurement Model Test Results (Outer Model)

This research uses the SEM (Structural Equation Model) method with the Smart-PLS version 3 analysis tool for data processing. Model measurements (outer model) were carried out using the PLS Algorithm Model in this research as shown in Figure 2.

There are four independent variables, namely EGSQUAL consisting of 21 indicators with 7 dimensions (Interactivity & Personalization, Information Quality, Quality of Assistance, Ease of Use, Website Functionality, Privacy & Security, and Aesthetics), Effort Expectancy with 6 indicators, Performance Expectancy with 6 indicators, and User Satisfaction with 5 indicators, as well as the dependent variable, namely Intention to Use with 2 indicators. Next, it will be analyzed using three testing criteria, namely convergent validity test, discriminant validity test and instrument reliability test

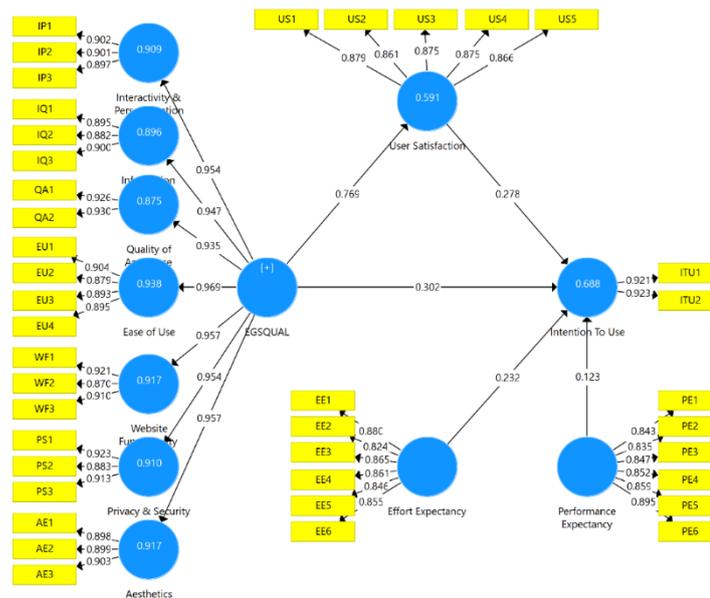


Figure 2. Outer Model

Convergent Validity Test

Convergent validity is achieved when the indicators of a construct are highly correlated with each other and have sufficient loading scores. All constructs have met the convergent validity test, namely factor loading value > 0.70 and average variance extracted (AVE) value > 0.50. The following are the convergent validity test values for each indicator in this research variable that shows that all research variable indicators are > 0.7. This shows that all indicator items are declared valid and can be used to represent research instruments.

Apart from that, Table 2 shows that the AVE (Average Variance Extracted) value is > 0.50, thus indicating that all indicators in the research variables have good convergent validity.

Table 1. Outer Model

	EGSQAL	EE	PE	US	ITU
IP1	0.860				
IP2	0.864				
IP3	0.852				
IQ1	0.829				
IQ2	0.848				
IQ3	0.858				
QA1	0.856				
QA2	0.879				

EU1	0.863
EU2	0.859
EU3	0.870
EU4	0.866
WF1	0.877
WF2	0.833
WF3	0.877
PS1	0.873
PS2	0.842
PS3	0.879
AE1	0.862
AE2	0.862
AE3	0.862
EE1	0.880
EE2	0.824
EE3	0.865
EE4	0.861
EE5	0.846
EE6	0.855
PE1	0.843
PE2	0.835
PE3	0.847
PE4	0.852
PE5	0.859
PE6	0.895
US1	0.879
US2	0.861
US3	0.875
US4	0.875
US5	0.866
ITU1	0.921
ITU2	0.923

Table 2. Average Variance Extracted (AVE)'s Score

Variable	Average Variance Extracted (AVE)	Result
EGSQUAL	0.741	Valid
Effort Expectancy	0.731	Valid
Performance Expectancy	0.732	Valid
User Satisfaction	0.759	Valid
Intention To Use	0.850	Valid

Discriminant Validity Test

Based on table 3 and table 4, it shows that the AVE root value in the Fornell-Larcker Criterion table and the Cross Loading value have the greatest value when connected to the latent

variable compared to when connected to other latent variables. This shows that each manifest variable in this research has correctly explained the latent variable and proves that the discriminant validity of all variables is valid.

Table 3. Fornell-Larcker Criterion

	EGSQUAL	EE	ITU	PE	US
EGSQUAL	0.861				
Effort Expectancy	0.759	0.855			
Intention To Use	0.766	0.743	0.922		
Performance Expectancy	0.603	0.667	0.620	0.855	
User Satisfaction	0.769	0.721	0.748	0.577	0.871

Table 4. Cross Loading

	EGSQUAL	EE	PE	US	ITU
IP1	0.860	0.659	0.502	0.683	0.677
IP2	0.864	0.691	0.512	0.682	0.676
IP3	0.852	0.666	0.524	0.654	0.650
IQ1	0.829	0.659	0.560	0.689	0.701
IQ2	0.848	0.624	0.524	0.643	0.672
IQ3	0.858	0.660	0.506	0.645	0.639
QA1	0.856	0.655	0.518	0.678	0.677
QA2	0.879	0.632	0.518	0.664	0.655
EU1	0.863	0.628	0.507	0.641	0.639
EU2	0.859	0.661	0.549	0.682	0.682
EU3	0.870	0.650	0.501	0.640	0.659
EU4	0.866	0.649	0.510	0.651	0.640
WF1	0.877	0.669	0.529	0.648	0.658
WF2	0.833	0.650	0.486	0.637	0.658
WF3	0.877	0.662	0.552	0.686	0.653
PS1	0.873	0.623	0.520	0.663	0.646
PS2	0.842	0.627	0.519	0.689	0.654
PS3	0.879	0.673	0.525	0.644	0.670
AE1	0.862	0.693	0.522	0.665	0.672
AE2	0.862	0.638	0.506	0.642	0.640
AE3	0.862	0.645	0.514	0.667	0.619
EE1	0.654	0.880	0.593	0.646	0.652
EE2	0.644	0.824	0.553	0.618	0.628
EE3	0.659	0.865	0.562	0.623	0.633
EE4	0.676	0.861	0.577	0.617	0.681
EE5	0.638	0.846	0.557	0.604	0.598
EE6	0.620	0.855	0.582	0.589	0.616
PE1	0.560	0.598	0.843	0.546	0.579
PE2	0.454	0.544	0.835	0.436	0.482
PE3	0.525	0.572	0.847	0.533	0.548
PE4	0.537	0.578	0.852	0.487	0.530

PE5	0.475	0.530	0.859	0.447	0.478
PE6	0.531	0.593	0.895	0.496	0.550
US1	0.679	0.652	0.501	0.879	0.670
US2	0.694	0.616	0.510	0.861	0.635
US3	0.618	0.606	0.478	0.875	0.635
US4	0.695	0.623	0.519	0.875	0.670
US5	0.659	0.643	0.504	0.866	0.647
ITU1	0.708	0.667	0.544	0.697	0.921
ITU2	0.704	0.704	0.599	0.682	0.923

Reliability Test

Based on table 5 it can be seen that the value of all variables in reliability testing using both Cronbach's Alpha and Composite Reliability is > 0.70 . Therefore, it can be concluded that the variables tested are valid and reliable, so that it can be continued to test the structural model.

Table 5. Reliability Test Results

Variable	Cronbach's Alpha	Composite Reliability	Result
EGSQUAL	0,982	0,984	Reliable
Effort Expectancy	0,927	0,942	Reliable
Performance Expectancy	0,927	0,942	Reliable
User Satisfaction	0,921	0,940	Reliable
Intention To Use	0,823	0,919	Reliable

Structural Model Analysis (Inner Model)

Based on table 6, it can be seen that the EGSQUAL model for User Satisfaction shows a coefficient of determination value of 0.591, thus meaning that the User Satisfaction variance that can be explained by the EGSQUAL variable is 59.1% while the remaining is 40.9% (100%-59, 1%) is explained by other variables outside this research.

In the Effort Expectancy, Performance Expectancy and User Satisfaction model of Intention to Use, the coefficient of determination is 0.688, meaning that the Intention to Use variance can be explained by the Effort Expectancy, Performance Expectancy and User Satisfaction variables, which is 68.8%, while the remainder is 31.2% (100%-68.8%) is explained by other variables outside this research.

Table 6. Coefficient of Determination R²

Model	R Square
User Satisfaction	0.591
Intention To Use	0.688

Meanwhile, based on table 7, it shows that the EGSQUAL variable has the greatest influence on the User Satisfaction variable with a value of 1.445 (large) while the smallest influence is found in the Performance Expectancy variable on the Intention to Use variable with a value of 0.026 (small).

Table 7. F² Effect Size

Variable	F ²	Category
EGSQUAL → User Satisfaction	1,445	Large
EGSQUAL → Intention to Use	0,092	Small

Effort Expectancy → Intention to Use	0,057	Small
Performance Expectancy → Intention to Use	0,026	Small
User Satisfaction → Intention to Use	0,089	Large

Based on table 8, it is known that the Q2 value of the research variable has a value greater than 0. Thus it can be concluded that the model in this research has good predictive relevance in predicting values from the original data.

Table 8. Q² (Q-square)'s Score

Variabel	Q ² (=1-SSE/SSO)
User Satisfaction	0.442
Intention To Use	0.574

Structural model testing is carried out by testing the overall suitability of the model, both outer and inner models, which is called the Goodness of Fit Index (GoF Index). According to Tenenhaus (2004), the value of GoF small = 0.1, GoF medium = 0.25 and GoF large = 0.38. The GoF value in PLS-SEM must be found manually using the following formula:

$$Gof = \sqrt{Com * R^2}$$

$$Gof = \sqrt{0.763 * 0.639}$$

$$Gof = 0.698$$

Based on the results of the calculations that have been carried out, a GoF value of 0.698 is obtained. It can be said that this research model can be stated to have a large Goodness of Fit value. So it can be concluded that hypothesis testing can be carried out because the R2 and GoF tests that have been carried out show that the model formed is strong.

Hypothesis Testing

Hypothesis testing is carried out using the bootstrapping method by making decisions to accept the hypothesis based on the significance value (P Value) and the T – table value. Testing by looking at the path coefficient based on the value of the original sample coefficient. A positive estimate indicates that there is a positive relationship or influence between variables, and vice versa. The criteria for accepting or rejecting the hypothesis are if the t-value significance value is > 1.96 and/or the p-value < 0.05 at a significance level of 5% (α 5%) then the hypothesis is accepted. The image of the bootstrapping model in this research is presented in Figure 3.

Based on Figure 3, the output of this research's bootstrapping model is known, while the results of the direct effect path coefficient in this research are presented in table 9.

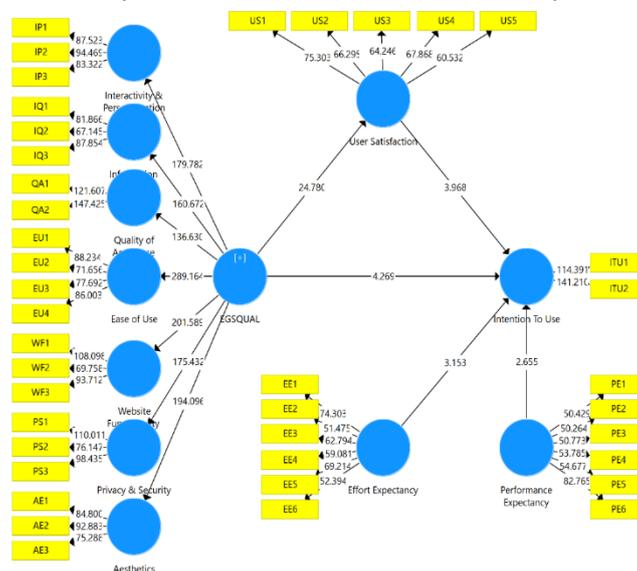


Figure 3. Bootstrapping Model

Table 9. Hypotesis Testing

Variable	Original Sample	T-Statistics	P-Values	Result
EGSQUAL -> User Satisfaction	0,769	24,780	0,000	Significant
User Satisfaction -> Intention To Use	0,278	3,968	0,000	Significant
EGSQUAL -> Intention To Use	0,302	4,269	0,000	Significant
Effort Expectancy -> Intention To Use	0,232	3,153	0,002	Significant
Performance Expectancy -> Intention To Use	0,123	2,655	0,008	Significant

Discussion

a. Electronic Government Service Quality (EGSQUAL) influences User Satisfaction (US) of the IKD Apps

Testing hypothesis 1 on the influence of the EGSQUAL variable on User Satisfaction has a positive original sample path coefficient of 0.769. Significance testing shows that the t-statistic value for this construct relationship is $24.780 > 1.96$, and the p-value is $0.000 < 0.05$, which means it is significant. Thus, hypothesis 1 which states " Electronic Government Service Quality (EGSQUAL) directly influences User Satisfaction (US) of OSS Applications positively" is accepted. This result is in accordance with previous research conducted by Li and Shang (2020) Wang and Teo (2020) Veeramootoo et al., (2018) which shows that service quality and user satisfaction are positively related.

b. User Satisfaction (US) influences Intention to Use (ITU) of the IKD apps.

Testing hypothesis 2 on the influence of the User Satisfaction variable on Intention to Use has a positive original sample path coefficient of 0.278. Significance testing shows that the t-statistic value for this construct relationship is $3.968 > 1.96$, and the p-value is $0.000 < 0.05$, which means it is significant. Thus, hypothesis 2 which states "User Satisfaction (US) directly influences Intention to Use (ITU) OSS Applications positively" is accepted. This result is also in accordance with previous research conducted by Wei *et al.*, (2017) that shows that Intention to use is significantly influenced by user satisfaction.

c. Electronic Government Service Quality (EGSQUAL) influences the Intention to Use (ITU) of the IKD Apps.

Testing hypothesis 3 on the influence of the EGSQUAL variable on Intention to Use has a positive original sample path coefficient of 0.302. Significance testing shows that the t-statistic value for this construct relationship is $4.269 > 1.96$, and the p-value is $0.000 < 0.05$, which means it is significant. Thus, hypothesis 3 which states " Electronic Government Service Quality (EGSQUAL) directly influences Intention to Use (ITU) OSS Applications positively" is accepted. The results of this research are in accordance with those carried out by Aljukhadar et al., (2022), the EGSQUAL variable which consists of 7 dimensions and 21 items which have been developed and validated through strict procedures is able to provide a valid and reliable scale for Intention to Use the Website.

d. Effort Expectancy (EE) influences Intention to Use (ITU) IKD Apps.

Testing hypothesis 4 on the influence of the Effort Expectancy variable on Intention to Use has a positive original sample path coefficient of 0.232. Significance testing shows that the t-statistic value for this construct relationship is $3.153 > 1.96$, and the p-value is $0.002 < 0.05$, which means it is significant. Thus, hypothesis 4 which states "Effort Expectancy (EE) directly influences Intention to Use (ITU) OSS Applications positively" is accepted. This result is also in accordance with previous research conducted by Garavand *et al.*, (2020), Hunde *et al.*, (2023), and Arfi *et al.*, (2021) which shows that there is a significant relationship between effort expectancy and intention to use.

e. Performance Expectancy (PE) influences the Intention to Use (ITU) of the IKD apps

Testing hypothesis 5 on the influence of the Performance Expectancy variable on Intention to Use has a positive original sample path coefficient of 0.123. Significance testing shows that the t-statistic value for this construct relationship is $2.655 > 1.96$, and the p-value is $0.008 < 0.05$, which means it is significant. Thus, hypothesis 5 which states "PERFORMANCE EXPECTANCY (PE) directly influences Intention to Use (ITU) OSS Applications positively" is accepted. This result is also in accordance with previous research conducted by Ayaz and Yanartas (2020), Kurfali *et al.*, (2017), Al-Shafi and Weerakkody (2010), and Budi *et al.*, (2021) which shows that performance expectancy has a positive effect on Intention to Use.

4. Conclusion

From the results of the research conducted, it was found that EGSQUAL can influence user satisfaction of the IKD application, so the government needs to improve the service quality of the applications they have in order to increase the level of user satisfaction. With increasing user satisfaction, people's intention to use the IKD application will also increase.

Apart from that, to increase people's intention to use the IKD application, the government can increase effort expectancy and performance expectancy because these two variables will also increase people's intention to use the application.

Based on the research conducted, there are several limitations found, including, this research has only focused on 1 application, namely IKD and respondents were only taken in Temanggung district. It would be better if this research could be developed using other government applications as research objects, in addition it would be better if the scope of the research was made wider, such as throughout Central Java. In addition it would be better if research variables were added such as E-Trust, security perception, and privacy perception considering that the security of information systems in Indonesia is still questionable

References

- Abu-Taieh, E. M., AlHadid, I., Abu-Tayeh, S., Masa'deh, R. E., Alkhaldeh, R. S., Khwaldeh, S., & Alrowwad, A. A. (2022). Continued Intention to Use of M-Banking in Jordan by integrating UTAUT, TPB, TAM and Service Quality with ML. *Journal of Open Innovation: Technology, Market, and Complexity*, Vol. 8(3), 120, p. 1-28.
- Akinuwesi, B.A., Uzoka, F.M.E., Fashoto, S.G., Mbunge, E., Odumabo, A., Amusa, O.O., Okpeku, M. and Owolabi, O., (2022). A modified UTAUT model for the acceptance and use of digital technology for tackling COVID-19. *Sustainable Operations and Computers*, Vol. 3, p. 118-135.
- Al-Saedi, K., Al-Emran, M., Ramayah, T., & Abusham, E. (2020). Developing a general extended UTAUT model for M-payment adoption. *Technology in society*, Vol. 62, p. 1-10.

- Al-Shafi, S., & Weerakkody, V. (2010). Factors affecting e-government adoption in the state of Qatar. *Proceedings of the European and Mediterranean Conference on Information Systems*, p. 1-23.
- Aljukhadar, M., Belisle, J. F., Dantas, D. C., Sénécal, S., & Titah, R. (2022). Measuring the service quality of governmental sites: Development and validation of the e-Government service quality (EGSQUAL) scale. *Electronic Commerce Research and Applications*, Vol. 55, p. 1-12.
- Arfi, W. B., Nasr, I. B., Kondrateva, G., & Hikkerova, L. (2021). The role of trust in intention to use the IoT in eHealth: Application of the modified UTAUT in a consumer context. *Technological Forecasting and Social Change*, Vol. 167, p. 1-15.
- Ayaz, A., & Yanartaş, M. (2020). An analysis on the unified theory of acceptance and use of technology theory (UTAUT): Acceptance of electronic document management system (EDMS). *Computers in Human Behavior Reports*, Vol. 2, p. 1-7.
- Budi, N. F. A., Adnan, H. R., Firmansyah, F., Hidayanto, A. N., Kurnia, S., & Purwandari, B. (2021). Why do people want to use location-based application for emergency situations? The extension of UTAUT perspectives. *Technology in Society*, Vol. 65, p. 1-10.
- Cong, J., Zheng, P., Bian, Y., Chen, C. H., Li, J., & Li, X. (2022). A machine learning-based iterative design approach to automate user satisfaction degree prediction in smart product-service system. *Computers & Industrial Engineering*, Vol. 165, p. 1-17.
- Erjavec, J., & Manfreda, A. (2022). Online shopping adoption during COVID-19 and social isolation: Extending the UTAUT model with herd behavior. *Journal of Retailing and Consumer Services*, Vol. 65, p. 1-12.
- Garavand, A., Samadbeik, M., Nadri, H., Rahimi, B., & Asadi, H. (2019). Effective factors in adoption of mobile health applications between medical sciences students using the UTAUT model. *Methods of information in medicine*, Vol. 58(04/05), p. 131-139.
- Hair, Joseph F., Black, William C., Babin, Barry J., Anderson, Rolph E. (2019). *Multivariate Data Analysis Eighth Edition*. Hampshire: Cengage Learning.
- Hunde, M. K., Demsash, A. W., & Walle, A. D. (2023). Behavioral intention to use e-learning and its associated factors among health science students in Mettu university, southwest Ethiopia: Using modified UTAUT model. *Informatics in Medicine Unlocked*, Vol. 36, p. 1-9.
- Jadil, Y., Rana, N. P., & Dwivedi, Y. K. (2021). A meta-analysis of the UTAUT model in the mobile banking literature: The moderating role of sample size and culture. *Journal of Business Research*, Vol. 132, p. 354-372.
- Kurfalı, M., Arifoğlu, A., Tokdemir, G., & Paçin, Y. (2017). Adoption of e-government services in Turkey. *Computers in Human Behavior*, Vol. 66, p. 168-178.
- Li, Y., & Shang, H. (2020). Service quality, perceived value, and citizens' continuous-use intention regarding e-government: Empirical evidence from China. *Information & Management*, Vol. 57(3), p. 1-15.
- Liu, J., Sun, H. L., & Zheng, J. (2023). Factors affecting users' intention to use mobile health services of public libraries. *Library & Information Science Research*, Vol 45(1), p. 1-9.
- Ong, M. H. A., Yusri, M. Y., & Ibrahim, N. S. (2023). Use and behavioural intention using digital payment systems among rural residents: Extending the UTAUT-2 model. *Technology in Society*, Vol. 74. p. 1-11.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. West Sussex: John Wiley & Sons.
- Sharma, R., Mishra, R. and Mishra, A., (2021). Determinants of satisfaction among social entrepreneurs in e-Government services. *International Journal of Information Management*, Vol. 60, p. 1-14.
- Smyth, J., Chen, H., Donzella, V., & Woodman, R. (2021). Public acceptance of driver state monitoring for automated vehicles: Applying the UTAUT framework. *Transportation research part F: traffic psychology and behaviour*, Vol. 83, p. 179-191.

- Sugiyono. (2013). Metode penelitian Kuantitatif, Kualitatif dan R&D. Bandung: CV. Alfabeta.
- Sugiyono. (2019). Metodologi Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: CV. Alfabeta.
- Veeramootoo, N., Nunkoo, R., & Dwivedi, Y. K. (2018). What determines success of an e-government service? Validation of an integrative model of e-filing continuance usage. *Government information quarterly*, Vol. 35(2), p. 161-174.
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly*, Vol. 36(1), p. 157-178.
- Wang, C., & Teo, T. S. (2020). Online service quality and perceived value in mobile government success: An empirical study of mobile police in China. *International Journal of Information Management*, Vol. 52, p. 1-12.
- Wei, K. M., Tang, Y. T., Kao, Y. C., Tseng, L. C., & Wu, H. H. (2017). Using an updated Delone and McLean model to assess the success of implementing the ward cleaning logistics system in a medical center. *Journal of Statistics and Management Systems*, Vol. 20(5), p. 965-976.