

# The Effect of Quality Service of INLIS Lite V.2.1 Library Information System on User Satisfaction in Depok City Public Library

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**Abstract:** This study aims to determine the effect of service quality of INLIS Lite V.2.1 library information system on user satisfaction in Depok City Public Library. To achieve this objective, this study uses a quantitative descriptive approach with regression method. The sample in this study are 100 respondents using Accidental Sampling techniques. The variables used are variable X (Service Quality) and variable Y (User Satisfaction) with a questionnaire of 18 statements. The analysis method carries out statistics using SPSS. Hypothesis test results indicate that service quality has a significant effect on the satisfaction of INLIS Lite V.2.1 information system users in Depok Public Library. The use of INLIS Lite V.2.1 application in the Depok Public Library provides many benefits for users, both librarians and visitors. Therefore, by using the application, library-planning activities can be managed properly.

**Keywords:** *Service Quality, Library, INLIS Lite V.2.1, User Satisfaction*

## I. INTRODUCTION

The progress of Information Technology (IT) has penetrated almost all areas of human life. Various things that were previously a wishful thinking only have now become a reality with the presence of information technology in the world. Thus, the presence of IT, the work may be done without or with little human intervention. The presence of IT is very helpful in many ways, in order to help the operation of the library, such as: membership process, library material acquisition, cataloging of library materials, circulation services (lending library materials), and facilitating librarians in organizing and providing library material services they have, or as a means of searching for users to search materials they are looking for (information retrieval process).

The use and utilization of the Library information system is now familiar for people around the world. Many libraries begin to use library information systems as an important part of improving the performance of staff and library organizations. Library information systems are growing so rapidly whether it is provided for free, licensed application systems, or by developing themselves to build information systems adjusted to the needs of the organization's business processes.

The same goes for Depok City Public Library. Depok City Library and Archives Agency are government agency that serve the community, especially by providing various services to support the efficiency and effectiveness of library operations. This is marked by the existence of a library information system that is applied to the Depok City Library and Archives Agency, INLIS Lite Information System.

INLIS Lite is a software application for library automation, which built and developed by the National Library of Indonesia since 2011. INLIS is taken from the word Integrated Library System, the name of an integrated library information management software built since 2003 to the need of routine library information management activities within the National Library. Along with the development of the library, especially in Indonesia, the National Library considers it necessary to facilitate the essence of library managers in all regions to start implementing library automation towards the realization of digital libraries; therefore, the National Library has the initiative to distribute this software in a lighter version called INLIS Lite. (National Library of Indonesia, 2014)

The application of the INLIS system as an automation system in the Depok Public Library began with several training sessions to use the INLIS system. As a collection management system that integrates all library activities, this system has several modules including the Back Office (acquisition module, catalog module, membership module, report module and administration module), OPAC (Online Public Access Catalog), Online Membership, Member Registration (Mandiri), and Checkpoint (Guest Book).

Looking at the wonderful role of INLIS Lite V.2.1 library information system in supporting the management of Depok public library, this attracts the researcher to conduct a research regarding "The Effect of Quality Services of INLIS Lite V.2.1 Library Information System on User Satisfaction in Depok City Public Library".

## II. LITERATURE REVIEW

### Technology Acceptance Model

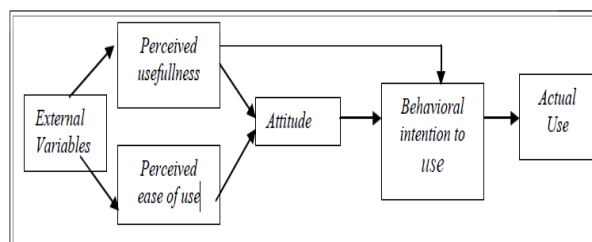
User acceptance of the implementation of an information technology system can be defined as the apparent desire in the user group to implement the information technology system in their work. By accepting the new information technology systems, the greater the willingness of users to change existing practices in the use of time and effort to a real start in the new information technology system (Succi and Walter, 1999 in Pikkarainen et.al, 2003). However, if the user does not want to accept the new information technology system, the change in the system does not give many benefits to the organization/company (Davis, 1989; Venkatesh and David 1996 in Pikkarainen et.al., 2004).

According to David (1996) in Pikkarainen et.al, 2004) there are five characteristics of technology acceptance, they are:

- a. Relative advantage (technology offers improvements).
- b. Compatibility (consistent with social practices and norms that exist in technology users).
- c. Complexity (ease of use or learning technology).
- d. Trial ability (opportunity to innovate before using the technology).
- e. Observability (technological advantages can be seen clearly).

### Technology Acceptance Model (TAM)

The TAM model is an adaptation of the Theory of Reasoned Action Model (TRA) that has specifically been adapted to the model of acceptance of information systems by users / users (Davis, et.al., 1998). TAM has two sides, namely: the first side is usually called beliefs that consist of perceived usefulness and perceived ease of use. The second side consists of: attitude, behavior intention to use and usage behavior (Straub, Limayen, Evaristo, 1995 in Petra, 2005).



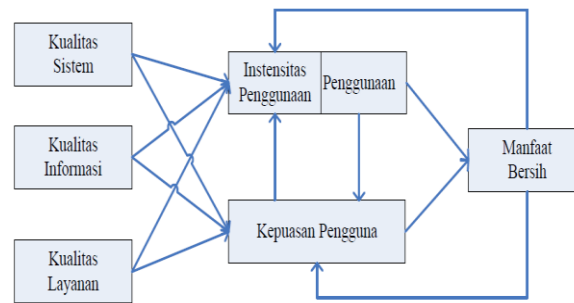
**Figure 2.5 Relations between components in TAM**

TAM model explains the relationship between beliefs (usefulness and ease of use) with attitudes, goals / intentions of users, and real use of the system. Perceived usefulness is defined by Davis et.al. (1989) as a level where one believes that the use of a system specifically will improve its performance. Whereas perceived ease of use is defined as a level where someone believes that the use of a system specifically will lead to a business.

### Information System Success Model (Delon and McLean)

Several models have been used by several researchers to measure the success rate of information systems. The models of information system success, which received more attention from the researchers, were the DeLone and McLean models. De Lone & McLean (1992) proposed a model to measure complex independent variables in a study. In

research, DeLone& McLean proposed an interactive model to demonstrate the concepts and operations of successful information systems implementation. This model has been widely integrated in various studies (DeLone& McLean, 2003). DeLone and McLean developed a multidimensional model. The model has 6 (six) dimensions or variables, namely information quality, system quality, service quality, use, user satisfaction and net benefit. All of these models are interconnected, called causal models.



### Information System Success Model (DeLone& McLean, 2003)

Based on the picture above, it can be explained that information quality factors, system quality, service quality independently can be intended to use and satisfy the user. The size of the element of use (Intention to use) can affect the value of user satisfaction, as well as the intention to use and user satisfaction can affect the level of utilization of the system.

In this study, researchers only analyzed the service quality. Service quality is the quality of services that can be provided by the INLIS Lite V.2.1 library information system users. There are 5 sub-indicators to measure the quality of services, namely:

- a. Reliability, is the perception of system users about the reliability possessed by the INLIS LITE V.2.1 library information system to help complete the work of system users
- b. Responsiveness, is the perception of system users about the responsiveness obtained by system users in completing work using the INLIS LITE V.2.1 library information system
- c. Assurance, is the perception of users of the system about the convenience obtained by system users to complete the work using the INLIS LITE V.2.1 library system
- d. Empathy is the perception of system users about the suitability or accuracy of features or menus in the INLIS LITE V.2.1 library information system to support the work of system users.
- e. Tangible, is evidence of the application of the INLIS LITE V.2.1 library information system in the Depok City Library supported by the application of good supporting facilities and infrastructure.

### User Satisfaction

The user satisfaction of information system is the response and feedback that the user raises after using the information system. The user's attitude is a subjective criterion regarding how satisfied the user is with the information system that has been applied and used. In this study, the variable user satisfaction is represented by Y. The following are indicators of measuring user satisfaction:

- a. Efficiency  
User satisfaction can be achieved if the information system can help the user's work efficiently. This can be seen from how the clinical information system can provide solutions to the work and tasks of users efficiently. An information system can be said to be efficient if a user's goals can be achieved by doing the right thing
- b. Effectiveness  
The effectiveness of an information system in meeting user needs can increase user interest in the system. The effectiveness of an information system can be seen from the needs or goals of the user can be achieved according to expectations or predetermined targets.
- c. User Satisfaction

User satisfaction can be measured through the satisfaction that felt by the users in using the clinical information system. The satisfied feeling felt by users indicates that the clinical information system has succeeded in meeting the needs of users.

### III. RESEARCH METHOD

This research is classified into quantitative descriptive research using linear regression method. Where this study aims to find the form of the relationship of two or more variables in the form of functions or equations. (Mustikoweni, 2002: 1, in the book Kriyantono, 2009: 181).

The location of the study took place at the Depok Public Library Office, Jalan Margonda Raya No. 54, Depok - West Java. The number of samples in this study were as many as 100 respondents who were determined by using accidental sampling techniques.

The variables in this study consist of variables X and Y, where the variable X in this study is service quality and variable Y is user satisfaction. Service quality is measured by five sub-indicators, namely: Reliability, Responsiveness, Assurance, Empathy, and Tangibles. (Jogiyanto, 2009: 97). Whereas for the variable of User Satisfaction measured by three sub-indicators namely: Efficiency, Effectiveness and Satisfaction.

### IV. DISCUSSION

From the discussion of results questionnaire data obtained and also the results of data processing using SPSS version 20, it is known that the questionnaire with 18 items of statements has been declared valid after being tested using SPSS.

The reliability test results for variable X (Service Quality) with a value of 0.742 and the results of the Y reliability test (User Satisfaction) with a value of 0.769.

From the results of a simple linear regression test, the value of  $Y = 12.469 + 0.239X$  is obtained. From these results, it can be said that if the value of X is zero (no), then the constant Y equals 12,469. Positive signs on service quality variables show a unidirectional relationship, meaning that if the influence of service quality is good then the satisfaction of INLIS Lite V.2.1 information system users in the Depok Public Library will also increase.

This is also reinforced by the opinion of Masrek et al (2010), Stacie et al (2008) which states that service quality has a positive influence on user satisfaction, both at the individual and organizational level.

This study obtained the value of determination (R) of 0.463. This means that this value explains that the influence of INLIS Lite V.2.1 library information system service quality on user satisfaction in Depok public library is affected only by 0.463 (46.3%). This means that the influence is quite strong.

Based on hypothesis testing, it can be seen that the Sig or research significance number is 0,000, while the significance level used is 0.05 or 5%. So that it can be concluded that the sig number is <level sig, which is 0,000 <0,005, so Ho is rejected and H1 is accepted. This shows that service quality has a significant effect on the satisfaction of INLIS Lite information system users in the Depok public library.

Based on the results of data analysis conducted by the researcher, the quality of INLIS Lite V.2.1 library information system services to user satisfaction has a significant effect, this is in accordance with the theory put forward by (DeLone& McLean, 2003) that service quality can affect usage (Intention to use) and user satisfaction. The size of the element of use (Intention to use) can affect the value of user satisfaction, as well as the intention to use and user satisfaction can affect the level of utilization of the system.

The use of INLIS Lite V.2.1 application on city general libraries not only affects librarians, but library visitors also feel helped by the application, because visitors can use the features contained in INLIS Lite V.2.1, namely:

1. When filling in the guest book, the visitor can use the guest book feature contained in INLIS Lite V.2.1
2. At the time of member registration, the user fills out the form contained in the Member Registration feature.
3. During information retrieval, users use the OPAC (Online Public Access Catalog) feature which can be found in INLIS Lite V.2.1

According to David (1996) in Pikkarainen et.al, 2004) there are five characteristics of technology acceptance, namely:

1. Relative advantage (technology offers improvements). INLIS Lite V.2.1 application in the public library of Depok city can help librarian performance in maximizing the service. For example in circulation services, administration and guest books.
2. Compatibility (consistent with social practices and norms that exist in technology users).
3. Complexity (ease of use or learning technology). The application of INLIS Lite V.2.1 as an automation system in the Depok public library begins by doing several training sessions to use INLIS system. As a collection management system that integrates all library activities, this system has several modules including the Back office.
4. Trial ability (the opportunity to innovate before using that technology). Before carrying out the application of the INLIS Lite application, the Public Library of Depok City still uses Ms.Excel as a library collection database so that when the procurement took place, there was a purchase of the same book as the previous year that causes heaping the same collections.
5. Observability (technological advantages can be seen clearly). The use of INLIS Lite V.2.1 application in Depok Public Library provides many benefits for users both librarians and visitors. With the application, library-planning activities can be managed properly, for example, knowing the availability of the number of collections that the library has through the INLIS Lite system. Checking the statistical data collection to see if the use of the book is high, then there will be a consideration to hold the collection again and to check the availability of books in the Depok City Public Library.

The presentation of the characteristics of technology acceptance in the Depok City Public Library is in accordance with the concept of the TAM model, namely explaining the relationship between beliefs (usefulness and ease of use) and attitudes / objectives, user goals / intentions, and real use of the system. Perceived usefulness is defined by Davis et.al. (1989) as a level where one believes that the use of a system specifically will improve its performance. Whereas perceived ease of use is defined as a level where someone believes that the use of a system specifically will lead to a business.

## **V. CONCLUSION**

Based on the results of the research conducted by distributing questionnaire to respondents about the effect of service quality of INLIS Lite V.2.1 library information system on user satisfaction in the Depok City Public Library, it can be concluded that according to the data obtained by researchers, the average statement given to Respondents showed that agreeing was more dominant among other statements. The conclusion is from the overall statement submitted to respondents, service quality had a significant effect on user satisfaction of INLIS Lite V.2.1 library information system in the Depok City Public Library.

Service quality variables show a unidirectional relationship, meaning that if the influence of service quality is good then the satisfaction of INLIS Lite V.2.1 information system users in the Depok Public Library will also increase. This is also reinforced by the opinion of Masrek et al (2010), Stacie et al (2008) which states that service quality has a positive influence on user satisfaction, both at the individual level and at the organizational level.

## **SUGGESTION**

Based on the results of the study, several difficulties are found in the use of the INLIS Lite V.2.1 application, namely:

- a. For the Public Library of the City of Depok
  1. Internet access in the Depok City Public Library is lacking in support or slow connection, which obstructs the process of finding books.
  2. Lack of socialization to library visitors is related to Check points (guest book), therefore, there are so many visitors do not take advantage of these facilities when visiting the library.
  3. The library automation tool in the form of an online catalog (OPAC) often off, therefore, many users do not use this tool.
- b. For Users or visitors of the Depok City Public Library  
It is expected to make more use of the OPAC (Online Public Access Catalog), in the process of finding books, and to utilize Check Point machines for attendance.
- c. For Further Research

1. In this study, researchers only use two variables, namely X (Service Quality) and Variable Y (User satisfaction) variables. For further research, it is expected to add variables in system quality and information quality.
2. Samples in this study were 100 respondents, for further researchers if interested in examining the same object and subject, the sample can be added with a precision of 0.5., so that more data can be obtained.

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