

## CHAPTER V

### SUMMARY AND CONCLUSION

Mobile phones have become an essential communication tool for almost every individual worldwide to update with technologies. In India, where mobile subscribers far exceed fixed line subscribers, because of better mobile infrastructure in comparison to fixed line infrastructure, mobile banking much more appealing has been made. Mobile banking helps the customers to perform a lot of wide range of transactions through mobile phones. To avail the facilities of mobile banking, customers can ask either through SMS or by using WAP (Wireless Application Protocol) technology, which allows online access of the web using mobile device. This technology serves to check details on issue of new cheque book, payment of bills, instruction to stop payment and other value added services. This system makes banking location independent. It provides 24 hours banking facility to the customers with no time and location constraints at banking environment. It is also a time saving facility and banks are beneficiary to earn good amount of income and gain image in the market. The present study on “Adoption and Usage of Innovative Techniques: A Study on Mobile Banking in Coimbatore City” is carried out with the following objectives.

1. To find out the relationship between the frequency in the usage of mobile banking and the socio, economic and demographic characteristics of the sample respondents.
2. To analyse the expectations of the sample respondents on mobile banking.
3. To explore the relationship between the frequency in the usage of mobile banking and the usage of mobile phones.
4. To study the problems of the customers in the usage of mobile banking and
5. To explore the factors which influence the customer’s adoption of mobile banking.

#### **Methodology**

The sample units of the current study were selected through three stage sampling technique. In the first stage Coimbatore city was selected. In the second stage

five public sector banks and six private sector banks were selected. In the third stage 400 customers of these banks, who were using mobile banking technology were selected. A well prepared questionnaire, after pilot survey, was administered to the respondents in the period April – July 2013. Using appropriate quantitative techniques the data were analysed.

The following null hypotheses were tested in the study

### **Hypotheses**

1. Frequency of usage of mobile banking is independent of socio, economic and demographic characteristics of the customers.
2. There is no association between the frequency of usage of mobile banking and the purpose of using mobile banking.
3. Frequency of usage of mobile banking is independent of perceived usefulness/perceived ease of use/trust/privacy/compatibility/social influence/perceived relative advantage and perceived financial cost.
4. Intention to adopt mobile banking is independent of perceived usefulness/perceived ease of use/trust/attitude and compatibility.

### **Major findings of the study are summarized as given below**

#### **I. Frequency of usage of mobile banking**

- About 28.5 percent of the customers use mobile banking once in a week, closely followed by 28 percent using twice in a month, 23.5 percent once in a month, 11.8 percent daily and 8.2 percent use mobile banking rarely.

#### **II. Socio economic and demographic background of the sample respondents**

- The sample respondents who use mobile banking are mostly males (60%) in the age group of 21-30 years (72%), hailing from Hindu (62%) backward community (52%) families. Further they have completed at least higher secondary level of education and are unmarried (59%) and work as professionals (32%). Majority of 38 percent of the respondents have their monthly income in the range of Rs 5001- Rs 15,000/-.
- Application of  $\chi^2$  test reveals that the frequency of usage of mobile banking by the selected respondents depends on religion, community and monthly income of

the respondents and independent on gender, age, marital status and educational level.

### **III. Banking details**

- About 76 percent of the sample respondents have their bank accounts in the past five years and mostly (53%) in public sector banks.
- State Bank of India has the highest number of mobile banking customers (45%), of which 29.2 percent use mobile banking once in a week.
- Among the private sector banks, ICICI has the maximum number of mobile banking customers (18%); of whom majority of 34.7 percent use mobile banking once in a month.
- For majority of 80 percent, the banks are within 10km from their place of residence.
- Irrespective of the distance of the bank, about 25 percent of the respondents use mobile banking.
- About 34 percent of the customers are aware of mobile banking through friends; 30% through banks, 18 percent through relatives & 16 percent through advertisement and the remaining through other sources.

### **IV. Mobile Phone details**

- About 63 percent of the sample units have smart phones and the others have basic mobile phones.
- Majority of 34 percent of the respondents use Airtel network, 29 percent Aircel network and 20 percent Reliance network.
- Majority of the sample units who have Airtel, Aircel and BSNL networks, use mobile banking once in a week, the percentage of them being 33, 38 and 28 respectively.
- Majority of 34.2 percent of the respondents of the current study started using mobile banking for the past six months only.

### **V. Views on mobile banking**

- All the respondents of the current study 'agree' that mobile banking is (i) easy to learn, (ii) reliable, (iii) completes banking tasks more quickly, (iv) reasonably

priced (v) available everywhere and (vi) mobile banking services are available 24hrs/day

## **VI. Expectations on mobile banking**

- The respondents expect mobile banking to be 'customer friendly service provider' and 'to use advanced technology' with 43.25 percent each 'strongly agree' towards these two statements.
- They also would like to be educated in using the new product as it would reduce their cost and save their time. These were marked by 38.75 percent as 'strongly agree' and 33.5 percent as 'agree'.
- About 28.5 percent of the respondents 'strongly agree' that their expectations are on 'reliability' and 'security'.
- Application of  $\chi^2$  test reveals that frequency of usage of mobile banking depends on the expectations of the customers in respect of 'reliability', 'security', and 'the banks educating the customers on the use of mobile banking' and 'using advanced technology'.
- Frequency of usage of mobile banking was found to be independent of the customers' expectations on mobile banking to be 'less cost and time saving' and 'customer friendly service'.

## **VII. Usage of mobile phone**

- Majority of the respondents 'strongly agree' that they use mobile phones 'to make calls' (80 percent), to send/receive SMS/MMS (71 percent), 'to browse internet' (53.25 percent), 'to listen music' (52.25 percent), 'to take photograph & videos' (51.5 percent), 'for banking' (49.75 percent), 'to play games' (42.25 percent), 'to download' (35.75 percent) and 'to visit social network sites' (33.5 percent) and 'agree' for 'buying products' (42 percent), 'to send/receive e mails' & 'to find price of product' (41.5 percent), 'to see maps & directions' (38 percent), 'to watch videos/TV' (37.5 percent) and 'to download' (33.25 percent).
- Based on the average scores given by the respondents on the usage of mobile phones; first two ranks were given for 'making calls' (rank 1) and for making 'SMS/MMS' (rank 2) and 6<sup>th</sup> rank was given for 'bank related activities'.

- The results of  $\chi^2$  test reveal that frequency of usage of mobile banking is found to be dependent on the use of mobile phones for bank related activities.
- For bank related activities, about 90 percent use mobile phones for getting 'SMS alert on bank transactions', about 88 percent for 'checking balance accounts', about 60 to 80 percent for 'downloading mobile banking applications' 'viewing last three transactions', 'transferring money between bank accounts and 'requesting bill payment'.

### **VIII. Problems in mobile banking usage**

- The respondents of the current study are all neutral in their views on the problems in the usage of mobile banking.
- The foremost problems of the customers in the usage of mobile banking is 'MB would make feel frustrated' and 'network problem'
- From the One-way kolmogorov- smirnov test summary, the other significant problems in the usage of mobile banking relates to 'limited scope for personal advice on banking transactions', 'lack of knowledge about MB transactions', 'security problem', 'high cost of MB', 'less storage' and 'all transactions not being exhibited in the mobile screen'.

### **IX. Mobile banking Adoption**

- The sample respondents assigned maximum score on 'MB is trustworthy' when asked about their views on mobile banking adoption.
- $\chi^2$  test reveals that frequency of usage of mobile banking is not independent of the views of the respondents on adoption of mobile banking.
- Estimated regression equation with frequency of usage of mobile banking as the dependent variable and eight adoption parameters as the explanatory variables reveal that excepting compatibility all the other adoption parameters were statistically significant in influencing the customers in the frequency of usage of mobile banking. These variables together could explain about 99 percent of the variations in the frequency of usage of mobile banking.

### **X. Models on intention to adopt mobile banking**

- Using factor analysis, 30 statements related to the adoption of mobile banking were resolved into 6 factors, viz., 'perceived usefulness', 'perceived ease of use', 'trust', 'attitude', 'intention to adopt mobile banking' and 'compatibility'.
- The best fit of the model using Visual Partial Least Squares (VPLS) software reveals that the path between (i) trust and perceived usefulness; (ii) trust and perceived ease of use, (iii) trust and compatibility, (iv) perceived usefulness and attitude (v) perceived ease of use and attitude, (vi) attitude and intention to adopt mobile banking, (vii) compatibility and intention to adopt mobile banking were statistically significant.
- The path between 'trust' and 'perceived usefulness' was significant with a path coefficient of 0.7320.
- 'Trust' accounted for 53 percent of the variance in 'perceived ease of use' and 40 percent of variance in 'compatibility'.
- The path between 'perceived usefulness' and 'attitude' and between 'perceived ease of use' and 'attitude' were also significant.
- Attitude has significant effect on 'intention' with a path coefficient of 0.447 and with 'compatibility' with a path coefficient of 0.42.
- 'Trust' could explain only 40 to 53.5 percent of the variances in the path with 'perceived usefulness' ( $R^2=0.535$ ), 'perceived ease of use' ( $R^2=0.532$ ) and 'compatibility' ( $R^2=0.407$ ).
- Omitting statements related to 'trust', 26 statements were reduced into 5 factors using factor analysis. The factors were 'perceived usefulness', 'perceived ease of use', 'attitude', 'compatibility' and 'intention to adopt mobile banking'. The best fit of the model using Visual Partial Least Squares (VPLS) software is obtained. The path coefficients between (i) perceived usefulness and attitude, (ii) perceived ease of use and attitude, (iii) attitude and intention to adopt mobile banking and (iv) compatibility and intention to adopt mobile banking were statistically significant.
- 'Attitude' is predicted by 'perceived usefulness' ( $\beta= 0.452$ ) and 'Perceived ease of use' ( $\beta=0.433$ ). These two constructs together could explain 69 percent of the total variance in 'Attitude'.

- 'Attitude' has a significant effect on 'intention to adopt mobile banking' with path coefficient of 0.41.
- 'Attitude' and 'compatibility' are the main constructs in influencing the customers on their intention to adopt mobile banking where 'attitude' is influenced by 'perceived usefulness' and 'perceived ease of use'.
- Compatibility has significant effect on 'intention to adopt mobile banking' with a path coefficient of 0.41.

#### **XI. Perceived risk**

- The respondents of the current study were neutral in their views on risks associated with the usage of mobile banking.
- Intention to adopt mobile banking was found to be independent of 'performance risk', 'financial risk', and 'time risk' and is dependent on 'social risk' and 'security risk'.
- The study shows that 'intention to adopt mobile banking' is not independent of 'perceived risk'.

#### **Conclusion**

Mobile banking usage was predominant among younger age groups who had completed at least higher secondary level of education. It was used mainly for 'checking SMS alert on bank transactions'. The customers felt that mobile banking was easy to learn but wanted the banks to be fair in customer service policies following transactions. They also expected 'security' in the usage of mobile banking. Perceived risk was found to be the resistant factor in the adoption of mobile banking. Technology resistance factors played a strong role in the formation of intention to use mobile banking. It is imperative for the banks, tele communication department and cellular service providers to take cognizance of these factors and develop appropriate strategies to minimize their impact. Perceived use, perceived ease of use together with attitude significantly determined the intention to adopt mobile banking. To induce the potential customers to try out mobile banking, banks have to follow better marketing structure and inform the customers the benefits of mobile banking. Further banks have to work in the minimisation of risk related to day- to- day transactions performed through mobile

devices to enable customers to build up trust in the banking services being offered. In the advent of IT revolution, innovative and quality services are the survival factors to meet the requirement of global competition.

### **Suggestions**

To make mobile banking more popular, combined efforts by the banks and cellular services are required. Some of the suggestions towards achieving mobile banking usage popular among customers are listed below

- Mobile banking adoption requires technologically efficient as well as cheap, reliable and secure technology development.
- Mobile banking technology must be efficient and quick as well as easy to understand and use.
- Bank can develop m-banking software in regional language and can use most commonly used phrases, name and shortcuts in the software.
- Telecommunication department and cellular service providers can extend their network coverage in rural and remote areas to facilitate communication and m-banking also.
- The government can provide conditional financial support to cellular service providers to extend such networks in rural areas.
- Banks have to provide operational knowledge of m-banking through SMS, WAP and IVR separately.
- Banks must arrange demo-fares to customers at counters.
- Banks are to provide posters consisting list of services provided by mobile banking at appropriate places.

### **Scope for future research**

- To explore the profitability associated with mobile banking technology.
- To investigate adoption - enhancing and adoption – inhibiting factors across various mobile phone services.
- To study the issues and problems of adoption and usage of mobile banking services among Indian customers.

- To analyse the extent of m-banking customers in various bank groups.
- To have a comparative study between users and non users of mobile banking.