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E-Banking: A Motivational Approach

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Abstract

Majority of the banks are turning to self-service technologies to provide their customers with several channels to access bank's products and services. This paper is based on an empirical study to investigate the motivational factors encouraging the users to adopt ebanking services. The scope of the present study is limited to select urban areas of Northern India only. The survey data used in this research have been collected through a questionnaire administered to 383 e-banking sampled users. The twin objective of the paper is to study the impact of demographic factors on the use of e-banking services and to explore the motivational factors encouraging the users towards these services. The study brings out that the time saving and convenience in accessibility are the main motivational factors behind the use of different e-banking services. The results are discussed to bring out managerial implications along with suggestions for future research.

Keywords: e-banking, banking services, motivational factors, information technology and banks.

I- Backdrop

Banking has never been more important to our society than it is today. Advancement in communication and computer technology and the availability of the internet have made it possible that one can do most banking transactions from remote locations. Information technology is becoming an important factor in the development of financial services sector, especially in banking. E-banking has been viewed as an advanced upgrading from previous electronic delivery systems to open many new business vistas for the banking sector (Ebling, 2001). Due to globalization and entry of new players in the market, the financial sector, particularly the banking sector needs to develop solutions to build a clear and distinct identity. Internet has changed the operations of many businesses, and has become a powerful channel for business marketing and communication (American Banker, 2000). The banking industry has followed this trend in recent years. Information technology has an enormous effect in developing more flexible and user-friendly banking services. Today, e-banking has received greater attention in the banking arena; moreover the clients are adopting internet based banking services. In view of all this, the banking system has been attempting to gather more and more information on aspects that encourage people to do their banking over the internet. In order to reap the benefits of having loyal customers and gaining a competitive advantage online, banks need to develop an understanding of the antecedents of loyalty on the World Wide Web (e-loyalty), such as business factors [Bhattacherjee 2001] or personal characteristics [Magi 2003]. To develop e-loyalty among consumers, bankers must explore influencing variables. This holds especially true for those industries which already depend heavily on their reputation and long-lasting relationships in the offline world, as is the case with the banking sector. The widespread adoption of e-banking services calls for research investigating those factors which are responsible for keeping customers motivated.

This study is structured as follows. In the very beginning conceptual analysis is undertaken. Second section presents review of the literature. The next section describes the research methodology. Thereafter, the results of the present study are analyzed and discussed in relation to each of the research questions. Finally, the paper concludes with summarizing the results and pondering over avenues for further research.

II- Review of the Literature

The various articles on different aspects of e-banking which appeared in different magazines, journals and books have been reviewed as follows:

Chan (1997) recognized that income was the single most important variable that influenced a consumer's use of a credit card. Empirical findings of income positively influencing adoption of e-banking can be found in Stavins's (2001) and Karjaluoto's (2002) studies. For example, Stavins (2001) studied the relationship between consumers' area of residence and the use of e-banking. The study identified that consumers who reside in different areas have heterogeneous preferences with regard to e-banking.

Katz and Aspden (1997) explained that males were more likely to use e-banking than females. Likewise, Karjaluoto (2002) found that e-banking users were dominated by males. Using the findings from these studies, it can be anticipated that gender appreciably impacts on the choice of e-banking.

Barnett's (1998) findings proved that the younger the consumers, the more comfortable they were in using e-banking. Similarly, Karjaluoto, (2002) demonstrated that e-banking users were younger than non-e-banking users. These findings imply that older consumers are less likely to favour e-banking. As for the impact of marital status on the assessment of e-banking, Stavins (2001) identified that married consumers were more likely to use e-banking.

Denny (1998) observes that the security of Internet access to client account is the biggest challenge facing banks. For success in the increasingly competitive financial services market, banks find that a comprehensive online banking strategy which provides the essential security requirements is necessary. Security policy should include management commitment, technological support and effective dissemination of the policy and the security awareness of all users.

In a study on internet banking adoption factors in Finland, Mattila, Karjaluotu and Pento (2001) conducted a factor analysis to develop a cognitive model of factors which affect the adoption of internet banking. It was found that prior technological

experience, personal banking experience, reference group influence and security concerns are the main factors. Further, the demographic characteristics and overall perceptions about internet banking were also found to play a significant effect on the adoption.

Stavins (2001) identified that white-collar consumers are most likely to use e-banking. It can be postulated that occupation status is positively related to the choice of e-banking. His study also showed that as the educational qualifications of consumers increased, their adoption of e-banking would increase as well.

Mattila, Karjaluoto and Pento (2002) investigated internet banking adoption among mature customers in Finland. Subjecting the data to factor analysis, they found that half of the mature customers belong to the group of late adopters of internet banking and the four main reasons for this are practical problems in using e-banking, concerns about expensive start up, security and lack of personal service.

Kerem (2003) studied adoption of e-banking in Estonia. The primary aim of the study was to further the understanding of how consumers perceived e-banking. The results indicated that bank activities alone may not be sufficient in achieving growth if general infrastructure, economic environment and government initiatives are not supportive. It was also found that banks' own marketing activities were not crucial in the adoption decision.

Karjaluoto, Koivumaki and Salo (2003) examined the uptake of online banking in Finland and the study indicated that in terms of demographics, online banking users differed from non-users. He concluded that high frequency online banking users have more positive perceptions of technology than non-users and low frequency users, but the results also indicated that non-users are more loyal to their banks than users. They suggested that the new strategies to enhance online relationship and to build loyalty must be designed.

Pikkarainen, Karjaluoto and Panhila (2004) studied consumer acceptance of online banking. They developed a model on the basis of focus group interview with banking professionals, technology acceptance literature and e-banking studies. The findings of the study indicated that the quantum of perceived usefulness and the amount of information on online banking on a website were the main factors influencing online banking acceptance.

Mishra (2005) in his paper explained the advantages as also the security concerns in internet banking. According to him, improved customer access, offering more services, increased customer loyalty, attracting new customers etc., are the primary drivers of internet banking.

Cheah et al. (2005) presented the profile of the internet banking adopters in Malaysia based on a large scale survey. The subjects consisted of 763 bank customers. The findings imply that the banks should be able to identify the market segments to be targeted. They can then introduce banking services that better suit the needs and wants of the customers of that segment.

Laukkanen and Pasanen (2005) investigated the variables that differentiated between the users of mobile banking and other online banking services with the help of Logistic regression. The results indicate that only age and gender differentiate these groups of customers and not other variables such as education, occupation and income. The results offer service providers better knowledge of the typical mobile banking user and thus adding value to their marketing actions in the field of e-banking.

Gan et al. (2006) identified the decision making factors that consumers use when deciding between electronic banking and non-electronic banking in New Zealand. These factors include service quality dimensions, perceived risk factors, user input factors, price factors, service product characteristics and individual factors. The demographic variables include age, gender, marital status, ethnic background, educational qualification, employment, income, and area of residence. The findings of the research confirmed positive relationship between the service quality and user input factor dimensions and electronic banking,

Padachi, Rojid and Seetanah (2008) analysed the factors that influence the adoption of internet banking in Mauritius. Comparing demographic variables of the internet banking users to the non-internet banking users, the analysis revealed that there is no significant difference between the two groups of users with respect to age and the education level. This is, however, not the case for the mean monthly income. It was also found that the most significant factor is the ease of use, whereas the restraining factors include reluctance to change, trust in and relationship with the banker, cost of computers, internet accessibility, convenience of use and security concerns.

Adesina, Awosola and Afolabi (2009) examined the influence of demographic variables and electronic banking on perceived customers' service delivery in the Nigerian banking sector. The results show that sex of customers has a significant influence on service quality perception. The electronic banking has a significant influence on customers' perception of quality service delivery, but the age of the customer has no significant influence on it.

Given this background, it is interesting to explore the motivational factors encouraging the users towards e-banking in Indian context. The results of the present work are expected to make an important contribution to the stock of knowledge on the subject.

III- Objectives and Research Methodology

The two-fold objective of this work is to study the impact of demographic factors on the use of e-banking services and to explore the motivational factors encouraging the users towards e-banking. The paper attempts to test the following hypotheses:

- H_{1:} There is no impact of age on various motivational factors for use of e-banking services.
- H₂: There is no impact of income on various motivational factors for use of e-banking services.
- H_{3:} There is no impact of occupation on various motivational factors for use of e-banking services.

H₄: There is no impact of education on various motivational factors for use of ebanking services.

As the concept of e-banking in the emerging scenario is quite new, the present study is both exploratory and descriptive in nature. Accordingly, the data are collected using both primary as well as secondary sources through convenience sampling.

Primary data are collected by administering a pre-tested structured questionnaire to 383 e-banking users residing in Chandigarh, Delhi and Haryana (i.e. Northern India). The secondary information has been obtained from the reports of RBI, different banks, websites, magazines, journals and newspapers. The collected data are analyzed with the help of percentages, averages, standard deviations and ANOVA to arrive at concise and concrete results.

IV- Analysis and Interpretation

This section presents the respondents' classification according to demographic variables and offers interpretation of the motivational factors with respect to each of them. The profile of the respondents as depicted in Table-1 shows that majority of them (54.3 percent) belong to the age group of 21 to 35 years, have an income of up to Rs.4 lakhs p.a. (46.0 percent) and are mostly in service class (37.9 percent) with an education level of post graduation and above (67.8 percent).

Table 1: Demographic Characteristics of sampled respondents

	Demographics	No. of Respondents	Percentage	
Age	21-35 yrs.	129	33.7	
	36–50 yrs.	208	54.3	
	51 yrs. and above	46	12.0	
Income	Less than Rs.2 lakhs p.a.	95	24.8	
	Rs. 2 to Rs.4 lakhs p.a.	176	46.0	
	Above Rs.4 lakhs p.a.	112	29.2	
Occupation	Business	101	26.4	
	Service	145	37.9	
	Professionals	122	31.9	
	Others	15	3.8	
Education	Matric and under graduate	14	3.7	
	Graduate but under postgraduate	e 109	28.5	
	Postgraduate and above	260	67.8	

Source: Based on Field Survey

The study sought to assess the importance of motivational factors encouraging customers for e-banking usage. The respondents were provided with six different statements pertaining to motivational factors and their views on them were sought

as to how far they motivated them (Table 2). The results revealed that out of six factors, 'time saving' was considered as a very important motivational factor, followed by 'convenient accessibility', 'accurate information', 'efficient services', 'cost effectiveness' and 'security provision'. It signifies that banks in India lack in providing sufficient security.

A significant percentage (77.1%, taking 'strongly agree' and 'agree' statements together) agreed that 'cost effectiveness' feature of e-banking motivates them for its usage. Very large percentage of the respondents (98.4%) in the study felt that e-banking is 'conveniently accessible'. Quite importantly, 89 percent of users held that e-banking provides 'accurate information'. Similarly, 89 percent of them believed that 'provision of efficient services' is also one of the motivational factors. Almost 65 percent of respondents agreed that doing banking through e-banking is 'secure'. A large percentage (93.7%) of respondents said that e-banking transactions save time.

Table 2: Motivational Factors Encouraging Customers for E-Banking Usage

Motivational Factors	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean	Standard Deviation
	(1)	(2)	(3)	(4)	(5)		
Cost Effective	137 (35.8)	158 (41.3)	22 (5.7)	56 (14.6)	10 (2.6)	2.07	1.11
Convenient Accessibility	280 (73.1)	97 (25.3)	0 (0.0)	0 (0.0)	6 (1.6)	1.31	0.63
Accurate Information	144 (37.6)	197 (51.4)	32 (8.4)	10 (2.6)	0 (0.0)	1.75	0.71
Efficient Services	146 (38.1)	193 (50.4)	38 (9.9)	0 (0.0)	6 (1.6)	1.76	0.75
Security Provision	122 (31.9)	125 (32.6)	77 (20.1)	47 (12.3)	12 (3.1)	2.22	1.29
Time Saving	293 (76.5)	66 (17.2)	24 (6.3)	0 (0.0)	0 (0.0)	1.11	0.57

Source: Based on Field Survey

Note: Figures in parentheses are percentages

Significant Demographics vis-à-vis Motivational Factors

In order to get a better understanding of the motivational features encouraging respondents for e-banking usage, the impact of demographic factors like age, income, occupation and education of the sampled respondents were analyzed through ANOVA (Table 3).

Age

Some significant differences were found among the age groups of sampled

respondents in terms of their perception of motivational factors. As far as the 'cost effectiveness' of e-banking is concerned, it is perceived differently across different age groups. Young users falling in the age group of 21-35 years agreed (mean score-1.86) whereas middle age users of 36-50 years (mean score 2.17) and old age users of 51 and above years (mean score 2.20) agreed only to some extent that cost effectiveness of e-banking motivates them. The reason for such differences may be the fact that young users are very energetic and assign greater importance to economy of time. They perceive that time saved due to e-banking can be invested in some other fruitful activities.

Similarly, 'accuracy of information' of e-banking is perceived differently by young, middle and old age users. Young users believed more strongly (mean score 1.63) than the

middle age (mean score 1.81) and old age users (mean score 1.91) that correctness of information motivates them towards e-banking usage.

While responding to the statement- 'efficient services'—there was a significant difference between the perception of the young age users (mean score 1.46), middle age (mean score 1.76) and old age users (mean score 1.84). One can argue that the young users get more fascinated by proficient services of e-banking than other users.

Statistically, the hypothesis gets accepted from the standpoint of 'time saving', 'convenient accessibility' and 'security provision'. However, it gets rejected with regard to other factors, including 'cost effectiveness', 'accurate information' and 'efficient services'. On the whole, it may be concluded that age structure has a significant impact on motivational factors for using the e-banking services. (H₁).

Income

While assessing the motivational factors income groups seemed to play a significant role. Respondents falling in the income group of less than Rs.2 lakhs p.a. (mean score 1.83) agreed more than the users having income of Rs. 2 to 4 lakhs p.a. (mean score 2.26) and Rs.4 lakhs and above p.a. (mean score 2.29) on the issue of 'cost effectiveness' of e-banking. One can argue that the people having less income are more concerned with the cost of services; consequently this feature of e-banking motivates them.

As far as 'convenient accessibility' is concerned, marked differences were found among the users in various income groups. Respondents in the income group of above Rs. 4 lakhs p.a. (mean score 1.17) agreed more than the respondents in the income group of less than Rs. 2 lakhs p.a. (mean score 1.23) and Rs.2 to 4 lakhs p.a. (mean score1.45) regarding convenient accessibility as a motivational factor. The reason for such differences could be the fact that people with high income generally have voluminous and frequent transactions with the bank so they want e-banking services near their places for ease in transactions.

Regarding 'accuracy of information' of e-banking services, there was difference among different income groups. Respondents falling in the lowest income group (mean score 1.60) are more motivated by accuracy than the users in the income

group of Rs.2 to 4 lakhs p.a. (mean score 1.80) and Rs. 4 lakhs and above p.a. (mean score 1.83). Precisely, there is inverse relationship between income level and need for precise information. That is, lower the income level, higher is the interest expressed in precise information.

Statistically, the hypothesis stands accepted with respect to 'time saving', 'efficiency of services' and 'security provision', whereas it is rejected with regard to the remaining factors like 'cost effectiveness', 'accurate information' and 'convenient accessibility'. To conclude, the income level has a significant impact on motivational factors for the use of e-banking services.

Occupation

The ANOVA result revealed that respondents of service class (mean score 1.87) and business class (mean score 1.92) agreed more that 'cost effectiveness' of ebanking motivates them than the professionals (mean score 2.39) and other respondents (mean score 2.40).

Similarly, 'accuracy of information' as a motivating factor is perceived differently among service class (mean score 1.71), business class (mean score 1.72), professionals (mean score 1.79) and others (mean score 2.27). Respondents in service, business and professions agreed more strongly than other respondents that correctness of information encouraged them to use e-banking.

Statistically, the hypothesis gets accepted in case of 'convenient accessibility', 'efficient services', 'security provision' and 'time saving', whereas it is rejected in case of 'cost effectiveness' and 'accuracy of information.' It is thus clear from the findings that occupations bear a relationship with the motivational factors (H_3) . Our findings are in line with those of Stavins (2001) who identified that white-collar consumers are most likely to use e-banking. It can be postulated that occupation status is positively related to the choice of e-banking.

Table 3: Significant Demographics vis-à-vis Motivational Factors (Summarized output of Analysis of Variance)

	Motivational Factors	Demographics	Mean	S.D.	F	Sig.
	Cost effective	21-35 36-50 51 and above	1.86 2.17 2.20	0.92 1.15 1.33	3.53	0.03
Age (in years)	Accurate information	21-35 36-50 51 and above	1.63 1.81 1.91	0.64 0.67 1.01	3.80	0.02
	Efficient services	21-35 36-50 51 and above	1.46 1.76 1.84	0.50 0.73 0.80	4.89	0.01

	Motivational Factors	Demographics	Mean	S.D.	F	Sig.
	Cost effective	Less than Rs.2 lakhs p.a. Rs.2 lakhs to Rs.4 lakhs p.a. Above Rs.4 lakhs p.a.	1.83 2.26 2.29	0.82 1.32 1.23	7.96	0.00
Income	Convenient accessibility	Less than Rs.2 lakhs p.a. Rs.2 lakhs to Rs.4 lakhs p.a. Above Rs.4 lakhs p.a.	1.23 1.45 1.17	0.42 0.81 0.38	7.61	0.00
	Accurate information	Less than Rs.2 lakhs p.a. Rs.2 lakhs to Rs.4 lakhs p.a. Above Rs.4 lakhs p.a.	1.60 1.80	0.75 0.80 0.48	3.27	0.04
Occupations	Cost effective	Business Service Professionals Others	1.92 1.87 2.39 2.40	1.01 0.94 1.28 1.24	6.34	0.00
	Accurate information	Business Service Professionals Others	1.72 1.71 1.79 2.27	0.71 0.72 0.71 0.59	2.96	0.03
Education	Accurate information	Matric and under Graduate Graduate but under Postgraduate	1.71 1.99	0.47	8.35	0.00
		Postgraduate and above	1.67	0.65		

Source: Based on Field Survey

Education

In the ANOVA results, it is revealed that education of the respondents also has an impact on the motivational factors in use of e-banking. As far as 'accuracy of information' is concerned, it is perceived differently across different education levels. Users, who were post-graduates and above (mean score 1.67) and graduates but under post-graduate (mean score 1.71) agreed more as compared to the users who were matric and under graduate (mean score 1.99) that accuracy of information motivates them for using e-banking.

Statistically, the hypothesis is accepted in case of 'cost effectiveness', 'convenient accessibility', 'efficient services', 'security provision' and 'time saving'. On the other hand, it stands rejected with regard to 'accuracy of information'. So, it may be concluded that there is significant impact of motivational factors on the use of e-banking services on the basis of education (H₄). These findings are in line with Stavins' (2001) study which showed that as the educational level of consumers

increases, their adoption of e-banking would increase as well.

V- Conclusion and Implications for Practitioners

When planning to initiate a new idea, like e-banking, bankers would like to predict whether it will be acceptable to the users and diagnose the reason why a planned system is not fully acceptable and to take corrective action to find out the factors which motivate the users. It is found that 'time saving' is the most encouraging factor. On the other hand, people are not happy with the security measures. The results of the study also indicate that there is significant impact of demographics on the use of e-banking services. It is observed that age, income, occupation and educational levels of respondents influence the motivational factors. No significant differences were found among respondents regarding 'time saving' and 'security provision' feature of e-banking.

A managerial implication of the findings of this paper is that banks must be aware of the problems of their customer base using e-banking services. Banks should ensure proper security measures without any extra charge for them. This is urgently required in order to face the cut throat competition. In addition to extending our understanding of consumer behaviour in e-banking context, the analysis presents practical implications for policymakers who have to make strategies and take decisions in order to cater to the needs of their consumers. Since the present study has been conducted in the context of urban customers of banks, a comparative and composite study of urban and rural customers is also called.

References

- Adesina, A. A., Awosola, R. K. and Afolabi, O. A. (2009), "Influence of Demographic Variables and eBanking on Perceived Customers Service Delivery in the Nigerian Banking Sector", available at: http://ssrn.com/abstract=1443104
- American Banker (2000), "Web Banks Beat Branches on Ratios but there's No Competition", available at: http://web6.infotrac.galegroup.com.
- Awamleh, R. Evans, J. and Mahate, A. (2003), "Internet banking in emergency markets the case of Jordan", Journal of Internet Banking and Commerce, Online International Referred Journal, available at: www.arraydev.com, Vol. 8, No.1.
- Barnett, C. (1998), "Virtual Communities and Financial Service: On-Line Business Potentials and Strategies Choice", *International Journal of Bank Marketing*, Vol.16, No. 4, pp.161-169.
- Bhattacherjee, A. (2001), "An Empirical Analysis of the Antecedents of Electronic Commerce Service Continuance," *Decision Support Systems*, Vol. 32, No.2, pp.201-214.
- Bruene, Jim (2002), "Online Banking by the Numbers 2002." available at: www.onlinebankingreport.com...
- Chan, R. Y. (1997), "Demographic and Attitudinal Differences between Active and Inactive Credit Cardholders - the Case of Hong Kong", *International Journal of Bank Marketing*, Vol.15, No. 4, pp.117-125.
- Cheah et al. (2005), "The Profiling the Internet Banking Adopter", Journal of Internet Banking and Commerce, Online International Referred Journal, available at: www.arraydev.com. Spring, Vol. 10, No.1.
- Denny, Stephanie (1998), "The Electronic Commerce Challenge", Journal of Internet Banking and Commerce, Online International Referred Journal, available at: www.arraydev.com, Vol. 3, No.3.
- Ebling, Tom (2001), "The Economics of Online Banking", Target Marketing. February, 2001.
- Furst, Lang and Nolle (2000), "Internet Banking: Developments and Prospects", Economic and Policy Analysis Working paper, 2000, available at: www.occ.treas.gov.

- Gan et al. (2006), "A logit analysis of electronic banking in New Zealand, <u>International Journal of Bank Marketing</u>, Vol. 24, No. 6, pp. 360-383.
- Hannan, A., Rahman, A. Uddin, M. (2007), "E-Banking: Evolution, Status and Prospects", The Cost and Management, Vol. 35, No. 1, pp. 36-48.
- Karjaluoto, H. (2002), "Selection criteria for a mode of bill payment: empirical investigation among Finnish bank customers", International Journal of Retail and Distribution Management, Vol. 30, No. 6, pp. 331-339.
- Karjaluoto, H., Koivumaki, T. and Salo, J. (2003), "Individual differences in private banking; Empirical evidence from Finland", Proceedings of the 36th Hawaii International Conference on System Sciences.
- Kasheir, D., Ashour, S.A., Yacout, M.O.(2009), "Factors Affecting Continued Usage of Internet Banking Among Egyptian Customers", Communications of the IBIMA, Vol. 9, No. 29, pp.252- 263.
- Katz, J., and Aspden, P. (1997), "Motivations for and Barriers to Internet Usage: Results of a National Public Opinion Survey", *Internet Research*, Vol. 7, No. 3, pp.170-188.
- Kerem, K. (2003), "Adoption of electronic banking: underlying consumer behavior and critical success factors, case of Estonia", available at: www.lse.ac.uk/collections/EMTEL/Conference/papers/Kerem.pdf.
- Laukkanen, T., and Pasanen, M. (2005), "Characterizing the Users of Mobile Banking: a Distinct Group of Online Customers", Paper presented at the ANZMAC 2005 Conference, The University of Western Australia Business School, Perth, Australia, December 5-7, 2005.
- Magi, A.W. (2003), "Share of Wallet in Retailing: The Effects of Customer Satisfaction, Loyalty Cards and Shopper Characteristics," *Journal of Retailing*, Vol. 79, No.2, pp.97-106.
- Mattila, M. Karjaluoto, H. and Pento, T. (2001), "Internet Banking Adoption Factors in Finland", Journal of Internet Banking and Commerce, Online International Referred Journal, available at: <u>www.arraydev.com</u>. Vol. 6, No.1.
- Mattila, M., Karjaluoto, H. and Pento, T. (2002), "Electronic Banking in Finland: Consumer Beliefs and Reactions to a New Delivery Channel", *Journal of Financial Services Marketing*, Vol. 6, No. 4, pp.346-361.
- Mishra, A. K., "Internet Banking in India Part-I", available at: http://www.banknetindia.com/banking/ibkg.htm
- Nor, K., Pearson, M. J. (2007), "The Influence of Trust on Internet Banking Acceptance", *Journal of Internet Banking and Commerce, Online International Referred Journal*, available at: www.arraydev.com, Vol. 12, No.2.
- Padachi K., Rojid, S., Seetanah, B. (2008), Investigating into the factors that influence the adoption of internet banking in Mauritius", *Journal of Internet Business*, Issue 5, 99-120.
- Pikkarainen, T., Karjaluoto, H. and Pahnila, S. (2004), "Consumer acceptance of online banking; an extension of the technology acceptance model", *Internet Research*, Vol.14, No. 3, pp. 224-235.
- Singh and Malhotra (2004), "Status of Internet Banking in India", Management Accountant, Vol. 39, No.11, pp. 890-896.
- Singhal, D. and Padmanabhan, V. (2008), "A Study on Customer Perception Towards Internet Banking Identifying Major Contributing Factors", The Journal of Nepalese Business Studies, Vol. 5, No.1, pp 101-111.
- Stavins, J. (2001), "Effect of Consumer Characteristics on the Use of Payment Instruments", New England Economic Review, No. 3, pp. 19-31.
- Sulaiman, A., Lim, C.H., and Wee, A. (2005), "Prospects and Challenges of E-Banking in Malaysia" Electronic Journal on Information Systems in Developing Countries, Vol. 22, No.1, pp 1-11.
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