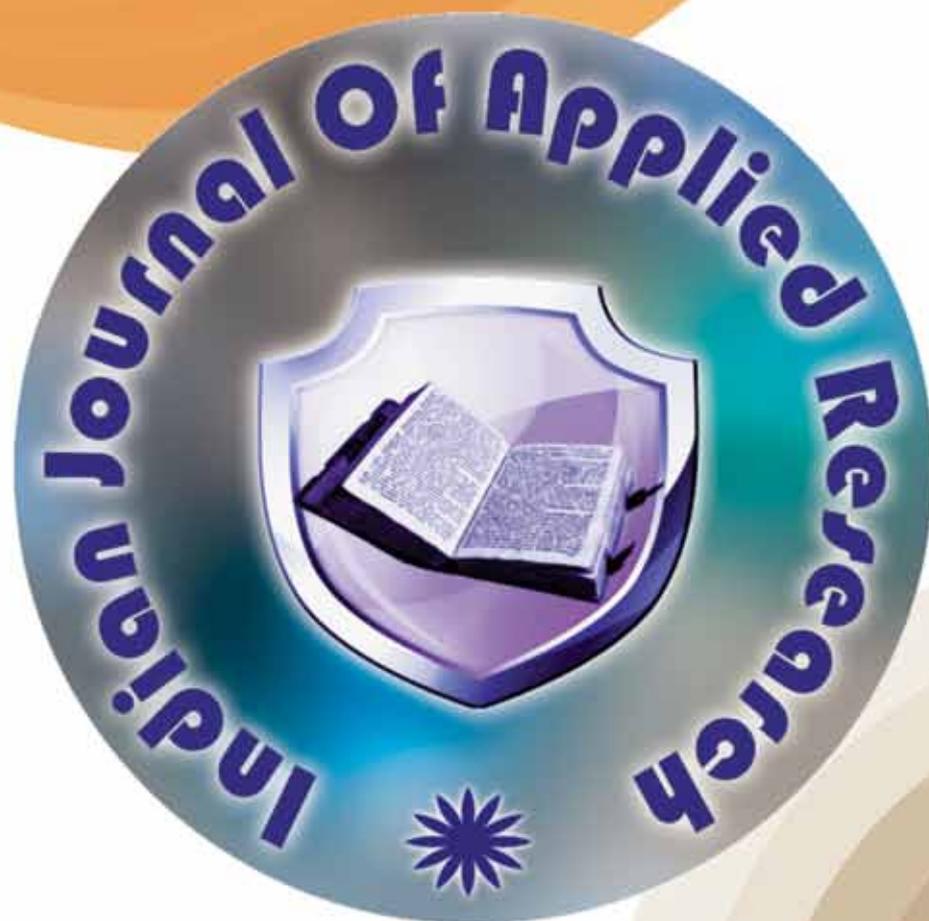


₹ 200

ISSN - 2249-555X

Volume : 1 Issue : 6 March 2012



**Journal for All Subjects**

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Listed in International ISSN Directory, Paris.



ISSN - 2249-555X

# Indian Journal of Applied Research

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## Internet Banking Customer Satisfaction and Online Banking Service Attributes

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### ABSTRACT

*The purpose of the study was to (a) identify which customer service and online attributes predict overall satisfaction, (b) to determine if satisfied customers use more online banking features than less satisfied customers and (c) to identify characteristics of less satisfied customers.*

*The sample was drawn from one of the main banks of Vadodara City. Multiple regression and discriminant analyses were used to analyze the data.*

*The findings suggest that satisfaction can be generated through improving courtesy, content, timeliness and product and services offered. The latter being the most important factor in driving internet banking satisfaction. The findings suggest that the majority of the customers in the sample are satisfied or very satisfied with the service and online systems attributes. The investigation does not support previous findings that more satisfied customers tend to use more product and services or that using internet banking for a longer period is associated with higher levels of satisfaction. It appears that banks that offer a wide product portfolio and relevant website content accompanied by prompt and courteous response create satisfaction online.*

**Keywords : Banking; Information and Communication Technology (ICT); Customer Satisfaction, Internet Banking, Online Banking**

### 1. INTRODUCTION

Customer satisfaction has been a focus of attention of managers worldwide for several years and in various sectors (e-government, retailing, health services, telecommunications, etc (Welch et al., 2005, Terblanche, 2006, Perreault et al., 2006, Cohen, 2006, Athanassopoulos and Iliakopoulos, 2003).

The main reasons for this are that high customer satisfaction has been linked to customer retention, market share, loyalty, and by extension, higher company's profits (Szymanski and Henard, 2001). Satisfaction levels with online banking has improved substantially over the years since the Gartner Group reported in 2000, that one third of customers who tried banking online gave it up later (Williams, 2000).

Sometimes banks have moved to offer alternative self-service technologies without actually measuring the impact of such services because the rationale is that for a customer "the more the merrier". Do more product-services online contribute to customer satisfaction? What are the online service attributes that create satisfaction on internet banking? What are the characteristics of more satisfied internet banking customers as opposed to less satisfied ones?

These are a few main questions we aim to answer using sample from one of the largest financial institution in Vadodara City. The above questions are translated into hypotheses as follows: H1: overall satisfaction with online banking services are positively related to customer service attributes. H2: overall satisfaction with online banking services are positively related to online systems attributes. H3: Satisfied customers use more online banking features than less satisfied customers.

### 2. RESEARCH METHOD

The approach to measure satisfaction in this study is based on multi-attribute measures of satisfaction (Thomson, 1995). The questionnaire used comprises five main sections: gener-

al Internet usage (frequency of internet use, internet access), Internet Banking usage (length, frequency of Internet Banking transactions), IB services used and frequency of use, satisfactions with IB web service qualities, and demographics (age, gender, education).

The sample came from one of the largest bank in Vadodara City. A total of 185 useful questionnaires were entered in the data analysis. Cross tabulations, Multiple Regression and discriminant analyses were the main statistical tools employed.

### 3. EMPIRICAL RESULTS

The sample comprises more male (80%) than female. The majority of the respondents (80%) are in the 25 -44 years old category. Access to the Internet is mainly at work (60%) or home (35%). Over 76% have been using the Internet for banking purposes for more than two years and almost half of the respondents use Internet banking daily or at least three times per week. Over 34% of the respondents use more than one Internet bank in addition to other delivery channels: branch (60.5%), phone (75.7%) and ATM (87%). Finally, overall 84.4 percent declared to be satisfied or very satisfied with the online banking services. This is a similar level of satisfaction as in other parts of the world for example in Australia 84% (Kam and Riquelme 2007); in The U.S.A. 77% (Joseph and Stone 2003), and Zineldin (2002) found that customers, in general, were very pleased with online banking in Sweden.

Our results show that despite the level of satisfaction with internet banking, customers are still using multiple channels to conduct their banking transactions. This finding is consistent with other studies by Joseph and Stone (2003), Patricio et al (2003), Kam and Riquelme (2007). This is a challenging aspect for banks that aim at migrating heavy-cost clients to transact via low-cost outlets (e.g. online). Satisfaction may not guarantee that clients will not use other channels.

Customers report to use the online banking facilities for information purposes e.g. check balances (100%), to transfer

funds between own accounts (88.1%), check for standing orders (70.8%), to pay bills (68.1%), to transfer funds to others (62.7%), to buy/sell shares (48.6%), request cheques (46.5%), and to stop ATM/ credit cards (42.2%). Most of the customers in our sample use internet banking facilities quite frequently; daily and sometimes two or three times per day. Cross tabulations between satisfaction (satisfied –not satisfied) and number of online banking facilities used were not statistically significant thus not supporting a relationship.

To test our hypotheses, we ran multiple regressions with the overall satisfaction measure as dependent variable and customer service and online systems attributes as independent variables. The main effects of customer service and online systems attributes are predicted by hypotheses 1 and 2. Both customer services (H1) and online systems (H2) attributes have statistically significant effect on overall satisfaction. More specifically, courtesy, web site content, timeliness and product and services offered are all statistically significant ( $p < .05$ ). The attribute with most weight is the bank product and services portfolio ( $B = .274$ ), followed by courtesy ( $B = .222$ ) and timeliness ( $B = .203$ ) of the content provided. The content of the bank website ( $B = .162$ ) comes in fourth place according to the standardized Beta. These variables are explaining a substantial variance in overall satisfaction ( $R^2 = .51$ ).

Our findings provide support to the conclusions elsewhere that not all customer service and online systems attributes influence satisfaction equally and more online features drives satisfaction (ForeSeeResults.com, 2005). However, our study's findings defer from Fore Sees's results that found navigation and tasks and transactions the most important features to improve satisfaction. The difference may be due to the observable variables used to measure navigation. In the current study the item perhaps reflecting navigation is 'accessibility'.

In both cases, customers using internet banking reported the highest level of satisfaction with the attribute 'accessibility'. On the other hand, the present study supports the importance of content and functionality found in the Fore See's study assuming that functionality can be interpreted by the variable 'ease of use' in the present study. From the managerial point of view, this stresses the importance of accessibility and number of features offered to customers as a strategic objective to move clients from transacting at branches to online.

To investigate if more satisfied customers of online banking tend to use more services, more frequently (H3), more of a

specific channel of distribution, or differ in their demographics than less satisfied customers, the sample was divided in two groups. One group constitutes satisfied customers (153 cases) and the other group contained dissatisfied and indifferent customers (24 cases). Discriminant analysis shows no detection of statistically significant differences at  $p = \text{or} < .05$ . This leads to conclude that H3 is not supported by the data.

An alternative discriminant analysis was conducted on those who had put a complaint online. Only 37 respondents rated the handling of the complaint as unsatisfactory or indifferent. The second group was comprised of 144 respondents who rated the handling of the complaint satisfactory or more than satisfactory. The discriminant analysis resulted in a function that was statistically significant (Wilk's Lambda = .74,  $p = .001$ ) and accurately classified 85.1 % of the cases. It appears that customers less satisfied with the way the complaint was handled tend to be female ( $p = .003$ ), are less educated ( $p = .027$ ) and use ATMs less frequently ( $p = .005$ ) than customers that were satisfied with the complaint resolution. This finding may suggest that these clients are less technologically ready.

#### 4. CONCLUSION

Overall, contrary to results from an e-service provider in the UK (Transversal) that concludes banks in the UK are failing to take online service seriously (Anonymous, 2006), our results signal that customers are satisfied or very satisfied (86%) with the bank's responsiveness online suggesting that the bank in Vadodara City does take Internet banking seriously.

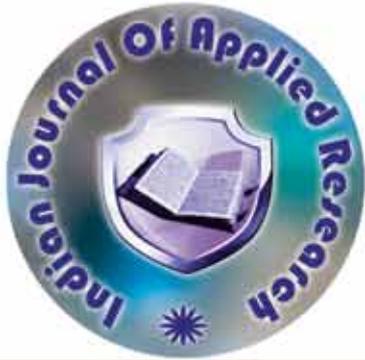
Clients of the bank in Vadodara City seem to be satisfied with the level of services. The level of satisfaction on average is as high as that found in other studies on Internet banking elsewhere.

It appears from the results that to increase satisfaction of online customers, a company must make sure that clients are treated with courtesy and in a timely manner. Clients also expect to have access to updated information on the bank services, and most importantly, they expect a range of products and services online. The findings suggest less satisfied customers are less technologically ready.

Overall, it is encouraging to see that the investment made in implementing web operations in the bank is paying off at least from the point of view of customer satisfaction.

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