

## **Perceptions of Customers About Banks' Self-Service Technologies**

**Tarannum\***

*\* Punjabi University Regional Centre for  
IT and Management, Mohali*

---

### **Abstract**

The paper aims to investigate the perception of bank customers about Self-Service Technologies and the factors which affect behavioural intentions of customers to adopt these channels. State Bank of India, PNB, HDFC Bank and ICICI Bank were taken for the study. Stratified branch intercept method was used and 300 customers from each sector-public and private sector were selected. The sample composed of customers who are using at least one of the Self-Service Technologies i.e., ATM, Mobile Banking and Internet Banking besides Branch banking. The study concludes that mobile and internet banking are more popular in private sector banks. Trust and social norms are important factors that influence customers intentions to use internet banking.

---

### **INTRODUCTION**

When banking started off, the bank's focus was on reach. Over a period of time this became a USP of public sector banks. For any new entrant it was tough to establish itself in the market. So, a new strategy was devised by the private banks to not just reach the customers but to do it cost effectively. This was possible with the introduction of Automated Teller Machines where important banking transactions could be done without service employees' interference. ATM was a huge success as a transaction can be done anytime, anywhere. Further introduction of other self service technologies like mobile and internet banking not just gave an edge to private banks but also forced public sector banks to redesign their customer service strategies.

Self-Service Technologies offer a huge cost saving to the banks. A

transaction on the internet costs just Rs. 4 to the bank. This is one of reasons banks need to look for ways and means, and design strategies to make customers switch over from the traditional brick and mortar banking to these new electronic cost effective channels. With the mobile handset penetration, the mobile banking is all set to gain popularity among bank customers.

## REVIEW OF LITERATURE

Chopra V. K. (2006) highlights the importance of IT and business re-engineering in achieving the objectives of banks. The paper concludes that PSBs and old private sector banks are slow in imbibing technology in their operations, whereas new private sector banks and foreign banks are early adopters of the technology and increasing the competition. The paper emphasizes that IT, along with the business process re-engineering, can provide ideal technology environment catering to the stated business objectives.

Durkin and Howcroft (2003) found that internet banking played a very important role in the fight in the race to be the best among banks. It played very crucial role apart from tele-banking and mobile banking in improving customer and bank relationship. Self-Service technologies stand-alone cannot replace traditional banking. Only with stronger customer relationship management can banks acquire more profitability.

Hua G. (2009) found that for a customer the security of bank's website is a prime concern. A study was conducted in a University in China and it was found that customer needs to be comfortable with the privacy policy of the dealing bank's website. Perceived ease of use also plays very important role in customers' acceptance of new technologies. However, it is less important an parameter as compared to Privacy policy and security.

Pikkarainen et al. (2004) conducted a survey to see customers' acceptance of online banking. The survey was conducted in Finland for customers dealing with private banks. The banks can now easily reach out to customers through electronic banking. However, its acceptance is dependent on the perceived usefulness, ease of use, and security. Besides, the quality of services provided by the bank and the information on bank's website are other important factors affecting the acceptance of online banking.

Rao N.V.M., Singh P. and Maheshwari N. (2005) found a new concept of mobile ATM adopted by public sector banks like State Bank of India and Bank of India and private sector banks like ICICI. Mobile ATM vans follow a specific route everyday and then are positioned at specific point for few hours everyday. It is found that the quality of websites of public and private banks in India is high with

regard to functional and interactivity levels. The performance of these banks have increased significantly. Most of the internet banks have privacy statements and half of them have security statement. The e-business models of some selected public, private banks were looked into.

Sathye (1999) found that internet banking could significantly bring down the cost for the banks in contrast to the traditional delivery channel. A study was done on internet banking in Australia and the factors leading to customers' adoption of it. It was found that internet banking should be a part of overall marketing and distribution strategy of the banks, only then customers will shift to it. It was found that the adoption of this channel was less due to lack of awareness about the channel. Security was another major reason for non-adoption. Banks need to convince their customers of the use of internet banking and how it can help them in daily banking issues.

Suoranta and Mattila (2003) found that the major reason for adoption of mobile banking is due to the mobility advantage. A study was conducted in Finland using the Bass Diffusion Model and Information Diffusion Technology. A sample of 1253 customers was drawn through postal survey. It was found that factors affecting the adoption of mobile banking included information sources like the word of mouth, the complete family income and the age. As cellphones have become so popular in Asia, mobile banking has grown. Well-devised marketing plans by the mobile service companies is an added advantage.

Uppal R. K. (2010) found that foreign banks take the lead when it comes to adoption of mobile banking. The new private banks follow them. Around half a number of the total branches of foreign banks are offering mobile banking. Such good penetration of mobile banking adds to the profits of the bank, thereby cutting down the cost. The quality of services provided by these banks and the efficiency is another reason for adoption. A study was done to compare the extent of usage of mobile banking in public banks, private and foreign banks. The private banks were divided into two categories of old private banks and new private banks. ATM is the most preferred channel in public and old private banks.

## **OBJECTIVES**

- (i) To study the perceptions of customers about banks' self-service technologies; and
- (ii) To identify the factors affecting behavioral intentions of customers towards banks' self-service technologies

## **RESEARCH METHODOLOGY**

The sample of the study was based on multi-stage stratified branch intercept technique. The study covered 2 Public sector banks and 2 Private sector banks based on their presence in terms of number of branches in the tri-city region. The tri-city region was selected as it was compared to other cities' maximum population of youth being the hub of IT sector.

The banks identified included State Bank of India (SBI) and Punjab National Bank (PNB) in the public sector banks category and HDFC Bank and ICICI Bank in the private sector bank category. As much as 300 customers from public sector banks and an equal number of customers from private sector banks were interviewed for data collection. Branch intercept method was adopted to interview the customers. The respondents were asked through questionnaire to evaluate the quality of the services provided through delivery channels of banks. Customers' satisfaction was measured by asking customers who are using at least one of the self-service technologies of the bank like ATM, Mobile Banking, Internet Banking, besides branch banking to fill the questionnaire. This allowed a comparison of the branch banking and self-service technologies. The responses to all the variables were obtained on a 5-point Likert scale ranging from '5' for 'strongly agree' to '1' for 'strongly disagree'. Multiple items were used to measure each construct so that their measurement properties could be evaluated. In order to analyze the data, advance statistical techniques like t-test and regression analysis were applied.

## RESULTS AND DISCUSSION

The respondents were asked to register their level of agreement on different statements related to various dimensions of delivery channels in banks. They responded in terms of 'strongly agree', 'agree', 'undecided', 'disagree' and 'strongly disagree'. These attributes were assigned weights in the respective order of 5, 4, 3, 2 and 1. The weighted mean scores for each dimension were calculated and compared with the help of t-test between public and private sector banks. The results so obtained have been discussed on the following pages.

### Branch Banking

The analysis given in Table 1 showed that in public sector banks, the highest extent of agreement was 4.35 (agree) on attitude, followed by 4.26 (agree) on usefulness of branch banking, 4.26 (agree) on trust, 4.22 (agree) on behavioral control, 4.16 (agree) on social norms, 4.13 (agree) on facilitating conditions, 4.08 (agree) on behavioral intentions, 4.07 (agree) on compatibility, 4.03 (agree) on adoption and 3.71 (agree) on convenience. The respondents were undecided about ease of use (2.67) and satisfaction (3.49).

Table 1

## Extent of Agreement on Various Dimensions of Branch Banking

Dimensions	Public Sector		Private Sector		t-value
	Mean	Agreement	Mean	Agreement	
Usefulness	4.29	A	4.32	A	0.68
Ease to Use	2.67	UD	2.69	UD	0.23
Trust	4.26	A	4.30	A	0.86
Convenience	3.71	A	3.70	A	0.21
Behavioral Control	4.22	A	4.23	A	0.46
Facilitating Conditions	4.13	A	4.15	A	0.47
Compatibility	4.07	A	4.04	A	0.41
Social Norms	4.16	A	4.18	A	0.34
Behavioral Intentions	4.08	A	4.02	A	1.47
Adoption	4.03	A	3.98	A	1.16
Attitude	4.35	A	4.39	A	1.24
Satisfaction	3.49	UD	2.76	UD	26.91**

In private sector banks, the highest extent of agreement was 4.39 (agree) on attitude, followed by 4.32 (agree) on usefulness of branch banking, 4.30 (agree) on trust, 4.23 (agree) on behavioral control, 4.18 (agree) on social norms, 4.15 (agree) on facilitating conditions, 4.04 (agree) on compatibility, 4.02 (agree) on behavioral intentions, 3.98 (agree) on adoption and 3.70 (agree) on convenience. The respondents were undecided about ease of use (2.76) and satisfaction (2.69).

The extent of agreement was significantly higher on satisfaction among public sector customers as compared to that among private sector customers as indicated by the t-value of 26.91. The agreement on all other dimensions of branch banking was similar in both the sectors.

### ATM Banking

A perusal of Table 2 indicated that in public sector banks, the highest extent of agreement was 4.61 (strongly agree) on usefulness, followed by 4.51 (strongly agree) on attitude, 4.47 (agree) on convenience, 4.44 (agree) on social norms, 4.39 (agree) on behavioral control, 4.38 (agree) on compatibility, 4.23 (agree) on trust and facilitating conditions, 4.15 (agree) on adoption, 3.92 (agree) on behavioral intentions and 3.74 (agree) on satisfaction. The customers were undecided on ease to use (2.21).

Table 2

## Extent of Agreement on Various Dimensions of ATM Banking

Dimensions	Public Sector		Private Sector		t-value
	Mean	Agreement	Mean	Agreement	
Usefulness	4.61	SA	4.37	A	7.53**
Ease to Use	2.21	DA	2.19	DA	0.32
Trust	4.23	A	4.32	A	1.88
Convenience	4.47	A	4.42	A	1.18
Behavioral Control	4.39	A	4.39	A	0.06
Facilitating Conditions	4.23	A	4.23	A	0.13
Compatibility	4.38	A	4.34	A	0.86
Social Norms	4.44	A	4.38	A	1.58
Behavioral Intentions	3.92	A	4.38	A	11.25**
Adoption	4.15	A	4.21	A	1.43
Attitude	4.51	SA	4.52	SA	0.51
Satisfaction	3.74	A	2.80	UD	23.94**

In private sector banks, the highest extent of agreement was 4.52 (strongly agree) on attitude, followed by 4.42 (agree) on convenience, 4.39 (agree) on behavioral control, 4.38 (agree) on social norms and behavioral intentions, 4.37 (agree) on usefulness, 4.34 (agree) on compatibility, 4.32 (agree) on trust, 4.23 (agree) on facilitating conditions and 4.21 (agree) on adoption. The customers were undecided on satisfaction (2.21) and disagree (2.19) on ease to use.

The extent of agreement was significantly higher on usefulness, and satisfaction among public sector banks customers, while it was significantly higher on behavioral intentions among private sector banks customers as compared to their counterparts in other sector of banks. The agreement on all other dimensions of ATM banking was statistically at par in both the sectors.

### Mobile Banking

The analysis presented in Table 3 indicated that in public sector banks, the highest extent of agreement was 3.74 (agree) on behavioral intentions. The customers were undecided on attitude (3.25), usefulness (3.24), facilitating conditions (3.23), convenience (3.22), trust (3.21), compatibility and social norms (3.20), behavioral control and adoption (3.19) and ease to use (2.98). The customers disagreed on satisfaction on mobile banking services in public sector banks.

Table 3

## Extent of Agreement on Various Dimensions of Mobile Banking

Dimensions	Public Sector		Private Sector		t-value
	Mean	Agreement	Mean	Agreement	
Usefulness	3.24	UD	3.31	UD	1.44
Ease to Use	2.98	UD	2.93	UD	1.41
Trust	3.21	UD	3.25	UD	0.77
Convenience	3.22	UD	3.26	UD	0.98
Behavioral Control	3.19	UD	3.25	UD	1.49
Facilitating Conditions	3.23	UD	3.20	UD	0.63
Compatibility	3.20	UD	3.21	UD	0.24
Social Norms	3.20	UD	3.69	A	6.54**
Behavioral Intentions	3.74	A	3.21	UD	12.94**
Adoption	3.19	UD	3.22	UD	0.86
Attitude	3.25	UD	3.30	UD	0.94
Satisfaction	2.38	DA	3.12	UD	31.47**

In private sector banks, the highest extent of agreement was 3.69 (agree) on social norms. The customers were undecided on usefulness (3.31), attitude (3.30), convenience (3.26), behavioral control and trust (3.25), adoption (3.22), behavioral intentions and compatibility (3.21), facilitating conditions (3.20), satisfaction (3.12) and ease to use (2.93).

The extent of agreement was significantly higher on behavioral intentions and satisfaction among public sector banks customers, while it was significantly higher on social norms among private sector banks customers as compared to their counterparts in other sectors of banks. The agreement on all other dimensions of mobile banking was statistically at par in both the sectors.

### Internet Banking

It is clear from Table 4 that indicated that in public sector banks, the highest extent of agreement was 3.72 (agree) on behavioral intentions. The customers were undecided on attitude (3.48), usefulness (3.48), social norms and facilitating conditions (3.44), convenience (3.22), trust (3.37), compatibility (3.45), behavioral control and adoption (3.39), ease to use (2.84) and satisfaction (3.16).

In private sector banks, the highest extent of agreement was 3.74 (agree) on satisfaction, followed by 3.63 (agree) on attitude, 3.61 (agree) on convenience, usefulness and behavioral intentions, 3.59 (agree) on compatibility, 3.58 (agree) on social norms,

Table 4

## Extent of Agreement on Various Dimensions of Internet Banking

Dimensions	Public Sector		Private Sector		t-value
	Mean	Agreement	Mean	Agreement	
Usefulness	3.48	UD	3.61	A	2.24*
Ease to Use	2.84	UD	2.80	UD	0.81
Trust	3.37	UD	3.52	A	2.84**
Convenience	3.47	UD	3.61	A	2.26*
Behavioral Control	3.39	UD	3.53	A	2.72**
Facilitating Conditions	3.44	UD	3.54	A	1.70
Compatibility	3.45	UD	3.59	A	2.49**
Social Norms	3.44	UD	3.58	A	2.43**
Behavioral Intentions	3.72	A	3.61	A	1.76
Adoption	3.39	UD	3.47	UD	1.57
Attitude	3.48	UD	3.63	A	2.46*
Satisfaction	3.16	UD	3.74	A	24.00**

3.54 (agree) on facilitating conditions, 3.53 (agree) on behavioral control and 3.52 (agree) on trust. The customers were undecided on adoption (3.47) and ease to use (2.80).

The extent of agreement was significantly higher on usefulness, trust, convenience, behavioral control, compatibility, social norms and satisfaction over internet banking in private sector banks as compared to these in public sector banks as conveyed by the calculated t-values. The extent of agreement on ease to use, facilitating conditions, behavioral intentions and adoption was at par in public and private sector banks.

The above analysis revealed that as far as branch banking is concerned, customers are more satisfied with public sector banks as compared to private sector banks. In case of ATM banking, the customers have high opinion regarding usefulness of ATM banking, behavioral intentions and satisfaction over ATM banking in public sector banks as compared to that in private sector banks. For mobile and internet banking, the opinion of customers is in favour of private sector banks. For mobile banking, it was favourable to private sector banks on social norms, behavioral intentions and satisfaction. In case of internet banking, the customers are having higher opinion for private sector banks about usefulness, trust, convenience, behavioral control, compatibility, social norms, attitude and satisfaction. Overall, we can say that modern self-service banking technologies like mobile banking and internet banking are much better in private sector banks as compared to the public sector banks.



## DETERMINANTS OF BEHAVIORAL INTENTIONS

The determinants of behavioral intentions of customers were identified through employing multiple regression model. In the model, behavioral intentions was taken as dependent variable and all other dimensions of delivery channels as explanatory variables. The explanatory variables include usefulness, ease to use, trust, convenience, behavioral control, facilitating conditions, compatibility, social norms, attitude and satisfaction. In the end, the effect of behavioral intentions on adoption of different self-service technologies was worked out.

### 1.3.1 Branch Banking

The results of regression analysis regarding behavioral intentions about branch banking have been presented in Table 5. In public sector banks, the coefficient of multiple determination was 0.729, which indicated that as much as 72.9 per cent of the variation in behavioral intentions of customers about branch banking in public sector was explained by the independent variables included in the regression model. The regression coefficient of usefulness (0.22), convenience (0.14), behavioral control (0.25), compatibility (0.33) and social norms (1.12) was significantly positive.

**Table 5**  
Determinants of Behavioral Intentions of Respondents in case of Branch Banking

Determinants	Public Sector		Private Sector	
	$\beta$	t-value	$\beta$	t-value
Constant	1.65		11.16	
Usefulness	0.22	3.57**	-0.02	0.28
Ease to Use	0.03	0.64	0.12	2.77**
Trust	0.09	1.19	-0.08	0.97
Convenience	0.14	2.36*	0.02	0.26
Behavioral Control	0.25	3.47**	0.27	3.69**
Facilitating Conditions	0.07	0.91	0.16	2.23*
Compatibility	0.33	5.78**	0.25	5.23**
Social Norms	1.12	16.04**	-0.02	0.25
Attitude	-0.16	1.90	0.06	0.67
Satisfaction	0.004	0.07	-0.10	1.44
R-square	0.729		0.325	
F-ratio	77.74**		13.91**	
Behavioral Intentions to Adoption	0.17	2.02*	0.11	1.97*

This showed that an increase in these dimensions would lead to an increase in behavioral intentions of customers about branch banking in public sector banks. Ease to use, trust, facilitating conditions, attitude and satisfaction could not exert any influence on behavioral intentions of customers.

In private sector banks, as much as 32.5 per cent of the variation in behavioral intentions of customers about branch banking in private sector was explained by the independent variables included in the regression model. The regression coefficient of ease to use (0.12), behavioral control (0.27), facilitating conditions (0.16), compatibility (0.25) and adoption (0.11) was significantly positive. This showed that an increase in these dimensions would lead to an increase in behavioral intentions of customers about branch banking in private sector banks. Usefulness, trust, convenience, social norms, attitude and satisfaction could not exert any influence on behavioral intentions of customers. The effect of behavioral intentions was significantly positive on adoption of banking technology in both the sectors.

The analysis revealed that behavioral control and compatibility emerged as the significant common determinants of behavioral intentions of customers regarding branch banking in both the sectors. However, usefulness, convenience and social norms in public sector branch banking and ease to use, facilitating facilities and adoption in private sector branch banking were the significant contributors towards behavioral intentions of customers about branch banking.

#### ATM Banking

The determinants of behavioral intention for ATM banking have been shown in Table 6.

A perusal of Table 6 indicated that in public sector banks, the coefficient of multiple determination was 0.828 which indicated that as much as 82.8 per cent of the variation in behavioral intentions of customers about ATM banking in public sector was explained by the independent variables included in the regression model.

The regression coefficients of trust (0.12), convenience (0.23), behavioral control (0.16), facilitating conditions (0.12), compatibility (0.22), social norms (1.09) and attitude (0.16) were significantly positive. This showed that an increase in these dimensions would lead to an increase in behavioral intentions of customers about ATM banking in public sector banks. Usefulness, ease to use and satisfaction could not exert any influence on behavioral intentions of customers.

**Table 6**  
**Determinants of Behavioral Intentions of Respondents in case of ATM Banking**

Determinants	Public Sector		Private Sector	
	$\beta$	t-value	$\beta$	t-value
Constant	4.81		2.46	
Usefulness	-0.02	0.32	0.07	0.98
Ease to Use	0.01	0.19	0.09	2.25*
Trust	0.12	2.25*	-0.01	0.10
Convenience	0.23	2.90**	0.32	4.31**
Behavioral Control	0.16	2.77**	0.24	3.33**
Facilitating Conditions	0.12	2.18*	0.19	3.01**
Compatibility	0.22	3.71**	0.20	2.91**
Social Norms	1.09	16.66**	0.09	1.01
Attitude	0.16	2.41*	0.26	2.69**
Satisfaction	0.03	0.63	0.25	4.44**
R-square	0.828		0.594	
F-ratio	139.12**		42.28**	
Behavioural Intentions to Adoption	0.21	2.47*	0.26	2.71**

In private sector banks, as much as 59.4 per cent of the variation in behavioral intentions of customers about ATM banking in private sector was explained by the independent variables included in the regression model. The regression coefficient of ease to use (0.09), convenience (0.32), behavioral control (0.24), facilitating conditions (0.19), compatibility (0.20), attitude (0.26) and satisfaction (0.25) was significantly positive. This showed that an increase in these dimensions would lead to an increase in behavioral intentions of customers about ATM banking in private sector banks. Usefulness, trust and social norms could not exert any influence on behavioral intentions of customers. The effect of behavioral intentions was significantly positive on adoption of banking technology in both the sectors.

The analysis revealed that trust, convenience, behavioral control, facilitating conditions, compatibility, social norms and attitude emerged as the significant common determinants of behavioral intentions of customers regarding ATM banking in public sector. Ease to use, convenience, behavioral control, facilitating conditions, compatibility and attitude emerged as the significant contributors towards behavioral intentions in private sector ATM banking.

### Mobile Banking

It is clear from Table 7 that in public sector banks, the coefficient of multiple determination was 0.962 which indicated that as much as 66.2 per cent of the variation in behavioral intentions of customers about mobile banking in public sector was explained by the independent variables included in the regression model. The regression coefficients of trust (0.32), convenience (0.34), compatibility (0.82) and social norms (0.93) were significantly positive. This showed that an increase in these dimensions would lead to an increase in behavioral intentions of customers about mobile banking in public sector banks. The regression coefficients of usefulness (-0.17) and facilitating conditions (-0.31) were significantly negative. This indicated that there would be a decline in the behavioral intentions of customers regarding mobile banking with the increase in usefulness and facilitating conditions. Ease to use, attitude and satisfaction could not exert any influence on behavioral intentions of customers.

**Table 7**  
**Determinants of Behavioral Intentions of Respondents in case of Mobile Banking**

Determinants	Public Sector		Private Sector	
	$\beta$	t-value	$\beta$	t-value
Constant	2.21		2.00	
Usefulness	-0.17	2.08*	-0.54	7.31**
Ease to Use	-0.06	1.38	-0.04	0.78
Trust	0.32	3.71**	0.42	4.45**
Convenience	0.34	3.11**	-0.20	2.23*
Behavioral Control	-0.01	0.13	0.53	5.92**
Facilitating Conditions	-0.31	2.38*	-0.42	7.15**
Compatibility	0.82	10.33**	0.32	5.25**
Social Norms	0.93	13.20**	0.08	1.07
Attitude	0.01	0.06	0.72	9.49**
Satisfaction	-0.07	1.73	0.01	0.19
R-square	0.662		0.577	
F-ratio	56.60**		39.42**	
Behavioural Intentions to Adoption	0.45	3.84**	0.28	3.64**

In private sector banks, as much as 57.7 per cent of the variation in behavioral intentions of customers about mobile banking in private sector was

explained by the independent variables included in the regression model. The regression coefficient of trust (0.42), behavioral control (0.53), compatibility (0.32) and attitude (0.72) was significantly positive. This showed that an increase in these dimensions would lead to an increase in behavioral intentions of customers about mobile banking in private sector banks. The impact of usefulness convenience and facilitating conditions was significantly negative on behavioral intentions over mobile banking. Ease to use, social norms and satisfaction could not exert any influence on behavioral intentions of customers. The effect of behavioral intentions was significantly positive on adoption of banking technology in both the sectors.

The analysis revealed that trust, convenience, compatibility and social norms emerged as the significant determinants of behavioral intentions of customers regarding mobile banking, while usefulness and facilitating conditions bore negative relationship with the behavioral intentions. In private sector, trust, behavioral control, compatibility, adoption and attitude emerged as the significant contributors of behavioral intentions towards mobile banking while usefulness, convenience and facilitating conditions bore negative relationship with mobile banking.

### Internet Banking

It is evident from Table 8 that in public sector banks, the coefficient of multiple determination was 0.974 which indicated that as much as 67.4 per cent of the variation in behavioral intentions of customers about internet banking in public sector was explained by the independent variables included in the regression model. The regression coefficients of trust (0.19), compatibility (0.34), social norms (1.59) and satisfaction (0.26) were significantly positive. This showed that an increase in these dimensions would lead to an increase in behavioral intentions of customers about internet banking in public sector banks. The regression coefficients of facilitating conditions (-0.51) were significantly negative. This indicated that there would be a decline in the behavioral intentions of customers regarding internet banking with the increase in facilitating conditions. Usefulness, ease to use, convenience, behavioral control and attitude could not exert any influence on behavioral intentions of customers.

**Table 8**  
**Determinants of Behavioral Intentions of Respondents in case of Internet Banking**

Determinants	Public Sector		Private Sector	
	$\beta$	t-value	$\beta$	t-value
Constant	-3.10		-0.39	
Usefulness	-0.01	0.13	0.27	4.46**
Ease to Use	0.02	0.52	0.03	0.67
Trust	0.19	2.79**	0.43	6.76**
Convenience	0.10	1.18	0.38	4.98**
Behavioral Control	0.12	1.72	-0.04	0.66
Facilitating Conditions	-0.51	7.29**	-0.07	1.04
Compatibility	0.34	4.55**	-0.10	1.59
Social Norms	1.59	24.03**	0.22	3.93**
Attitude	0.01	0.19	0.21	2.79**
Satisfaction	0.26	4.35**	-0.03	0.70
R-square	0.674		0.532	
F-ratio	59.75**		32.85**	
Behavioral Intentions to Adoption	0.19	3.03**	0.10	2.02*

In private sector banks, as much as 53.2 per cent of the variation in behavioral intentions of customers about internet banking in private sector was explained by the independent variables included in the regression model. The regression coefficient of usefulness (0.27), trust (0.43), convenience (0.38), social norms (0.22) and attitude (0.21) was significantly positive. This showed that an increase in these dimensions would lead to an increase in behavioral intentions of customers about internet banking in private sector banks. Ease to use, behavioral control, facilitating conditions, compatibility and satisfaction could not exert any influence on behavioral intentions of customers. The effect of behavioral intentions was significantly positive on adoption of banking technology in both the sectors.

### SUMMARY AND CONCLUSIONS

The study revealed that as far as branch banking is concerned, customers are more satisfied with public sector banks as compared to private sector banks. In case of ATM banking, the customers have high opinion regarding usefulness

of ATM banking, behavioral intentions and satisfaction over ATM banking in public sector banks as compared to that in private sector banks. For mobile and internet banking, the opinion of customers is in favour of private sector banks. Overall, we can say that modern self-service banking technologies like mobile banking and internet banking are much better in private sector banks as compared to the public sector banks.

The paper further revealed that trust and social norms emerged as the common significant contributors of behavioral intentions of customers towards internet banking. Except these dimensions, compatibility and satisfaction in public sector banks and usefulness, convenience, attitude in private sector banks emerged as the significant determinants of behavioral intentions of customers regarding internet banking, while facilitating conditions in public sector bore negative relationship with the behavioral intentions.

### References

- Chopra, V. K. (2006), "IT and Business Process Re-Engineering", *Indian Bankers - Special Issue on e-payments & Commerce*, Vol. 1, No. 3 (March).
- Durkin, M. G.; and B. Howcroft (2003), "Relationship Marketing in the Banking Sector : The impact of New Technologies", *Journal of Marketing Intelligence Planning*, 2(1), 61 - 71.
- Hua, G. (2009), "An Experimental Investigation of Online Banking Adoption in China", *Journal of Internet Banking and Commerce*, April 2009, Vol. 14, No. 2.
- Pikkarainen, T.; Pikkarainen, K.; Karjaluoto, H.; and Pahlila, S. (2004), "Consumer Acceptance of Online Banking : An Extension of the Technology Acceptance Model", *Internet Research*, 14, (3).
- Rao, N. V. M.; Singh, P.; and Maheshwari, N. (2005), A Framework for Evaluating E-Business Models and Productivity Analysis for Banking Sector in India, *Journal of Internet Banking and Commerce*, 10 (2).
- Sathye, M. (1999), "Adoption of Internet Banking by Australian Consumers : An Empirical Investigation", *The International Journal of Bank Marketing*, 17(7), pp. 324-334.
- Suoranta, M.; and M. Mattila (2004), "Mobile Banking and Consumer Behavior : New Insights into the Diffusion Pattern," *Journal of Financial Services Marketing*, Vol. 8, No. 4 : 354-366.
- Uppal R. K. (2010), "Customer Perception of e-banking Services of Indian Banks : Some Survey Evidence", *The ICEAI Journal of Bank Management*, Vol. 8(10).

