EVALUATION OF SUCCESS CLAIM OF PAYMENT INFORMATION SYSTEMS AND USING DELONE MCLEAN MODEL IN HEALTHCARE

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Abstract: *The success of the system claim payment information a very active role in information systems and strategies in the core business that exists today got a critical priority for the company. The is unavoidable because of information systems has become an essential part of the survival of companies, companies that do not follow it will miss. The purpose of this study is to evaluate the billing payment systems, information systems using information systems and methods of success DeLone McLean. The analysis showed that the quality of information, quality systems, and top management support systems affect the perceived usefulness of the system. With the use of information systems claims payments affect the perceived benefits of the company is the satisfaction for users of the system in general and organizations. The perceived usefulness of the system for users is very helpful for daily operations in its work, as well as the quality of information and the quality of the system will have a direct impact to the organization, some manual processes no longer in the payment of claims to the client. With the results of this study are expected to be useful for management to determine the factors that affect the success rate of use claims payment system based on quality information and quality system. The conclusions of this evaluation are the system already meets the quality information and quality system that can further develop.*
Keywords: *Evaluation System Information, Payment Claim, Model DeLone & McLean*

Abstrak: Keberhasilan sistem pembayaran informasi klaim peran yang sangat aktif dalam sistem informasi dan strategi dalam bisnis inti yang ada saat ini mendapat prioritas penting bagi perusahaan. Hal ini tidak dapat dihindari karena sistem informasi telah menjadi bagian penting dari kelangsungan hidup perusahaan, perusahaan yang tidak mengikutinya akan ketinggalan. Tujuan dari penelitian ini adalah untuk mengevaluasi sistem pembayaran penagihan, sistem informasi menggunakan sistem informasi dan metode keberhasilan DeLone McLean. Analisis menunjukkan bahwa kualitas informasi, sistem kualitas, dan sistem dukungan manajemen puncak mempengaruhi persepsi manfaat sistem. Dengan penggunaan sistem informasi pembayaran klaim mempengaruhi manfaat yang dirasakan perusahaan adalah kepuasan bagi pengguna sistem secara umum dan organisasi. Kegunaan yang dirasakan dari sistem untuk pengguna sangat membantu untuk operasi sehari-hari dalam pekerjaannya, serta kualitas informasi dan kualitas sistem akan memiliki dampak langsung kepada organisasi, beberapa proses manual tidak lagi dalam pembayaran klaim ke klien. Dengan hasil penelitian ini diharapkan dapat bermanfaat bagi manajemen untuk mengetahui faktor-faktor yang mempengaruhi tingkat keberhasilan penggunaan sistem pembayaran klaim berdasarkan informasi yang berkualitas dan sistem yang berkualitas. Kesimpulan dari evaluasi ini adalah sistem sudah memenuhi kualitas informasi dan sistem mutu yang dapat dikembangkan lebih lanjut.
Kata kunci: Informasi Sistem Evaluasi, Klaim Pembayaran, Model DeLone & McLean

A. Background

Effective use of information systems in the company is critical because it can be the basis to gain a competitive advantage. Therefore, many companies are beginning to develop and give special attention to the system as a source of information that facilitates the collection and use information effectively and efficiently. One form of this concern is the use of a computer-based information system to facilitate the flow of information out to customers, as well as to the internal needs of the organization's or company. Information systems used by organizations to help organizations become more efficient operating up to its role as a tool for winning the competition. The Organization will use the information to improve the products, services, and capabilities that will provide advantages in market competition. The adoption and development of information systems is a costly investment. Nevertheless, it is an expensive investment not necessarily getting a quality system and by following what is expected by the organization. The success of the implementation of the system is affected by a variety of complex factors. While the failure of the implementation of the system, usually the case because of no compatible computers systems with business processes and required information organization (Janson and Subramanian, 1996; Lucas et al. 1988).

Robbins in Wiyono cs. (2008) States that the results of a survey conducted a study of 232 respondents in the U.S. over the implementation of the Enterprise Resource Planning (ERP) at their place of work, shows that 51% viewed the implementation of the ERP is not successful, and 46% felt their organizations do not understand how to use the system to develop themselves in running the business. Hastie (2006) added, according to a Surveys Chaos for seven years (1994-2000) on more than 30,000 projects information system, only less than 30% of the project information system that is having success.

Failures in the implementation of an information system by Jogiyanto (2007b) differentiated into two aspects, namely: a) The technical issue, that is, aspects regarding the system itself which is the quality of the mechanical information systems. Bad professional quality concerns the still large number of syntaxerrors, logical errors, and even error- error information; b) Non-technical Aspect, the failure of the non-technical user perceptions related to information systems that cause users unwilling or reluctant to use information systems that have developed.

Measurements of failure that is determined based on the perception of users have the advantage that naturally integrates a range of aspects. The shows that the problem is more on issues of human resources users who can not accept the implementation of information systems. This aspect is more relating to the behavior of the users of the information system. A lot of research and the research that has been done to examine aspects of behavior in the implementation of an information system. The first stream is a stream of study that focuses on acceptance, adoption, and use of information systems. It also focuses on the flow of history-history or the causes of behavior while the flow of the second was focusing on the success of implementation at the level of the organization.

The flow of the first grouped again into two groups, namely the Group of the history-a history of behavior in the form of a feeling (affect) and cognitive (cognitive), for example, attitudes, norms, perceptions of the use. Some of the theories and models of research-research in the Group of history in the form of a feeling and cognitive: TRA (Theory of Reasoned Action) by Fishben and Ajzen (1975), TAM (Technology Acceptance Model) by Davis (1989), the TPB (Theory of Planned Behaviour) by

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Ajzen (1991). A second group is a group that history-a history of behavior is more in the form of a process, for example, the assessment process, the process of participation and involvement as well as the process match the right technology with its work. Some of the theories and models of research-research in the Group of history in the form of a process include: completion of the model user adaptation (coping model of user adaptation) by Beaudry and Pinsioneault (2005), participation and user engagement by Barki and Hartwick (1994), model the suitability of task-technology (task-technology fit) by Goodhue and Thompson (1995).

One of the popular models on the second flow, i.e., the flow is focused on the success of implementation at the level of the organization is a model developed by DeLone and McLean (1992), known as the information system Success Model DeLone and McLean. This model reflection of dependency from six measurement information systems success: the quality of the system (system quality), information quality (information quality), the satisfaction of users (user satisfaction), use (use), the impact of individual (individual impact), and the impact of the Organization (organizational impact). Many studies have developed by DeLone and McLean (1992). The research seems to reveal a lack of practical results obtained his solid performances among one another. Some research results that the quality system and quality of information is a significant predictor of satisfaction towards the user, use, and impact of an individual (Roldan and Leal 2003; McGill et al. 2003, Hussein et al. 2005, 2007).

The quality of the system and the quality of information is a significant predictor of the use of will but not significantly to user satisfaction (Rai, 2002; Hanmer 2004; Livari 2005; Radityo and Zulaikha, 2007; Anthony 2007). His solid performances with not testing the model done in some of these areas of research, opening up opportunities for further developed on different objects. By doing testing on the impact to the Organization, research was replicating research done by Livari (2005) on the City Council (city council) in Oulu, Finland. This research was conducted to obtain empirical evidence are the same but with the theory of the object, the time, and different spots will show the same results by doing a case study on the implementation of a mandatory information system applied in Healthcare.

B. Methodology

This research is the study of causality that aims to analyze the relationship and influence (as a result) of two or more phenomena through hypothesis testing. This research can also classify as critical research, i.e., research basing on theories or hypotheses that will be used to test an aspect going on. The critical analysis did a study of the relationship between two or more variables, then seek to explain events that occur. Model in this study using information system Success Model DeLone and McLean has seen in Figure 5, the reason for the selection of the Model of Delone and McLean was due to focus on the quality of the research in information, quality systems, use, user satisfaction, impact individual and organizational impact. Based on the authors take reference from the Model DeLone and Mclean, although reference DeLone and McLane last in 2003, which adds emphasis to quality Delivery (Service Quality), specialized in research is based on or using the Model DeLone and McLean (1992).

There is two data analysis method used, i.e., Multiple Regression Analysis and structural equation models (SEM). Multiple Regression Analysis (regression analysis) is to look for the influence of two or more free variables, or to find a functional relationship of two or more free variables against variable is not open, or foresee two or

more free variables against variable is not free. It should note that correlation does not mean causation. Although an association can provide valuable guidance concerning the causal relationships among variables, a high correlation between two variables does not constitute sufficient evidence that changing one variable may be a result of changes in other variables. At the same time, the study also performs The Structural Equation Modeling method (SEM). The primary purpose of the SEM Model in its analysis that determines whether a model is reasonable or correct models by its data and to test the hypothesis that has built earlier. Data collected will be analysis using SPSS, the validation Results with SEM compared to that from the report of the available previous regression to see whether there is a difference or additional findings concerning the model of research.

C. Result And Discussion

The questionnaire conducted in PT. KBM spread to divisions within the PT. KBM. The respondents are all units that use Payment information system claims is part of regular administrative and often use information systems to assist the process of payment claims is their daily work. The total number of staff at the business unit PT KBM 420 employees, but who use information systems to assist in the day-to-day operations of their work process is 178 people. Based on the Slovin formula number of sample The value of n is 178, sampling using a probability sampling technique that is sampling, i.e., random sampling, the sample composition as follows: Where;

n: number of samples

N: number of population

n = 172/(1 + 172 * (0.05 * 0.05)) = 120.2797 rounded into 120

The total of 120 responders who fill out the questionnaire. Only 113 that fills up with complete (which meets the criteria of research).

Tabel 7 Komposisi Sampel Untuk Kuesioner

No		Nama Bagian	Populasi (N)	Jumlah Sampel (n) 5%	Total yang mengisi Kuesioner
1		Medical Center	48	43	41
2		Medical Site	24	23	22
3		Medical Evacuation	4	4	4
4		Medical Admin.	24	23	23
5		Finance	72	23	23
		TOTAL	**172**	**116**	**113**

Sumber: Data primer diolah (2016)

Validity Test

Testing the validity performed using the Pearson bivariate correlation with borderline significance is 0:05. The results of testing the validity of each variable measurements show that all variables expressed as a valid variable. Provided that the indicators for the variables used in this study all had the Sig. (2-tailed) smaller than 0.05.

Reliability Test

Reliability testing carried out on the items to test the level reliability valid. Tests carried out using the Corrected Item-Total Correlation. The results of reliability testing using SPSS version 20 indicates that all variables have alpha coefficients higher than 0.70 so it can say of all the concept of measuring the variables used in this study is reliable. Analysis of the Relationship Between the dimension on the Model of DeLone and McLean. The following testing relationships between size on the Model DeLone and McLean using linear regression:

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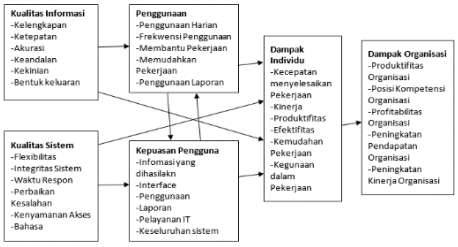
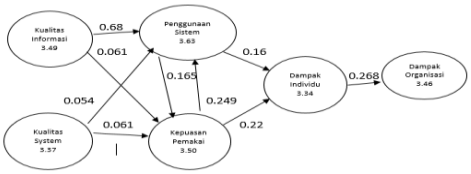


Picture 3 Model DeLone dan McLean Sukses

Result Analysis Model DeLone dan McLean

The use of the system is directly influenced in a positive/significant by the quality of the information, quality systems, quality of service, user satisfaction, and operational benefits to feel. The organizations that impact users obtain the most significant impact of the use of the system and most profound influence is the quality of the information.



Picture 4 Regression Results Between Dimensions Model

Table 1 Rekap Uji Validitas

No.	Hipotesa	Hasil Hipotesa	Nilai
1	H1: Kualitas Informasi terhadap Kepuasan pemakai	Berpengaruh Positif	0,061
2	H2: Kualitas Sistem terhadap Kepuasan Pemakai	Berpengaruh Positif	0,061
3	H3: Kualitas Infromasi terhadap Penggunaan Sistem	Berpengaruh Positif	0,680
4	H4: Kualitas Sistem terhadap Penggunaan Sistem	Berpengaruh Positif	0,540
5	H5a: Kepuasan Pemakai terhadap Penggunaan Sistem	Berpengaruh Positif	0,165
6	H5b: Penggunaan Sistem terhadap Kepuasan Pemakai	Berpengaruh Positif	0,249
7	H6: Penggunaan Sistem terhadap Dampak Individu	Berpengaruh Positif	0.160
8	H7: Kepuasan Pemakai terhadap Dampak Individu	Berpengaruh Positif	0,220
9	H8: Dampak Individu terhadap Dampak Organisasi	Berpengaruh Positif	0,268

The highest value of the above recap is a quality System against the use of the system which means that the quality System is very influential towards the consumption of the system (User), the user cares to what System or system generated much needed and much help in the work of its users. The lowest value is quality of information towards satisfaction of the users that have both the same amount, namely 0.061, which means that the system generates or system generated the report, the user will only have a direct impact on personal satisfaction. User satisfaction is directly affected in a positive/significant by the quality of the story, quality systems, quality of service, the use of the system, and the Organization's impact is felt. The most significant impact user satisfaction is the quality of the information generated, and most profound influence is the impact of the organization.

The impact of the organizations directly affected in a positive/significant by the use of the system and user satisfaction. Organizational impression indirectly influenced in a positive/significant by the quality of the information, quality systems, and quality service. The most significant impact of the impact the organization is the use of the system, and most profound influence is the quality of the information. Based on the results of the analysis on the Delone and McLean model of

overall success IS obtained the highest value is the use of the system, and the lowest cost is the quality of the system. It clear that the use of the system was already done as everyday activities to support their operations. For the quality system has not felt too good so that necessary repairs and improvements to the quality of the system. Be entered for IT management Divison, where high levels of use, but the user does not care about the quality of the system. It may occur because the questionnaire data retrieval does to operational staff, where they use the system without regard to the quality system. To do further analysis to analyze whether the use of the system is only done as a duty and help to accomplish the task of daily operations.

Overall, the results obtained from this case study is: a) The quality of the information and quality systems, and service quality of influential and had a considerable role in the satisfaction of users; b) The quality of the information, user satisfaction, service quality and influential low against the use of the system; c) The purpose of a prominent contribution to the organizational impact of perceived or otherwise impact the regarded organization also influence the use of the system; d) The object of influential low user satisfaction or vice versa also has low user satisfaction against the use of the system. Based on the results of a questionnaire using a Likert scale (1-5) earned the average rating is 3.45, it means the perceived information systems are already quite well. The highest value is the use of the system; it is clear that the use of information systems already performed as everyday activities to assist, facilitate, and expedite the process of operational work in the organization. The lowest value is the quality of the system; it is clear that the quality system is felt not too good so that necessary repairs and improvements to the variety of information systems. This result is because data retrieval performed on the staff of the operational use of the system, so it looks to have the highest value. The value of the quality system that is low, due to the lack of awareness could be operational staff to quality information, and it put on the network to assist and resolve the functional everyday job without regard to the quality of the existing system.

Table 2 Average Rating Table

Variabel	Nilai Rata-Rata
Kualitas Infromasi	3.49
Kualitas Sistem	3.37
Penggunaan Sistem	3.63
Kepuasan Pemakai	3.50
Dampak Individu	3.34
Dampak Organisasi	3.46
Rata-Rata Keseluruhan	**3.46**

Variable Based On Questionnaire

Recommendations for improving the system of Information on payment Claims

To increase the success of information systems can do the following: a) The information system needs to develop, it is necessary to make the information accessible to learn the system, improve the response time, ease in the use of the system, minimize the is free from bugs, maintain stability of the system, enhance the user's confidence in the system, create a flexible system, and improve the security of the system. Supporters also require reliable technology and according to your needs; b) To improve the quality of information that must ensure so that information generated from the system. Increasing the accuracy of the report, resulting in precise details, keeping the information easy to understand, providing the information is up to date, and maintain the completeness of the data with the

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agreement with the user; c) To improve the quality of service must be made to the provisions and procedures in the process of granting appropriate user services to deal with, about how long the operation of the facility, to problem-solving, who is working on, the status of problem- solving, and so on. Do the assignment to some people to take charge of the process of the service. Procurement training to support the team so the team could understand how to serve users better, prompt, and courteous, and have the knowledge required to deal with the problems in the system; d) From the results of the analysis, the use of information systems is already good, which means that information systems were instrumental in supporting the process of daily work not just as a sheer liability. To increase the use of information systems, to do quality improvement system, quality of information, and the quality of service, so the user will be more likely to use the system because it can help simplify, accelerate, and them in completing their work; dan e) To need to improve the quality system, required improvement to the quality of the order made, the variety of information, the quality of the service, your use of, and the benefits felt by individuals and organizations. Do increased interface system, the ease of use of the system, generates the appropriate reports and reliability, improve IT services, and increase the value of the system so that the manual process reduced and the user feels the system is helpful for their work on the operational procedures of the everyday; and f) To increase the impact of the Organization carried out an increase of the quality system, quality of information, the quality of the service, your use of, and satisfaction of the users. Create a system that can increase user productivity. Improve the quality of information to use for the management decision making process. Implementation of a system that could reduce daily operating costs. Create information systems that can provide comfort and convenience for the user. Create information systems that can support and assist the activities of Payment claims.

Based on the results of the analysis already done an obtained outline as follows: Information systems are already quite good success/(residing on the scale of 3.48 out of 5.There is a positive influence/significant study, based on a hypothesis of information quality looks very influential towards the use of the system (H1 accept). The regression coefficient value the quality of the information against the use of the significant system of 0.680 at $\alpha = 0.218$ is more than 5% of the variable quality of data indicates that the effect of the use of the system. Then the hypothesis has a positive influence/significance. The more the system information quality then the user will assume that the application there will be a benefit. Based on visible information quality hypothesis against the use of a system that has a value (0.680) hypothesis and the quality of the system against the use of the have system value (0,540), then the theory that positive influence/significance. The indicates that the quality information and the quality of the system then the user will assume that the application will benefit from its implementation and on next will use it.

Benefits of organizational impacts directly not too influential in the study proved the value of the coefficients of the regression value impact individual and regulatory Impacts have the lowest cost (2,649 x 0.268), namely, the impact of individual 2,917 too influential positive/significantly to impact the organization information. Based on what researchers already do, then following the advice given: 1) To do repairs to the quality system and improvement of the quality of information, since both are influential significantly to the success of information systems; 2) The development of information systems in an organization based on the needs of the user. Further research on issues related to the needs of the users of the system can be used as

an extra variable as the development model the success of information systems; and 3) Further Research was conducted on the level of management or supervisor, to see how the level of concern for their impact on the success of information systems implemented.

D. Suggestion

Following the advice is given: a) To do repairs to the quality system and improvement of the quality of information, since both are influential significantly to the success of information systems; b) The development of information systems in an organization base on user needs. Further research on issues related to the needs of the users of the system can be used as an extra variable as the development model the success of information systems; and c) Further research was conducted on the level of management or supervisor, to see how the level of concern for their impact on the success of information systems implemented.

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