EVALUATION OF THE SUCCESS OF THE REKON.ID MOBILE ATTENDANCE APPLICATION USING THE DELONE AND MCLEAN APPROACH

[1]**RAHMAT IVAN AZIZ**, [2]**EMIL ROBERT KABURUAN**

[12]Information Systems Management Department, BINUS Graduate Program-Master of Information System

Management, Bina Nusantara University, Jakarta 11480, Indonesian.

E-mail: [1]rahmat.aziz001@binus.ac.id, [2]emil.kaburuan@binus.edu

ABSTRACT

This study discusses the evaluation process on the use of the Rekon.id application at the company PT Solusi Konvergen. The Rekon.id application is an application made by companies to record every activity carried out by employees and help employees to carry out administrative processes every day. However, at the time of its application, the Rekon.id application experienced a decrease in users every month. So, with these problems, companies must evaluate the use of the application. This study conducted an evaluation process for the success of the Rekon.id application using the DeLone and McLean model which consisted of system quality, information quality, service quality, usage, user satisfaction, and net benefits. This study uses 235 samples of Rekon.id application users to test and perform quantitative analysis in the evaluation process of using the Rekon.id application. The results of the 10 hypothesis test conducted show that the variables that have a positive relationship are information quality on user satisfaction, system quality on user satisfaction, service quality on use, and user satisfaction with net benefits.

Keywords: *Evaluation Information System, Information System, Mobile Attendance, DeLone and McLean Approach.*

1. INTRODUCTION

This In today's technological developments, there are many developments carried out by various companies to improve quality by providing convenience to all sections or employees in the company. By utilizing current technological developments, the company will be able to improve quality and make it easier for the company to control all activities of every employee who works at the company, one of which is the employee attendance of a company. Attendance performed by each employee manually will be very time consuming, tedious, and not very efficient in the process. So that the existence of an information system gives more tension and pressure to users related to administration. Some human errors can occur when recapping so much data on the company that if an error occurs it will take a long time to be repaired [1].

Current technological developments have an impact on companies to apply today's modern technology such as online attendance. Online attendance can be done by every employee of the company every day with the aim of finding out whether the employee is present, sick, permission, or negligent for any given job, where later this attendance data will be directed into the attendance data recap of each employee [2]. Today's online attendance technology can make it easy for company employees to do attendance and provide an easy impact on companies to monitor and recap the data of every employee who works at the company.

Online attendance or online attendance systems are attendance records using applications that send biometrics that distinguish each individual to a cloud system, which is connected to a real-time database. The cloud system will store attendance data which can be accessed anywhere and anytime as long as it is connected to the internet [3]. In addition to providing convenience for employees at the company in carrying out attendance, online attendance also provides benefits for the company itself such as saving financial costs, easy data recapitulation, and more accurate calculation of working hours. The main reason a company uses online attendance is that it makes it easier to recapitulate the data of each company employee [4]. But at this time many companies have created and

implemented online attendance applications but in the process of implementing this information system many company employees are less interested in using it and are not accustomed to using attendance online.

The Indonesian Convergent Solutions Company is one of the subsidiaries of the employee cooperative of the digital multimedia division. The Indonesian Convergent Solutions Company also has several services in cooperation with other companies. One of the cooperative services provided by the Indonesian Converging Solution Company is to provide services in helping provide labor to cooperating companies. Currently, the number of employees who have collaborated with the Indonesian Convergent Solutions Company has reached 550 employees spread across 2 areas, namely Jakarta and Bandung. To assist the company in the administrative process of each employee, the Indonesian Convergent Solution Company has made and implemented the use of online attendance by using a mobile-based application called Rekon.id. This online attendance application has been implemented by the company since early 2019 until now for all employees who have collaborated with the company.

The Rekon.id application made by the Indonesian Convergent Solutions company is expected to provide convenience to all employees in meeting administrative needs and can assist the company itself in providing administrative process procedures such as making data recaps for each employee which will be more centralized by using the system in the Rekon.id application. But at this time the use of the Rekon.id application had problems, where the use of the Rekon.id application had decreased quite significantly. The following is a graph of data on the use of the Rekon.id application in 2019.
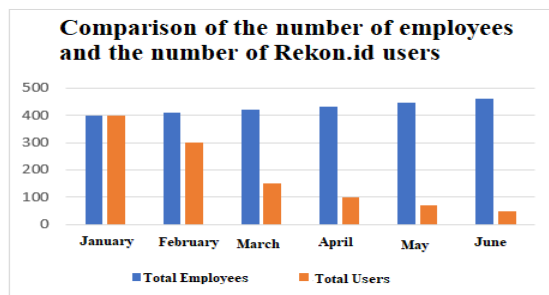

Figure 1: Comparison Graph of Number of Employees and Users of the Rekon.id Application in 2019.

Based on figure 1, it is known that the target month for the first time the application is released,

all employees are required to use the Rekon.id application. However, based on these data, it can also be seen that a significant decrease in the following months. The increase in the number of employees cannot increase the number of uses of the Rekon.id application. The results of the information that has been collected by the company show that employees often use conventional methods, namely by using paper or hardcopy which is made monthly as attendance reports to meet employee administrative needs, so that the data recap process must be done manually by the company.

This does not make the function of the Rekon.id application run well as it should be which is expected to provide convenience to all employees and for the company. With these problems, the Indonesian Convergent Solution Company will evaluate the Rekon.id application to maximize the use of the application in its daily use by employees and Indonesian Convergent Solution companies. Evaluation of the success of an information system will be able to help the company, where the company maximizes the use of information systems in the day-to-day so that it will provide convenience to the company [5]. Therefore, the authors consider that the evaluation of the use of the Rekon.id attendance application using the DeLone and McLean approach is necessary to find out the problems that exist in the current use of the Rekon.id mobile application.

Therefore, the authors consider that the evaluation of the use of the Rekon.id attendance application using the DeLone and McLean approach is necessary to find out the problems that exist in the current use of the Rekon.id mobile application. Over time and the development of technology approaches using DeLone and McLean have also been modified to find the needs or requirements that suit various types of information systems and from various user perspectives. In the aspects of users and aspects of user satisfaction, both in terms of information quality, system quality, and service quality in each dimension as well as a combination of the three, the DeLone and McLean approach proves to be able to offer the development of a successful model of information systems [6]. Analysis and evaluation will be carried out using the approaching model proposed by DeLone and McLean regarding the success of information systems to assist in evaluating the company using 6 dimensions, namely; information quality, system quality, service quality by use, user satisfaction, and net benefits. Thus, the results of this evaluation are

expected to know the current situation so that improvements can be made to the parts needed or enhanced and maintain existing services at the company PT Solusi Konvergen Indonesia.

2. LITERATURE REVIEW

2.1 Information Systems

Understanding Information Systems, information systems are a way that is organized and made to collect, enter, and process, and store data, and report information in such a way that an organization can achieve the goals set by the organization [7]. Information systems can also be interpreted as a collection of interconnected components and functions to be able to collect, process, store, and distribute information in terms of supporting decision-making and control in an organization [8]. An information system can be in the form of a neatly arranged combination of users, hardware, software, networks, data, policies, and procedures for storing, retrieving, changing, and disseminating information within the organization [9]. So based on the above understanding, it can be concluded that an information system is a tool for collecting, processing, storing, processing, and distributing information and in the form of integrated and complementary data sets and producing good output to solve problems and make decisions.

2.2 Evaluation of Information Systems

Evaluation is a phase that is indispensable in every process of developing an information system [10]. The evaluation process will determine the level of success or failure in an information system. Research has provided a taxonomy of success variables, which can be applied in various situations [11]. Information system evaluation can also be done by conducting interviews with users of the information system, to be able to assess the level of benefits obtained from the information system, as well as asking senior company or organization questions or referring to more objective data from annual reports or when measuring benefits. organization [12].

2.3 Mobile

At this time, most people prefer mobile devices such as cellphones or smartphones to search for information rather than using devices or devices such as computers and laptops which are difficult to access at any time and can be taken anywhere. Mobile devices can have various operating systems such as iOS, Android, and other devices, which can drive several types of features on each device and how these features can be accessed and displayed on a device [13]. Mobile learning can be defined as a container that provides general information electronically to users, which can provide educational content that helps obtain knowledge regardless of time and place [14].

2.4 Evaluation of the Use of the Rekon.id Application

The success of application use can be measured based on the level of satisfaction of the application user, individual impact, and the outcome of the organization. However, the measurement most often used is measuring the quality of information based on how the results are measuring user satisfaction. The definition of the quality of an information system can be described in the DeLone & McLean IS Success Model by DeLone and McLean which started in 1992 which was later developed into the latest IS Success Model in 2003. The DeLone & McLean IS Success Model has also been updated, indicators of success An information system is categorized into six main dimensions, namely system quality, information quality, service quality, usage, user satisfaction, and net benefits [12].

2.5 Delone and Mclean Approach

The approach using DeLone & McLean is a framework used to measure complex independent variables in information systems research. Meanwhile, DeLone & McLean Information Systems Success Model is a comprehensive model that has been supported by many empirical studies and reviewed 180 studies from seven Management Information System publications and synthesizes six factors that contribute to the success of an information system [17]. DeLone & McLean is a framework model capable of measuring the success of an application or system in a company or organization [18]. In its development, the DeLone and McLean IS Success Model approach has undergone refinement, adding service quality and net benefits as a substitute for individual and organizational impacts. The addition of service quality is due to the emergence of end-user computing which makes the information system organization not only as an information provider but also as a service provider to the organization and the company itself [19]. While the net benefit variable is made to replace the individual impact and organizational impact because it can further simplify the measurement of success along with the increasing activity of information systems in everyday life [19]. Based on the DeLone and McLean's Success Model, it is important to measure the success of an information system, this is to be able to find out the value of the steps taken

in managing an information system and in other matters, namely information systems investment [19]. The information system success model was first introduced by William H. Delone and Ephraim R. McLean. The dimensions used in the DeLone & McLean [20] information system success measurement model are as follows: Information quality; System quality; Quality of service; Use; User satisfaction; Net benefits.

3. RESEARCH METHOD

In this section, the writer will explain the research method used. The research methodology used in this research is to use the DeLone and McLean approach method. Where the DeLone & McLean approach is a framework for measuring complex independent variables in information systems research. DeLone & McLean's approach is a model framework capable of measuring the success of an application or system in companies and organizations [18]. This study uses variables that already exist in the DeLone and McLean method as variables to measure the success of the information system, namely Rekon.id at the company.

3.1 Research Object
The Indonesian Convergent Solution Company is a company that was inaugurated in 2013. The Indonesian Convergent Solution Company has currently collaborated with 550 active employees to date. In helping the existing business processes in the Indonesian Convergent Solution company, in early 2019 the Indonesian Convergent Solution company created an online attendance application called Rekon.id. This application is used by the company to help all employees with the Indonesian Convergent Solution company in carrying out daily attendance including monthly reports and making all employee activity data that is integrated directly with the company's system. The making of this online attendance application aims to make it easy for all employees to be able to provide attendance every day by using the application so that it makes it easy for employees to provide activity reports to the company and the company will be easy to get monthly reports or recap data as one of the administrative processes of the company. every employee. The Rekon.id application has several features such as absent forms, melting forms, leave forms, late forms, and SPPD forms. It is hoped that all the features that are available in the application can make the work of all employees integrated by

the company system and the company can monitor all its employees.

3.2 Research Model
This research uses quantitative methods starting from theory to data that lead to acceptance or rejection of existing theories to test the predetermined hypotheses. The following is a research model made following research needs.
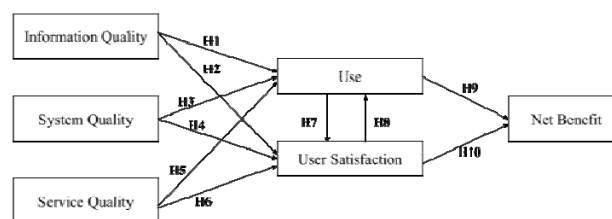

Figure 2: Research Model The Evaluation of the use of the Rekon.id application uses the DeLone and McLean approach.

This study uses a research model such as figure 3. Where the DeLone and McLean approach models have several variables, namely information quality, system quality, service quality, usage, user satisfaction, and net benefits. So that with these variables, hypothesis testing can be done. The hypothesis is a temporary answer to the formulation of the research problem, where the formulation of the research problem has been stated in the form of a question sentence, this is said to be temporary because the answer given is only based on relevant theory, not based on empirical facts obtained through data collection. which was done [16]. To show the relationship between each factor and existing variables, this study uses the following hypotheses: H1: the quality of information has a positive effect on usage; H2: information quality has a positive effect on user satisfaction; H3: system quality has a positive effect on usage; H4: system quality has a positive effect on user satisfaction; H5: service quality has a positive effect on usage; H6: service quality has a positive effect on user satisfaction; H7: usage has a positive effect on user satisfaction; H8: user satisfaction has a positive effect on usage; H9: use has a positive effect on net benefits; H10: User satisfaction has a positive effect on net benefits.

3.3 Measurement Variable
Based on the research model in Figure 3, this study will measure variables to test the success factors that affect the use of the Rekon.id application as follows.

Table 1: Research Variable.

Variable	Indicator	Reference	Code
Information	Accurate	[21]	IQ1

Quality	information		
	Relevant information	[21]	IQ2
	New Information	[21]	IQ3
	Complete Information	[21]	IQ4
	Information arranged neatly	[21]	IQ5
System Quality	Application easy to use	[21]	SQ1
	Flexible application for interaction	[21]	SQ2
	Application is understandable and clear	[21]	SQ3
Service Quality	Can be accessed anywhere and anytime	[21]	SQ1
	Provides the required features	[21]	SQ2
	Provide interactive services	[21]	SQ3
Use	Time of use	[22]	SU1
	Frequency of use	[22]	SU2
	Repeated use	[22]	SU3
User Satisfaction	The right application for the user	[21]	US1
	Meets user expectations	[21]	US2
	Emotional level of user satisfaction	[21]	US3
Net Benefit	Solve the problem	[22]	NB1
	Improve the performance	[22]	NB2
	Provides effectiveness	[22]	NB3
	Provide the desired knowledge	[22]	NB4

3.4 Data Analysis Methods

At this stage, data quality testing is carried out to obtain question items that produce output according to research needs. This test is carried out through validity and reliability tests. Validity Test, The validity test will lead to an accurate interpretation of the results of using an evaluation procedure by the objectives of the measurement. Validity is a condition where an evaluation instrument can measure what should be measured

precisely [23]. Convergent validity is determined using the loading factor parameter and the AVE (Average Variance Extracted) value. The measurement can be categorized as having convergent validity if the loading factor value of the AVE value is 0.7 or more and the AVE value is 0.5 or more [24]. Described validity is a test performed to prove that latent variables predict the size of their block better than the size of the other blocks. Reliability Test, Reliability test Reliability refers to consistency in a series of measurements. The Alpha Cronbach method is used to measure the reliability of each question item. An alpha value (reliability coefficient) of 0.6 is acceptable, but not as strong as the commonly used value, which is at the 0.7 [25] limit. For this reason, this study used an alpha value> 0.7. T- Test, The T-test is a statistical test used to prove whether or not the influence of independent variables is significant on the dependent variable individually with a 95% confidence level and a 5% error rate. The criteria in this test are as follows.

4. RESULT AND DISCUSSION

This research data collection method was carried out by distributing questionnaires via google form which the researcher has made and given to the company PT. Indonesian Convergent Solution via WhatsApp messenger. This questionnaire was distributed for approximately 1 month and was distributed through the WhatsApp group to make it easier to interact during this work from home (WFH) period. The number of respondents who were collected during 1 month was 240 respondents who were employees of PT. Indonesian Convergent Solutions. Based on the results of data collection using the questionnaire distribution method, the results of the respondent characteristics data are summarized using descriptive statistics as follows. The majority of 77.5% of respondents in this study were men with an average of 94.6% having the latest education, namely S1 or strata-1, with an average of 90% of the length of work at the PT. The Indonesian Convergent Solution is 1-2 years old, and an average of 95.4% work as a software engineer.

4.1 Validity Test

Validity testing is used to measure the validity or validity of a data calculation that has been collected through questionnaires. This study has a measurement consisting of the variables information quality, system quality, service quality, use, user satisfaction, and net benefits as the dependent variable. Validity testing is carried out

using 2 methods, namely by carrying out the convergent validity test and the discriminant validity test. The following is the research model used in the SmartPLS 3.0 application to test the convergent validity and discriminant validity.

Figure 3: Research Model on SmartPLS 3.0 with Flow Use on User Satisfaction.

This study uses 2 research models, where the first research model is a full model research model with the flow variable Use to User Satisfaction, and the second model is a full model with the flow variable User Satisfaction to Use. Figure 3 above is a structural model with flow Use for User Satisfaction using the SmartPLS 3.0 software, where in this first model the validity test results have been obtained with the AVE value in each variable equal to or more than 0.5 so that it can be stated that all variables Research in the first model gets valid results and meets the standards of convergent validity. This is also explained in Table 2 where the variables information quality, system quality, service quality, use, user satisfaction, and net benefits are declared valid or have a value equal to or more than a value of 0.5.

Table 2: Results of the Validity Calculation Research Model with the Flow Use on User Satisfaction.

No	Variable	Averange Variance Extracted (AVE)	Description
1	Information Quality	0,537	Valid
2	System Quality	0,706	Valid
3	Service Quality	0,668	Valid
4	Use	0,602	Valid
5	User Satisfaction	0,699	Valid
6	Net Benefit	0,628	Valid

The results of the validity test can also be seen in Table 3, where the results on each indicator

variable that has been tested get a value equal to or more than 0.7 on outer loading. So it can be concluded also that the indicator variables used in this study are valid, and meet the convergent validity by using the first research model. Following are the results of outer loading in the first research model test.

Table 3: Results of Outer Loading Research Model Flow Use on User Satisfaction.

Indicator	IQ	SQ	EQ	UE	US	NB
IQ1	0,710					
IQ2	0,705					
IQ3	0,701					
IQ4	0,766					
IQ5	0,778					
SQ1		0,873				
SQ2		0,821				
SQ3		0,826				
EQ1			0,739			
EQ2			0,885			
EQ3			0,821			
UE1				0,717		
UE2				0,857		
UE3				0,746		
US1					0,878	
US2					0,872	
US3					0,751	
NB1						0,748
NB2						0,835
NB3						0,776
NB4						0,810

After testing with the first model, the second model is tested. Figure 4 is the second research model, which uses a full structural model with the User Satisfaction variable with Use using the SmartPLS 3.0 software.
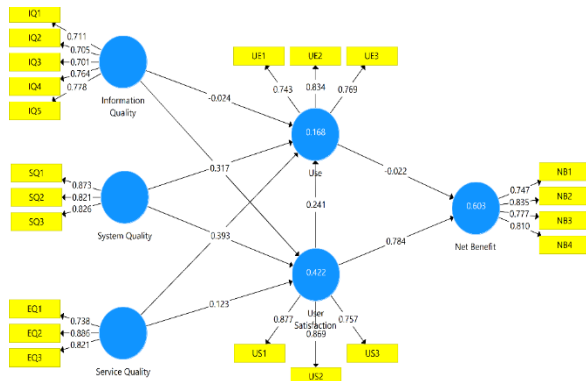
Figure 4: Research Model on SmartPLS 3.0 with Flow User Satisfaction with Use

In this second model, the validity test has been carried out and obtained the AVE value for each variable, which is equal to or more than 0.5 so that it can be stated that testing all research variables in the second model is valid and meets the standard of convergent validity. This statement is also explained in Table 4 where the variables information quality, system quality, service quality, use, user satisfaction, and net benefits are declared valid or have a value equal to or more than a value of 0.5.

Table 4: Results of the Validity Calculation Research Model with the Flow User Satisfaction on Use.

No	Variable	Averange Variance Extracted (AVE)	Description
1	Information Quality	0,537	Valid
2	System Quality	0,706	Valid
3	Service Quality	0,668	Valid
4	Use	0,613	Valid
5	User Satisfaction	0,699	Valid
6	Net Benefit	0,628	Valid

The results of the validity test in the second model can also be seen in Table 5, where the results of each variable indicator that has been tested produce a value equal to or more than 0.7 on outer loading. So it can be concluded that the variable indicators used in this study are valid, and meet the convergent validity by using the second research model. Following are the results of outer loading in the second research model test.

Table 5: Results of Outer Loading Research Model Flow User Satisfaction on Use

Indicator	IQ	SQ	EQ	UE	US	NB
IQ1	0,711					
IQ2	0,705					
IQ3	0,701					
IQ4	0,764					
IQ5	0,778					
SQ1		0,873				
SQ2		0,821				
SQ3		0,826				
EQ1			0,738			
EQ2			0,886			
EQ3			0,821			
UE1				0,743		
UE2				0,834		
UE3				0,769		
US1					0,877	
US2					0,869	
US3					0,757	
NB1						0,747
NB2						0,835
NB3						0,777
NB4						0,810

4.2 Reliability Test

Reliability discusses the accuracy of the measurement results of a measuring instrument that has high reliability or can be trusted if the measuring instrument is consistent. In a sense, the measuring instrument is stable, reliable, and predictable. A measuring instrument will be said to be consistent if the measuring instrument is repeatedly measuring the same object will get the same measurement results as well. In this study, the level of reliability will be measured based on the Cronbach's Alpha value which has been tested using the SmartPLS 3.0 software. Following are the results of the calculation of the reliability test using two research models.

Table 6: Reliability Test Results with the First Research Model Figure 3 and the Second Research Model Figure4.

Variable	Cronbach's Alpha	Result
Information Quality	0,786	Reliable
System Quality	0,791	Reliable
Service Quality	0,751	Reliable
Use	0,722	Reliable
UserSatisfaction	0,783	Reliable
Net Benefit	0,802	StronglyReliable

Based on the results of reliability testing in Table 6, it can be seen that each variable used in the first research model and the second research model has a Cronbach's alpha value> 0.7. So it can be concluded that all the questions that have been made to measure the research variables in the first research model and the second research model are reliable and valid.

4.3 Research Model Evalution

This study consisted of 6 variables in which 5 independent variables and 1 dependent variable were interconnected according to the hypothesis used in this study. The following table describes the reflective indicators for measuring each variable in this study.

Table 7: Reflective Indicator.

Variable	Total Indicator	Reflective Indicator Notation
Information Quality	5	IQ1, IQ2, IQ3, IQ4, IQ5
System Quality	3	SQ1, SQ2, SQ3
Service Quality	3	EQ1, EQ2, EQ3
Use	3	UE1, UE2, UE3
User Satisfaction	3	US1, US2, US3
Net Benefit	4	NB1, NB2, NB3, NB4

In figure 3 the full model with the flow variable Use to User Satisfaction, and figure 4 is the second model, namely the full model with the flow variable User Satisfaction with Use. Both of these research models were created using SmartPLS 3.0 software. In the PLS Structural Equation Modeling (SEM) two types of models are formed, the first is the measurement model (Outer model) and the measurement model (Inner model). The evaluation process of this research model is carried out on the outer model measurement model and the inner model measurement model. This process is carried out to determine the level of validity and reflective reliability in measuring the

latent variables used. Evaluation of the structural model is carried out to get the results whether the independent variable affects the dependent variable.

4.4 Evaluation of the Measurement Model (Outer Model)

The measurement of the outer model is a measurement model that defines the relationship between latent variables and their indicators, which are reflective or normative. Table 8 and Table 9 are the results of the loading factor value in testing the first research model for testing the PLS algorithm.

Table 8: First Test Results Loading Factor Indicators in the First Research Model Figure 3

Variable	Indicator	Loading Factor	Description
Information Quality	IQ1	0,710	Valid
	IQ2	0,705	Valid
	IQ3	0,701	Valid
	IQ4	0,766	Valid
	IQ5	0,778	Valid
System Quality	SQ1	0,873	Valid
	SQ2	0,821	Valid
	SQ3	0,826	Valid
Service Quality	EQ1	0,739	Valid
	EQ2	0,885	Valid
	EQ3	0,821	Valid
Use	UE1	0,717	Valid
	UE2	0,857	Valid
	UE3	0,746	Valid
User Satisfaction	US1	0,878	Valid
	US2	0,872	Valid
	US3	0,751	Valid
Net Benefit	NB1	0,748	Valid
	NB2	0,835	Valid
	NB3	0,776	Valid
	NB4	0,810	Valid

Table 9: First Test Results Loading Factor Indicators in the Second Research Model Figure 4

Variable	Indicator	Loading Factor	Description
Information Quality	IQ1	0,711	Valid
	IQ2	0,705	Valid
	IQ3	0,701	Valid
	IQ4	0,764	Valid
	IQ5	0,778	Valid
System Quality	SQ1	0,873	Valid
	SQ2	0,821	Valid
	SQ3	0,826	Valid
Service Quality	EQ1	0,738	Valid
	EQ2	0,886	Valid
	EQ3	0,821	Valid
Use	UE1	0,743	Valid
	UE2	0,834	Valid
	UE3	0,769	Valid
User	US1	0,877	Valid

Satisfaction	US2	0,869	Valid
	US3	0,757	Valid
Net Benefit	NB1	0,747	Valid
	NB2	0,835	Valid
	NB3	0,777	Valid
	NB4	0,810	Valid

Based on the results of the loading factor test in Table 8 and Table 9, it can be seen that all indicators on latent variables have a loading factor value of > 0.7, it can be concluded that all indicators on each latent variable are valid and meet the criteria to describe each variable. When viewed from the Average Variance Extracted (AVE) value, the measurement of convergent validity can be said to be good if the AVE value is equal to or more than 0.5. The following table shows the results of validity testing at the latent variable level based on the AVE value.

Table 10: AVE Value for each Latent Variable of the First Research Model

Laten Variable	AVE Value
Information Quality	0,537
System Quality	0,706
Service Quality	0,668
Use	0,602
User Satisfaction	0,699
Net Benefit	0,628

Table 11: AVE Value for each Latent Variable of the Second Research Model

Laten Variable	AVE Value
Information Quality	0,537
System Quality	0,706
Service Quality	0,668
Use	0,613
User Satisfaction	0,699
Net Benefit	0,628

Based on the results in table 10 and table 11, the principle of convergent validity has been fulfilled because it has an AVE value of more than 0.5. Then the reliability test on the latent variables was carried out by performing the internal consistency reliability test which was determined by the composite reliability value for each latent variable in the PLS. If the value of the latent variable is more than or equal to 0.7, then the composite reliability is met. The following table shows the results of testing the composite reliability on the measurement model.

Table 12: Value of Composite Reliability on Each Latent Variable in the First Research Model

Laten Variable	Composite Reliability Value
Information Quality	0,853

System Quality	0,878
Service Quality	0,857
Use	0,819
User Satisfaction	0,874
Net Benefit	0,871

Table 13: The Value of Composite Reliability on Each Latent Variable in the Second Research Model

Laten Variable	Composite Reliability Value
Information Quality	0,853
System Quality	0,878
Service Quality	0,857
Use	0,826
User Satisfaction	0,874
Net Benefit	0,871

Based on the results in Table 12 and Table 13, it can be seen that all latent variables have a composite reliability value of more than 0.7. So it can be said that all latent variables are reliable. Then after that, the discriminant validity test was carried out using cross loading by showing the relationship and correlation between each indicator against all the latent variables in the study. The following is a table of cross loading indicators for all latent variables in the first research model and the second research model.

Table 14: The Results of Cross Loading Testing for Indicators in the First Research Model are in Figure 3

Indicator	IQ	SQ	EQ	UE	US	NB
IQ1	0,710	0,238	0,247	0,172	0,396	0,346
IQ2	0,705	0,221	0,112	0,045	0,299	0,324
IQ3	0,701	0,252	0,172	0,043	0,323	0,348
IQ4	0,766	0,310	0,330	0,194	0,344	0,310
IQ5	0,778	0,284	0,221	0,186	0,419	0,424
SQ1	0,322	0,873	0,355	0,176	0,470	0,374
SQ2	0,221	0,821	0,364	0,200	0,496	0,335
SQ3	0,362	0,826	0,308	0,308	0,433	0,382
EQ1	0,075	0,329	0,739	0,306	0,213	0,106
EQ2	0,333	0,372	0,885	0,347	0,367	0,390
EQ3	0,314	0,290	0,821	0,171	0,332	0,257
UE1	0,057	0,082	0,159	0,717	0,228	0,206
UE2	0,232	0,368	0,370	0,857	0,352	0,224
UE3	0,058	-0,00	0,180	0,746	0,123	0,099

		8				
US1	0,359	0,617	0,295	0,282	0,878	0,700
US2	0,453	0,340	0,309	0,229	0,872	0,746
US3	0,440	0,428	0,357	0,370	0,751	0,481
NB1	0,339	0,536	0,301	0,200	0,603	0,748
NB2	0,387	0,262	0,200	0,197	0,591	0,835
NB3	0,455	0,353	0,344	0,180	0,666	0,776
NB4	0,335	0,215	0,170	0,205	0,596	0,810

Table 15: The Results of Cross Loading Testing for Indicators in the Second Research Model are in Figure 4

Indicator	IQ	SQ	EQ	UE	US	NB
IQ1	0,711	0,238	0,248	0,170	0,397	0,347
IQ2	0,705	0,221	0,113	0,041	0,299	0,324
IQ3	0,701	0,252	0,173	0,041	0,323	0,348
IQ4	0,764	0,310	0,331	0,181	0,345	0,310
IQ5	0,778	0,284	0,222	0,183	0,420	0,424
SQ1	0,322	0,873	0,355	0,170	0,469	0,374
SQ2	0,221	0,821	0,363	0,186	0,498	0,336
SQ3	0,361	0,826	0,308	0,297	0,433	0,381
EQ1	0,075	0,330	0,738	0,299	0,214	0,106
EQ2	0,333	0,372	0,886	0,343	0,368	0,390
EQ3	0,314	0,290	0,821	0,165	0,333	0,257
UE1	0,057	0,082	0,159	0,743	0,227	0,206
UE2	0,232	0,368	0,369	0,834	0,355	0,225
UE3	0,058	-0,008	0,180	0,769	0,123	0,098
US1	0,359	0,617	0,295	0,280	0,877	0,700
US2	0,453	0,340	0,309	0,229	0,869	0,746
US3	0,440	0,428	0,357	0,357	0,757	0,482
NB1	0,339	0,536	0,301	0,200	0,601	0,747
NB2	0,387	0,262	0,200	0,197	0,588	0,835
NB3	0,455	0,353	0,345	0,171	0,668	0,777
NB4	0,336	0,215	0,171	0,207	0,594	0,810

Based on the results obtained in tables 14 and 15, it can be seen that each indicator can measure and assess its latent variable better than other latent variables. This is shown by the loading value of each indicator on its latent variable which is higher than the loading value for the latent variable itself.

4.5 Evaluation of the Measurement Model (Inner Model)

The inner model is a structural model that describes the correlation between latent variables. This measurement is used to determine the relationship between latent variables in this research model, which can be done by evaluating the inner model. The inner model evaluation was carried out by calculating the t-statistic of the path coefficient and the R-square value at the significance level of alpha (0.05) using the two-tailed test. In this measurement model, the t-statistic is used to test the hypothesis in this study, whether a hypothesis can be accepted or rejected, by comparing the t-statistic value with the table value (1.97). A hypothesis will be accepted if it has a t-statistic value greater than the t-table value, that is, the latent variable has a significant effect on other latent variables. The following table 16 and table 17 are the results of testing the first research model and the second research model by showing the t-statistic value for each latent variable.

Table 16: Results of Testing the Relationship Between Variables in the First Research Model

Relations Between Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (|O/STDEV|)	Description
IQ -> UE	0,055	0,066	0,072	0,763	Not significant
IQ -> US	0,308	0,314	0,079	3,894	Significant
EQ -> UE	0,269	0,276	0,111	2,435	Significant
EQ -> US	0,079	0,072	0,099	0,799	Not significant
SQ -> UE	0,143	0,137	0,135	1,059	Not significant
SQ -> US	0,370	0,365	0,087	4,274	Significant
UE -> NB	-0,025	-0,019	0,059	0,417	Not significant
UE -> US	0,159	0,155	0,119	1,336	Not significant
US -> NB	0,786	0,781	0,062	12,671	Significant

The conclusion from the test results in table 16 of the t-statistics column above shows that the relationship between IQ to US, EQ to UE, SQ to US, and US to NB, can be said to be related because it has a t-statistic value above the t-table value of 1.97. Meanwhile, the relationship between IQ to the EU, EQ to US, SQ to the EU, UE to NB, UE to US, is said to be not significantly related because it has a t-statistics value which is below the t-table value of 1.97.

Table 17: Results of Testing the Relationship Between Variables in the Second Research Model

Relations Between Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (|O/STDEV|)	Description
IQ -> UE	-0,024	-0,008	0,084	0,282	Not significant
IQ -> US	0,317	0,324	0,079	3,997	Significant
EQ -> UE	0,238	0,250	0,113	2,110	Significant
EQ -> US	0,123	0,117	0,077	1,592	Not significant
SQ -> UE	0,037	0,049	0,154	0,240	Not significant
SQ -> US	0,393	0,384	0,078	5,044	Significant
UE -> NB	-0,022	-0,023	0,064	0,351	Not significant
US -> NB	0,784	0,779	0,068	11,569	Significant
US -> UE	0,241	0,221	0,159	1,516	Not significant

Based on the test results in table 17, it can be seen that the t-statistics column above shows that the relationship between IQ to US, EQ to UE, SQ to US, and US to NB, can be said to be related because it has a t-statistic value above t-table 1,97. Meanwhile, the relationship between IQ to the EU, EQ to US, SQ to the EU, UE to NB, UE to US, is said to be not significantly related because it has a t-statistics value which is below the t-table value of 1,97.

4.6 Hypothesis Testing Results

In this study, a hypothesis test was carried out, where this test will see or get the results whether or not there is a significant effect of exogenous variables on endogenous variables. To test the hypothesis of this study using SEM, where the SEM model will determine whether the exogenous variables have a relationship with endogenous variables. The t-table value used will be 1.97 to determine whether the relationship between exogenous variables and endogenous variables is statistically accepted or rejected.

Table 18: Results of Hypothesis Testing for the First Research Model

Hypothesis	Variable Relationships	Original Sampel (O)	T Statistics (|O/STDEV)	t-tabel	Description
H1	IQ -> UE	0,055	0,763	1,97	Rejected
H2	IQ -> US	0,308	3,894	1,97	Received
H3	SQ -> UE	0,143	1,059	1,97	Rejected
H4	SQ -> US	0,370	4,274	1,97	Received
H5	EQ -> UE	0,269	2,435	1,97	Received
H6	EQ -> US	0,079	0,799	1,97	Rejected
H7	UE -> US	0,159	1,336	1,97	Rejected
H8	UE -> NB	-0,025	0,417	1,97	Rejected
H9	US -> NB	0,786	12,671	1,97	Received

H1: Information Quality has a positive effect on Use (IQ -> UE). Based on table 18, it can be seen that the relationship between Information Quality (IQ) to Use (UE) has a t-statistic value of 0.763. Due to the t-statistic value (0.763) <t-table (1.97), H1 is rejected. This shows that the quality of information has no effect on the intention to use the Rekon.id application. H2: Information Quality has a positive effect on User Satisfaction (IQ -> US). Based on table 18, it can be seen that the relationship between information quality (IQ) and user satisfaction (US) has a t-statistic value of 3.894. Because the t-statistic value (3.894)> t-table (1.97) so that H2 is accepted. This shows that the quality of information has a positive effect on user satisfaction of the Rekon.id application. H3: System Quality has a positive effect on Use (SQ -> UE). Based on table 18, it can be seen that the relationship between System Quality (SQ) to Use (UE) has a t-statistic value of 1.059. Due to the t-statistic value (1.059) <t-table (1.97), H3 is rejected. This shows that the quality of the system has no effect on the intention to use the Rekon.id application.

H4: System Quality has a positive effect on User Satisfaction (SQ -> US). Based on table 18, it can be seen that the relationship between System Quality (SQ) and User Satisfaction (US) has a t-

statistic value of 4.274. Due to the t-statistic value (4.274)> t-table (1.97) so H4 is accepted. This shows that the quality of the system has a positive effect on user satisfaction of the Rekon.id application. H5: Service Quality has a positive effect on Use (EQ -> UE). Based on table 18, it can be seen that the relationship between Service Quality (EQ) and Use (UE) has a t-statistic value of 2.435. Because the t-statistic value (2.435)> t-table (1.97), H5 is accepted. This shows that the quality of service has a positive effect on the use of the Rekon.id application. H6: Service Quality has a positive effect on User Satisfaction (EQ -> UE). Based on table 18, it can be seen that the relationship between Service Quality (EQ) and User Satisfaction (US) has a t-statistic value of 0.799. Due to the t-statistic value (0.799) <t-table (1.97), then H6 is rejected. This shows that service quality has no effect on user satisfaction of the Rekon.id application.

H7: Use has a positive effect on User Satisfaction (UE -> US). Based on table 18, it can be seen that the relationship between Use (UE) and User Satisfaction (US) has a t-statistic value of 1.336. Because the t-statistic value (1.336) <t-table (1.97), then H7 is rejected. This shows that use has no effect on user satisfaction of the Rekon.id application. H8: Use has a positive effect on Net Benefit (UE -> NB). Based on table 18, it can be seen that the relationship between Use (UE) to Net Benefit (NB) has a t-statistic value of 0.417. Because the t-statistic value (0.417) <t-table (1.97), then H8 is rejected. This shows that use has no effect on the net benefits of the Rekon.id application. H9: User Satisfaction has a positive effect on Net Benefit (US -> NB). Based on table 18, it can be seen that the relationship between User Satisfaction (US) and Net Benefit (NB) has a t-statistic value of 12.671. Because the t-statistic value (12.671)> t-table (1.97), so H9 is accepted. This shows that user satisfaction has a positive effect on the net benefits of the Rekon.id application.

Table 19: Results of the Second Research Model Hypothesis Test

Hypothesis	Variable Relationships	Original Sampel (O)	T Statistics (|O/STDEV)	t-tabel	Description
H1	IQ -> UE	-0,024	0,282	1,97	Rejected
H2	IQ -> US	0,317	3,997	1,97	Received
H3	SQ -> UE	0,037	0,240	1,97	Rejected
H4	SQ -> US	0,393	5,044	1,9	Receive
H5	EQ -> UE	0,238	2,110	1,97	Received
H6	EQ -> US	0,123	1,592	1,97	Rejected
H7	US -> UE	0,241	1,516	1,97	Rejected
H8	US -> NB	0,784	11,569	1,97	Received
H9	UE -> NB	-0,022	0,351	1,97	Rejected

H1: Information Quality has a positive effect on Use (IQ -> UE). Based on table 18, it can be seen that the relationship between Information Quality (IQ) and Use (UE) has a t-statistic value of 0.282. Due to the t-statistic value (0.282) <t-table (1.97), H1 is rejected. This shows that the quality of information has no effect on the intention to use the Rekon.id application. H2: Information Quality has a positive effect on User Satisfaction (IQ -> US). Based on table 18, it can be seen that the relationship between information quality (IQ) and user satisfaction (US) has a t-statistic value of 3.997. Because the t-statistic value (3.997)> t-table (1.97) so that H2 is accepted. This shows that the quality of information has a positive effect on user satisfaction of the Rekon.id application. H3: System Quality has a positive effect on Use (SQ -> UE). Based on table 18, it can be seen that the relationship between System Quality (SQ) to Use (UE) has a t-statistic value of 0.240. Due to the t-statistic value (0.240) <t-table (1.97), H3 is rejected. This shows that the quality of the system has no effect on the intention to use the Rekon.id application.

H4: System Quality has a positive effect on User Satisfaction (SQ -> US). Based on table 18, it can be seen that the relationship between System Quality (SQ) and User Satisfaction (US) has a t-statistic value of 5.044. Due to the t-statistic value (5.044)> t-table (1.97) so that H4 is accepted. This shows that the quality of the system has a positive effect on user satisfaction of the Rekon.id application. H5: Service Quality has a positive effect on Use (EQ -> UE). Based on table 18, it can be seen that the relationship between Service Quality (EQ) and Use (UE) has a t-statistic value of 2,110. Because the t-statistic value (2,110)> t-table (1.97) then H5 is accepted. This shows that service quality has a positive effect on the intention to use the Rekon.id application. H6: Service Quality has a positive effect on User Satisfaction (EQ -> UE). Based on table 18, it can be seen that the relationship between Service Quality (EQ) and User Satisfaction (US) has a t-statistic value of

1.592. Due to the t-statistic value (1.592) <t-table (1.97), then H6 is rejected. This shows that service quality has no effect on user satisfaction of the Rekon.id application.

H7: User Satisfaction has a positive effect on Use (US -> UE). Based on table 18, it can be seen that the relationship between User Satisfaction (US) and Use (UE) has a t-statistic value of 1.516. Due to the t-statistic value (1.516) <t-table (1.97), H7 is rejected. This shows that user satisfaction has no effect on the intention to use the Rekon.id application. H8: User Satisfaction has a positive effect on Net Benefit (US -> NB). Based on table 18, it can be seen that the relationship between User Satisfaction (US) and Net Benefit (NB) has a t-statistic value of 11.569. Because the t-statistic value (11.569)> t-table (1.97), then H8 is accepted. This shows that user satisfaction has a positive effect on the net benefits of using the Rekon.id application. H9: Use has a positive effect on Net Benefit (UE -> NB). Based on table 18, it can be seen that the relationship between Use (UE) to Net Benefit (NB) has a t-statistic value of 0.351. Because the t-statistic value (0.351) <t-table (1.97), so H9 is rejected. This shows that the intention to use the Rekon.id application has no effect on the net benefits of using the Rekon.id application.

4.7 Managerial Implications

This research provides managerial implications that can be carried out by PT. The Indonesian Convergent Solution is related to the use of the Rekon.id application which is an attendance application and other administrative processes for employees who work with companies. A system or application in a company is a way created by a company to help all employees who work in the company to always be integrated and connected directly to a centralized system. However, the role of the user or employee is very important in determining whether a system or application is suitable for use in the company or not.

The results of this study can be used as a basis for evaluating information quality, system quality, service quality, usage, user satisfaction, and net benefits of using the system at PT. Indonesia's Convergent Solution so far. This study found the problems contained in the Rekon.id attendance application. The findings of this problem can be used by PT. The Indonesian Convergent Solution as a guideline for improvement and enhancement of the quality of information systems on the Rekon.id

application or as a reference for developing other applications that will be developed by the company.

Based on testing the validity, reliability, and hypothesis testing in the study, it was found that Information Quality did not have a significant relationship with the Use of the Rekon.id application. Most of the employees feel that Information Quality in the Rekon.id application system is still not enough to help employees to get the latest, relevant, and neatly arranged information. However, by looking at the relationship between Information Quality and User Satisfaction, it can be seen that a significant relationship occurs. Where Information Quality will greatly influence User Satisfaction in using the Rekon.id application. Because of this significant relationship, the Information Quality on the Rekon.id application needs to be further improved again to continue to maintain stability at the level of use of the Rekon.id application. If users of the Rekon.id application feel that the application is of high quality and can produce good information, then the application will continue to be used and provide a level of satisfaction to the user. Users want a system that can provide good quality information and is updated to provide the latest information to users so that users don't miss the information that happens to the company.

System Quality is also another important aspect that must be considered in the Rekon.id application system. Judging from the research results, system quality has no significant effect on use, but system quality has a significant effect on user satisfaction. So it can be concluded that the Rekon.id attendance application system has problems with the existing quality system. Where, users continue to use the application as something that must be done to fulfill the obligations of each employee, but the Rekon.id application system has a poor quality system so that employees feel dissatisfied with the use of the Rekon.id attendance application system. An information system can be said to be successful if it has quality information and system quality that is able to produce and provide satisfaction to users so that users will feel comfortable and can improve performance with the use of these applications. The quality of a good information system will affect the level of system use and will provide satisfaction for users [26].

This study also get results where service quality has a significant effect on use, where the level of service quality in the Rekon.id application has a mutually influential relationship. So that good service quality will increase the intensity of user

use and increase user satisfaction with the Rekon.id application. The better the service quality in an information system in the company and involves a broad scope, it will give trust and confidence to users of the information system. This service quality can be interpreted as the service provided by the Rekon.id information system to users of the application, such as if a disturbance occurs to a user who experiences problems during check-in or checkout and other features that users need in the attendance system can be resolved with help parties related to companies that develop the Rekon.id application system. Companies must be able to improve the level of service quality provided to users by providing quick responses to users if there are problems with the system used, so that good service quality will increase the use of using the Rekon.id application and provide user satisfaction for each application user. moment. In addition, companies can also develop various special features for services, which will make it easy for the company or the Rekon.id application team to accommodate and record problems that occur in the system, and also make it easy for users to report if a problem occurs in the system.

In addition to information quality, system quality, and service quality, this study also finds results where use has no significant effect on user satisfaction, and user satisfaction has no significant effect on use on the Rekon.id application. This is because the Rekon.id application at the beginning of its creation was required for all employees who collaborated with the company to be used, were before the application, employees were required to make or make attendance reports every month and signed by the team manager, then given to PT. Convergent Solutions Indonesia is a company that provides contracts to employees. Use also does not have a significant effect on the Net benefits of using the Rekon.id application, this is by the obligations given by the company to employees in using the Rekon.id application as an application that helps the administrative process of each employee. However, at the level of user satisfaction, it gets significant results and has an impact on net benefits in using the Rekon.id application, this proves that user satisfaction is very important to be improved so that it will have a good impact on the Rekon.id application system and make the Rekon.id application functional. as the Rekon.id application should be used by increasing the level of service and the level of satisfaction for its users, namely company employees.

5. CONCLUSION

Based on the test results of this research model, the researcher found that the information system success factors that had an indirect positive effect on the net benefit variables were the information quality and system quality variables. Where the variables of information quality and system quality have a positive effect on user satisfaction variables and user satisfaction variables have a positive direct effect on the net benefit variables.

This can be seen also based on the results of the DeLone and McLean model relationship test that has been carried out in this study, namely, information quality does not affect the use, information quality has a positive effect on user satisfaction, system quality does not affect the use, system quality has a positive effect on user satisfaction, quality Service has a positive influence on Use, Service Quality does not affect User Satisfaction, Use does not affect User Satisfaction, User Satisfaction does not affect Use, Use does not affect Net Benefits, User Satisfaction has a positive effect on Net Benefits.

So, based on the results of this study it can be concluded that not all variables or dimensions in the Delone and Mclean approach model have a positive influence on one another. Where there are only 4 hypotheses out of 10 hypotheses that have been tested, the results show that the variables in the hypothesis have an influence. The variables that have this influence are information quality and system quality have a positive effect on user satisfaction variables and user satisfaction variables that have a positive direct effect on the net benefits variable and also the information system success factors that have an indirect positive effect on the net benefit variables are the information quality and system quality variables. So the suggestion for this research is that the Rekon.id application should be made to provide flexibility in its use and a display that is easy to understand so that employees who use it can quickly and easily use the Rekon.id application every day.

The company can provide counseling and provide documentation of use to all employees so that the use of the application can be done properly and correctly. Then to increase the benefits of using the Rekon.id application, companies are advised to make a Standard Operational Procedure (SOP), as well as sanctions or rewards if employees do not or have used the Rekon.id attendance application so that it can increase the satisfaction level of users of the Rekon.id application and finally In terms of the

quality of information, and the quality of the system in the Rekon.id application, it can be improved and developed according to the wishes of the user. This increase can be done by continuously updating the latest information, neatly arranged on the Rekon.id application. To make improvements to the company system, the company can make improvements to application features that still have shortcomings or bugs and provide easy access to the Rekon.id application system.

REFRENCES:

[1] Melinamath, B. C., Jamadar, N. B., Patil, N. B., & Killedar, O. S. (2018). Smart Attendance Application.

[2] Susilowati, T., Dacholfany, M.I., Amini, S., Ikhwan, A., Nasir, B.M., Huda, M., Prasetyo, A., Maseleno, A., Satria, F. and Hartati, S., 2018. Getting parents involved in child's school: using attendance application system based on SMS gateway. International Journal of Engineering and Technology (UAE), 7(2.27), pp.167-174.

[3] Pawar, A., Sharma, R., Suvarna, V., Sureshkumar, S., & Chavan, H. K. (2019, April). Intelligent Attendance System With Attention Analysis. In 2nd International Conference on Advances in Science & Technology (ICAST).

[4] Soewito, B., Gunawan, F.E. and Hapsara, M., 2017, September. Smartphone for next generation attendance system and human resources payroll system. In 2017 4th International Conference on Electrical Engineering, Computer Science and Informatics (EECSI) (pp. 1-6). IEEE.

[5] Jaafreh, A., 2017. Evaluation information system success: Applied delone and McLean information system success model in context banking system in KSA. International Review of Management and Business Research, 6(2), pp.829-845.

[6] Masrek, M.N., 2007. Measuring campus portal effectiveness and the contributing factors. Campus-Wide Information Systems.

[7] Krismiaji. (2015). Sistem Informasi Akuntansi. Yogyakarta: Unit Penerbit.

[8] Laudon, K.C. and Laudon, J.P., 2015. Management information systems (p. 143). Upper Saddle River: Pearson.

[9] O'Brien, J. A., & Marakas, G. M. (2010). Introduction to Information Systems 15th edition. New York, NY, USA: McGraw-Hill, Inc.

[10] Sligo, J., Gauld, R., Roberts, V. and Villa, L., 2017. A literature review for large-scale health information system project planning, implementation and evaluation. International journal of medical informatics, 97, pp.86-97.

[11] DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. Information systems research, 3(1), 60-95.

[12] Petter, S., DeLone, W. and McLean, E., 2008. Measuring information systems success: models, dimensions, measures, and interrelationships. European journal of information systems, 17(3), pp.236-263.

[13] Link, M. (2018). New data strategies: nonprobability sampling, mobile, big data. Quality Assurance in Education.

[14] Sönmez, A., Göçmez, L., Uygun, D., & Ataizi, M. (2018). A review of current studies of mobile learning. Journal of Educational Technology and Online Learning, 1(1), 12-27.

[15] Sunyoto, D. (2013). Metodologi penelitian akuntansi. Bandung: Refika Aditama.

[16] Sugiyono. (2016). Metode Penelitian Kuantitatif Kualitatif dan Kombinasi (Mixed Methods). Bandung: Alfabeta.

[17] Jeff. (2016). Information privacy: measuring individuals' concerns about organizational practices, 4-10.

[18] Gable, S. L., & Berkman, E. T. (2013). 12 making connections and avoiding loneliness: Approach and avoidance social motives and goals. Handbook of approach and avoidance motivation, 203.

[19] Delone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: a ten-year update. Journal of management information systems, 19(4), 9-30.

[20] Mudzana, T., & Maharaj, M. (2015). Measuring the success of business-intelligence systems in South Africa: An empirical investigation applying the DeLone and McLean Model. South African Journal of Information Management, 17(1), 1-7

[21] Aldholay, A., Isaac, O., Abdullah, Z., Abdulsalam, R., & Al-Shibami, A. H. (2018). An extension of Delone and McLean IS success model with self-efficacy. The International Journal of Information and Learning Technology.

[22] Zuama, R. A., Hudin, J. M., Puspitasari, D., Hermaliani, E. H., & Riana, D. (2017, August). Quality dimensions of Delone-McLean model to measure students' accounting computer satisfaction: An empirical test on accounting system information. In 2017 5th International Conference on Cyber and IT Service Management (CITSM) (pp. 1-6). IEEE.

[23] Wahyuni, Sri dan Syukur Ibrahim. (2012). Asesmen Pembelajaran Bahasa. Bandung: PT Refika Aditama.

[24] Ghozali, Imam. (2008). "Structural Equation Modeling metode alternative dengan Partial Least Square, edisi 2P-Undip. Semarang.

[25] Ali. 2010. Dasar-dasar Pendidikan Kesehatan dan Promosi Kesehatan, Jakarta: Trans Info Media.

[26] Oktavia, D., Saraswati, E., & Baridwan, Z. (2016). Faktor-Faktor Yang Mempengaruhi Kesuksesan Sistem Informasi Manajemen Daerah Dengan Pendekatan Model Delone dan Mclean Yang Dimodifikasi (Doctoral dissertation, Tesis. Fakultas Ekonomi dan Bisnis. Universitas Brawijaya).
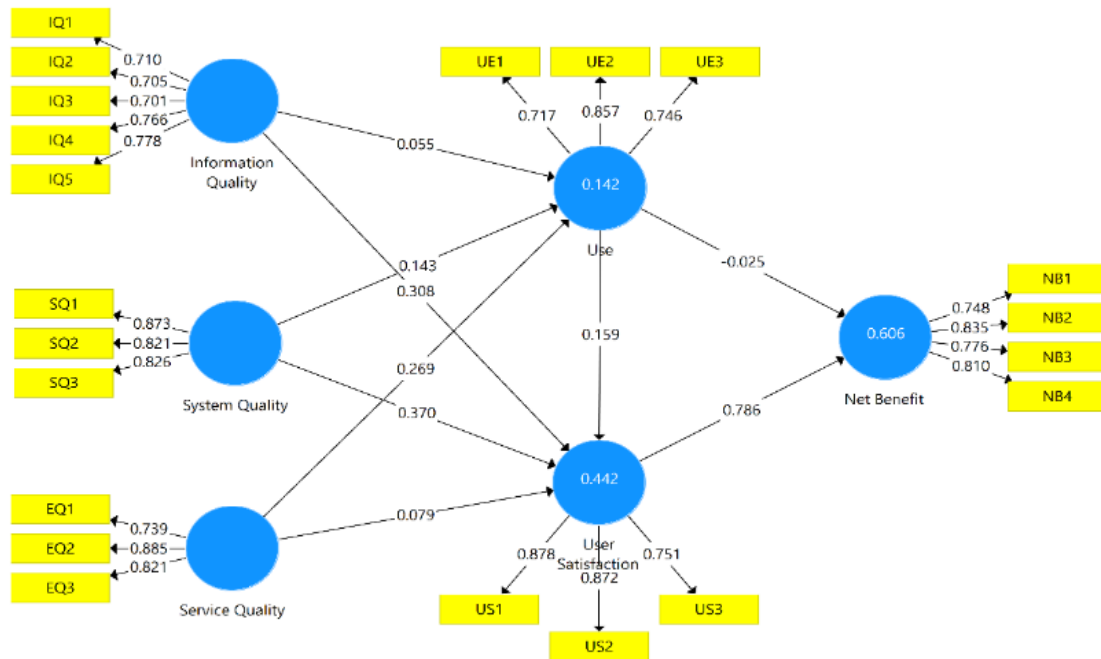
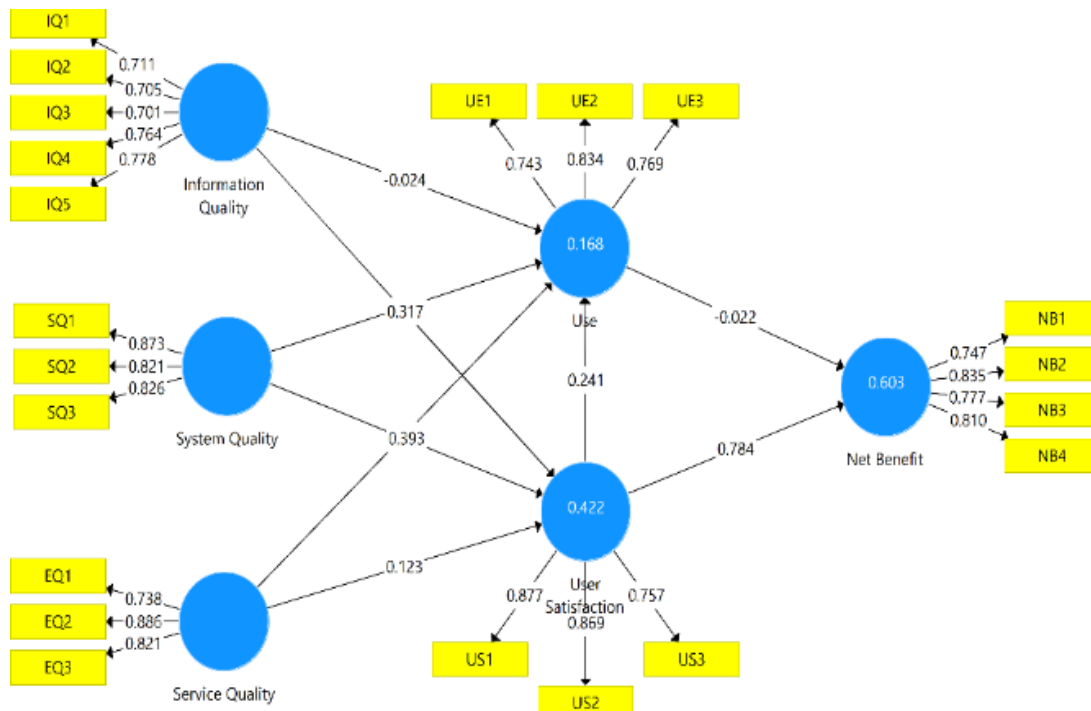*Figure 3: Research Model on SmartPLS 3.0 with Flow Use on User Satisfaction.*

Figure 4: Research Model on SmartPLS 3.0 with Flow User Satisfaction with Use