A Study on Adoption of Internet Banking among Customers of Public and Private Sector Banks in North Gujarat

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Abstract – The purpose of this study is to understand that which factors significantly influencing the adoption of the internet banking among the customers of public sector bank and private sector banks in North Gujarat. Adoption of internet banking by the consumers of the banking sectors are increasing in the present era. Under the current study researchers had reviewed the past literatures in the field of the adoption of the internet banking among the consumers of banks around the world. Also, it can be seen that there are various studies related to adoption of the internet banking has been done in India. After the review of literature on hand, the data was collected though questionnaires from various people over the regions in the North Gujarat. After the data analysis researchers derived the results that the factors significantly influencing adoption of internet banking in North Gujarat are perceived usefulness, perceived ease of use, awareness of internet banking, quality of internet connection and computer self-efficacy. The attitude toward the use of internet banking and perceived usefulness can be used to predict the intention to use internet banking by users.

INTRODUCTION

India is increasingly moving towards the digitization. In Nowadays, time competition and continuous changes in the mechanization and the style of living has transposed the look of banking enterprise. There are various different ways to give banking services and customers like human beings and the corporate customers are not too much amenable to line in banking sectors or waiting on the telephone calls for the primary facilities of banking. People need and look for a service to take on their activities of banking sectors when and where they desire to perform. (Uppal, 2011)

Nowadays many people are awake about the utility of the internet banking and internet banking system concede individual and corporate consumers to execute activities of banks at offline bank site like at work place, home and many other location.

Internet Banking

Internet banking refers to that offering the various financial harvest and as well as offering the various facilities straightly to their consumers from the services of the internet (Afuah 2003).

In the simple words the banks are launching the one website with its name for the purpose of giving the information about their financial items and providing the various facilities to their consumers.

- Definition of the internet banking at the primary level;
- Definition of the internet banking at the forward stage;

In the forward meaning the internet banking is giving the various facilities to their customers as like they making the transfer of the fund of the consumer with the help of the RTGS, generalizing the financial record of the consumers and banking sector also purchasing or selling the loans to the individuals.

However it’s eminently crucial for the consumers as well as banking sectors to persuade the prime procedure to utilize of the online banking. A specific risk appears with annoying to combine fresh channel with current channels (Ajilri et. al., 2003). In the country like India, tardily but constantly, consumers of the India are movable in the direction of online banking. But they are highly regarded for safety and privacy of the online banking (Malhotra and Singh, 2009).

According to Goldfinger (2001), protection is witness as a significant obstacle to internet banking. Banking sectors is concerned regarding illegal use to their
system and consumers were worried regarding the safety of their private information or essentials and the hazard of fake transactions. Further, it is alarming to note that only a third of Internet consumers are satisfied with the facilities they are getting. Data and information from research studies indicates lacking one of the core functions of the Internet, i.e. consumer service.

LITERATURE REVIEW

Literature review is the significant part of the study. In literature review it covers the former research study related topic. The literature review classifies the perform literature connected to Banking industry and taking the internet banking view along with utilize of the internet services from the public and private sector banks consumers. In details, the Internet has been a major dynamic strength at the back to the development into the field of the banking. The increase use of the Internet has had an important crash on the progress of banks (Daniel, 1999). Changing consumer demands, new financial products, transformation in the industry framework and a mix of delivery channels are modify the banking industry.

Mamode and Emmambokus (2011) determine hazard and service benefit to be the major factor for a human to acceptance internet banking. Various consumers think dealings of the internet banking would be dangerous and further disposed to cheat or fake as there is a financial worth implicated. Hence, apparent threat has been build to be real sole of the significant aspects which prevent the adoption of internet banking (Sathye, 1999; Tan and Teo, 2000). It has been constitute that, threat has a essential crash on the consumer faithfulness in Electronic commerce dealings (Ramakrishnan, 2011).

Internet banking provides various advantages to banking sectors and also to consumers. Conversely, into worldwide words the greater part of customers is still not access internet banking feed. Causes toward this may be indication to; Fresh internet utilizers necessity primary to understand how near access the facilities (Ross et al.,1999.) Consumer has been scared of safety problems (Sathye, 1999; Hamlet and Strube, 2000; Howcroft et al., 2002). Ndubisi et al (2004) also defines the significance of sufficient safety related to increase the self-assurance of customers to access online banking.

Adoption Theories:-

While outlining the information system acceptance research, researchers have studied the acceptance of such systems from two perspectives: (a) technology (b) behaviour. In fact, technology acceptance model has been highly comprehensively studied to understand acceptance/adoption in various researches, while to conceive the acceptance from human behaviour aspect, theory of planned behaviour has been extensively used. The subsequent divisions elucidate these two theories in detail.

1. Technology Acceptance Model (TAM):-

Davis (1989) create the Technology Acceptance Model, as indicated by the consumer selected the personal computer for the framework would be relies on the prediction of they how to utilize it and its was totally depend on the mind of the user because its catch the way they are what think in the mind. Davis placed in his TAM model there are 2 hypothetical builds, Perceived Usefulness and Perceived Ease of Use, be key elements of framework using into an association. This develops likewise give healthier dealings to foreseeing as well as clarifying framework using than different builds (Davis, 1989).

- **Attitude:-**
  
  Davis, Bagozzi, and Warshaw (1989) claim that utilizers adoption behaviour is entirely decided by PEOU, PU , and purpose to use, and the role of attitude is at prime a fragmentary intermediary.

- **Perceived usefulness:-**

  Perceived Usefulness was outlined by Fred Davis as of the "the level in the direction of which a human being presumes with the purpose of utilizes a specific structure on their work achievement."

- **Perceived ease of Use:-**

  PEOU, in contrast, refers to the level to which an individual presumes that utilize a specific coordination will be complimentary of exertion (Davis, 1989).

2. Theory of Planned Behaviour (TPB):-

The TPB of Icek Ajzen (1988, 1999) co-operates to recognize how we can diversify the behavior of individual. The Theory of Planned Behaviour is a conjecture which anticipates measured performance, because performance could be premeditated. Theory of Planned Behaviour is the theory of the model behavioral purpose; TAM (Davis, 1989; Davis et al., 1989) modified the TRA model to justify the behavioral intension of the utilizers particularly in connection to the adoption of the IT.

- **Social influence:-**

  Davis et al. (1989) observation the utilizers capacity choose to utilize a equipment dependent taking place causes rather than one’s individual ideas as well as emotions.

- **Intension to Use:-**

  Fishbein and Ajzen (1975) explain purpose as the criterion of the intensity of single’s objective toward executes a particular performance.
3. Combined TAM-TPB in online banking:

- Internet banking awareness:

In this study, the build AW pertains to the data that the consumers maintain concerning accessibility of internet banking, line of facilities, procedure of mark up and advantages as well as hazard involved. Awareness has been mention as a significant element in learning a user’s acceptance of internet banking (Sathye, 1999; Pikkarainen et al., 2004).

- Quality of the internet connection:

It is defined in terms of speed and continuity can influence user’s perception of the ease of use. As an alternative, enhanced internet facilities may improve the user’s awareness of ease of use and create the utilizers extra willing to utilize internet banking (Sathye, 1999).

- Computer self-efficacy:

The Computer Self-Efficacy could change based on the fluctuating understanding and study as of before time utilization of a range of expertise’s. Various researches build the connection linking CSE and the level of utility of internet banking and CSE and PEOU (Davis, 1989; Wanger et al.)

Hypothesis

H1 - Quality of internet connection has a positive impact on customer’s perceived ease of use

H2 - Computer self-efficacy has a positive impact on customer’s perceived ease of use

H3 - Perceived ease of use has a positive impact on perceived usefulness

H4 - Social influence has a positive impact on customer’s perceived usefulness

H5 - Internet banking awareness has a positive impact on customers perceived Usefulness

H6 - Perceived usefulness has a positive impact on customer’s attitude toward Internet Banking

H7 - Perceived ease of use has a positive impact on customer’s attitude toward Internet banking

H8 - Attitude has a positive impact on intention to use Internet banking

H9 - Perceived usefulness has a positive impact on intention to use Internet banking

RESEARCH METHODOLOGY

- A research is completed for the aims of answering the questions for a specified topic, at which point scientific measures are applied. A systematic way of approaching the research objectives and thus coming to conclusions and findings is what research methodology is (Kothari, 2004).

OBJECTIVE OF THE RESEARCH STUDY:

The objectives of the Study are as follows:

(A) Primary Objective:

- A study on adoption of internet banking among customers of public and private sector banks in North Gujarat.

(B) Nature of the Research Study:

- The study was descriptive in nature and it involves a field survey.

Sampling Design:

(i) Area of Research Study:

- This study primarily attempts to study the adoption of internet banking among public and private sector bank in North Gujarat.

- In North Gujarat totally 6 district included:

  (A) Mehsana (Mehsana)
  (B) Patan (Patan)
  (C) Gandhinagar (Gandhinagar)
  (D) Himmatnagar (Sabarkantha)
  (E) Palanpur (Banaskantha)
A Study on Adoption of Internet Banking among Customers of Public and Private Sector Banks in North Gujarat

Modasa (Aravalli)

Target Population:
- Customers of public and private sectors banks in north Gujarat having age 18 years or more was the target population under the study.

Sampling Method:
- Sampling design is a plan and a graph that helps one obtains a sample from a provided and given population (Kothari, 2004).
- For this particular study, Non probability Convenience sampling method was used to collect the data.

Sample Size:
The research was consist sample size based on formula accepted as thumb rule.

\[(Z^2 \times pq) / e^2\]

\[= 1.96^2 (0.5 \times 0.5) / (0.05)^2\]

\[= 3.8416 / 0.0025\]

\[= 384.16\]

\[= 385\] samples (approx.) (Naresh Malhotra)

Sampling Unit:
The sampling units for the study include the customers of the public sector banks and private sector banks.

DATA ANALYSIS

In this study the sample will be including 400 respondents. From the data collection the 400 respondents will give those opinions on the acceptance of the internet banking and in this study only the 400 respondents are selected for the acceptance of internet banking is those who are using the internet banking if the person does not use internet banking those people who did not calculated in my sample. There are mainly two category of the data analysis be execute on the figures: - Descriptive analysis and Inferential analysis and factor analysis. Descriptive analysis was executing via SPSS software.

Frequency Analysis:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>254</td>
<td>63.5%</td>
</tr>
<tr>
<td>Female</td>
<td>146</td>
<td>36.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25</td>
<td>172</td>
<td>43.0%</td>
</tr>
<tr>
<td>26-35</td>
<td>104</td>
<td>26.0%</td>
</tr>
<tr>
<td>36-45</td>
<td>60</td>
<td>15.0%</td>
</tr>
<tr>
<td>Above 45</td>
<td>84</td>
<td>19.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Monthly Income</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; INR 25000</td>
<td>270</td>
<td>67.5%</td>
</tr>
<tr>
<td>Between INR 26000-50000</td>
<td>60</td>
<td>15.0%</td>
</tr>
<tr>
<td>Between INR 51000-75000</td>
<td>34</td>
<td>8.5%</td>
</tr>
<tr>
<td>&gt; INR 76000</td>
<td>38</td>
<td>9.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's</td>
<td>168</td>
<td>42.0%</td>
</tr>
<tr>
<td>Master's</td>
<td>94</td>
<td>23.0%</td>
</tr>
<tr>
<td>Doctorate</td>
<td>4</td>
<td>1.0%</td>
</tr>
<tr>
<td>Others</td>
<td>136</td>
<td>34.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>90</td>
<td>22.5%</td>
</tr>
<tr>
<td>Service</td>
<td>132</td>
<td>33.0%</td>
</tr>
<tr>
<td>Businessperson</td>
<td>88</td>
<td>22.0%</td>
</tr>
<tr>
<td>Housewife</td>
<td>84</td>
<td>21.0%</td>
</tr>
<tr>
<td>Professional</td>
<td>6</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use of Internet Banking</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 5 Years</td>
<td>188</td>
<td>42.0%</td>
</tr>
</tbody>
</table>

Out of total resonance 63.5 percentages are male and 36.5 percentages are female. From the total collection of the data there are 43.0 percent respondents are including in the age group of 18-25, 26 percent respondents are including in 26-35 age group. Then 15 percent respondents are involved in the age group of 36-45 and remaining 16 percent respondents including in the above 45 age group.

As per the monthly income 67.5 percent of the respondents who has <25000 monthly income. Then between the 26000-350000INR there are 15.0 percent respondents involved. In the income group of 51000-75000INR there are 8.5 percent respondents including. And as the last >INR 75000 monthly income there are 9.0 percents respondents in this group.

According to education 168 respondents are including in Bachelors study, 92 respondents was including in masters education, 4 respondents was completed their Doctorate degree and remaining 136 respondents was including into the other education field. In the occupation of the respondents 22.5 percent are involved in student, 33.0 percent was make services, 22.0 percent of responders was businessperson, 21.0 percents was housewives and 1.5 percent respondents are done professional work.

As per the using of the internet banking services, there are 30.5 percent respondents using internet banking for 1-2 years, 27.5 percent respondents using internet banking for 2-5 years and 42.0 percent respondents using internet banking for more than 5 years.

Reliability:

The cronbach's alpha indicator, "the most common measure of scale reliability (Field 2005, p. 667) was used in this study to access the internal consistency of scale. Cronbach's alpha value of 0.7 or greater is a good indication of reliable scale with homogeneous data measuring the same construct, although
Cronbach’s alpha coefficient value of 0.6 is considered acceptable in exploratory research (Hair et al., 2006).

Regression:

Some of the most interesting questions of statistical analysis revolve around the relationship among the variables, which is established by regression analysis. Regression analysis is a tool with several important applications.

Model 1:-

In the Model 1 the regression analysis was done to measure the PEOU (Dependent Variable) is QI (Independent Variable) and CSE (Independent Variable).

In this model 1, the measure of the strength of the association is given by the coefficient of determination denoted by R-square. As per the above table, it can be noticed that the R-Square value is 0.523, which is a show the 52.3% variance is explained in consumer PEOU by two independent variable QI and CSE. There are both of the columns in the table shows the standard errors of the estimations that provide a measure of how accurately the regression equation predicts the value of the dependent variable. From the above table is displays that statistically significant with the value of 0.000, which is <0.05. As a result, we may pronounce that the model is fit and it’s significant as well. And other information from this table displays that CSE and the QI is statistically significant with a value of 0.000, which is <0.05.As per the Collinearity Statistics, the VIF value of the two independent variables QI and CSE is 1.419. And it is a significant value because this value between the >0.000 and <10.000.

Model: - 2

In the Model 2 the regression analysis was done to measure the PU (Dependent Variable) is based on the three independent variable SI (Independent Variable), AW (Independent Variable) and PEOU (Independent Variable).

In this model 2, the measure of the strength of the association is given by the coefficient of determination denoted by R-square. From the above table, it may be notice that the R-Square value is 0.492, which is a show the 49.2% variance is explained in consumer PU by three independent variable SI, AW and PEOU. There is the first column (AVGPEOU) and the last column (AVGAW) of the columns in the table shows the standard errors of the estimations that provide a measure of how accurately the regression equation predicts the value of the dependent variable. From the above table is displays that statistically significant with the value of 0.000, which is <0.05. As a result, we may tell that the model is fit and it’s significant as well. And other information from this table displays that PEOU and AW is statistically significant with a value of 0.000, which is <0.05. But the SI has a value 0.395 so it is not statistically significant with a value of 0.000, which is >0.05.As per the Collinearity Statistics, the VIF value of the three independent variables SI, AW and PEOU is alternatively 1.246, 1.912 and 1.791. And it is a significant value because this value between the >0.000 and <10.000.

Model: - 3

In the Model 3 the regression analysis was done to measure the ATT (Dependent Variable) is based on the two independent variable PU (Independent Variable) and PEOU (Independent Variable).

In this model 3, the measure of the strength of the association is given by the coefficient of determination denoted by R-square. From the above table, it could be notice that the R-Square value is 0.476, which is a show the 47.6% variance is explained in consumer ATT by two independent variable PU and PEOU. There are both of the columns in the table shows the standard errors of the estimations that provide a measure of how accurately the regression equation predicts the value of the dependent variable. From the above table is displays that statistically significant with the value of 0.000, which is <0.05. As a result, we could tell that the model is fit and it’s significant as well.
significant as well. And other information from this table displays that PU and PEOU is statistically significant with a value of 0.000, which is <0.05. As per the Collinearity Statistics, the VIF value of the two independent variables PU and PEOU is 1.814. And it is a significant value because this value between the >0.000 and <10.000.

**Model 4:**

In the Model 4 the regression analysis was done to measure the INT (Dependent Variable) is based on the two independent variable PU (Independent Variable) and ATT (Independent Variable).

In this model 4, the measure of the strength of the association is given by the coefficient of determination is denoted by R-square. As per the above table, it may be observe that the R-Square value is 0.514, which is a show the 51.4% of variance is explained in consumer INT by two independent variable PU and ATT. There are both of the columns in the table shows the standard errors of the estimations that provide a measure of how accurately the regression equation predicts the value of the dependent variable. From the above table is displays that statistically significant with the value of 0.000, which is <0.05. As a result, we could declare that the model is fit and it's significant as well. And other information from this table displays that PU and ATT is statistically significant with a value of 0.000, which is <0.05. As per the Collinearity Statistics, the VIF value of the two independent variables PU and ATT is 1.613. And it is a significant value because this value between the >0.000 and <10.000.

**DISCUSSION OF FINDINGS AND CONCLUSION:**

The factors significantly influencing adoption of internet banking in North Gujarat are perceived usefulness, perceived ease of use, awareness of internet banking, quality of internet connection and computer self-efficacy. The attitude toward the use of internet banking and perceived usefulness can be used to predict the intention to use internet banking by users.

As per the findings we got the reviews of the respondents who use the internet banking and respondents have the problems in the adoption of the internet banking in the North Gujarat. As per the reviews of the respondents, we can know that nowadays peoples are aware about the internet banking after the demonetization and the rate of the using of the internet banking was increased.

**CONCLUSION & FUTURE WORK:**

In India, there are many causes are the affect the acceptance of the internet banking but sometimes safety provided by banks are the very helpful for the consumers for acceptance of the internet banking. There are PEOU and finally supported by banks & Government for using internet banking and also usefulness of internet has higher impact on the adoption rate.

At last, In India the internet banking is still in a preliminary phase, and further follow a line of investigation or learning is desirable in this field. The anticipated form is a methodical try into this track to discover consumer adoption of internet banking in India and be able to shape a helpful foundation for upcoming observed studies and research.

**SUGGESTIONS:**

- Banking sectors staff must be start particular guidance meant for working internet banking for illiterate and stumpy learned citizens.
- Banking trade must give demo into their websites used for consumers of the banks about working internet banking.
- Banking diligence be supposed to give various information to the consumers of the banks about hackers of internet banking and must divulge policy of hackers to the consumers of the banks.
- In the field of internet banking there are many consumers are require to get awareness for the make use of internet banking and government and many banking sectors are require to help the consumers of the banking branches. The banks will be helpful consumers in the fund transferring facilities and provide the safety for their assets. And also many times banking sector providing the awareness program of internet banking for their customers.

**LIMITATION OF THE STUDY:**

- In this study the sample size was not big sufficient to cover and take a broad view the outcome to the whole nation, as India is a vast nation and the extensive fraction of the citizenry live in rural areas. Simplify outcome to the whole nation, as India is sufficient to cover and take a broad view the outcome to the whole nation, as India is vast nation and the extensive fraction of the citizenry live in rural areas.
- As per this study, this study was done on the limited area like North Gujarat Region. We cannot do the study on the entire Gujarat state because of the insufficient time for collection and analysis of the data.
- There are many times respondents does not share his personal information like his occupation and income. And many times people do not give accurate answer because of their shyness in telling education qualification and monthly income.

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