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by Kinus Karoba

Analysis of User Satisfaction in MediatingThe Effect of Information Quality onNet Benefit in "SMK Negeri 1 Malang"

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Abstract:
Background: *This study aimed to analyze the influence of the information quality on the net benefit in "SMK Negeri 1 Malang", analyze the influence of the information quality on user satisfaction at "SMK Negeri 1 Malang", to analyze the influence of satisfaction of users of the net benefit in "SMK Negeri 1 Malang" and analyze the information quality on the net benefits via satisfaction at "SMK Negeri 1 Malang".*
Materials and Methods: *The research methodology in this study with a design causality. The population in this study all students of "SMK Negeri 1 Malang", amounting to 1,881 students. Samples in this study were calculated using the formula Slovin, to obtain a sample of 242 students and Teknik sampling using simple random sampling. The analysis technique using path analysis.*
Results: *Research results indicate that the information quality affects net benefit, which means that the more information quality provided "SMK Negeri 1 Malang" can increase the net benefit. The information quality affects user satisfaction, which means that the more information quality provided "SMK Negeri 1 Malang" can improve user satisfaction. User satisfaction affects net benefit, which means that the higher level of user satisfaction can increase the net benefit.*
Conclusion:*The information quality affects net benefit through user satisfaction, which means that the net benefitcan be increased if the information quality and can satisfy the users*
Key Word:*Information quality, User satisfaction, Net benefit*

I. Introduction

"SMK Negeri 1 Malang" is one of the educational institutions in the city of Malang technologies that implement specific functions to organize professional education in some areas of applied technology, with an emphasis on life skills that match the needs of labor in the business world or the Industry today. As one of the schools inMalang city that has prospects, "SMK 1" pick some programming skills up to date, including Administration, Tata Books, Tata Commerce, Engineering Program Computer Networks (TKJ) and Technical Audio Video (TAV), which can be accessed through https://smkn1malang.sch.id/profil,

Creating a website is an option when people have also become accustomed to using Internet-based technologies as a means of communication between teachers, students, and parents. The website with their school information can be obtained easily anywhere and anytime. There is a surveillance system that allows the student as an evaluation value that can be monitored by a parent/guardian in various places that the processing can be done online. Increasethe friendly relationshipbetweengraduate students and also parents/guardians. Facilitating school in tapping funds from various sources, particularly from alumni who have been successful and scattered in various parts of the archipelago and even the World. Increase credibility in the eyes of the public schools in its sincerity to improve the quality of education. There is also a variety of information about the school is a public appeal because of the school's image. Besides, the school website could also be an information center for visitors and those who want to pursue a higher education level.

Information quality output characteristics are presented in an information system that includes management reports and web pages (Petter and Mclean 2009). It measures how well the output generated from the information system used. According to Kotler (2005), satisfaction is feeling happy or disappointed with someone who comes from a comparison between the impression of product performance or results and expectations.

This study aims to (1) to describe the information quality, user satisfaction and net benefit in "SMK Negeri 1 Malang", (2) to analyze the influence of the information quality on the net benefit in "SMK Negeri 1 Malang", (3) to analyze the impact of information quality on satisfaction users at "SMK Negeri 1 Malang", (4)

To analyze the effect of user satisfaction to the net benefit in "SMK Negeri 1 Malang", (5)to analyze the information quality on the net benefits through user satisfaction at "SMK Negeri 1 Malang".

II. Literature Review

Information quality

DeLone and McLean (2003) suggest that the information quality measure the output quality of the information system, the quality produced by the information system, in particular in the form of a report. Information qualityis characteristic of the output is presented in a management information system consists of reports and web pages (Petter and Mclean, 2009).Kadir (2005: 46) points out the information quality is the "information quality used to express good information, and can also be analogous to the pillars in the building and determine whether or not the decision-making". Bodnar and Hopwood translated by Saputra and Setiawati (2006: 15) information quality is as follows: "The information quality is the degree to which a data that has been processed by the information system into a means for users, who can be a fact and a value for the benefit." Next DeLone and McLean (2003) suggest consists of a system of quality indicators relevant, accurate, timely and reliable.

User Satisfaction

User satisfaction is a response to the user or the feeling after use information systems. Overall satisfaction of users affected by the information quality, quality systems, and quality of service. Instruments used in measuring the level of user satisfaction is to see the level of satisfaction regarding the reports or the output produced, websites, and support services of the provider system (Petter et al., 2008). Kotler (2005) suggests satisfaction is feeling happy or disappointed with someone who comes from a comparison between the impression of product performance or results and expectations. DeLone and McLean (2003) expressed the satisfaction of users has often used as a surrogate measure of the effectiveness of information systems. If the effective system is defined as one that adds value to the company, then an effective system should have some positive influence on the behavior of the user is the decision-making, increase productivity, and others. DeLone and McLean (2003), reveals there are five indicators to measure user satisfaction (user) include: content, accuracy, format, ease of use and timeliness.

Net Benefit

Torkzadeh and Doll (1999), to classify some of the possible benefits of using information systems into four different categories, are innovation, productivity, and customer satisfaction, as well as management control. Labor productivity can be measured by the number of tasks that can be completed and the length of time to complete the task. The task of innovation can be known about how information systems help workers try innovative ideas (Almutairi and Subramanian, 2005). Customer satisfaction can be ascertained from the information system's ability to help the customer needs, improve customer service and customer satisfaction.Jogiyanto (2007: 157) stated net benefit as the effects of the existence and use of information systems in the quality performance of both individuals and organizations include productivity, improve knowledge and reduce the length of time searching for information. Individual effects: the effect of the existence and use of the information system on the quality of the performance of individual users. Indicators of net benefit by DeLone and Mclean (2003: 65) includes (1) learning; (2) the quality of the decision; (3) a decision; (4) productivity; (5) the performance of tasks.

III. Development Hypothesis

DeLone and McLean (2003) suggest that the information quality measure the output quality of the information system, the quality produced by the information system, in particular in the form of reports. Information qualityis characteristic of the output is presented in system information consisting of management reports and web pages (Petter and Mclean, 2009). User satisfaction is a response or the feeling after using an information system. Overall user satisfaction is influenced by the quality of the system, and the information quality, as well as quality of service, so that the instruments used to measure the level of user satisfaction is to see the level of satisfaction regarding the reports or the output produced websites, and support services of the provider system (Petter et al. 2008). The research result Wahyudi et al. (2015) suggest that the information quality affecting student satisfaction. Further research results Pawirosumarto (2016) found that information quality affects user satisfaction. The research result of Utomo et al (2017) and Wahyudi et al. (2017) also result in the information quality affects user satisfaction. Based on these descriptions, then formulated the following hypotheses:

H1: Information quality affects user satisfaction.

According to Bodnar and Hopwood translated by Saputra and Setiawati (2006: 15),information quality is: "The information quality is the degree to which a data that has been processed by the information system becomes has meaning for users, who can be a fact and a value that is helpful." Jogiyanto (2007: 157) reveals the

net benefit is the effect of the existence and use of information systems on the quality performance of both individuals and organizations, including productivity, improve knowledge and reduce the length of time searching for information. The research result Krisdiantoro et al. (2018) found that information quality affects the net benefits. However, the research results Wahyudi et al. (2017) stated that the quality of the information does not affect net benefits. Based on these descriptions,

H2: The quality of striving towards net benefit information.

According to Kotler (2005), satisfaction is feeling happy or disappointed with someone who comes from a comparison between the impression of product performance or results and expectations. The net benefits are the benefits felt by individuals in the use of the system. It benefits individuals can be seen from the intensity of the system users and the satisfaction that arises from the use of the system to improve the performance of individuals and even organizations. In this study, the net benefit is a benefit that is felt by individuals and organizations. The research result Wahyudi et al. (2017) and Khairunnisa and Yunanto (2017) suggest that the net benefit affects user satisfaction. Based on these descriptions, and then formulated the following hypotheses:

H3: user satisfaction striving towards net benefit.

The information quality by DeLone and McLean (2003) is to measure the output quality of the information system, the information quality produced by the system, especially in the form of reports. Increasingly good information quality can increase user satisfaction. As the opinion of DeLone and McLean (2003), user satisfaction is often used as a surrogate measure of the effectiveness of information systems. On models DeLone and McLean (1992) the effects of the individual as an indication that the information system already gives the user a better understanding of the context of the decision, has improved the productivity of decision-making, has produced changes in user activity, or have changed the perception of decision-makers on the importance or usefulness of the system information. Based on these descriptions.

H4: The information quality affects net benefit through user satisfaction.

IV. Research Methods

The study design is a causal research design with a quantitative approach.The information quality as the quality of the output in the form of information produced by the information system used. An indicator of the quality of the information is relevant, accurate and trustworthy.User satisfaction is the impression given someone of experience using information system output. The indicator used in the content, accuracy, format, ease of use, timeliness. The net benefit is the net result by individuals as well as organizations after applying the information system. Indicators used consisted of learning, decision quality, decision time, productivity, and performance of tasks.

The population in this study all students of "SMK Negeri 1 Malang", amounting to 1,881 students.sample in this study was calculated using the formula Slovin, to obtain a sample of 242 students and Teknik sampling using simple random sampling.

This research uses descriptive analysis by way of tabulating the data and then do the frequency distribution of the variables of the study completed questionnaires by respondents. Result tabulation and distribution have been done, is analyzed to determine how the distribution of respondents' answers to a questionnaire covering the variables along with each of the indicators that are preferred by the respondent using calculating the average, so clearly known responder. The classic assumption test did so that there are no issues heteroscedasticitymodels and normal distribution. Classical assumption test results indicate that not happen heteroskedasticity and normal distribution of data.

V. Research Result

The method of hypothesis testing is done with path analysis, using regression analysis based filtering is then performed statistical tests and significance. These statistical tests can be done using a standardized coefficient beta coefficient (β standard). If the value of β significantly, then the path coefficients are significant. The path coefficients were not significantly dumped. A significance test can be done by comparing the significance of the pathway. When path coefficient significance value less than 0.05 was considered significant than the coefficient. Conversely, if the value of coefficient significance greater than 0.05, then it is not considered significant. To see the effect of the information quality on the net benefit through the satisfaction is presented in Table 1 below.

Table 1. SummaryAnalysis Direct Effect, Indirect,andTotal Effect of Path Analysis

Variables	Direct Effects	Sig.	Indirect Effects	Total Effects	Result
Information quality→ Satisfaction	0.770	0.000	-	-	H₁ accepted
Information quality→ net benefits	0.310	0.000	-	-	H₂ accepted
User satisfaction→ net benefits	0.517	0.000	-	-	H₃ accepted
Information quality→ user satisfaction → net benefits	0.310	-	0.770 X 0.517 = 0.398	0.708	H₄ accepted

Based on Table 1, resulting in that the total effect of the variable information quality on the net benefit (0.708) is greater than the direct effect (0.310). These results indicate that the status of user satisfaction as an intervening variable in the influence of the information quality on the net benefits, for a total value greater than the direct effect.

In Table 1 the test results indicate that the hypothesis 1, the value of the beta coefficient of 0.770 and information quality t values of 18.688 and a p-value of 0.000 is smaller than p = 0.05 (α = 5%), which means that the information qualitysignificant impact on user satisfaction. Thus the first hypothesis states that the information quality significant impact on user satisfaction statistically proven.

Results of testing the hypothesis 2, the value of the beta coefficient of .310 and information quality t value of 4.903 and p-value of 0.000 is smaller than p = 0.05 (α= 5%), which means that the information quality significant effect on the net benefit. Thus the second hypothesis states that the information quality significant effect on the net benefit is statistically proven.

Results of testing the hypothesis 3, the value of the beta coefficient of 0.517 and user satisfaction t value of 8.180 and p-value of 0.000 is smaller than p = 0.05 (α = 5%), which means that the user satisfactionsignificant effect on the net benefit. Thus the third hypothesis which states that user satisfaction significantly influences the net benefit is statistically proven.

Results of testing the hypothesis 4, indicating that the status of satisfaction as an intervening variable that can mediate variable information quality on the net benefits, because the value of the total effect is greater (0.801) on the direct effect (0.310). Thus the fourth hypothesis states that information quality significantly influences net benefits through user satisfaction that is statistically tested.

Figure 1. Path Analysis Results
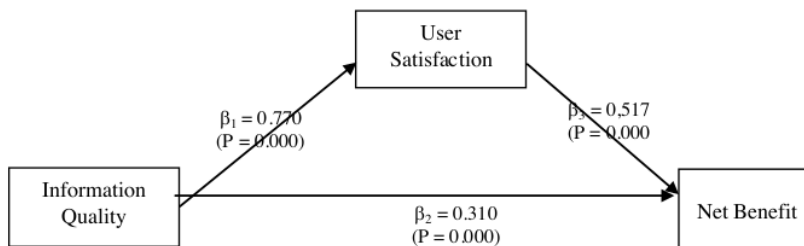
VI. Discussion

The information quality established by relevant, accurate, timely, and trustworthy. The main thing that drives quality trustworthy information is reflected in the information presented school website can be trusted. DeLone view and McLean (2003), which states that the information quality to measure the output quality of the information system, the quality produced by the information system, in particular in the form of a report.

User satisfaction is determined by the Content, Accuracy, Format, Ease of Use, and Timeliness. The main thing that supports customer satisfaction is reflected in the format of the information submitted on the school's website is easy to read. User satisfaction is the response or feeling after using an information system. Overall satisfaction of users affected by the information quality, quality systems, and quality of service. So that the instrument used to measure the level of user satisfaction is to see the level of satisfaction regarding the reports or the output produced, websites, and support services of the provider system (Petter et al., 2008).

*Net benefits*determined by learning, decision quality, decision time, productivity, and performance of tasks. The main thing that can increase the net benefit is reflected task performance of "SMK Negeri 1 Malang" information can be accessed by devices other than computers. As opinion Jogiyanto (2007: 157) states that the net benefit is the impact of the existence and use of information systems on the quality performance of both individuals and organizations, including productivity, improve knowledge and reduce the length of time searching for information.

The information quality affects net benefit, which means that the more information quality provided "SMK Negeri 1 Malang" can increase the net benefit. An increase in the information quality produced by the Management Information System will improve the quality of decision making. Indicators of good quality among other information relevant, accurate, timely and trustworthy able to provide relevant information for decision making. Indicators of the information quality that gives the largest contribution to the increase in net benefit are reliably reflected on the information presented school website can be trusted. Better information and improve decision-making can lead to increased performance of the individual. The results of this study are consistent

with Wahyudi et al. (2015), Pawirosmarto (2016), Utomo et al. (2017), Wahyudi et al. (2017) which states the information quality affects net benefit.

The information quality affects net benefit, which means that the more information quality provided "SMK Negeri 1 Malang" can improve user satisfaction. The quality level of information is relevant, timely, secure and served with good design information on a website. Information about the highest quality will increase the perceived usefulness of users and improve the use of information. Information quality can also be seen with the potential to produce unlimited information within the organization and outside the organization. The size of the information user satisfaction is reflected by the information quality produced by the system. If the information system users believe that the information generated from the system is optimal, they will be satisfied using the system.The results of this study are consistent with Wahyudi et al. (2017), Krisdiantoro et al. (2018) which states that the information quality affects user satisfaction.

User satisfaction affects net benefit, which means that the higher level of user satisfaction can increase the net benefit. User satisfaction indicators which give the largest contribution to the increase in net benefit is reflected in the format of the information submitted on the school's website is easy to read. Net benefits are the effects of the use of information on individuals, groups, organizations, industries, communities, and others, this includes the impact of the individual, the benefit of the students and the community and the school. If a person is satisfied with the information used, then there is a tendency to feel safe and comfortable use of such information.The results are consistent with Wahyudi et al (2017) as well as Khairrunnisa and Yunanto (2017) which states that the net benefit affects user satisfaction.

User satisfaction mediates the effect of the information quality on the net benefits. This indicates that the information quality can increase the net benefit if supported users were satisfied with the information presented to the user. The information quality is the output generated by "SMK Negeri 1 Malang" quality, information can be a result of the information output accuracy, completeness, easy to understand, and the right time. If the information quality produced, then the user will feel more satisfied with the information obtained, so the impact on the net increase in benefit. As Jogiyanto view (2007: 157) states that the net benefit is the effect of the existence and use of information systems on the quality performance of both individuals and organizations include improving knowledge, productivity, and reduce the length of time in finding information. The individual effect is the impact of the existence and use of the information system on the quality of the performance of individual users.

VII.   Conclusion

Statistical descriptive results indicate that the information quality established by the relevant, accurate, timely, and trustworthy. The main thing that drives quality trustworthy information is reflected in the information presented school website can be trusted. User satisfaction is formed by Content, Accuracy, Format, Ease of Use, and Timeliness. The main thing that supports customer satisfaction is reflected in the format of the information submitted on the school's website is easy to read. Net benefits established by the learning, the quality of the decision, the decision, productivity, and performance of tasks. The main thing that can increase the net benefit is reflected task performance of "SMK Negeri 1 Malang" information can be accessed by devices other than computers.

The information quality affects net benefit, which means that the more information quality provided "SMK Negeri 1 Malang" can increase the net benefit. The information quality affects user satisfaction, which means that the more information quality provided "SMK Negeri 1 Malang" can improve user satisfaction. User satisfaction affects net benefit, which means that the higher level of user satisfaction can increase the net benefit. The information quality affects net benefit through user satisfaction, which means that the net benefit may be increased if the information quality and can satisfy the users.

Based on these results, the suggestions given at "SMK Negeri 1 Malang" is as follows: The School maintains information provided to users and constantly updating information. To increase user satisfaction should "SMK Negeri 1 Malang" improve access speed. For subsequent researchers, it is recommended that add more variables outside variables that have not been examined in this study is expected to affect the net benefit, for example, the quality system and quality of service.

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