Modelling Open Access Catalog (OPAC) Success using DeLone and McLean models in Library Agriculture Polytechnic of Samarinda

Dani Wahyudi
Software Engineering Technology, Agriculture Polytechnic of Samarinda, 75242, Indonesia
satujam23@gmail.com

Suswanto *
Software Engineering Technology, Agriculture Polytechnic of Samarinda, 75242, Indonesia
Suswanto.attala@gmail.com
Corresponding Author

Reza Andrea
Software Engineering Technology, Agriculture Polytechnic of Samarinda, 75242, Indonesia
reza@bibirdesign.com

Abstract—Online Public Access Catalog (OPAC) is one of the systems used and utilized by the Samarinda State Agricultural Polytechnic library to provide information regarding the availability and collection of books owned by the library. The purpose of this study was to determine the success in implementing OPAC using the Delone and McLean Model. Consists of seven variables, namely information quality, system quality, service quality, usage, user convenience, interest in using, and net benefits. The data obtained from this study were obtained from the distribution of questionnaires using Google Forms and in writing, the research sample was obtained by 40 respondents. The results obtained in this study are in the form of conditions for each variable in the Delone and McLean Model. The user satisfaction and net benefit variables are in the high category, while the information quality and system quality variables are in the fairly high category. From the results obtained, it is necessary to prioritize improvements to the indicators owned by the Delone and McLean Model variables with the average percentage of each indicator which is below the average percentage of all indicators.

Keywords— Library, System Implementation, OPAC, Online Public Access Catalog, Delone and McLean Model.

I. INTRODUCTION

Online Public Access Catalogue is a computer-based information retrieval system used by users to browse the collections of a library or other information unit. An online catalog system is an installed catalog system that is publicly accessible and can be used by users to browse catalog data to obtain information about their location. If the catalog system is connected to the circulation system, the user can find out whether the library material being searched for is available in the library. From the above reference, the Delone and Mclean Model was chosen in evaluating the success of system implementation. (Agustina & Sutinah 2018)

Making the system is assessed by the quality of the system, the quality of information and the quality of service. The use of the system is assessed by the variables of use and user satisfaction and the impact of using the system is assessed from the net benefits obtained. The DeLone and McLean model uses six measures of information system success. The six components and measurements of this success model are system quality, information quality, service quality, usage, user satisfaction, and net benefits. The DeLone and McLean Information System Success Model is a suitable model to measure the success of the implementation of information systems. Based on the description, it discusses the implementation of the OPAC system at the Samarinda State Agricultural Polytechnic library using the Delone and Mclean methods. (DeLone and McLean, 2016)

II. LITERATURE REVIEW

A. Study of Literature

Several studies are used as guidelines and references in making this application, among others

Research conducted by (Gondomono, T. 2019) entitled Effectiveness of the Online Catalog System (OPAC) Against Users at the National Library of Indonesia using the DeLone and McLean is Success Model. Online Public Access Catalog. This study aims to determine the factors that influence the effectiveness of the OPAC system on users at the National Library of Indonesia. Analysis of the data used is Path Analysis on the AMOS program. Based on the results of the analysis of the research model tested, it is proven that the information quality factor has a positive influence on user satisfaction with the value of Critical Ratio = 2.373 and Probability = 0.018. Service quality has a positive effect on user satisfaction with the value of CR = 10,674, and P = 0.00. The use has a system effect on the benefits with a value of CR = 2.612 and P = 0.009.

Research conducted by (Novia, T. 2018) entitled Analysis of the Success of the Unitomo Open Public Access Catalog (OPAC) Website Using the Delone and Mclean Model at Dr. University. Soetomo Surabaya. The library is part of the educational organization at Dr. University. Soetomo Surabaya. Along with the times, in 2015 the Unitomo library created an Open Public Access Catalog website to facilitate students. In terms of ranking

according to www.alexa.com, the OPAC website still ranks 12,902 in Indonesia. This shows that the ranking of the OPAC website is still below the ranking of other universities. Based on the questionnaire distribution of 100 samples, it was found that the quality of information indirectly affects net benefits through user satisfaction and use indirectly affects user satisfaction through net benefits.

The research conducted (Pentidari, A., Rachmadi, A., & Herlambang, A. D. 2019) entitled Evaluation of the Successful Implementation of the Open Public Access Catalog System with Delone and Mclean Models at the Brawijaya University Library. Open Public Access Catalog is one of the systems used and utilized by the UB library to provide information related to the availability and collection of books owned by the library. The population in this study was obtained from the number of active students of Universitas Brawijaya of 57,975 people. The data obtained from this study were obtained from the distribution of questionnaires and by using the stratified purposive sampling technique, the research sample obtained was 113 respondents. The system quality, use, user satisfaction and net benefit variables are in the high category, while the information quality and service quality variables are in the fairly high category.

Research conducted by (Alzahrani, A. I., Mahmud, I., Ramayah, T., Alfarraj, O., & Alalwan, N. . 2019) entitled Modeling digital library success using the DeLone and McLean information system success model. This is an exploratory study to model the determinants of the actual use of a digital library system. To do so, a research model was developed using the Delone and McLean information systems success model and described as an empirical study. Data were collected from 978 respondents using a structured questionnaire from four different universities in Malaysia. The findings indicate that the digital library system quality factor has a strong influence on satisfaction, behavioral intention, and variation in actual use. Information quality is the strongest predictor for measuring user satisfaction, and satisfaction has a strong influence on students' behavioral intentions to use the system. In addition, user satisfaction and behavioral intention to use the system also have a strong positive influence on the actual use of the digital library system. In short, behavioral intentions are strongly influenced by system quality, information quality and service quality.

Research conducted by (Kamala, N. M. L. S., Haryanti, N. P. P., & Suhartika, I. P. 2018) entitled Effectiveness of Online Public Access Catalog (OPAC) as a Means of Searching Information Retrieval Systems at the Integrated Library of Denpasar Health Polytechnic. The purpose of this study was to determine the constraints faced by library users while seeking information about OPAC and to determine the effect of Variable X on Variable Y the effectiveness of the Online Public Access Catalog (OPAC) in searching for information at the Integrated Health Polytechnic Library in Denpasar. This type of research is descriptive quantitative. The total population is 565 people and the number of samples calculated is 85 people.

This research was conducted with the title of implementing the OPAC system with the Delone and Clean model at the Samarinda State Agricultural Polytechnic library. The purpose of this research is to implement OPAC at the Samarinda State Agricultural Polytechnic library and to test the DeLone and Mclean methods to determine the effect of OPAC success on the Samarinda State Agricultural Polytechnic library. This type of research is a validation test using SmartPLS and the Slovin formula in determining the sample with a population of 40 people. The difference from my previous research, with the use of a simple feature but its function is useful directly to the user.

B. Theoretical Basis
1. Online Public Access Catalogue

OPAC is an online catalog of library collections provided for the general public. Libraries make OPAC open and accessible via the web. (Nguyen, 2018). The provision of an online public access catalog (OPAC) is a facility for retrieving library collections using information technology such as computers that can be used directly by library users. OPAC is one of the automatic results that are visible to library visitors. (Erwin & Wijaya, 2018).

2. Evaluation

Evaluation is used to determine the value of the success of a program, product, procedure, goal, or benefit in the design of an alternative approach to maintain its specific objectives. Evaluation is a process that can provide information that is used as consideration for determining the value and value of the goals achieved, design, and implementation as recommendations in making decisions, helping to account for and increasing understanding of the phenomenon. So that evaluation can mean the provision of information that can be presented as consideration in making a decision. Suharsimi (2018). The opinion that evaluation is an activity to collect information about the work of something, which is then used to determine the right alternative in making a decision. Evaluation is a tool or procedure used to find out and measure something in an atmosphere with predetermined ways and rules (Muryadi, A, 2017).

3. Delone and McLean Model

To measure the level of success of an information system, a model is needed to analyze the factors related to its success. DeLone and McLean created an information systems success model and suggested that researchers should "systematically combine individual measures of information systems success categories to create a comprehensive success measurement instrument. Communication research conducted by Shannon and Weaver states that communication in an information system is formed on three levels. First, the technical level of communication is the accuracy and efficiency of the communication system that produces information. In DeLone and McLean's success model, the three levels of

TEPIAN Vol. 3 No. 3 (September 2022) p-ISSN 2721-5350 e-ISSN 2721-5369

communication are divided into six dimensions, Can be seen in Picture 1.
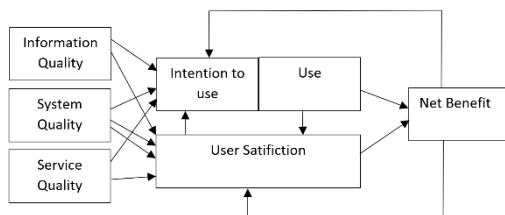
Picture 1. DeLone & McLean Model of Success

The following is a description of each variable:

a. System Quality includes the extent to which the performance shown by the system when the user uses the information system, both in terms of hardware and in terms of software. Indicators of measuring system quality include ease of use (ease of use), flexibility (flexibility), system reliability (reliability), speed of access (response time), and system security (security).

b. Information Quality This variable describes the quality of information expected by users when using the system. Information quality measurement indicators include the availability/completeness of information (completeness), ease of understanding (ease of understanding), presentation of information (format), relevance of needs (relevance), and accuracy of information (accurate).

c. Service Quality Information system users expect services that meet expectations when using an information system. This variable guarantees the services provided by the information system, such as updates and responses to user feedback. Indicators of measuring service quality include system assurance (assurance), empathy (empathy), and service response time (responsiveness).

d. Usage, this variable refers to how often users use the information system. Usage measurement indicators cover all things about system usage habits, such as frequency of use and nature of use.

e. User Satisfaction, this variable is the response and responses submitted by the user after using the information system. The variables measuring user satisfaction are efficiency, effectiveness, and overall satisfaction.

f. Net Benefits, this variable is the impact of the existence and use of information systems on the quality of user performance both individually and in organizations. The variables measuring net benefits are increased performance, efficiency and effectiveness, and productivity. The DeLone and McLean Information System Success Model is a suitable model to measure the success of implementing information systems in an organization or company (Azahra & Ramdhani, 2020).

4. *Quantitative Research*

In general, quantitative research is research whose data is in the form of numbers and is analyzed using statistical calculations (Alfianika, 2018). Quantitative research methods can be interpreted as research methods based on the philosophy of positivism used to examine populations and samples. Data collection uses research instruments and quantitative data analysis with the aim of testing the established hypothesis (Sugiyono, 2015). Quantitative research emphasizes objective phenomena and is studied quantitatively. Maximizing the objectivity of this research design was carried out using numbers, statistical processing, structure, and controlled experiments (Hamdi, 2015). In addition, quantitative research has the goal of developing and using mathematical models, theories and hypotheses that are linked and have elemental clarity (Aliana, 2018).

5. Population and Sampling Technique

Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions. Population is not just people, but also objects and other natural objects. Population is also not just the number of objects or subjects studied, but includes all the characteristics or properties possessed by the subject or object (Sugiyama, 2015).

6. Slovin

Slovin is a formula in the sample calculation developed by Slovin in 1960. The Slovin formula is used for research that has a large population with a 95% confidence coefficient configuration and a margin of error of 5% (0.05) because it is considered that the margin of error is in this configuration can represent the total population. In determining the sample with slovin, namely by knowing the number of populations and using the formula in direction (1).

$$n = \frac{N}{1 + Ne^2} \qquad (1)$$

Description of Slovin Formula (1): = sample size = population size = allowance for inaccuracy due to tolerable/allowed sampling error

III.   RESEARCH METHODS

A. Research procedure

The first stage is to identify the problem, at this stage the research provides solutions to the existing problems on the effect of the successful implementation of OPAC in the Samarinda State Agricultural Polytechnic library. In this case the method taken is the DeLone and Mclean Model. Analysis of the data using the analytical technique used by previous researchers with the Miles and Huberman model. The preparation of the questionnaire with reference to the variables and indicators of the success

model of the DeLone and McLean Model. It can be seen in Picture 2
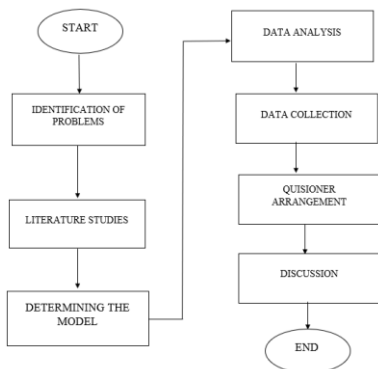
Picture 2. Research flow chart

*B. OPAC Polytechnic State Agricultural Samarinda*

The Online Public Access Catalog of the Agricultural Polytechnics an alternative application that functions to make a library provide better services. The website-based catalog is considered to be more time efficient in searching for books by visitors. In addition, the online catalog provided is also very useful because you can search anywhere and anytime for something you are looking for and want.

1. Home Page, The home page is the main page of the website. When visitors type the name of the website address in the search engine, in this view the user can browse or search for books. Seen in Picture 3.
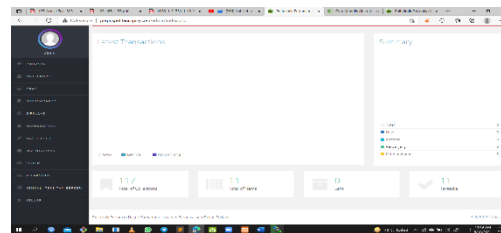

Picture 3. Home View

2. Options menu, in this Dropbox there are various types of choices and also provides pages for the front homepage, library info, members' area, and about Slims. Seen in Picture 4
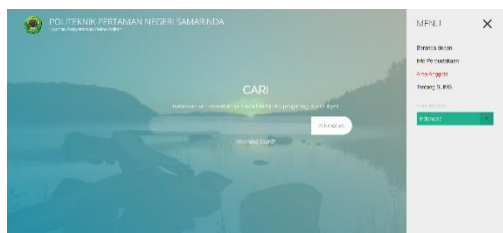
Picture 4. Menu Display

3. Admin page, is the website control panel center for admins to add, find and delete book or visitor data. It can be seen in Picture 5.


Picture 5. Admin Page

4. Collection page, on this page the user can find out the details of the books in the library and also find out complete information about the book, as shown in Picture 6.

Picture 6. Collection page

In the Context Diagram design, there are two parts that use this system, namely Visitors and Admin. Visitors provide keywords and visitor data to the Agriculture Polytechnic of Samarinda Library's OPAC system. Meanwhile, from the OPAC system of the Agriculture Polytechnic of Samarinda Library to Visitors, they provide Book Info and Book Lists to Visitors. From the Admin side, it provides Admin Data and Book Data to the Agriculture Polytechnic of Samarinda Library's OPAC system. Then the Agriculture Polytechnic of Samarinda Library OPAC system provides Visitor Info, Admin Info, and Book List to Admin. (Yulianton et al, 2015) can be seen in Picture 7.
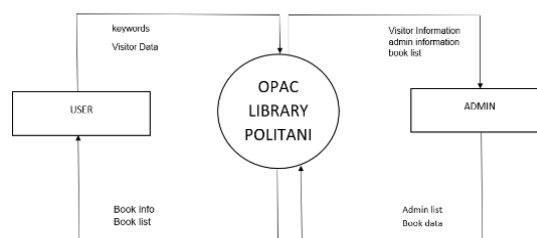
Picture 7. OPAC Agriculture Polytechnic of Samarinda (Politani) Diagram

C. Research Hypothesis

From the research conceptual model, there are ten research hypotheses analyzed, namely:

1. H1: The quality of information (information system) is suspected to have a positive and significant effect on interest in using (intention to use).

2. H2: The quality of information (information system) is suspected to have a positive and significant effect on user satisfaction.

3. H3: Net Benefits are suspected to have a positive and significant effect on intention to use.
4. H4: Net Benefits are suspected to have a positive and significant effect on user satisfaction.
5. H5: Service quality is suspected to have a positive and significant effect on interest in using (intention to use).
6. H6: Service quality is suspected to have a positive and significant effect on system quality.
7. H7: System quality is suspected to have a positive and significant effect on intention to use
8. H8: System quality is suspected to have a positive and significant effect on user satisfaction.
9. H9: The use of the system (use) is suspected to have a positive and significant effect on the net benefits.

10. H10: The use of the system (use) is suspected to have a positive and significant effect on user satisfaction. It can be seen in Figure 8 the research model.

D. Research Variables and Indicators

Based on the research model and the elaboration of each variable and the research hypotheses that have been taken, the following are indicators of each variable used in this study. Furthermore, by referring to the research indicators, it produces questions as material in distributing questionnaires that will be given to respondents. (Zulhalim, 2019). It can be seen in table 2.

Table 2. Research Indicator

Research variable	Research indicators	explanation	Indicator
Information quality	Ease of understanding	information provided easier to understand	A1
	Completeness	Completeness and diversity of information available at the Samarinda State Agricultural Polytechnic OPAC.	A2
	Information accuracy	Information must be accurate and not misleading so as not to damage the information received by users	A3
System quality	Access	Ease of accessing the OPAC of the Samarinda State Agricultural Polytechnic.	B1
	User convenience	Ease for users to use the OPAC of the Samarinda State Agricultural Polytechnic.	B2
	Efficiency	Efficiency of using the OPAC of the Samarinda State Agricultural Polytechnic.	B3
Service quality	Effectiveness	The effectiveness of the use of the Samarinda State Agricultural Polytechnic OPAC system that has an impact on users.	C1
Use	Satisfaction in getting information	User satisfaction in obtaining information obtained by the OPAC of the Samarinda State Agricultural Polytechnic.	D1
User satisfaction	Overall satisfaction	User satisfaction in the overall OPAC of the Samarinda State Agricultural Polytechnic.	E1
intention to use	System satisfaction	User satisfaction in using the Samarinda State Agricultural Polytechnic OPAC system.	F1
Net Benefit	Decision effectiveness	The effectiveness of the use of the OPAC system Samarinda State Polytechnic Agriculture.	G1
	Individual Productivity	OPAC Samarinda State Polytechnic Agriculture can help user productivity	G2

IV. RESULTS AND DISCUSSION

A. Data validation results

1. Respondent Population

In this stage, demographic analysis is carried out by analyzing the respondents' answers to the questionnaire regarding the respondent's profile questions and the use of the OPAC Agriculture Polytechnic of Samarinda web. The population in this study were all students of the Samarinda State Agricultural Polytechnic. The questionnaires were distributed to 40 samples over a period of 18 days (3 August – 17 August 2021). The following are the results of the Population analysis generated at this stage including gender: It can be seen in table 3.

\

Table 3. Population

Population (Gender and study program)	Frequency	Percent	Total	Total Percent
Woman	19	48%	40	100%
Gentleman	21	52%		
TRPL	33	83%	40	100%
BTP	1	3%		
PHH	4	10%		
PP	2	5%		

In Table 3 it is explained that the majority of system users are male, amounting to 21 people or the equivalent of 52% of respondents from a total of 40 respondents. And the majority are students of the TRPL study program with a total of 33 respondents which is equivalent to 83% of 40 respondents. The

overall data collected contains various agreements as shown in table 4.

Table 4. Respondent Statistics

Latent construction	Indicator	N (3)	A(4)	VA (5)	Total	total percent
Information quality	A1	5	23	12	40	100%
	A2	6	23	11	40	100%
	A3	6	20	14	40	100%
System quality	B1	5	21	14	40	100%
	B2	4	20	16	40	100%
	B3	4	23	13	40	100%
Service quality	C1	7	19	14	40	100%
Use	D1	5	22	13	40	100%
User satifitation	E1	6	25	9	40	100%
Intention to use	F1	7	22	11	40	100%
Net Benefit	G1	5	24	11	40	100%
	G2	5	19	16	40	100%
Total		65	261	154	480	100%

2. *Per variable descriptive analysis*

Variable system quality (Quality System). Recapitulation can be seen in Table 4 respondents indicated that the majority of respondents to the questionnaire existing answer "agree". This shows that the outline in terms of systems supporting user activity (use) on the D1 indicator has the highest value of 63%. The statement is also decisive by showing the OPAC Agriculture Polytechnic of Samarinda has hope in the existing library within the Agriculture Polytechnic of Samarinda library in terms of improving and promoting the library. The analysis of Information quality (quality of information) is shown in table 5.

Table 5. Information Quality Analysis

Indicator	Answer					Total
	VD	D	N	A	VA	
A1	0%	0%	13%	58%	30%	100%
A2	0%	0%	15%	58%	28%	100%
A3	0%	0%	15%	50%	35%	100%

3. *Validity test*

In this study, respondents' answers were processed using the Partial Least Square method and the help of the SmartPLS software version 3.0 M3. The evaluation of the PLS model was carried out in two stages, namely the evaluation of the measurement model and the evaluation of the structural model. There are four criteria used to assess the outer model, namely convergent validity, discriminant validity or using variance extraction mean, and construct reliability which is measured using composite reliability and Croncbach alpha. The composite test results can be seen in Table 6 Cronbach's alpha.

Table 6. Cronbach's Alpha.

Latent construction	Indicator	Cronbach Alpha	Information
Information quality	A1	0,908	Valid
System quality	B3	0,884	Valid
Service quality	C1	1,000	Valid
Use	D1	1,000	Valid
User satifitation	E1	1,000	Valid
intention to use	F1	1,000	Valid
Net Benefit	G1	0,857	Valid

4. *Testing Outer Loading*

The outer model is concerned with the relationship between latent. External model testing was carried out on 40 samples by testing the validation (discriminant), reliability (composite reliability) on the questionnaire given to users of the Agriculture Polytechnic of Samarinda OPAC application system. As shown in the following table. The results of the calculation of the PLS algorithm there is no loading factor value below 0.7. This shows that the loading factor values have met convergent validity or it can be said that these indicators are valid to form the dimensional construct. Details of the calculation results can be seen in table 7 and the discriminant validity is in table 8.

Table 7. Outer Loading

Latent construction	Indicator	Outer Loading	Information Valid (>0,7)
Information quality	A1	0,949	Valid
	A2	0,885	Valid
	A3	0,924	Valid
System quality	B1	0,912	Valid
	B2	0,845	Valid
	B3	0,944	Valid
Service quality	C1	1,000	Valid
Use	D1	1,000	Valid
User satifitation	E1	1,000	Valid
intention to use	F1	1,000	Valid
Net Benefit	G1	0,941	Valid
	G2	0,929	Valid

Table 8. Discriminant Validity (Ave)

Indicator	A1	B3	C1	D1	E1	F1	G1
Information	0,920						
Intention to use	0,800	1,000					
Net benefit	0,873	0,715	0,935				
Service quality	0,783	0,820	0,751	1,000			
System quality	0,794	0,739	0,853	0,787	0,901		
User	0,765	0,483	0,823	0,533	0,781	1,000	
User satifitation	0,702	0,602	0,728	0,613	0,686	0,668	1,000

In smart PLS the reliability test is measured by two criteria, namely composite reliability and Cronbach alpha from the indicator block that measures the construct. The construct is declared reliable if the composite reliability value is above 0.70 and the Cronbach alpha value is 0.50. From the results of data processing obtained composite reliability and Cronbach alpha values as in the table so that it can be said that each latent variable is reliable. Can be seen in table 9.

Table 9. composite reliability

Variable	Composite reliability	Cronbach alpha
Information quality	0,943	0,908
System quality	0,928	0,884
Service quality	1,000	1,000
Use	1,000	1,000
User satifitation	1,000	1,000
intention to use	1,000	1,000
Net Benefit	0,933	0,857

After doing three stages of testing the measurement model (outer model) it is known that the four stages of the test have met the requirements in each test so that it can be concluded that the model contained in this study has good characteristics. Based on the results of the previous model measurement analysis, the following is an interpretation and discussion of the results of the outer model analysis. Judging from the results of the analysis of the measurement model of the model used in this

study, it can be said that the results have met the requirements at each stage of the test so that it can be concluded that the model contained in this study has good characteristics and deserves to be continued to the next stage, namely structural model testing (inner mode)

5. *Structural Model (Inner Model)*

Structural model describes the relationship between latent variables in the model. The independent variable has no R^2 value because the variable is not influenced by other variables in the model. The strong model is indicated by a value of 0.70, the moderate model is indicated by a value of 0.50 and the weak model is indicated by a value of 0.25. The R^2 value in this research model is presented in table 10.

Table 10. R-Square

Variable	R-Square
intention to use	0,743
Net Benefit	0,678
System quality	0,619
User satifitation	0,615

Intention to use has an R^2 value of 0.743 which means that the validity of Intention to use can be explained by the construct of System quality, Information quality, Service quality, User satisfaction, Net benefit of 74.3% while the remaining 25.7% is explained by the variables not investigated in this model. The R^2 value of the User Satisfaction variable of 0.678 can be interpreted that the validity of the User Satisfaction construct can be explained by the

construct System quality, Information quality, Service quality, Use, User satisfaction, Net benefit of 61.5% while 38.5% is explained by the R Square variable. Net Benefit 0.678 can be interpreted that the validity of the construct Satisfaction Net benefit 67.8% can be explained by the Use construct of 16.6% Bootstrapping process. In this study, hypothesis testing is to see the level of significance between latent variables using t-statistics calculated from SmartPLS. And according to Picture 8 about the test results using the PLS algorithm
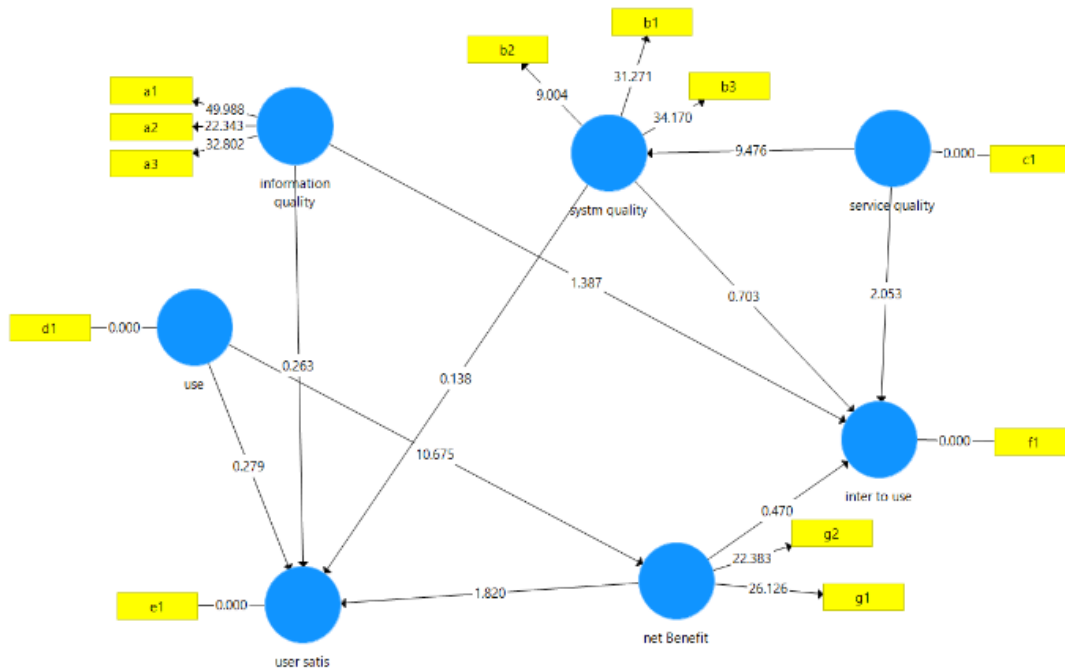
Picture 8. Test results using the PLS Algorithm process

B. Data Validation

Hypothesis testing in this study uses a significance level of 1% and a confidence level of 50% so that the t-statistics must be > 0.1. The results of hypothesis testing show that all hypotheses are proven/accepted significantly. The accepted hypothesis is further discussed as follows:

1. Hypothesis I: The test results with Smartpls show that information quality has a significant effect on intention to use, the condition is indicated by the value of path coefficients between information quality and intention to use a positive value of 0.309 or in line with the compiled hypothesis. Furthermore, the t-statistic value is $1.496 > 0.100$. This means that hypothesis 1 is accepted.

2. Hypothesis II: The test results with Smartpls show that information quality has a significant effect on user satisfaction, the condition is indicated by the value of path coefficients between information quality and user satisfaction has a positive value of 0.201 or in line with the compiled hypothesis. Furthermore, the t-statistic value is $0.309 > 0.100$. This means that hypothesis 2 is accepted.

3. Hypothesis III: The test results with Smartpls show that Net Benefit has a significant effect on intention to use, this condition is indicated by the value of path coefficients between Net Benefit

and Intention to use which is positive at 0.375 or in line with the formulated hypothesis. Furthermore, the t-statistic value is $0.423 > 0.100$. This means that hypothesis 3 is accepted.

4. Hypothesis IV: The results of the Smartpls test show that Net Benefit has a significant effect on User satisfaction. This condition is indicated by the path coefficients between Net Benefit and User satisfaction with a positive value of 0.375 or in line with the hypothesis that was developed. Then the t-statistic value is $2.015 > 0.100$. This means that hypothesis 4 is accepted.

5. Hypothesis V: The test results with Smartpls show that service quality has a significant effect on intention to use, this condition is indicated by the value of path coefficients between service quality and intention to use a positive value of 0.240 or in line with the compiled hypothesis. Furthermore, the t-statistic value is $1.953 > 0.100$. This means that hypothesis 5 is accepted.

6. Hypothesis VI: The test results with Smartpls show that service quality has a significant effect on system quality, the condition is indicated by the value of the path coefficients between service quality and system quality, which is positive at 0.077 or in the same direction as the hypothesis. Furthermore, the t-statistic value is $10,152 > 0.100$. This means that hypothesis 6 is accepted

7. Hypothesis VII: The test results with Smartpls show that system quality has a significant effect on intention to use, this condition is indicated by the value of the path coefficients between system quality and intention to use a positive value of 0.334 or in line with the compiled hypothesis. Furthermore, the t-statistic value is $0.412 > 0.100$. This means that hypothesis 7 is accepted

8. Hypothesis VIII: The test results with Smartpls show that system quality has a significant effect on intention to use the condition is indicated by the value of path coefficients between system quality and user satisfaction has a positive value of 0.241 or in line with the compiled hypothesis. Furthermore, the t-statistic value is $0.178 > 0.100$. This means that hypothesis 8 is accepted

9. Hypothesis IX: The test results with Smartpls show that Use has a significant effect on Net Benefit, the condition is indicated by the value of path coefficients between Use i and Net Benefit which is positive at 0.070 or in line with the compiled hypothesis. Furthermore, the t-statistic value is $11,684 > 0.100$. This means that hypothesis 9 is accepted

10. Hypothesis X: The test results with Smartpls show that Use has a significant effect on User satisfaction. The condition is indicated by the value of the path coefficients between Use and User satisfaction with a positive value of 0.225 or in line with the compiled hypothesis. Furthermore, the t-statistic value is $0.250 > 0.100$. This means that hypothesis 10 is accepted

V. CONCLUSION

The results of the study show that the relationship between variables that occur between these factors is as follows. There is a relationship between information quality and user satisfaction. The higher the quality of the information produced by the online public catalog system, the greater the satisfaction of the user/user with the Agriculture Polytechnic of Samarinda OPAC system. Likewise, the implementation of a library automation system at the Samarinda State Agricultural Polytechnic Library provides many benefits for library managers and users, including the quality of library services and assisting librarians in meeting the information needs of library users, library managers or admins in inputting book data and making energy and time efficient.

REFERENCES

Agustina, N., & Sutinah, E. (2019). Model Delone dan McLean Untuk Menguji Kesuksesan Aplikasi Mobile. *Jurnal Nasional Informatika dan Teknologi Jaringan, 3* (2).

Alzahrani, I. A., Mahmud, I., Ramayah, T., Alfarraj, O., & Alalwan, N. (2019). Modelling Digital Library Success Using The DeLone and McLean Information System success Model. *Journal of Librarianship and Information Science, 51*(2), 291-306.

Azahra, D., & Ramdhani, S. (2020). Pengembangan Aplikasi Online Public Access Catalog (OPAC) Perpustakaan Berbasis web Pada STAI Auliauarrasyiddin Tambilahan. *Teknologi dan Sistem Informasi Bisnis, 2*(2), 152-160.

Erwin, & Wijaya, A. (2018). Penggunaan Model DeLone Dan McLean Dalam Mengukur Kesuksesan Aplikasi Go-Jek di Palembang. *SISTEM & TEKNOLOGI INFORMASI KOMUNIKASI, 3 (1)*, 9-17.

Gondomono, T. (2019). Efektivitas Sistem Katalog Online (OPAC) Terhadap Pemustaka di Perpustakaan Nasional RI dengan Menggunakan Model Delone and Mclean Is Success Model. *Buletin Jaringan Informasi Antar Perpustakaan, 18*(2), 127-136.

Kamala, N. M., Haryanti, N. P., & Suhartika, I. P. (2018). Efektivitas Online Public Access Catalog (OPAC) sebagai Sarana Penelusuran Sistem Temu Kembali Informasi di Perpustakaan Terpadu Politeknik Kesehatan Denpasar. *Jurnal Ilmiah D3 Perpustakaan, 1*(1), 1-8.

Novia, T. (2018). Analisis Kesuksesan Website Open Public Access Catalog (OPAC) Unitomo Menggunakan Model Delone dan Mclean pada Universitas Dr. Soetomo Surabaya. *Doctoral dissertation, Institut Bisnis dan Informatika Stikom Surabaya, 1*(1), 1-12.

Pentidari, A., Rahmadi, A., & Herlambang, A. D. (2019). Evaluasi Kesuksesan Implementasi Sistem Open Public Access Catalog Dengan Delone and Mclean Model Pada Perpustakaan Universitas Brawijaya. *Pengembangan Teknologi Informasi dan Ilmu Komputer, 3*(2), 1961-1970.

Sugiyono. (2015). *Metode Penelitian Kuantitatif, Kualitatif dan R&D* . Bandung: Alfabeta.

Yulianton, H., Susanto, F. A., & Mulyani, S. (2015). Rancang Bangun Online Public Access Catalogue (OPAC) pada Perpustakaan Universitas Stikubank menggunakan Bootstrap. *Teknologi Informasi DINAMIK, 20*(1), 36-41.

Zulhalim, Sulistyanto, A., & Sianipar, A. Z. (2019). Implementasi Aplikasi Sistem Otomasi Perpustakaan Terintegrasi Menggunakan Inlislite Versi 3 Pada Perpustakaan STMIK Jayakarta. *Information System, Applied, Management, Accounting and Researh, 3*(4), 1-9