

Indonesian Puslit (Centre Of IT Solution) Website Analysis Using Webqual For Measuring Website Quality

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Abstract - *Media websites are all available information on the Internet. Needs also use websites in need in an enterprise, companies can more easily promote their products using the website penjualan. Kualitas services in disseminating information on the sales website has become a very important requirement, as this may impact the level of subscriber satisfaction and community wide that will access the company's website. INDONESIA CV.PUSLIT website. INDONESIA Research Center or the IT Solution Center Indonesia is one of the companies engaged in the sale of which is highly dependent to the Internet. It is important for a website to be able to make the Research Center INDONESIA assessment of the quality of the website using the WebQual is one method or technique of measuring the quality of the website is based on the perception of the end user. This is because the Research Center is a company focused to serve the development of the product - software products (software or system) based Information Technology is marketed only through the website. This method is an extension of the widely used SERVQUAL prior to the measurement of service quality*

Keyword : *Webqual, Website, information, quality, useability, service, interaction*

INTRODUCTION

Website or World Wide Web (WWW) is all available information medias in Internet. The need of using website is also needed in a company, A company usually is easier to promote their product using website sales. The service quality in sharing informations on this website has been important needed because it will give impact in level customer satisfaction and all citizens who want to access it. At the end of improving that service quality will become as the indicator of successful of that company on sailing and customer's level satisfaction. The Website of IT Solution Centre company is one of company that join in sailing which really related with internet. It's really important for PUSLIT Indonesia website to make appraisal or scoring on their website quality that give some views of their characteristics program from a service quality of web design, information quality, and interaction quality using webqual which is one of method or website quality leveling method based on the last user. This method is an improving from SERVQUAL that has been used by many companies on service quality measurement. Webqual has been developed since 1998 and has got some interactions on dimension stacking and the grain questions. Webqual 4.0 is designed based on observation in three (dimension) areas quality such as information quality, usability, and service interaction.

PROCEDURE

Webqual has been developed since 1998 and has got some interactions on dimension stacking and 14 grain questions (Barnes and Vidgen, 2002). Webqual 3.0 was designed by observing in 3 areas, such as :

1. The information quality from information system observation (Information Quality). Information Quality is the quality of content that available on site, accepted or not

- accepted for user purpose like accuracy, the form and the relation (Barnes and Vidgen, 2002, p. 122)
2. The interaction and the service quality from information system quality observation (Service Interaction Quality). System interaction quality is a quality from service interaction that happen by the users when they investigate into the deeper site, which will view in believing and empathy. For example: The issue from the safing of information and transaction, product delivery, personalisation, and communication with site's owner (Barnes and Vidgen, 2002, p. 122).
 3. The usability from human computer interaction. Usability is a quality that related with site design, for example the appearance, the easier way of using navigation, and the view that will be sent to the user.

The quality measurement website model is made based on Barnes and Vidgen, 2003, The list of the question is made by 3 webqual dimension.

See on this table below

Table 4 WebQual 4.0 Instrument

Quality	Description
Usability	
1	I find the site easy to learn to operate
2	My interaction with the site is clear and understandable
3	I find the site easy to navigate
4	I find the site easy to use
5	The site has an attractive appearance
6	The design is appropriate to the type of site
7	The site conveys a sense of competency
8	The site creates a positive experience for me
Information Quality	
9	Provides accurate information
10	Provides believable information
11	Provides timely information
12	Provides relevant information
13	Provides easy to understand information
14	Provides information at the right level of detail
15	Presents the information in an appropriate format
Interaction Quality	
16	Has a good reputation
17	It feels safe to complete transactions
18	My personal information feels secure
19	Creates a sense of personalization
20	Conveys a sense of community
21	Makes it easy to communicate with the organization
22	I feel confident that goods/services will be delivered as promised
Overall impression	
23	My overall view of this Web-site

Accordint to webqual theory, there is 3 dimentions that represent a website quality, such as usability, information quality, service interaction. As the ilustrated on the table 4. The user perception about a good information system is a system where the users feel satisfied because of the website quality. This quality is composed by 3 dimentions from webqual 4.0. The previous research suggest that webqual dimention can predict the user satisfaction and the user's purpose on using the system again.

RESULT

Indonesian Puslit Website or The centre of IT solution Indonesia sailing or endorsment website from cv. puslit indonesia. The domain name of puslit Indonesia is puslit.com, because puslit is a company that foccus to serve developing software and system products based on information and technology (IT) that is only sold by this website. Making website that will be the main media for sailing must has good stabilitation and perfect accuration. From description above about Indonesian puslit website , we conclude that it is really important to able to make scorning of the website quality that will be used.

The data can be got from this observation result is qualitative data. The qualitative data is got from the quitioner respon of responden user and developer on puslit's website observation. This observation is observed to the responden who has used indonesian puslit website. The responden

is an actor who is drawn on use case.

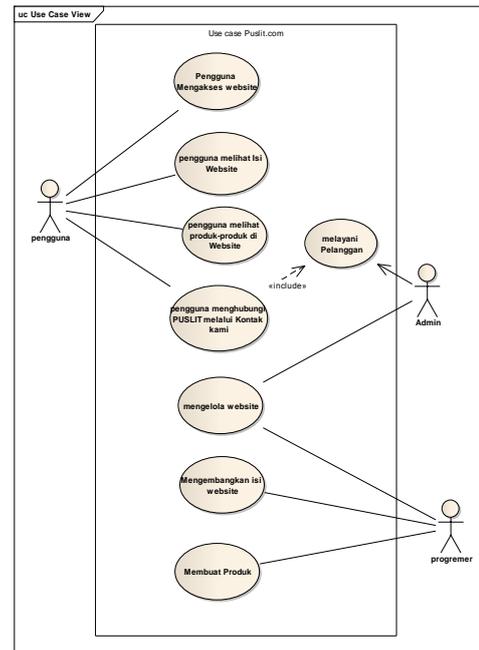


Diagram on picture 1

Gambar 10. Use Case Diagram

The Quitioner Result

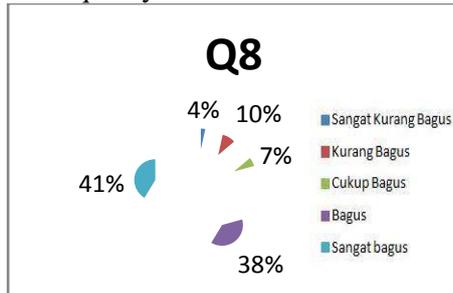
From all quitioner that we're got, 30 respondens are doing analysis data using microsoft office excel. The first step that we must be done is doing validation and rehabilitation test from the questions on quitioner. The validation and rehabilitation testing are the process for testing all available grain question on the quitioner, are the grain questions valid and reliable? If it is already valid and reliable it means those questions already can be used to measure the factors. The next step is testing all the factors, are them already valid to measure available constuct? In that grain testing, can be be has grain is not valid and reliable, so it must be replaced with another question. The validation testing is doing by seeing corrected item-total correlation dalam on factor analysis. Number of corrected item-total correlation is from the correlation of moment product between the grain

question that will be tested and the no. Of grain question.

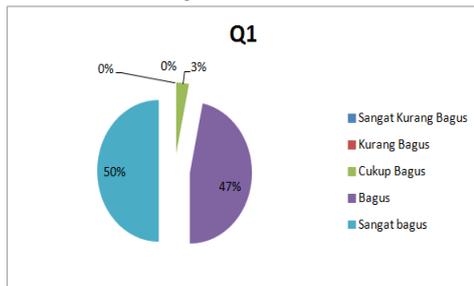
The Analisisi Data Of Quitioner Result

a. Web Information Quality

in web information quality has 8 question. Every question has level result and if it is compared by the number of the statistics will get last result to web information quality.



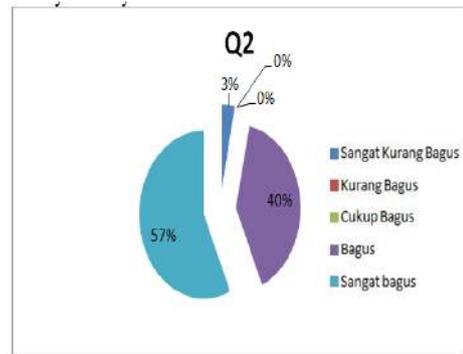
1. Question “I find the site easy to learn to operate?”.



Picture 11. The percentage chart of user response quitioner Q1

Based on picture 11, it shows 0% answer very not good, 0% answer not good, 03% answer good enough, 47% answer good and 50% answer very good. So from the level percentage that many respondens answer very good.

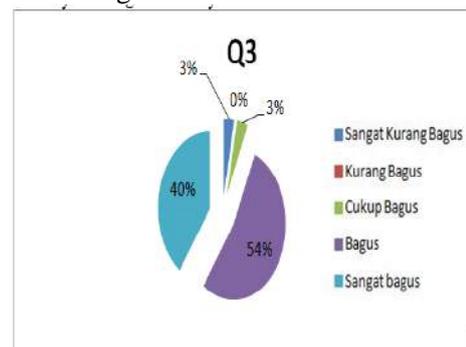
2. Question “My interaction with the site is clear and understandable?”.



Picture 12. The percentage chart of user response quitioner Q2

Based on picture 12, it shows 3% answer very not good, 0% answer not good, 0% answer good enough, 40% answer good, 57% answer very good, So from the level percentage that many respondens answer very good.

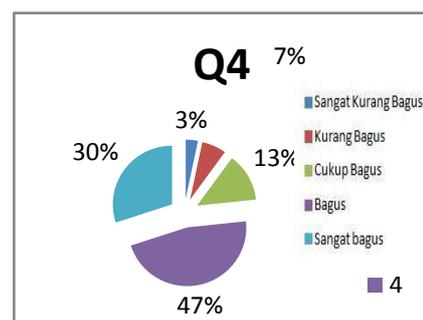
3. Question “I find the site easy to navigate?”



Picture 13. The percentage chart of user response quitioner Q3

Based on picture 13, it shows 3% answer very not good, 0% answer not good, 3% answer good enough, 54% answer good, 40% answer very good. So that by percentage level many respondens answer very good.

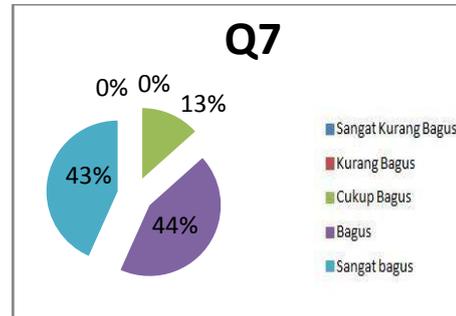
4. Question “I find the site easy to use.”



7. Questions “The site conveys a sense of competency.”

Picture 14. The percentage chart of user response quitioner Q4

Based on picture 14, it shows 3% answer very not good, 7% answer not good, 13% answer good enough, 47% answer good, 30% answer very good. So that by percentage level many respondents answer good.



5. Question “The site has an attractive appearance”

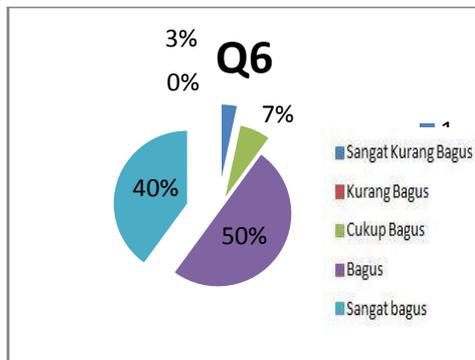
Picture 15. The percentage chart of user response quitioner Q5

Based on picture 15, it shows 3% answer very not good, 0% answer not good, 10% answer good enough, 47% answer good, 40% answer very good. So that by percentage level many respondents answer good.

Picture 17. The percentage chart of user response quitioner Q7

Based on picture 17, it shows 0% answer very not good, 0% answer not good, 13% answer good enough, 44% answer good, 43% answer very good. So that by percentage level many respondents answer good.

6. Question “The design is appropriate to the type of site”.



Picture 16. The percentage chart of user response quitioner Q6

Based on picture 16, it shows 3% answer very not good, 0% answer not good, 7% answer good enough, 50% answer good, 40% answer very good. So that by percentage level many respondents answer very good.

8. Question “The site creates a positive experience for me.”

Picture 18. The percentage chart of user response quitioner Q8

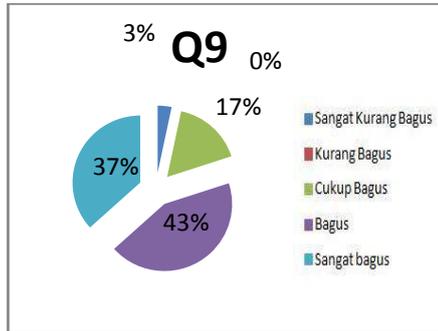
Based on picture 18, it shows 4% answer very not good, 10% answer not good, 7% answer good enough, 38% answer good, 41% answer very good. So that by using percentage level many respondents answer very good.

In website information quality from 8 question, that consist of Q1,Q2,Q8 the result is very good and the result for the rest such as , Q3,Q4,Q5,Q6,Q7 is good. Finally the last result of website information quality is in good level.

B. Site Design Quality

In site design quality has 7 questions. Every bquestions has level result and after cmpparing with the no. Of the statistics will get final level result to site design quality.

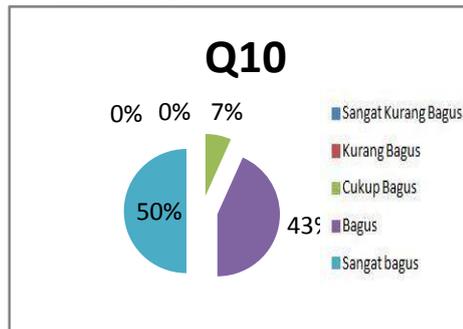
9. Question “Provides accurate information?”



Picture 19. The percentage chart of user response quitioner Q9

Based on picture 19, it shows 3% answer very not good, 0% answer not good, 17% answer good enough, 43% answer good and 37% answer very good .So that by using percentage level many respondens answer good.

10. Question “Provides believable information

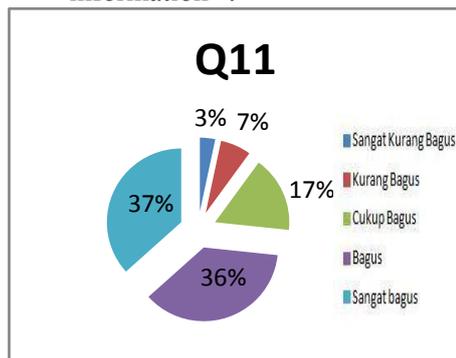


Picture 20. The percentage chart of user response quitioner Q10

Based on picture 20, it shows 0% answer very not good, 0% answer not good, 7% answer good enough, 43% answer good, and the rest say that it is very good(50%).

So that by using percentage level many respondens answer good.

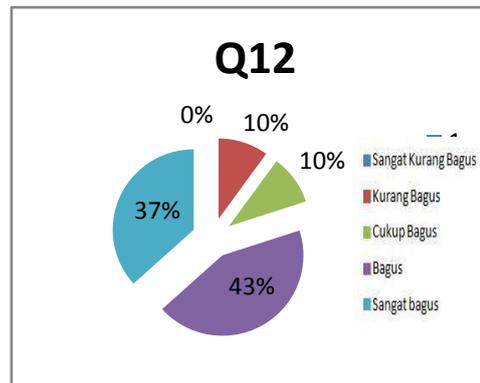
11.Question “Provides timely information” .



Picture 21. The percentage chart of user response quitioner Q11

Based on picture 21, it shows 3% answer very not good, 7% answer not good, 17% answer good enough, 36% answer good, 37% answer very good. So that by using percentage level many respondens answer very good.

12.Question “Provides relevant information” .



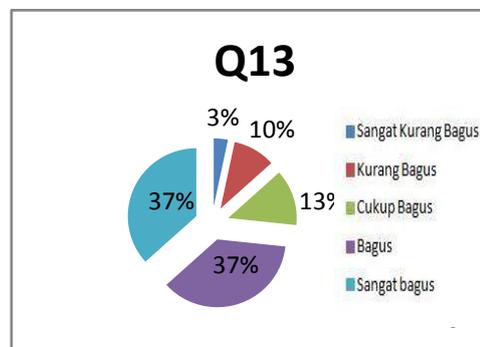
Picture 22. The percentage chart of user response quitioner Q12

Based on picture 22, it shows 0% answer very not good, 10% answer not good, 10% answer good enogh, 43% answer good, and 37% answer very good.

So that by using percentage level many respondens answer good.

13. Question “Presents the information in an appropriate format ”

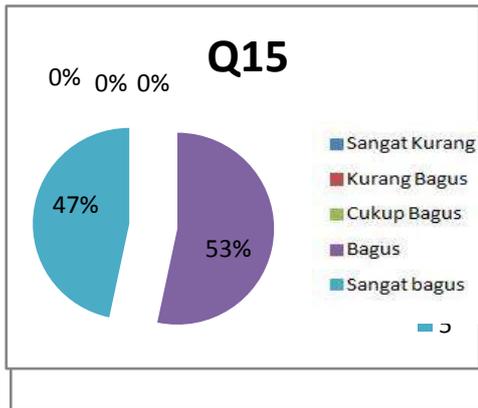
Picture 23. The percentage chart of user



response quitioner Q13

Based on picture 23, it shows 3% answer very not good, 10% answer not good, 13% answer good enough, 37% answer good, and 37% answer very good. So that by using percentage level many respondents answer very good.

14. Question “Provides information at the right level of detail”



Picture 24. The percentage chart of user response questioner Q14

Based on picture 24, it shows 7% answer very not good, 0% answer not good, 17% answer good enough, 33% answer good, and 43% answer very good. So that by using percentage level many respondents answer very good.

15. Question “Presents the information in an appropriate format”

Picture 25. The percentage chart of user response questioner Q15

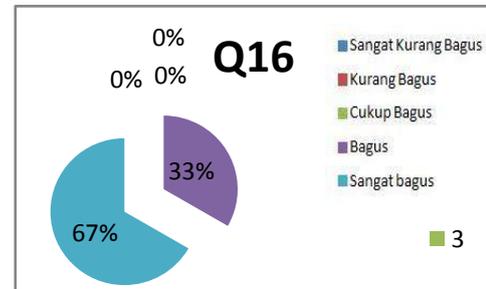
Based on picture 25, it shows 0% answer very not good, 0% answer not good, 0% answer good enough, 53% answer good, and 47% answer very good. So that by using percentage level many respondents answer good.

C. Usability Quality

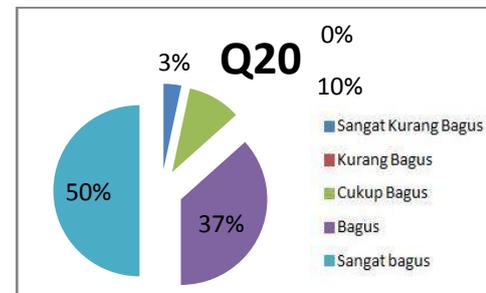
In the use of quality there are 7 questions. Every question has level result

and after comparing with the no. Of the statistics will get final level result for using of quality.

16. Question “Has a good reputation”

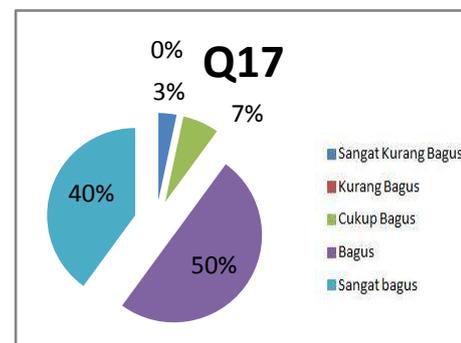


Picture 26. The percentage chart of user response questioner Q16



Based on picture 26 , it shows 0% answer very not good, 0% answer not good, 0% answer good enough, 33% answer good, 67% answer very good. So that by using percentage level many respondents answer very good.

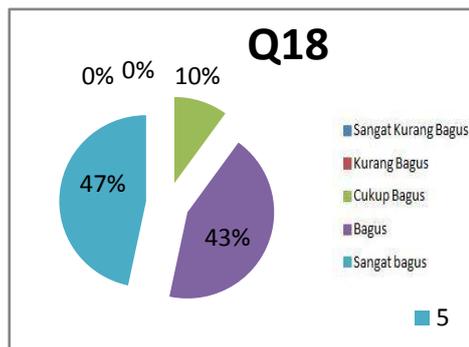
17. Question “It feels safe to complete transactions”



Picture 27. The percentage chart of user response questioner Q17

Based on picture 27 , it shows 3% answer very not good, 0% answer not good, 7% answer good enough, 50% answer good, 40% answer very good. So that by using percentage level many respondents answer good.

18. Question “My personal information feels secure ”



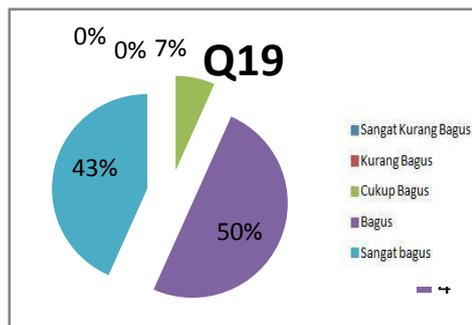
Picture 28. The percentage chart of user response quitioner Q18

Based on picture 28 , it shows 0% answer very not good, 0% answer not good, 10% answer good enough, 43% answer good, 47% answer very good. So that by using percentage level many respondents answer very good.

19. Question “Creates a sense of personalization”

Picture 29. The percentage chart of user response quitioner Q19

Based on picture 29 , it shows 0% answer very not good, 0% answer not good, 7% answer good enough, 50% answer good, 43% answer very good. So that by using percentage level many respondents answer good.

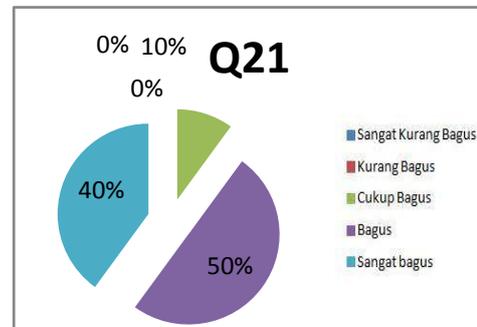


20. Question “Conveys a sense of community”

Picture 30. The percentage chart of user response quitioner Q20

Based on picture 30 , it shows 3% answer very not good, 0% answer not good, 10% answer good enough, 37% answer good, 50% answer very good. So that by using percentage level many respondents answer very good.

21. Question “Makes it easy to communicate with the organization.”

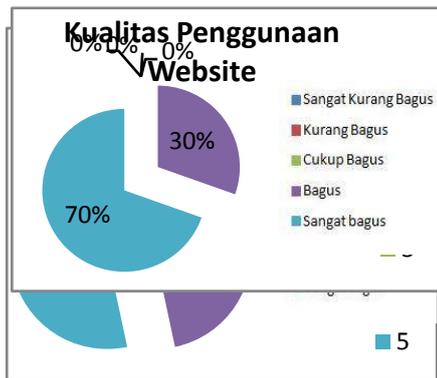


Picture 31. The percentage chart of user response quitioner Q21

Based on picture 31 , it shows 0% answer very not good, 0% answer not good, 10% answer good enough, 50% answer good, 40% answer very good. So that by using percentage level many respondents answer good.

22. Question “I feel confident that goods/services will be delivered as promised”

Picture 32. The percentage chart of user response quitioner Q22



Based on picture 32, it shows 0% answer very not good, 0% answer not good, 7% answer good enough, 40% answer good, 53% answer very good. So that by using percentage level many respondents answer very good.

In website information quality from 8 question, that consist of Q16,Q18,Q20,Q22 the result is very good and the result for the rest such as, Q17,Q19,Q21 Q3, is good. Finally the last result of website information quality is in very good level generally.

Website Quality	
Characteristics	Sacle of website quality
Usibility	B
Information Quality	SB
Interaction Quality	SB

Table 5 The last result of quitioner

The Analysis data of interview result

This analysis is doing after did interview, so it will get last same level in quitioner such as very not good, not good, good enough, good, and very good. The level result from every available risk in interview gives result such as very not good 0%, not good 0%, good enough 0%, good 30%, and very good 70%. The quality of using website has last level result is very good or sangat baik (SB).

The Merging data analysis results of quitioners and interviews

After analyze the result of quitioner and interview those result will be mixed, so will give website measurement result puslit.com based on webqual 4 website quality.

The Conclusion

After analyze result of quitioner and interview, those result will be mixed and compared the needed level in instrument of webqual 4.

The Quality of Indonesian Puslit's site			
Characteristics	quitioner	Interview	Result
Usability	B	SB	SB
Information Quality	SB	B	SB
Interaction Quality	SB	SB	SB

Table 6 The obsevation result of PUSLIT's site based on webqual

Based on the submitting rersult and analyze data on this observation, so it can be taken a coclusion that 3 available characteristics in webqual such as usability, information quality, interaction quality are got very good result. (SB)

From 23 grains questions that make dimation from webqual 1 the questions is not because only include some and not for all and it is already representative by many factors questions above. From 3 dimitions webqual 4, only the function and the interaction quality that many people think influenced the customer's satisfying. Meanwhile the dimation of information quality is thought don't have any influenced to site user's satifaction. It

also can be as the seller's note to improve their content quality from their own site.

REFERENCE

[1] Barnes and Vidgen. (2002). An integrative approach to the assessment of e-commerce quality,. *Journal of ElectronicCommerce Research*, Vol. 3 No. 3.

[2] Handini. (Juni 2012). Pengukuran Mutu Layanan Perpustakaan Perguruan Tinggi Dengan Menggunakan Metode Webqual (Studi Kasus: Web Library Perguruan Tinggi Swasta Dan Perguruan Tinggi Negeri). *Jurnal Penelitian IPTEK-KOM* Volume 14, No. 1, .

[3] Mulyana, I. (2012). Instrumen Pengukuran Web Based Learning (WBL) Sekolah.

[4] Munawar. (2005). *Pemodelan Visual dengan UML*. Yogyakarta: Graha Ilmu.

[5] Prabowo Pudjo Widodo, H. (2011). *Menggunakan UML*. Bandung: Informatika.

[6] Risyad, F. B. (n.d.). Pengaruh Kualitas Web Terhadap Tingkat Kepuasan Penggunaan.

[7] Saputro, H. W. (2007, Agustus 01). Pengertian Website dan Unsur-unsurnya.

[8] Stuart Barnes , dan Vidgen,. (2001). *WebQual: An Exploration of Web-site Quality . An Exploration of Web-site Quality .*

[9] Suryanto. (2008). *Soft Compiuting Membangun Mesin Ber-IQ Tinggi*. Bandung: Informatika.

[10] Tarigan, J. (2007). User Satisfaction using WebQual Instrument 47 : A Research on Stock Exchange of Thailand (SET). *Jurnal Akuntansi dan Keuangan. , 1:34.*

[11] Vidgen, S. J. (2003). Measuring Web site quality improvements: a case study of the forum on strategic management knowledge exchange. 297-308.

[12] Wahana. (2010). *Membangun website tanpa Modal*. Semarang: Andi.