ryan

by dts digital

Submission date: 29-Jun-2024 01:04PM (UTC+0700)
Submission ID: 2410145922
File name: 8265-22425-1-RV.docx (117.54K)
Word count: 3597
Character count: 19735

JIKO (Jurnal Informatika dan Komputer)
Vol. x, No. x, April 2024, pp. x-x
DOI: 10.33387/jiko

Accredited KEMENDIKBUD RISTEK, No.105/E/KPT/2022
p-ISSN: 2614-8897
e-ISSN: 2656-1948

WEBSITE QUALITY ANALYSIS OF PT. ORIGINAL ISOAE SOLUSINE BY USING THE WEBQUAL 4.0 METHOD

[1]Raihan Abi Fadly, [2]Muhamad Ryansyah,[3]Andi Taufik

*Email: [1]af241200@gmail.com, [2]muhamad.mur@nusamandiri.ac.id, [3]andi.iuf@nusamandiri.ac.id

(Received: dd mmm yyyy, Revised: dd mmm yyyy, Accepted: dd mmm yyyy)

Abstract

Customer satisfaction is important to be a benchmark for the company. PT. Asli Isoae Solusine wants to improve the quality of the existing website so that customers are more satisfied, but the company has not assessed customer satisfaction on its company profile page. The purpose of this study is to measure the level of excellence in the quality of the Company Profile website of PT. Original Isoae Solusine based on user perception This study uses the webqual 4.0 method which has 3 main variables Usability (X1), Information Quality (X2) and Service Interaction (X3) to determine the influence of quality of use, the influence of interaction quality, and the influence of information quality on a website. Using questionnaires as a data collection technique, questionnaires were distributed to PT. Original Isoae Solusine via social media. The overall quality of https://isoae.id website based on R^2 value contributes 58% to user satisfaction.

Keywords: *Analysis, Spss, Webqual 4.0*

Corresponding Author: Muhamad Ryansyah

1. INTRODUCTION

The development of information and communication technology is getting faster all the time, demonstrated by the emergence of the internet and websites and their ease of use. The internet is developing faster than any other technology product. The internet facilitates you to explore various results smoothly and quickly. As a perpetrator business in the IT world, very important for PT. Original Isoae Solusine to continue strives to provide maximum service to its customers. Customer satisfaction is an important thing to measure company. PT. Asli Isoae Solusine has a company profile website, namely https://isoae.id as a means to promote its services. Nowadays, almost every aspects of human life cannot be separated from the use of technology, especially in

The field of informatics, both in the form of computer hardware and software supports and assists in processing and providing information appropriately time, complete and accurate to users [1].

Information seekers now have more options for searching information due to advances in internet technology, including websites. The role of the website is good in government and private agencies not only as a means of communication, but also as an indicator of quality assessment. Institutional and corporate websites requires consistent maintenance and improvement to achieve ranking high and ensure quality [2]. The website can help someone find information about anything they want to know. Quality of service in disseminating information via the web is very important. Overall website quality
Overall, it is still not given enough attention by most web developers [3].

Websites are one type of service or facility provided by the internet which is most widely used besides other services.[4]

The usability of a website, or whether users can use it effectively (correctly), is one of the requirements for a good website. Friendliness users have the attributes not difficult to understand, efficient to use, easy memorability, duplication of errors, and user satisfaction. Then, if you speak regarding the quality of information (information quality) is determined by the provision reliable information, while in terms of service quality, level of interaction (service interaction quality) is determined by information security guarantees [5].

Web Quality 4.0 (Webqual) is a variable that is often used for assess the quality of the website. The choice of webqual was made because webqual is technique or method for measuring the quality of web-based applications based on end user opinion. Because this metric is related to quality measurement services, this metric is often used to assess web-based IT services. Quality information, service interactions, and usage aspects are three components form Webqual 4.0 variable indicators. This approach has been used extensively effective in comparable studies to measure website superiority and understand the elements that influence customer satisfaction [6].

Website measurements are needed to determine user ease of use using websites and gathering information about the websites we build, while on the company profile website. PT Asli Isoae Solusine has not yet done so assessment of user satisfaction on their company profile page. By therefore, the company does not know which areas may be in need improvements to improve website quality [7].

Website quality was assessed using WebQual 4.0, which evaluates three aspects: user friendliness, information accuracy, and service interaction quality. The measurement results show that usability, information quality, and quality Service interactions should be prioritized when deciding to perform enhancement. In addition, this research shows that the quality of websites is generally significantly affects user satisfaction [8]

This method has been developed since 1998 and has undergone several changes in the dimensions and 14 question items. This method is also structured based on research in three parts, namely: (a) Information quality from information systems research, (b) Interaction and service quality from information systems quality research, (c) Usability from human computer interaction (human computer interaction)[9]

The results of calculations based on population size, this research uses The sample was 55 individuals. The approach chosen for the collection method survey data is by utilizing the Google Form online platform which will distributed to PT employees. Original Isoae Solusine.

2. RESEARCH METHOD

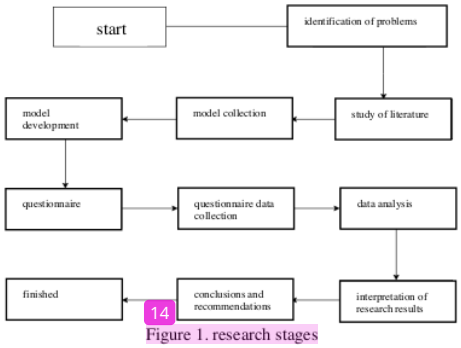

Figure 1. research stages

The explanation of the research stages above is as follows:

1. In the initial stage, problem identification is carried out, where the writer will be determine exactly the problem that will be raised as a topic research, of course the relevance of the problem has been checked so that the issues raised are not far-fetched.

2. The second step is to conduct a literature study where the author will review return to the problems that will be raised in the thesis. Will check again Whether the topic raised has been discussed previously by other people or not, if there is previous research then it can be used as a reference further development.

3. The third stage is data collection, where the author will collect data support from various related sources to prepare this thesis.

4. The fourth step is model development, which is included in this final project The model used is the WebQual 4.0 model. This model will be divided into several system quality tests such as usability, information quality, and the quality of service interactions that will be applied to the topics discussed in This thesis is analyzing user satisfaction from the website https://isoae.id.

5. In the fifth stage, namely the Questionnaire, it is used to support validity data. The questionnaire will be distributed online via a Google form link which is disseminated via social media platforms such as Whatsapp and Instagram.

6. In the sixth stage, namely collecting questionnaires, which will be distributed The questionnaire was carried out for approximately 2 weeks to reach the number The targeted sample was 55 respondents.

7. In the seventh stage, namely data analysis, the data collected from the questionnaire will be Validity, Reliability and Multiple Linear Regression Tests were analyzed, namely the F Test and T test on the data using SPSS 26 and Microsoft applications Excel 2016.

8. In the eighth stage, namely Interpretation of the results, where the data has been analyzed will produce final results from which conclusions can be drawn.

9. In this ninth stage, namely the stage of drawing conclusions and suggestions, results The final result can be used to draw comprehensive conclusions and provide recommendations for further development.

2.1 RESEARCH INSTRUMENT

Size is an element that determines the quantity, size or standard capacity or units of measurement. Measurement can also be understood as assigning numbers on a particular quality or property of a particular person, thing, or object according to rules or formulas that are clear and mutually agreed upon [10]

The instrument used in this research was a distributed questionnaire into 2 parts. The first part consists of respondent profiles which include 4 questions namely Email, Full Name, Gender, Age. Software that used for profile data analysis using Microsoft Excel 2016. Section The second consists of

Statistical Data which contains 18 questions taking 3 variables from webqual 4.0 for PT. ORIGINAL ISOAE SOLUSINE to be analyzed the quality. This research uses a likert scale instrument with 5 (five) options answers starting from 1 which means Strongly Disagree, to 5 which means Strongly agree.

The Likert scale is a frequent psychometric scale measurement instrument used in surveys, where data has been collected through filling in The questionnaire will be processed quantitatively, and then assign a score to the answers which have been given by respondents in the questionnaire [11].

Likert Scale is a measurement method discovered by Rensis Likert in 1932. This method is used to measure an individual's view of something specific statement or topic. Usually, a Likert scale consists of statements that equipped with a measurement scale, where the scale is an alternative attitude related to the statement given that can be chosen by the respondent according to their attitude towards the statement [12].

There are three elements in Webqual. related to the quality of the website. Then, in this investigation, these dimensions are used as variables independent. The following are the three dimensions:

1. Using the Usability Quality dimension X1
2. Using the information quality dimension X2
3. Using the X3 Service Interaction Quality dimensions

Table 1. Webqual 4.0 Research Variables

Variable	Information
X1	Usability
X2	Information Quality
X3	Interaction Quality
Y	User Satisfaction

2.2 Multiple Linear Regression Analysis

To find out whether the usability variable (X1), the information quality variable (X2), and the service interaction quality variable (X3) influences the variable user satisfaction (Y), then a multiple linear regression analysis test is used this research. According to the justification provided, this indicates that there are three X variables and one Y variable in this research. Then to estimate or assume that a linear regression equation will formulated as follows:

$$Y=a+b1X1+b2X2+b3X3$$

Information:
Y = Dependent Variable
X1 = User Quality (Usability)
X2 = Information Quality (Information Quality)
X3 = Service Interaction (Service Interaction)
b1, b2, b3 = Regression coefficients
a = constant

Source: [13]

2.3 Data Collection and Processing

This research uses the method of distributing questionnaires indirectly directly to obtain data from participants. This type of combination is possible used to test the depth and breadth of data, the level of respondent response and data quality, as well as the effectiveness and efficiency of data collection. Author's sample, which includes all 55 respondents from the population, taken using a strategy Saturated sampling, namely taking all samples from the existing population. Deployment This is done indirectly by sharing the online survey link via social media platforms.

The deployment was carried out for approximately 2 (two) weeks reach the desired sample size. The analysis process is carried out by utilizing SPSS 26 which will be used to obtain research data, process and evaluate research results. Data analysis includes: Validity Test, Reliability Test, Multiple Linear Regression Analysis.

3. RESULT AND DISCUSSION

At this stage, the author will discuss the results of the questionnaire that has been carried out given to respondents, namely all employees and staff who have accessed it website https://isoae.id at PT. Original Isoae Solusine. Google Forms, a tool that used to fill out online surveys, used to distribute questionnaires this is indirectly (via internet surveys). This survey was distributed over a period of 2 (two) weeks, in order to achieve the expected sample size.

The following is a table of questionnaire questions which has 3 variables X and 1 Variable Y distributed to respondents:

Table 2. List of Questionnaire Questions

Variable	Question
Usability	1. Website operation https://isoae.id easy to learn? 2. Interaction with https://isoae.id is clear and easy to understand? 3. Ease of navigation on the website https://isoae.id 4. The website https://isoae.id has attractive appearance? 5. According to your website https://isoae.id convey competence? 6. What do you think of the website? https://isoae.id increases knowledge from the website information?
Information Quality	1. According to you, the website https://isoae.id provide the information you can trustworthy? 2. According to you, the website https://isoae.id presented in detail? 3. According to you, the website https://isoae.id provide accurate information? 4. Is the website https://isoae.id provide sufficient information

	details? 5. According to you, the website https://isoae.id provide relevant information? 6. According to you, the website https://isoae.id provide easy information understood?
Service Interaction	1. What do you think of the website https://isoae.id has a good reputation Good? 2. I feel safe doing it interaction on the website https://isoae.id? 3. The website https://isoae.id is easy to attract interest and attention? 4. The website https://isoae.id provides ease of communicating with company? 5. Is the website https://isoae.id have a high level of confidence will the services be provided?
User Satisfaction	View the website https://isoae.id in full overall good?

Based on Diagram Figure 2 below, from 55 respondents the author gathered there were 26 male participants with a percentage of 47%. Meanwhile for There were 29 female participants with a percentage of 52%.

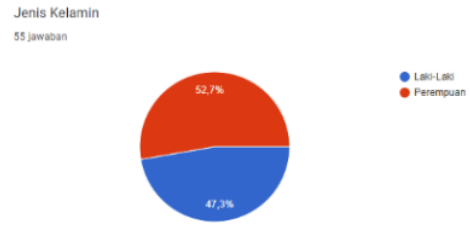

Figure 2. Questionnaire Diagram by Gender

Respondents in this study, as seen in Diagram figure 3 There were 11 people aged under 20 years (20%), followed by those aged 20 - 25 years as many as 37 people (67%), aged 25 - 30 years as many as 3 people (5.5%) and aged 30 years and over as many as 4 people (7.3%).

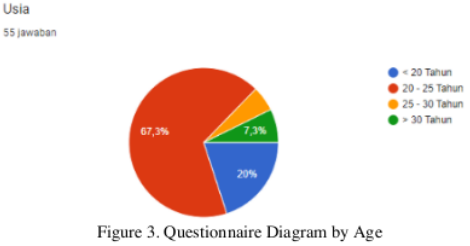

Figure 3. Questionnaire Diagram by Age

3.1 Validity test

Validity refers to the level of precision and completeness of the measuring instrument (test). carry out the measurement task. A test is considered to have high validity if the instrument accurately performs the measurement function or produce measurement findings that are appropriate to the intended use these measurements. In other words, the measurement results represent accurately the actual facts or circumstances of what is measured [13] Instrument considered valid if r count exceeds r table and declared invalid if r count smaller than r table. If the probability (sig.2 tailed) < 0.05 then the instrument declared valid, and vice versa if the probability (sig2.tailed) > 0.05 then the instrument is declared invalid.

Validity tests are carried out to check the substance of a tool, the purpose of it Validity Test is to measure the accuracy of the tool that will be used in study.

Variables usability quality (X1), information quality (X2), interaction quality service (X3), and user satisfaction (Y) are each carried out by product analysis moment/Pearson a part of the validity test using the program SPSS. The calculated r value is compared with the r table for degrees of freedom (df) = n-2 where n is the number of samples and 0.05 is the alpha value, which can be seen in the table statistics, a significance test is carried out.

The validity test of X1 uses the r table limit, two-sided test and significance level 0.05. If the calculated r value > r table with an n value (population value) of 55 populations, then the df value = 53, resulting in an r table value of 0.265. Item is considered valid if the correlation value is more than the specified limit and is considered invalid if has a value below it.

Table 3. Validity Quality of Use (X1)

variable	R table	R count	SIG (2-tailed)	information
X1.1	0,265	0,735	0	valid
X1.2	0,265	0,846	0	valid
X1.3	0,265	0,785	0	valid
X1.4	0,265	0,729	0	valid
X1.5	0,265	0,837	0	valid
X1.6	0,265	0,847	0	valid

From the correlation data, conclusions can be drawn that each row of the Pearson Correlation column Total_X1 has a correlation value of X1.1 of 0.735. The correlation coefficient is greater than the r value the table has value 0.265, as seen in the values X1.2, overall 0.846, 0.785, and so on. The conclusion is that all items valid.

3.2 Reliability Test

Reliability or reliability means the extent of a result reliable measurements. Confidence in measurement results can be obtained if several measurements are taken that produce relatively similar results, provided that the aspects measured in the subject remain unchanged. State that measure

reliability relates to the degree to which individual scores vary, or scoresz, is relatively consistent when the same test or equivalent tests are repeated within administrating [14]

The condition for testing the reliability assessment is that the calculated r value must be more greater than the rtable value with a significance level of more than 5%. In this case, then can be ensured to be reliable (can be trusted). Conversely, if the rcount value is smaller from the rtable value with a significance level of less than 5%, then the measuring instrument considered unreliable (untrustworthy).

Table 4. Reliability Statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.958	18

the first result seen in table 4 shows that there are valid data, then the results of the two tables 5 are the results of the reliability test obtained by the coefficient Cronbach's Alpha was 0.958 with a total of 18 questionnaire items. Because the coefficient at above 0.6, it can be concluded that the survey of X and Y is considered acceptable reliable or coherent for use in research.

Table 5. Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected ItemTotal Correlation	Cronbach's Alpha if Item Deleted
X1.1	68.8000	117.867	.584	.958
X1.2	68.7818	115.803	.698	.957
X1.3	68.7455	117.564	.711	.957
X1.4	68.7636	115.110	.653	.958
X1.5	68.7273	115.795	.711	.956
X1.6	68.5818	114.026	.795	.955
X2.1	68.6909	114.625	.720	.956
X2.2	68.7455	114.934	.751	.956
X2.3	68.7273	115.535	.777	.956
X2.4	68.6727	115.891	.699	.957
X2.5	68.6909	115.366	.792	.955
X2.6	68.7455	115.341	.705	.957
X3.1	68.7636	113.851	.781	.955
X3.2	68.8182	115.596	.734	.956
X3.3	68.8909	111.951	.822	.955
X3.4	68.6909	112.736	.807	.955
X3.5	68.7636	114.332	.732	.956
Y1	68.6909	115.551	.753	.956

The first thing we do after getting results from respondents is to carry out validity testing wh the validity test is a functional test to see whether it is valid or invalid. The measuring tool referred to here is the questions contained in the questionnaire. When questions in the questionnaire can explain the subject being measured, then the questionnaire said to be valid[15]

4. CONCLUSION

Based on research findings that have been carried out on the website https://isoae.id with the title "Website Quality Analysis PT. Original Isoae Solusine By Using the Webqual 4.0 Method", recommendations or suggestions are made can be proposed by the author in this research is Including various data analysis methods is very important, apart from validity testing, reliability and multiple linear regression. The newest variable should be introduced.

It is hoped that companies will conduct surveys more frequently to continu improving quality towards customer satisfaction and to improve the quality of the website In the future, there needs to be regular evaluation of services, especially in the usability section and Information Quality.

5. REFERENCE

[1] C. Co, I. D. Dengan, and M. Webqual, "ANALISIS PENGUKURAN KUALITAS WEBSITE," vol. 4, no. 1, pp. 41–47, 2020.

[2] D. Yulianto and T. Ismail, "Analisis Website Program Kreativitas Mahasiswa (PKM Center) Universitas Ahmad Dahlan Menggunakan WebQual 4 . 0 Analysis of Student Creativity Program Website at Ahmad Dahlan University," vol. 20, no. 2, pp. 325–334, 2021, doi: 10.30812/matrik.v20i2.1098.

[3] Y. Hariyanto, E. Kristianto, and F. Cia, "METODE WEBQUAL (STUDI KASUS WEB UNIVERSITAS KRISTEN KRIDA WACANA) QUALITY ANALYSIS OF UNIVERSITY WEBSITE USING WEBQUAL METHOD (A CASE STUDY ON UNIVERSITAS KRISTEN KRIDA WACANA WEBSITE) Adapun data mengenai objek yang akan diteliti terbagi menjadi :," pp. 339–348.

[4] A. W. Soejono, A. Setyanto, dan A. F. Sofyan, —Evaluasi Usability Website UNRIYO Menggunakan System Usability Scale (Studi Kasus: Website UNRIYO),‖ J. Teknol. Inf. Respati, vol. 13, no. 1, Mar 2018.

[5] M. P. Putri, I. P. Sari, P. Studi, and S. Informasi, "JOINTECS," vol. 3, no. 28, pp. 99–108, 2022.

[6] R. Sistem, "Analisis Kualitas Situs Web Batampos Menggunakan," vol. 2, no. 2, pp. 591–596, 2018.

[7] P. Co, I. D. Dengan, and M. Webqual, "Analisa Kualias Website," vol. 7, no. 2, pp. 124–129, 2022.

[8] M. J. Farrell, H. M. Az-Zahra, and R. I. Rokhmawati, "Analisis Kualitas Website Portal Berita dan Opini Mojok.Co Menggunakan Webqual 4.0 dan Importance-Performance Analysis," J. Pengemb. Teknol. Inf. dan Ilmu Komput., vol. 5, no. 7, pp. 3036–3045, 2021, [Online]. Available: http://j-ptiik.ub.ac.id

[9] F. Titiani, Erni, D. Riana, C. Budi hartanti, S. Rahmatullah, and T. A. Tutupoly, "Analysis of User Satisfaction on Corona.Jakarta.go.id Website: Use WebqualMethod 4.0," J. Phys. Conf. Ser., vol. 1641, no. 1, pp. 0–6, 2020, doi: 10.1088/1742-6596/1641/1/012015

[10] F. Susilowati, K. Z. Wafirotin, and A. Hartono, "PENGARUH UKURAN PERUSAHAAN, PROFITABILITAS, LEVERAGE, TIPE

INDUSTRI, DAN UKURAN DEWAN KOMISARIS TERHADAP CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE (Studi Empiris Pada Perusahaan Sektor Industri Barang Konsumsi Yang Terdaftar Di Bursa Efek Indonesia Perio,"

[11] Safrudiannur, Measuring Teachers' Beliefs Quantitatively. Cologne: Springer, 2020. [Online]. Available: https://www.google.co.id/books/edition/_/mjFuzQEACAAJ?hl=id&kptab=overview

[12] A. H. Suasapha, "Skala Likert Untuk Penelitian Pariwisata; Beberapa Catatan Untuk Menyusunnya Dengan Baik," J. Kepariwisataan, vol. 19, no. 1, pp. 26–37, 2020, doi: 10.52352/jpar.v19i1.407.

[13] A. Adellia and L. A. Abdillah, "Analisis Kualitas Layanan Website E-Commerce Bukalapak Terhadap Kepuasan Pengguna Mahasiswa Universitas Bina Darma Menggunakan Metode Webqual 4.0," J. Softw. Eng. Ampera, vol. 1, no. 3, pp. 144–159, 2020, doi: 10.51519/journalsea.v1i3.52.

[14] H. M. Zhang, L. S. Peh, and Y. H. Wang, "Servo motor control system and method of auto-detection of types of servo motors," Appl. Mech. Mater., vol. 496–500, no. 1, pp. 1510–1515, 2014,doi:10.4028/www.scientific.net/AMM.496-500.1510.

[15] N. M. Janna and Herianto, "Artikel Statistik yang Benar," J. Darul Dakwah Wal-Irsyad, no. 18210047, pp. 1–12, 2021.

ryan

ORIGINALITY REPORT

14%	11%	6%	7%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Universitas Khairun Student Paper	2%
2	journal.formosapublisher.org Internet Source	1%
3	Nur Aeni Hidayah, A'ang Subiyakto, Fani Setyaningsih. "Combining Webqual and Importance Performance Analysis for Assessing A Government Website", 2019 7th International Conference on Cyber and IT Service Management (CITSM), 2019 Publication	1%
4	Purwanto, P.B. Deden Hedin. "Measurement of user satisfaction for web-base academic information system using end-user computing satisfaction method", IOP Conference Series: Materials Science and Engineering, 2020 Publication	1%
5	ijistech.org Internet Source	1%

6	docplayer.info Internet Source	1 %
7	dspace.umkt.ac.id Internet Source	1 %
8	eprints.uny.ac.id Internet Source	1 %
9	Submitted to Politeknik Pariwisata Palembang Student Paper	1 %
10	ejournal.unkhair.ac.id Internet Source	1 %
11	repository.ub.ac.id Internet Source	<1 %
12	Jubelia Ayu Ebong Hurek, David Humala Sitorus. "The Influence of Promotions and Prices on Purchase Decisions at Shopee (Case Study in Tanjung Piayu Community, Batam City)", eCo-Buss, 2023 Publication	<1 %
13	www.researchsquare.com Internet Source	<1 %
14	Submitted to Universitas Sang Bumi Ruwa Jurai Student Paper	<1 %
15	arxiv.org Internet Source	<1 %

16	link.springer.com Internet Source	<1 %
17	www.atlantis-press.com Internet Source	<1 %
18	Submitted to Universitas Negeri Manado Student Paper	<1 %
19	repo.palcomtech.ac.id Internet Source	<1 %
20	repository.ihu.edu.gr Internet Source	<1 %
21	garuda.kemdikbud.go.id Internet Source	<1 %
22	Ahmad Herry Sulistiyawan, Qotrinnada Latifa, Zunita Adeliani, Puji Rahayu. "Usability Evaluation on Universitas Mercu Buana Jakarta Library Website Using SUS", 2023 6th International Conference of Computer and Informatics Engineering (IC2IE), 2023 Publication	<1 %
23	www.abacademies.org Internet Source	<1 %
24	Kristoko Dwi Hartomo, Muhammad Rizky Ramadhan. "Quality Evaluation in Disaster Mitigation Information System using Webqual 4.0 Method", 2021 2nd International	<1 %

	Conference on Innovative and Creative Information Technology (ICITech), 2021 Publication	
25	www.researchgate.net Internet Source	<1%
26	ejournal.kopertais4.or.id Internet Source	<1%
27	M Afriansyah, Andi Sunyoto, Asro Nasiri. "Evaluasi Kualitas Website Pemerintah Daerah Dengan Menggunakan WebQual 4.0 Pada Instansi Pemerintahan ABC", Jurnal Teknologi Informasi dan Komunikasi (TIKomSiN), 2020 Publication	<1%

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	On		