

# Factors Affecting Schools' Acceptance of Platform SIPLah Implementation Using UTAUT Modified Model

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## Keywords

*E-Procurement, SIPLah, UTAUT, Perceived service quality, Good Government Governance*

## ABSTRACT

*SIPLah is an inventive process for purchasing goods and services in educational institutions. It facilitates the reporting process by providing online marketplace partners, non-cash electronic payments, and digitization of documents. The purpose of this study is to examine the impact of SIPLah adoption on the quality of good government governance and identify the factors influencing educational institutions in adopting SIPLah. The study was conducted with 210 respondents, who are school principals or officially appointed individuals responsible for procuring goods/services. Questionnaires were distributed online, and data were analyzed using Structural Equation Model (SEM). The results show that Use Behavior in SIPLah adoption significantly influences good government governance. Performa expectancy, effort expectancy, and perceived service quality significantly influence attitude towards SIPLah adoption and usage. Conversely, social influence, facilitating condition, Trust in application, and perceived risk do not significantly affect attitude in adopting SIPLah.*

## INTRODUCTION

Digital transformation in the education sector was realized by the Ministry of Education, Culture, Research and Technology by launching various Educational Technology Platforms. Various Educational Technology Platforms exist in order to accelerate the development of the education system, one of which is the School Procurement Information System (SIPLah). SIPLah is present as part of the digitalization program for education services to realize clean, effective, transparent and accountable education governance.

The large amount of School Operational Assistance (BOS) distributed by the central government requires the Ministry of Education, Culture, Research and Technology to carry out technological transformation so that the procurement of goods and services sourced from government aid funds can be carried out easily, practically, transparently and can be easily monitored. by interested parties. Monitoring the use of government assistance such as BOS funds is of particular concern, this is done to minimize fraud in the form of abuse, intimidation and corruption. According to Suparno and Rahmadhani (2020), corruption that occurs in the use of School Operational Assistance (BOS) funds can be avoided if the use of information technology and digital applications can be optimized.

Cash electronic payments and digitizing documents to make it easier for Education Units to carry out the reporting process. The Ministry of Education, Culture, Research and Technology continues to strive to increase the number of users and transactions carried out through SIPLah. Various efforts have been made, one of which is issuing Minister of Education, Culture, Research and Technology Regulation Number 18 of 2022 concerning Guidelines for Procurement of Goods or Services by Education Units in order to increase trust and satisfaction of Education Units and online market partners. Data from the 2022 Pusdatin Performance Report states that the number of active SIPLah users in 2022 will be 216,594 Education Units or around 50.19% of the total number of Education Units in Indonesia. The increase in SIPLah users and transactions is of course greatly influenced by the level of acceptance SIPLah by the Education unit. Based on this, this research was conducted to analyze the factors that influence the acceptance of the use of SIPLah technology by Education Units.

In several literatures it is stated that *the Unified theory of acceptance and use of technology (UTAUT)* is a model that can be used to increase the acceptance and use of *e-government services* (Alhadid et al. 2022) and has high relevance in analyzing user behavior (Williams et al. 2015). *Unified theory of acceptance and use of technology (UTAUT)* was developed by Venkatesh et al (2003) by combining eight previous theories of technology acceptance, namely *Theory of Reasoned Action (TRA)*, *Technology Acceptance Model (TAM)*, *Motivation Model (MM)*, *Theory of Planned Behavior (TPB)*, *Model of PC Utilization (MPCU)*, *Innovation Diffusion Theory (IDT)*, and *Social Cognitive Theory (SCT)*. The four core constructs in the UTAUT model are a synthesis of 32 variables contained in eight previous theories of technology adoption models (Huwaydi 2017). The four main constructs contained in the UTAUT model are *Performance Expectancy*, *Effort Expectancy*, *Social Influence*, and *Facilitating Conditions*. Venkatesh et al. (2003) stated that the UTAUT model has a prediction accuracy rate of 75%, while there is also other research stating that the UTAUT model has a prediction efficiency of 70% higher than eight other technology acceptance theories (Christine and Legowo 2018).

However, some literature states that testing the *Unified theory of acceptance and use of technology (UTAUT)* model in e-government applications has limitations, because it only captures four core determinant variables of intention and use, meanwhile in the use of technology it is suspected that there are other factors that can influence the behavior of application users. Several findings note that the low level of adoption of technology is caused by a lack of user trust in internet-based platforms/services, and risks related to theft of personal data recorded electronically (Li 2021). For this reason, in this research, a more comprehensive empirical study was carried out using a modification of the Unified Theory of Acceptance and Use of Technology (UTAUT) model, by adding *Perceived Risk*, *Trust in Application* which is part of the TAM acceptance model and the Theory of Planned Behavior (TPB). (Xie et al. 2017), expanded with the *Perceived Service Quality variable* (Li et al. 2022) and added *Performance Impact* which is measured using indicators from *Good Government Governance*.

### **School Procurement Information System (SIPLah)**

SIPLah is a *platform* that brings together online market partners, goods and service providers with Education Units in a forum that allows them to carry out the process of procuring goods and services *online* (Education and Culture 2020).

SIPLah is categorized as an *e-government service* in the field of procurement of goods and services (*e-procurement*). A system designed to carry out non-cash electronic transactions by utilizing *e-commerce* managed by a third party. The business process is regulated under the legal umbrella contained in the Minister of Education, Culture, Research and Technology Regulation Number 18 of 2022 concerning Guidelines for Procurement of Goods or Services by Education Units.

The four main factors directly involved in the SIPLah ecosystem are: 1) The Ministry of Education, Culture, Research and Technology which is responsible for distributing the School Operational Assistance (BOS) budget, setting service standards and the identity of online market partners and monitoring the implementation of SIPLah; 2) Online Market Partners/Marketplaces, namely online market managers who have taken part in the selection process from the Ministry of Education and Culture and are designated as official partners who meet the qualifications; 3) Education Units/Schools as end users of SIPLah users in

carrying out goods and services procurement transactions whose funding source comes from BOS funds; and 4) Providers consist of SMEs, MSMEs and shops that sell goods/services for school needs.

### **Unified theory of acceptance and use of technology (UTAUT)**

In 2003 Venkates, Morris and Davis created a technology acceptance model by identifying four factors of technology acceptance which were measured through behavioral intention (Venkatesh *et al.* 2003) . The four constructs are:

- 1) Performance *Expectancy* is defined as the extent to which individuals believe that the use of technology can help increase work productivity (Venkatesh *et al.* 2003) ; (Mensah *et al.* 2020) . Based on previous research, it is stated that *performance expectancy* influences the user's attitude *in* accepting technology (Soong *et al.* 2020) ; (Pamungkas *et al.* 2022) . In other words, the usefulness of a technology/system influences the acceptance attitude of its users. Based on previous research, the hypothesis that will be formulated in this research is:  
H1: *Performance expectancy* (PE) has a positive and significant influence on *Attitude* (ATT) in adopting SIPLah.
- 2) Effort *Expectancy* is the level of ease in using a system or technology (Venkatesh *et al.* 2003) . In previous research, this construct was used to understand the user's attitude ( *Attitude* ) in terms of the amount of effort made by the user in using a system or technology (Khurshid *et al.* 2019) . *Effort expectancy* is considered to be an important predictor that has an influence on the attitude of acceptance of a technology (Xie *et al.* 2017);(Kurfalı *et al.* 2017). Therefore testing the second hypothesis is formulated by:  
H2: *Effort expectancy* (EE) has a positive and significant influence on *Attitude* (ATT) in adopting SIPLah.
- 3) Social Influence *describes* the extent to which the external environment influences a person's decision to use a system or technology (Dwivedi *et al.* 2017) ; (Mensah *et al.* 2020) . Lallmahomed *et al.* (2017) states that Social Influence is a moderating factor in e-government acceptance. Several previous studies stated that the user's attitude of acceptance is influenced by social influence. (Kurfalı *et al.* 2017) (Alhadid *et al.* 2022).  
H3: Social influence (SI) memiliki pengaruh positif dan signifikan terhadap *Attitude* (ATT) dalam mengadopsi SIPLah.  
H3: *Social influence* (SI) has a positive and significant influence on *Attitude* (ATT) in adopting SIPLah.
- 4) Facilitating Conditions *are* an individual's view regarding the availability of infrastructure, technical knowledge and service facilities to support the effective use of a technology (Camilleri 2020) . Slade *et al.* (2015) and (Alhadid *et al.* 2022) in their research stated that *Facilitating conditions* have a significant influence on a person's attitude of acceptance *in* using *e-government*. Based on this, the fourth hypothesis that will be tested in this research is:  
H4: *Facilitating conditions* (FC) have a positive and significant influence on *Attitude* (ATT) in adopting SIPLah.
- 5) Attitude is a reflection of the extent to which users have a positive or negative evaluation of their experience using a system or technology ( Mensah and Mi 2018) (Dwivedi *et al.* 2017) . Davis (1989) in his research suggested that attitude *can* influence *Intention to Use*. This is validated by research conducted by (Xie *et al.* 2017) which proves that an attitude of acceptance (*attitude* ) has a direct impact on behavioral intentions ( *Intention to Use* ) to use a system or technology. Based on this, the fifth hypothesis formulated in this research is:  
H5: *Attitude* (ATT) has a positive and significant influence on *Intention to Use* (INU).
- 6) *Intention to Use* is defined by Venkatesh (2003) as the level of a person's desire or intention to use a technology on an ongoing basis. The *Theory of Planned Behavior* states that a person's actions ( *Use Behavior* ) are influenced by behavioral intentions (Ajzen 2012). Several studies in the context of technology use have validated the relationship between *Intention to Use* and *Use Behavior* (Zhang, B., & Zhu 2021) , the results show that there is a significant influence between *Intention to Use* and *Use Behavior*. Based on this description, the sixth hypothesis is formulated:  
H9: *Intention to Use* (INU) has a positive and significant influence on *Use Behavior* (UB).

## METHOD

This research was conducted at the Data and Information Technology Center of the Ministry of Education, Culture, Research and Technology starting from May to July 2023. Hypothesis testing in this research was carried out using a quantitative approach. Quantitative research is aimed at developing and using systematic models, theories and hypotheses related to phenomena (Hadi 2015).

The population in this study are educational units receiving BOS funds that actively use SIPLah, represented by the school principal or someone officially appointed to procure goods and services for the educational unit. The population in this research is 216,594 education units.

In determining the sample size for a relatively large population, researchers used references from Hair *et al.* (2019) stated that the large population size can be recommended to choose a sample size of between 100-200 respondents so that interpretation estimates can be used with the Structural Equation Model. Furthermore, Hair *et al.* (2017) argue that the number of samples drawn depends on the number of indicators multiplied by 5 to 10, thus if there are 41 indicators then the minimum number of respondents is 205 samples. The total number of respondents was 210 consisting of 87 respondents at the preschool/kindergarten level, 152 respondents at the elementary school level, 40 respondents at the junior high school level, and 23 respondents at the high school level. Determining the number of strata in each province uses the *Proportionate Stratified Random Sampling formula*.

This research instrument uses a questionnaire distributed online, using a 1-5 Likert scale. Data processing in the research was carried out using SPSS and Microsoft Excel 365 for descriptive analysis, while for hypothesis and significance testing using the statistical tool *Structural Equation Modeling - Partial Least Square (SEM-PLS)*. *Structural Equation Modeling - Partial Least Square (SEM-PLS)* is a multivariate technique used to test causal relationships between constructs, test the feasibility of the model and confirm it according to empirical data to determine the significant factors that have the most influence (Hair *et al.* 2019). The research model used in this research is as in Figure 1.

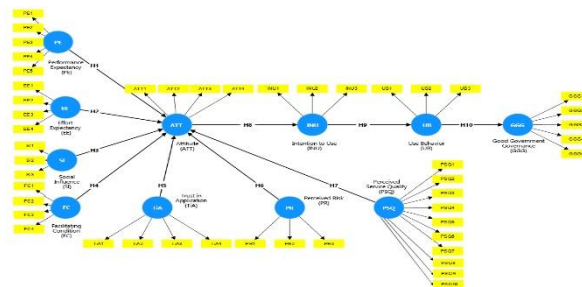


Figure 1. SEM-PLS modeling

## RESULTS

Based on research conducted on 210 respondents spread across almost all provinces in Indonesia, the demographic characteristics of respondents consisted of 55.7% women and 44.3% men, with the majority aged >45 years at 55.2%. The characteristics of respondents based on employment status were dominated by Civil Servants (PNS) at 63.3%, with the highest level of education being dominated by bachelor's degrees at 77.6%. These data show that the majority of respondents who use SIPLah in terms of educational background have a good level of education, thus providing quite a large opportunity to accept the implementation of a new technology or system. In terms of internet experience, the majority of respondents were in the "experienced" category with a percentage of 79.5% with an average number of application mastery of 3-5 applications (61.9%). Based on these data, it can be concluded that the majority of respondents who use SIPLah have an adequate level of education, extensive internet experience and sufficient mastery of the application. This illustrates that the majority of SIPLah users have great potential to adapt to sustainable use of SIPLah. The Ministry of Education and Culture, as the manager of SIPLah, can

utilize the knowledge and abilities of respondents in using technology by providing more targeted support and training to increase participation and success in implementing SIPLah.

The next data analysis is SEM – PLS using SmartPLS 3.0 software, namely through evaluation of measurement models, structural model evaluation analysis (inner model) and hypothesis testing carried out using bootstrapping techniques. Evaluation analysis of the measurement model was carried out using convergent validity tests, discriminant validity tests and composite reliability tests.

#### **Test the measurement model (evaluation of measurement model)**

In the convergent validity test, it is measured by looking at the *loading factor value* and the *average variant extraced* (AVE) value of each indicator. The loading factor value shows how strong the relationship is between the indicator and the variable being measured, as well as whether the indicator is able to define the latent variable well or not. Hair *et al.* (2019) stated that an indicator is declared valid if it has a *loading factor value* > 0.70 and has an *average variant extracted* (AVE) value > 0.5. If from the test results it is found that indicators have a *loading factor* below 0.7, the indicators are eliminated, then the research construct is recalculated to obtain an adequate final calculation model.

From the test results, there are five indicators that do not meet the requirements with an outer loading value below 0.7, namely the " *Resources*" indicator in the *Facilitating condition variable* (FC2), the " *Assurance*" indicator (PSQ8), " *Emphaty*" (PSQ9) and (PSQ10) on the *Perceived Service Quality variable* and the " *Participation*" indicator on the *Good Government Governance variable* (GGG1). Indicators that do not meet the requirements are deleted and recalculated. Summary of validity and reliability testing results as shown in table 1.

**Table 1**  
**Validity and reliability test results**

| <b>Variable</b>                        | <b>Indicator</b> | <b>Factor Loading (&gt;0.7)</b> | <b>AVE (&gt;0.5)</b> | <b>Cronchbach Alpha (&gt;0.6)</b> | <b>Composite Reliability (&gt;0.7)</b> |
|--|------------------|---------------------------------|----------------------|-----------------------------------|--|
| <b>Performance expectancy (PE)</b>     | PE1              | 0.778                           | 0.617                | 0.844                             | 0.889                                  |
|  | PE2              | 0.781                           |                      |                                   |  |
|  | PE3              | 0.760                           |                      |                                   |  |
|  | PE4              | <b>0.818</b>                    |                      |                                   |  |
|  | PE5              | 0.787                           |                      |                                   |  |
| <b>Effort Expectancy (EE)</b>          | EE1              | 0.803                           | 0.642                | 0.815                             | 0.877                                  |
|  | EE2              | 0.802                           |                      |                                   |  |
|  | EE3              | 0.743                           |                      |                                   |  |
|  | EE4              | <b>0.835</b>                    |                      |                                   |  |
| <b>Facilitating Conditions (FC)</b>    | FC3              | <b>0.892</b>                    | 0.750                | 0.668                             | 0.857                                  |
|  | FC4              | 0.839                           |                      |                                   |  |
| <b>Social Influence (SI)</b>           | SI1              | 0.789                           | 0.597                | 0.665                             | 0.816                                  |
|  | SI2              | <b>0.799</b>                    |                      |                                   |  |
|  | SI3              | 0.728                           |                      |                                   |  |
| <b>Trust in application (TIA)</b>      | TIA1             | 0.705                           | 0.592                | 0.773                             | 0.853                                  |
|  | TIA2             | 0.741                           |                      |                                   |  |
|  | TIA3             | 0.778                           |                      |                                   |  |
|  | TIA4             | <b>0.847</b>                    |                      |                                   |  |
| <b>Perceived risk (PR)</b>             | PR1              | <b>0.831</b>                    | 0.652                | 0.734                             | 0.849                                  |
|  | PR2              | 0.797                           |                      |                                   |  |
|  | PR3              | 0.794                           |                      |                                   |  |
| <b>Perceived service quality (PSQ)</b> | PSQ1             | 0.729                           | 0.592                | 0.885                             | 0.910                                  |
|  | PSQ2             | 0.792                           |                      |                                   |  |
|  | PSQ3             | <b>0.842</b>                    |                      |                                   |  |
|  | PSQ4             | 0.827                           |                      |                                   |  |



| Variable                                | Indicator | Factor Loading (>0.7) | AVE (>0.5) | Cronchbach Alpha (>0.6) | Composite Reliability (>0.7) |
|---|-----------|-----------------------|------------|-------------------------|------------------------------|
| <b>Attitude (ATT)</b>                   | PSQ5      | 0.712                 | 0.794      | 0.914                   | 0.939                        |
|   | PSQ6      | 0.706                 |            |                         |                              |
|   | PSQ7      | 0.767                 |            |                         |                              |
|   | ATT1      | <b>0.913</b>          |            |                         |                              |
|   | ATT2      | 0.891                 |            |                         |                              |
| <b>Intention to Use (INU)</b>           | ATT3      | 0.868                 | 0.628      | 0.704                   | 0.835                        |
|   | ATT4      | 0.893                 |            |                         |                              |
|   | INU1      | 0.787                 |            |                         |                              |
| <b>Good Government Governance (GGG)</b> | INU2      | <b>0.809</b>          | 0.678      | 0.840                   | 0.893                        |
|   | INU3      | 0.781                 |            |                         |                              |
|   | GGG2      | 0.777                 |            |                         |                              |
|   | GGG3      | <b>0.896</b>          |            |                         |                              |
|   | GGG4      | 0.895                 |            |                         |                              |
|   | GGG5      | 0.710                 |            |                         |                              |

Source: Processed Data (2023)

### Structural Model Test (Inner Model)

A structural model evaluation analysis (*Inner Model*) was carried out to test the suitability and quality of the model that had been built in the jalut analysis. This test was carried out by looking at the *R-square* coefficient of determination for endogenous latent variables, the relevance of predictions through the *blindfolding process* ( $Q^2$ ), and the *Goodness of Fit* (GoF) value. The coefficient of determination or *R-square* ( $R^2$ ) is the ability to measure all endogenous variables that can be explained by exogenous variables and indicators that influence them. Ghozali and Latan (2019) stated that based on *the rule of thumb*, the *R-Square value* of the prediction accuracy model category is weak/small if it is at a value of 0.25, it is said to be strong as a moderate/medium prediction accuracy model if the *R-square value* is 0.50, and categorized as a strong/large accuracy model if it is at a value above 0.75. The *R-Square value* in this study is presented in table 2.

**Table 2**  
**Coefficient of Determination**

| Endogenous Variables             | R-square | Criteria |
|----------------------------------|----------|----------|
| Attitude (ATT)                   | 0.671    | Moderate |
| Good Government Governance (GGG) | 0.237    | Weak     |
| Intention to Use (INU)           | 0.325    | Weak     |
| Use Behavior (UB)                | 0.386    | Weak     |

Source: Processed data (2023)

Based on table 5, it can be concluded that the endogenous variables *Attitude (ATT)*, *Intention to Use (INU)*, *Use Behavior (UB)* and *Good Government Governance (GGG)* are influenced by all the factors in the research, each amounting to 67.1%, 32.5%, 38.6% and 23.7% and the remainder was explained by factors outside the research.

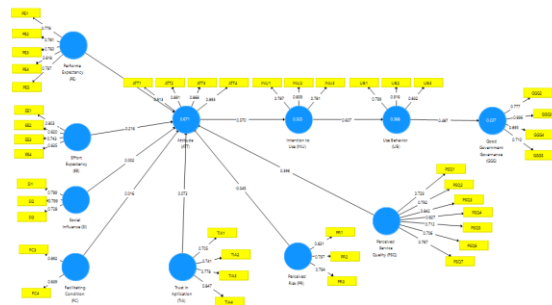


Figure 2. SEM-PLS Model Results

Predictive relevance testing ( $Q^2$ ) is carried out using *blindfolding* to measure how good the observation values produced by the model are and the estimated parameters. Ghozali (2014) states, if the  $Q^2$  value  $> 0$  then it can be said to have a good observation value or is said to have *predictive relevance*, whereas if the  $Q^2$  value  $< 0$  then the observation value is declared not good. Based on table 6, it shows that the  $Q^2$  value for the *Attitude (ATT)*, *Intention to Use (INU)*, *Use Behavior (UB)* and *Good Government Governance (GGG)* variables are still  $> 0$ , meaning that this research has good *predictive relevance*.

**Table 3**  
**Predictive Relevance Value ( $Q^2$ )**

| Variable                         | $Q^2$ |
|----------------------------------|-------|
| Attitude (ATT)                   | 0,515 |
| Intention to Use (INU)           | 0,202 |
| Use Behavior (UB)                | 0,258 |
| Good Government Governance (GGG) | 0,154 |

Source: Processed Data (2023)

Furthermore, *Goodness of Fit* aims to see how good the model being researched or owned is by looking at the *Standardized Root Mean Square (SRMR)* value through PLS-Algorithm analysis. The SRMR value must be  $< 0.10$  (Henseler and Sarstedt 2013). Based on the test results, the SRMR value produced in this study was 0.078, meaning that it shows that the resulting model construction is declared fit and has good abilities in explaining the data.

**Table 4**  
**Goodness of Fit Value**

|             | Saturated Model | Estimated Model |
|-------------|-----------------|-----------------|
| <b>SRMR</b> | <b>0.078</b>    | <b>0.143</b>    |
| d_uls       | 5,550           | 18,405          |
| d_g         | 2,058           | 2,276           |
| Chi-Square  | 2,335,819       | 2,489,977       |
| NFI         | 0.631           | 0.607           |

Hypothesis testing in this research was carried out through a *bootstrapping procedure* to determine the significance of the influence between variables. The *path coefficients* parameter value shows the direction of the positive and negative relationship. The relationship between variables in this study was carried out using a significance test (t-test) where the confidence level used was 95% with the provisions being significant and not significant if the t-count value was less than or equal to the t-table -1.960 (t-count  $\leq - 1.960$ ), or if the t-count value is greater than or equal to 1.960 (t-count  $\geq 1.960$ ). From the results of

testing the 10 hypotheses, there were 6 significant hypotheses and in accordance with what was hypothesized, while the other 4 hypotheses were not significant, this is summarized in table 7

**Table 5**  
**Path Coefficients values and Relationship Significance (t-count)**

| No | Hypothetical Path | Original Samples (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Stat | P Values | Hypothesis |
|----|-------------------|----------------------|-----------------|----------------------------|--------|----------|------------|
| 1  | PE -> ATT         | 0.287                | 0.304           | 0.075                      | 3,823  | 0,000    | Accepted   |
| 2  | EE -> ATT         | 0.216                | 0.202           | 0.088                      | 2,440  | 0.015    | Accepted   |
| 3  | SI -> ATT         | 0.002                | 0.003           | 0.072                      | 0.033  | 0.974    | Rejected   |
| 4  | FC -> ATT         | 0.016                | 0.014           | 0.050                      | 0.325  | 0.745    | Rejected   |
| 5  | TIA -> ATT        | 0.073                | 0.077           | 0.068                      | 1,076  | 0.283    | Rejected   |
| 6  | PR -> ATT         | -0.045               | -0.044          | 0.048                      | 0.935  | 0.350    | Rejected   |
| 7  | PSQ -> ATT        | 0.396                | 0.392           | 0.085                      | 4,677  | 0,000    | Accepted   |
| 8  | ATT -> INU        | 0.570                | 0.577           | 0.056                      | 10,152 | 0,000    | Accepted   |
| 9  | INU -> UB         | 0.607                | 0.611           | 0.050                      | 12,065 | 0,000    | Accepted   |
| 10 | UB -> GGG         | 0.487                | 0.493           | 0.063                      | 7,758  | 0,000    | Accepted   |

Source: Processed Data (2023)

The *performance expectancy* and *effort expectancy* factors show significant value to the attitude towards acceptance and use of SIPLah. The t-statistic values respectively showed significant results of 3.823 and 2.440 > 1.96 with p-values of 0.000 and 0.015 respectively and were stated to have a positive effect on increasing attitudes towards accepting SIPLah adoption. Based on the test results, **H1 and H2 are accepted**. These findings consistently support research conducted by (Dwivedi *et al.* 2017) ; (Soong *et al.* 2020) ; (Alhadid *et al.* 2022) which states that *performance expectancy* and *effort expectancy* are significant predictors of *attitude toward acceptance of e-government services*. Observation results state that SIP provides benefits in simplifying the administrative and reporting processes for managing BOS funds. SIPLah users tend to have a positive attitude in assessing the level of ease and effort that must be expended in using SIPLah.

In contrast to the above, *Social Influence* and *Facilitating conditions* show insignificant results on *attitude* towards adoption and use of SIPLah with t- *statistic values* respectively showing insignificant results of 0.033 and 0.325 < 1.96 with p- *values* respectively also 0.974 and 0.745 > 0.05. Based on the test results, **H3 and H4 are rejected**. This finding explains that in research on SIPLah adoption, *facilitating conditions* and *social influence* are thought to not predict *attitude*. The results of this research show that the adoption and use of SIP is not completely determined by the availability of *facilitating conditions* and the amount of *social influence*. Individual perceptions regarding the benefits, usefulness and relevance of SIPL are thought to be more influential in shaping adoption behavior. This was similar to what was found in research conducted by Supristiowadi *et al.* (2018) ; (Avazov and Lee 2020) and Mensah *et al.* (2020) stated that *facilitating conditions* and *social influence* did not have a significant effect on *attitude*.

The extension of the construct carried out in this research was by adding the variables *Trust in application*, *Perceived risk* and *Perceived service quality*. The results show that *Trust in application* and *Perceived risk* show insignificant results on *attitudes* towards adoption and use of SIPLah with t- *statistic values* respectively showing insignificant results of 1.076 and 0.935 < 1.96 with p-values respectively 0.283 and 0.350 > 0.05. Based on the test results, **H5 and H6 are rejected**. These findings explain that in research on the adoption of SIPLah *Trust in application* and *perceived risk* do not predict *attitudes* towards acceptance and use of SIPLah by schools. The results of the observations identified the reasons that are thought to be the cause of *trust in application* not having a significant influence on *attitude*, namely external factors originating from regulations and government intervention, in this case the Ministry of Education and Culture, where the adoption of SIPL is mandatory for schools receiving School Operational Assistance funds.



In conditions like this, *Trust in application* does not absolutely depend on the user's perception of *Trust in application*. Meanwhile, *perceived risk* does not have a significant influence due to the conditions where the SIPLah service can meet the expectations of protecting user privacy and security, so that users have the perception that potential risks can be managed well by the Ministry of Education and Culture as the owner of the SIPLah application. Educational units tend to look at the benefits compared to the potential financial risks of implementing SIPLah. The results of this research are in line with the findings of Kasilingam (2020) which states that trust in the system does not have a significant influence on attitude and the findings of Avazov and Lee (2020) which state that *perceived risk* has an insignificant influence on *attitude*.

Another construct that is an extension of this research is *Perceived service quality*. The results of the hypothesis test show that it has a positive influence of 0.0396 on attitude with a t- *statistic value* of 4.677 > 1.96 and a p-value of 0.000 > 0.05. Based on these test results, **H7 is accepted**. The results of this study consistently support the findings of Alkrajji and Ameen (2022) and Alhadid et al. (2022) who stated that *perceived service quality* has a significant influence on *attitude*. From the observation results, it can be concluded that the quality of SIPLah services has improved linearly with the positive attitude of educational units towards participation and use of SIPLah.

The next test results explain the influence of the *attitude variable* on *intention to use*, which shows *attitude* has a positive influence of 0.570 on *intention to use* (INU) with a t- *statistic value* of 10.152 > 1.96 and a p-value of 0.000 > 0.05. Based on these test results, **H8 is accepted**. The research results consistently support the research results of Fitriyah et al. (2022) and Pamungkas et al. (2022) which states that a positive attitude from users will increase their intention to adopt SIPLah services. The positive attitude formed by users will have an impact on interest in using SIPLah. Next, a hypothesis test was carried out on *intention to use* versus *use behavior*, with a t-*statistic value* of 12.065 > 1.96 and a p-value of 0.000 > 0.05. Based on the test results, **H9 is accepted**. The results of this research support research conducted by Zhang, B., & Zhu (2021) which consistently supports *the Theory of Reasoned Action*, which states that a person's actions are influenced by behavioral intentions (Ajzen 2012) . In the context of SIPLah implementation, *intention to use* becomes a direct predictor of *use behavior*, in other words, the stronger the school's intention or desire to use SIPLah, the higher the possibility that the school will actually use the application.

Finally, a test was carried out on the influence of use behavior on *Good Government Governance* (GGG), showing that it had a positive influence of 0.487 on *Good Government Governance* (GGG) with a t- *statistic value* of 7.758 > 1.96 and a p-value of 0.000 > 0.05. Based on the test results, **H10 is accepted**. This finding is in line with Ariefjauhari and Hasan Basri (2015) who stated that the implementation of *e-government* has a positive and significant relationship in efforts to implement *good governance*. A similar thing was also found in Zawani's (2012) research which stated that the use of *e-government implementation* through *e-procurement* was a concrete step taken by the government in implementing *good governance*.

## CONCLUSION

Based on the results of analysis from research, the adoption of SIPLah by educational units can have an influence on improving the quality of *Good Government Governance*, where the use of SIPLah produces good practices that contribute to increasing transparency, efficiency and accountability in the process of procuring goods/services in schools. Digitalization of documents and processes can streamline workflows, provide security guarantees in transactions and increase more active public participation. The real impact felt in the adoption and use of SIPLah is reducing corrupt practices and increasing community integration into government institutions. According to the research results, *performance expectancy*, *effort expectancy*, *perceived service quality* are the factors that have the greatest influence on the use of SIPLah in educational units, while *facilitating conditions*, *social influence*, *trust in application* and *perceived risk* do not have a significant influence on adoption *attitudes*. SIP lah. Apart from that, the research results show that attitude positively and significantly *influences intention to use* and *use behavior* which has an impact on improving the quality of *Good Government Governance*.

From the results of the analysis and conclusions above, the Ministry of Education and Culture as the manager and regulator of the SIPLah application needs to pay special attention to the main determining

factors for the success of SIPLah adoption, including increasing *performance expectancy*, *effort expectation* and increasing *perceived service quality*. This can be done by providing more intensive technical support for users so that they have more trust and confidence that SIPLah can provide benefits and convenience in the process of procuring goods/services in schools. In increasing preferences for goods/services, the Ministry of Education and Culture can formulate broader strategic policies with online market partners so that SMEs, MSMEs and shops, especially in areas with low usage levels, can join massively to become part of the providers of the SIPLah application. In the process of developing and improving applications, communication and engagement with online market partners must be improved, feedback from online market partners can be the basis for more strategic decision making. The Ministry of Education and Culture can provide training to schools and provide comprehensive support for providers who have just joined the SIPLah application to ensure providers understand all policies and how to use the platform so that they can maximize the potential of providers in providing more varied product preferences according to school needs.

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