INFLUENCE OF INFORMATION SYSTEM QUALITY TO USER SATISFACTION OF HUMAN RESOURCE INFORMATION SYSTEM (STUDY AT PT PLN (PERSERO) NTB REGION)

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Abstract: This study aims to analyze and determine the level of significance of the influence of system quality on user satisfaction SISDM, the significance of the influence of information quality on user satisfaction SISDM, the significance of service quality to user satisfaction SISDM, perceived usefulness significance of SISDM user satisfaction and significance perceived ease of use to satisfaction SISDM user on PT. PLN (Persero) Region NTB human resources (HRD).

The data collection method used was census method where the entire study population was chosen to be the respondent. The total population in this study amounted to 101 people who are employees of the HR department. Techniques or ways of collecting data is by interview, documentation, and questionnaire. The data analysis technique used in this research is with the analysis of PLS (Partial Least Square) with the help of SmartPLS 3.0 program.

The result of the research shows that (1) the quality of the system has a positive and insignificant effect on the user satisfaction of SISDM, (2) the quality of the information has a positive and significant effect on the SISDM user satisfaction, (3) the service quality has positive and significant influence to the SISDM user satisfaction, perceived usefulness has a positive and significant effect on SISDM user satisfaction and (5) perceived ease of use has positive and insignificant effect on SISDM user satisfaction.

Key Words: System Quality, Information Quality, Service Quality, Perceived Usefulness, Perceived Ease Of Use, SISDM User Satisfaction.

1. INTRODUCTION:

Human Resource Information System is a form of intersection / meeting between the field of human resource management and information technology where the incorporation of human resource management as a discipline that primarily applies the field of information technology in human resource management activities.

The existence of offices of PT. PLN (Persero) in every region of Indonesia to make the number of employees to reach thousands of employees. The number of employees is so much proportional to the amount of data that must be managed and the personnel services provided by the HR department that ultimately increase the workload by the HR department and also make it a challenge in improving the quality of human resources to go PT.PLN (Persero) a modern and professional. HR Section PT. PLN (Persero) requires a support in the form of information systems that will help manage the employment of a reliable, fast and accurate in fulfilling its duties and functions.

To overcome the number of employees and reduce the workload of the human resources department PT.PLN (Persero) located in Jakarta decided to improve the human resource information system that was not integrated into an integrated human resource information system (SISDM) to update the personnel data independently through the process of verification and validation by the direct supervisor of the head of the HR department at the regional office or head of HR department at the head office.

The success of information systems is a concept used in various researches as the basic criteria in evaluating information systems. Delone and Mclean states that one of the variables that affect the success of information system implementation is user satisfaction. This research uses the latest modification of Delone and Mclean (2003) model with Technology Acceptance Model (TAM) model to the user satisfaction of human resource information system. This research also uses Quality of System, Information Quality and Service Quality which is taken from Deloan and Mclean model while Perceived Usefulness and Perceived Ease of Use are taken from Model Technology Acceptance Model (TAM).

2. LITERATUR REVIEW:

Research conducted by Ginting & Marlina (2017) using 5 variables are system quality, quality of information, service quality, perceived usefulness and perceived ease of use in e-filling facilities in KPP Pratama in Pondok Gede
that shows that system quality, service, information quality, perception of ease of use, and perception of benefits have a positive and significant impact on user satisfaction of E-Filling facility.

Other researches are Octapiani and Riana (2017) which proved the opposite of the above research. In his research to measure the satisfaction of Wifi.id user with Delone and Mclean model using system quality variable, information quality and service quality showed the result that system quality, information quality and service quality had positive and insignificant effect on user satisfaction of Wifi.id.

Other studies have been conducted by Istiyana (2014) using the DeLone Model and McLean (1992) modification of the Seddon (1997) study. The Istiyana study adds a variable of perceived usefulness and perceived ease of use variables of the TAM Model (Davis, 1989). The results of this study support Seddon's (1997) research, ie there is a significant influence on the usability of perception and ease of use of perception on user satisfaction (Istiyana, 2014).

Laksono (2017) conducted a study to test the use of SIMDA BMD application in Klaten District by using modification of the DeLone and McLean Information System Success Model with TAM. Samples were taken from 35 SIMDA BMD users who are goods holders in Klaten Regency Government. The result states that the quality of the system and the quality of the information affect the perception of usability and perception of ease of use. Perception of ease of use affects the perception of usefulness. Usability perceptions, perceptions of ease of use, and quality of service affect the user satisfaction. System quality and user satisfaction affect net benefits, and the quality of information has no effect on net benefits.

From the various models studied, the Technology Acceptance Model adopted from Theory of Reasoned Action (TA) offers as a basis for gaining a better understanding of user behavior in the reception and use of information systems (Davis, 1989). The purpose of this model is to be able to explain the main factors of user behavior of information technology on the acceptance of the use of information technology itself.

The DeLone and McLean models were first developed in 1992. This model developed a model of parsimony that tests the success of an information system. Then based on the criticisms given to the model, DeLone and McLean updated the model in 2003.

This study was adapted from The Reformulated D & M IS Success Model (DeLone & McLean, 2003) combined with Seddon's research, the Technology Acceptance Model (Davis, 1989). Success test that will be done in this research using DeLone and McLean success model to test the system while in user attitude will be tested using TAM model. A good system will impact the receiver's attitude in using the technology system. Then from user attitudes will result in user satisfaction that will have a direct impact on individuals related to performance, which in turn will have an impact on organizations or companies.

2.1 System Quality

System quality is used to measure the quality of its own information system technology (DeLone and McLean, 1992). The quality of information systems means the quality of a combination of hardware and software in information systems. Information system quality indicators are manifested in a set of quality system information questions that can be measured through several indicators such as Response Time, Reliability, Flexibility, Security.

2.2 Information Quality

Quality information to measure the quality of output resulting from information systems mainly in the form of reports (DeLone and McLean, 1992). Criteria that can be used to assess the quality of information include completeness, accuracy, timeliness, availability, relevance, consistency, and data entry.

2.3 Service quality

The concept of the quality of this service is an overall, permanent revolution in changing the way people view in running or striving for its efforts related to the dynamic process, lasting, continuously in meeting expectations, wants and needs. According to Arisutha (2005) that the success of a service act is determined by quality. Quality is the highest appreciation of service actions. According to Parasuraman et al. (2005) there are five components or characteristics used as indicators to evaluate service quality, namely responsiveness, assurance, tangibles, empathy, and reliability.

2.4 Perceived usefulness

Perceived Usefulness is the extent to which a person trusts that a user's technology can improve his or her work performance (Davis, 1989). According to Dalcher and Shine (2011) the use of perceptions is a belief that is owned by someone against the use of certain technologies that can improve their performance. Based on these two definitions, it can be concluded that the use of perceptions related to productivity and effectiveness as a whole to improve the performance of system users. The measurements that become indicators of perceived usefulness according to Davis in (Jogiayanto, 2007) are work more quickly, Job Performance, Increase Productivity, Effectiveness, and Makes Job Easier (Making Jobs Easier), easy to learn and operate a technology in doing the job desired by someone and can give skill to make the work easier.

2.5 Perceived ease of use

Perceived Ease Of Use is the extent to which a person believes that technology is easy to understand (Davis, 1989). According Wibowo (2008) ease of use of an information system is defined as the size of a person believes the
technology is easy to understand and use. Based on some of the above definition, that ease of use can minimize one's effort both energy and time to understand the system or technology used, because the user believes the system or technology used is easy to understand. Perception indicators of ease of use of information technology (Davis, 1989) is the ease of learning, doing the desired job with ease, easy to improve user skills and easy to use / operate.

Based on previous research and theoretical basis, it can be formulated hypothesis as follows:

H$_1$: Systems quality have a positive and significant impact on User Satisfaction of human resource information system.

H$_2$: Information Quality has a positive and significant effect on User Satisfaction of human resource information system.

H$_3$: Service Quality has positive and significant impact on User Satisfaction of human resource information system.

H$_4$: Perceived Usefulness has a positive and significant impact on User Satisfaction Human Resource Information System.

H$_5$: Perceived ease of use has a positive and significant impact on User Satisfaction of Human Resource Information System.

![Figure 1. Conceptual Research](image)

3. METHOD:

The research method used in this study is quantitative with the type of causal associative research which is a study to determine the effect of independent variables to the dependent variable. This research was conducted at PT. PLN (Persero) Region NTB consisting of four offices PT. PLN (Persero) Region NTB is the Regional Office, Branch Office Mataram, branch offices and branch offices Bima Branch with human resources respondents (HR) as many as 101 people. Questionnaires are distributed as many as 101 questionnaires and then questionnaires that have been returned in though to get the results of respondents' answers. The variables used in this study are system quality variables measured using indicators developed by Barley & Pearson, Quality information is measured using indicators developed by Bailey & Pearson, service quality is measured using indicators developed by Parasuraman, perceived usefulness is measured by using indicators developed by and perceived ease of use measured using indicators developed by. The weighting used in each variable with Likert scale consisting strongly agree, agree, disagree, disagree and strongly disagree. After performing the reliability test and validity on the instrument statement of the questionnaire showed that all items in this reliable research variable is due to cronbach alpha above 0.6, whereas for the validity of the research instrument by using the correlation technique Product Moment Pearson showed that two items statement on the variable quality system and two items of revelation on the variable of quality of information is declared invalid because the value of r-count is less than r-table that is 0.374 so that the four items of statement are issued for the redistributed while for the other item declared valid. Analysis in this research using Partial Least Square (PLS).

4. RESULT AND DISCUSSION:

Based on the hypothesis that has been formulated, then in this study the analysis of inferential statistical data measured using SmartPLS 3.0 Software consisting of model measurement (outer model), Model Structure (Inner
Model) and hypothesis testing (Ghozali, 2011). In the Outer Model measurement, there are two tests: discriminant validity test and composite reliability showing all variables are valid (value $\sqrt{AVE} > 0.5$) and reliable (CR value > 0.7).

<table>
<thead>
<tr>
<th>Variable Latent Research</th>
<th>AVE</th>
<th>$\sqrt{AVE}$</th>
<th>CR</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality system</td>
<td>0.446</td>
<td>0.668</td>
<td>0.896</td>
<td>Valid &amp; Reliabel</td>
</tr>
<tr>
<td>Quality of Information</td>
<td>0.640</td>
<td>0.800</td>
<td>0.951</td>
<td>Valid &amp; Reliabel</td>
</tr>
<tr>
<td>Service quality</td>
<td>0.465</td>
<td>0.682</td>
<td>0.927</td>
<td>Valid &amp; Reliabel</td>
</tr>
<tr>
<td>Perceived Usefulness</td>
<td>0.543</td>
<td>0.737</td>
<td>0.946</td>
<td>Valid &amp; Reliabel</td>
</tr>
<tr>
<td>Perceived Ease Of Use</td>
<td>0.459</td>
<td>0.677</td>
<td>0.909</td>
<td>Valid &amp; Reliabel</td>
</tr>
<tr>
<td>User Satisfaction</td>
<td>0.594</td>
<td>0.771</td>
<td>0.946</td>
<td>Valid &amp; Reliabel</td>
</tr>
</tbody>
</table>

Assessment of structural model or inner model is done to see the relationship between construct, significance value and R-Square research model.

<table>
<thead>
<tr>
<th>Variabel</th>
<th>R-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Satisfaction</td>
<td>0.752</td>
</tr>
</tbody>
</table>

The variable of user satisfaction construct can be explained by construct variable of system quality, quality of information, service quality, perceived usefulness and perceived ease of use equal to 75.2%. While the remaining 24.8% is explained by other variables outside of the studied.

Furthermore, hypothesis testing can be seen from the coefficient of path and p value significant ($\alpha = 0.05$) on the relationship between variables.

| NO  | Relationship between Variables | Path Coefficient | T Statistics ($|O/STERR|$) | T Table | P Value | Information  |
|-----|--------------------------------|------------------|----------------|--------|--------|-------------|
| 1   | System quality -> User Satisfaction | 0.017            | 0.215          | 1.96   | 0.830  | Not significant |
| 2   | Quality Information -> User Satisfaction | 0.283            | 2.413          | 1.96   | 0.016  | Significant  |
| 3   | Quality of Service -> User Satisfaction | 0.372            | 3.734          | 1.96   | 0.000  | Significant  |
| 4   | Perceived Usefulness -> User Satisfaction | 0.280            | 2.322          | 1.96   | 0.021  | Significant  |
| 5   | Perceived Ease of use -> User Satisfaction | 0.067            | 0.568          | 1.96   | 0.570  | Not significant |

Based on table 4.3 shows that the quality of the system of human resource information system has a positive but not significant impact on user satisfaction. This is because the information system used is mandatory where employees have no freedom to use the system. Mandatory Information System is an information system that must be used in all activities and activities in PT.PLN (Persero) Region NTB. The results of this study do not support research conducted by DeLone and McLean (1992), Ginting and Marlina (2017), Rai et al. (2002), Masa'deh et al. (2017), Luo and Zhang (2016), Kim and Lee (2014), Shahibi et al. (2016), Ultan et al. (2006), Dreheeb et al. (2015), Nwone (2014), Tajuddin (2015), Manchanda and Mukherjee (2014), Arshad et al. (2015), which states that the quality of information systems will be higher the user satisfaction of the information system as well as in research conducted by Delone and Mclean respondents used are the users of information systems voluntarily. However, this study supports the results of research conducted by Panjaitan et al. (2016), Octapiani and Riana (2016), Song et al. (2017), Alhendawi and Baharudin (2014), Montesdiioca and Maçada (2015), which states that the quality of information systems if enhanced then the users of information systems will not be satisfied with the information system.

Based on Table 4.3 shows that the quality of information has a positive and significant effect that explains that if the quality of information on human resource information systems used by employees of the HR department at PT. PLN (Persero) NTB area better then it will increase user satisfaction will system information. Rai et al. (2002) states...
that the quality of information is the quality of output in the form of information generated by the information system used while according to Liu and Arnet (2000) the quality of information is relevant level, timeliness, safe and presented with good information design in a report. The results of this study support and expand the results of research conducted by DeLone and McLean (1992), Ginting and Marlina (2017), Rukmiyati and Budiartaha (2017), Song et al. (2017), Shahibi et al. (2016), Ulan et al. (2006), Nwone (2014), Tajuddin (2015), Manchanda and Mukherjee (2014), Arshad et al. (2015), which explains that the size of the information system user satisfaction is reflected by the quality of information generated. If the quality of information is good according to the user's perception, then the users tend to feel satisfied in using the information in every decision-making. However, the results of this study contradict the results of research conducted by Yuliana (2016), Puturuhu et al. (2016), Panjaitan et al. (2017), Oktapiani and Riana (2017), Serumaga-Zake (2017), Kamaludin and Kamaludin (2017) which states that although the quality of information is improved, it will not increase the user satisfaction of the information system.

Based on table 4.3 it can be seen that service quality has positive and significant effect to user satisfaction of human resource information system. This explains that the services provided by SISDM providers are so satisfactory that HR employees are satisfied. This is in line with research conducted by Ginting and Marlina (2017), Yasa (2015), Puturuhu et al. (2016), Panjaitan et al. (2017) and Delone and Mclean (2003), Masa'deh et al. (2017), Shahibi et al. (2016), Nwone (2014), Tajuddin (2015), Manchanda and Mukherjee (2014), Arshad et al. (2015), which indicates that the better the quality of services provided will be more satisfied perceived by users of the information system. However, research conducted by Utomo et al. (2017), Oktapiani and Riana (2017), Montesdioca and Maçađa (2015), contrary to this study, which states that although service quality is improved, it can not increase the satisfaction of users of the information system.

Based on Table 4.3 shows that perceived usefulness has a positive and significant effect on user satisfaction of human resource information system. This shows that the higher perceived usefulness will increase user satisfaction so that users feel the need SISDM in providing information in accordance with the needs by users who ultimately can increase the productivity of individual and organizational work. This is in line with research conducted by Delone and Mclean and Ginting and Merlina (2017), Yasa (2015), Rukmiyati and Budiartaha (2017), Ammarhusein (2015), Setyowati and Respati (2017), Masa'deh et al. (2017), Dalcher and Shine (2011), Rai et al. (2002), Kim and Lee (2014), Halilovic and Cicic (2015), which resulted in the higher level of perceived usefulness, the users will feel more satisfied in using SISDM. But contrary to research conducted by Amalia and Pratomo (2016), Kamaludin and Kamaludin (2017) stating that the more useful information systems, it will be able to provide satisfaction for users of the information system.

Based on Table 4.3 shows perceived ease of use has no significant positive effect on user satisfaction seen from the value of output Smart PLS 3. This is because the information system used is mandatory where employees do not have freedom because it is an information system that must be used in all activities and activities in PT.PLN (Persero) NTB Region. When viewed from the characteristics of respondents based on the age of 25-35 years, S1 Education, Working Mass less than 10 years shows that employees PT.PLN (Persero) at the age of 25-35 years are still in productive period and can adapt for their productive age only thinking to finish their work properly and in accordance with the set in the company because their minds are young and still want to enjoy his life not to work alone but for other things so that at this age either use or operate human resource information system easy or difficult for them it is not important for them is able to complete their duties in order to improve their performance. The results of this study are in line with previous research conducted by Halilovic and Cicic (2015), Kamaludin and Kamaludin (2017) which states that perceived ease of use does not affect the satisfaction of users of HR information systems. However, a different study was found by Dalcher and Shine (2011).

5. CONCLUSION:

Based on the above description, the results of this study can be concluded that the quality of the system has a positive but not significant effect on user satisfaction Human Resource Information System. Information Quality has a positive and significant impact on user satisfaction of human resource information system, Service Quality has positive and significant impact on user satisfaction of human resource information system. Perceived usefulness have positive and significant influence to user satisfaction of human resource information system, and Perceived ease of use have positive but not significant effect to user satisfaction of human resource information system.

There are limitations in this study. First, the factors that influence Kepuasang users of information systems in this study consists of only five variables, namely system quality, information quality, quality of service, perceived usefulness and perceived ease of use while there are many other factors that affect the satisfaction of users of information systems. Second, the sample used in this study is only done on employees of PT. PLN (Persero) NTB Region Human Resources Division so that the results obtained may make a difference if done on different types of organizations such as in other enterprises, government banks, private banks, or the finance company. And the type of software used by SISDM respondents vary so that the perception among respondents can not focus on one object.
REFERENCES:


