Influence of the Quality of Academic Information Systems (SIAKAD) and Service Quality on Student Satisfaction Faculty of Economics and Business UTP Surakarta

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\textbf{ARTICLE INFO}

\textit{Keywords:} System Quality, Service Quality, User Satisfaction

\textit{Received:} 20, August
\textit{Revised:} 21, October
\textit{Accepted:} 25, November

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\textbf{ABSTRACT}

The purpose of this study is to address the academic and administrative problems of the Academic Information System (SIAKAD). This research uses quantitative techniques, analytical descriptive methodology, and collects primary data by sending online questionnaires through Google Form to UTP Surakarta students who are customers of SIAKAD services at the Faculty of Economics and Business. Meanwhile, secondary data for this study was collected from literature studies. The population of this study is 160 FEB students who are regular users of SIAKAD and are enrolled in one of the two study programs Bachelor of Management or Bachelor of Accounting. Proportional random sampling is the method used in the sampling procedure. Based on the research, student satisfaction at the Faculty of Economics and Business UTP Surakarta is strongly influenced by the quality of administrative services and SIAKAD.

DOI: \url{https://doi.org/10.55927/ajabm.v2i4.6855}
\url{https://journal.formosapublisher.org/index.php/ajabm}
INTRODUCTION

In the ever-growing digital era, information technology has improved many aspects of daily life, including the use of human resources (HR) in organizations. Effective and efficient HR management is very important for the business world to overcome increasingly severe global market pressures (Dwanita et al., 2022). Technology is primarily used to facilitate and enhance human activities, making work more productive and efficient. Particularly in the case of information technology, technology is undergoing rapid development. One type of information technology that is utilized in the field of education is the Academic Information System (SIAKAD). Academic information systems are used in universities for various tasks, including filling out KRS (Study Plan Cards), printing KHS (Study Results Cards), managing lecture grades, and student attendance. The aim of implementing SIAKAD is to improve the standard of academic services for students (Widodo, Zaelani, et al., 2023).

Tunas Pembangunan Surakarta University is a tertiary institution in Surakarta with ten undergraduate study programs. The need for the use of information technology is very important in carrying out various activities. Many aspects of daily life in tasks that were previously done by hand are now done digitally. An information system has value if it produces useful information based on real data that is of interest to users. Therefore, the use of information systems is one of the digitalization process methods carried out by UTP Surakarta to assist the research process. Academic Information System (SIAKAD) refers to an information system that can assist various academic processes for both students and lecturers, making it easier for users to complete academic tasks by utilizing information technology in a safer environment (N. K. A. Putri & Indriyanti, 2021). The two levels of access to the Integrated Academic Information System are lecturers and students. The SIAKAD website can be accessed at http://siakad.utp.ac.id/.

User access to the Academic Information System (SIAKAD) is very important because it ensures that system users receive high-quality support to guarantee student performance and increase student efficiency and effectiveness in the academic process (Tsabita et al., 2023). The structure of a university will be determined by the existing Academic Information System and Service Quality. There are several very important considerations in the teaching process. This is what allows a student to understand a particular subject (Widodo, Agustini, et al., 2023).

System quality, information quality, and service quality have a significant impact on user experience. This is explained by research regarding the influence of system quality, information quality, and service quality on the use of e-learning systems (Irwanda et al., 2022). If these educational institutions are able to provide high-quality services, students will experience increasing pressure. If student satisfaction increases, the university will benefit. However, if there is no satisfaction it will hinder the student's ability to study or study at the university (Miati & Setiawan, 2022). Service quality is one of the factors that can have an impact on user satisfaction. The quality of work is an important
factor that must be considered and maximized so that users can choose wisely. (Widodo, Bangun, et al., 2023) When user expectations are met then they feel satisfied. Faculty performance is one of the work units in higher education that is assessed based on the quality of services provided, where services with varying information can be identified based on user behavior, in this case students (Zahri, 2023).

**LITERATURE REVIEW**

**Quality of Academic Information Systems**

Academic Information System (SIAKAD) is an application that integrates all the steps in starting a teaching business into an information system that is updated with modern technology. The academic information system will assist a lecturer in transferring data that is in accordance with the teacher's current activity curriculum. In addition, information systems provide positive reinforcement for those who use them. Therefore, many university lecturers are implementing this information system (FALEVI, 2022). First and foremost, the academic information system at Tunas Pembangunan University Surakarta has been implemented. The quality of systems and programs can also impact a student's unique learning style. The more valuable a system is and the quality of assistance provided, the higher the level of student satisfaction that is recognized. Conversely, when the quality of the system and services provided decreases, the level of student satisfaction offered also decreases (Syamsiah et al., 2022).

User behavior and attitudes are closely related and have an impact on students, which in turn has an impact on the organization. In other words, a high-quality information system that minimizes failure can maximize the productivity of system users and optimize their work processes so that the technology they use is not disrupted. Thus, information system quality refers to the overall quality of systems and tools that are high, effective, and can be used as a means to understand customer needs and maximize their use (E. R. Putri et al., 2023).

The quality of educational information systems is very important for lecturers in the teaching process. Therefore, quality is important in order to improve student learning and teaching methods. Good quality will produce a comprehensive learning experience and become one of the main learning goals for students. This will also lead to an intense learning experience. Students as people who live in a lecture environment have rights that must be upheld by universities, one of which is having a reliable academic information system. So, in the future learning process, students will easily access information on exam results, lecture schedules, tuition payments and the latest information at the university. However, if the lecture academic information system has weaknesses in one or several areas, it can be assumed that students will not get the same benefits from the teaching they receive in the lecture environment. The shortcomings that cause this dissatisfaction can include difficulty in accessing course grades, other shortcomings and lecture schedules. This can have a
negative impact on students' lack of enthusiasm for studying in college. Therefore, the information system needs to continue to be improved in order to increase student satisfaction evaluation scores. In this way, ongoing maintenance of the information system can be sustainable.

**Service Quality**

According to Kotler (2014) in (Prabowo et al., 2023) Service quality must start with customer needs and end with their perceptions. Customer satisfaction can be known after using a product or service. Service quality according to (Rias Aji Pangestu et al., 2023) is the application of quality as a characteristic of product appearance or performance, which is the main component of a company's strategy to achieve sustainable excellence, continue to grow and develop, and both as a market leader and as a strategy to achieve excellence sustainable.

Service quality refers to how well a college's services meet the needs and expectations of its customers. Users will be able to determine whether the academic quality provided is appropriate or not. In this case, the beneficiaries are students who will evaluate the quality of academic services based on their specific needs. In this research, the quality of academic support is evaluated in terms of how well the academic support provided by the Administration of the Faculty of Economics and Business UTP Surakarta can meet student needs (Hamza, 2021).

In terms of academic quality, the main focus of educational institutions is on the concept of quality that measures users' reactions and understanding of the services offered. Quality is an important factor in product development and service contexts. In the academic environment, academic quality refers to the evaluation of the teaching process, curriculum and facilities related to student learning outcomes and ability to understand lectures, learning materials and learning outcomes. Academic quality is closely related to the ability of educational institutions to provide services that meet or exceed the needs of students in pursuing high quality education. Aspects such as level of mastery, independence, human resources, physical environment, and quality of education have an impact on academic performance. Measuring the quality of academic services includes indicators as part of efforts to ensure quality services to students. Indicators such as physical (physical factors), reliability, responsiveness, confidence and empathy (Manaransyah et al., 2023).

**Student Satisfaction**

The results of student research show that the level of service quality has a threshold of enjoyment, above or below the level of service quality. Customer satisfaction can be ensured after customers use a product or customer service (Hanisah et al., 2022). One of the most important aspects of a higher education institution's competitive strategy is the faculty retention rate. Strong leadership fosters devoted students by providing positive reinforcement for higher education services (Yulia et al., 2022).

Students can be described as customers who use educational services provided by college lecturers. According to Amin's (2017) analysis, universities
that provide educational services aim to give students a sense of achievement. The focus of higher education is on student behavior, academic integrity, and the educational programs taught. Therefore, to satisfy all users, quality services must be provided. Feedback from participants is very important for college lecturers. This is not only to improve the image of university lecturers in the context of promotion, but also to assess their performance in raising standards in building national education (Nuraini, 2022).

Satisfaction and dissatisfaction between customers regarding the added disconfirmation between the actual service performance determined after use and previous norms for the product (Rumaningsih, 2021). In this way, customer experience can be inferred from the purchase of a product or service. In accordance with this statement, it can be said that satisfaction is an assessment that shows an individual's response to an experience that causes stress or is unsatisfactory in an activity (Susetyo et al., 2022).

Student satisfaction can be increased by identifying the factors that influence it so that a student can improve the system to increase satisfaction (N. T. Putri et al., 2021). As an employee at a university, especially at the Economics and Business Department of UTP Surakarta, it is very important and must be done, because it is closely related to higher education programs. Moreover, the level of customer satisfaction with the quality of academic services provided by UTP Surakarta can also be related to the large number of graduates who enter the world of work each year, with the assumption that highly qualified graduates will become agents. promotion for higher education educators who want to train new graduates (Firdaus et al., 2021).

![Conceptual Framework](image)

**Figure 1. Conceptual Framework**
METHODOLOGY
This research uses a quantitative method of descriptive analysis design which aims to describe students' perceptions as users of the quality of SIAKAD and the quality of administrative services on student satisfaction. The research uses primary data obtained through distributing online questionnaires via Google Form to students of the Faculty of Economics and Business, UTP Surakarta as users of SIAKAD services. Meanwhile, secondary data was obtained from literature studies related to this research. The population in the study were 160 FEB students who were active as SIAKAD users who were divided into 2 study programs, namely Bachelor of Management and Bachelor of Accounting. The sampling technique uses a proportional random sampling technique, where the population is heterogeneous by taking samples from each sub-population randomly with the aim of obtaining a representative sample by looking at the active student population at the Faculty of Economics and Business, UTP Surakarta.

RESULT
Multiple Linear Regression Analysis

Table 1. Multiple Linear Regression Analysis Test Results

<table>
<thead>
<tr>
<th>Coefficients a</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Q</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-.378</td>
<td>.436</td>
<td>-.869</td>
<td>.390</td>
</tr>
<tr>
<td></td>
<td>X1</td>
<td>.462</td>
<td>.073</td>
<td>.722</td>
<td>6.303</td>
</tr>
<tr>
<td></td>
<td>X2</td>
<td>.168</td>
<td>.074</td>
<td>.259</td>
<td>2.263</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y

Based on this table, it can be seen that the linear regression equation that reflects the relationship between the variables in this research is as follows:

\[ Y = 0.462 \times X1 + 0.168 \times X2 + e \]

The multiple linear regression equation above shows that:

a. The regression coefficient value of the quality of academic information systems (SIAKAD) (X1) has a positive sign of 0.462, indicating that there is an influence on student satisfaction at the Faculty of Economics and Business.

b. The regression coefficient value for the quality of administrative services (X2) has a positive sign of 0.168, indicating that there is an influence on student satisfaction at the Faculty of Economics and Business.
F Test

Table 2. F Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>315,867</td>
<td>2</td>
<td>157,934</td>
<td>400.095</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>18,553</td>
<td>47</td>
<td>.395</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>334,420</td>
<td>49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y
b. Predictors: (Constant), X2, X1

Based on the table above, you can find out the relationship between the independent and dependent variables, and the F test is to find out whether the influence of the independent variable (X) is significant or not on the dependent variable (Y). The observed significance value is 0.000 which is based on the calculated F test = 400.095 findings. It was determined that Ho was approved because 0.000 < 0.05. This shows that the student satisfaction variable with the quality of the academic information system (SIAKAD) is significantly related.

T Test

Table 3. T Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-.378</td>
<td>.436</td>
<td>-.869</td>
</tr>
<tr>
<td></td>
<td>X1</td>
<td>.462</td>
<td>.073</td>
<td>.722</td>
</tr>
<tr>
<td></td>
<td>X2</td>
<td>.168</td>
<td>.074</td>
<td>.259</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y

a. After conducting the t value test for variable X1 the quality of the academic information system (SIAKAD), the t value = 6.303 is positive and has a significant value of 0.000 <0.05, so H1 is accepted, so that the quality of the academic information system (SIAKAD) has a significant relationship to student satisfaction.

b. After testing the t value for variable X2, the quality of administrative services, the t value = 2.263 is positive and has a significant value of 0.028 <0.05, so H2 is accepted, so that the quality of administrative services has a significant relationship to student satisfaction.
Determination

Table 4. Determination Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.972</td>
<td>.945</td>
<td>.942</td>
<td>.62828</td>
<td>2.534</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X2, X1
b. Dependent Variable: Y

Based on the table results, the Adjusted R square figure is 94.2%. Therefore, these results show that the ability of the independent variable to interpret the dependent variable reaches 94.2%. Meanwhile, the remaining 5.8% could be caused by the influence of other variables not included in this study.

After carrying out the coefficient of determination test above, it can be obtained that the calculated $F = 400.095$ so it can be concluded that $H_0$ is accepted because the significance is $0.000 < 0.05$. This shows that the quality of the academic information system (SIAKAD) and service quality have a significant simultaneous influence on student satisfaction at the Faculty of Economics and Business, UTP Surakarta.

DISCUSSION

SIAKAD Quality on Student Satisfaction

Based on the research results, $H_0$ was rejected, while $H_a$ was accepted because the $t$-significance value was 0.000. Based on the significance value found, variable $X_1$ influences how well students are satisfied at the Faculty of Economics and Business, UTP Surakarta. It can be concluded that student satisfaction as users will also influence their feelings of enjoyment in using academic information systems if they think that the better the quality of the information system used, the more satisfied they will be in using it.

Service Quality on Student Satisfaction

Based on the research results, $H_0$ was rejected while $H_a$ was accepted because the $t$-significance value was 0.028. Based on the significance value found, variable $X_2$ influences how well students are satisfied at the Faculty of Economics and Business, UTP Surakarta. It can be concluded that, response, certainty and empathy are good service qualities that meet the expectations of system use. Academic information system users will be more satisfied when they receive higher quality services. It is hoped that by providing the maximum possible service, starting from lecturers, staff, or information systems that can be accessed by students, will increase user satisfaction among students. Therefore, customer satisfaction is greatly influenced by service quality.
CONCLUSION AND RECOMMENDATION

The quality of the academic information system (SIAKAD) and service quality have been proven to have a partial relationship to student satisfaction with a significant value of <0.05. The quality of academic information systems (SIAKAD) has a significant value of 0.000 and the quality of administrative services has a significant value of 0.028. The quality of the academic information system (SIAKAD) and service quality were proven to have a simultaneous influence on student satisfaction, obtaining a calculated f value of 400.095 with a significance value of 0.000 < 0.05. The results of testing the coefficient of determination showed that the R-Square value was 94.2%. Meanwhile, the remaining 5.8% could be due to the influence of variables that were not included in this study.

ADVANCED RESEARCH

(Subroto, 2022) research with the title "Influence of Application of Information Systems Academic Information System (Ready) and the Quality of Administrative Services to the Level of Student Satisfaction (Case Study on Students of the Faculty of Economics and Business Pancasakti University Tegal)". This study found that Pancasakti Academic Information System (SIAP) and Administrative Service Quality simultaneously have a significant effect on student satisfaction. And partially Pancasakti Academic Information System has a significant effect on student satisfaction, Administrative Service Quality has a significant effect on student satisfaction.

(Yunus & Samad, 2023) research with the title "The Effect of Academic Information System Quality (SISKA) and Service Quality on Student Satisfaction at Fajar University". The results showed that the quality of the academic information system (siska) and the quality of service to student satisfaction had a significant effect, so the better the information system and the quality of service, the more student satisfaction would increase.

(Efnita & Widana, 2021) research with the title "The Effect of Academic Information Systems (SIKAD) and Service Quality Student Satisfaction at Riau Islamic University". Based on this analysis, it is known that the academic information system (SIKAD) and service quality affect student satisfaction by 93.1%. service quality affect student satisfaction by 93.1%. Testing the feasibility of the model used with the Normed Fit Index (NFI) of 0.841 means that the model owned is fit, is in the marginal fit category because it is at a critical value of 0.8 NFI 0.90. Path coefficient to see the magnitude of the influence of exogenous variables on endogenous variables, with the t-statistics (bootstrapping) method the two variables have a positive and significant effect.

ACKNOWLEDGMENT

We would like to thank all the roles involved in compiling this research article, as well as our fellow students at the Faculty of Economics and Business, UTP Surakarta for their participation in this research.
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