Journal of Applied Engineering and Technological Science

Vol 3(2) 2022 : 190-194



USER SATISFACTION ANALYSIS OF SERVICE QUALITY OF DAPODIK APPLICATIONS (EDUCATIONAL DATA) USING SERVQUAL METHOD

Rizki Novendra^{1*}, Nizwardi Jalinus², Waskito³, Afriansyah⁴, Anna Rasfira⁵

1,4,5 Universitas Lancang Kuning 1,2,3 Universitas Negeri Padang rizkinovendra@unilak.ac.id

Received: 25 May 2022, Revised: 29 June 2022, Accepted: 30 June 2022

*Corresponding Author

ABSTRACT

Dapodik is an education data system with a national scale in which there are various kinds of information regarding educational data units. The problem that occurs is that the operator has difficulty if the input data is invalid, so to correct the invalid input data, it is done in the operator's account, while to synchronize the data the operator must first login to the principal's account. In addition, for filling the infrastructure (facilities and infrastructure) operators have difficulty measuring the percentage of damage that occurs to school facilities because they are not in their expertise or field. Therefore, this dapodik application needs to be measured user satisfaction with the quality of its services using the servqual method. This study aims to measure user satisfaction in using the dapodik application on the quality of its services using the servqual method. The results of the measurement can be concluded that the empathy dimension, H5 (-1.03) should be further improved because the value of user dissatisfaction is higher. In addition, based on tangible values, reliability, responsiveness and assurance are still not good, so it is necessary to improve the quality of dapodik application services.

Keywords: Dapodik, Servqual Method, Satisfaction

1. Introduction

Advances in technology can have a significant effect in various aspects of life. One of them is getting convenience in providing services and information. Information technology has now penetrated into various fields such as education. Technological advances encourage educational institutions to improve and develop existing and sustainable information systems to make data processing easier, faster and more accurate. The success of the service is reflected in the user's perception of it. User satisfaction with information systems is the most important factor in developing service quality. Service quality is measured by the system that supports the use of these services, including: systematic data processing. One of the educational institutions that have implemented it is SDN 120 Pekanbaru.

Currently SDN 120 Pekanbaru is implementing the National Education Planning Program which is the most important part of the implementation of the National Education Development Strategic Plan. The program is known as the Dapodik Application. The Dapodik application is an educational data system managed by the Ministry of Education and Culture with the aim of realizing intelligent and competitive Indonesian people.

The number of modules or application guides available and the variety of user perceptions. Therefore, this application needs to measure user satisfaction. This measurement is directly related to service quality. One of the users of the Dapodik application is the operator and teachers at SDN 120 Pekanbaru. The problem that occurs is that the operator has difficulty if the input data is not valid, so to correct the invalid data it is done in the Operator's account, while to synchronize the operator data, you must first login to the Principal's account. In addition, when filling out the infrastructure (facilities and infrastructure) Operators have difficulty measuring the percentage of damage that occurs to school facilities because they are not in their expertise or field. Therefore, this Dapodik application needs to be measured user satisfaction with the quality of its services.

Measurement of user satisfaction is used to improve the effectiveness and efficiency of schools when using the Dapodik application, based on service quality using the Servqual method. When measuring service quality, it is based on five servqual dimensions, namely Tangibles, Reliability, Responsiveness, Assurance, and Empathy.

2. Literature Review

This research was conducted by Lila Setiyani, Jaki Wagiar, Evelyn Tjandra (2020) entitled "Analysis of the Quality of the Dapodik Application System at the Regional Coordinator for the Education Sector of Kutawaluya District Using the Webqual 4.0 Model". This study aims to analyze the quality of the Dapodik application system using the Webqual 4.0 model. The survey results show that the user's ease (usability), quality of information (quality of information) and quality of service (service interaction) of the Dapodik application are very well received by users.

The research was conducted by Syahtriatna Djusar, Muhamad Sadar, Elvira Asril (2020) entitled "Analysis of Service Quality for the Unilak Smart System Using the Servqual Method". The purpose of this study was to determine the effect of service quality aspects, namely Tangibles, Reliability, Responsiveness, Assurance and Empathy on Student Satisfaction as Unilak SMART Users in PDPT Unilak services. The survey results show that the quality of physical evidence, reliability, responsiveness, security and empathy is still lacking and user satisfaction with the quality of SMART Unilak services at PDPT Unilak has not been met.

The research was conducted by Felix Wuryo Handono, Hafis Nurdin, Sumarna (2019) entitled "The Level of Customer Satisfaction with Service Quality at CV Jia Pradana with the Servqual Method". The purpose of this survey is to determine the level of customer satisfaction and it is necessary to measure the satisfaction of service users. Measurement by Servqual method. The results of 100 samples indicate that the services provided by the company do not satisfy customers. Aspects that have a significant effect on user satisfaction can only be seen in aspects of security and empathy. Gap Analysis is also carried out as a management criterion to improve company performance. The two biggest gaps where companies can focus on improving performance are in the Tangibles and Reliability dimensions.

The research was conducted by Renanda Nia Rachmadita and Wibowo Arninputranto (2018) entitled "Analysis of User Satisfaction on the Quality of Library Services in Vocational Colleges Using the Servqual Method and Importance-Performance Analysis". The purpose of this study was to measure the level of satisfaction of services provided by libraries in vocational colleges. The analysis is carried out by analyzing the perception and expectation gaps and applying the Importance-Performance Analysis method. The gap analysis found that the overall dimensions of Servqual were negative. Therefore, improvement measures must be taken to meet the expectations of the users. With this increase, it is hoped that library users can use the services in the library more optimally according to their needs.

This research was conducted by Satria (2019) entitled "Analysis of Information Systems Measuring Customer Service Satisfaction with the Servqual Method". Design systems that measure customer service and improve work efficiency and can be useful in helping work creativity, besides that progress in service leveled by the company is prioritized. One method that can be used to measure customer satisfaction is the Servqual method. The assessment is based on 5 aspects of service quality, namely: Tangibles, Reliability, Responsiveness, Assurance, Empathy.

3. Research Methods

This method is used to measure user satisfaction and understanding of service quality in the form of a questionnaire based on five servqual dimensions, namely Tangible (physical evidence), Reliability (Reliability), Responsiveness (responsiveness), Assurance (Assurance) and Empathy (Empathy).

Data were obtained directly from the research site and references related to this research. Data collection techniques used include:

Observation

This technique collects information through direct observation or observation at the location under study, such as conducting a review of the parties involved in the research at SDN 120 Pekanbaru.

Interview

In this technique, the writer conducted a direct question and answer to one of the teachers at SDN 120 Pekanbaru.

Questionnaire

This questionnaire contains open-ended questions whose answers are in accordance with the expectations and circumstances of the Dapodik application users.

Literature review

The author takes various sources for research-related references such as books, scientific works, journals and the internet.

4. Results and Discussions

This section will explain what has been described in the previous chapter. This research starts from November 2021 to completion. Respondents who became the sample in the study were thirteen teachers and one operator. The data to be analyzed was obtained from the distribution of online questionnaires using google from to measure user satisfaction with the service quality of the dapodik application using the servqual method. User satisfaction or dissatisfaction is the result of differences in user perceptions and expectations. User perception is a response to user behavior and evaluates the perceived quality of the service and user expectations.

For this study, two variables were used, namely the independent variable and the dependent variable. The independent variables measured are tangible (X1) which consists of three statement items, reliability (X2) consists of 6 statement items, responsiveness (X3) consists of 6 statement items, assurance (X4) consists of 3 statement items, empathy (X5) consists of 2 statement items. While the dependent variable measured is tangible (Y1) which consists of three question items, reliability (Y2) consists of 6 question items, responsiveness (Y3) consists of 6 question items, assurance (Y4) consists of 3 question items, empathy (Y5) consists of 2 question items. Some of the tests that will be carried out are instrument testing consisting of validity and reliability tests, data processing servqual methods (service quality) and the results of hypothesis testing.

The purpose of testing this instrument is to determine whether the questionnaire can be used as an accurate or valid and reliable measuring tool. The instrument test in question is a test of the validity and reliability of the questionnaire distributed to respondents so that the data obtained can be used in further research. According to (Hendra Adisaputro 2020) "Validity Test is used to test the extent to which the accuracy or correctness of an instrument as a measuring instrument for research variables". To make it easier to do calculations on the validity test, the SPSS 20 application is used. After the validity test is carried out with the results obtained all items are valid, because r count > r table, where r table = 0.497.

The following are the results of the recap of the frequency of respondents' answers to the perception variable on the quality of dapodik application services at Sdn 120 Pekanbaru per dimension as follows. The tangible dimension that has the largest number of respondents' answers lies in X12 with a total of 8 answers for the P (Satisfied) category and the lowest number of respondents answers lies in X12 with 2 answers for SP (Very Satisfied) answers. the reliability dimension which has the largest number of respondents' answers lies in the question X21 with the number of answers that is 8 for the answer category P (Satisfied) and X23 with the number of answers that is 8 for the CP answer category (Quite Satisfied) and the lowest number of respondents' answers lies in X21, X23, X24 with the number of answers is 1 in the categories of TP (Not Satisfied), CP (Quite Satisfied), and P (Satisfied). The responsiveness dimension which has the largest number of respondents' answers lies in question X34 with a total of 8 answers for the answer category P (Satisfied) and the lowest number of respondents' answers lies in X33 and X35 with the number of answers 1 for SP answers (Very Satisfied). The assurance dimension that has the largest number of respondents' answers lies in questions X41 and XX42 with the number of answers, namely 8 for the CP category of answers (Quite Satisfied) and the lowest number of respondents' answers lies in X41, X42, X43 with 1 answer for TP answers (Unsatisfied) . The empathy dimension which has the largest number of respondents' answers lies in questions X51 and X52 with the number of answers, namely 7 for the CP category of answers (Quite Satisfied) and the lowest number of respondents' answers lies in X51 and X52 with the number of answers being 1 for TP answers (Unsatisfied).

In testing the hypothesis, it was found that H1, H2, H3, H4, H5 there was no positive and significant effect on user satisfaction because the results of H1 (-0.35), H2 (-0.77), H3 (-0.74), H4 (-1), H5 (-1.03). So from these results it has not been able to satisfy user satisfaction and it is necessary to improve the quality of dapodik application services at Sdn 120 Pekanbaru.

5. Conclusion

Based on the research that has been done by the author, it can draw conclusions using the Servqual method to measure user satisfaction with the quality of dapodik application services, where the results of the validity and reliability tests use the SPSS version 20 application, which are valid and reliable. Based on the calculation of the value of the servqual score there is no positive and significant effect on user satisfaction. The results of the measurement can be concluded that the empathy dimension, H5 (-1.03) should be further improved because the value of user dissatisfaction is higher. In addition, based on tangible values, reliability, responsiveness and assurance are still not good, so it is necessary to improve the quality of dapodik application services.

References

- Alramuri, D. (2017). Pelayanan Customer Service Terhadap Kepuasan Pelanggan Di Pt. Telkom Dengan Menggunakan Metode Fuzzy Servqual.
- Ariani, F., Trisnasari, E., Aprilinda, Y., & Affandi, F. N. (2018). Aplikasi Berbasis Web Metode Servqual untuk Mengukur Kepuasan Mahasiswa terhadap Layanan Laboratorium Komputer. *EXPERT: Jurnal Manajemen Sistem Informasi dan Teknologi*, 8(2).
- Djusar, S., Sadar, M., & Asril, E. (2020). Analisa Kualitas Layanan Sistem Smart Unilak Menggunakan Servqual Method. *Digital Zone: Jurnal Teknologi Informasi Dan Komunikasi*, 11(2), 278-290.
- Handono, F. W., Nurdin, H., & Sumarna, S. (2019). Tingkat Kepuasan Pelanggan terhadap Kualitas Pelayanan Pada CV Jia Pradana dengan Metode Servqual. *JUSTIN (Jurnal Sistem dan Teknologi Informasi)*, 7(3), 154-159.
- Horax, M., Sanjaya, L., & Pratiwi, J. (2017). Analisis Kepuasan Konsumen terhadap Pelayanan Restoran Cepat Saji (Restoran X) dengan Metode Service Quality (Servqual). *Jurnal Metris*, 18(2), 65-74.
- Izzati, L. (2021). Analisis Kualitas Layanan Sistem Informasi Akademik (Siak) Terhadap Kepuasan Pengguna Menggunakan Metode Servqual Pada Universitas Lancang Kuning (Doctoral Dissertation, Universitas Islam Negeri Sultan Syarif Kasim Riau).
- Rachmadita, R. N., & Arninputranto, W. (2018). Analisis kepuasan pemustaka terhadap kualitas layanan perpustakaan di perguruan tinggi vokasi dengan metode servqual dan importance-performace analysis. *Berkala Ilmu Perpustakaan dan Informasi*, 14(2), 214-225.
- Rais, M. F. R., & Sufa, M. F. (2021). Analisis Kepuasan Pelanggan Terhadap Kualitas Pelayanan Pada Bengkel Ahass 1215 Galuh Motor Menggunakan Metode Servqual Dan Importance Performance Analysis (Ipa) (Doctoral dissertation, Universitas Muhammadiyah Surakarta).
- Sarja, N. L. A. K. Y. (2018). Pengukuran Kepuasan Pengguna Sistem Informasi Dosen Menggunakan Metode Servqual. *Jurnal Sistem dan Informatika (JSI), 12*(2), 19-25.
- Satria, S. (2019). Analisis Sistem Informasi Mengukur Kepuasan Pelayanan Pelanggan dengan Metode Servqual. *Kilat*, 8(1), 52-64.
- Septiani, Y., Aribbe, E., & Diansyah, R. (2020). Analisis Kualitas Layanan Sistem Informasi Akademik Universitas Abdurrab Terhadap Kepuasan Pengguna Menggunakan Metode Sevqual (Studi Kasus: Mahasiswa Universitas Abdurrab Pekanbaru). *Jurnal Teknologi Dan Open Source*, *3*(1), 131-143.
- Setiyani, L., Wagiar, J., & Tjandra, E. (2020). Analisis Kualitas Sistem Aplikasi Dapodik Pada Koordinator Wilayah Bidang Pendidikan Kecamatan Kutawaluya Menggunakan Model Webqual 4.0. *Jurnal Interkom: Jurnal Publikasi Ilmiah Bidang Teknologi Informasi dan Komunikasi*, 15(2), 12-20.
- Sinnun, A. (2017). Analisis Kepuasan Pengguna LMS Berbasis Web Dengan Metode Servqual, IPA dan CSI. *Jurnal Informatika*, 4(1).
- Situmorang, I. S. S., & Nasari, F. (2019, December). Analisis Kepuasan Konsumen Terhadap Layanan Spa Dengan Servqual (Studi Kasus: Pt. Royal Amadeus). In Sensitif: *Seminar Nasional Sistem Informasi Dan Teknologi Informasi* (Pp. 521-528).
- Pramono, S. (2018). Analisis Tingkat Kepuasan Konsumen Terhadap Kualitas Layanan Dengan Metode Servqual Dan Importance Performance Analisys (Ipa)(Studi Kasus Pada Sbm Cabang Besi Yogyakarta).

Yunis, R., Ibsah, F. L., & Arisandy, D. (2017). Analisis Kesuksesan Penerapan Sistem Informasi Data Pokok Pendidikan (Dapodik) Pada SD Kabupaten Batu Bara. *Jurnal SIFO Mikroskil*, 18(1), 71-82.