QUALITY OF ONLINE BANKING: A SERVQUAL APPROACH

ABSTRACT
Banking industry has faced a tremendous sea change in the way operations have been done with the introduction of core-banking solutions where the branches were interconnected and subsequently the banking systems were connected with third party service providers through the payment gateway. This technological intervention has revitalized the level of quality of service the customers were experiencing with the reduced waiting time, reduced queues and self-serving through ATMs, e-corner and online banking facilities. With the technology, Banks are able to reduce the transactional errors and improve the speed of operation. However, analysis of the system from the perspective of the users has to be done frequently to find the gap in the expectation and experience of the users. The current study focused on analyzing quality of the online banking system applying the gap analysis using the SERVQUAL approach. The study applied binary logistic regression for analysis. The study found the gap was found to be more in the assurance dimension of the online banking services and the gaps in assurance, availability and reliability affected the online banking access by the customers.

1 Introduction
The core banking solution has led to the revolution in banking with the integration of the branch connectivity and extending further to connect with the customers online. With the online banking facility, customers are offered the self-service facility where they can transact themselves either deposit or fund transfer merely at a click from anywhere. This has completely changed the customers’ banking experience where long before they had stood for hours together waiting in the queue for transacting the deposit or withdrawal. Banks use online banking as the tool of Customer relationship management (CRM). Through this online banking they try to improve their customer services and thereby they try to maintain better relationship with the customers. The better their CRM strategy and better their service the better the retention rate of customers will be. Though the online banking has eased the operations for both the bankers and the customers, the quality of online banking has to be analyzed to find out the areas of improvements. Improvements could be suggested only when the gaps between the expectations and the experience is known. The current study focused on finding the gaps in the online service comparing the expectations and experiences of customers with regard to online banking. The study has come up with the recommendation in the quality of information as suggested by the customers to enhance the customer service and the CRM medium.

II Literature Review
Hans et al. (2004) has studied the e-banking portal quality in the dimensions of security, trust, basic service quality, cross-buying service quality, added value, transaction support and responsiveness and classified them under three broad categories core services, additional services and problem-solving services.

Simon et al. (2013) has found that the lack of responsiveness results in dissatisfaction and unavailability of services reduces the satisfaction level among the customers.

Mohannad (2015) studied the accuracy, timeliness, completeness and relevancy dimensions of the content provided in the online banking web pages to determine the information quality.

Silvio J. et al. (2014) have found that reliability and access are the two important dimensions that motivated the customers.

Sadaf Firdous (2017) has found that efficiency, privacy and website design are very important determinants that impacts the perception on online banking quality.

III Objectives
1. To know the expectations of the customer and their actual experience in online banking among the new generation private sector and nationalized banks.
2. To find out the gaps between the expected and actual in terms of assurance, reliability, availability and empathy dimensions
3. To find out the extent of influence of gaps over the frequency of usage

III Methodology
Questionnaire method was adopted to collect responses from 344 respondents from Dindigul district. Convenience sampling method was applied to collect the responses from among the online banking customers of different nationalized and new generation private sector banks. The reliability of the data is ensured where the cronbach alpha is.994 and the data has been tested for the normality where the Shapiro-Wilk Test found that p>0.05, which confirmed the data has been normally distributed.

The study used the SERVQUAL model developed by Parasuraman et al. (2005) to study the dimensions of online banking quality. The quality of the e-banking was studied in the dimensions of the responsiveness, assurance, availability and empathy.

• Responsiveness indicates how the customer requests, queries, orders and complaints are attended by the manufacturer or service provider.
• Assurance shows the commitment level of the service provider or manufacturer in fulfilling the promises made to the customer.
• Availability means the presence of service elements whenever the customer requires.
• Empathy indicates the understanding the position and feelings of the customers that would enable to serve them better.

The gap was identified in these areas comparing the expectation and perception of online banking users. The study focused on finding to what extent the frequency of usage of online banking service is affected by the increased gap in service quality in these dimensions and whether the bank category whether the nationalized and the private status of the bank has influenced the usage.

The study applied the Mann-Whitney U test to find if there is difference in gaps between the nationalized and new generation private sector banks and between the low and heavy users of online banking. The binary logistic regression is applied to find which problem has affected the frequency of usage of online banking.
III Results and Discussion
The results of Mann-Whiney U Test showed that the reliability gap (Test statistic = 5.181, p=.000 at α=.005), assurance gap (Test statistic = 5.203, p=.000 at α=.005), availability gap (Test statistic = 5.173, p=.000 at α=.005) and empathy gap (Test statistic = 5.210, p=.000 at α=.005) is more in nationalized banks than new generation private sector banks.

The results of Mann-Whiney U Test showed that the reliability gap (Test statistic = 15.611, p=.000 at α=.005), assurance gap (Test statistic = 15.856, p=.000 at α=.005), availability gap (Test statistic = 15.915, p=.000 at α=.005) and empathy gap (Test statistic = 15.639, p=.000 at α=.005) is more among the low users than the heavy users of online banking.

In the binary logistic regression analysis the ratio of cases to independent variables is 69 to 1 that satisfies the preferred ratio of 20 to 1. The probability of the model chi-square (459.167) was .000, less than or equal to the level of significance of 0.05. The null hypothesis that there is no difference between the model with only a constant and the model with independent variables was rejected. Hence the existence of relationship between the dependent variable and independent variables was supported.

The values of Cox & Snell (.737) and Nagelkerke’s R square of .994 indicate a very strong relationship between prediction and grouping. Hosmer and Lemeshow goodness-of-fit statistics 0.918 indicated that the model was a better fit confirming there was no significant difference between the model predictions and observed values.

The probability of the Wald statistic of the gap in the availability, reliability and assurance was .000, less than or equal to the level of significance of 0.05. Similarly the influence of bank category on the frequency of usage was also found to be significant. This supports that the increase in the gap in availability, reliability and assurance reduces the frequency of usage of online banking and the frequency of usage was found to be more among the new generation private sector banks than the nationalized banks.

Considering the frequency of usage by y, availability gap be x1, reliability gap be x2, assurance gap be x3 and bank category be x4, the study found the relationship which is expressed in equation 1.

\[ y = (-3.400x_1) + (-2.878x_2) + (-3.473x_3) + (-3.191x_4) \]

The probability of the Wald statistic =35.328 for the availability gap was .000, less than or equal to the level of significance of 0.05. The null hypothesis that the b coefficient for availability gap was equal to zero was rejected. This supports the relationship that “survey respondents from the new generation private sector bank category was .000, less than or equal to the level of significance of 0.05. The null hypothesis stating that the b coefficient for bank category was .000, less than or equal to the level of significance of 0.05. This supports the relationship that "survey respondents from the new generation private sector banks were less likely to reduce the usage of online banking."

The value of Exp(B) was .0323 which implied that positive rating of reliability decreased the odds by 99.7% survey respondents reducing the usage of online banking than those who had negatively rating the reliability. This confirmed the statement of the amount of change in the likelihood of belonging to the modeled group of the dependent variable associated with a one unit change in the independent variable, reliability gap.

The probability of the Wald statistic =27.949 for the variable assurance gap was .000, less than or equal to the level of significance of 0.05. The null hypothesis that the b coefficient for assurance gap was equal to zero was rejected. This supports the relationship that “survey respondents who had positively rated the assurance positively were less likely to reduce the usage of online banking."

The value of Exp(B) was .156 which implied positively rated assurance decreased the odds by 84.64% survey respondents reducing the usage of online banking than who had negatively rating the assurance. This confirmed the statement of the amount of change in the likelihood of belonging to the modeled group of the dependent variable associated with a one unit change in the independent variable, assurance gap.

The probability of the Wald statistic =27.486 for the variable bank category was .000, less than or equal to the level of significance of 0.05. The null hypothesis stating that the b coefficient for bank category was equal to zero was rejected. This supports the relationship that “survey respondents from the new generation private sector banks were less likely to reduce the usage of online banking."

The value of Exp(B) was .151 which implied new generation private sector bank category decreased the odds by 75.33% survey respondents reducing the usage of online banking than those from the nationalized bank category. This confirmed the statement of the amount of change in the likelihood of belonging to the modeled group of the dependent variable associated with a one unit change in the independent variable, bank category.

IV Managerial Implications
The study found that when the assured level of service was not provided, it reduces the usage of online banking followed by the unavailability of services whenever required and then the reliability failures. The nationalized bank customers experience more quality gaps in assurance, availability and reliability that reduces the usage of online banking. To improve the quality of service, more attention need to pay to fulfill these gaps in customer service operations. To address these gaps, the bankers could match their communication strategies with the features of their services with appropriate information provided in the online banking web pages and they could ensure the availability of online banking services are not compromised due to network traffic, server capacity or the speed of loading of the online banking web pages. The security has to be given due focus to keep the hackers out of reach that would encourage the customers who fear to use the online banking just due to lack of reliability.

V Conclusion
The quality of online banking was found to influence the frequency of usage of online banking service. The gaps in assurance, availability and reliability were found to be more important influencing the usage of online banking. The study concluded that the nationalized banks have to overcome their quality gaps in these dimensions to compete with the new generation private banks in the usage of online banking.

References


