

Correlation Analysis in Software Information Dissemination Testing in Regional Apparatus Organizations (RAD) to Support Jogja Smart City

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Abstract

The application of information technology is one of the characteristics of smart cities that are used to provide services for their citizens. This application does not only change the one that previously did not use information technology to the one that used information technology. However, the uses of software is specifically used to serve the community so that the service process becomes as fast as the one in the Government RAD of Yogyakarta City. Before using a special application, dissemination services were performed using Microsoft Excel which can only be accessed on a computer. The software for information dissemination was tested by distributing questionnaires with questions grouped on Service quality improvement for information dissemination and User satisfaction. The results were processed and analyzed using the correlation method. The result showed a value of sig. (2-tailed) is 0,000, the Correlation Coefficient of 0,400, so it can be concluded that the relationship between improving service quality for information dissemination on RAD to user satisfaction is significant, strong enough, and unidirectional.

Keywords: Correlation Analysis; Information Dissemination; Smart City.

I. INTRODUCTION

The Yogyakarta City Government has built various websites to improve services to the community as a form of support for the movement towards a Jogja Smart City. There are emergency services, fire services, violent complaints, live-saving services, and other services. Berita Yogya is the latest news service that functions as a means of information used by the Regional Apparatus Organization (RAD) of the Yogya City Government so that information dissemination can run quickly. This is very helpful to meet the needs of users' sources of information about hot issues that are happening in the community. Users will feel very satisfied if the information is obtained by the user's wishes. Satisfaction is a feeling of pleasure or disappointment that arises after comparing perceptions with the expected information results.

The result of the assessment using Boyd Cohen Smart City Wheel shows that the dimension of Smart City that stands out in the city of Yogyakarta is Smart People[1]. Smart City has been applied in the city of Bandung named Bandung Smart City 1.0 and Surabaya City with the theme e-Government[2]. Social e-learning application is an application designed to help realize the Bandung Smart City Program[3]. Ridwan Kamil's performance in the year between 2013 and 2018, received the support of Bandung citizens for the implementation of Bandung Smart City[4]. The software used to support public services in smart cities is also created and implemented in Jakarta. Qlue dan CROP, two Jakarta Smart City applications have become effective in community complaint services, residents are very satisfied and appreciate the performance of the DKI Jakarta Provincial Government[5]. The development of a smart city in the city of Yogyakarta is carried out by continuing or utilizing what has been done with the use of ICT[6] with the support of the application developed in it, as well as what is done in the city of Surabaya[7]. The number of smart city applications in a city/region can be disseminated to the public quickly and is expected to improve the open innovation environment in the development of smart city applications today[8].

Good service for people in smart cities requires software support that can disseminate information from the public to bureaucrats or vice versa. Information dissemination is not mandatory using information technology. The results of qualitative research using case study methods with locations in Bali and Central Sulawesi show that traditional media that can adapt to technological advances can still exist and have potential as a means for the dissemination of public information[9]. In addition to the interests of smart cities, information dissemination can also be applied in the fields of creative industry products[10], health [11], and tourism[12].

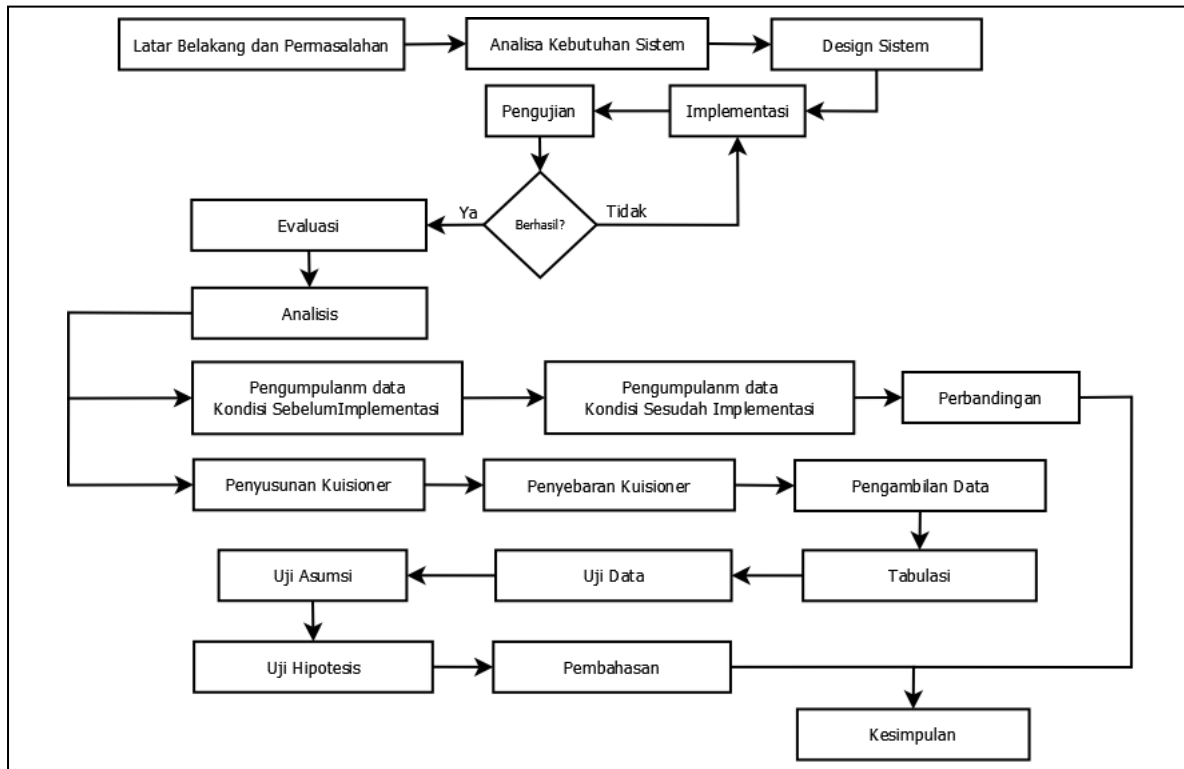
The provision of services to the community carried out by the local government that designates its government area as a smart city needs to be measured against the services that have been provided. Measurement of service quality is a very important tool[13] for the head of government in the smart city to understand the needs and desires of the community. In a study of a food product, it was found that food customer loyalty is influenced by service quality[14]. Thus, for the government in a smart city that provides services to the community through applications, it is necessary to measure the level of community satisfaction with the application. Applications that are built to

provide web-based services to the public can be measured using webqual[15], [16]. The quality of the website used in the service will affect user satisfaction[17].

In this study, the application used in the web-based information dissemination service at RAD Yogyakarta City was measured for service quality using a quiz whose data was analyzed using the correlation method that has been used in previous studies[18]–[21].

II. RESEARCH METHOD

The method used in this research is a descriptive statistical analysis method with a quantitative approach. This quantitative approach is used to examine specific samples and is static to test established hypotheses. With this method, it will be known a significant influence between the variables studied. The collected data will be described as is without any purpose of making conclusions for generalization. The research flow is described in the 1st figure.



The 1st figures. The research flows

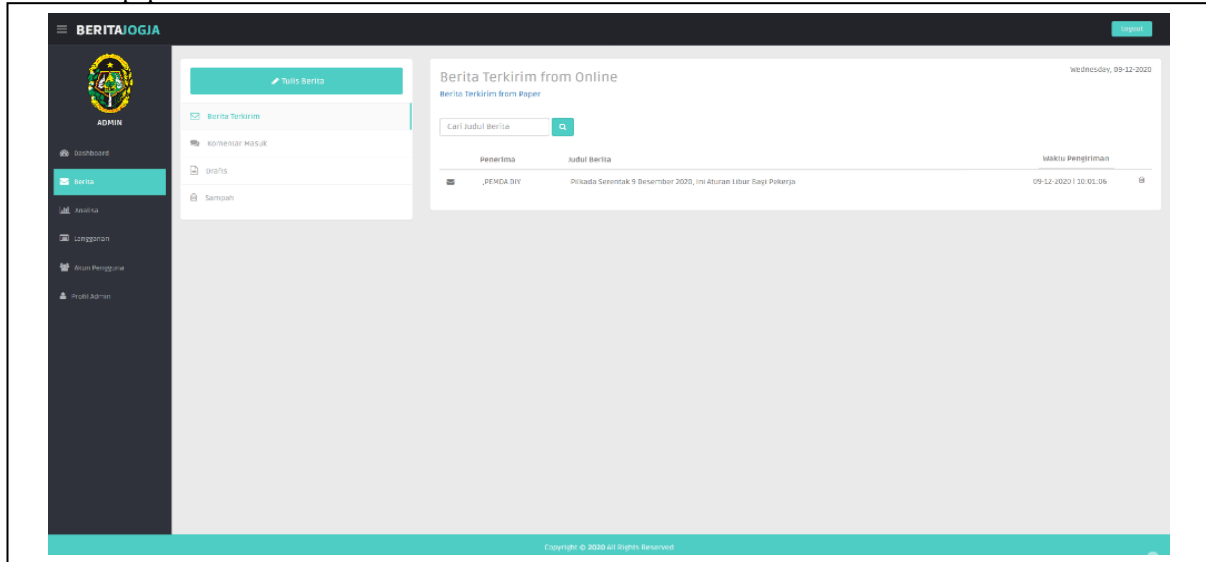
The research was conducted at RAD to identify the problems to be solved through this research. The steps taken after identifying the problem are :

1. Build software that can be used by RAD to distribute information and public complaints to the divisions responsible for handling the problems complained of in the organizational structure of the Regional Government (Pemda) of Yogyakarta Municipality. The software designed is called the Berita Jogja Application. The design of the software used can be seen in the 2nd figure in the form of a use-case diagram. The use-case Diagrams are used to briefly describe who can use the system and what can be done on the system. The Jogja News Application has 3 actors (users) who can interact with the system, namely administrators, special users, and ordinary users. The administrator or commonly referred to as the admin acts as a news writer which will be sent to several users who are concerned with the news. Admin can also monitor the progress of the news that is shared whether it gets a response from the recipient or not. In addition to writing news, the admin can view news analysis. Admin can also add, edit and modify user accounts and the access rights to be granted. Special users and ordinary users act as news recipients. Special users can see all the news and see the analysis of the news that has been sent by the admin. Ordinary users do not have access to view news analysis and can only view news sent to them. These three actors can interact with each other in the system through the comments column. All registered actors can change their password through the forgot password feature or through the user profile page and can ask the admin for help to change the password.

III. RESULT AND DISCUSSION

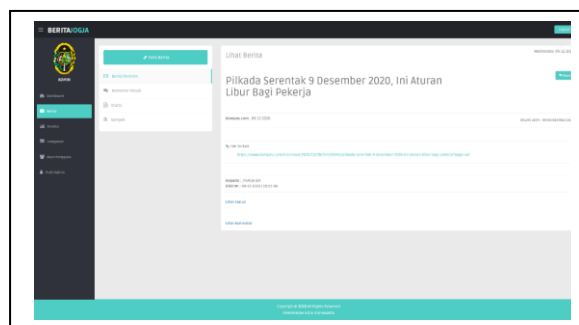
The Jogja News application that we describe in this section is only for the menu to send and view online news and view status, to show the flow of information disseminated through RAD to local government internal organs.

The 3rd figures are the implementation of the online sent news menu, where the news sources come from online media spread on the internet. Admin can access this menu by clicking sent news and then selecting “Berita terkirim from online”. In this menu, there are a table containing news receiver information, the title of the news, and news delivery times. There is a search feature to search news by title. Admins can delete news by pressing the trash icon in the rightmost column. There is a menu of “Berita terkirim from the paper” that admins can use to view sent news from newspapers.



The 3rd figure. Implementation of the online sent news menu

The implementation of the online news view menu in the figures is a display of online media news that has been sent by the admin. This menu can be opened by selecting one of the news items in the online sent news menu. In this menu, there is information on news titles, news sources, news dates, news writers, news recipients, and news delivery dates. There is also a news link where if it is clicked, it will take the admin to the original news page. An internet connection is required to open the link. The back menu at the top right will take the admin back to the online sent news menu. If the admin wants to monitor news progress, there is a view status menu. There is also a view comment menu that can show a list of comments about the news in question. Admin can also comment on news through this menu.



The 4th figures. Implementation of the view online news menu

The view status menu as shown in the 5th figure applies to both paper and online news. This menu is used by the admin to monitor how the news progresses and how the recipient responds to the news sent. This menu can see if the recipient read the news or just leave it.

There is a table with four columns. First is the recipient column, containing the name of the news recipient. Suppose news is intended for two users, then the first recipient will fill the first row in the recipient column, and the second recipient will fill the second row. The second column is status. There are two indicators used that are received or seen. If the message has been sent but has not been read, the indicator will be yellow with a closed envelope icon. However, if the recipient has read the contents of the news, the indicator will turn green with a white checklist.

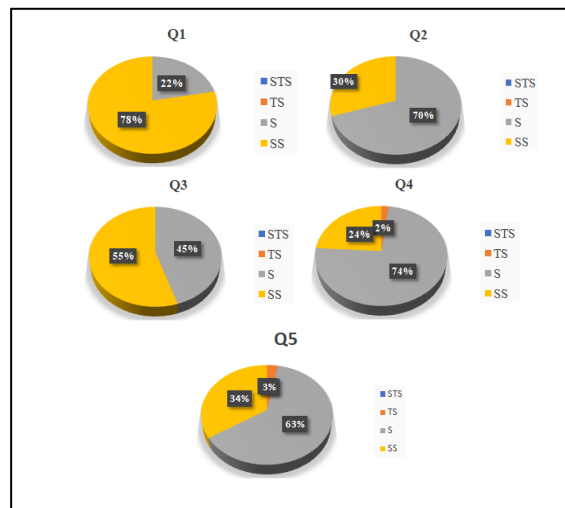
The third column is the description. This column shows the number of times the attachment was downloaded by the recipient. There are two color indicators used, namely red and blue. Red indicates the attachment has never been downloaded. Blue indicates that the recipient has downloaded the attachment at least once. The number in the indicator shows the number of downloads. Download this attachment as a reference if the recipient has read the news attachment.

The fourth column contains a description of the color indicator. Overall, there are four color indicators: yellow, green, blue, and red. Yellow means the news has been received. Green means the message has been seen. Blue means the attachment has been downloaded and read. Red means the attachment has not been downloaded and has not been read.

Penerima	Status	Description	Keterangan
DINAS KOPERASI USAHA KECIL DAN MENENGAH TENAGA KERJA DAN TRANSMIGRASI	0 kali dibaca		diterima dilihat dibaca belum dibaca
PSIM	3 kali dibaca		diterima dilihat dibaca belum dibaca

The 5th figures. Implementation of menu view status

A. Data Respond Variabel Independen (X)



The 6th figures. Response graph to questions 1-5

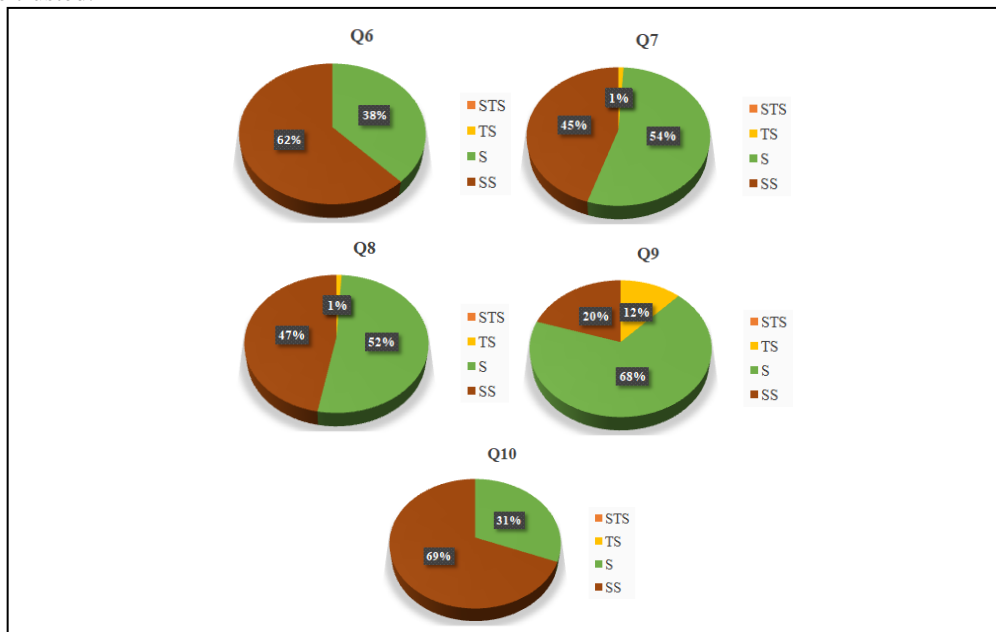
The independent variable or free variable in this study is an improvement in the quality of service for the dissemination of information on RAD. Five questions are asked and must be filled out by the respondent. Based on the results of the questionnaire, the data obtained can be seen in the figures.

Question number 1 is accessible anywhere and anytime. Based on the data processing of question number 1 (Q1) from the research questionnaire, it was found that 78% of respondents strongly agreed with the question of Q1 and 22% answered agree. This data explains that the application created can be accessed anywhere and anytime because this application is connected to the internet. Question number 2 (Q2) is that there is a discussion room that makes it easier to communicate between RAD members. Based on the results of the data, 30% of respondents strongly agreed and 70% answered in agreement. This data explains that the application created has a discussion room to communicate but the perceived benefits are not yet 100%. Question number 3 (Q3) is the provision of up-to-date information. Based on the results of the questionnaire data, it was found that 55% of respondents strongly agreed and 45% answered agree. This data explains that the information distributed is information that is up to date or the latest but cannot be real-time. This can be caused by several factors, including the availability of Human Resources (HR) and the time spent by HR to take care of the dissemination of information in the application. Sources of information originating from print media can also cause the dissemination of information in the application cannot be real-time. Question number 4 (Q4) is that dissemination results can be easily documented offline. Based on the results of data processing carried out on the results of distributing questionnaires, it was found that 24% of respondents strongly agreed, 74% agreed, and there were 2% of

respondents did not agree with the second question. This data explains that almost all respondents agree that it can be downloaded so that the information distributed can be read offline. There is also a small percentage of respondents who do not agree. This can be caused by the user's ignorance of the existing download features or respondents who do not understand the meaning of the questions given. Question number 5 (Q5) is that the data has been presented based on its classification. Based on the results of data processing carried out on question number 5, it was found that 34% of respondents answered strongly agree, 63% answered agree, and there were 3% of respondents did not agree. This data explains that the information presented in the application has been grouped based on their respective classifications. There are two classifications of news, namely news sourced from print media and online news. There are also user classifications, namely administrators, special users, and ordinary users.

B. Data Respond Variable Dependent (Y)

The dependent variable or variable bound in this study is user satisfaction. Five questions are asked and must be filled out by the respondent. Question number 6 (Q6) I like the look of this website. Based on the results of data processing carried out on question number 6, it was found that 62% of respondents answered strongly agree and 38% agreed. This data explains that the appearance of the website can be accepted and liked by users. Question number 7 (Q7) is not slow, even when opened through my phone. Based on the results of the data, 45% strongly agree, 54% agree, and 1% answered disagree. From these data, it can be concluded that the website is built lightly and does not require a long loading time to access. Question number 8 (Q8) is that I find it easy to understand how the website operates. Based on the results of data processing, there are 47% of respondents strongly agree, 52% agree, and there are 1% do not agree with question 8. From these data, it can be concluded that the website built is easy to use. Question number 9 (Q9) is that I get a fast response in interactions. Based on the results of the data processing, there were 20% of respondents answered strongly agree, 68% agreed, and 12% disagreed. The data explains that the interaction among application users already exists but has not been maximized. Not all users are quick to respond to information shared or discussed. Question number 10 is trustworthy content. From the results of data processing carried out on question 10, 69% of respondents strongly agree with the questions asked and the remaining 31% answered agree. The data explains that the content or information on the website is real and can be trusted.



The 7th figures. Response graph to questions 6-10

C. Validity Test

The validity test in this study was carried out statistically using the Product Moment technique with the help of SPSS. The validity test connects each question score with each total score obtained, which can be seen in the figures.

Correlations												
		Question_1	Question_2	Question_3	Question_4	Question_5	Question_6	Question_7	Question_8	Question_9	Question_10	Skor_total
Question_1	Pearson Correlation	1	.032	.247*	-.271**	.222*	.579**	.359**	.239*	-.140	.323*	.483**
	Sig. (2-tailed)		.755	.013	.006	.026	.000	.000	.017	.166	.001	.000
	N	100	100	100	100	100	100	100	100	100	100	100
Question_2	Pearson Correlation	.032	1	.154	.493**	.154	.018	.076	.135	.452**	-.080	.477**
	Sig. (2-tailed)	.755		.127	.000	.125	.859	.452	.181	.000	.428	.000
	N	100	100	100	100	100	100	100	100	100	100	100
Question_3	Pearson Correlation	.247*	.154	1	.214*	.382**	.120	.265**	.221*	.129	.219*	.582**
	Sig. (2-tailed)	.013	.127		.032	.000	.234	.008	.027	.200	.028	.000
	N	100	100	100	100	100	100	100	100	100	100	100
Question_4	Pearson Correlation	-.271**	.493**	.214*	1	.215*	-.118	.013	.121	.436**	-.102	.402**
	Sig. (2-tailed)	.006	.000	.032		.032	.241	.894	.231	.000	.310	.000
	N	100	100	100	100	100	100	100	100	100	100	100
Question_5	Pearson Correlation	.222*	.154	.382**	.215*	1	.267**	.198*	.359**	.086	.190	.613**
	Sig. (2-tailed)	.026	.125	.000	.032		.007	.048	.000	.395	.058	.000
	N	100	100	100	100	100	100	100	100	100	100	100
Question_6	Pearson Correlation	.579**	.018	.120	-.118	.267**	1	.228*	.417**	-.146	.277**	.504**
	Sig. (2-tailed)	.000	.859	.234	.241	.007		.022	.000	.148	.005	.000
	N	100	100	100	100	100	100	100	100	100	100	100
Question_7	Pearson Correlation	.359**	.076	.265**	.013	.198*	.228*	1	.253*	.051	.320**	.545**
	Sig. (2-tailed)	.000	.452	.008	.894	.048	.022		.011	.613	.001	.000
	N	100	100	100	100	100	100	100	100	100	100	100
Question_8	Pearson Correlation	.239*	.135	.221*	.121	.359**	.417**	.253*	1	.114	.178	.606**
	Sig. (2-tailed)	.017	.181	.027	.231	.000	.000	.011		.257	.077	.000
	N	100	100	100	100	100	100	100	100	100	100	100
Question_9	Pearson Correlation	-.140	.452**	.129	.436**	.086	-.146	.051	.114	1	.019	.418**
	Sig. (2-tailed)	.166	.000	.200	.000	.395	.148	.613	.257		.855	.000
	N	100	100	100	100	100	100	100	100	100	100	100
Question_10	Pearson Correlation	.323*	-.080	.219*	-.102	.190	.277**	.320**	.178	.019	1	.450**
	Sig. (2-tailed)	.001	.428	.028	.310	.058	.005	.001	.077	.855		.000
	N	100	100	100	100	100	100	100	100	100	100	100
Skor_total	Pearson Correlation	.483**	.477**	.582**	.402**	.613**	.504**	.545**	.606**	.418**	.450**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	100	100	100	100	100	100	100	100	100	100	100

*. Correlation is significant at the 0.05 level (2-tailed).
 **. Correlation is significant at the 0.01 level (2-tailed).

The 8th figures. Product Moment validity test output

The value of N indicates the amount of data, which is 100 data. Two asterisks in the total_score column indicate that the significant value used is 1%. Based on the value of N and significance, the value of the r table is 0,256. This number can be searched using the distribution of r values in the table. The correlation coefficient (Pearson Correlation) in the table above shows the calculated r-value. The basis for decision-making on the validity test uses the calculated r-value and sig. (2-tailed).

- If r count > r table, then it is valid
- If r count < r table, then it is not valid
- If sig.(2-tailed) < 0,05, then it is valid
- If sig.(2-tailed) > 0,05, then it is invalid

The results of the Product Moment validity testing data can be seen in table 2.

The 2nd table Analysis of validity test results

No	Correlation/Relation with Skor_total	r count	r table	Sig. (2-tailed)	Result
1	Question_1	0,483	0,256	0,000	Valid
2	Question_2	0,477	0,256	0,000	Valid
3	Question_3	0,582	0,256	0,000	Valid
4	Question_4	0,402	0,256	0,000	Valid
5	Question_5	0,613	0,256	0,000	Valid
6	Question_6	0,504	0,256	0,000	Valid
7	Question_7	0,545	0,256	0,000	Valid
8	Question_8	0,606	0,256	0,000	Valid
9	Question_9	0,418	0,256	0,000	Valid
10	Question_10	0,450	0,256	0,000	Valid

The 2nd table shows the results of the validity test of each question submitted to 100 respondents with the total score obtained. Question_1 to Question_5 are questions from variable X (improvement in the quality of service for the dissemination of information on RAD). Question_6 to Question_10 are questions from the Y variable (User Satisfaction).

Based on the analysis table above, because the value of r count > r table and the value of sig. (2-tailed) < 0,05, it can be concluded that there is a relationship between each question and the total score. Thus, it can be interpreted that the items on the questionnaire are valid.

D. Reliability Test

Reliability testing in this study was carried out statistically using the Alpha Cronbach technique with the help of SPSS. This test is intended to determine the extent to which the results of this study remain the same when measurements are made several times. The reliability test was carried out simultaneously on all question items in the questionnaire. The basis for decision-making can be seen from the value of Cronbach's Alpha.

- a. If Cronbach's Alpha > 0,60, then reliable
- b. If Cronbach's Alpha < 0,60 then it is not reliable

The reliability test output displays several tables.

The 3rd table “Case processing summary” reliability test

		N	%
Cases	Valid	100	100,0
	Excluded ^a	0	0,0
	Total	100	100,0

a. Listwise deletion is based on all variables in the procedure.

The 3rd table is the first output, namely the Case processing summary table. The table above provides information about the number of samples or the number of respondents denoted by N, which is 100 people. The number of valid data is 100%, which means that there is no empty data (all respondents answered all questions).

The 4th table Reliability statistics

Cronbach's Alpha	N of Items
0,681	10

The 4th table is the second output, namely the Reliability Statistics table. N of items shows the information on the number of questions in the questionnaire, namely 10 items. Cronbach's Alpha shows the reliability coefficient (r_{11}) of 0,681. Cronbach's Alpha value of 0,681 > 0,60 means that this questionnaire is reliable or consistent.

The 5th table “Item total statistics” reliability test

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Question_1	39,67	5,456	0,340	0,658
Question_2	40,15	5,402	0,316	0,662
Question_3	39,90	5,081	0,426	0,641
Question_4	40,23	5,573	0,231	0,676
Question_5	40,14	4,950	0,455	0,634
Question_6	39,83	5,294	0,338	0,658
Question_7	40,01	5,141	0,374	0,651
Question_8	39,99	4,980	0,447	0,636
Question_9	40,37	5,427	0,208	0,686
Question_10	39,76	5,457	0,284	0,667

The 5th table is the third output, namely the Item total statistics table. This table provides information on Cronbach's Alpha value for each question item. The Cronbach's Alpha value can be seen in the Cronbach's Alpha column if the item is deleted. Based on the table, it is known that Cronbach's Alpha value is > 0,60, so it can be concluded that all questionnaire questions are reliable or consistent. If the data is collected repeatedly, it will produce the same results.

E. Service Quality Improvement

The author uses the self-report method with qualitative data to explain the extent to which service quality improvements have been made. The author will compare the conditions before and after an increase in the quality of information dissemination services at the Regional Apparatus Organization (RAD).

Before the upgrade, the information dissemination service used the Microsoft Excel application to record all available news information. The RAD subscribed to several newspapers that came every morning. Admin is the person who is responsible for reading and distributing news. News related to the Regional Government in the Special Region of Yogyakarta will be read in its entirety and then recorded into the Microsoft Excel application. Some important points recorded are news headlines, news source media names, and news pages. There are six tables in the Microsoft Excel application, namely the DIY Regional Government table, the Bantul Regency Government table, the Kulon Progo Regency Government table, the Gunungkidul Regency Government table, the Sleman Regency Government table, and the Yogyakarta City Government table. Each table is likened to a news object. If a news story discusses the Bantul Regency Government and the Kulon Progo Regency Government, then all important points will be written in the tables of the Bantul Regency Government and Kulon Progo Regency Government. Especially for the Yogyakarta City Government, there is an additional point, namely the source of the RAD (Regional Apparatus Organization). Admin takes a long time to read and record all the news.

News distribution is carried out directly by the admin to the parties concerned face to face. Therefore, the existing news cannot be distributed directly. Long-distance becomes an obstacle in delivering news. Another obstacle is the busyness of the admin and news recipients. If the admin or the recipient of the news is carrying out other activities that cannot be disturbed, the delivery of news will be delayed and the response to the news will be slow. This mechanism is not suitable if it is used to distribute news that is important and urgent. News media

(newspapers) that have been read will be stored as a form of physical documentation. Data recapitulation as report material is done manually by the admin.

After improving the service, information dissemination activities are carried out using a website-based application. This application is not used for the public at large, only to disseminate internal government information. The Berita Yogya website is managed by an admin who is in full control of the system. Regional Apparatus Organizations (RAD) act as news recipients. Users are given special access rights or ordinary access rights that are used as restrictions in accessing the system.

Admin is in charge of reading news from the media. News distribution is done through a news writing form. Admin is required to write news titles, news media, news pages, news objects, and attachments. Admin can select more than one news object according to the number of objects being discussed in the news. Attachments contain photos or pdf files containing the original manuscript of the news. These attachments are used as documentation that can be downloaded and printed. Admins can also add notes about the news. After clicking the send button, the news will be automatically distributed to each selected news object without the need to meet face to face. This makes the dissemination of news information run faster so that it is suitable for distributing news that is important and urgent.

Admin can monitor the progress of information dissemination of news through the description column that has been provided. Automatically, the admin can find out whether the recipient is active in responding to the news. The comment field allows users to interact with each other and discuss the news that is being discussed. This makes the user's response to the news becomes fast. There are two classifications of news, namely online news, and offline news. Online news comes from online media on the internet. Offline news comes from print media in the form of newspapers, magazines, and so on. Admin has full control over news distribution. Through the delete, restore, and draft menus, the admin can minimize errors in disseminating news information. If there is a writing error due to human error, the news that has been sent can be changed and then sent back. Data recapitulation as report material is carried out automatically by the system which can be easily downloaded and printed by the admin.

The 6th table Before and after comparison

Before	After
Using Microsoft Excel	Using web-based applications
News distribution is slow	News distribution is fast
Delivery of news directly (face to face)	Online news delivery (no face-to-face)
Slow response to news	Fast response to news
Physical documentation (paper)	Online documentation (<i>paperless</i>)
Sources of information come from print media	Sources of information come from print and online media
Input multiple times for each news object	Input once for all news objects
There is no control over the dissemination of news information	There is control over the dissemination of news information
Data recapitulation for reports is done manually	Data recapitulation for reports is done automatically by the system
Limited distance and time	Unlimited distance and time

The 6th table is a comparison table before and after the improvement of service quality. Based on some of the differences that have been explained above, it can be concluded that improving the quality of news information dissemination services at Regional Apparatus Organizations (RAD) has been successful. The quality of website-based news information dissemination services has made great progress and is better than the previous dissemination service.

F. Correlation Analysis

A correlation test is used to determine the relationship between two ordinal scale variables. Based on the normality test that has been carried out, it is known that the existing data are not normally distributed. Therefore, the author uses Kendall's Tau-b test to examine the relationship between improving service quality for dissemination of information on RAD and user satisfaction. The hypotheses used are the null hypothesis (H_0) and the alternative hypothesis (H_a).

H_0 = There is no significant relationship between improvement in the quality of service for the dissemination of information on RAD and user satisfaction.

H_a = There is a significant relationship between improvement in the quality of service for the dissemination of information on RAD and user satisfaction.

The test will be carried out using the help of the SPSS application. There are several interpretations of Kendall's Tau-b test output results. The following is the basis for making decisions on each interpretation:

1. Seeing the relationship between variables

The relationship between variables can be seen based on the significant value.

- a. If the value of sig.(2-tailed) > 0,05 then H_0 is accepted.
 - b. If the value is sig.(2-tailed) < 0,05 then H_0 is rejected.
2. Seeing the level of closeness of the relationship between variables
 The criteria for the level of closeness of the relationship between variables can be seen from the Correlation Coefficient.
- a. Correlation coefficient value 0,00 – 0,25 = very weak relationship.
 - b. Correlation coefficient value 0,26 – 0,50 = enough relationship.
 - c. Correlation coefficient value 0,51 – 0,75 = strong relationship.
 - d. Correlation coefficient value 0,76 – 0,99 = very strong relationship.
 - e. Correlation coefficient value 1,00 = perfect relationship
- Sign * means that the relationship formed has a significant value of 0,05.
 Sign ** means that the relationship formed has a significant value of 0,01.
3. Seeing the direction of the variable relationship
 The direction of the variable relationship can be seen based on the correlation number, which can be positive or negative.

The results of Kendall's Tau-b correlation test can be seen in the 7th table below.

The 7th Table Kendall's Tau-b test results

		X	Y
Kendall's tau_b	X	Correlation Coefficient	1,000
		Sig. (2-tailed)	. 0,000
		N	100
	Y	Correlation Coefficient	0,400**
		Sig. (2-tailed)	0,000
		N	100

** . Correlation is significant at the 0,00 level (2-tailed).

The 7th table is the output of Kendall's Tau-b test, namely the Correlations table. Here are some interpretations of the results of the output correlations:

1. The value of sig. (2-tailed) of 0,000 is less than 0,05, then H_0 is rejected and H_a is accepted. There is a significant relationship between improvement in the quality of service for the dissemination of information on RAD and user satisfaction.
2. The correlation Coefficient of 0,400 indicates that the relationship between improvement in the quality of service the dissemination of information on RAD and user satisfaction is "strong enough". Two asterisks (**) mean that the relationship formed has a significant value of 0,01.
3. The correlation Coefficient of 0,400 means that there is a positive relationship between the variables of improvement in the quality of service the dissemination of information on RAD and user satisfaction. This positive or unidirectional relationship means that if the quality-of-service increases, user satisfaction will also increase.

Based on the above interpretation, it can be concluded that the relationship between improvement in the quality of service the dissemination of information on RAD, and user satisfaction is significant, quite strong, and unidirectional.

G. Impact on User Satisfaction

The development of technology is an important factor in the development of the Smart City concept. To support Smart City, public services need to be improved using existing technology. Services that are still manual are starting to be changed gradually into digital forms that can make it easier for service users. A service is said to be good if the perception of the service matches the expectations of its users. User satisfaction can be assessed from the response given after the user uses a service.

To support the Jogja Smart City, the quality of news information dissemination services was improved at the Regional Apparatus Organizations in Yogyakarta. News information dissemination service which was originally done manually using Microsoft Excel now uses a website-based news application. The success of improving news information dissemination services can be measured based on user satisfaction through scientific research conducted by the author.

The results of the correlation test show that the value of sig. (2-tailed) of 0,000 is smaller than 0,05, which means that H_0 is rejected and H_a is accepted. There is a significant relationship between improvement in the quality of service for the dissemination of information on RAD and user satisfaction. There is a positive impact between

improvement in the quality of service for the dissemination of information on RAD and user satisfaction. This means that users are satisfied with the existing Berita Yogya application services.

User attitudes towards service are subjective, therefore user satisfaction is very difficult to measure. User satisfaction is also influenced by many factors.

IV. CONCLUSION

The quality of website-based news information dissemination services has made great progress and is better than the previous dissemination service on RAD. The test results show the value of sig. (2-tailed) of 0,000, the Correlation Coefficient of 0,400, so it can be concluded that the relationship between improvement in the quality of service dissemination of information on RAD, and user satisfaction is significant, quite strong, and unidirectional.

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