UNIVERSITAS TERBUKA

AAOU
Asian Association
of Open Universities

The 31ST Annual Conference
of the Asian Association of Open Universities

AAOU2017

27 - 29 September 2017, Royal Ambarrukmo Hotel
Yogyakarta, Indonesia

PROCEEDINGS
Quality Assurance in Open University

OPTIMIZATION OF ONLINE TUTOR SATISFACTION THROUGH IMPROVEMENT OF QUALITY SYSTEMS, INFORMATION QUALITY AND IMPROVEMENT OF CONTACT PERSONNEL SERVICES AT UNIVERSITAS TERBUKA

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Abstract

Internal service quality has been trusted to be an important key for organizations and institutions to be able to optimize internal customer satisfaction and ultimately will provide satisfaction for external customers. Internal service quality in question is a prepared facility such as e-learning web pages and services from the responsible tuton to online tutors during online tutorial activities on progress. This study aims to determine the effect of system quality, information quality and contact personnel service to online tutor satisfaction at the Universitas Terbuka. Data obtained from 100 respondents online tutors in UT academic year 2017.1. The final result obtained. Information systems, quality information and services. And the dominant contribution to tuton satisfaction in succession is the quality of information, following the quality of contact person service and the last is the quality of the application system. This foundation thus formed a model of optimization of tutor satisfaction through improving the quality of the system from the tuton application, the quality of information and services.

Keywords: system, information, quality, services, satisfaction

1. INTRODUCTION

Universitas Terbuka provides broad access to world-class higher education to all citizens through Open and Distance Learning (ODL) to produce globally-competitive graduates. To that end, UT has set up gradual improvement in every aspect of its education products and services. As one of academic support services at UT, online tutorial serves as an alternative to on-campus tutorial, which primarily works with students who opt to take up tutorial experience in an online environment with broader flexibility of time and space. In online tutorials, tutors assist and facilitate students academically. They respond to students' questions or opinions in discussions and evaluate their assignments. By the end of tutorials, tutors provide assessment on their academic achievement on a particular course and incorporate feedback into subsequent tasks for improvement. Students may be admitted to online tutorials with 8 initiation courses and 3 assignments. In addition, they may take on tutor-student discussion or student-student interaction. To make sure that the learning activities and environment are properly set up to support effective learning, tutors heavily depend on the quality of system, information and services provided by Tuton supervisors. Internal-service quality reflects and encourages how tutors perform their tasks.This study identified several critical issues throughout the implementation of Tuton. Among them were unplanned scheduling that led to a lack of information about tutorial meetings and website issues such as slow-loading speed and under-maintenance issue. This study refers to these as "critical" given that planning how to cope with them is likely the key to achieving success in terms of the internal-service quality. Internal Marketing (IM) is a relatively new notion adopted by companies with the aim of enhancing the quality of products and services for better job performance. Most service companies like higher education institutions apply Internal Marketing for marketing feat in a way that integrates every aspect of a company's internal qualities in on-going marketing processes (Lupyoadi, 2001). In addition, Service Profit Chain asserts that internal-service quality fosters service delivery and empowers customer satisfaction. These are the focuses of this study that aimed to measure the effect of system quality, information quality and contact personnel service on online-tutor satisfaction.

2. LITERATURE REVIEW AND HYPHOTESIS DEVELOPMENT

2.1. System Quality

The notion of information system quality lies in how the system is perceived and used. Davis et al. (1989) perceive it as "ease of use" when it comes to experiencing new technologies. It represents the degree to which users feel that the new-technology experience does not require considerable effort and lets them spend time on other tasks, which in turn improves their time management and overall work performance. Studies by Delone and McLean (1992), McKinley et al. (2002), Rai et al. (2002), McGill et al. (2003), Almutairi and Subramanian (2005) and Livari (2005) demonstrate similar findings that information system quality positively affected user satisfaction

2.2. Information Quality

Identifying information quality means determining whether the content of particular information has the charateristics or attributes that make it meaningful and purposeful. Information quality, as posited by Kadir (2010), is heavily related to conveying certain knowledge based on relevance and timeliness. Likewise, O'Brien (2005) classifies a number of dimensions that define information quality, which are timeliness, currency, frequency and time period. Information quality has long been associated with system use, user satisfaction and net profit (DeLone and McLean, 1992). In addition, Kotler et al. (2004) in Tjiptono (2006) state that attractive web pages that serve as information platforms are likely to represent and define how business operations are running for potential visitors and customers. Turban and Gehrke (2000) shed light on online business where the quality of web contents either attracts potential customers or drives them away to competitors. Furthermore, O'Brien in his book "System Analysis and Design Method" classifies 3 dimensions of information quality – time dimension, content dimension and form dimension. Time dimension deals with the time in which the information is presented. Content dimension focuses on the content of the presented information, while form dimension focuses on how the information is presented.

2.3. Contact Personnel Service

Contact personnel constitutes an individual or a group of individuals through which service delivery runs and with which customers do direct interactions in a service setting. According to Nguyen and Leblanc (2002), contact personnel is an individual at the front line of organizations who interacts with public in service-purchase encounters. As high-contact service, contact personnel for Tuton is of crucial importance, as put by Lovelock and Wright (2002) that state, "In high-contact service, service personnel is central to service delivery." Lovelock and Wright (2002) further state, "In the eyes of the customers, service personnel may also be seen as an integral part of the service experience." Nguyen and Leblanc (2002) classify what influences contact personnel: a. Appearance b. Competence c. Professionalism. While appearance refers to the combination of attire, hairstyle, make-up and personal hygiene, competence is defined by the personnel's expertise and experience. Customer perception on real-time service is defined by a number of factors in addition to the company value and achievement. The manner, courtesy and appearance of the personnels make indelible impression on customers. Shamdasani and Balakrishnan (2000) put additional traits into the categories: a. Expertise b. Similarity c. Knowledge d. Hospitality e. Mutual Disclosure. Good customer service means having quick access to service delivery. In a service setting, contact personnels are in a position to respond a number of inquiries and complaints quickly and accurately. High-performance human resources score good business. They serve as service providers within service companies who set the tone for whatever customer interaction proceeds to. Contact personnels are closely related to marketing; marketing brings customers in, and contact personnels keep them coming back.

2.4. Hypothesis Development

This study proposed a number of hypotheses:
H1: System quality had a positive and significant effect on online-tutor satisfaction.
H2: Information quality had a positive and significant effect on online-tutor satisfaction.
H3: Contact personnel service had a positive and significant effect on online-tutor satisfaction.

3. METHOD

3.1. Research Design

This study was designed as an explanatory research that sought to verify hypotheses by explaining a phenomenon based on a scientific approach. This study provided three independent variables – system quality, information quality and contact personnel service – and one dependent variable – online-tutor satisfaction.

3.2. Participants

The method of data collection used cross-sectional analysis. The population comprised the entire online tutors, and the target population included online tutors in Faculty of Economy, Universitas Terbuka, 2017.1. Samples were obtained from convenience sampling, and questionnaires were taken online. 100 respondents were selected as samples from which data were used to make inferences.

3.3. Instrument

Data collection used questionnaires with a 5-point likert scale, ranging from "1= Strongly Disagree" to "5= Strongly Agree."

Table 1. Variables and Indicators

Variables	Indicators	Codes
System Quality (X1)	X1.1 Tuton application enables tutors to interact with students.	A1
	X1.2 Tuton application enhances tutorial experience.	A2
	X1.3 The features of Tuton application meet tutors' needs in conducting online tutorials.	A3
Information Quality (X2)	**Time Dimension**	
	1. Timeliness I am notified well in advance regarding the implementation of online tutorials.	B11
	2. Currency (Up-to-date Information) Tuton supervisors keep me updated regarding the implementation of Tuton.	B12
	3. Time Period Tuton supervisors keep notifying me of the duration of online tutorials per meeting.	B13
	Content Dimension	
	1. Accuracy The tutorial-assigned courses have met my educational background.	B21
	2. Relevance The tutorial-assigned courses have met the curriculum requirements.	B22

	3. Scope Information about how to attend Tuton is comprehensible.	B23
	4. Performance Information about how to attend Tuton is useful.	B24
	Form Dimension	
	1. Clarity Information about how to attend Tuton is clear and concise.	B31
	2. Detail Each information from Tuton supervisors is thoroughly presented.	B32
	3. Order Steps in Tuton implementation are well ordered.	B33
	4. Presentation Information about Tuton implementation is presented in additional platforms such as video.	B34
	5. Presentation Each information is meaningful and purposeful with respect to the succesful implementation of Tuton.	B35
Contact Personnels (X3)	**Tuton supervisors' abilities** 1. Tuton supervisors are able to provide accurate solutions to tutors in the event of implementation issues during Tuton.	C1.1
	2. Tuton supervisors fully welcome tutors' inquiries and criticism.	C1.2
	3. Tuton supervisors behave ethically when it comes to dealing with tutors' difficulties.	C1.3
	4. Tuton supervisors provide quick feedbacks for any difficulties during Tuton.	C1.4
Online-Tutor Satisfaction (Y)	Satisfaction of system quality	Y1
	Satisfaction of information quality	Y2
	Satisfaction of contact personnel service	Y3

3.4. Data Analysis

The analysis began with the process of developing the instrument which was measured using validity and reliability test to avoid errors that might affect the accuracy of data collected. Then, multiple linear regression was completed to acquire the result of model testing, the effect between the variables and the dominant variables. In terms of validity test, an item was a valid measure only to the extent that it scored above 0.40 at a significance level of 95% within a group of items representative of the content of the trait to be measured. In terms of reliability test, Cronbach's Alpha, coefficient and item-total correlation were applied to measure whether each variable was reliable. Each variable scored above 0.60, which generated reliable variables and indicates internal consistency. To figure out the effect

between variables, p-value must score ≤ 0,05 to ensure significant effect of the independent variables on the dependent variable, at a confidence level of 95% and a maximum deviation level of 5%.

4. RESULTS

4.1. Validity and Reliability

The results of validity and reliability test are presented in the following table:

Table 2

Results of Validity and Reliability Test

Variable	Indicator		Validity	Cronbach's Alpha	Reliability
	Min.	Max.			
X1	0.901	0.938	Valid	0.870	Reliable
X2	0.354	0.84	Valid	0.765	Reliable
X3	0.839	0.923	Valid	0.837	Reliable
Y	0.317	0.895	Valid	0.765	Reliable

Source: SPSS Output, processed in 2017

The result shows that the minimum values stand above 0.2, and the alpha values stand above 0.6. This indicates that the instrument could be properly distributed.

4.2. Frequency Distribution

The recapitulation of frequency distribution of respondents regarding the assessment of system quality, information quality and contact personnel service and online-tutor satisfaction is presented in Table 3.

Table 3. Recapitulation of Tutors' Assessment on System Quality, Information Quality and Contact Personnel Services

Cross tabulation of Respondents' Answers

Count		Respondents' Answers			Total
		Low	Moderate	High	
Variable	X1	3	6	91	100
	X2	0	14	86	100
	X3	0	18	82	100
	Y	0	18	82	100
Total		3	56	341	400

Source: SPSS Output, processed in 2017

The majority of respondents perceive information quality, system quality and contact personnel service as high, which indicates that UT consistently meets its customer requirements and expectations in the three areas. Likewise, online-tutor satisfaction is perceived as high. Tutor satisfaction sets off a profit chain of performance links between quality, productivity and student satisfaction.

4.3. Multiple Regression Analysis

Multiple linear regression was used to measure the effect of the independent variables on the dependent variable presented in Table 4.

Table 4. Results of Multiple Regression

Independent Variable	Dependent Variable	t	Sig t
System Quality (X1)	Tutor Satisfaction (Y)	4.096	.014
Information Quality (X2)		12.137	.000

		5.201	.000
Contact Personnel Service (X3)			
R^2			.922
Adjusted R^2			.919
F			376.5
Sig F			.000

Sources : SPSS Output, processed in 2017

The output is interpreted as follows:

13. R^2 of 0.92 (92%) is the simultaneous effect value of system quality, information quality and contact personnel service on tutor satisfaction. The remaining 8% constitutes other factors not included in the model.
14. $F_{Cal.}$ of 376.5 with alpha probability level of 0.00 (less than 0.05) indicates that system quality, information quality and contact personnel service simultaneously had positive and significant effects on tutor satisfaction.
15. $T_{Cal.}$ of system quality is 4.096 with the alpha of 0.014 (less than 0.05), which indicates that the system quality had a positive and significant effect on tutor satisfaction, given that the other factors that might affect the system quality remained constant. Hypothesis 1, that system quality positively and significantly affected online-tutor satisfaction, is accepted.
16. $T_{Cal.}$ of information quality is 12.137 with the alpha of 0.000 (less than 0.05), which indicates that the information quality had a positive and significant effect on tutor satisfaction, given that the other factors that might affect the information quality remained constant. Hypothesis 2, that information quality positively and significantly affected online-tutor satisfaction, is accepted.
17. $T_{Cal.}$ of contact personnel service is 5.201 with the alpha of 0.000 (less than 0.05), which indicates that the contact personnel service had a positive and significant effect on tutor satisfactions, given that the other factors that might affect the information quality remained constant. Hypothesis 3, that contact personnel service positively and significantly affected online-tutor satisfaction, is accepted.

A good information system should be user-oriented, which means that the system is essentially designed for user convenience. Despite the fact that the system is properly developed, without user support, system failure is likely to occur, and the implementation goes poorly. User satisfaction of information system refers to the degree to which the outcome of the use of an information system meets the user expectation. It is perceived as a positive condition the user experiences after using the system due to its ease of use (Santoso, 2009). Information quality generates output from information system that relates to the value, benefit and relevance of the information addressed to the system users. A good information quality addresses its users' needs, which in turn leads to satisfaction of using the information system (Radityo and Zulaikha, 2007). Contact personnels are equally important, given that oftentimes they are the only direct links customers have with a company when it comes to product or service inquiries and/or complaints. In addition to customer links, contact personnels help distinguish a company from its competitors. When two or more companies sell products or services with similar qualities and at similar prices, pulling off extra effort into customer services may give one company a competitive advantage over another.

5. CONCLUSION

The results are concluded as follows:

j. The variable of system quality, information quality and contact personnel service simultaneously had positif and significant effects on online-tutor satisfaction. The ability to retain and to improve the quality in the three areas is imperative to tutor experience and, ultimately, the level of service tutors are able to provide to students.
k. The variable of system quality closely relates to the availability, usability and performance of an overall system. Quality means that a system fits for the implementation of Tuton and therefore meets the requirements set for online-tutor satisfaction.
l. The variable of information quality affects online-tutor satisfaction so long as it addresses tutors' needs. Accurate, timely and well-presented information is likely to improve how tutors perceive the quality of information, and, in turn, how they perform their tasks.

m. The variable of contact personnel service that reflects user orientation supports tutors and focuses on their major needs and priorities. Tutors are hence able to connect with approriate resource for consistent and reliable service.

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