

## Impact of Consumers' Perceptions on Uses of Internet banking in Burdwan District

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### Abstract

*Consumers' adoption of a technology has become a significant measure of the success of new technology. Internet banking is the latest and most innovative service and is the new trend among the consumers. This research able to determines the factors influencing the consumers' perception of internet banking in Burdwan District, West Bengal, India. In this study survey based questionnaire was formulated. For measuring the accuracy of data, reliability test was conducted and hence investigated the influence of perceived usefulness, perceived ease of use and perceived reliability.*

**Keywords :** Perceived Usefulness, Perceived Ease of Use, Perceived Reliability, Perception, Internet Banking, Burdwan District.

### Introduction

Customer satisfaction and customer retention are increasingly developing into key success factors in Internet Banking (IB). In banking system, doing affairs fast and save time are considered as the most important elements on success in competition among banks. The customers as the most determining elements of this competition. Banking today needs modern methods, effective customer orientate, offering new technologies and servicing the customer that every bank and as the result it has high productivity. Internet banking (IB) is a radical technological innovation with potential to change the structure and nature of banking. One of the most utilized model in studying information system acceptance is the technology acceptance model (TAM) in which system use actual behavior is determined by perceived usefulness (PU) and perceived ease of use (PEU). Perceived reliability (PR) is more powerful at explaining consumers' behavior since consumers are more often motivated to avoid mistakes than to maximize utility in purchasing.

### Literature Review

Using Internet banking customers are expected to enjoy several benefits. Chan (2001) stated convenience as one of them. Joseph et al (1984) agree that convenience is an important factor to customers. Davis (1989) found that customers are now demanding greater conveniences and

accessibility. This is reflected in longer branch banking hours and an increase in the choice of delivery mechanisms. Baldock (1997) found that the implementation of internet banking would remove the constraints of time, place and form. Brich and Young (1997) asserted that consumers would also enjoy the privilege of access to far more providers of financial services. As a result of a wider choice of internet bank service providers. Information on pricing and returns is also far easier to gather (Brich and Young, 1997). Chan (2001) also quoted that customers will be able to save of traveling to the branch and other intangible factors like avoiding the aggravation of traffic jams and long queues as the advantages of internet banking. Indeed Brich and Young (1997) highlighted customers will able to conduct their banking transactions at ease, because they would not be subjected to high- pressure sales tactics.

### **Consumer Acceptance of Internet banking**

Research on consumer attitude and adoption of internet banking showed there are several factors pre determining the consumers' attitude towards internet banking. Such a person's demography motivation and behavior towards different banking technologies and individual acceptance of new technology. It has been found that consumer's attitudes toward internet banking are influenced by the prior experience of computer and new technology. Internet Banking requires perhaps the most consumer involvement as it requires the consumer to maintain regularly interact with additional technology such as a computer and an internet connection. Consumers who use IB on an ongoing basis and need to require a certain comfort level with the technology to keep using it. Technology Acceptance Model provides a conceptual framework for this study. In the technology context of use, the frequency of use and duration of experience with the technology have been found to capture the customers use of technology. In this study consumer attitude and intention to use is evaluated by PU, PEU and PR and usage pattern by frequency and duration of IB use.

#### **Perceived Usefulness (PU)**

PU is one of the components of TAM which has been widely used by information system research. PU is the extent to which a person believes that using a particular system will enhance his or her performance. Empirical studies on TAM have suggested that PU has a positive effect on the adoption of internet banking.

#### **Perceived Ease of Use (PEU)**

It depends upon the frequency of using the IB services on a regularity basis. Also, the longer an individual has been using IB the more likely they are to find it easy to use. The easier it is for a user to interact with a system, the more likely he or she will find it useful.

### Perceived Reliability (PR)

It is defined in terms of the individual perception of the security of the system and the service provider's responsibility. The privacy and concerns about risk associated with the reliability of IB. Customers trust is a function of degree of risk involved in the situation where there is a physical separation between the bank and the customer.

### Questionnaire Design

The questionnaire for the different constructions was validated using a 5- point Liker- Scale. The statements were modified based on PU, PEU and PR to match the context of the perception of internet banking. Shows in Table 1.

Table 1: Constructs and Corresponding Items

Constructs	Corresponding Items	SA	A	N	D	SD
<b>Perceived Usefulness</b>	PU1: Internet Banking enables people to conduct financial transactions more quickly.					
	PU2: Internet Banking provides convenience since it is available 24 hours, 7days of the week.					
	PU3: Internet Banking saves time compared to traditional banking.					
<b>Perceived Ease of Use</b>	PEU1: Internet banking makes it easier to conduct banking transactions.					
	PEU2: Learning to use Internet Banking is easy.					
	PEU3: I am aware of the services that could be done using Internet Banking.					
<b>Perceived Reliability</b>	PR1: Using Internet Banking is as safe as using other modes of banking.					
	PR2: Internet Banking is reliable and can be used for my banking transactions.					
	PR3: I am aware of the security and privacy issues of Internet Banking.					

### Data Collection Method and Sampling

The study deals with a sample size of around 130 responses indicating 52 percent return rate. This sample indicates that the majority of the people around the age 18-24 are using the Internet banking services on frequently basis. After collecting the sample data from the small section of burdwan district, we determined the reliability measure for the entire questionnaire as well as the three determinants (PU, PEU, PR) that have impact on the acceptance of the Internet banking services by the consumers by using Cronbach's alpha coefficient in the analysis section. In this

study a total of 250 questionnaires are created and distributed. The sample size are collected from burdwan district in three area, namely Kalna, Assansol and Burdwan Town in burdwan district West Bengal India. Using five- point liker scale for each dimation we maked out the weight average of the ranking, where the Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree responses were assigned a value of 1,2,3,4 and 5 respectively.

### Respondents Characteristics

IBM SPSS software was used as an analysis tool to perform the assess the validity of the questionnaire. Initially, we performed the demographic profile of the responded to the questionnaires is shown in table 2. This table indicates the percent of male, female, educational qualification, employment status and finally the persons with different age groups submitted their responses in burdwan district are displayed in the table. After tabulating the demographic profile, we evaluated the validity of the three determinants such as PU, PEU and PR by estimating the reliability coefficient measure or cronbachs's alpha.

Table 2: Respondent's Characteristics

Demographics	Category	No. of Respondants	Percent
Gender	Male	100	76.9
	Female	30	23.01
Employment Status	Employed	84	66.7
	Unemployed	33	26.2
	Retired	1	0.8
	Other	6	4.8
	Not Response	2	1.6
Educational Qualification	Bachelors/UG/Diploma	58	45.7
	Masters/PG	59	46.5
	Doctorate/PHD	4	3.1
	Secondary	1	0.8
	Higher Secondary	1	0.8
	Professional	4	3.1
	under 18	2	1.6
	18-25	54	42.5

Age group	26-35	53	41.7
	36-45	10	7.9
	46-55	7	5.5
	greater than 55	1	0.8

### Data Analysis and Findings

Our research frame work is an explanatory survey based upon correlation method by the use of sample election. It is applicable from the view point of goal and measurement the information gathering from Burdwan district. There are three sections for the questionnaire. First section brings about the perceived usefulness of Internet banking and second one is perceived ease of use and third about the information of perceived reliability of Internet banking in Burdwan district.

In our study data collection was done by survey method. Figure 1 and Figure 2 shown the respondents rate of financial transaction through Internet banking in Burdwan district and Figure 3 shown the respondents rate of usages Internet banking. A personally administered questionnaire method was employed in Figure 4 and Figure 5.

Figure 6 and Figure 7 showed the respondents rate of reliability concern. Awareness level of customers on the concept of security and services of Internet banking in Burdwan district, the rate of despondence are shown in Figure 8 and Figure 9.

Figure 1: Financial transaction Level of Respondents

1. Internet Banking enables people to conduct financial transactions more quickly.

128 responses

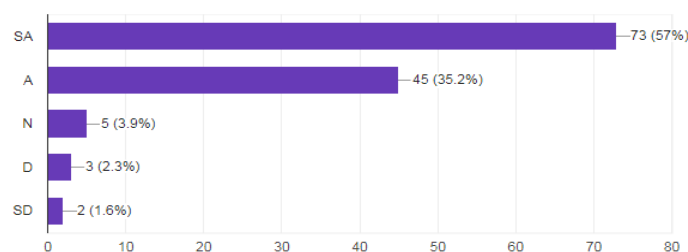


Figure 2: Respondent's rate of bank transaction

2. Internet Banking makes it easier to conduct banking transactions.

128 responses

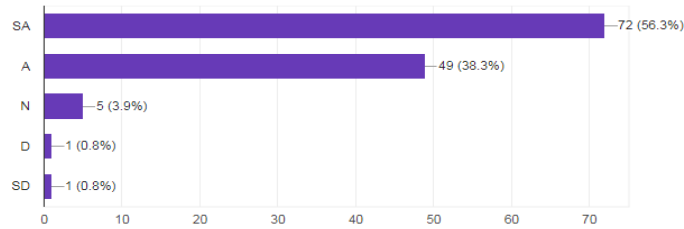


Figure 3: Respondent's rate of Internet banking Usage

3. Internet Banking provides convenience since it is available 24 hours and 7 days of the week.

128 responses

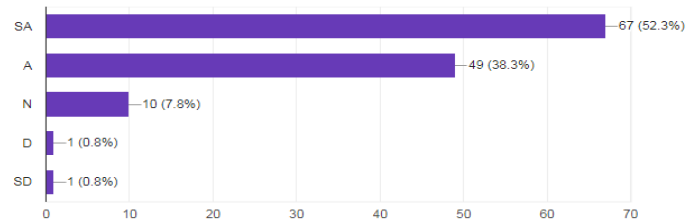


Figure 4: Respondent's rate of usages of Internet Banking

4. Internet Banking saves time compared to traditional banking.

127 responses

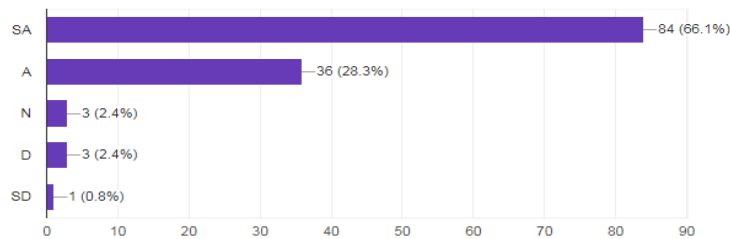


Figure 5: Usages purpose of Internet banking

5. Internet Banking is easy to use.

128 responses

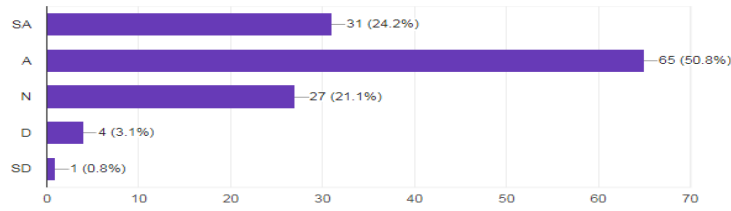


Figure 6: Respondent’s level of ease of use

6. Using internet banking is as safe as using the other modes of banking.

127 responses

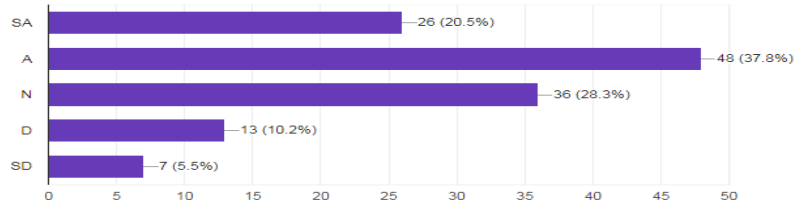


Figure 7: Reliability Level of the Respondents

7. Internet Banking is reliable and can be used for any banking transactions.

128 responses

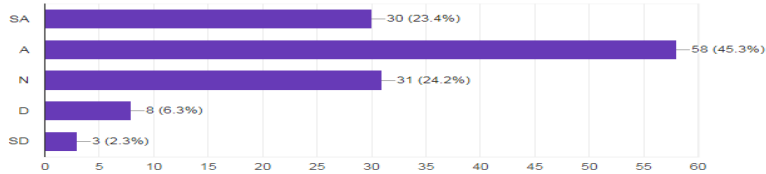


Figure 8: Awareness  
Level of the Respondents

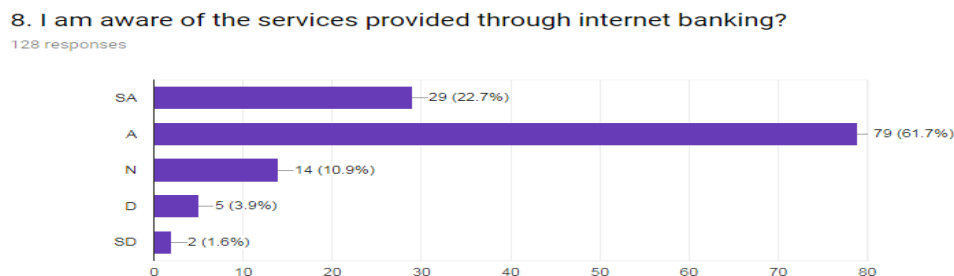
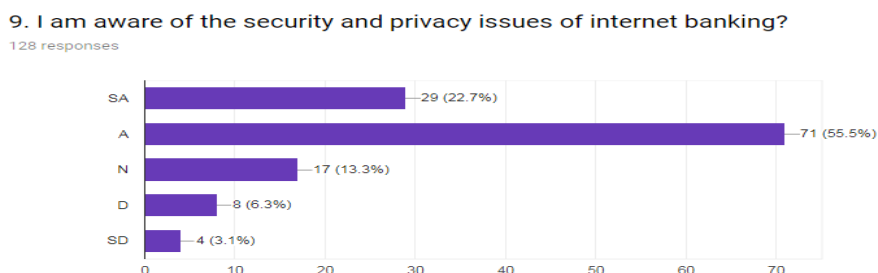


Figure 9: Security and Privacy Level of the Respondents



The reliability analysis has been applied to determine the impact of Perceived Usefulness, Perceived Ease of Use and Perceived Reliability on the perception of internet banking in Burdwan district by the user. Reliability of the factors is determined by means of cronbach's alpha, a method used to measure the internal consistency of a set of items. Alpha value of 0.60 or above is considered to be reliable for any research. The cronbach's alpha results as shown in Table 3 reveals that the acceptance of Internet banking by the user is positively correlated with the perception of Internet banking in Burdwan district. The reliability scores of all the factors were observed to exceed the required standard reliability of 0.60 thus indicating that the convergent validity of the collected data is proven.



Table 3: Reliability Statistics

Determinants	No. of items belonging to this determinant	Reliability measure for this determinant
PU	3	0.7894199
PEU	3	0.782839452
PR	3	0.75223
Perception	9	0.888224

### Conclusion and Discussion

The current study investigates the adoption of Internet banking among a group of people in Burdwan district. Reliability assessment was done by cronbach's alpha. The focal concentration of this study was to explore customer's view of Internet banking and to examine contributory elements that impact the utilization of Internet banking in Burdwan district, West Bengal. From our study we concluded that the intention to use Internet banking was effected by perceived usefulness, perceived ease of use and perceived reliability. This study viewed the perception value of cronbach's alpha 0.888 and It was found that the value of alpha constructs could be viewed as reliable.

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