Chapter 8

Findings and

Conclusion

Contents:

This chapter presents the major findings of the study and also puts forward a few suggestions for the banks.

8.1 Findings:

1. Usage of Online Banking Services among various demographic variables:

i. The findings of the study suggest that the use of online banking platforms is used mostly for payment of bills. This includes electricity bills, water supply bills, etc. This was followed by mobile and DTH recharge and payment for regular shopping. The least usage of online banking service platforms was identified for school fees payment, rent payment, trading of goods, and trading of shares.
ii. It was observed that all respondents had a savings bank account. This was followed by a loan account, fixed deposit account, recurring account, and current account. The least amount of respondents were observed to possess a demat account.
iii. The demographic data was analysed and a summary of the same are given below:

    a. Usage of online banking services was independent of the district of the respondents. There was no significant association between the two.
    b. Usage of online banking services was dependent on the age group of the respondents. There was a significant association between the two. For the demographic variable age it was observed that majority of the frequent users of online banking services were from the age group 18-30 yrs, and the majority of the infrequent users were from the age group 51 yrs and above.
    c. Usage of online banking services was dependent on the gender of the respondents. There was a significant association between the two. For the variable gender - online usage was found to be more among female respondents.
    d. Usage of online banking services was dependent on the educational qualification of the respondents. There was a significant association between the two. Usage of online banking services was observed to be more frequent among the respondents having graduate, post-graduate and professional qualification.
    e. Usage of online banking services was dependent on the employment status of the respondents. There was a significant association between the two. Working people i.e. service holders and entrepreneurs had higher usage of online banking services as compared to unemployed respondents and students.

f. Usage of online banking services was dependent on the monthly family income of the respondents. There was a significant association between the two. Consumers with higher monthly family income (Rs. 1,00,001 and above) had higher usage of online banking services as compared to consumers with low family income.

g. Usage of online banking services was independent of the type of bank of the respondents. There was no significant association between the two. Also a similar distribution of frequent and infrequent users can be observed among private and public sector banks.

2. Determination of the Factors for measuring online banking service quality:

The first objective of the study was to determine the factors for measuring online banking service quality and the findings derived in fulfilling this objective are given below:

i. Through the literature review conducted and the data collected through the Delphi technique, a list of items was identified that were observed to be used for analysing service quality across various industries. These items were moulded in a form to fit to measure banking services. A total of 38 items were identified through this process.

ii. The 38 items were subjected to Exploratory Factor Analysis which led to the formation of two factors – App/ Website Performance (AWP) and Aptitude of the User (AU). The AWP factor was observed to have 21 items that contributed to the achievement of the factor score. The AU factor was observed to have 17 items that contributed to the achievement of the factor score.

iii. It was observed that of the factor AWP the item 'time taken to complete a transaction' is observed to have the highest weight. This was followed by the item, 'easy to learn services'. The lowest weights were observed for the item 'customised attention' and influenced to use online banking services due to 'usage by friends'.

iv. It was observed that of the factor AU the item 'satisfaction after the use of online banking services' had the highest weight. This was followed by the items, 'intend to use in future', 'intend to frequently use the online banking services', and 'clear and understandable instructions'. The lowest weights were observed for the item 'handling of personal information' and the influence of 'education in the use of online banking services'.

v. The results of the Confirmatory Factor Analysis indicated that the overall model has a good fit. In other words, the items of the factors strongly correlate with each. The

various validity and reliability tests were also conducted which indicated the existence of good validity for the factors.

3. Formulation of the index values and the ranking of the banks:

i. The calculated OBSQ index value was utilised to rank the selected banks. It was discovered that private sector institutions have higher service quality standards than their public sector counterparts. The State Bank of India is the only public sector bank to feature among the top five. IndusInd Bank is the only private-sector bank that does not rank among the top five. This reflects the calibre of service provided by the institution. Consumers believe that the service quality of online banking services offered by private sector banks is preferable to that of public sector banks.

ii. A paired t-test was conducted to compare the mean of the scores derived from OBSQ and OSQ, and the results indicated that there exists no difference in the mean scores. The OSQ is the score derived based on the consumer rating of their respective banks on a 10-point rating scale. The same rating scale was used to collect the data for the items of the OBSQ index. The result of the t-test indicated that the scores that were derived from the OBSQ index were able to predict the consumer perception on the service quality of online banking.

8.2 Conclusion:

As a result of the rapid development of technology and by implementing technology in every aspect of life, humans have begun to extract comfort and convenience for themselves. The internet has earned a significant position in the various service industries, as it enables these industries to provide additional services online. Online banking is the result of technological advancements that have altered the appearance of conventional banking. It is an innovation in the financial industry that has begun to move offline transactions online (Estrella-Ramon et al., 2016; Chen et al., 2017). Mobile banking and internet banking are included in online banking. It enables consumers to conduct financial transactions such as wire transfers and bill payments.

In recent years, there has been a greater focus in the literature on the significance of online service acceptance and usage, as well as service delivery technologies, in the banking sector. Numerous studies have been conducted on the adoption and acceptance of online banking services where they have already been deployed, as well as the factors

that influence customers' adoption, use, and intention to use those services, due to the fact that strong online banking services are crucial for bank performance and customer service delivery (Dauda & Lee, 2015; Martins et al., 2014). It is necessary to concentrate on enhancing the online financial services offered by banks. There are numerous other platforms (e.g., Gpay, PhonePe, etc.) that enable consumers to conduct financial transactions on their platforms. Using a third-party payment platform makes it more difficult for a bank to assist a customer in the event of fraudulent transactions or cybercrime. Utilising the bank's official online platforms reduces the likelihood of such incidents (Routh, 2019; Ali, 2019). Chi square tests were performed to examine the relationship between 'online banking service usage frequency' and the demographic variables. According to the test results, the variable 'frequency of online banking service usage' has a significant relationship with the variables - age, gender, education level, employment status, and monthly family income. The findings from the study reveal that demographic factors such as gender do not have significant effect on customers' adoption and usage of internet banking. There is a strong correlation between the findings from this study and a study conducted by Okeke & Okpala, (2011). This finding is inconsistent with the findings from some similar, past studies (Izogo & Nnaemeka, 2012). Consistent results were also observed by researcher Ameme, (2015), for the demographic variables- employment status and education level which observed that these demographic variables are important determinants of customers' adoption and usage of internet banking. A study conducted by Jimenez & Diaz, (2019), observed that educational level, gender, level of income, and employment status have greater frequency in the use of banking operations and the use of Internet banking.

In this present research, 38 elements in total were found and classified into two categories: factors related to App/Website Performance (AWP) and factors related to User Aptitude (AU). It was discovered that the AWP factor consisted of 21 components in total, all of which were used to calculate the factor score. It was discovered that 17 items in all contributed to the AU factor's factor score. An index was created utilising these variables to assess the banks' online banking services. This indicator, known as the Online Bank Service Quality (OBSQ) index, gauges the consumers' perception about the bank's online banking services.

Based on the study's findings, a framework is developed around two dimensions: Aptitude of the User (AU) and App/Website based Performance (AWP). These dimensions combined serve as the basis for assessing the service quality of online banking services.

AWP is inclusive of all the App/Website Performance items, where the performance of the app/website has a major role in the service quality perception of the consumer. AU focused on consumer satisfaction, intention, education level, etc. By integrating these two dimensions, the OBSQ Index provides a comprehensive measure of service quality, with weighted contributions from each factor ensuring an accurate depiction of their relative importance.

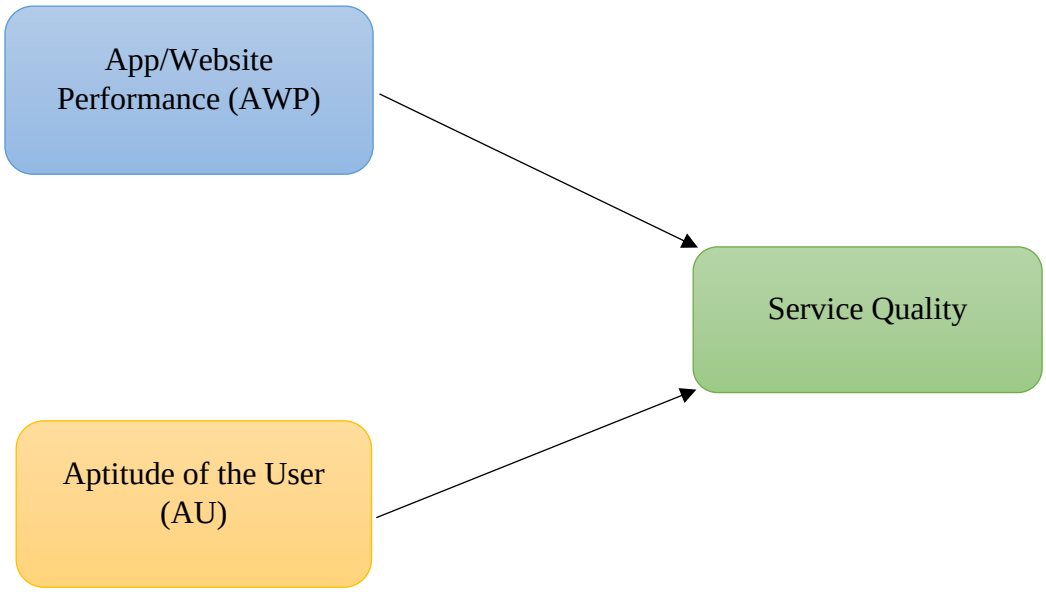

Fig 8.1: Conceptual Framework

The OBSQ Index provides a strategic benchmarking tool for evaluating and improving service quality, filling gaps in previous research (Herington & Weaven, 2009) that advocated for standardized methodologies for measuring online banking performance. It enables banks to identify specific areas of improvement, whether they are technical or user-oriented. This aligns with Zeithaml et al., (2002) emphasis on addressing service gaps systematically. The study thus provides actionable insights for improving service quality, fostering user adoption, and positioning banks competitively in the digital landscape.

The OBSQ index is calculated with the intention to measure the perception of service quality by the users of online banking services. One of the important aspects used in formulating the index is to use the weights of the items of the factors. This was done because all the items of the factors do not have an equal contribution towards determining the factor. This index will help determine the areas in which banks should concentrate in order to improve the service quality of their online platforms. This will motivate more consumers to use the official banking sites or application. This index will also help assess how well the banks' online banking services are developing in comparison to their past performances and how well they compare to those of other banks because the scores that were derived from the OBSQ index were able to predict the consumer perception on the service quality of online banking.

References:

Ali, M. A. (2019). *Does the online card payment system unwittingly facilitate fraud?* (Doctoral dissertation, Newcastle University).

Ameme, B.K. (2015). The impact of customer demographic variables on the adoption and use of internet banking in developing economies. *Journal of internet banking and commerce*, *20*(2), 1-30.

Chen, Z., Li, Y., Wu, Y., & Luo, J. (2017). The transition from traditional banking to mobile internet finance: an organizational innovation perspective-a comparative study of Citibank and ICBC. *Financial Innovation*, *3*(1), 12.

Dauda, S. Y., & Lee, J. (2015). Technology adoption: A conjoint analysis of consumers′ preference on future online banking services. *Information Systems*, *53*, 1-15.

Estrella-Ramon, A., Sánchez-Pérez, M., & Swinnen, G. (2016). How customers' offline experience affects the adoption of online banking. *Internet Research*, *26*(5), 1072-1092.

Izogo, E. E., Nnaemeka, O. C., Onuoha, A. O., & Ezema, K. S. (2012). Impact of demographic variables on consumers' adoption of e-banking in Nigeria: An empirical investigation. *European Journal of Business and Management*, *4*(17), 27-39.

Jiménez, J. R. Z., & Díaz, I. A. (2019). Educational level and Internet banking. *Journal of Behavioral and Experimental Finance*, *22*, 31-40.

Martins, C., Oliveira, T., & Popovič, A. (2014). Understanding the Internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application. *International journal of information management*, *34*(1), 1-13.

Okeke, T. C., & Okpala, C. G. (2014). A discrete analysis of demography and electronic banking usage in Nigeria. *Journal of internet banking and commerce*, *19*(2), 1-14.

Routh, S. (2019). *The potential of technological innovation to reduce fraud and increase trust in the Indian banking system* (Doctoral dissertation, Dublin Business School).