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Testing Of ERP (Enterprise Resource Planning)
Implementation Success Using Delone and Mclean Model in
The Banking Company in West Sumatera

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Research Highlights

The study proposed six hypothesis and result indicate that there is no influence on the quality of information systems, information quality and service quality at the level of real use of Enterprise Resource Planning. While the test results in model II show that there is an influence of the quality of the information system, information quality and service quality on the satisfaction of users of Company Resource Planning.

Research Objectives

This study aims to examine the level of real use and satisfaction of ERP users in banking companies in the West Sumatra region. The analysis was carried out by examining the effect of system quality, information quality and service quality on the level of real use and satisfaction of ERP users in banking companies in West Sumatra. Data acquisition was carried out by survey techniques through questionnaires to 140 employees from 4 government banks in West Sumatra (ERP users). A total of 89 data can be processed in this study. Multiple regression statistical tests are used to test hypotheses. Regression test results on model I indicate that there is no influence on the quality of information systems, information quality and service quality at the level of real use of Enterprise Resource Planning. While the test results in model II show that there is an influence of the quality of the information system, information quality and service quality on the satisfaction of users of Company Resource Planning.

Methodology

Research sites

The study was conducted on banks in the West Sumatra region. Padang as the provincial capital will be the target location for West Sumatra because all banks in West Sumatra have branch offices operating in the city of Padang.

Research Population and Samples





The population of this research is employees who work for government and private banks in the city of Padang. The employee in question is an employee who works using an information system (user). Not included in the user are security personnel, driver, courier and office boy.

Research Method

In this study, to test the hypothesis using multiple linear regression (Multiple Regression analysis) with the help of the SPSS program.

Results

Based on the results of the regression test on Model I it can be concluded that:

1. The results of the F test show the results of testing on the research model I. The results of this test indicate the F value of statistics is 5.331 with a significance value of 0.002. This means that the proposed research model I can be accepted, where together the variable quality of information systems, information quality and service quality have an influence on the real use of Enterprise Resource Planning.
2. The results of the t test show partial testing of hypothesis. The test results on Hypotheses 1a, 1b, and 1c show the value of t statistics for the variable quality of information systems, information quality and service quality respectively are 1.418; -0.417 and 0.555 with a significance level of t of 0.160; 0.78 and 0.581. Based on the results of the t test, it can be concluded that hypotheses 1a, 1b, and 1c are rejected, meaning that there is no influence on the quality of information systems, information quality and service quality on real use of Enterprise Resource Planning.
3. The R square test is intended to test how much influence the variable quality of information systems, information quality and service quality on the real use of enterprise resource planning. From the test results, it can be seen that the R square value is 0.158, meaning that the variable quality of information systems, information quality and service quality has an influence of 15.8% on the variable real use of Enterprise Resource Planning

Based on the results of the regression test on Model II it can be concluded that:

1. The results of the F test show the results of testing on the research model II. The results of this test indicate a F value of 65.390 with a significance value of 0.000. This means that the proposed research model I can be accepted, where together the variable quality of information systems, information quality and service quality has an influence on user satisfaction Enterprise Resource Planning.





2. The results of the t test show partial testing of hypothesis. The test results on Hypotheses 2a, 2b, and 2c show the value of t statistics for the variable quality of information systems, information quality and service quality respectively are 2.05; 1,829 and 2,233 with a significance level t of 0,043; 0.071; 0.028. Based on the results of the t test, it can be concluded that hypotheses 2a, 2b, and 2c can be accepted, meaning that there is an influence of information system quality, information quality and service quality on user satisfaction of Enterprise Resource Planning.
3. The R square test is intended to test how much the influence of information system quality variables, information quality and service quality on real use of Enterprise Resource Planning. From the test results, it can be seen that the R square value is 0.698, meaning that the three variables of information system quality, information quality and service quality have an effect of 69.8% on the real use variable of enterprise resource planning.

Findings

Based on the objectives and framework of the study, the researchers managed to obtain data through the distribution of questionnaires to 89 employees of four government banks in 7 cities in the province of West Sumatra. The results of the regression analysis conducted on model I show that there is no effect on the quality of information systems, information quality and service quality on real use of Enterprise Resource Planning (ERP). However, different things were found for regression tests on model II, that is, there was the influence of information system quality, information quality and service quality on user satisfaction of Enterprise Resource Planning (ERP).

References

- Amrani R.E, Franantz Rowe, Marronat, 2006, *The effects of enterprise resource planning implementation strategy on cross functionalit*, Journal Compilation blackwel publishing Ltd.
- Almuatairi, H. and Subramanan, G, 2005, *An empirical application of the Delon and McLean Model in the Kuwaiti Private Sector*, Journal of Computer Information System.
- Bailey, J.E. and S.W Pearson.1983, *Development of a Tool for Measuring and Analysing Computer Satisfaction*, Management Science 29 May.





- Baraoudi, J.J and Orlikowski, W.J 1988, *A Short-form Measure of User Satisfaction: A psychometric Evaluation and Notes on use*, Journal of Management Information System.
- Davis, F,1989, *Perceived Usefulness, Perceived Ease of use and Acceptance Of Information Technology*, MIS Quarterly.
- Delone, W.H and E.R McLean 1992, *Information System Success : The Quest for Dependent Variabel*, Information System Research 3
- Delone, W.H and E.R McLean. 2003, *The DeLone and McLean Model Of Information System Success : A Ten Year Update*, Journal Of Information System.
- Hamilton, S, and Chervany, N.L, 1981 *Evaluating Information System Effectiveness Part 1: Comparing Evaluation Approaches*, MIS Quarterly
- Ifnedo, P. 2006, *Extending The Gable et al Enterprise System Success Measurement Model : A preliminary Study*, Journal of Information Technology Management ,2006.
- Jogiyanto, H.M 2007. *Model Kesuksesan Sistem Teknologi Informasi*, Penerbit Andi Yogyakarta
- Jogiyanto, H.M 2007. *Sistem Informasi Keprilakuan*, Penerbit Andi, Yogyakarta
- Jogiyanto, H.M. 2007 *Metodologi Penelitian Bisnis: Salah Kaprah dan Pengalaman*, Penerbit Andi, Yogyakarta
- Livari, Juhani. 2005, *An empirical Test Of Delone and McLean Model of Information System Success : Database for Advance in Information System*, Proquest Company
- Mason, R. O. 1978, *Measuring Information Output : A Communication System Approach*, Information and Management
- McGill, T, Hobs Valerie and Klobas J. 2003, *User Developed Applications and Information System Success : A test of Delone and McLean Model*.
- Raymond, L. 1985, *Organizational Characteristics and MIS Success in The context of Small Bussiness*, MIS Quarterly.
- Sanders, G.L and Courtney, J.F, 1985, *A Field Study of Organizational Factor Influencing DSS Success*, MIS Quarterly.
- Seddon, P.B. 1997, *A Respecification and Extention of The Delone and Mc Lean Model of IS Success*. Information System Research, 8, 240-254.
- Srinivan, A. 1985, *Alternatif Measure of System Effectiveness : Association and Implication*, MIS Quarterly.
- Sniktkin, S. R. dan King, W. R, 1986, *Determinant of the Effectiveness of Personal Decision Support System*, Information and Management
- SAP , [http/ rahmaputri.com](http://rahmaputri.com) , SAP accessed June 15, 2018
- SAP, ERP , Wikipedia.org, accessed August 3, 2018