Efforts to Increase User Satisfaction Based on System Quality and Information Quality

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Abstract

This research aims to determine and analyze the influence of system quality and data quality on data user satisfaction on the Jember Regency One Data Portal Application. The population in this study was all State Civil Apparatus in the Jember Regency Government, totaling 11,667 employees. Samples are determined using the Slovin formula. Data analysis uses descriptive analysis for respondents and research variables. The reliability test and data validity test aim to measure the research questionnaire. Research hypothesis testing was carried out to determine the effect of the independent variable on the dependent variable. The data analysis method uses descriptive analysis, validity and reliability tests, hypothesis testing. The results of this research are expected to show that system quality and information quality can increase user satisfaction

Keywords

system quality; information quality; user satisfaction.



I. Introduction

The current development of information and communication technology has triggered efficiency in all areas of life. The impact of technological advances can not only be felt in the business sector, but also in other fields. Utilization of technology is very important, because it can make work more effective and efficient. In the government sector, digital transformation presents opportunities and challenges for the Indonesian Government, especially in data-based policy making. The implementation of government data governance to increase the value of data as a basis for policy making is contained in the 2018-2020 national open government action plan for Indonesia (Open Government Indonesia), with one of the initiatives being One Data Indonesia (SDI). The implementation reference and guidelines for the implementation of Satu Data Indonesia are contained in Presidential Regulation of the Republic of Indonesia Number 39 of 2019. The end of the data governance policy through Satu Data Indonesia that is created and implemented is a quality government policy, so that it can provide satisfaction to users of government services.

The Jember Regency One Data Portal is the Official Jember Regency Sectoral Data Portal which contains data from all agencies that produce data related to Jember. The data is available in an open format and is easy to reuse with the hope that users of this portal can utilize the available data to realize and support the development of Jember Regency. The main function of the Jember Regency One Data Portal Application is as a data sharing medium that can be accessed through the use of information and communication technology which provides complete, current, valid and accountable data and information within the scope of Jember Regency. Regarding services in the form of the Jember

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Regency One Data Portal, we are required to provide the best service so that users get satisfaction related to the service.

Currently, with the sophistication of technology, all organizations are competing to provide information technology services to service users. What needs attention with this service is the issue of satisfaction that will be felt by service users. According to (Qomariah, 2016), satisfaction is a condition in a person or group of people who have succeeded in getting something they need and want. To be able to increase data user satisfaction, many influencing factors include system quality and data quality.

One of the factors that can provide system user satisfaction is the quality of the system itself. System quality is how a system works well and optimally so that it can produce output that meets the expectations of system users (DeLone & McLean, 2003). Research conducted by (Indriani & Adryan, 2009), (Hernita et al., 2020), (Buana & Wirawati, 2018), (Asnawi, 2014), (Rinaldi & Santoso, 2018), (Septianita et al., 2014), (Prayanthi et al., 2020) stated that system quality can provide satisfaction to system service users. Meanwhile, research (Amarin & Wijaksana, 2021), (Tulodo & Solichin, 2019) states that system quality has no effect on system user satisfaction.

The next thing that can also increase system user satisfaction is the quality of information. Data quality provides various techniques for assessing and improving data quality, such as record relationships, business rules, and similarity measures (Batini et al., 2009). Information quality is the extent to which information can consistently meet the needs and expectations of all parties who need information to carry out the process (Sutabri, 2012). The data presented must be able to provide accurate information to users of the data or information. Research conducted by (Prayanthi et al., 2020), (Rinaldi & Santoso, 2018), (Buana & Wirawati, 2018) states that the quality of data or information can increase data system user satisfaction.

Based on problems related to research concepts and previous research, because there are still inconsistent research results, namely the relationship between system quality and user satisfaction, this research aims to determine and analyze system quality and information quality on system user satisfaction.

II. Literature Review

2.1 Services Marketing

According to (Tjiptono & Candra, 2012), services are the result of efforts to use humans and machines for a number of people or objects. Services include an act, a performance, or an effort that cannot be processed physically. Marketing services are something that can be identified separately and not materialized, offered to meet a need. Services can be produced using tangible or intangible objects (Kotler & Keller, 2016). Marketing of services is intangible and cannot be returned or sold at a later date, services also cannot be stored like goods, services produced must coincide with time (Dewi et al., 2018).

2.2 System Quality

System quality is how a system works well and optimally so that it can produce output that meets the expectations of system users (DeLone & McLean, 2003). System quality is a sign or relating to the expected quality of a system and the quality of accurate information regarding the characteristics of a product (DeLone & McLean, 2003). In an

information system, system quality is a combination of software and hardware that works in the system (Jogiyanto, 2009). System quality can be used as a characteristic measure when accessing applications provided by system service providers, such as easy use, reliable system, fast access, flexible system, and security.

2.3 Information Quality

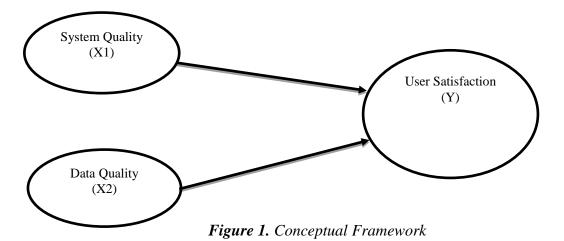
Data quality is part of data governance, data quality means the completeness and accuracy of data (Batini et al., 2009). Timeliness is an aspect of updated data, timeliness has dimensions of recency, volatility and timeliness (Batini et al., 2009). Apart from that, data quality is also related to consistency and timeliness. Data completeness usually means information as the output of the data processing process, representing every actual situation, thus requiring data accuracy. Information quality is the extent to which information can consistently meet the needs and expectations of all parties who need information to carry out the process (Sutabri, 2012).

2.4 User Satisfaction

According to (Qomariah, 2016), satisfaction is a condition in a person or group of people who have succeeded in getting something they need and want. Satisfaction is a person's feeling of happiness or disappointment that arises after comparing their perception/impression of the performance (or results) of a product and their expectations (Kotler & Keller, 2016).

2.5 Research Hypothesis

- 1. First hypothesis (H1): System quality has a positive effect on user satisfaction.
- 2. Second hypothesis (H2): Data/information quality has a positive effect on user satisfaction.



III. Research Methods

Research methods are basically a scientific way to obtain valid data with the aim of finding, proving and developing knowledge so that in turn it can be used to understand, solve and identify problems (Sugiyono, 2017). Research carried out using descriptive analysis methods which helps in comparing and describing data that has been determined or obtained is by using a survey method which is carried out by taking samples from the entire population and using a questionnaire as a data collection tool. The focus of this

research and thesis is Data Users of the Jember Regency One Data Portal Application, especially 38 (thirty eight) OPDs in Jember Regency. The independent variables in this research are: system quality (X1) and data/information quality (X2), while the dependent variable is user satisfaction. Descriptive analysis, validity and reliability tests and hypothesis testing were used in this research.

IV. Results and Discussion

4.1 The Influence of System Quality on User Satisfaction

System quality is how a system works well and optimally so that it can produce output that meets the expectations of system users (DeLone & McLean, 2003). Organizations that use information systems to provide information to users must provide a system that can be accessed by users carefully and precisely and has complete features. A system that has complete features will provide comfort to users. Many studies have been conducted on the relationship between system quality and user satisfaction, including: (Septianita et al., 2014), (Hernita et al., 2020), (Asnawi, 2014) who stated that system quality influences user satisfaction. Thus, the first hypothesis is stated that system quality influences user satisfaction.

4.2 The Influence of Data/Information Quality on User Satisfaction

Data quality is part of data governance, data quality means the completeness and accuracy of data (Batini et al., 2009). Information quality is the extent to which information can consistently meet the needs and expectations of all parties who need information to carry out the process (Sutabri, 2012). Good quality data or information will increase user satisfaction. Thus, the second hypothesis is stated that the quality of data/information influences user satisfaction.

V. Conclusion

Conclusions and suggestions that can be explained on the basis of exposure related to theory and previous research results are:

- 1. Based on the first hypothesis (H1) which states that system quality has a positive effect on system user satisfaction. It is hoped that this hypothesis will be accepted after research is carried out.
- 2. Based on the second hypothesis (H2) which states that information quality has a positive effect on system user satisfaction. It is hoped that this hypothesis will be proven after the research is completed.

Suggestion

The results of this research are to increase knowledge, especially about marketing management and company operational management and also management information systems with the concept of system quality and information quality which is linked to user satisfaction.

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