

## USER EXPERIENCE OF THE ACADEMIC COMMUNITY IN THE ISLAMIC LIBRARY AND INFORMATION SCIENCE STUDY PROGRAM AT UIN SMH BANTEN ON DIGITAL LIBRARY APPLICATIONS USING THE WEBQUAL 4.0 METHOD

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### Abstract

*As time goes by, technology is also developing rapidly, making everything digital, including libraries, which are also experiencing developments where all library collections have been digitized. Conventional libraries have become digital libraries. One application that has many digital collections is iPusnas. This national digital library has a collection of 73,302 book titles and 891,397 ebook copies, which can be downloaded and installed on Playstore/Appstore. This research aims to determine user satisfaction with the iPusnas application based on user experience. This research method uses quantitative methods. The data collection techniques in this research are literature study and questionnaire data. The data analysis technique uses the Webqual 4.0 method. The results of this research are that respondents are very satisfied with the iPusnas application and do not experience problems when logging in. Many also agree that the queue to borrow collections on the iPusnas application is very long. Hence, the writer/researcher wants to suggest increasing the number of copies of books (ebooks) that people can read—users of the iPusnas application.*

**Keywords:** *User Experience, Mobile App, Digital Library*

### INTRODUCTION

Along with the times, technology has experienced very rapid developments, which now make things easier for everyone because of technology. With the development of technology, libraries are also changing from conventional to digital libraries. Digital libraries are alternative libraries that can respond to every need of information seekers (Widayanti, 2015), making it easier for users to read or get information online, such as the iPusnas application. Therefore,

researchers will only focus on digital library applications, namely the iPusnas application. The iPusnas application is a digital library application with social media features created and managed by the National Library of the Republic of Indonesia to help access various books online for free (Jumino, 2017).

The iPusnas application has many features that can help users use the application, from the book lending feature to the search feature. Based on the Playstore/Appstore ratings regarding the iPusnas application, most users provide assessments or ratings and reviews. Some give an assessment or rating of 5 stars to those who are satisfied with the application, and some give 1 star to those unsatisfied. Therefore, researchers want to know to what extent users are satisfied with the iPusnas application among the academic community in the Islamic Library and Information Science study program at UIN SMH Banten.

Researchers used a questionnaire to determine the user experience of the iPusnas application in the academic community in the Islamic Library and Information Science study program. In the context of the user experience of the iPusnas application, researchers use a questionnaire to determine the user experience of the application in the context of iPusnas. Application user experience is an important aspect that assesses how satisfied and how comfortable a person is in using the iPusnas application. User experience is a person's perception and response to using a product, system, or service. A person's sense of satisfaction and comfort with a product, system, or service is determined by user experience (UX) (Wiryawan, 2011). User Experience (UX) is essential for exploring and helping fulfill user (human) oriented product development needs so that UX can help in application development.

## RESEARCH METHOD

The type of research used in this research uses a quantitative approach, with data collection techniques using questionnaires and the WebQual 4.0 method for data analysis. The sources used are sources related to user satisfaction with the iPusnas application.

The questionnaire in this study used 5 Likert scales. The Likert scale has four more questions combined to form a score/value representing individual characteristics (Budiaji, 2013). The questionnaire was created using Google Forms and distributed online to respondents for three days, which the researcher then processed. The population and sample to be studied is the academic community consisting of students and lecturers in the Islamic library and information science study program at Sultan Maulana Hasansuddin State Islamic University, Banten; 33 respondents are the number of samples used in this research.

Researchers chose the iPusnas application, which is one of the information services belonging to the National Library of the Republic of Indonesia, as their consideration, namely because:

1. iPusnas is a digital information service portal that provides complete books that can be borrowed, received, and saved
2. Many people have used the iPusnas application, making distributing questionnaires easier, or many will become respondents.

## RESULT AND DISCUSSION

### Webqual Version 4.0

Webqual is a system or approach that measures the quality of a website by looking at how users perceive it (Sanjaya, 2012). The Webqual method can help in this research because it

is what the researcher wants to examine. Webqual was developed in 1998 and has experienced several interactions in preparing dimensions and questions. Webqual can be applied in evaluating IT services to understand user recognition and expectations so that it can be a consideration for improving the quality of IT services (Andry et al., 2019). Barnes & Vidgen (2005) say that measurements using the WebQual 4.0 method are more effective in measuring the service quality of a website, so this method has been widely accepted and has been used by many researchers (Giyanti & Suparti in Wijayanti, 2023)

The data analysis in this research used UI validity, reliability testing, and linear regression using the SPSS application. After the questionnaire data is collected, the next step is to test the validity of the questionnaire results.

### Validity Test

The validity test uses a table value with a significance of 0.05. For the rtable value with  $n = 33$ , the rtable value is 0.334. So, to test validity, there is a condition, namely  $\text{count} > \text{table}$ , so if the count is more significant, then it is declared valid, and conversely, if the count is smaller than the table, then it is declared invalid. The validity test was carried out using the Pearson correlation coefficient formula, with the results as shown in the following table:

**Table 1. Validity Test Results**

No question items	rcount	rtable	status
1	0,755	0,334	Valid
2	0,683	0,334	Valid
3	0,584	0,334	Valid
4	0,672	0,334	Valid
5	0,734	0,334	Valid
6	0,757	0,334	Valid
7	0,640	0,334	Valid
8	0,692	0,334	Valid
9	<b>0,259</b>	0,334	<b>Invalid</b>
10	<b>0,270</b>	0,334	<b>Invalid</b>
11	0,661	0,334	valid
12	0,866	0,334	valid

Based on table 1. Based on the results of calculations using the SPSS application, it was found that in questions number 9 and number 10 it was found that  $r \text{ calculated} < r \text{ table}$ , so that questions number 9 and number 10 were declared invalid. For this reason, questions number 9 and number 10 will not be included in the calculation of the reality test.

### Reliability Test

Next, the researcher carried out a reliability test on the data which had passed the validity test. The reliability test was carried out by checking the Cronbach's Alpha value. Measurements using this method are widely used in many studies. The following is the Cronbach's Alpha interpretation table:

**Table 2. Interpretation of Cronbach's Alpha**

Interval	Information
< 0,399	Low Reliability
0,4- 0,599	Medium Reliability
0,6 - 0,799	High Reliability
0,8 - 1	Very High Reliability

Reliability test using SPSS with the following results:

**Table 3. SPSS Output Reliability**

**Case Processing Summary**

		N	%
Cases	Valid	33	100.0
	Excluded <sup>a</sup>	0	.0
	Total	33	100.0

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

**Tabel 4. Output SPSS**

**Reliability Statistics**

Cronbach's Alpha	N of Items
.734	11

A reliability test using Cronbach's Alpha formula yielded a result of 0.734, which can be stated to have high reliability based on the interpretation table. So, the 11 questions in the questionnaire are valid and reliable.

### Regression Test

To determine the relationship between the independent variable (user satisfaction) and the dependent variable (digital library application), a Regression test or correlation test was carried out using the SPSS application with the following results:

**Table 5. Determination Coefficient**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.143 <sup>a</sup>	.020	-.011	4.722

a. Predictors: (Constant), VAR00001

The table above explains that the correlation value or R-value is 0.143. Meanwhile, the variable's influence on variable Y is 0.20. So, the analysis results show 20%, while other variables influence the rest.

Next, to predict variable x against variable y, simple regression analysis is used with the formula  $Y=a + bX$ . With the following results:

**Table 6. Regression Coefficients**

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.165	7.168		.302	.765
	VAR00001	.155	.193	.143	.802	.428

a. Dependent Variable: VAR00002

From this table, column B in constant (a) is 2.165 while b = 0.155, so a simple regression equation is obtained, namely  $Y= 2.165 + 0.155 X$ .

## CONCLUSION

Based on the results of data collection and analysis in this research, it can be concluded that: Two of the 12 questions were invalid: "I often experience problems when logging in" and "I feel dissatisfied with the features in the iPusnas application." Therefore, the respondents in this study were very satisfied with the iPusnas application and did not experience problems when logging in. Many respondents agreed with the question, "The queue for borrowing collections on the iPusnas application is very long."

This research only took respondents from the academic community in the Islamic library and information science study program who currently use or have used the iPusnas application. Many respondents agreed with the question, "The queue for borrowing collections on the iPusnas application is very long." Therefore, researchers suggest increasing the number of copies of books (e-books) that users can read on the iPusnas application. Researchers also suggest that further research be carried out over a very long period for distributing questionnaires and having more respondents than in this study so that it can be analyzed better.

## SUGGESTION

The recommendations for the future are (1) Improving coordination and communication between the Bank Indonesia Bengkulu Library, RASBI, GenBI and the Bengkulu Reading Community with regular meetings and discussion forums which can be a means for sharing experiences, program updates, and solutions to obstacles that may arise; (2) Develop a strong financial sustainability model for the Children's Reading Corner Program. This can involve collaboration with external parties, such as companies or potential donors, as well as considering a community-based approach involving voluntary contributions from local communities; (3) Arrange additional educational programs that can support social inclusion goals, such as educational workshops, arts activities, or other skills learning. This can enrich children's experiences and increase the appeal of the program; and (4) Increasing the

effectiveness of usefulness, promotion to the public who wish to share and update reading collections from both the Bank Indonesia Library and external donors who wish to donate book collections.

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### REFERENCES

- Andry, J.F., Christianto, K., & Wilujeng, F.R. (2019). Menggunakan Webqual 4.0 dan Analisis Kinerja Penting untuk Mengevaluasi Website E-Commerce. *Jurnal Rekayasa Sistem Informasi dan Intelijen Bisnis*, 5(1), 23. <https://doi.org/10.20473/jisebi.5.1.23-31>
- Budiaji, W. (2013). Skala Pengukuran Dan Jumlah Respon Skala Likert (Skala Pengukuran dan Jumlah Respon dalam Skala Likert). *Jurnal Ilmu Pertanian Dan Perikanan*, 2(2), 127–133. <http://umbidharma.org/jipp>
- Jumino, M.A.P.dan. (2017). Efektivitas Aplikasi Ipusnas Sebagai Sarana Temu Balik Informasi Elektronik Perpustakaan Republik Nasional Indonesia. x, 308 hlm. <https://books.google.co.id/books?id=rBVNDwAAQBAJ&printsec=frontcover&dq=tahap-tahap+penelitian+kuantitatif+dan+definisi&hl=en&sa=X&ved=0ahUKEwjDuYHTgoLmAhWL4jgGHXQEBpAQ6AEILDAA#v=onepage&q&f=false>
- Sanjaya, I. (2012). Pengukuran Kualitas Layanan Website Kementerian Kominfo Dengan Menggunakan Metode Webqual 4.0. *Jurnal Penelitian IPTEK-KOM*, 14(1), 1–14. [www.kominfo.go.id](http://www.kominfo.go.id)
- Widayanti, Y. (2015). Pengelolaan Perpustakaan Digital. <http://repository.radenfatah.ac.id/id/eprint/8513>
- Wijayanti, ST dan L. (2023). Pengukuran Kualitas Layanan Aplikasi Ipusnas Terhadap Kepuasan Pengguna Dengan Menggunakan Metode Webqual 4.0. *Kunjungan Pustaka*, 25(1).
- Wiryawan, MB (2011). User Experience (Ux) sebagai Bagian dari Pemikiran Desain dalam Pendidikan Tinggi Desain Komunikasi Visual. *Humaniora*, 2(2), 1158. <https://doi.org/10.21512/humaniora.v2i2.3166>