

# Factors Affecting Customer Service Delivery of using Online Banking in Malaysia

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## Abstract

*The rapid spread of information and communication technology (ICT) has made electronic banking the best channel to provide banking services/products to customers. The quality of online banking services has become a major area of attention among researchers and bank managers due to its strong impact on business performance, profitability and customer service delivery. Hence, banks now consider online banking as part of their strategic plan. This paper provides a model with 5 factors on the following dimensions: cost, convenience, security, online banking and customer service delivery. The study employed some hypotheses in order to guide the research*

*in achieving the overall aim of the research as well as testing the stated hypotheses by using Structural Equation Modelling (SEM). The findings of the study reveal that security and convenience are the major drivers of customer service delivery of online banking in Malaysia. In addition, using online banking service context, the study also found a strong empirical evidence for measuring customer satisfaction with electronic banking services.*

**Keyword:** Customer Service Delivery, Kano's Model, Malaysian Banking Industry and Online Banking.

## I. Introduction

A strong online banking services are an important drivers in the banking industry for bank's performance and customer service delivery [1]. Thus, online banking can have a significant effect in supporting economic development through efficient financial services [2].

As the banking industry is becoming global in nature, faces a competitive environment; banks are forced to balance the goals of outreach and sustainability. Hence, online banking may be the instigator of this new environment and the prime mover in terms of providing the potential solution for bank's survival in the near future [3, 4, 5, 6].

Research has proven that, electronic banking services (EBS) are the wave of the

future banking by providing enormous benefits to consumers in terms of ease and cost of transactions through online banking [7, 8].

Due to little research conducted in Malaysia in the areas regarding accessing the external factors that entice or discourage customers to patronize online banking, there is a strong need for this study to address two major issues,

- The first one is to explore the significant factors that may cause online banking to have an impact on customer service delivery in Malaysian commercial banks.
- Secondly, there is a need to examine the relationship between the factors that may affect online banking services and customer service delivery in Malaysian banks.

By understanding the basic factors that encourage customers to patronize online banking, this will go a long way in reaping the benefits of online banking and also for banks to remain competitive and profitable in the long run [1].

## **RESEARCH FRAMEWORK (KANO'S MODEL)**

The research framework of this study is based on the adaptation of Kano's Model first developed by Professor Kano in 1984 (see figure 1).

The Kano's model of customer satisfaction seeks to explain how assigning priorities to operational objectives may result in lasting improvements in customer service delivery (Saeidipour et al, 2012; Shen, et al, 2009). Thus, the Kano's model is viewed in the perspective of online banking service via customer service delivery (see figure 1).

The essence of choosing the Kano's model in this study is because, the model could provide a unique opportunity for understanding the impact of online banking on customer service delivery and identify the categories of behavioural factors to be managed. Hence, this model shows the best way for putting the fundamental principles of good behavioural factors in place and continually expanding and enriching that set of principles which makes it easy to apply in different situations.

The study considers online banking as one of the major tools of interaction with customers, while behavioural factors such as security, convenience and cost are classified as banking capabilities at the root of effective customer service delivery.

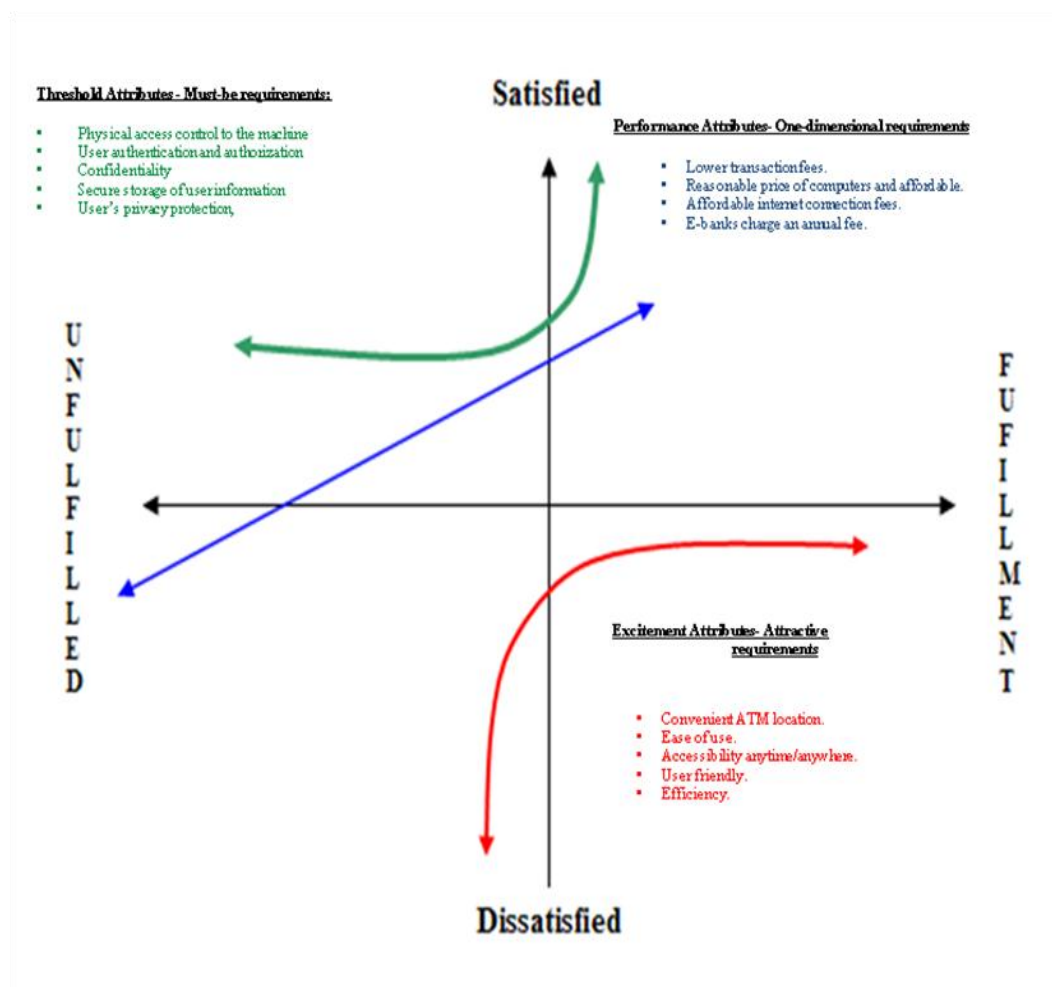


Figure 1: Slightly Modified Kano's Model (Source: Bhattacharyya & Rahman, 2004)

## II. Factors Inhibiting Online Banking Adoption

Behavioral (external) factors are the important determinants of online banking adoption as disclosed by [9]. Behavioral factors pertaining to convenience, security and cost are the focus of this study as they have a reciprocal influence on customer service delivery [10, 11, 12].

- Cost: This is one of the major factors that influence consumers' adoption of innovation [2] stated that for consumers to use new technologies, the technologies must be reasonably priced relative to alternatives.

Otherwise, the acceptance of the new technology may not be viable from the standpoint of the customer.

- Security: This is another very important factor in determining the decision of customers to use online banking. [13] identified security as an important characteristic from a customer's perspective on the adoption of innovation.
- Convenience: This is considered to be an influential factor for the use of online banking. Still, there is a positive relationship between

convenience and service delivery via online banking, such as the ability of online banking to meet users' needs using the different feature availability of the services. [14]

- Trust: is the expectations that companies with which one interacts will not take improper advantage resulting from the dependence one has on their customers.

Trust has been considered a decisive factor in stimulating electronic banking services through online banking. The reason for such importance lies in the fact that, in the absence of any practical guarantee, customers cannot be certain that the bank will not resort to undesirable, opportunistic behaviour such as the violation of privacy, unauthorised use of credit card information, or access to unauthorised transactions.

This is based on expectations that the other person will behave in a responsible manner and will not take advantage of a dependence upon him or her [20, 21]

Therefore, trust is perhaps a critical component in building economic relationships in an online environment such as online banking due to a greater perception of risk and uncertainty.

This may be due to a higher threat of possible inappropriate

behaviours such as security lapses where vital private information can be stolen. Unless individuals trust the technology, in which this negative possibility will not occur, it is more likely that the technology will not be adopted.

Previous researches reveal that customers are more sensitive to the behavioral factors mentioned above in terms of customer service delivery via online banking than the internal factors [15].

This means that there is a direct relationship between technology and behavioral (external) factors in the adoption of online banking. Therefore, the level of online banking adoption will directly impact on the degree to which the customers are satisfied, in terms of the behavioral factors [4].

This reveals that effective service delivery on behavioral factors may result in customer loyalty (which impacts their future utilization of online banking patterns) in relation to other factors, just like it has on customer satisfaction.

Thus, banks should give high priority to behavioral factors and should consider it as important key drivers towards successful implementation of online banking [12, 16, 17]

#### **IV. Conceptual Model and Hypotheses**

For the purpose of understanding the factors influencing online banking services towards customer service delivery, this paper proposes a conceptual model (see figure 1 below).



Figure 1: Conceptual Research Model (Source: Literature Survey, 2013)

## V. Methodology

This study applies SPSS statistical tests and AMOS 18 Structural Equation Modeling (SEM). Data were collected through online questionnaire.

Respondents were randomly chosen from the list of both undergraduate and postgraduate students from the States of west coast Malaysia, because they are the most frequent users of electronic banking.

Interestingly, 283 students filled up the questionnaires using a five-point Likert scale ranging from “strongly disagree” to “strongly agree.”

## IV. Cronbach’s Alpha

[18] noted that alpha and construct-reliability values greater than or equal to 0.70 and a variance-extracted measure of 0.50 or greater indicates sufficient scale or factor reliability.

**Table 1: Cronbach’s Alpha Coefficient  
Online Banking Services**

	Cronbach's Alpha	No. of Items
1. Cost	0.694	6
2. Convenience (CONV)	0.873	6
3. Security (SEC)	0.859	6
4. Online Banking (OB)	0.836	6
5. Customer Service Delivery (CSD)	0.859	8

## VII. Measurement Model (Online Banking)

An exploratory factor analysis (EFA) was applied in ensuring only high loading items were used in the data analysis. The

factor loading are newly developed scales and [19] is on the view that for newly developed scale the factor loading of an item should be 0.5 and above.

All indices exceed their acceptable levels, suggesting that the measurement model provides a good fit to the data.

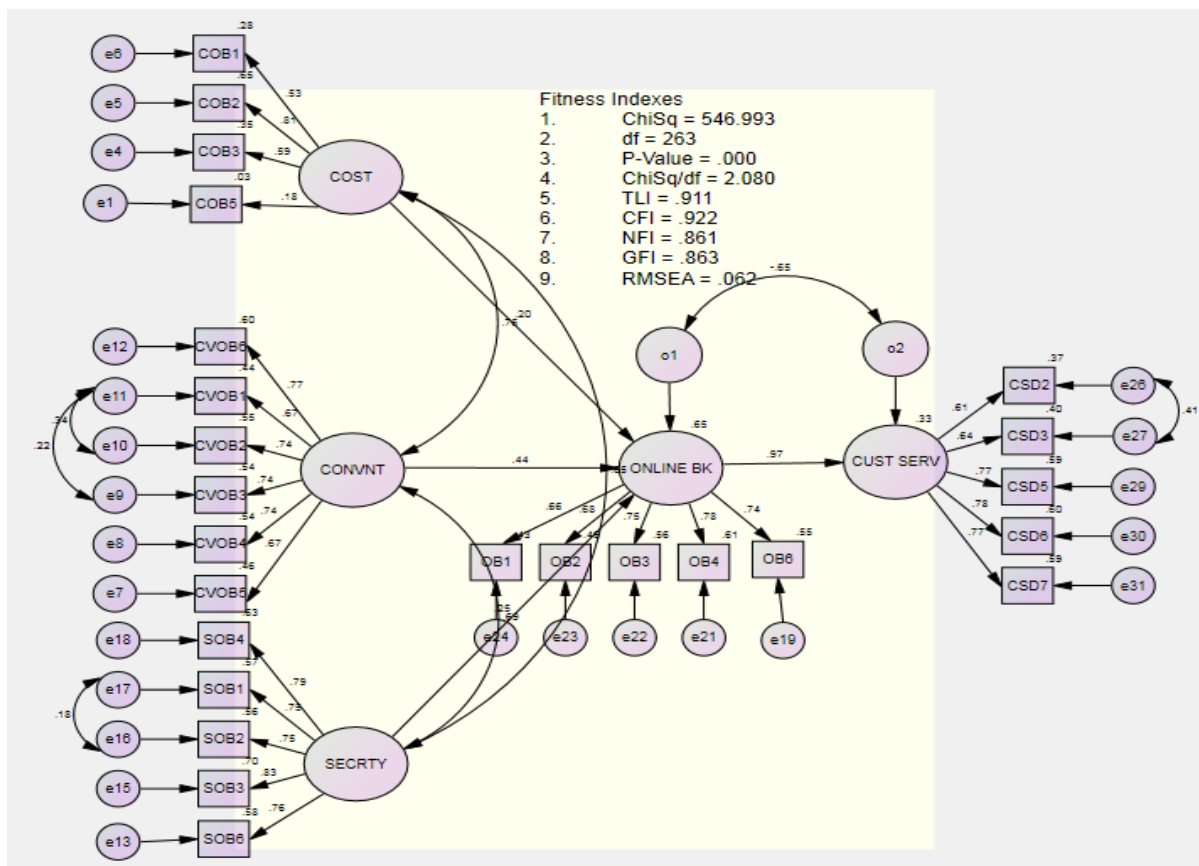


Figure 2: Structural Model Of Online Banking And Customer Service Delivery

The full structural model results show that there are 3 correlations and 4 covariances achieving stable model fit estimates. Figure 2 displays its indicators of fit: Cmin/DF = 2.080 (C min =546. 993, DF = 263); GFI = 0.863; NFI = 0.861; CFI = 0.922; RMSEA = 0.062.

In summary, Figure 2 empirically shows that online banking has a highly significant influence ( $\beta=0.97$ ,  $p=.0001$ ) on customer service delivery ( $R^2=0.33$ ). These indices

suggested that the structural model provides a good fit to the data and yields a corroborating value for good model fit.

However, it is interesting to note that the covariance link between e1 online banking and e2 customer service delivery had a negative magnitude of 0.65. This means that online banking with unknown element was not positively associated with an unknown element of customer service delivery.

Table 7: Model Fit Summary of the Structural Model

Regression Weights: (Group number 1 - Default model)				Estimate	S.E.	C.R.	P	Label
ONLINE BK	<---	COST		.727	.326	2.231	.026	
ONLINE BK	<---	CONVNT		.467	.095	4.897	***	
ONLINE BK	<---	SECRTY		.223	.058	3.862	***	
SERV DELV	<---	ONLINE BK		.890	.105	8.438	***	

All the hypotheses are supported, except (Online Banking ← Cost), which indicated that cost has no direct effect of customer service delivery via online banking. Instead, customers value more on the convenience and security factors which have a direct effect on online banking services, while on the same vein online banking has a direct effect on customer service delivery.

Thus, from the result of the hypothesis testing, the study has proven that those two constructs namely convenience and security have strong evidence of customer satisfaction via online banking as the mediator linking the relationship between Online banking and customer service delivery.

#### III. Conclusion

The primary aim of this paper is to outline the research hypotheses and the procedure employed in Structural Equation Modeling (SEM) followed by developing scales to measure online banking and customer service delivery in Malaysian Banking Industry. By measuring the factors that influence customer service delivery via Online banking using Confirmatory Factor Analysis (CFA), it is revealed that these factors have a significant influence with a higher cutoff Goodness-of-Fit Index (GFI)  $\geq .95$  and RMSEA (spec.)  $\leq 0.080$ .

Furthermore, the results of the survey provides a strong empirical support for the three hypotheses tested by comparing the relationship between the constructs. Figure 2 shows the final model and highlights the significant relationship in bold.

The research provides an empirical evidence about the relationship between cost, convenient, security, online banking and customer service delivery. This

research provides the first investigation into conceptualizing such relationships in online banking service within the context of Malaysian banking industry. Essentially, the research systematically developed a model of customer service delivery that are mentioned in the literature and then empirically tested the model in the context of online banking in Malaysia. Hence, evidence about the relationships between online banking, cost, convenience, security and customer service delivery was produced.

The findings of this paper confirm the existing body of literature on the importance of online banking to customer service delivery. It shows that most of the behavioral factors positively influence service delivery [17]. Hence, these factors are determinants of customer service delivery in online banking services.

As such, this paper presents new directions in a service delivery research and offers new directions to researchers and managers in providing service delivery improvement.

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