Providing A Conceptual Model for Identifying Critical Success Factors (Csfs) Affecting Internet Banking Customer’s Attitude (Case Study: Mellat Bank)

Prof. Dr. A. Divandari M. Haghighi
Associate Professor of Business Management Assistant professor of Business Management

E. Abedi
PhD. Candidate of Business Policy Making
e-mail: abedi@ut.ac.ir

Abstract
Due to the increasing importance of Internet Banking and the critical actions taken by banks in order to offer Internet Banking services in Iran and also according to the increasing number of customers using Internet Banking services, it is essential for bank marketers to understand Internet Banking customers better. Only through this comprehension the marketers are able to develop strategies and tactics to attract and sustain their customers. In this study we have investigated the influential factors in Internet Banking customer’s attitude. Electronic questionnaires were applied for data gathering through case study of Mellat Bank internet banking customers. According to research findings and conclusions it is suggested to apply different marketing strategies for different age groups, provide customers with the opportunity of using Internet Banking Services and achieving good experiences, and present information and training focusing on Internet Banking benefits.

Keywords: Internet Banking, Online Consumer Attitude, Online Consumer Behavior, Structural Equation Modeling

Introduction
As improvement of Internet and other electronic tools, lots of companies have adapted their performances whit IT. This has had an enormous impact in all service contempt especially those which are based on the traditional and close relationship between customers and staff, Like the new way of contacting with customers by self-service technologies such as: e-banking and ATMs (Meuter, 2005).

E-banking is now growing all over the world. According to statistics of ITU, the Internet penetration factor in Iran is 10.8 percent, while the average is estimating 16.7% in
all over the world (eshiraz.ir, 1388). Estimated number of Internet users in Iran in 2000 was about 250000 (nirana.com, 1387) and based on the report of Business Monitor Institute this factor will increase up to 53 percent at the end of 2012 (musavis.com, 1387). These results prove that the use of Internet will increase in the following years and provide the infrastructure of offering better e-banking services.

According to last statistics presented by the Central bank of Islamic Republic of Iran, tools and equipments of e-banking in Iranian banks- include: ATM Cards, ATMs, sale terminals and sale branches and they have increased about 1.52 percent from October, 2004 till June, 2009 (CBI.ir, 2009). This shows that the investigations of Iranian banks in the field of offering electronic services to the customers is developing. On the other hand 36 percent increase in the number of transactions done by the end of June, 2009 shows the increasing attentions towards e-services of the banks. The concentration of customers on this field express that banks need to understand customers’ attitudes in order to achieve competitive advantages.

Since the attitudes of customers about issues is a positive or negative evaluation of that item (Didier and Soopramanien, 2006) and is difficult to change, understanding the attitudes towards e-banking is an essential factor to predict the future growth of these services which can help marketing managers turn customers’ head. In this way managers can also discover influential information about how to attract customers, how to make them satisfied and loyal (Didier and Soopramanien, 2006).

**Literature Review**

In electronic business world there are many factors influencing customers’ attitudes towards internet banking e-services. These factors such as lack of security in Internet network, not trust on internet banking e-services, quality of website and the way of designing it, can lead not to use internet banking e-services by customers (Pikkarainen, T et al, 2004; Jun and Cal, 2001; Gerrard, P et al, 2006; Chen and Chang, 2003). On the other hand perception of customers towards the opportunities provided by internet banking e-services, affect their attitudes toward this field (Tunke Nejad, 1384; Shwu-Ing Wu, 2003; Jarvenpaa and Todd, 1997; Jayawardhena, 2004). In last decades, Marketers have tried to discover the factors which can cause positive or negative attitudes toward internet banking e-services (Pikkarainen et al, 2004; Polatoglu and Ekin, 2001; Gerrard et al, 2006; Chen and Chang, 2003; Park and Kim, 2003). In this part some of the previous researches will be considered.

Shwu-Ing Wu in 2003 conducted a research titled "investigating the relationship between consumers’ traits and their attitudes toward shopping online". The Results proved that customer’ preferences, their lifestyle, the perception of advantages of online shopping and demographic data have direct relationships with their attitudes toward online shopping.
Tunke Nejad (1384) did a research named "investigating customers’ attitudes toward online shopping in Shahrvand stores". He searched for the answers of following questions:

- How is the attitude of Shahrvand customers towards online shopping?
- How is the priority of factors influencing the customers’ attitudes toward online shopping?

The results shows that the security of the database of store, the extend of trustworthiness in keeping customers’ information secure, speed, quality of contact, facility and enjoyableness have the highest impact on customers’ buying behavior. (Tunke Nejad, 1384)

Kyoung in 2003 conducted a paper in order to investigate the clothes sell websites and the customers' intentions to purchase from these sites. He tried to find out the differences between customers who are interested in online buying clothes and who are reluctant. They used the behavioral model of Fishbin which contains 3 factors named beliefs and attitudes and intentions.

They used behavioral Fishbin model that is consist of 3 main components; beliefs, attitudes and tendencies. They found significant relationship between these three components and their research results which revealed that customers who have a strong desire to use computer, have more favorable beliefs and attitudes toward online clothes shopping through the internet than others. The study was conducted only on clothing and researchers have suggested reviewing other products and services (Seock, 2003).

Todd and Jarvenpaa in 1997 evaluated the relationship between consumer’s attitude towards a specific e-shop and their tendency to purchase from the shop. In this study, researchers used a questionnaire which was distributed among the customers of that shop. Their findings suggested that the attitudes of consumers towards the internet shop, it has had a positive influence on willingness to buy their products (Jarvenpaa and Todd, 1997). The findings of this study, also confirmed Drake & Shim’s findings (Shim and Drake, 1990).

A research which titled the effect of personal values on attitudes and purchase behaviors through the internet was conducted in 2004 by Jayawardhena. In This research, a group of 10 MBA students from the universities of England with electronic shopping experience were used and after expression of the study objectives, group members were in the experimental condition of e-shopping and discussed. The results revealed that the hierarchy of values and attitudes and behavior can be used to predict the behavior of Internet shopping, and although all aspects of personal values, are significant predictors for favorable attitudes toward Internet shopping, but the value of personal orientation are more important the other values. Model presented in this study indicates that customer’s belief about preferring online shopping than buying from traditional stores is related to his
personal values (Jayawardhena, 2004).

Despite of so many studies about internet consumer’s behavior in recent 10 years, many studies has not been done to investigate the factors influencing consumers’ attitudes towards e-banking services, especially in Iran. So there is an increasingly need to research in this area of marketing and internet banking with regard to Iranian customer’s culture and specifications and social conditions with focus on the need to align with global developments in the use of modern methods of business.

According to evaluating subject of study, all research variables and hypotheses considered in this model, are supported with a wide range of research performed in this field. According to experts in banks and considering the situation in Iran, content validity of the model has been reviewed and approved. Facial validity is approved when an expert or experienced person investigate it and conclude that model has the required validity. Effective variables on attitudes of internet banking customers which evaluated in this study are shown in Figure 1.

![Diagram of effective factors on customers' attitudes towards the internet banking services.](image)

*Figure 1: Effective factors on customers' attitudes towards the internet banking services.*

The brief explanation about each of the identified factors in the study of literature is presented:

1. Factors related to consumer attitudes towards the internet banking services
   1.1. Demographic variables are included customer’s gender, age, marital status, education, occupation, income and living area.
   1.2. Shopping preferences: it means the level that someone considers him / her self such a buyer and enjoys with purchasing. The effect of this factor is known as one of the most effective predictors of consumer buying behavior (Wu, 2003).
1.3. Perception of benefits of Internet banking services: the individual beliefs about using this purchase method, will improve the performance of life. These benefits can result from improved productivity and quality, reduce costs and ... (Wu, 2003)

1.4. Lifestyle: Are a function of individual inherent, which is formed through social interactions and is measured by three factors; ideas, activities and interests.

Research hypotheses

The main aim of this research is to provide a conceptual model for determining key factors which effect on customers' attitudes towards internet banking among Mellat bank customers. Other goal of this research is to prioritize and determine the importance of each factor towards internet banking. Based on the model shown in figure 1 and by considering literature review, the following hypotheses are assumed:

1- There is significant relationship between customers' demographic data and attitude towards internet banking.

1-1- There is a significant relationship between customers' gender and their attitude towards internet banking.

1-2-There is a significant relationship between customers' age and their attitude towards internet banking.

1-3-There is a significant relationship between customers' marital status and their attitude towards internet banking.

1-4-There is a significant relationship between customers' education and their attitude towards internet banking.

1-5-There is a significant relationship between customers' vocation and their attitude towards internet banking.

1-6-There is a significant relationship between customers' income and their attitude towards internet banking.

1-7-There is a significant relationship between customers' location and their attitude towards internet banking.

2- There is a significant relationship between customers' purchase preference and their attitude towards internet banking.

3- There is a significant relationship between customers' perceptions and their attitude towards internet banking.

4- There is a significant relationship between customers' life style and their attitude towards internet banking.

Research methodology

This empirical-descriptive study adopted structural equation model (SEM) in the data analysis. The required data for descriptive studies is gathered by questionnaire, interview or
observation. Classifying the study based on the goal, this study is empirical which determines and prioritizes the key factors based on analytical model. For hypotheses testing, this study used structural equation model by offering implicit and explicit variables (Segares, 1997). Analyzing of the research model in this study was tested using Lisrel.

Sample and population

The population of this study is Mellat bank e-service users and the sample is Mellat bank e-service users which are in Tehran. The reason to choose tehranian users is the appropriate communication infrastructures and other facilities in Tehran which can lead mostly use of internet bank. For sampling the Simple Random Sampling method was used. As the size of population is limited, sample size determines in $\alpha=0.05$ by the following relationship:

$$n = \frac{NZ^2 \alpha^2 P(1-P)}{(N-1)\varepsilon^2 + Z^2 \alpha^2 P(1-P)}$$

In which, $n=$estimated sample size, $N=$ population size, $P=$ estimated objective variable by the previous researches, and $\varepsilon$ is the standard error. Eventually the sample size of 170 is obtained.

$$n = \frac{NZ^2 \alpha^2 P(1-P)}{(N-1)\varepsilon^2 + Z^2 \alpha^2 P(1-P)} \cong 170$$

By using Simple Random Sampling of Mellat bank customers, 800 questionnaires were sent by considering customer ID. Eventually 204 questionnaires were usable for analyzing data.

Scale and measurement

For gathering required data, this study used library and online references include all relative books, articles and case study. To determine the effects of variables on customer attitudes the questionnaire was used. The designed questionnaire has 28 closed questions which part of them was rated on a five – point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5) (sarmad et al, 2006). In the other part, the demographic data from customers were achieved. The reliability of this measurement was obtained by the viewpoints of professors and experts. The validity of the measurement was achieved by assessing Cronbach’s alpha through SPSS software which was 0.72 and appropriate enough.

Findings

Demographic data shown in table 1 was obtained from 204 gathered questionnaires. The frequency of each part has been shown in table 1.
### Table 1
Demographic data

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>gender</td>
<td>5.4 %</td>
<td>94.6 %</td>
</tr>
<tr>
<td>age</td>
<td>23.5%</td>
<td>44.1%</td>
</tr>
<tr>
<td></td>
<td>20-30</td>
<td>30-40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More than 40</td>
</tr>
<tr>
<td>marital</td>
<td>single</td>
<td>married</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>177</td>
</tr>
<tr>
<td>education</td>
<td>diploma</td>
<td>Post diploma</td>
</tr>
<tr>
<td></td>
<td>13.2%</td>
<td>10.8%</td>
</tr>
<tr>
<td>vocation</td>
<td>employee</td>
<td>student</td>
</tr>
<tr>
<td></td>
<td>80%</td>
<td>3.4%</td>
</tr>
<tr>
<td>income</td>
<td>Less than 200,000</td>
<td>200,000-500,000</td>
</tr>
<tr>
<td></td>
<td>0.5%</td>
<td>12.7%</td>
</tr>
<tr>
<td>location</td>
<td>Tehran</td>
<td>province</td>
</tr>
<tr>
<td></td>
<td>87.3%</td>
<td>8.3%</td>
</tr>
</tbody>
</table>

For testing Hypotheses 1-1 to 1-7, which considering gender, age, marital status, education, vocation, income, and location the Pearson's chi-squared test was applied. The results are shown in table 2.

### Table 2
Results of Pearson's chi-squared test

<table>
<thead>
<tr>
<th>Pearson's chi-squared</th>
<th>Sig. no. (2sided)</th>
<th>Degree of freedom</th>
<th>quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>gender</td>
<td>٠/٧٤٦</td>
<td>١</td>
<td>٠/١١٠</td>
</tr>
<tr>
<td>age</td>
<td>٠/٧٠٢</td>
<td>٢</td>
<td>٣/١٥١</td>
</tr>
<tr>
<td>marital status</td>
<td>٠/٣٤٤</td>
<td>١</td>
<td>٢/٧٦٧</td>
</tr>
<tr>
<td>education</td>
<td>٠/٧٠٥</td>
<td>٥</td>
<td>١/٣٧٧</td>
</tr>
<tr>
<td>vocation</td>
<td>٠/٣٣٣</td>
<td>٤</td>
<td>٣/٨٣٣</td>
</tr>
<tr>
<td>income</td>
<td>٠/٨٨١</td>
<td>٣</td>
<td>٢/٧٢٨</td>
</tr>
<tr>
<td>location</td>
<td>٠/٦٣٣</td>
<td>٣</td>
<td>١/٨٨٧</td>
</tr>
</tbody>
</table>
As the validity of test in all cases is more than 0.05, \( H_0 \) which shows that there is no significant relationship between demographic variables and attitude towards internet banking e-service is accepted.

For testing hypotheses 2, 3 and 4, first the structure model of study should be evaluated. The model fit is obtained by testing some scales. As shown in figure 2 and 3 \( \text{CMIN/Df<3} \) and \( \text{RMSEA<0.08} \) as the model fit measures are good. Other model-fit measures include: \( \text{NFI=0.91, CFI=IFI=0.93, GFI=0.92, AGFI=0.91} \) which are all show goodness of fit. In the models which offer in figure 2 and 3, none of demographic hypotheses were shown because they all rejected.

![Figure 2. Model of the standard estimates](image)

![Figure 3. Model in significant numbers](image)

Figure 3 shows the model in significant no. position. Significant of whole model proves by considering RMSEA and CMIN/Df. As shown in the figure 3 all factors are significant and more than 1.96. The results of this part are used to prove hypothesis 2-4. In this paper, customers' attitude towards internet banking is an implicit variable while preference, perceptions and life style of customers are observed variables. Hypothesis 2, 3 and 4 are accepted by the path factors of 0.59, 0.50 and 0.47.
In conclusion, customer purchase preference has the strongest relationship with attitude towards internet banking. Perceptions and life style of customers play the same role in determining customers' attitude towards internet banking.

**Results and Suggestions**

Kotler believes that marketing is not the same as Euclidean geometry that is non-change. One of the most dynamic areas of management is marketing. Always market environment has new challenges and the companies must respond to them (Kotler & Armstrong, 1379). So in this section, according to the results of the study hypotheses and data analyzing, we try to provide recommendations to managers and practitioners of the Internet banking services. According to the approved model of study, factors that cause customers tend to use Internet banking services are considered. Educating and informing about the benefits of these services, are the important factors in changing customers’ attitudes toward using internet banking services. According to hypothesis 3, the informing and educating should emphasize on the benefits of using internet banking services. Informing about the advantages of this method, such as the need to travel and spend time for trips within the city, 24 hour access to bank accounts, and ease of use ... can have a positive effect. Therefore, bank’s marketing managers, and their cooperators, should inform customers towards these advantages and conduct this positive attitude in order to help customers and to achieve the differentiated position in Internet banking services.

According to the second hypothesis about the relationship between customer buying preferences and their attitudes toward the Internet banking services, banks should provide the opportunity of satisfying use of their Internet service for customers to create a positive attitude.

Although the results of structural equations model show that there is a significant relationship between customer’s life style and their attitudes towards internet banking services. So banks need different strategies for different groups of customers with different lifestyles and adopted for each group, different suitable advertising and promotion.

After that we mention the ways of developing positive attitudes which forms positive emotions. Repeated exposure to a stimulus can be one of the ways that establish the positive emotions and after that positive attitude (Moon and Minor, 1381). So internet services provider banks, face customer with internet banking repeatedly through television advertisings or word of mouth advertisings and establish positive attitudes in customers. The other way of establish positive attitudes in customers is impacting on individuals perceptions through the reference groups, because the reference groups have significant impact on behavioral tendencies (Moon and Minor, 1381). Other approach is impacting on customer’s attitudes towards the advertisement. Researchers have found that customer
make an attitudes toward advertisings in their minds that affect on advertised products or services. Advertisements that contain high levels of mental illustrations, for example, with clear words, live audiovisual images, advised consumers to imagine the use of this method and its advantages will strongly affect the attitude towards advertising (Moon and Minor, 1381).

Suggestions for future research

With regard to the subject of this research and psychological experiments, suggestions for future research are discussed as follows:

- Evaluation of model used in this study among Internet customers of other products and services
- Classification of different life styles and types of active users using Internet banking services and to identify their interests and desires
- Evaluation of the factors influencing customers' attitudes towards internet banking
- Evaluation of the relationship between attitudes towards the use of internet banking with advertising for using internet banking services
- Evaluation of the effect of risk perception on attitude regarding the use of Internet Banking Services
- Evaluation of the effect the attitude on customers buying decision towards internet banking services in different banks.

References


Http://www.eshiraz.ir/news/shirazfava/fa/1742
Http://www.musavis.com/1387/06/25/


Jayawardhena, Chanaka,(2004), Personal values’ influence on e-shopping attitude and
behaviour, Internet research, Vol.14, No.2, pp.127-138
Kotler, Philip; Garry, Armstrong (1379) the administrations of marketing, Bahman Foroozande, atropat publisher, fourth edition, Isfahan
Minijoon Jun, Shaohan Cal; (2001).The key determinants of Internet Banking service quality: a content analysis; International journal of bank marketing, Volume 19, Number 7, pp.276-291
Moon, John; Minor, S. (1381) consumer behavior, Abbad Saleh Ardestani, AAn publisher, first edition, Tehran
Philip Gerrard et al; (2006),Why consumers are not using Internet Banking: a qualitative Study; Journal Of services marketing, Volume 20, Number 3, pp.160-168
Seock, Yoo-Kyoung, ( 2003),Analysis of clothing websites for young customer retention via the internet, Virginia Poly technique institute
Shim,S., Drake,M.F.,(1990)," Consumer intention to Utilize Electronic Shopping".Journal of direct marketing,No.4,pp.22-33
Shwu-Ing Wu, (2003), The relationship between consumer characteristics and attitude toward online shopping, Marketing Intelligence & planning, Volume 21 Number .1, pp. 37-44
Tunke nejad, Mandana (1384) customers' attitudes towards online shopping in Shahrvand stores, M.S. project, university of Allameh tabatabaei
Vichuda Nui Polatoglu, SerapEkin;(2001),An empirical investigation of the Turkish consumer acceptance of internet banking services; International journal of bank marketing, Volume 19, Number 4, pp.156-165
www.cbi.ir