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- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
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- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

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- Garg Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

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- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

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- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Economic and Political Weekly, Viewed on July 05, 2011 http://epw.in/user/viewabstract.jsp

THE IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) ON CUSTOMER SATISFACTION IN HDFC BANK OF INDIA

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ABSTRACT

This paper deals with the factors that affect Electronic Banking (E-Banking) customer satisfaction. More specifically, it examines the case of an HDFC Bank branch in India which is a pioneer in introducing and applying e-banking services in India. In this framework, this paper performs a factor analysis based on the gathered results provided by customer questionnaires in order to quantify the various parameters that affect the use of an Electroni Banking system (EBS). The findings of the analysis show that although EBS in India is steadily increasing its penetration, factors like security, ease of use, and perceived usefulness of a system continue to play a major role on the final decision of the customer to adopt an E-Banking system.

KEYWORDS

Customer satisfaction, E-Banking System (EBS), Information and Communication Technology (ICT), HDFC bank.

INTRODUCTION

A growing phenomenon in monetary services is the rising use of sophisticated electronic means years.(e.g., communication and computer networks, mobile terminals, automatic teller machines, etc.) toward the growth of novel monetary services for processing electronic transactions, collaborating with business partners, or servicing customers, regardless of geographical and time limitations.

Especially lately, there is significant use of the Internet as a shared telecommunication channel for performing monetary transactions and offering bank services. The Internet is a global network consisting of numerous discrete wide area networks that use a specific set of protocols in order to interchange data successfully. The Internet, in its current form, came up for public use in the mid-1990s, with the World Wide Web, a huge collection of hyperlinked documents located in Web servers around the world available for viewing or downloading.

The integration of the Internet as a worldwide network infraconstruction with traditional banking services provided a new class of bank services, which are generally described as "E-Banking" (EB). Besides the many advantages, EB transactions imply significantly lower costs than traditional branch or even phone banking transactions, making them quite profitable and preferable for the banks. Thus, banks are moving towards the provision of multimodal EB services, offering to customer's innovative products with wider choices and at a lower cost. On the other hand, most customers are accustomed to conducting traditional transactions instead of electronic ones. They are also accustomed to touching and examining a transaction receipt after its completion. Moreover, the face-to-face contact is related to trust in business deals and transactions, while in the new environment of faceless electronic transactions, the concept of in terms of security issues like confidentiality, integrity, and authenticity. The penetration of the Internet as a useful tool in the hands of India people has risen significantly during the last five years.

The aim and objectives of this paper are the identification and quantification of the factors that affect the adoption of EBS in India. More specifically, the paper examines the EB customer satisfaction of HDFC Bank. The rest of this paper is organised as follows. The next section initially presents some ICT related to impact of technology on banking industry and an extensive literature review is presented about EB satisfaction, while the next section shows data collection analysis, which includes the research aims/objectives, the research design, and the research techniques. The paper then deals with the findings, providing specific data in order to deduce important conclusions.

IMPACT OF TECHNOLOGY ON BANKING INDUSTRY

The growths in ICT gathering, storing, dispensation and broadcast and delivery technology have influenced all features of banking activity and were regard as the main driving forces for the vicissitudes in banking manufacturing. The technology influences the banking manufacturing, mainly in the following three aspects:

1. Technology is influencing rivalry and the degree of contestability in banking.
   Due to the growth of technology, bank's superiority in ICT is deteriorated. Entry fence have been declining, new competitor have arose. Some monetary products and services have become more transparent and commodities, customer show willing to unbundled the demand for monetary products and services, all these lead to a more competitive market environment. Due to lowered entry and exist and deconstruction, for some sub-monetary markets, contestability in banking is also raised.
2. Technology influence Economy of scale:
   Competitive pressure force banks to lower their cost. Bank seeks to get economy of scale in bank procession instead of being a big bank. Bank pursues to protected the optimal business construction, and secure the competitive imperative of economy of scale. There are other options to get economy of scale, including joint venture and confederation of monetary firms. Small firms also can get economy of scale by outsourcing, i.e. buy in economy of scale.
3. Technology influence the economics of delivery
   Technology has a main impact on the way banking and monetary facilities are delivered. A wide range of alternative delivery instrument becomes available, Internet, ATM… these Decreases the dependence on the branch network as a core delivery instrument. With the growth of technology, the monetary systems are significantly over-supplied with delivery system through a duplication of net work; bank has to change their delivery strategy

CUSTOMER SATISFACTION OF E-BANKING

E-Banking is a field where research has been focused on demonstrating the various benefits of it against the traditional transactions. Towards this, the main customer benefits (Beethika, S.K. (2004), of EB is classified as:

- Service availability 24 hours/7 days a week.
- No delays and queues.
- Quick access to bank products.
- Reduction of paper usage.
- Online transfer of funds.
- Accessibility anytime and anywhere.
- Reduction of transaction costs due to automation/human-free of the required processes.
- Better utilisation of time.

On the other side, the intention to transact online is closely related to the significant reduction in operational costs, due to the decrease of the branches and the minimisation of the staff. It is widely satisfied that online banking is the inexpensive way for contribution banking services once recognised (Sathye, 1999; Robinson, 2000; Giglio, 2002). More exactly, it has been appraised that the operative cost of a outdated bank transaction is about $1.07, while the equal cost through a phone transaction is almost half; if the transaction is performed online, then the cost drops to only $0.001 (Mols, 1998; Robinson, 2000; Sheshunoff, 2000). Moreover, besides EBS being the most profitable and wealthiest segment of bank institutions (Mols, 1998; Robinson, 2000; Sheshunoff, 2000), it has been shown that EB also leads to higher levels of customer satisfaction and retention in comparison to the standard face-to-face monetary services (Polatogly & Ekin, 2001). Therefore, EBS (i.e., online transactions, payments, and money transfers) have recently increased in popularity around the world.

According to Barwise (1997), it has been estimated that 60 per cent of retail banking transactions will have been replaced by the corresponding online ones by 2009, while the total move from the traditional transactions to the electronic ones will be gradually completed, as 3G/4G mobile communication networks offer Internet access anytime, anywhere, and anyhow. From a business perspective, emphasis has been put on researching the customer satisfaction of EBS in correlation to economical, social, and psychological issues (Karjaluoto et al., 2002; Waite & Harrison, 2002; Brandley & Stewart, 2003). One of the earliest works in this field was conducted and showed that the EBS-registered bank customers are generally more satisfied than Non-EBS registered customers for the same bank services (Mols, 1998). Similarly, another early work by Sathye (1999) showed that the main factors for the non-adoption of EBS by customers are: (1) security concerns about the Internet, and (2) the lack of awareness about EBS.

These preliminary outcomes about EBS satisfaction motivated the examination also of other aspects/factors that affect EB satisfaction, such as compatibility, usefulness, and ease of use, as well as various demographic data (i.e., gender, age, marital status, ethnic background, and formal instruction of the customer) (Eriksson et al., 2004; Yoonhee, 2005; Shergil & Bing, 2005; Eun, 2001). Finally, relative advantage, complexity, compatebility, observability, and risk tolerance proved to play a crucial role in EB satisfaction (Mattila et al., 2003; Kolodinsky et al., 2004). Also, another parameter that influences the degree of EB adoption is the customer familiarity with the target-object/service, since it has been proven that experienced customers behave in a more positive way towards EB than inexperienced ones (Karjaluoto et al., 2002).

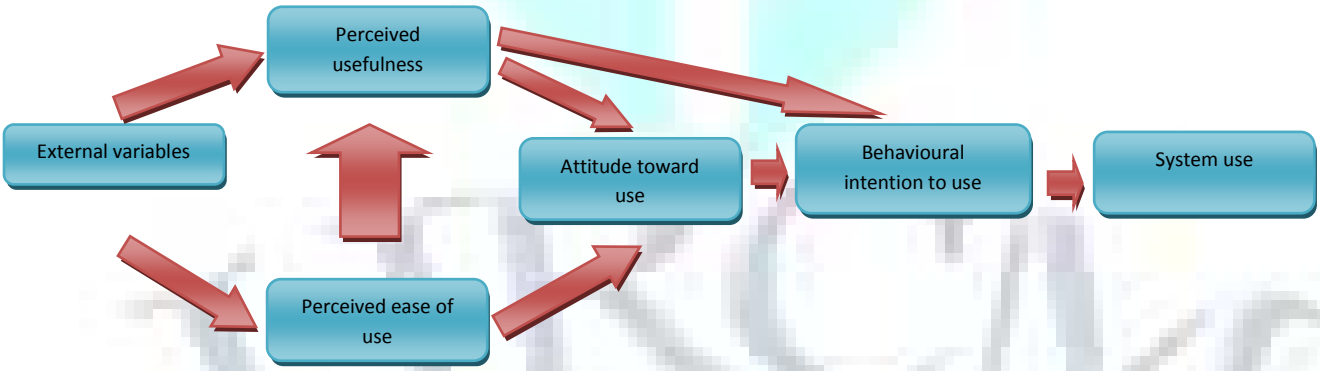
Similarly, security and privacy are considered to be closely related to EB satisfaction. From the customer point of view, security remains the vital factor of EB satisfaction. Customers still remain skeptical about security, hacking issues, and personal data/ICT misuse by third parties (Kobsa, 2001; Kobsa, 2002). Going to an online/virtual banking environment, in contrast to a face-to-face transaction with a teller, the customer feels that he or she is open to numerous risks. According to a specific study about security, customers want to lead their own acts and be in the position to know the consequences and causes of their own decisions (Baronas & Louis, 1988; Karvonen, 1999).

However, there are also many other non-psychological factors that may negatively influence EBS adaptation, since a great portion of the potential or existing customers do not have access to the Internet, making it impossible for them even to try the online services. Also, another great portion of the customers have Internet access only at work/office, where content/access filtering rules deprive the EB use.

RESEARCH METHODOLOGY

According to Technology Satisfaction Model (TSM), which is depicted in Figure 1, the system use (actual behavior) is determined by two factors: Perceived Usefulness (PU) and Perceived Ease Of Use (PEOU). These factors are related to the attitude toward the use, which in turn influences the behavioral intention to use an ICTs. More specifically, PU is defined as "the degree to which a person believes that using a particular system would enhance his or her performance" (Davis, 1989), while PEOU is considered "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1989).

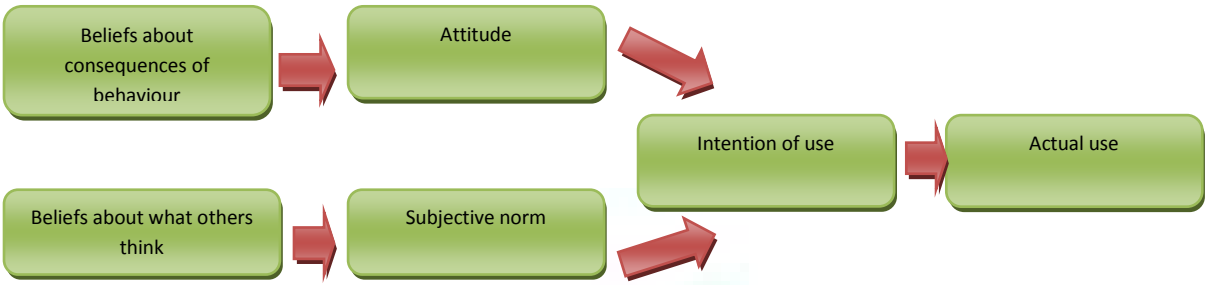
FIGURE1: TECHNOLOGY SATISFACTION MODEL



Source: Davis et al., 1989

TSM is based on the Theory of Reasoned Action (TRA) model, which has been designed to predict and understand an individual's intended behavior (Ajzen & Fishbein 1980). According to Ajzen and Fishbein (see Figure 2): "An individual executes a unique behavior that was decided by his or her Behavioral Intention (BI) determined by their Attitude (A) and a Subjective Norm (SN), including that some external variables are considered in TRA to be related to a person's behavior." In the TRA model, the term "actual use" is used in a similar way to "customer satisfaction" of a specific service, since it describes the final customer decision on using a specific service.

FIGURE 2: THEORY OF REASONED ACTION



Source: Ajzen & Fishbein, 1980

Many related studies have used TSM to measure ETS satisfaction, and have proven its validity and reliability (Mathieson, 1991; Davis & Venkatesh, 1996; Eriksson et al., 2004: Davis, 1989; Taylor & Todd, 1995), while some improvements have been proposed to it (Venkatesh & Davis, 2000). Moreover, Mathieson (1991) states that "TSM's ability to explain attitude toward using a new IT system is better than other models (e.g., TRA)."

According to TSM, PU and PEOU are both critical factors that can affect IT satisfaction (Davis et al., 1989). Therefore, an ETS that is believed to be easier than another is more likely to be accepted by customers.

- H_1: PU has a positive effect on customer satisfaction of EB.
- H_2: PEOU has a positive effect on customer satisfaction of EB.

In an empirical investigation among customers, Sathye (1999) found that customers were totally unaware about the advantages and potential of EBS, and this proved to be an obstacle against using the system.

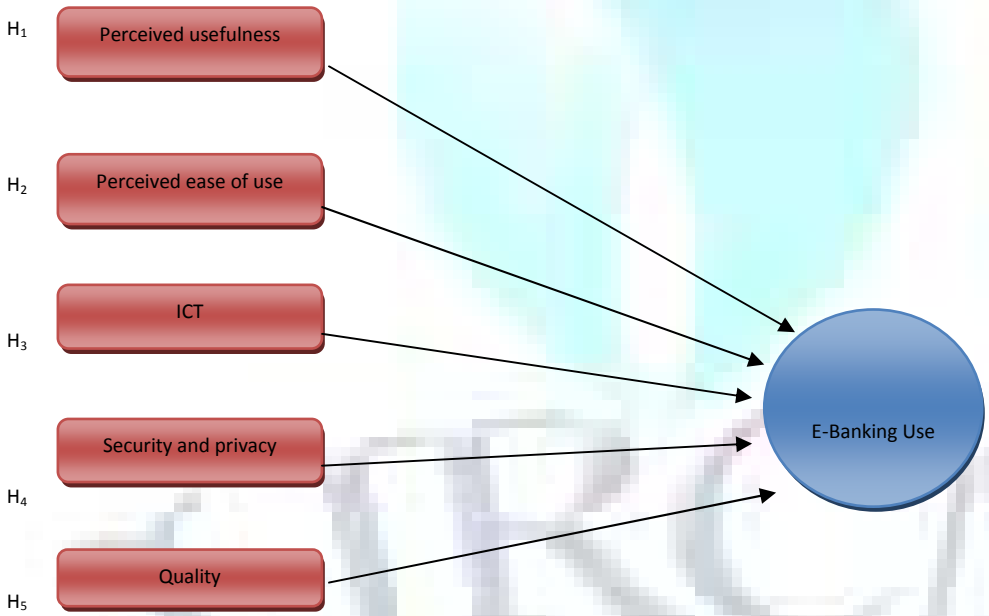
- H_3: The amount of ICT a customer receives about Electronic banking services has a positive effect on customer satisfaction of EB.

As mentioned before, the potential customers of EBS are concerned about security and privacy issues. Security is the primary factor that can prevent a customer from accepting an ETS.

- H_4: Security and privacy have a positive effect on customer satisfaction of EB.

Finally, the quality of Internet connection may influence the adoption of EBS (Sathye, 1999). So, my last hypothesis for the proposed research model is:

FIGURE 3: THE PROPOSED EXTENDED TSM MODEL



- H_5: The quality of the Internet connection has a positive effect on customer satisfaction of EB.

Consequently, the proposed extended TAM research model for measuring customer satisfaction of HDFC Bank EBS is depicted in Figure 3, and it is based on the five previous hypotheses. Considering the proposed extended TSM model, it can be derived that the TRA, which is the basis of the original TSM model, is strongly related to our five hypotheses since the five afore-mentioned hypotheses describe different aspects of the consumer's attitude and subjective norm. In order to examine the impact of these factors on the satisfaction of HDFC Bank EBS, I performed a questionnaire survey with HDFC Bank customers of three different branches in India (Bangalore, Mysore, and Mangalore). The procedure involved the collection of primary/personal data from the participants, in order to reassure the selection of a representative population sample, ensuring higher reliability than other survey techniques. The survey was conducted during the period of January–May 2010. A total of 200 questionnaires were delivered to respondents, of which 159 were returned, for a response rate of approximately 80 per cent. In order to quantify the positive/negative perception of the respondents, a Likert five-point ranking scale was used, ranging from "strongly agree" to "strongly disagree." The questionnaire included all five hypotheses of the proposed TSM model as well as some demographics data. The use of E-Banking was in this model as the dependent variable.

The aforementioned described collection of perceptual data related to EBS satisfaction provides some ICT about how it must be bridged by the IT specialists, the gap between the actual reliability of an IT system, and the psychological/subjective sense of reliability as it is perceived by the customer. Thus, such data can provide hints of making consumer friendly a technologically efficient EB system. On the other hand, perceptual data are subjectively dependent, which

sometimes imposes a limitation on the objectiveness of the collected data. In the next section, I analyse the collected results, providing the factors and their impact on influencing HDFC Bank EB satisfaction.

SOLUTIONS AND RECOMMENDATIONS

In order to interpret the collected answers and measure the tendency of HDFC Bank customer towards EBS use, I used five independent factors. The five-point Likert scale was used as a technique for the fulfillment of the questionnaires. Afterwards, I used the Principal Component analysis with Varimax rotation for the computation. I should infer that two of the variables from our model related to the quality of Internet connection were not included at the end, because the dispersion of the answers was not appropriate for the extraction of accurate conclusions. Due to this, hypothesis H_5 was excluded from further analysis, since there was not a clear tendency from the customers. This may be explained by the fact that nowadays a typical Internet user has a reliable connection, and thus that factor does not affect EBS adoption. The mean age of the 159 respondents is 33.2 years, and gender is 61 per cent male and 39 per cent female. The average level of monthly income before taxation is: 25.7 per cent less than Rs. 34000, 36.4 per cent between Rs. 34400 and Rs.137000, and 37.9 per cent greater than Rs.137000. Initially, Bartlett's Test of Sphericity (BTS) showed that the variables within the same factors are strongly inter-correlated, being used to determine whether the subgroup error variances were homogeneous.

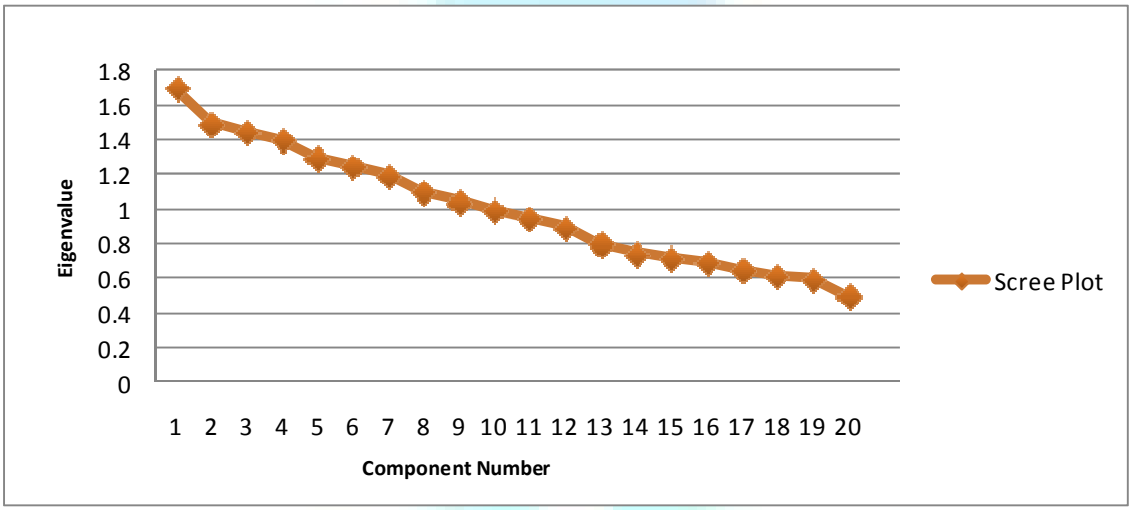
The null hypothesis being tested is: the error variances for the subgroups are statistically equal. This is a necessary and often ignored assumption, when moderated multiple regressions are used to evaluate moderating effects of categorical variables. BTS showed that it is unlikely that the correlation matrix is the 'identity', and thus the variance (and standard deviations) of the groups differ significantly.

Table 1 presents the descriptive statistics for all the variables under investigation (i.e., the mean, the standard deviation, and the number of respondents N who participated in the survey). Based on these statistics, the following outcomes can be derived about the statistically important variables that influence customers for or against EB use:

- Customers are worried about the security of EBS.
- Security plays an important role in accepting EBS.
- Perceived usefulness is an important factor in EB satisfaction.

In order to identify and quantify the various parameters that affect the adoption of EBS, I used the descriptive statistics of Table 1 for factor analysis. From this procedure, Figure 4 was deduced, which depicts the Scree Plot of the collected data, demonstrating the corresponding eigenvalues of the factors. The graph is useful for determining how many factors to retain in the analysis. Towards this, the Kaiser criterion was applied, which is also known as the "eigenvalue-greater-than-1" method.

FIGURE 4: SCREE PLOT



Thus, from Figure 4 it can be observed that the first 10 factors have eigenvalue greater than 1, while from factors 11-20 the eigenvalues are less than 1. So, 10 factors are retained for the representation of data. Table 2 presents all the factors extractable for the analysis along with their eigenvalues, extraction, and rotated sums of squared loadings. The 10 factors account for 64.895 per cent of the total variance, with Factor 1 accounting for 8.456 per cent and Factor 10 for 5.064 per cent. Only 35.105 per cent of the total variance is attributable to the other factors. Thus, these 10 factors can satisfactorily represent the data.

TABLE 1: DESCRIPTIVE STATISTICS

Hypothesis	Item	N	Minimum	Maximum	Mean	Std. deviation
ICT	I have received enough ICT about EBS	159	3.00	5.00	4.0377	0.57243
	I have received enough ICT about EBS	159	3.00	5.00	4.5849	0.63944
Perceived Usefulness (PU)	Using EB enables me to utilise services quickly	159	3.00	5.00	4.4906	0.72799
	Using EB improves my performance at utilising EBS	159	3.00	5.00	4.7547	0.51209
	Using EB for my banking services increases my productivity	159	3.00	5.00	4.7101	0.61533
	Using EB enhances my effectiveness at utilising EBS	159	3.00	5.00	4.8679	0.37506
	Using EB makes it easier for me to Utilise EBS	159	3.00	5.00	4.7849	0.57701
	Overall, EB is useful for me to utilise EBS	159	3.00	5.00	4.7786	0.53229
Perceived Ease of Use (PEOU)	Learning to use EB is easy for me	159	2.00	5.00	3.3082	0.98050
	I find it easy to do what I want	159	2.00	5.00	3.4151	0.90219
	My interaction with EB is clear and understandable	159	1.00	5.00	3.9308	1.44134
	I find EB to be flexible to interact with	159	1.00	5.00	4.6792	0.69647
	It is easy for me become skillful at using EB	159	1.00	5.00	3.7421	1.07453
	Overall EB is monetaryly secure EB	159	1.00	5.00	3.9245	1.38503
Security and Privacy	Using EB is monetaryly secure	159	1.00	5.00	3.1698	1.66577
	I trust in the ability of EB to protect my privacy	159	1.00	5.00	3.0063	1.41196
	I trust in the technology EB is using	159	1.00	5.00	3.9686	1.43386
	I trust in EB as an actual bank	159	1.00	5.00	2.8679	1.27345
	I am worried about the security of EB	159	4.00	5.00	4.9371	0.24354
	Matters of security have great influence on me for using EB	159	3.00	5.00	4.9308	0.30020

TABLE 2: FACTOR EIGENVALUES, EXTRACTION SUMS, AND ROTATED SUMS OF SQUARED LOADING

Component	Initial Eigenvalues			Extraction Sums of Squared Loading			Rotation Sums of Squared Loading		
	Total	per cent of Variance	Cumulative per cent	Total	per cent of Variance	Cumulative per cent	Total	per cent of Variance	Cumulative per cent
1	1.691	8.456	8.456	1.691	8.456	8.456	1.565	7.827	7.827
2	1.529	7.6462	16.10	1.529	7.646	16.102	1.424	7.118	14.945
3	1.441	7.205	23.308	1.441	7.205	23.308	1.348	6.739	21.684
4	1.413	7.605	30.372	1.413	7.065	30.372	1.343	6.713	28.397
5	1.275	6.373	36.746	1.275	6.373	36.746	1.301	6.507	34.904
6	1.216	6.080	42.825	1.216	6.080	42.825	1.258	6.290	41.193
7	1.199	5.996	48.821	1.199	5.996	48.821	1.227	6.133	47.327
8	1.144	5.718	54.539	1.144	5.718	54.539	1.195	5.976	53.303
9	1.058	5.292	59.831	1.058	5.292	59.831	1.182	5.911	59.214
10	1.013	5.064	64.895	1.013	5.064	64.895	1.136	5.681	64.895
11	0.994	4.719	69.614	-	-	-	-	-	-
12	0.879	4.395	74.009	-	-	-	-	-	-
13	0.858	4.290	78.299	-	-	-	-	-	-
14	0.766	3.830	82.130	-	-	-	-	-	-
15	0.718	3.592	85.721	-	-	-	-	-	-
16	0.661	3.304	89.025	-	-	-	-	-	-
17	0.617	3.086	92.112	-	-	-	-	-	-
18	0.587	2.935	95.047	-	-	-	-	-	-
19	0.531	2.653	97.700	-	-	-	-	-	-
20	0.460	2.300	100.000	-	-	-	-	-	-

TABLE 3: ROTATED COMPONENT MATRIX

Item	1	2	3	4	5	6	7	8	9
I have received enough ICT about EBS	0.709	-	-	-	-	-	-	-	-
I have received enough ICT about EBS	-	-	-	-	-	-	0.861	-	-
Using EB enables me to utilise services quickly	-	-	-	-	-	-	-	-	-
Using EB improves my performance at utilising EBS	0.815	-	-	-	-	-	-	-	-
Using EB for my banking services increases my productivity	0.798	-	-	-	-	-	-	-	-
Using EB enhances my effectiveness at utilising EBS	0.845	-	-	-	-	-	-	-	-
Using EB makes it easier for me to Utilise EBS	0.787	-	0.732	-	-	-	-	-	-
Overall, EB is useful for me to utilise EBS	-	-	-	-	-	-	-	0.696	-
Learning to use EB is easy for me	-	-	-	0.610	-	-	-	-	-
II find it easy to do what I want to	-	-	-	-	-	0.802	-	-	-
My interaction with EB is clear and understandable	-	-	-	-	0.771	-	-	-	-
I find EB to be flexible to interact with	-	-	-	-	-	-	-	-	0.797
It is easy for me become skillful at using EB	-	-	-	-	-	-	-	-	0.587
Overall EB is monetaryly secure EB	-	0.635	-	-	-	-	-	-	-
Using EB is monetaryly secure	-	-	-	-	-	0.564	-	-	0.598
I trust in the ability of EB to protect my privacy	-	0.711	-	-	-	-	-	-	-
I trust in the technology EB is using	-	0.584	-	-	-	-	-	-	-
I trust in EB as an actual bank	0.768	-	-	-	-	-	-	-	-
I am worried about the security of EB	0.625	-	-	-	-	-	-	-	-
Matters of security have great influence on me for using EB	0.823	-	-	-	-	-	-	-	-

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalisation. Rotation converged in 19 iterations.

Table 3 designates the corresponding rotated constituent analysis. The idea of rotation is to decrease the issues on which the variables under investigation have high loadings. Rotation does not really change anything, but makes the clarification of the analysis easier. Also, from Table 3 it can be derived that factors 8 and 10 did not load any parameter on the specific variances, which leads to exclude them from the specific issue analysis presented in this paper. Factor 1 account for the main amount of the total variance (8.456 per cent). Table 3 shows that this issue contains of the eight variables with factor loadings ranging from 0.625 to 0.845. Four of the eight items describe apparent practicality, and they propose that the use of EB improves the presentation of bank transactions; three issues are security-related, signifying that a well-secured EBS is a crucial parameter to EB acceptance. Finally, the last issue regards the amount of ICT, showing that customers have already received enough ICT about EBS potentials and security level. Thus, according to this, the factor can be mentioned to as the "Amount of ICT about perceived usefulness and security level." Factor 2, which accounts for 7.646 per cent of the total variance, contains of three variables with factor loadings ranging from 0.584 to 0.711. One issue is related to perceived ease of use, while the other two are security related, showing the position of providing, on the one hand, a friendly user interface, and on the other hand, upholding concurrently at high levels the trust of the customer regarding privacy and EBS reliability. Thus, this issue can be named "Friendly user interface, providing privacy and reliability." Similarly, Factor 3 accounts for 7.205 per cent of the total variance. Table 3 shows that two substances are loaded on this factor: one regarding perceived practicality, and one about perceived ease of use. Therefore, this issue is referred to as "Easy use of EB and EBS utilisation."

On Factor 4, only one item is loaded about perceived ease of use, which accounts for 7.065 per cent of the total variance. Thus, this factor can be named "Clarity between EB and customer interaction."Factor 5 accounts for 6.373 per cent of the total variance. As presented in Table 3, this factor consists of two items with loadings ranging from 0.564 to 0.802.

One factor is related to perceived ease of use, while the other is security related. This factor is referred to as "Easiness to find and run securely a specific EBS monetary process." factor 6 accounts for 6.080per cent of the total variance.

TABLE 4: DEDUCED FACTORS INFLUENCING EB SATISFACTION

Factor	Factor Name	Variance
1	Provision of ICT about perceived usefulness and security level	8.456 per cent
2	Friendly used interface, providing privacy and reliability	7.646 per cent
3	Ease use of EB and EBS utilisation	7.205 per cent
4	Clarity between EB and customer interaction	7.065 per cent
5	Easiness to find and run securely a specific EBS monetary process	6.373 per cent
6	Amount of ICT about EBS benefits	6.080 per cent
7	EB usefulness on EBS utilisation	5.996 per cent
8	Flexibility and ease of use of a secure EBS	5.292 per cent

Table 4 presents the item which loads on this factor at 0.861. This item describes the amount of ICT regarding EBS benefits. Thus, this factor is referred to as the "Amount of ICT about EBS benefits." Similarly, Factor 7 contains only one item with factor loading of 0.696, which is related to perceived usefulness and named "EB usefulness on EBS utilisation." Finally, Factor 8, which accounts for 5.292 per cent of the total variance, includes three factors related to security and perceived ease of use. Therefore, this factor is referred to as "Flexibility and ease of use of a secure EBS." To summarise, the eight factors and their factor names that affect HDFC Bank's EB satisfaction are presented in Table 4, along with their share in variance. The main factors that seem to influence a customer towards or against using EBS are perceived ease of use and perceived usefulness, in combination with adequate security. In other words, customers seem to be willing to use a specific EBS if they have received adequate ICT about its benefits and potentialities, while the whole service is offered via a friendly, easy, and definitely secure interface.

CONCLUSION

This paper presented a study of HDFC Bank EBS customer satisfaction in India. An extension of the technology satisfaction model was used for the quantification of the parameters that influence the customer satisfaction, which included two standard variables and three new ones: amount of ICT, quality of Internet connection, and security/privacy.

Subsequently, I performed factor analysis with a sample of 159 customers. From this, eight different factors were deduced which are loaded with variables coming from the questionnaires and quantify the EBS customer satisfaction. By extrapolating the deduced factors, I conclude that: if customers trust in the security of an EBS and believe that using an EBS will increase their productivity and effectiveness, then the probability of using the particular system is higher. Thus, bank institutions, in order to promote EBS use, must take actions in order to reassure possible customers about the high standards of the security and the potential that EBS use offers. The EBS training sessions could be organised on the bank premises for customer to strengthen their confidence in using an EB system. Based on the perceived usefulness-related results, it is obvious that banks should provide through the EBS an efficient graphical user interface that will provide easy access and navigation among the various offered services.

Finally, according to my results, the amount of ICT that a consumer receives about an EBS plays a major role into adapting its use or not. Thus, by providing informative leaflets and advertisements relative to the alternative services and benefits of using an EBS, new users can be motivated towards EBS adoption.

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