

THE INFLUENCE OF GOVERNMENT SUPPORT IN THE ADOPTION OF INTERNET BANKING

Preethi Sheshadri and S. Sheela Rani***

Abstract: *The Banking system gained significance in the 19th century. The structure and the System of banks have altered immensely since 1969. The application of technology in the delivery of banking services is becoming familiar as it is being engaged to trim down costs and remove uncertainties. Bank can offer different services to the customers with the introduction of IT related products such as Internet Banking, Electronic payments, Information exchanges etc. This paper discusses the influence of government support on the customer adoption of these services. The study also discusses the influence of attitude, and security factors of the respondents in using internet banking. The influence of demographic variables on the adoption of these internet banking services is also considered for the study. The study was conducted among 284 respondents working in public sectors and make use of these e banking services. The respondents include both male and female and belong to different educational qualification level consisting of Graduates, Post Graduates and Professionals. The study revealed that Educational qualification has an impact on the customer adoption gender plays no role in the adoption of e banking. The study also reveals that there is significant correlation among government support and adoption of these e banking services.*

Keywords: *e banking, government support, attitude, security, and Customer adoption.*

1. INTRODUCTION

The Banking system achieved significance in the 19th century. The structure and the System of banks have altered immensely since 1969. The application of technology in the delivery of banking services is becoming familiar as it is being engaged to trim down costs and remove uncertainties (G.S. Sureshchandar, Chandrasekharan Rajendran, R.N. Anantharaman, 2003). Customers are offered services which are designed and formed with a combination of advancement in technology and new business thoughts (Freeman 1996, Crane & Bodie 1996). Banks have drastically changed by providing an efficient system which would increase the investment made by investor which in turn increases the savings motto of the investor. With the Globalisation and Liberalisation in the year 1991, there have been a lot of changes in the banking sector in offering services to the customers

* Research Scholar, Sathyabama University, Jeppiar Nagar, Rajiv Gandhi Salai, Chennai-600 119, Tamil Nadu, India, E-mail: preeths_lucy12@yahoo.co.in

** Professor, MEASI Institute of Management, Chennai, Tamil Nadu, India

and they have also raised their dependence on technology for the process of delivering services. (Al-Smadi and Al-Wabel, 2011). Information Technology has a major role to play in today's information seeking business viz banking Business.

2. REVIEW OF LITERATURE

2.1. Internet Banking

In today's competitive world, customers will have to be delivered with the best of services (Mefford 1993). In this process banking services through an electronic mode was introduced to facilitate the interface between the customers and the bank (Daniel 1999, Molls 1998, Sathye 1999). This provides an electronic link between the banks and the customers in offering and adopting services. Benefits are received both at the customer's and also at the banks' end with the introduction of these electronically provided services (Burr 1996). Ong Hway-Boon, Cheng Ming Yu (2003) revealed that the electronic process of providing services has reached esteem in today's banking scenario. The main aim of these electronically provided services is to shed down costs and eliminate uncertain happenings (Mathew Joseph *et al.* 1999).

2.2. Government Support

Customers disposition towards technology is a function of environmental conditions that encourages adoption (Goh, 1995). In order words, as supporting technological infrastructure become readily available, adoption of technologies increases. Goh (1995) suggested that the role of government is instrumental in creating this facilitating environment. The government's regulations and procedures aids in improving the users' confidence and trust in the usage of Internet banking. Tan & Teo (2000), investigated the proposition that government support has a direct influence on customer use of internet banking and found empirical evidence to show that internet banking was significantly higher in environment where government supported this medium, especially in environments where governments have a traditional role of promoting innovation and enterprise. Goh (1995) also suggested that the government can play an intervention and leadership role in the diffusion of innovation. In Singapore, it has been well documented that the local government is a major driving force in the diffusion of information technology (Gurbaxani *et al.* 1990; Jussawalla *et al.* 1992; Tan 1998; Toh and Low 1993).

2.3. Attitude

An individual's positive or negative feelings about performing a target behaviour is termed as attitude. People have intentions to perform behaviours towards which they have positive feeling. (Fishbein and Ajzen 1975). Triandis

(1977) stated that the perceptions on risk, adaption features, privacy, electronic features of banking, and personal preferences depends on attitude. Pikkarainen, Pikkarainen, Karjaluoto, and Pahnla (2004) revealed that the overall customer attitude is desirable to be considered to determine customer adoption. (Tan & Teo; 2000; Bobbitt & Dabholkar, 2001; Gerrard & Cunningham, 2003) studied that there is positive correlation between attitude and customer adoption. Several studies revealed that the attitude of the customer plays a main role in determining the internal policies and practices of an organisation which in turn leads to customer value, customer satisfaction, and customer adoption. (Luo & Strong, 2000; Pavlou, 2001; Singh, 2001).

2.4. Security

The past literature reveals that one important causing factor of belief or trust on e – banking is the customer’s perception of security. The primary essentials for any business dealings is to assure security and privacy in passing any sensitive information. In fact the main obstacle to electronic commerce is been caused by the non availability of privacy and security (Adam *et al.* 1999). Chen and Barnes, (2007) and Sathye, (1999) revealed that the practice of online banking is significantly affected by the non availability of security and privacy in banks. Even though the customers identify these risks they have a poor understanding about them (Roboff and Charles, 1998). Though the customers have a high level of confidence towards their bank, their level of confidence in the technology services of their banks was comparatively low. (Howcroft *et al.*, 2002).

2.5. Customer Adoption

Liao and Cheung (2002) in their study have stated that intention to use internet banking determines the customers’ adoption of internet banking. There are other factors which might determine the customer adoption which includes the advancement in technology, user himself and peer group influence (Moon & Kim, 2001). When a customer believes that the resources to use internet banking and the ways to use internet banking are available, Customer adoption happens (Sohail and Shanmugham 2003). The adoption of internet banking also depends on the infrastructure, the service delivery process of the banks and the system of the banks in offering the services (Lee and Allaway 2002). Bradley & Stewart, 2003 have stated in their research that banks have mandatorily incorporated these technology services to improve the customer adoption of these services.

3. RESEARCH FRAMEWORK

The objective of this research is to study whether gender and educational qualification has an influence on perception of Government support and customer adoption of internet banking. The study also aims to find out the relationship

between government support and attitude, security and adoption of internet banking services. The data was collected among respondents who work for public sector units and have hands on experience on internet banking.

3.1. Sample

Primary data was collected from potential internet banking users who work for public sector units. Questionnaires were distributed to respondents and the survey yielded 284 usable responses. The reliability of all instruments was assessed by the Cronbach alpha reliability coefficient. The alpha coefficient for Government support was 0.843, attitude was 0.782, security was 0.869 and customer adoption was 0.868, which revealed an acceptable level of reliability ($\alpha > 0.70$).

3.2. Profile of the Respondents

39.8% of the respondents were post graduates, followed by Professionals (33.1%) and 27.1% of the respondents were graduates. 68.7% of the respondents were male and 31.3% were female.

3.3. Measures

Respondents were asked to state the extent to which they agree with the statements using a five-point Likert scale which ranged from 5 = 'strongly agree' to 1 = 'strongly disagree'. To measure the level of customer adoption, a five item scale developed by (Shih & Fang 2000) was used. Tan & Teo (2000) five item scale was used to measure security. To measure the Government support a five point scale developed by Goh (1995) was used and to measure attitude Fish Bein & Ajzen (1975) five point scale was used.

3.4. Hypotheses for the Study

- Educational qualification do not cause significant variation in the perception of the respondents on government support for internet banking usage.
- Gender do not cause significant variation in the perception of the respondents on government support for internet banking usage.
- Educational qualification has no influence on customer adoption of internet banking.
- Gender has no influence on customer adoption of internet banking.
- There will be no significant correlation between government support and customer adoption of internet banking.
- There will be no significant correlation between government support and attitude in using internet banking.

- There will be no significant correlation between government support and perception of security in using internet banking.

3.5. Tools Used For Analysis

To find out the significant difference in the perception of the respondents on government support and to find out customer adoption of internet banking based on educational qualification, Analysis of Variance was used. t - test was used to find out the significant difference in the perception of respondents on government support and customer adoption of internet banking between male and female respondents. Pearson’s Correlation was used to find out the relationship between government support and attitude, security and customer adoption.

4. ANALYSIS AND INTERPRETATION

Table 1
Influence of Educational Qualification on perception on Government support

| | <i>Educational Qualification</i> | | | <i>F- value</i> | <i>p value</i> |
|--------------------|----------------------------------|----------------------|---------------------|-----------------|----------------|
| | <i>Graduate</i> | <i>Port-Graduate</i> | <i>Professional</i> | | |
| Government Support | 12.63 | 12.58 | 12.50 | .178 | .837 |

Source: Primary Data

The ANOVA table reveals that there is no significant difference in the perception of the respondents on government support based on Educational qualification. We can infer that Educational qualification do not cause significant variation in the perception of the respondents on government support in the usage of internet banking.

Table 2
Influence of Educational Qualification on Customer Adoption

| | <i>Educational Qualification</i> | | | <i>F- value</i> | <i>p value</i> |
|-------------------|----------------------------------|----------------------|---------------------|-----------------|----------------|
| | <i>Graduate</i> | <i>Port-Graduate</i> | <i>Professional</i> | | |
| Customer adoption | 12.15 ² | 11.85 ¹² | 11.57 ¹ | 2.576 | .048* |

Source: Primary Data Note * denotes significance at 5 per cent level

The ANOVA table reveals that there is significant difference in the Customer Adoption (at 5 per cent level of significance) of the respondents belonging to different Educational qualification. We can infer that Educational qualification significantly influences the customer adoption of internet banking.

The Duncan post-hoc analysis shows that the customer adoption of internet banking of the respondents with professional qualification was lower. The highest

mean value (12.15) in the graduates group signifies that the customer adoption is highest in this group and is significantly different from other groups.

Table 3
Independent Sample t-test

| <i>Variable</i> | <i>Gender</i> | <i>N</i> | <i>Mean</i> | <i>SD</i> | <i>t-value</i> | <i>Sig Value</i> |
|--------------------|---------------|----------|-------------|-----------|----------------|------------------|
| Government Support | Male | 195 | 12.6667 | 1.78 | 1.271 | 0.706 |
| | Female | 89 | 12.3820 | 1.73 | | |

Source: Primary Data

An independent sample t-test was conducted to find out the difference in the perception of the respondents on government support based on gender. There is no significant difference in the scores of perception of the respondents on government support between male respondents (Mean = 12.67, SD = 1.78) and female respondents (Mean = 12.38, SD = 1.73); $t = 1.271$, P value = 0.706. The t-test results suggest that gender does not have an effect on the perception of the respondents on government support in the usage of internet banking.

Table 4
Independent Sample t-test

| <i>Variable</i> | <i>Gender</i> | <i>N</i> | <i>Mean</i> | <i>SD</i> | <i>t-value</i> | <i>Sig Value</i> |
|-------------------|---------------|----------|-------------|-----------|----------------|------------------|
| Customer adoption | Male | 195 | 11.71 | 1.76 | 1.614 | 0.541 |
| | Female | 89 | 12.06 | 1.70 | | |

Source: Primary Data

An independent sample t-test was conducted to find out the difference in the customer adoption based on gender. There is no significant difference in the scores of customer adoption between male respondents (Mean=11.71, SD=1.76) and female respondents (Mean = 12.06, SD = 1.70); $t = 1.614$, P value = 0.541. The t-test results suggest that gender does not have an effect on the customer adoption of internet banking.

Table 5
Correlation between
Government Support and Attitude, Security and Customer Adoption

| | <i>Mean</i> | <i>SD</i> | <i>Government support</i> | <i>Attitude</i> | <i>Security</i> | <i>Customer adoption</i> |
|--------------------|-------------|-----------|---------------------------|-----------------|-----------------|--------------------------|
| Government support | 12.5775 | 1.7706 | 1 | 0.773** | 0.019 | 0.480** |
| Attitude | 12.9965 | 1.2954 | 0.773** | 1 | 0.102 | 0.587** |
| Security | 17.3028 | 2.7253 | 0.019 | 0.102 | 1 | 0.307** |
| Customer adoption | 11.8239 | 1.7464 | 0.480** | 0.587** | 0.307** | 1 |

Note: ** Correlation is significant at 0.01 level (2-tailed)

The correlation analysis reveals that there is a significant positive correlation between government support and attitude ($r = .773$, $p < 0.01$) and and customer adoption ($r = 0.480$ $p < 0.01$). We can infer that when Government support increases, attitude towards internet banking and customer adoption increases. There is a positive correlation between attitude and customer adoption ($r = 0.587$ $p < 0.01$). When attitude towards using internet banking increases, the level of customer adoption in using internet banking increases. Perception about security is positively correlated with customer adoption ($r = 0.307$ $p < 0.01$). There is no significant correlation between government support and perception of security in using internet banking. Similarly there is no significant correlation between attitude of the respondents towards internet banking usage and their perception of security in using internet banking.

5. DISCUSSIONS

Largely the respondents have utilized almost all the internet banking services provided by their banks. The perception of the respondents on government support did not significantly vary based on their educational qualification. Educational qualification significantly influences the customer adoption of internet banking, as education enhances the exposure to technology. Post graduates have a better usage of internet banking when compared to graduates. Gender does not have an effect on the perception of the respondents on government support in the usage of internet banking. The male and female perceptions regarding government support do not vary. There is no significant difference in the customer adoption of internet banking services between male and female respondents. Both genders are equally qualified and equally exposed to technology. They manage their own individual bank accounts and carry out their transactions independently. There is a positive correlation between government support and customer adoption. If the respondents feel that the government endorses the usage of internet banking, it increases their level of trust in the usage of internet banking. With an increase in the government support the respondents' share a positive attitude in the usage of internet banking. Discussing on the security aspects, there is no relationship between government support and the perception of security related to internet banking usage. Even if there is government support the respondents need not have a positive perception on the security aspects of internet banking. Similarly positive attitude towards internet banking usage does not imply a positive perception on security aspects in the usage of internet banking. There is a positive correlation between attitude, security and customer adoption. When the respondents have a positive attitude towards internet banking usage, it increases customer adoption. correspondingly If there is a positive perception on security aspects of internet banking among respondents, it increases customer adoption. Banks can create more awareness campaigns on their services offered to their customers. With the increase in the awareness created by banks there will be more adoption of these services. Banks

can also manage their security aspects of their services which will facilitate more customers to utilize these technological services.

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