

## **User Acceptance of Internet Banking in North India: With Special reference to the Haryana**

**Dr. Naaz Gorowara,**

Assistant Professor,  
Department of Management Studies,  
Maharishi Markandeshwar University,  
Sadopur, Ambala, India.

**Dr. Ruchika Wadhwa,**

Assistant Professor in Commerce,  
Government College for Women,  
Ambala, India.

### **ABSTRACT**

*The economic and financial system of the country considers the Banking Industry as its backbone and also recognizes it as a major service sector contributing tremendously to the Indian economy. The banking Industry has observed a change with respect to the financial reforms from the year 1991. In the current scenario, each and every bank is making an attempt to provide new products and services to its customers. However, for the banks to excel from their competitors, there was a need to reframe their strategies and resort to new technological ways of conducting business, in order to provide improved and better services to its customers. The presence of technology is now seen in all sectors of the economy. Internet Banking is a gift of the new technological advancements taking place in the Banking Industry. It can also be stated known as Online banking "or Web based banking". The paper intends to investigate the factors determining the acceptance of Internet Banking amongst customers in Haryana along with influence of Internet Banking on the extent of satisfaction of customers. The acceptance of Banking via Internet revolves around two broad aspects of decision making together with acceptance of technology. A tailored edition of the theory called TAM (Technology Acceptance Model) (24) will be used as a foundation of the study. TAM states the acceptance of technology by the users to a large extent is affected by their behavior intention towards using the system.*

**Keywords:** TAM, Behavior Intention, Acceptance, Online Banking.

### **INTRODUCTION:**

Internet banking means performing banking activities via internet in a secure way. The bank through Internet provides a number of services to its customers such as transfer of funds, account balance enquiry, payroll process, bill payment, loan applications etc. However most of the times it has been observed that the term "Internet banking" has been used vice versa with E-banking. (Ahuja, 2015) Electronic banking is a wider term that incorporates ATM's, mobile banking, telephone banking, electronic clearing cards, smart cards and Internet banking as well, Thus, Internet banking is indeed a type of Electronic banking.

### **Internet Banking : The Current Scenario**

The financial services industry have witnessed drastic changes over the past decade as result of advent of new technology. This led to the evolution of E-commerce thereby leading to evolution of e-banking. E-Banking has offered totally new banking experience for its customers. E-banking also stated as electronic banking incorporates ATM's, Internet banking, Mobile banking, Tele banking. Customers have now access to these new deliver channels and are offering their products and services by making use of these new channels. ATM as a delivery channel was highly accepted and gained huge access as a mode of delivery channel for banks. It also helped in enhancing customer base. ATM's are computer controlled devices. They do not require

help of individuals. Customer can check their balance; make withdrawals with the help of ATM's (Automated teller machines) without any involvement of human resources. Smart cards are chip based card used for making purchases without the need of any pin. When the card is used for making the transaction the value is debited and the balance comes down. Tele- banking is banking over the phone. It is mostly used for marketing of services by the banks. The customer can anytime and at any place perform non- cash operations with the phone. It is now being replaced by mobile banking as a result of fall in mobile call rates. Internet banking was yet another innovation which added on to the banking experience of the customers. Through Internet banking the banks could offer their products and services online (via internet) to its customers. Market forces are also acting as a driving force for banks to offer online services to its customers. But Security is a major concern and need to be addressed carefully. The Issue of Security is a major factor that restrains customers from E-banking as customers fear loss of confidential information and unethical hacking

### **Internet Banking Acceptance and Technology Acceptance Model (TAM):**

The aim of the research is to analyse the factors that determine acceptance of Internet Banking among customers in Haryana The acceptance of Internet banking revolves around two broad aspects of decision making together with acceptance of technology. Literature review of previous studies highlighted the fact that theoretical background of the study was based on the theories from social psychology. Two theories were used by the researchers namely.

- The Theory of Reasoned Action
- The Theory of Planned Behaviour to frame their research design.

A modified version of the theories called TAM(Technology Acceptance Model) is used to base the study. TAM is extensively used for studies involving customer acceptance of technology.

### **Social Psychology:**

The impact of Information technology is quite visible on all sectors for performing all kinds of commercial as well as non- commercial activities. Though, there has been tremendous impact of technology but all technology is not acceptable by the customers. Most of the times users resist using new technology, so research has been conducted to analyse why there is resistance among people in using Information technology along with the factors that accept or reject a technology. Also as to how the users will respond to changes taking place in the technological surroundings.. Researchers have acknowledged three key pillars in Information system environment i.e. People, process. Technology. Robert Kling( Kling & Lamb,1999) recommends for a combination of social as well as technical approach in order to manage Information Technology in the upcoming digital economy. Research highlights IT as "social -technical" systems which differentiate it from the main concepts of Information technology. Research highlighted that when people understand the use of information technology then theories from other disciplines like management, psychology and economics need to be considered. The theory of social psychology is extensively used as a theoretical background for studying customer behavior with reference to the adoption of a product/ service. Further, the concept of social psychology is studied in depth with the help of

- TRA- Theory of Reasoned Action
- TPB- Theory of Planned Behaviour

### **Theory of Reasoned Action:**

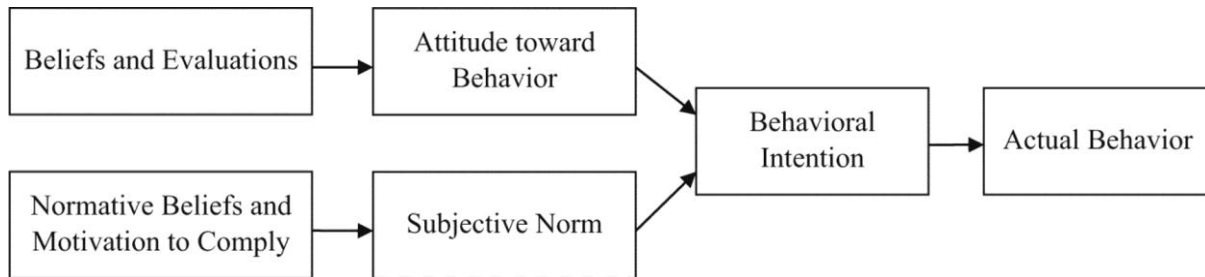
TRA is a valid model that has been widely used in predicting and thereby explaining the factors that determine the intended behavior of individual across a wide variety of areas. This model is an extensively studied from social psychology. TRA indicates that the behavior of a person is depicted by the person's' Intention to perform the behavior. The intention to perform in fact is a function of his/her

- Attitude towards behaviour
- Subjective norm

(Ajzen& Fisbein,1980) defines Subjective norm as "an individuals' self-perception believing that all the important people around him believe that he must or must not execute a particular behavior which is in questionThe figure below gives a schematic representation of the relationship among constructs in TRA. According to TRA a person's attitude towards a particular behavior is determined by set of belief he/she has on the outcomes of the particular behavior. TRA has been used as a framework for a number of studies in examining certain specific kinds of behavior. Behavioral Intention is important in the study of the theory because theses intentions are determined by behavioral attitude along with subjective norms. TRA holds that

intention which are stronger will lead to more effort in performing the behavior which in turn, leads to increase in the possibility of the behavior to be performed.

**Figure 1.3: Theory of Reasoned Action**



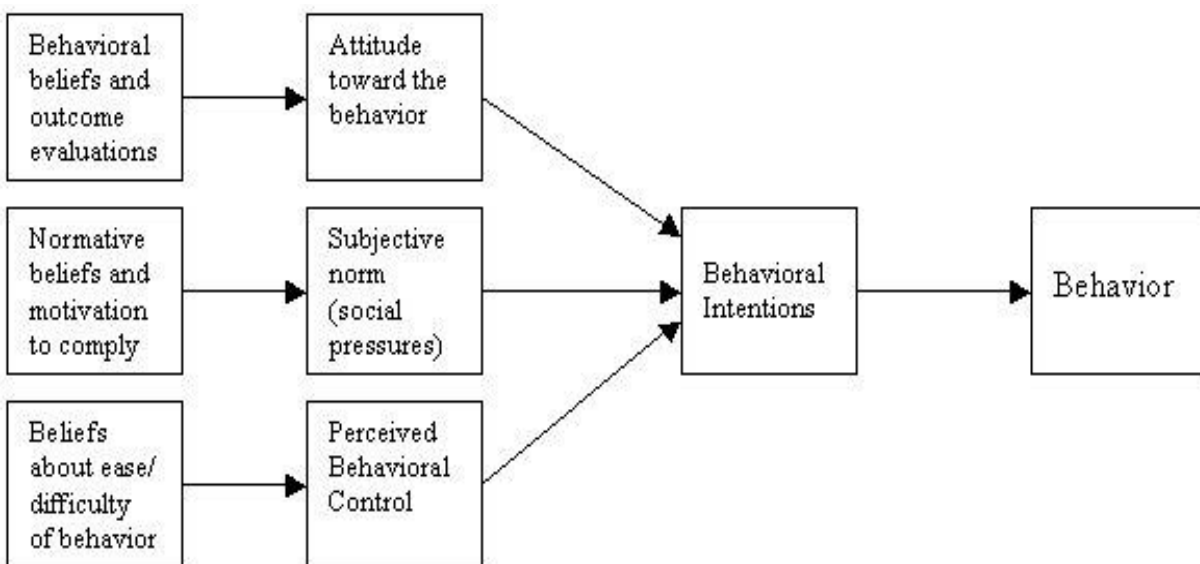
Source: (Theory of Reasoned Action from Daviss, Bagozzi and Warshaw 1989)

The model depicts that attitude of the person is influenced by external stimuli which thereby modifies the structure of the person’s belief. TRA states that all factors which indirectly influence the behaviour of the individuals, manage to do it by influencing the attitude together with the subjective norms. (Fishbein and Azen(1975) refer to these factors as external variables.

**Theory of Planned Behaviour:**

Icek Ajze propounded the Theory of Planned Behavior .The theory included perceived behavioral control to develop on predictive power of the theory of reasoned action. Perceived behavioral control indicates that the motivational level of a person is influenced by his/her behavioral perceptions. It means the way they perceive as to how difficult can be the behavior. It also depicts the perception as to how successful an individual can be in performing an activity. With reference to existence of factors if a person holds strong control beliefs that help in facilitating his behavior, then in that case the individual will have a high perceived control over behavior.

**Figure 1.4: Theory of Planned Behaviour**



Source: (Theory of Planned Behavior Ajzen, 1991)

Behavioral Intent is the key component of this model. The theory was proposed to explain every single behavior over which people have the capacity to exert control. The theory states that it is the combination of intention and behavioral control that forms the basis of. behavioral achievement .The TPB is composed of six constructs that represents a person actual control over the behavior including perceived power, Behavior Intention, behavioral control, Subjective norms, Attitude, Social norms.TPB has been successfully applied to various situations in predicting behavioral performance and intentions.. TPB or the model based on TPB is widely used in the study of technology Acceptance for instance electronic commerce, Internet banking.

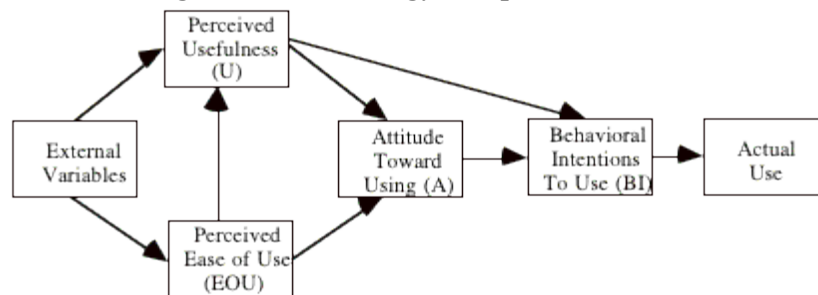
### **TAM (Technology Acceptance Model):**

Davis 1989 developed the Technology Acceptance Model (TAM) model that depicts how customers approach towards and then accept technology. Researchers conducting research on information systems widely accept and use TAM. The most important motive for recognition of TAM's is because of its cost-cutting, precise nature, information system and empirical support from a number of studies (Mathieson, 1991; Gefen & Straub 1997). The model suggests that when consumers are exposed to new technology there are a number of factors which come to influence their decisions as to how and when they will make use of new technology. TAM States that the user acceptance of new technology is determined by their behavioral intention to use the system which can be explained by the perception of the user regarding usefulness of technology and attitude of the users towards the use of technology.

- Perceived Usefulness (PU): Fred Davis defined it " as the extent to which one believes that making use of a particular method would help in improving their performance on the job".(Davis 1989)
- Perceived Ease of Use(PEOU): Fred Davis defined it "as the extent to which a person assumes that making use a particular method would not involve any effort"(Davis 1989)

TAM has been repeatedly studied and then upgraded, further Venkatesh and David (2000) proposed TAM 2 which incorporates cognitive instrument process and subjective norm as additional constructs.

**Figure 1.5: Technology Acceptance Model**



Source: Technology Acceptance Model Davis et al.1989

### **REVIEW OF LITERATURE:**

From traditional body of literature Dixit and Dutta(2012) in their study investigated the factors affecting the acceptance of adult customers, in the age group of 35 and above towards Internet banking services. The study also focused on the Privacy and Security aspect of the customers regarding the use of Internet banking services. Habib(2012) in his study investigated the concerns of the Indian customers with respect to Internet banking along with the factors that affects the strategies of the bank to adopt internet banking services. Arshveer Kaur(2015) investigated that present era is era of technology the impact of technology in the banking sector offers an array of opportunities in the form of anywhere, anytime banking to its customers, such services are adding value to the satisfaction of the customers. Milind Sathye(1999) \highlighted that Security was of outmost importance with respect to the usage of internet banking. Sathye (1999) The results of the study concluded that the major factors which were creating hurdles in the adoption of Internet banking were Lack of awareness among the customers regarding Internet banking services. Suganthi, Balachandher, & Balachandran (2001) conducted a study on Internet banking Patronage in Malaysia. The investigation was empirical in nature. The study identified certain factors critical for the adoption of Internet banking. Ekin et al, 2001 in their study suggested that increased awareness among people as well as spread of education will contribute a great deal in the acceptance of online banking. Kamal & Hassan (2003) conducted a study in Egypt.. The study made an attempt to analyse the acceptance of new canal of delivery of services to customers in banking sector with the help of new approach based on Technology Acceptance Model. Trust was added as an additional construct to The Technology Acceptance model for the purpose of the study. Wang, Wang & Lin (2003) the study made use of Technology acceptance model along with the additional construct of perceived credibility included in the model. It was observed that the behavioural intentions of the Taiwanese participants were greatly influenced by perceived ease of use, perceived credibility and perceived usefulness. Zikkarainen, Karjaluota& Pahnila(2004) conducted a study among private banking customers in Finland. They identified the impact on certain variables affecting the use of Internet banking. The variables can be outlined as Perceived ease of use, perceived usefulness, perceived enjoyment, security and privacy, information on online banking and quality of internet connection. Eriksson, Kerem, Nilsson (2005) conducted study in Estonia. The research made an attempt to study technology

acceptance of Internet banking. The results of the study conclude that Trust should be inculcated in the technology acceptance model in order to ensure higher acceptance of Internet banking. Jaruwachirathanakul, B., and Fink, D. (2005) conducted a study on Internet banking adoption strategies for developing country. The study was carried out in Thailand. The results concluded that User friendly website and perceived usefulness were certain attitudinal factors affecting Internet banking adoption. (Alsajjan & Dennis (2006) made an attempt to study the extension to the Technology acceptance model. Incorporating Trust into the TAM model would help users in accepting online banking. Moreover this will also add to the competitive advantage of the banks. Lichtenstein & Williamson (2006) the study made an attempt to discover factors affecting the adoption of Internet banking services among customers in Australia. The study highlighted Convenience as the most significant factor affecting the adoption of internet banking among Australian banking customers. Further, risk acceptance by the customers is increasing as the banks are providing greater support and assistance with respect to internet banking services. Sakalya Venkata (2007) in his study made an attempt to discover fifteen factors considered significant for the customers of the bank. The study was experimental in nature. These factors can be outlined as Safe Deposits, accurate transactions, Proximity, Size and Strength of bank, Service Charges General Service Quality, Speed of Delivery, Security, attitude of Staff, Bank Product, Public Image, Bank image in eyes of Peer, Face Lift (Structural), friendship with Bank Employees and Advertisement and Publicity. In accordance with the findings of the study, the former six factors have the maximum influence, the next four have comparatively a reasonable influence and the remaining five have comparatively lower influence. Thus, retail banks must give due attention to these factors. Rajesh Kumar Srivastava (2007) in their study made an attempt to find out the perception of the customers towards internet banking services. The study concluded that certain demographic factors had significant impact on the usage of Internet banking. The demographic factors which were identified in the study were gender, education and income level. Shanab & Pearson (2007) conducted a study in Jordan whereby an attempt is made to analyze the factors leading to adoption of Internet banking. The study within the framework of Internet banking also attempts to authenticate the correctness of the Unified Theory of Acceptance and Use of technology. The results of the study conclude that performance expectancy, effort expectancy, social influence are key indicators which help in predicting customer's adoption of internet banking. Shaikh, Kazi, Khaskhheley (2014) conducted a study in Hyderabad. The study made an attempt to analyze the impact of variables namely convenience, security, perceived knowledge about Internet, and online banking information on the adoption of online banking. The study clearly concluded that Information on online banking as the most critical variable in the adoption of online banking.

**OBJECTIVE OF THE STUDY:**

To identify the major factors affecting the acceptance of respondents towards Internet Banking.

**RESEARCH METHODOLOGY:****Scope of the study:**

The scope of the study is limited only to Haryana. The state of Haryana lies in Northern part of India. The state is divided into four divisions for administrative purposes: Ambala, Rohtak, Gurgaon, Hissar. The participants for this study were selected from urban areas of Haryana from all domain of the society like private sector employee, government sector employee, business man, students, and housewife having age above of 18 years.

**Data collection procedure:**

In this study questionnaire survey is used as data collection method. The main aim of the study is to identify the major factors affecting the acceptance and non- acceptance of respondents towards Internet Banking and also its impact on the satisfaction level of the customers in Haryana region. Haryana region was divided into four different strata- North, South, East, and West. Each strata comprised of five districts each. Sample was collected from the customers of the banks in all four strata. The source of data for this research was the responses made by participants on the questionnaire sheet. The respondents were made to submit their response. All the participants were requested to fill questionnaire at their convenient time and return back. Total number of distributed questionnaires were 700 Only 599 are complete and taken into consideration. This number of sample collected is reasonably sufficient for the purpose of this study.

**Drafting of Research Instrument:**

The Questionnaire was developed after an extensive review of literature. The questionnaire was drafted in a structured manner. To identify the major factors affecting the acceptance of respondents towards Internet

Banking services the Technology Acceptance model (TAM) model is being used. A questionnaire was prepared from the point of view of the customers taking into consideration modified version of TAM model (Davis et al., (1989). The questionnaire included 13 items from the original 3 constructs ( Perceived Usefulness, Perceived Ease of Use, Behaviour Intentions) developed by Davis et al., (1989), Some additional items were derived by going through the review of literature of the studies conducted in the banking industry. Thus in total 37items included under 10 dimensions (Perceived Usefulness, Perceived Ease of Use, Behaviour Intentions, Perceived Risk, Perceived Familiarity, Marketing Communication, Image, Word of mouth, and User friendly website, Security and Privacy, Behaviour Intentions). All the items were measured on the five-point Likert scale from 5 (strongly agree) to 1 (strongly disagree).

**Table**

| S. No | Construct               | Definition   | Source   | Factor Item No.    | Total Items |
|-------|-------------------------|--|--|--------------------|-------------|
| 1     | Perceived Usefulness    | The degree to which a person believes that using internet banking would enhance her/his job performance  | (Davis et al., 1989)                                     | 1,2,3,4,5          | 5           |
| 2     | Perceived Ease of Use   | The degree to which a person believes that using internet banking would be free of effort  | (Davis et al., 1989)                                     | 6,7,8,9            | 4           |
| 3     | Perceived Risk          | The concept of risk is organized around the idea that consumer behaviour involves risk in the sense that any consumer action (some of which may be likely to be unpleasant) will produce consequences that they cannot anticipate with anything approaching.             | (Bauer, 1967)  | 10,11,12, 13,14,15 | 6           |
| 4     | Perceived Familiarity   | Familiarity, related to experience, has a positive effect on the degree of consumer skill and favours an increase in the individual trust in one's own abilities   | Flavián, Guinalú and Gurrea, 2006).                      | 16,17,18           | 3           |
| 5     | Marketing Communication | Marketing communications inform customers about services provided by an organization, persuade customers that a specific service product offers the best solution to a customer's needs, remind customers of service product availability, and motivate customers to act | (Lovelock, Patterson and Walker, 1998)                   | 19,20,21           | 3           |
| 6     | Image                   | Image represents your own beliefs about your strengths and weaknesses, your own understanding of possibilities and limitations   | Sharp (2002)   | 22,23              | 2           |
| 7     | Word of Mouth           | WOM plays an important role in the information diffusion in consumer markets and shaping consumers' attitudes  | (Murray, 1991).  | 24,25              | 2           |
| 8     | User Friendly Website   | A user-friendly website has features of a quick response time, easy navigation, rich information content, and responsive interaction with customer   | (Al-Hawari and Ward, 2006; Jayawardhena and Foley, 2000) | 26,27,28, 29,30    | 5           |

| S. No | Construct            | Definition  | Source             | Factor Item No. | Total Items |
|-------|----------------------|---|--------------------|-----------------|-------------|
| 9     | Security & Privacy   | Security perceptions are defined as “the subjective probability with which consumers believe that their private information will not be viewed, store and manipulated during transit and storage by inappropriate parties in a manner consistent with their confident expectations. | Pavlou 2001        | 31,32,33        | 3           |
| 10    | Behaviour Intensions | A person readiness to adopt internet banking  | Davis et al., 1989 | 34,35, 36,37    | 4           |

**TECHNIQUES OF DATA ANALYSIS:**

For the purpose of the study, raw data is collected from primary sources. But this data is not much meaningful. So, in order to draw valuable conclusions from the data, such data is analysed. In this study raw data has been collected using a questionnaire from 599 respondents. To identify the major factors affecting the acceptance of respondents towards Internet Banking we used factor analysis

Factors were extracted from the survey of responses by making use of Principal component extraction method. Factors with Eigen values above 1 is accepted as desirable results of PCA (Principal Component Analysis) .The tables below gives results of the factor analysis of survey responses. Two precautions are applied for conducting factor analysis. First one is to judge the measure of adequacy of sample and to confirm that the variables within the factor are co-related. Kaiser -Meyer-Olkin test is used to check the adequacy of the sample size whereas Bartlett's Test of Sphericity is used to check the presence of correlation among the variables used in the research instrument.

**Table 6.1: Results of KMO and Bartlett's Test for Statements of Acceptance**

|  |                    |       |
|--|--------------------|-------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .726  |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 182.4 |
|  | DF                 | 666   |
|  | Sig.               | .000  |

Source: Compiled by the researcher using spss

The KMO measure of sample adequacy is 0.726 which is higher than the commonly accepted 0.60. Therefore, factor analysis for the data is appropriate. The results of Bartlett's Test of Sphericity is also significant (Sig value=0.00) which shows the presence of correlation among the variables used in the study.

**Table 6.2: Results of Eigen values for statements of Acceptance**

| tatements  | Initial Eigen values |               |              |
|--|----------------------|---------------|--------------|
|  | Total                | % of Variance | Cumulative % |
| I prefer Internet banking as it is available 24*7  | 11.323               | 30.604        | 30.604       |
| Internet banking is more convenient as I can perform banking transactions at any place that has internet connection. | 3.124                | 8.442         | 39.045       |
| Internet banking saves time of the customers   | 2.214                | 5.984         | 45.029       |
| Internet banking reduces the overall cost of performing banking transactions   | 1.882                | 5.087         | 50.116       |
| Internet banking systems are more useful in conducting bank transactions.  | 1.744                | 4.713         | 54.829       |
| It was easy for me to learn the internet banking system.   | 1.617                | 4.370         | 59.199       |
| I am comfortable in solving all my problems which occur while using the internet banking system                      | 1.571                | 4.246         | 63.445       |
| I do not feel mentally exhausted while interacting with the internet banking system.                                 | 1.481                | 4.002         | 67.447       |
| Overall, I find the internet banking system easy to use.   | 1.139                | 3.079         | 70.525       |

| tatements   | Initial Eigen values |               |              |
|---|----------------------|---------------|--------------|
|   | Total                | % of Variance | Cumulative % |
| People can hack your information through internet banking and can do harmful things.                  | 1.015                | 2.742         | 73.267       |
| There is uncertainty in performing transactions on internet because of poor connectivity of Internet. | 1.005                | 2.715         | 75.982       |
| Frauds are common in Internet banking transactions.   | .859                 | 2.322         | 78.305       |
| Processing Errors are common in Internet Banking Transactions.  | .822                 | 2.223         | 80.527       |
| Providing multilayer of protection to online banking systems, will help prevent fraud.                | .755                 | 2.040         | 82.567       |
| Security Issues are not properly addressed in Internet Banking Transactions.                          | .655                 | 1.770         | 84.337       |
| I have good knowledge of computer and Internet banking technologies.                                  | .589                 | 1.592         | 85.929       |
| I can help others in performing their Internet banking transactions.                                  | .577                 | 1.558         | 87.488       |
| I have all the resources to use the online banking system.  | .518                 | 1.399         | 88.887       |
| Media advertisement inspires me for Internet Banking  | .482                 | 1.303         | 90.189       |
| Marketing Campaigns by banks influence my use of Internet Banking                                     | .438                 | 1.184         | 91.373       |
| E-mails and E-leaflets from banks persuade me for using internet banking.                             | .389                 | 1.050         | 92.424       |
| Internet Banking reflects my Social Image.  | .326                 | .880          | 93.304       |
| I feel a greater sense of Prestige when I do Internet Banking.  | .313                 | .847          | 94.150       |
| My friends and my relatives influenced me to use Internet Banking.                                    | .302                 | .817          | 94.967       |
| Bank Officials convinced me for using Internet Banking  | .282                 | .761          | 95.728       |
| The website of the banks are very user friendly.  | .249                 | .674          | 96.401       |
| The bank's website provide accurate and timely information.   | .190                 | .515          | 96.916       |
| Time to time Feedback from the users are duly considered  | .186                 | .503          | 97.419       |
| The bank's website is regularly maintained and up to-dated.   | .166                 | .449          | 97.869       |
| The proper layout of the bank's website indicates higher credibility                                  | .160                 | .433          | 98.302       |
| Security is the biggest concern for customers when faced with the decision to use Internet banking.   | .134                 | .362          | 98.664       |
| Positive feedback or comments of customers increases my trustworthiness towards Internet Banking.     | .130                 | .351          | 99.015       |
| I feel safe in performing my Internet banking transaction.  | .113                 | .304          | 99.320       |
| I will do more online transactions in the future.   | .086                 | .231          | 99.551       |
| I intend to continue internet banking rather than traditional banking.                                | .067                 | .182          | 99.733       |
| I will recommend internet banking to my peer groups.  | .053                 | .143          | 99.876       |
| I will post positive feedback about internet banking services   | .046                 | .124          | 100.000      |

Source: Compiled by the researcher using spss

The result in the table above shows that out of 37 components, only 11 have their eigen values greater than one. The total variation explained by these nine factors taken together is 75 percent which represents these factors as representative of factors affecting acceptance of Internet banking. In other words, variation in the acceptance of Internet Banking explained by these factors accounts for 75 percent. The table below shows the results of Rotated Component Matrix. The value in each cell represents communality. Communality ( $h^2$ ) indicates how much each variable is accounted for by the underlying factor taken together. The amount of Variance a variable shares with all the other variables being considered. (137)



**Table6.3: Table of Community Values for statements of Acceptance**

| Statements   | F1    | F2    | F3    | F4    | F5    | F6    | F7    | F8    | F9    | F10   | F11   |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Banks Website Regularly Maintained And Updated                     | .781  | .099  | .206  | -.124 | .026  | .162  | .091  | -.135 | .094  | .141  | .145  |
| Banks Website Provide Accutare And Timely Information              | .634  | .181  | .366  | -.191 | .135  | -.057 | .057  | -.051 | .114  | .185  | .230  |
| I Will Post Positive Feedback About Internet Banking Services      | .625  | .192  | .158  | -.144 | .230  | .177  | .242  | .128  | -.082 | .014  | .005  |
| Reflects My Social Image   | .611  | .050  | .033  | -.060 | .065  | .453  | -.133 | .155  | .317  | .137  | -.040 |
| Do Not Feel Mentally Exhausted                                     | .592  | .481  | -.037 | .191  | .289  | .053  | .053  | .264  | .022  | .084  | .138  |
| Time To Time Feedback Of Users Considered                          | .580  | .093  | -.013 | -.240 | .356  | .159  | .239  | .100  | .313  | -.224 | -.025 |
| I Will Do More Online Transactions In Future                       | .438  | .362  | .438  | -.025 | .275  | .069  | .213  | -.058 | .210  | .049  | .144  |
| Easy To Learn  | .131  | .812  | .168  | -.053 | .108  | .154  | .129  | -.126 | .124  | .054  | .081  |
| Overall,Easy To Use  | -.007 | .757  | .171  | -.007 | .379  | .206  | .022  | -.092 | .112  | -.041 | .072  |
| Comfortable In Solving My Problems                                 | .294  | .695  | -.072 | -.250 | .017  | .013  | .096  | .289  | .125  | .051  | .213  |
| Userfriendly Website Of The Bank                                   | .445  | .597  | .275  | .025  | .086  | .063  | .170  | .076  | .000  | .034  | -.268 |
| Security Biggest Concern For Customers                             | .089  | -.028 | .826  | -.121 | .166  | .138  | -.038 | .183  | -.099 | .157  | .127  |
| I Intend To Continue Internet Banking                              | .384  | .229  | .658  | -.020 | -.032 | .094  | .213  | -.183 | .066  | .032  | .168  |
| Positive Feedback Or Comments Of Customers Inccres Trustworthiness | .223  | .219  | .599  | .020  | .072  | .144  | .307  | .161  | .137  | -.216 | -.065 |
| Media Advertisement Inspires Me For Internet Banking               | -.063 | .115  | .449  | -.196 | -.228 | -.109 | .295  | .407  | .167  | .252  | .372  |
| Proper Layout Of Banks Website Indicates Highter Credibility       | .167  | .281  | .389  | -.336 | .269  | .301  | .155  | -.022 | -.114 | -.172 | -.065 |
| Frauds Are Common  | -.206 | .021  | .001  | .815  | -.084 | -.074 | -.031 | -.121 | .043  | -.052 | -.056 |
| People Can Hackninformation And Do Harmful Things                  | -.059 | -.231 | -.203 | .728  | .206  | .036  | -.252 | -.104 | -.033 | -.018 | .079  |
| Processing Errors Are Commom                                       | .036  | -.024 | .056  | .618  | -.168 | -.126 | -.068 | -.003 | .419  | .332  | -.084 |
| Uncertainty In Transactions  | -.009 | .047  | -.110 | .553  | -.119 | -.047 | .169  | -.242 | .449  | -.255 | -.209 |
| I Can Help Others In Performing Internet Banking                   | .185  | .169  | .024  | -.026 | .759  | .151  | .226  | -.069 | .115  | .094  | .010  |
| I Have Good Knowledge Of Internet Banking                          | .257  | .319  | .231  | -.120 | .742  | .111  | .102  | -.032 | .077  | .004  | .171  |
| I Have All Resources To Use Internet Banking                       | .335  | .034  | .253  | .258  | .434  | .103  | .314  | .117  | -.233 | .290  | .043  |
| Saves Time Of Customers  | .106  | .043  | .255  | -.032 | .132  | .819  | .110  | .049  | .093  | .025  | .111  |
| More Useful In Conducting Bank Transactions                        | .233  | .282  | -.012 | -.032 | .153  | .622  | .307  | .088  | -.043 | -.098 | -.092 |
| I Will Recommend Internet Banking In My Peer Groups                | .077  | .307  | .437  | -.079 | .374  | .449  | .046  | .035  | .003  | -.244 | .069  |
| Convenience  | .066  | .046  | .202  | -.124 | .272  | .177  | .764  | -.132 | .120  | .191  | -.176 |

| Statements   | F1   | F2   | F3    | F4    | F5    | F6    | F7    | F8    | F9    | F10   | F11   |
|--|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| I Prefer Internet Banking                                  | .281 | .215 | .223  | -.204 | .214  | .126  | .584  | .037  | .175  | -.193 | .271  |
| Reduces Overall Cost                                       | .178 | .360 | -.041 | -.171 | .061  | .340  | .511  | .103  | -.094 | .196  | .272  |
| I Feel Safe In Performing Internet Banking                 | .420 | .404 | .293  | .123  | .192  | -.043 | .466  | .229  | .150  | .100  | -.074 |
| Security Issues Are Not Properly Handled                   | .114 | .167 | -.187 | .344  | -.112 | -.071 | -.035 | -.730 | -.106 | .016  | -.203 |
| Bank Officials Convinced Me For Internet Banking           | .209 | .152 | .003  | -.061 | -.178 | .179  | -.047 | .728  | .186  | .167  | -.253 |
| Greater Sense Of Prestige When Doing Internet Banking      | .189 | .069 | .021  | .041  | .065  | .106  | .112  | .212  | .854  | .073  | .005  |
| My Friends And Relatives Influence Me For Internet Banking | .305 | .073 | .300  | -.368 | .273  | -.151 | -.040 | .177  | .510  | -.067 | -.232 |
| Marketing Campaigns Influence Me For Internet Banking      | .153 | .011 | .036  | -.177 | .086  | -.089 | .124  | .054  | .028  | .840  | -.089 |
| E-Mails And E-Leaflets From Banks Persuade                 | .177 | .231 | .002  | -.121 | -.064 | .486  | -.032 | .367  | .056  | .553  | .020  |
| Multilayer Protection Help Prevent Fraud                   | .282 | .186 | .239  | -.053 | .160  | .077  | -.025 | -.017 | -.096 | -.122 | .727  |

**Source:** Compiled by the researcher using spss

The followings factors have been extracted after a careful investigation of the communalities in the various factors and named on the basis of statements they are composed of.

**Factor 1 (Functional Efficiency and Intentions to Use):**

This factor contains seven statements from 3 constructs that is User friendly website, Familiarity and Behaviour Intentions which indicate that all the three constructs are co-related, The items of the construct indicate that if the Bank's website is easy for the users to understand and further use, then only the customers will have an intention to perform transactions in future which will further increase their familiarity with the use of IT related services. Factor 1 reports 11.182% of the total variation explain by factor analysis.

**Factor 2 (Ease of Use):**

This Factor includes 4 statements from 2 constructs namely "Perceived Ease of Use" and "Perceived Usefulness" indicating a clear relationship between the two constructs. The statements included in the construct clearly indicate that the respondents consider the usefulness of Internet banking because of its ease of use. The factor reports for 9.65% of the total variance explained by factor analysis.

**Factor 3 (Security and Trust):**

This factor gets loaded with two statements from "Security and Trust". One statement from "User Friendly Website" and one from "Marketing campaign and also a statement from behaviour intentions. These co-related as the credibility of the bank's website relates to the "Trust and Security" aspect of the respondents. Also media advertisements also inculcate feeling of trust and security in the usage of such services which ultimately motivates respondents to continue using internet banking services. Factor 3 reports 8.52% of the total variation explained by factor analysis.

**Factor 4 (Perceived Risk):**

This Factor contains 4 statements from the construct "Perceived Risk" which clearly indicates that the fear of risk among respondents in the use of internet banking services. Factor 4 reports 7.526% of the total variation explained by factor analysis.

**Factor 5 (Perceived Familiarity):**

This Factor gets loaded with the statements from the construct "Perceived Familiarity" which highlights the familiarity coupled with knowledge and resources" in performing internet banking services. Factor 5 gets loaded with 7.004% of the total variance explained by factor analysis.

**Factor 6 (Usefulness and Recommendation):**

This factor includes 2 items from the construct "Perceived Usefulness" and one item from the construct "Behaviour Intention" which indicate that the respondents consider all the benefits of Internet banking and which thereby influence their behaviour for future. Factor 6 gets loaded with 6.317% of the total variance explained by factor analysis.

**Factor 7 (Convenience):**

This factor gets loaded with 2 items from the construct "Ease of Use". One item from the construct "Perceived Usefulness" and one item from the construct "Security and Trust". This clearly indicates "Convenience" of the respondents while performing internet banking services. Factor 7 gets loaded with 6.226% of the total variance explained by factor analysis.

**Factor 8 (Bank Employee Performance):**

This factor gets loaded with one item from the construct "Perceived risk" and another item from the construct "Word of mouth" which indicates that though the respondents get influenced by the bank officials and start using Internet banking services but still there is a fear of risk amongst the respondents with respect to the security aspect of Internet banking services are not properly taken care of. Factor 8 gets loaded with 5.38% of the total variance explained by factor analysis.

**Factor 9 (Social Image):**

This factor gets loaded with one item from the construct "Image" and another item from the construct "Word of Mouth" which clearly indicates that the respondents take into consideration the viewpoint of their friends and relatives and consider them in high esteem as these friends and relatives are already using such services. This inculcates a feeling among the respondents that using such services would also enhance their prestige. Factor 9 gets loaded with 5.346% of the total variance explained by factor analysis.

**Factor10 (Marketing Communication):**

This Factor comprises of 2 items from the construct "Marketing Communication" thereby clearly indicating that marketing of such services provided by internet banking influences the respondents and thereby persuade them for making use of internet banking services and facilities. Factor 10 gets loaded with 4.958% of the total variance explained by factor analysis.

**Factor 11(Security Measures):**

This factor has only one entity and "Security Measures" is the name given for the construct. The ability of the construct to represent one entity is questioned and items could be dropped for further analysis. But it should be noted that this statement talks about the security measures to be taken up by the banks for the safe execution of banking transactions and therefore is an important construct to become a part of the study. Factor 11 gets loaded with 3.837% of the total variance explained by factor analysis.

**CONCLUSION:**

On the basis of the findings of the research work, the conclusions drawn states that technology is progressively influencing the current and prospective customers of the bank, they have a reasonably good level of awareness regarding Internet banking facilities like checking online balance, opening a fixed deposit account. Further the study has discovered certain factors affecting the acceptance of the respondents towards Internet banking services. The factors outlined are Functional efficiency and intentions, Ease of Use, Security and Trust, Perceived Risk., Perceived Familiarity, Usefulness and Recommendation, Convenience, Bank Employee Performance, Social Image, Marketing Communication, security Measures. Out of all these factors, Functional efficiency and intentions is most vital factor which contributes tremendously in directing the banks to ensure that the website of the bank is easy to understand and follow. as this goes a long way in motivating and attracting customers to use the internet banking products and services offered.

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