

# Impact of service quality dimensions on student satisfaction

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#### Abstract

The purpose of this study was to examine the effect of service quality dimensions consisting of Tangibles, Reliability, Responsiveness, Assurance, and Empathy variables on student satisfaction at STIE AUB Surakarta. Respondents in this study were students at STIE AUB Surakarta. The analysis tool uses logistic regression. The sampling technique used is a random sampling technique. The consequences of the examination show that physical assets have a critical constructive outcome on fulfillment. Unwavering quality has a huge adverse consequence on understudy fulfillment. Responsiveness has a critical constructive outcome on understudy fulfillment. Confirmation has a huge beneficial outcome on fulfillment. Compassion has a huge beneficial outcome on fulfillment. The managerial implication of this result is that the management of STIE AUB Surakarta must increment the positive and huge that influence understudy fulfillment. namely the Responsiveness, Assurance, and Empathy variables, and reduce the variables that have a negative and significant effect, namely the Reliability variable so that the credibility of STIE AUB remains awake.

**Keywords**: tangibles, reliability, responsiveness, assurance, empathy, satisfaction.

## Introduction

The current period of globalization truly requires solid HR, on the grounds that the advancement of a nation relies upon the nature of HR. The better the nature of a country's HR, the higher the country's seriousness with different nations. The state must pay attention to education programs if it does not want to lose a generation that is reliable, intelligent and has integrity in the nation. Education is the basic capital to ensure the development and continuity of the nation's life in addition to other capital including natural capital and existing wealth, because education will change attitudes and behavior and it can develop human knowledge skills.

Globalization motivates educational institutions to improve the quality of graduates to be able to compete with domestic and foreign workers. Higher education institutions, both public educational institutions and private educational institutions have the same responsibility to prepare human resources. In order to be able to compete in order to maintain the viability of the university, one of which is excellence in the field of operational services to



students.

An ideal rivalry framework, where numerous makers offer similar labor and products, the way to winning the opposition is quality, particularly administration quality. Service quality as a metric for how well a company's quality of service meets consumer expectations According to this definition, service quality is defined as the satisfaction of a customer's requirements and aspirations, as well as the precision with which they are delivered in order to meet their expectations (Lewis & Booms, 1983). Moreover, today's universities, as one of the service organizations, are experiencing increasing demands from the community. Colleges are as of now required not exclusively to have the option to create quality alumni that are estimated scholastically, yet additionally to demonstrate great responsibility. Society overall requests that colleges incorporate, among others: quality affirmation, quality control, and quality improvement (Indriyenni, 2017).

Researched a number of service industries and succeeded in identifying responsiveness, competence, ten main Reliability, access, communication, credibility, security, customer understanding, and tangibles are all aspects of service quality (Parasuraman et al., 1988). However, in 1988, it was found that there was an overlap between the above dimensions. Thus simplifying the ten dimensions mentioned above into five main dimensions of service quality, namely: tangibles, reliability, responsiveness, assurance, empathy (Tjiptono, 2016). According to (Parasuraman et al., 1985), states that "Service quality is a fundamental strategy for success and survival in a tight environment". This applies to school services seen as what consumers expect. The gap that often occurs is the difference in the quality perceptions and attributes of Services for education. There are five steps to achieving a good service organization, namely: reliability, responsiveness, assurance, empathy, and tangibles (Machali, 2015).

Assurance, tangible, and reliability variables have a significant effect on in terms of patient satisfaction, but responsiveness and empathy variables have no significant effect on in terms of patient satisfaction (Amalia et al., 2017). Tangible, assurance, empathy variables have a significant effect on passenger satisfaction. While the reliability and responsiveness variables have no partial effect on passenger satisfaction (Veronica & Supriyono, 2016). Research shows that physical, reliability, responsiveness, assurance, empathy have a significant positive effect on Indihome customer satisfaction. (Armanto, 2018).

As an educational institution, STIE Adi Unggul Bhirawa Surakarta cannot avoid this global competition. STIE Adi Unggul Bhirawa Surakarta must be ready to compete with these other educational institutions in providing the best educational services. The purpose of this study was to see how quality dimensions, which included of Tangible, Reliability, Responsiveness, Assurance, Empathy concern for student satisfaction at STIE AUB Surakarta.

The expected result of this research is to know the expectations and level of student satisfaction with educational services at STIE Adi Unggul Bhirawa Surakarta. Furthermore, it can be seen the reality felt by students in connection with the implementation of the education service system at STIE Adi Unggul Bhirawa Surakarta, so that corrective actions can be taken to improve the quality of educational services.



Customer satisfaction is a fundamental concept in contemporary theory and use of marketing. Customer satisfaction is seen as the main element that determines the success of a marketing organization, both business and nonprofit organizations (Tjiptono, 2015). While according to (Strauss & Neuhaus, 1997), distinguish three types of satisfaction and two types of dissatisfaction based on a combination of specific emotions towards service providers, expectations regarding the future performance capabilities of service suppliers, and behavioral interest in choosing the service provider again. The types of satisfaction and dissatisfaction are requesting fulfillment, stable fulfillment, surrendered fulfillment, stable disappointment, and requesting disappointment (Tjiptono, 2016). According to (Windasuri & Susanti, 2017), consumer loyalty is an enthusiastic reaction to the assessment of the utilization experience of an item or administration. Student satisfaction is the satisfaction that is felt by students (emotionally) for all the services provided by STIE AUB Surakarta. Indicators: Facilities owned, appearance of employees, sincere attention, guarantees provided, assistance provided to students.

One of the secrets to succeeding in the market is to focus on quality. When the business has been able to deliver high-quality goods, it has built one of the foundations for creating customer satisfaction. As per (Goetsch & Davis, 2010), expresses that quality is a powerful condition identified with items, administrations, HR, measures, and the climate. that meets or surpasses assumptions. Dimensions of quality according to Zeithaml (2013), can be broken down into five distinct dimensions, thus: Tangibles, Reliability, Responsiveness, Assurance, Empathy (Tjiptono, 2016).

According to (Parasuraman et al., 1988), tangibles relates to the appealingness of the company's physical buildings, equipment, and materials, as well as the appearance of its workers (Tjiptono, 2016). Based on this opinion, it can be concluded that real evidence is visible conditions, facts related to the company, including various objects such as seats, lighting, wall colors, daily correspondence, employee appearance, and employee friendliness and so on. This dimension consists of dimensions related to company equipment and facilities as well as personnel and communication materials used in providing services to customers.

According to Zeithaml (2013) dependability refers to a company's capacity to provide accurate services the first time, without making any mistakes, and to provide them on time. (Tjiptono, 2016). From this understandings, it can be concluded that reliability is the company's ability to provide services to customers in accordance with the company's commitments that have been promised, not just promises but evidence of truly reliable and reliable services. Reliability reflects the consistency and reliability of the company's performance, as well as concerns the questions of whether the company provides the same level of service from time to time, or changes significantly each time it is provided.

According to (Zeithaml, 2013), responsiveness In terms of staff' willingness and capacity to assist customers and respond to their demands, as well as to inform consumers when services will be delivered and then provide services rapidly (Tjiptono, 2016). From this understanding it can be concluded that the responsiveness of a company is the company's way of always responding and



trying to help its customers in providing services quickly and precisely.

According to Zeithaml (2013) assurance employee behavior may encourage client trust in the organization, and the corporation can provide its customers a sense of security. It can be concluded that guarantee is an effort to prove the company's performance in the context of providing services to customers based on skills, knowledge, abilities, attention, honesty and convincing nature so that they are free from doubts, risks and dangers that can be inflicted on customers.

According to Zeithaml (2013) empathy means that the company understands its customers' concerns and acts in their best interests. It also means that the company provides personalized service and operates during convenient hours. So the segment of this measurement is a blend of access, to be specific the simplicity of using the administrations offered by the organization, correspondence is the capacity to pass on data to customers.

Research conducted that tangibles have a big positive impact on Indihome customer satisfaction (Armanto, 2018). Tangibles have a significant effect on patient satisfaction (Amalia et al., 2017). Tangibles has a huge positive impact on the Arab Bank's services (Al-Azzam, 2015).

Research shows that positive impact of reliability is enormous on Indihome customer satisfaction (Armanto, 2018). In Jordanian Islamic banks, reliability has a substantial beneficial impact on client satisfaction (Muala, 2016). Patient satisfaction is influenced by reliability (Amalia et al., 2017).

Research shows that Indihome consumer satisfaction improves significantly when service is responsive (Armanto, 2018). In Jordanian Islamic Bank, responsiveness has a positive and significant impact on customer satisfaction (Muala, 2016).

Assurance has a considerable favorable impact on Indihome customer happiness, according to research Armanto (2018). In Jordanian Islamic Banks, assurance has a good and considerable impact on customer satisfaction (Muala, 2016). Affirmation significantly affects patient fulfillment (Amalia et al., 2017).

Research that Indihome client satisfaction is significantly improved by empathy (Armanto, 2018). Empathy has a substantial positive impact on Arab bank client happiness (Al-Azzam, 2015). The framework of thought in this research shown by Figure 1.

#### **Research Methods**

The object of this research is the students of STIE AUB Surakarta. The study's participants were STIE AUB Surakarta D3 and S1 students, the number of which was ± 450 people. The sampling method in this study is by means of a random sampling technique, namely the sample is taken randomly in the April 2021 period (cross sectional data or random data taken at a certain time) and each individual observation has the same opportunity to be selected as respondents. The sample is set at 100 students. A sample of 100 people was able to represent the existing population (Sugiyono, 2015). This study uses a questionnaire model research design on a number of STIE AUB Surakarta students as respondents.



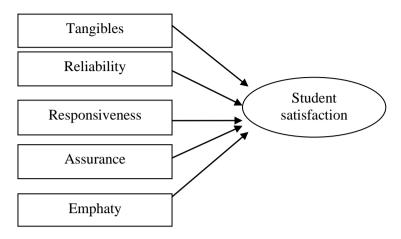


Figure 1. Thinking Framework

The analytical technique used in this research is testing the tool for study in the form of a validity test with the one shot method and reliability testing is measured using Cronbach's Alpha technique. Multiple logistic regression analysis was utilized to analyze the data in this study, with the following equation, you can determine the effect of the independent variable on the dependent variable:

$$Ln = b0 + b1 X1 + b2 + b2 X2 + ... bi Xi$$
 (1)

While in (Ghozali 2016) the formula is described as:

$$Ln = b0 + b1 X1 + e$$
 (2)

Based on the formula above, in this study the formula used for multiple logistic regression is as follows:

$$Ln = bo + b1 X1 + b2 X2 + b3 X3 + b4 X4 + b5 X5 + e$$
 (3)

The information of the formula, p is probability of respondents being satisfied, 1-p is probability of respondents feeling normal and dissatisfied, X1 is tangible, X2 is reliability, X3 is responsiveness, X4 is Assurance, X5 is Emphaty, bo is konstanta, and e is error/disturbance.

The appraisal of the model in strategic relapse can be seen from the -2Log Similarity (-2LL). The worth of -2LL follows the Chi Square X2 appropriation with a level of opportunity n- $\alpha$ . Hosmer and Lemeshow's Decency of Fit Test tests the invalid theory that the exact information fits or fits the model (there is no distinction between the model and the information so the model can be supposed to be fit). In the event that the worth of Hosmer and Lemeshow's Decency of Fit Test measurement is equivalent to or under 0.05 then Ho is dismissed, which implies there is a huge contrast between the model and the noticed worth so the Integrity of Fit model isn't acceptable. In the event that the worth of Hosmer and Lemeshow's Decency of Fit Test measurement is more noteworthy than 0.05 then Ho is acknowledged which implies there is no critical contrast between the model and the noticed worth so the Integrity of Fit model can be supposed to be fit.

The estimated maximum likelihood of parameters and models can be seen in the display of the output variable in the equation (Ghozali, 2016). The estimation of the logistic coefficient measures the ratio of the probability of an event occurring or not occurring. If the coefficient is positive the probability of



occurrence increases, and if it is negative the opposite is true.

Wald's test was used to test whether each significant logistic regression coefficient was not equal to zero.

Wald test = 
$$\frac{\beta}{\text{Standard Error}}$$
 (Ghozali, 2016) (4)

# **Result and Discussions**

Before the data was analyzed by Multiple Logistics Regression Analysis, the validity and reliability of the questionnaire were tested first. The results of the instrument test are known as follows:

**Table 1. Instrument test results** 

Test	Tools	Variable	Status	
		Tangible	Valid	
		Reliability	Valid	
Validity	One shot methods	Responsiveness	Valid	
		Assurance	Valid	
		Emphaty	Valid	
		Tangible	Reliabel	
		Reliability	Reliabel	
Reliability	Cronbach Alpha	Responsiveness	Reliabel	
	·	Assurance	Reliabel	
		Emphaty	Reliabel	

Source: Processed data, 2021

The table 2. above can be seen the results the full model test uses 5 independent variables, namely Tangibles, Reliability, Responsiveness, Assurance and Empathy compared to the model that only uses statistically proven constants to be trusted. This can be seen from the omnibus test, the Chi-Square results of 61.157 with a significance of 0.000 indicating that a number of explanatory variables (Tangibles, Reliability, Responsiveness, Assurance and Empathy) are able to distinguish the level of satisfaction of satisfied and dissatisfied students convincingly.

The predictive ability of this model is quite good, which is 97%. The satisfaction level of satisfied students is 85 out of 85 students or 100% and the number of dissatisfied students is 12 out of 15 students or 80% has been able to be predicted correctly.

The correlation matrix shows no serious multicollinearity between independent variables, as seen from the correlation value between independent variables below 0.8. The results of the Hosmer and Lemeshow test show that the Chi-square value is 2.860 with a significance of 0.898, so there is no significant difference between the model and the observed value so that the Goodness of Fit model can be said to be fit.

The test results of how much the model is able to explain the probability that consumers are satisfied with the service and consumers who are not satisfied with the service are explained by the Nagelkerke R2 value of 0.802. This shows that the ability to explain variables namely Tangibles, Reliability, Responsiveness, Assurance and Empathy to the probability of students being satisfied and dissatisfied is 80.2%. Parameter estimation and their interpretation



**Table 3. Logistics Coefficient** 

Model	Variable	Coefficient	t	Sig	Note
Wald Test	Constanta	3,825		0,778	
	Tangible	2,255	10,873	0,001	Significant
	Reliability	- 3,951	6,073	0,014	Significant
	Responsiveness	7,444	11,077	0,001	Significant
	Assurance	3,606	6,144	0,013	Significant
	Emphaty	2,365	3,964	0,046	Significant

Source: Processed data, 2021

Table 3 shows the results of the data regression equation above shows that Tangibles, Responsiveness, Assurance, Empathy are positively and significantly associated with the probability of students being satisfied and dissatisfied. The reliability variable has a negative and substantial relationship with the likelihood of students being satisfied or unsatisfied.

Given the importance of the value of student satisfaction in determining the level of better service quality, the variables determining student satisfaction must always be improved and considered; it means that if the service is not good, it must be improved for the better so that the credibility of STIE AUB Surakarta is maintained. Services that are too excessive can cause students to decrease their satisfaction.

The responsiveness variable is a very important variable in influencing student satisfaction because it has the most dominant probability which is a form of employee seriousness in providing services. The seriousness of an employee is very vital. Students will feel comfortable and confident when handled by employees who show seriousness in their services. On the other hand, students will be worried (don't believe it) if handled by employees who are not serious. Attitude reflects a person's personality, for that the management must always advise and direct employees to be serious and serious in providing services, not at will. To form this attitude, education and training regarding personality is important for all employees related to services. So that they can become individuals who are elegant and authoritative.

Readiness must also be shown by all service employees, the management must take firm action against all employees who do not heed the rules and discipline. This can be started from the top management, leaders set a good example to their employees that readiness is the main thing in service. Continuous readiness can create an attitude of discipline and speed, not to delay work.

Assurance variable is a variable that is also significant in terms of impacting student satisfaction. The existence of guarantees for everything that STIE AUB Surakarta has can increase the degree of student confidence to get good service and trust to become students. Therefore, the management must be able to provide the best possible guarantee to students and increase this assurance variable again, so that they feel at home and do not switch to other universities. The form of guarantee can be in the form of definite complaint handling, the accuracy of the costs that must be incurred in accordance with existing promotions, as well as responsive and friendly staff to all students.

Tangibles are variables that also affect student satisfaction. The



management of STIE AUB Surakarta must improve the quality of the existing facilities. No matter how good the services provided, if the facilities owned by STIE AUB Surakarta are inadequate, students will definitely feel uncomfortable and uncomfortable, for example, lecture hall facilities, parking facilities, security facilities and WC facilities. Lack of good facilities can be a source of outside promotion that causes people to distrust.

Empathy variable is another variable that has a positive effect on student satisfaction. Therefore, the Management of STIE AUB Surakarta must improve the indicators of empathy variables continuously, for example is good relationships/interactions and communication with students, providing complete information, handling students with understanding and patience, caring for students and their families, caring for student complaints and desires, understanding the needs needed by students, special attention to students and not discriminating against students' social status.

Variables that have a positive value, management as much as possible improve the indicator. Improving the ability, knowledge and service skills of employees is absolutely necessary so that there is a synergistic relationship between employees and students. This is the hope of all parties. If this situation can be formed properly, surely the students will be able to provide the right information to other prospective students about STIE AUB Surakarta and become the right promotion tool, and cheap compared to other forms of promotion. Students and families who are satisfied will have more confidence and believe that STIE AUB Surakarta is a trustworthy university.

The accuracy and alertness of an employee is needed in providing services to students. Serious attitude and respect for students will have a positive impact on the image of the institution. Students will always have a sense of trust and enthusiasm that the services provided are wholehearted services, all are served well according to their portions. For this reason, STIE AUB Surakarta must continue to improve the quality of service capabilities as promised to students. Commitment to good service must always be upheld. Waiter fast, accurate, reliable and reliable service greatly affects the level of student satisfaction.

Reliability variable is an influential variable with a negative value. The variable with this negative value implies that if the variable is left alone it will reduce the value of student satisfaction. Moreover, if it is increased by one unit, it becomes an anomaly, namely the negative points will increase. This happens because of the reliability variable; such as fast service, very friendly and polite service, uncomplicated procedures, concern in serving students, and timeliness of service are counter productive to student satisfaction at STIE AUB Surakarta. Why is that, because sometimes the information provided is not in accordance with what students need. This causes students to be dissatisfied. For this reason, as far as possible the management of STIE AUB Surakarta should reduce services related to variable reliability gradually, because if this finding is not immediately responded to, it will cause students to become dissatisfied and result in student distrust of the institution. Maintaining this variable is very unprofitable and counterproductive.



# Conclusion

Based on the findings of the preceding analysis, which were gathered through the use of logistic regression tests on respondents, Finally that the dimensions of service quality at STIE AUB Surakarta which consist of tangibles, responsiveness, assurance and empathy variables are able to explain or predict positive student satisfaction. Therefore, the four dimensions of service need to be maintained and even improved continuously to maintain the image of STIE AUB Surakarta as a private university that can be trusted and can provide very satisfying services. Dimensions of service quality in the form of reliability are able to explain or predict satisfied students negatively. Therefore, this variable does not need to be increased because if it is increased or maintained it will actually give negative points to the satisfaction value and reduce satisfaction itself. The test results are how much the model is able to explain the probability of satisfied and dissatisfied consumers with the service described by the Nagelkerke R² value. of 0.802.

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