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The Effect of System Quality and Information Quality of The Student Academic Portal on User Satisfaction in Accounting Students

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Abstract: This study aims to analyze the effect of system quality and information quality of the academic portal on user satisfaction among accounting students at Universitas Pembangunan Panca Budi. The method used in this research is a quantitative approach with descriptive and analytical design. Data was collected through an online questionnaire distributed to 323 students, with the sample determined using the Slovin formula, resulting in 76 respondents. Data analysis was carried out using multiple linear regression with the help of SPSS software version 21. The results showed that there was a significant positive influence between system quality and information quality on user satisfaction. Students expect improvements in portal accessibility, especially when filling out KRS, as well as reducing distractions such as annoying advertisements. This study concludes that improving the quality of academic portal systems and information can increase user satisfaction, which in turn supports a more effective teaching and learning process.

Keywords: Academic Portal, System Quality, Information Quality, User Satisfaction

Introduction

In general, the growth of information technology in the world is enormous. The existence of information technology seems to make the lives of its users easier. Information technology has become very important for educational institutions because globalization makes the flow of information faster. This is very important for educational institutions to remain competitive and provide satisfactory services for students. According to (Purwati et al. 2018) states "an academic information system that is sufficient for students, teaching staff, and the Academic Administration of Higher Education must characterize quality higher education institutions". "Information systems for academic management are becoming more important along with advances in information technology" (Safrian Aswati, Neni Mulyani, Yessica

Siagian 2015).

In today's digital era, academic portal is one of the important tools to support learning and management of higher education in today's internet era. The user experience of academic portals, especially students, is greatly influenced by the quality of the system and its information. System quality includes technical aspects such as reliability, speed, and ease of access, while information quality includes accuracy, relevance, and completeness of the data presented. The results of research (Purwati, A. A. and Sitompul 2017) "show that academic information systems such as online registration, online KRS filling, academic website utilization, and lecturer e-learning are important components of one-dimensional college quality. In other words, the attributes of academic information systems must be considered because if they are not fulfilled, they cause user dissatisfaction". In addition, research conducted by (Hamzah and Purwati 2017) "found that academic information systems play an important role in supporting academic quality, with infrastructure to provide academic information" (Hamzah, Purwati, and Kadir 2018).

Universitas Pembangunan Panca Budi realizes that effective and high-quality academic data management is essential to support all academic activities, including lecturer and student data management, lecture scheduling, curriculum arrangements, and student registration. "The purpose of the academic management information system is to improve communication between lecturers and students, improve the decision-making process, and improve the efficiency of academic data management" (Agnes and Wattimena 2019). "Generally, universities that want to have their own software for Academic Information Systems include relatively large costs, undeveloped human resources or technology, unstable internet infrastructure and networks, and software that does not meet the requirements" (Rostini et al. 2023). Adequate human resources, both in terms of quantity and quality, are needed in the procurement of a university's academic information system to carry out monitoring and infrastructure development. "Technicians must always be ready to maintain the system and repair it in case of damage. The inadequate number and quality of human labor will have an impact on the performance of the running information system" (Maimunah 2023).

Universitas Pembangunan Panca Budi has an information system known as "Academic Portal" with the address Log In To UNPAB which allows all academic activities. Universitas Pembangunan Panca Budi to access information through the Internet more quickly. This portal is expected to help all academicians conduct academic activities and the teaching-learning process. Students can use all facilities in the academic portal by entering their username and password. The portal is designed to provide services and resources that can be accessed by students anytime and anywhere to fulfill their academic needs.

Based on the questionnaire that has been made containing essay questions such as advantages, disadvantages and suggestions, the author found various student opinions regarding the quality of the Academic Portal system. The advantages are the

ease with which the portal is accessed by students. There are also shortcomings, for example, during the process of taking KRS at the beginning of the semester, some students have difficulty accessing the UNPAB Academic Portal because many access it simultaneously so that the UNPAB Academic Portal crashes or cannot be accessed, in addition, there are often annoying advertisements when accessing the Portal, If these problems exist, students will definitely not be satisfied with the UNPAB Academic Portal. System and Information Quality theory is the basis of this problem. And the advice given is to continue to improve the Portal, especially when filling in KRS so that it does not error, and students hope that the Portal can be accessed offline. Based on the description of the problem above, the researcher considers it necessary to conduct research on the effect of system quality and information quality of the student academic portal on user satisfaction in Accounting students.

Theoretical Overview

Quality

"Quality is defined as the factors contained in an item or result that cause the item or result to be suitable for the purpose for which the item or result is intended or needed" (Kristiawan 2016). Quality is "a combination of properties and characteristics that determine the extent to which the output can meet the requirements of customer needs" (Sunyoto and Susanti 2015).

System

According to (Marshall B. Romney and Steinbart 2019) "a system is a series of two or more components that are bound together and interact to achieve a goal. Most systems consist of smaller subsystems that support a larger system". Meanwhile, according to (Mulyadi 2023) "the system is a network of procedures made according to an integrated pattern to carry out the company's main activities."

Information

"Information is data that has been organized and processed to provide meaning and improve the decision-making process. As a result of its role, users make better decisions as the quantity and quality of information increases" (Marshall B. Romney and Steinbart 2019).

Information System

"The needs of system users follow the times, the presence of technology requires the system to be able to work with this new component, the cooperation between the system and this technology is called an information system" (Aisyah Nurwulandari 2020). According to (Pusparini, Najoan, and Najoan 2017) "an information system uses humans as a source, \hardware, software, data, and networks to perform input, process, output, storage, and control activities that convert data back into information source products. The first data received will be converted into a form suitable for

processing (input). Then the data is manipulated and converted into information (proccesing), stored for future use (storage), or delivered to end users (output)".

System Quality

According to (Suharno Pawirosumarto 2016) "System quality is a measurement of information system processes that focuses on the results of interactions between users and the system. System quality has attributes such as equipment availability, equipment reliability, ease of use, and response time are determining factors why an information system is used or not used ". Meanwhile, according to (Amarin et al. 2021) "System quality is how a system works properly and optimally so that it can produce output in accordance with the expectations of system users".

Information Quality

"Information quality is how information is presented completely and clearly and can educate users, information quality is a benchmark for consumers in fulfilling the requirements and expectations of people who need information to make decisions, (Amarin et al. 2021)". "The quality of information systems focuses on the performance of information system components, namely how well the capabilities of hardware, software, people, procedures, databases, communication networks, data, activities, networks, and technology of information systems produce information for users. The quality of academic information can be seen in the information received by users is sufficient or exceeds what is needed, (Aisyah Nurwulandari 2020) ".

Student Academic Portal (academic information system)

"The academic information system or often called the academic portal serves to manage student data, lecturers, study planning, assessment and many other functions. The Academic Portal is an information system that functions to optimize services as an integrator of academic information that exists in various academic units (study programs / faculties) as well as a means of communication between the campus academic community. This system was built from the condition of the existence of academic information on campus which is very diverse and varies in form, so it requires a "portal" that will integrate this information so as to facilitate public access" (Rahmawita, Kartika, and Megawati 2021). "The academic portal as a system that is built based on needs and has various users, a condition will arise where users are satisfied and dissatisfied with the system being built. User satisfaction or dissatisfaction can be feedback for future portal developers" (Putra et al. 2021).

Research Method

This study uses a quantitative approach with a descriptive and analytical research design to measure the effect of system quality and information on user satisfaction. The object of this research is students majoring in Accounting at Panca

Budi Development University who are enrolled in semesters 1, 3, and 7. The data collection technique used in this research is primary data obtained through an online questionnaire distributed to students related to the Academic Portal using Google Form, the questionnaire consists of questions with values from 1 to 5. The collected data were analyzed using multiple linear regression methods and classical assumption tests with the help of SPSS version 21 software to determine the effect of independent variables (system quality and information quality) on the dependent variable (user satisfaction). This research was conducted during the period November 2024 to January 2025.

The population is 323 students that the sample size is calculated using the Slovin technique. According to (Sugiyono 2017) "The research uses the Slovin formula because in drawing a sample, the number must be representative so that the research results can be generalized and the calculation does not require a sample size table, but can be done with a simple calculation formula. The error tolerance limit used in this study is 10%, so e = 10% = 0.1." Using the Slovin formula, the minimum sample size required can be calculated as follows:

n = Sample Quantity

N = Total Population

e = Tolerance of Error (0.10)

n = N / (1 + (N x e2))

n = 323 / (1 + (323 x 0.102))

n = 323 / (1 + (3,23)

n = 323/ 4,23

n = 76,3593 ~ 76

Result and Discussion

The results of research related to system quality and information quality of student academic portals on user satisfaction of accounting students, Universitas Pembangunan Panca Budi in Medan, were carried out by distributing questionnaires via online to accounting students from semester 1, 3, and 7. With the number of semester 1 students being 96 students, semester 3 being 104 students and semester 7 being 129 students. Were 104 students and semester 7 were 129 students with a total of 323 students. The number of questionnaires received back was 68 while the rest did not return.

Classical Assumption Test Results

Table 1. Normality Test

		Unstandardized Residual
N		68
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	1.66893275
Most Extreme Differences	Absolute	.113
	Positive	.113
	Negative	-.087
Kolmogorov-Smirnov Z		.933
Asymp. Sig. (2-tailed)		.348

a. Test distribution is Normal.
b. Calculated from data.

Based on the results of the calculation, the sig. Value is 0.348 or greater than 0.05 that the H_0 provision is accepted, the normality assumption is fulfilled.

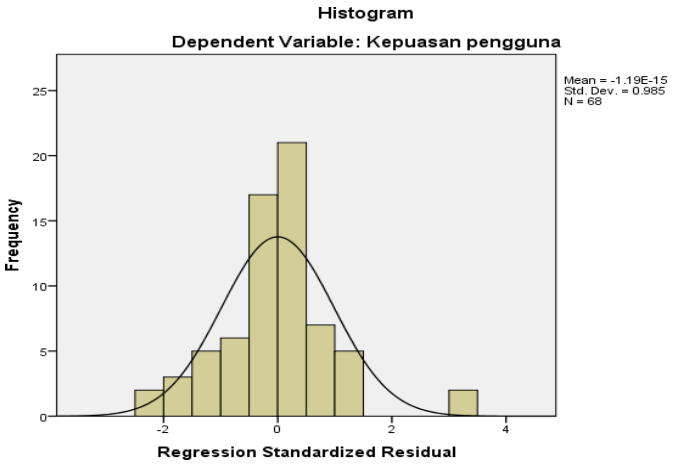

Figure 1. Histogram

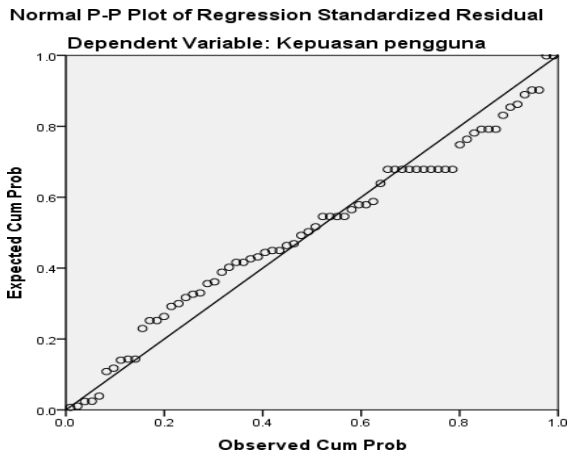

Figure 2. Normality Test (Kolmogorov-Smirnov)

Based on the results of the tests carried out to determine whether the distribution of data when this study follows a normal pattern, the researcher uses the p-plot method and pays attention to the distribution of points that reach the diagonal line. The results show that the data in this study are normally distributed.

Table 2. Multicollinearity Test

Coefficients[a]

Model		Unstandardize Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.582	1.353		1.169	.247		
	System Quality	.409	.110	.478	3.702	.000	.270	3.699
	Information Quality	.326	.106	.395	3.060	.003	.270	3.699

a. Dependent Variable: User satisfaction

Based on the table above, it is known that the VIF value of the System Quality Variable (X1) and the Information Quality Variable (X2) is 3.699 < 10 and the Tolerance Value value is 0.270> 0.1. Then the data does not occur Multicolonierity.

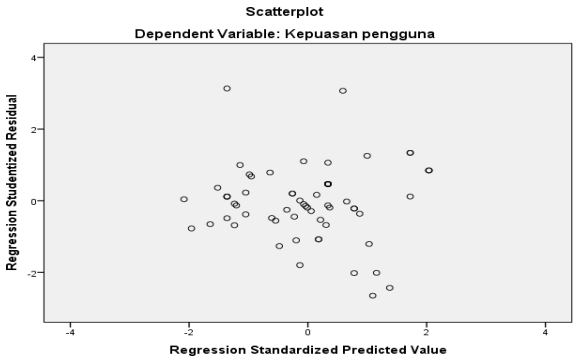

Figure 3. Heterokedastistas Test

The results of the heteroscedasticity test show that the data points do not form a certain pattern and are randomly scattered above and below zero on the Y-axis. This indicates that there is no heteroscedasticity. Thus, the assumptions regarding normality, multicollinearity, and heteroscedasticity in this regression model can be considered fulfilled.

Table 4. Multiple Linear Regression Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.841[a]	.707	.698	1.6944

a. Predictors: (Constant), X2, X1

It is known that the Adjusted R Square value is 0.698, it concludes that the contribution of the independent variable to the dependent variable simultaneously (together) reaches 69.8%.

Table 5. Hypothesis Test (T Test)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	1.582	1.353		1.169	.247
1	X1	.409	.110	.478	3.702	.000
	X2	.326	.106	.395	3.060	.003

a. Dependent Variable: User Satisfaction (Y)

Hypothesis 1 shows that the significance value for the System Quality variable is smaller than alpha, namely 0.000 <0.05. Based on the analysis above, it is concluded that hypothesis 1 is accepted, meaning that the System Quality (X1) of the academic portal has a significant influence on User Satisfaction (Y).

Hypothesis 2 obtained a significance value on the Information Quality variable is smaller than alpha, namely 0.003 <0.05. Based on the analysis above, it is concluded that hypothesis 2 is accepted, meaning that the Information Quality (X2) of the academic portal has a significant influence on User Satisfaction (Y).

Table 6. Simultaneous Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	450.603	2	225.302	78.474	.000[b]
1	Residual	186.618	65	2.871		
	Total	637.221	67			

a. Dependent Variable: Y

b. Predictors: (Constant), X2, X1

Based on the Sig. value of 0.000 (<0.05). So conclude that the Independent variable has a significant effect simultaneously (together) on the Dependent Variable.

Table 7. Determination Coefficient Test Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.841[a]	.707	.698	1.6944

a. Predictors: (Constant), X2, X1

It is known that the Adjusted R Square value is 0.698, it concludes that the contribution of the independent variable to the dependent variable simultaneously (together) is 69.8%.

Conclusion

This study shows that system quality and information quality of the academic portal have a significant influence on user satisfaction among students majoring in Accounting at Universitas Pembangunan Panca Budi. The results of the analysis reveal that both variables contribute significantly to increasing user satisfaction, with a significance value below 0.05. Good system quality, which includes aspects of reliability, speed, and ease of access, as well as information quality that includes data accuracy, relevance, and completeness, are essential to creating a satisfying user experience. Therefore, the management of the academic portal must continue to be considered and improved in order to meet student expectations.

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