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Strategy for Improving Service Quality and Organizational for Optimizing Hospital Management Information System with the use of Mandatory Systems

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Abstract

Developments in information technology have had a positive impact on health services. Three factors play a role in the implementation of Hospital Management Information System (HMIS) including service quality, organizational and system usage. The use of mandatory systems can cause ineffective use so that it impacts on the application of HMIS. A strategic plan is needed to improve the quality of services and organizational so that the application of HMIS runs optimally. Quantitative research with analytic observational research and cross sectional design from August 2019 September. The sample used 167 people in the hospital X was chosen using probability sampling with disproportional sampling technique. Data analysis using SmartPLS 3.2. The findings of this study confirm that the role of service providers and organizational is very important in motivating the use of mandatory systems so that the use of the system is more effective and the implementation of hospital information systems is increasingly optimal

Keywords: Service quality, System Use, Organizational, Strategy, Information System

1.0 INTRODUCTION

Developments in information technology have had a positive impact on health services. The hospital is one of the health services that utilizes advances in technology through the application of hospital management information systems. Hospital Management Information System (HMIS) functions to help improve service quality and patient satisfaction [1]. HMIS supports decision making for management in determining strategies to achieve the organization's objectives. The application of hospital management information system is expected to be able to increase productivity, efficiency and effectiveness of the organization. The successful implementation of hospital management information systems is not only determined by information technology but also other factors, including business processes, management changes and IT governance [2].

The use of hospital management information systems at hospital X is mandatory so users have no choice but to use the existing system. Use that is mandatory sometimes leads to user dissatisfaction, low morale, decreased productivity and effectiveness that can lead to failure of the application of information systems [3]. The use of mandatory systems cannot be used to measure the successful implementation of HMIS when viewed in terms of intensity of use. Burton-Janes and Grange (2012) in [4] show that the use of mandatory systems needs to be examined whether the use of information systems has been effective or not. The use of mandatory systems in hospital X has problems where user knowledge is still lacking in understanding the usefulness of the application of hospital management information systems. The application of information systems must be followed by infrastructure and human resource capabilities so that the application runs optimally.

IT governance is tasked with managing to optimize the application of hospital information systems to be better [5]. IT governance consists of human resources involved in IT units / installations that have qualifications in the field of systems analysts, programmers, hardware and network maintenance. The main task of the IT unit / agency is to communicate with top management regarding strategic plans and critical success factors in achieving organizational goals [6]. Based on the above problems, strategic planning is needed to achieve the goal of

implementing the hospital management information system. Strategic planning involves the support of top management as the actor responsible for the overall strategy and direction of the organization [7]. In addition, the strategic plan includes policies, processes and technology.

2.0 METHODOLOGY

This study uses a quantitative approach to the type of analytic observational research and cross sectional research design. Primary data obtained through interviews with guidance on distributing questionnaires to users of information systems as respondents, in this study the object is the user of Hospital Management Information Systems in hospitals. X. When the study was conducted in August September 2019. The population in this study was the user of the hospital management information system at Hospital X as many as 288 people. The sample used was 167 people. The type of sampling uses probability sampling with disproportional sampling technique. The variables in this study consisted of exogenous variables, endogenous variables, and intervening variables. Exogenous variables consist of service quality, organizational and system usage. Endogenous variables consist of the use of organizational systems and implementation of hospital management information systems. Intervening variables consist of the use of systems and organizational. Data analysis in this study uses the Sem (Structural Equation Modeling) analysis technique. The application used is Smart PLS 3.2.

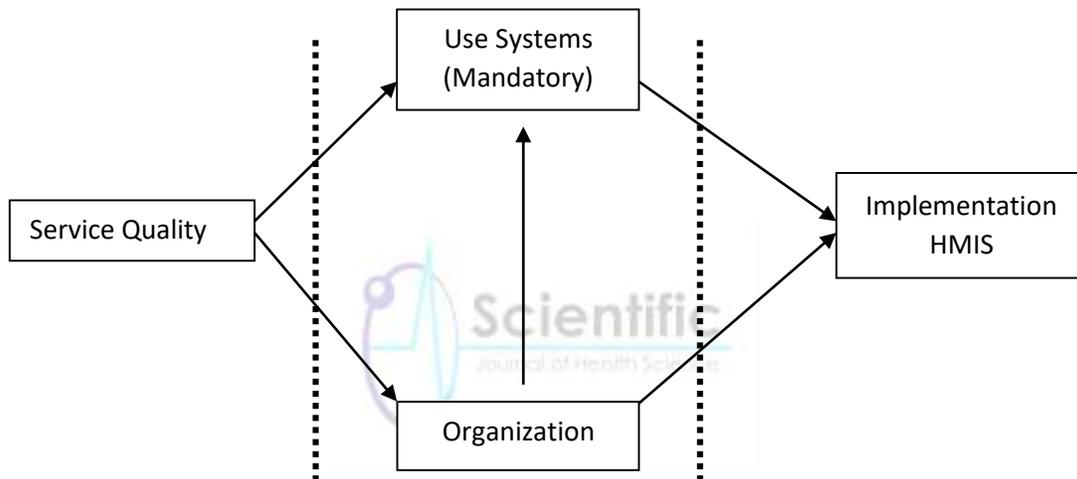


Figure 1. Research Model

3.0 RESULTS

The analysis was conducted using SmartPLS 3.2 software, it was found 2 models including measurement model (outer model) and structural model (inner model). From the two models, the path coefficient, R2 and t value are produced to test the hypothesis. An instrument is said to meet the test of convergent validity if it has a loading factor > 0.7 and Average Variance Extracted value > 0.5. The test criteria state that if Cronbach alpha is > 0.6 and composite reliability is > 0.7, the construct is declared reliable. Significance testing is directly used to test whether there is an influence of exogenous variables on endogenous variables. Test criteria state that if the value of T-statistics \geq T-table (1.96) or p-value \leq level of significance (Alpha ($\alpha = 5\%$)) then the significant influence of exogenous variables on endogenous variables is stated.

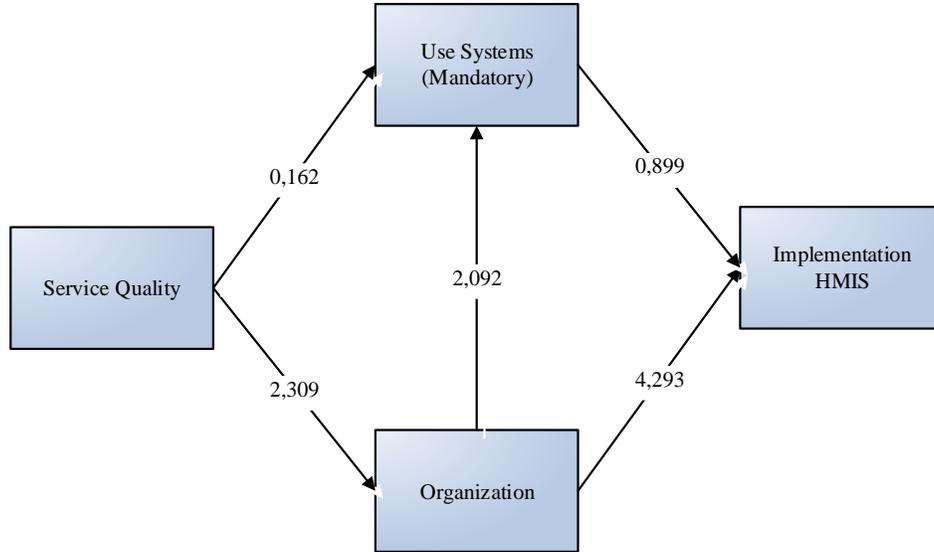


Figure 2. Analysis SmartPLS 3.2

The analysis shows that: (1) There is no influence of service quality on system use (T Statistics of 0.162 and P Value of 0.871). (2) There is an effect of service quality on the organizational (T Statistics of 2.309 and P Value of 0.021). (3) There is an influence of the organizational on the use of the system (T Statistics of 2.092, P Value of 0.037). (4) There is no influence of the use of the system on the implementation of HMIS (T Statistics of 0.899, P Value of 0.369). (5) There is an influence of organizational on the implementation of HMIS (T Statistics of 4.293, P Value of 0.000). (6) There is no influence of service quality on the implementation of HMIS through the use of the system (T Statistics of 0.111 <1.96, P Value of 0.912> 0.05 and) and there is an influence of service quality on HMIS implementation through the organizational (T Statistics of 2,152 > 1.96, P value of 0.032 <0.05). (7) There is no influence of organizational on the implementation of HMIS through the use of the system (T Statistics of 0.732 <1.96, P Value of 0.464> 0.05).

4.0 DISCUSSION

This study shows that there is a gap analysis between existing conditions in the application of hospital information systems with existing government policies. The use of information systems is not effective this is caused by the use of a mandatory nature but with less user knowledge. So users do not understand the usefulness of information systems. Service quality is one of the variables from the aspect of technology. The success of an organization depends on how good the quality of services provided [8]. Technical support provided in the implementation of information systems is good, this is supported by the availability of the server system as the main database of data that has been inputted.

However, responsiveness and empathy is still less due to the limited human resources available in the information technology unit. The impact of this is due to work delays due to the response of service providers is not fast enough. Empathy is one of the things that supports users in doing their jobs smoothly [9]. In addition, the organizational rarely monitors and evaluates the application of HMIS, so it is difficult for organizations to understand the needs of users and service providers.

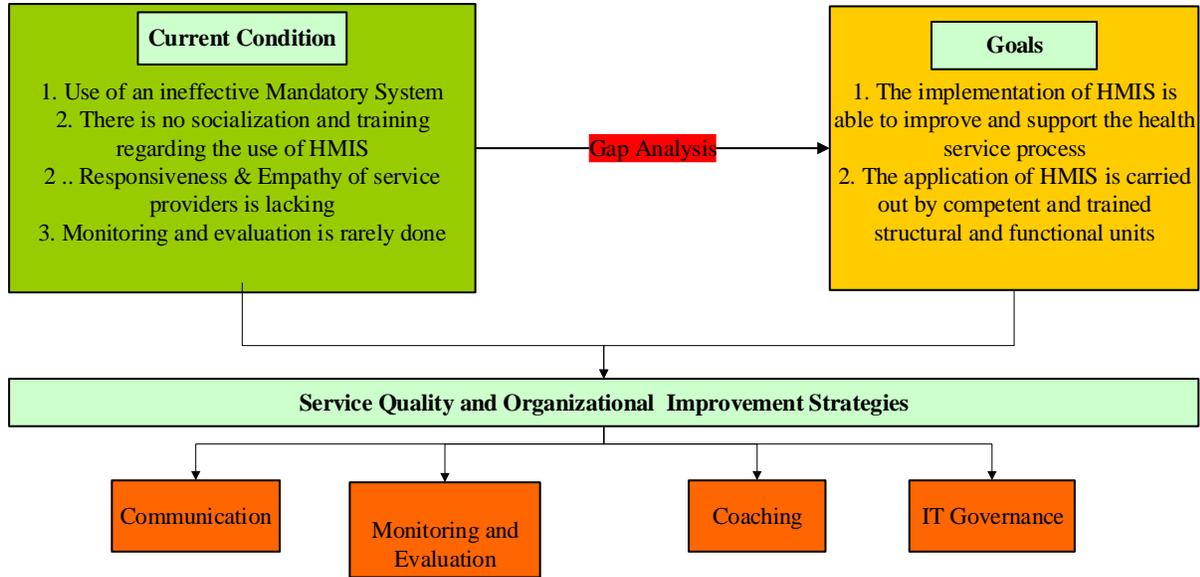


Figure 3. Strategic plan to improve service quality and organizational

This research resulted in a strategy to improve the quality of services and organizations needed for the effective use of the system so that optimal hospital management information system implementation is achieved including:

Communication: the process of delivering ideas or partitions from one party to another. Communication on the application of hospital management information systems includes system users, service providers and organizations. Implementation of hospital management information systems requires communication to exchange information between system users, service providers as actors in service quality and organizational as policy makers. [10] stated that one of the factors that influenced the implementation of information systems was the support of top management. Increasing support from top management and participating in the information system development planning process will increasingly show seriousness in providing support in the application of information systems. The support of top management can motivate users to improve individual performance and the performance of the system used.

Monitoring and Evaluation: the process of identifying and assessing the application of hospital management information systems so that they can anticipate and solve existing problems. Monitoring and evaluation is conducted regularly.

Coaching: the process or action taken to get better results. Coaching is done by means of socialization, training and technical guidance to increase user knowledge. Coaching can be done during the orientation of new employees.

IT Governance: an existing unit in a hospital that is focused on information technology systems. Good governance must be aligned with the organization's functions, vision, mission and strategy. IT governance consists of quality services carried out by professional and competent technicians who meet the qualifications in the field of systems analysts, programmers, hardware and network maintenance. Information system service providers must be able to provide guarantees to users. So that users have confidence in involving information systems in their work. Information technology is responsible for the quality of the existing system and is able to provide guarantees in order to support the needs of users.

5.0 CONCLUSION

The findings in this study confirm that the role of service providers and organizational is very important in motivating the use of mandatory systems so that the use of the system is more effective and the implementation of hospital information systems is increasingly optimal. Improving the quality of services and organizational including communication, monitoring and evaluation, guidance and IT governance.

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