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## Service Quality and Students' Satisfaction Towards Purchasing Online Educational Resources

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#### Abstract

The aim of this research is to explore the degree of influence of the variables: reliability, responsiveness, ease of use and security on the student satisfaction in purchasing online educational resources. A sample of 250 Malaysian and foreign students from different level participated in this inquiry. This research applied descriptive statistics, exploratory factor analysis and structural equation modeling to test the proposed hypothesis. The outcome indicated that security perceived by the respondents were the highest influence on the student satisfaction in purchasing online educational materials. It is indicated that the online sellers of educational materials should concern their effort on raising their services with higher effort to insure the consumer security when they purchase educational materials from online.

**Keywords:** reliability, Responsiveness, ease of use, Security, Customer satisfaction

#### 1. Introduction

The success of online purchase depends on the satisfaction of the users with providers overall systems. Therefore, this research empirically tested the role of service quality and students' satisfaction with online purchase of different educational resources. The increase of the internet not only alters the ways individual performs their task, it has also made the modification in the methods of doing business by the education resource providers. In order to make their products available for the internet users, the majority of the education resources has started to store their books and other resources under the digital form.

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Tilya et.al., (2006) identifies three reasons for education resources uploaded in virtual reality, for instance: access to learning opportunities through the flexibility of delivery, enriching the learning experience quality, increasing the efficiency in their overall market shares. Apart from free access, the majority of the resources are not free. As a result, online payment system is adapted by those companies, in order to manage their purchasing process with their respective customers to success their transactions (Fazlollahi, 2002). When the users purchase resources through online, the significance of transferring money through online has become a concern for the consumers. That is why the majority of the sellers is concerned with security, privacy, the ease of use, responsiveness of their customers and efficiency of their own systems (Rust and Kannan, 2002; Dabholkar, 1996). Aside from that, customers' satisfaction relates to the success of the business (Ho & Wu, 1999; Getty & Getty, 2003). Generally, service quality is an important antecedent that is mostly influenced the overall customers' satisfaction. Cronin and Taylor (1992) found that the tight relationships among service quality and client satisfaction. As numerous researchers have already investigated the issue online purchase and satisfaction. However, still there is a lack of researches on the antecedents of student satisfaction in particular by investigating their online purchase of educational resources under Malaysian context. This research attempts to fill this gap. The purpose of this research is examining the components of service quality and its impact on customer satisfaction of online purchase academic resources.

### 2. Hypothesis Development

Service quality and customer satisfaction in online context are explained in this section. Previous researchers agreed that service quality is an intangible element, which has elusive construct, and difficult to read. The analysis of service quality definitions arises in the judgment for consumers' attitudes—which relates to the superiority of a service provider (Fisher, 2001; Alam and Yasin, 2009). As consumers of digital resources, the existing and potential companies need a sure level of skills and experiences in solving with the feedback they got from the clients.

Quality of service delivered is correlated to customers' overall satisfaction or dissatisfaction (Juan et al. 2008; Kang et al. 2002; Kettinger et a 2005; Parasuraman 2005). Giese, and Cote, 2003); Parasuraman (2005) have given high priority on SERVQUAL model, that considers service quality as a multi-dimensional construct consisting of five dimensions: tangibles, reliability, responsiveness, assurance and empathy.

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This model designed to practice across a change of service settings (Cox and Dale 2001, Chen 2003, Kettinger, 2005).

In fact, researchers also matched that in online purchase reliability, responsiveness, ease of use were seen the most important components. As reliability can be assessed through the achievement of successful online transactions, maintaining records, superior online performance, and fulfilment of hopes. Responsiveness is the ability of the service providers to respond consumers' requests by resolving their payment problems (Eid and Al-Anazi, 2008). Specially for online transactions safeguarding the personal information of the consumers and safety in completing online transactions is an important agenda (Kotleret.al. 2001; Reibstein, 2002; Schaupp and Bélanger, 2005, Dillon and Reif, 2004). Studies concern the "ease of use" also play a significant role to attract both experienced and new online customers for purchasing online products from the providers (Lee et al. 2001 and Song and Zahedi, 2001). Grounded along the previous literature the researchers constructed four possible relationships that assume to refer with the student satisfaction of purchasing online educational resource. The constructs address variables such as reliability, responsiveness, ease of use, security positively relates to overall customer satisfaction with purchasing online educational resources. As a consequence, following hypothesis will be examined to further confirm the relationship:

**H1:** The association between reliability and students' satisfaction with online purchase is strongly significant.

**H2:** There strong relationship between responsiveness and students' satisfaction with online purchase of educational resources.

**H3:** Ease of use plays a significant role in students' satisfaction of online payment for educational resources.

**H4:** Security plays a significant role in student's satisfaction for the quality of online purchase of educational resources.

# 3. Methodology

This research is a cross sectional survey. The primary data collection method was included by applying survey methods for the students of different higher learning institutions in Malaysia.

The details of the questionnaires were adapted from previous literature. This research adapted 30 items from the literature for survey instruments. Each variable of this research was constituted with 6items. As the research applied convenience sampling and instruments was distributed for the intention to achieve 250 respondent's responses. Respondents were also requested to get their judgment on a five point Likert-type scales (1= strongly disagree and 5= Strongly disagree). The data were analysed with descriptive statistics followed by reliability Analysis, exploratory factor analysis and Multiple Regression Analysis.

### 4. Data Analysis

Out of the total 250 respondents, a majority number of respondents belong to 65%, whereas the female respondents were only 35%. It was also found that most of the respondents were from the Bachelor level (60%) followed by Master Level (25%) and PHD level were only (15%).

Among the respondents, 80% were local (Malaysian) and just 20% were foreign students. The big differences exist between public and private institution respondents, 60% of the respondents were from public institutions while 40% were from private institutions.

Out of the entire sample, 80% of the respondents are very interested to purchase online educational resources, however 20% of the respondents still prefer to purchase offline materials. Out of total respondents, 60% of the respondents like to access free educational materials while 40% of the respondents like to purchase materials through online payment.

The result from the descriptive research also explored that majority of the respondents (60%) are worried about security when they buy anything from online. Apart from that respondents also concerned about reliability of the sites itself (20%), while the rest of the respondents (10%) were concerned about responsiveness and remaining 10% were worried about ease of utilisation of the websites in purchasing online educational resources

This research also calculated the Reliability Statistics of all the items through Cronbach's Alpha which is. 823, which means that our measurement items were consistent.

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**Table 1: Reliability Statistics** 

Cronbach's Alpha	Cronbach's Alpha Based on Standardized	N of Items
	Items	
.821	.831	30

All items of the instruments were operated through exploratory factor analysis by using the principal component extraction method. This research utilized varimax rotation. As this study only considers the items that were at least 0.50 loadings to ensure the convergent validity. From the result of factor analysis only 20 items were retained under four factors. Above all the Kaiser-Meyer-Olkin (KMO) Measures of sampling Adequacy were adequate (. 813) to guide the researchers for further data analysis.

The model summary output from the regression analysis explained that 42% of variance in customer satisfaction variable on online purchase. Which means that dependent variable (students' satisfaction with online purchase) is explained 42% by the model (that includes the variables of Relaibilty, responsiveness, ease of use and security). In this study the tolerance value of all the variables (independent) was within. 824 to. 831, which is not less than. 10. As a consequence, researchers in this research had not violated the multicollinearity assumption during the performance of multiple regression. For the Coefficients Matrix output, the researchers were seeing on the Standardized Beta Coefficients which assisted the researchers to evaluate the influence of each variable to the dependent variables in the regression model.

The consequence of multiple regression revealed that the largest beta coefficient is.478 for the security, which means that the bulk of the respondents were highly influenced by the security to explain their satisfaction with online purchase of educational materials when all other variables in the model were controlled for. The beta values for reliability, responsiveness, ease of use are, accordingly, 0.281, 0.259, 0.018 made a less contribution to the dependent variable.

For the significance test of each variable, it was explored that all the variables were significant at.05signifinace level. As a result this research accepted all the hypothesis at the 95 % confidence level.

The outcome of this research underpins the findings by Parasuraman et al. (2005) where they indicated that offering reliable service, encourages customer satisfaction.

The findings from these surveys will be positive impact the players of online education service providers by looking at the function of the components of service quality. In this survey, the researchers also brought out that the security assurance of the service providers is very important to meet the existing and likely customers. This guide the seller of online education materials an efficient marketing tactic with dynamic policy to insure all the components (Security, Reliability, Responsiveness and Ease of usage). Above all we can conclude the students are likely to utilize more and more for online materials with assurance by vendors. This research finding demonstrated a strong association of security towards the online purchase, comparing with other three variables

### 5. Conclusion and Recommendation

Most of the respondents are very much conscious of security when they purchase in online educational materials. So, Online resource service providers must ensure about this factor to be incorporated in their marketing as well as business strategy. Further research should be undertaken to gather more information regarding the service quality and customers' satisfaction dimensions in the context of a particular students' segments. This study developed and tested a model for customer satisfaction with online purchase by adjusting various components of service quality. The result of this research identified service quality dimensions had an important impact on customer satisfaction on the purchase online education resources. So, secure services on the web is highly commended for the accomplishment of student satisfaction

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#### References

Alam, S. S. and Yasin, N. M. (2009). An Investigation into the Antecedents of Customer Satisfaction of Online Shopping. The Australian & New Zealand Marketing Academy (ANZMAC) Conference, Melbourne, Australia 30 November – 2 December, Paper number 79.

- Chen, Q., Clifford, S. J. and Wells, W. D. (2003). Attitude toward the site II: new information. Journal of Advertising Research, 42(2), 33-46.
- Cox, J. and Dale, B.G. (2003). Service quality and e-commerce: an exploratory analysis. Managing Service Quality, 11(2), 121-31.
- Cronin, J. J., and Taylor, S. A. (1994). SERVPERF versus SERVQUAL: reconciling performance based and perceptions-minus-expectations measurement of service quality. Journal of Marketing, 58(1), 125–131.
- Dabholkar, P.A. (1996). Consumer evaluations of new technology-based self-service options: an investigation of alternative models. International Journal of Research in Marketing, 13 (1), 29-51.
- Dillon, T and H. Reif, H. (2004) "Factors Influencing Consumers' Factors Influencing Consumers E-Commerce Commodity Purchases Commerce Commodity Purchases," Information Technology, Learning, and Performance Journal, vol. 22, pp. 1.
- Eid, M. and F. Al-Anazi, (2008). Factors Influencing Saudi Consumers Loyalty towards B2C E-commerce, 14th Americas Conference on Information Systems, Toronto, Ontario, Canada, August 14-17.
- Fazlollahi, B. (2002), Strategies for E Commerce Success, IPM, London.
- Fisher, A. (2001). Winning the battle for customers. Journal of Financial Services Marketing, 6(2), 77-83.
- Getty, J.M., & Getty, R.L. (2003). Lodging Quality Index (LQI): "Assessing hotel guests' perceptions of quality delivery". International Journal of Contemporary Hospitality Management, 15 (2), 94–104.
- Giese, J. and J. Cote, (2003). Defining consumer satisfaction. Academy of Marketing Science Review, retrieved from http://www.amsreview.org/articles/giese01-2000.pdf Academy of Marketing Science.
- Ho, C., Wu, W. (1999). Antecedents of customer satisfaction on the Internet: an empirical study of online shopping. Proceedings of the 32nd Hawaii International Conference on Systems Sciences.
- Juan, A.; Huertas, M.; Steegmann, C.; Corcoles, C. and Serrat, C. (2008). Mathematical E-Learning: state of the art and experiences at the Open University of Catalonia. International Journal of Mathematical Education in Science and Technology, 39(4), 455-471.
- Kang, H. and G. Bradley (2003). Measuring the Performance of IT Services: An Assessment of SERVQUAL. International Journal of Accounting Information Systems, 3(3), 151-164.
- Keeps them coming back?" Journal of the Academy of Marketing Science, vol. 30, pp. 465-473.

- Kettinger, W. and C. Lee (2005). Zones of Tolerance: Alternative Scales for Measuring Information Systems Service Quality. MIS Quarterly, 29 (4), 607 621.
- Kotler, P., Cunningham, M.H. and Turner, R.E. (2001). Marketing Management, Pearson Education Canada, 2001.
- Lee, D., Park, J., and Ahn, J. (2001). "On the explanation of factors affecting e-commerce adoption, Proceedings of the 22<sup>nd</sup> International Conference on Information Systems, 2001, pp. 109-120.
- Parasuraman, A., V. Zeithaml, V.and A. Malhotra, (2005). A Multiple Item Scale for Assessing Electronic Service Quality. Journal of Service Research, 7(3) 233.
- Reibstein, D. J. (2002) "What attracts customers to online stores, and what
- Rust, R.T. and Kannan, P.K. (2002). The era of e-service", in Kannan, P.K. (Ed.), e Service. New Directions in Theory and Practice, M.E. Sharpe, New York, NY.
- Schaupp. L.C and F. Bélanger (2005), "A conjoint analysis of online consumer satisfaction," Journal of Electronic Commerce Research, vol.6, pp. 95-111.
- Song, J., and Zahedi, F. M. (2001) "Web design in e-commerce: a theory and empirical analysis", Proceeding of 22<sup>nd</sup> International Conference on Information Systems, 2001, pp. 219
- Tilya, F., Moens, N., and Ducastel, N. (2006). ICT in education: the Tanzanian Experience. International Institute for Communication & Development: The Hague, NL.