# Investigating the Reasons of Failure at Internet Banking Usage in Pakdasht City 

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#### Abstract

In recent years, along with the development of electronic commerce in the global economy, the use of ICT in the field of monetary, financial and electronic payment systems increased significantly. Although millions of dollars have been spent on making internet banking systems but reports suggests that potential users despite the availability of these facilities are reluctant to use them. The purpose of the present study is investigating the reasons of failure at internet banking usage in Pakdasht City. The research was descriptive correlational survey. The study included all residents of the central city Pakdasht society characterized by random sampling, $95 \%$ of 265 people were chosen from different classes. The collected data were analyzed by two descriptive and inferential methods (Pearson correlation, analysis of variance, $t$-test). The results indicate that internet banking variables-age, sex, education, jobs and significant direct relationship exists and there is not any significant relationship between with information, trust and facilities variables. Hence, improving the mentality of people of the security system by appropriate ads must be strengthened.


Key words: internet banking, information technology, communications technology, e-Commerce, e-Banking

## INTRODUCTION

In recent years, along with the development of e-Commerce in the global economy, communication technology and information in the field of monetary exchanges and financial increased and electronic payment systems significantly developed. Nowadays, economic factors may be of different types of electronic money for monetary and financial use. In economic terms, the most impact of the spread of electronic money issued increasing the velocity of money and create problems in the mechanism of monetary policy by government.

Increasing the current forces in global competition in the financial industry and particularly the banking industry the continued demand and diversification of customer needs has forced banks view to use electronic trade mechanisms such as the internet and the World Wide Web to provide electronic banking services. Information communication technology is said to technology such as the internet, intranets, extranets pand other technologies that refer to a wide range of basic infrastructure to technologies that improve an organization's services and operations cover (Gupta et al., 2008). Electronic banking in terms of use pass of information technology that the banks' customers and other stakeholders to engage with the bank and without intermediaries through various channels of
communication such as the internet, wireless and ATM machines, similar technologies (Misra, 2001). In fact, electronic banking including all electronic channels, customers will have access to personal accounts and transfer money or pay their bills use it. These channels are: telephone, internet, mobile and digital television, the same technology (Karjaluoto et al., 2003). Lao as well as internet banking providing banking services through a computer network with access directly to the customer's home or their personal address defined (Yiu et al., 2007). internet banking systems can also be modeled with the aid of semantic web technologies to represent their operations.

Many banks are trying to pay attention customers to the fact that using internet banking can get better rates for deposits and loans benefit. Better access to information, quickly transfer money, sense of control over the account, efficiency and ease certainly a welcome feature of internet Banking to its customers (Ajzen, 1991; Moon and Kim, 2001). In the past, traditionally, more research in the field of internet banking based on the technology but even though millions of Dollars used to production and processing the internet banking systems, available reports has been show that potential users despite access to the facilities do not have reluctant to use them. Moreover, the need for new research to identify the effecting factors on the internet banking shows. Technology acceptance

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model of Davis is one of the method that to assess the effecting factors on behavioral tendency in the acceptance and use of new technology used. Technology acceptance model in principle includes an explanation and the relationship of factor perceived ease of use, functional understanding, attitude toward use, behavioral intention to use and actual use. Customer understanding of applicability and ease of use are both decisive factor and important for the actual use of the system and behavioral intention to use it (Tan and Teo, 2000). In fact, these two perceptions of attitudes predictors factor to technology adoption and use of it (Miller, 2005). Although, the technology acceptance model for a variety of technologies can be used but due to failing to provide sufficient information in the field of customer opinions about new technologies has been criticized (Pikkarainen et al., 2004). The structure of this model should be developed with the use of other factors.

The aim of this study was to investigate and identify the barriers to full establishment of modern banking practices and provide recommendations to improve the effectiveness of the system in the Pakdasht City. For this purpose, the target population considered the people living in the central part of Pakdasht city. Due to the large size of statistics population and limitations at $95 \%$ confidence interval, 265 people from the population at random from different categories of population including working-class, market, student, cultural, homemakers, computer operator, working, certain occupations (lawyers, engineers, veterinarians, experts, etc.) and unemployed persons as statistical sample were selected and questionnaires were distributed among them.

In addition to the questionnaire to get more information, conduct interviews with some officials and staff. In some cases, additional information obtained helped us to advance the issue. Measuring tools to this study, a questionnaire consisting of 13 questions with 11 closed questions and 2 open questions which comments regarding the subjects of internet banking at 7 hypothesis indicates. Our assumptions about the effecting factors on the turnout of internet Banking such as age, sex, education, job, informative, reliable and facilities that try each of these variables is placed in the questionnaire. As well as to analyze the data obtained from the questionnaire was used advanced software SPSS which results in tables and graphs are depicted.

In the field of internet banking, numerous research conducted by researchers in different countries. Suh and Han (2002) by entering the confidence structures in the pattern of technology adoption, the effect of confidence on internet banking adoption by customers evaluated. The 845 people of internet banking customers in the 5 largest banks in South Korea to their online questionnaire
responded. Results of the hypothesis study that confidence is the major determinant of intention to use internet banking confirmed, the results showed that confidence of perceived usefulness and perceived ease of use are the main factors determining of attitude. The effects of attitude and perceived usefulness on intention to use were significant and ultimately the effect intention to use was also significant on the actual use (Suh and Han, 2002). Sohail and Shanmugham (2003) studied the effecting factors on the adoption of internet banking in Malaysia. They questionnaire included a list of 27 factors that may influence the adoption of internet banking distributed among the members of the sample. The results showed that the seventh factor influencing on the adoption of internet banking are: access to the internet, attitude change, the cost of access to computers and the internet, trust of banks, security and ease of use. With regard to age, level of education the findings showed that there is no difference between internet users and non-users in terms of demographic feature (Sohail and Shanmugham, 2003). Wang et al. (2003) studied the adoption of internet banking in Taiwan. They are based on the pattern of technology adoption; the impact of added structures of perceived reliability (security and privacy perceived) examined the use intent of internet banking of. The findings, significant effects perceived usefulness, perceived ease of use and reliability perceived approved the plan to use (Wang et al., 2003). Pikkarainen et al. (2004) studied the adoption of internet banking among customers Finnish. In this study used perceived usefulness structures and perceived ease of use about technology adoption pattern and added four structures including the perceived enjoyment, information about internet banking, security and privacy and quality of the network connection internet is used as a research model dimensions.

The studied sample was 268 subjects of Finnish customers. Factor analysis result and regression analysis showed that all factors despite the quality of the internet connection effect on the adoption intention of internet banking. Also perceived usefulness factor and the information about internet banking are the most important factors in explaining their use of internet banking services (Pikkarainen et al., 2004). Increasing attention of big banks in developed countries and developing countries to provide banking services through electronic channels and development banks and financial institutions of virtualization increased competition in the banking industry such that other bank also intends to have taken develop e-Banking different approaches (Mattila et al., 2003). With the development of web applications, internet banking also expanded. With increasing who people access to internet, provide these services also
expanded. Internet banking cause the development the domain of bank geographic reach, increased convenience for customers and reduce transaction costs. Also, this approach allows customers to directly access their financial information and banking operations without regard to location and without having to visit the bank using a personal computer and communications networks Remote done. This banking method is a new way for banks to interact with customer's offer.

Edwin Chang, Lam and Yong in the research, examined internet banking adoption by consumers in Hong Kong with use of technology acceptance expanded model (TAM) have paid. They added to Davis primary model a new element which called a sense of security in their web environment. Independent variables included in the model: ease of use and web security sense. Usefulness or usefulness variable as well as user attitude as intervening variables and variable of user intends to use internet banking are considered as the dependent variable. The results of the research, more research assumptions and technology adoption expanded model approved and it can predict consumer intent to the adoption of internet banking shows (Cheng et al., 2006).

## Define concepts

Electronic business: Generally, the term e-Commerce refers to electronic transactions which through the communication network is performed. Initially, the purchaser or consumer to search for a virtual shop on the internet deals and product through the web or a mail order. Finally, the product is delivered.

Electronic exchange: Electronic data interchange or EDI exchange business data in a standardized template between computers. The electronic exchange of data, information on a specific model that is specified by the parties' exchanger organized that allow computers exchange without interference and require no human factor involved or re-enter the information in the two path.

Information technology: Information technology is collecting, organizing, storing and publishing data such as voice, video, text or number by means of computer tool and telecommunications done.

Electronic banking: It is necessary to understand the phenomenon to the specific definition of the phenomenon and the factors and variables related to it provided. For e-Banking given the different definitions including can be noted below definitions.

- Providing customers access to banking services using secure intermediaries without a physical presence
- Direct delivery of services and banking operations of new and traditional to customers by communication channels of electronic interaction

Electronic banking including systems that financial institutions customers will enable to have three levels of information, communication and services transaction, banking services.

Information: This level is the most basic level of internet banking. Bank details of the service and its banking operations through public or private networks introduce.

Community: The level of internet banking allows transactions between the banking systems and customer provides. The level of risk in e-Banking is more than traditional methods and therefore to prevent and notifying the bank management of any unauthorized attempt to access the internet network of bank and computer systems are needed to appropriate controls.

Transaction (trade): The system proportion with the type of information and communications has the highest level of risk and should be governed a strong security system. In this level, customer in a reciprocal relationship is able to operations such as bill payments, check issuance, transfer funds and make account.

Branch of electronic banking: Various types of electronic banking are:

- Internet banking
- Based banking based on the mobile and related technologies
- Telephone banking
- Banking based fax
- Banking based ATMs
- Banking based POS
- Banking based electronic station

Internet banking services provides the ability for customers to save time and cost and some of their banking affairs (such as receiving bills, transfer funds, pay bills, electricity, water, phone, mobile phone, etc.) to carry through this system.

Electronic money for the first time in 1918 in America by Federal Reserve Banks was used. Banks, payment, funds transfer using telegraph put on your agenda. This bank later with the development of automated clearinghouse institutions (in 1972), widespread use of electronic money provided.

The first experience of making the ATM device back to 1939. The first e of them, five million dollars in the harvest. The product of this project in 1973 as the first ATM at Chemical Bank in New York City was installed. The first generation of ATMs were working offline and the money is not automatically deducted from customers' accounts. So, just special customers have a special account were allowed to use these devices.

The benefits of electronic banking: According to research firm data monitor, the most advantages of electronic banking are: focus on new distribution channels, provide improved services to customers and the use of e-commerce strategies. The benefits of e-Banking from the views of the short term, medium term and long term can be investigated. The same competition, keeping and attracting customers, including electronic banking benefits in the short term ( $<1$ year), respectively. In the medium term ( $<18$ months), the benefits of electronic banking are integrating various channels, information management, broad range of customers, lead customers to the appropriate channels with desirable properties and reduce costs. Reduce the cost of processing transactions, providing services to customers and target market and generate revenue are the long-term benefits of e-Banking.

Research purposes: In general, the purpose of this research is as follows.

## Failure at internet banking usage:

- Knowledge of the theoretical bases and application of electronic banking and internet banking in particular
- Identify barriers to full deployment of internet banking in Pakdasht City
- Raising the awareness of people interested in the use of modern banking system in the Pakdasht City
- Realize the fact that training, information and prepare the infrastructure to what extent in the turnout of internet banking is effective
- Provide recommendations and contribute to the further development of this system

The aim of this study was to investigate the causes of low welcome of the internet banking in the Pakdasht City.

## Hypotheses:

- There is a significant relationship between age and usage of internet banking
- There is a significant relationship between gender and usage of internet banking
- There is a significant relationship between education and usage of internet banking
- There is a significant relationship between jobs and usage of internet banking
- There is a significant relationship between information and usage of internet banking
- There is a significant relationship between trust and usage of internet banking
- There is a significant relationship between Facilities and usage of internet banking


## MATERIALS AMD METHODS

According to the study to investigate causes of failure usage Pakdasht of internet banking, the study method was descriptive, correlational and survey. The research population including all persons residing Pakdasht city by random sampling method in the $95 \%$ confidence interval, 265 people of different classes selected as samples. Collected data both descriptive and inferential (Pearson correlation coefficient, analysis of variance, $t$-test) were analyzed. For this purpose, the target population for this purpose are people living in the central part of Pakdasht city considered. Due to the large population size and limitations within $95 \%$ of confidence interval, the number of 265 people randomly from different classes ranging from working-class community, a marketplace, a student and... as statistics sample selected and the questionnaire was distributed among them. In addition to the questionnaire, to get more information and materials, conduct interviews with some officials and staff. In some cases, additional information obtained which have helped advance the issue. Measuring tool of this study is a questionnaire with 13 questions with 11 closed questions and 2 open questions which comments regarding the subjects of internet banking, at 7 hypothesis indicates. Our hypothesis about the effecting factors on the turnout of internet banking such as age, sex, education, job, information, trust and facilities that try each of these variables by proportion is included in the questionnaire. As well as to analyze the data obtained from the questionnaire is used advanced Software SPSS, the results in the form of tables and graphs are depicted.

Validity and reliability: Face validity of questionnaire using experts view in internet banking of Bank Melli Iran and academic experts verified. To evaluate the validity, construction of paper model was used the confirmatory factor analysis. To assess the reliability of the questionnaire was used the Cronbach's alpha coefficient. Cronbach's alpha of the questionnaire which is equal to 0.87 , showed acceptable reliability of the questionnaire.

## RESULTS AND DISCUSSION

## Testing hypotheses

First hypothesis: There is a significant relationship between age and welcome of internet banking shown in Table 1.

Given the correlation coefficient, rachieved 0.27, at 0.00 level is significant, there is a significant relationship between age and welcome of internet banking because the significant level is $<0.01$.

The second hypothesis: There is a significant relationship between gender and usage of internet banking. According to Table 2 and t-test of two independent groups, there is a significant relationship between gender and low welcome of internet banking because the t -test equal to 6.722 and is significant at 0.00 level because the $s i g$ obtained is $<0.05$. As seen in Table 3, mean of men is more than women mean as 2 score which welcomed by men is less than women, Fig. 1 shows it is well, then the second hypothesis is accepted.

The third hypothesis: There is a significant relationship between education and usage of internet banking. According to Table 4 and F calculated at 0.03 level is significant because sig obtained is $<0.05$ and this shows that there is a significant relationship between education and usage of internet banking, so that the hypothesis can be accepted.

The fourth hypothesis: There is a significant relationship between jobs and usage of internet banking. According to Table 5 and F calculated which equal to 7.03 at 0.00 level is significant because sig obtained is $<0.05$ and this shows that there is a significant relationship between job and usage of internet banking, so that the hypothesis can be accepted.

| Table 1: Pearson correlation coefficient between age and of internet banking |  |  |
| :--- | :---: | ---: |
| Variables | Pearson correlation coefficient | Sig. |
| Age | 0.271 | 0.00 |
| Usage | 0.271 | 0.00 |

Table 3: T-test independent between gender and usage of internet banking

| Variable | t-test | Sig. |
| :--- | :--- | :---: |
| Usage of intemet banking | 6.722 | 0.00 |

Table 3: Mean and standard deviation of usage of internet banking based on gender
Welcome

| ------------------------------------------------------------------------------------- |  |  |  |
| :--- | ---: | :---: | :---: |
| Gender | No | Mean | SD |
| Man | 175 | 14.6971 | 2.11854 |
| Woman | 86 | 12.7326 | 2.26702 |

The fifth hypothesis: It seems that there is not a significant relationship between information andusage of internet banking Table 6 .

According to Pearson test, there is not a significant relationship between information and welcome of internet banking because $0.078=\mathrm{r}$ and at 0.204 level is not significant and sig is obtained is $>0.05$ therefore, the fifth hypothesis is rejected.

Sixth hypothesis: It seems that there is not a significant relationship between trust and usage of internet banking Table 7.

According to analysis of variance, between trust and usage of internet banking, F is equal to 1.029 which is not significant at 0.401 level because the significant level is higher than 0.05 , so the sixth hypothesis is rejected that there is not significant relationship between the trust and usage. In other words, according to Fig. 2, although respondents their trustrate has been considered medium and large but was still at a low level of their usage.


Fig. 1: Distribution of patients according to gender and usage of internet banking

| Table 4: F-test (ANOVA) | between education and usage of internet banking |  |
| :--- | ---: | ---: |
| Usage | F-test | Sig. |
| Education | 3.013 | 0.003 |


| Table 5: F-Test (ANOVA) between job and usage of intemet banking |  |  |
| :--- | :---: | :---: |
| Usage | F-test | Sig. |
| Job | 7.013 | 0.000 |

Table 6: Pearson correlation coefficient between information and usage of internet banking

| Variables | Pearson correlation coefficient $\mathbf{r}$ | Sig. |
| :--- | :---: | :---: |
| Information | 0.078 | 0.204 |
| Usage | 0.078 | 0.204 |


| Table 7: <br> F-test (ANOVA) between the trustand usage of the internet <br> banking <br> Usage$\quad$ F-test | Sig. |  |
| :--- | :--- | ---: |
| Trust | 1.029 | 0.401 |



Fig. 2: The distribution is based on trust and usage of internet banking


Fig. 3: The distribution is based on facilities and usage of internet banking

Seventh hypothesis: There is a significant relationship between facilities and usage of internet banking.

According to Table 8 and analysis of variance test, $F$ is equal to 0.373 which is not significant at 0.867 because the significant level is higher than 0.05 , so the hypothesis is rejected that there is not significant relationship between the facilities and welcome. As can be seen in Fig. 3, although ass's rate to internet has been considered large but still usage in the low or medium.

Table 8: F-test (ANOVA) between the facilities and usage of the internet banking

| Usage | F-test | Sig. |
| :--- | :---: | :---: |
| Facilities | 0.373 | 0.867 |

## CONCLUSION

The overall results show that according to the statistical analysis, 3 hypothesis has not effects on the low welcome from internet banking and 4 other hypothesis is effective in the people welcome. Accordingly, it has been tried by the end of this study, suggestions for further development of this system should be presented. The people distribution based on the response in terms of men gender is more than women which $66 \%$ ( 175 people) in terms of jobs, the highest response rate to the tradesman with $30.2 \%$ ( 80 people) and followed by employees, $27.9 \%$ ( 74 people) according to people inform about, $86.8 \%$ ( 230 people), their own data is considered moderate. In term of trust about $41.1 \%$ (109 people) of respondents have stated that to a certain extent rely on internet banking. In terms of access to the internet about $25.3 \%$ ( 67 people) respondents said they somewhat have internet access as well as familiarity with the internet which is about $39.2 \%$ (104 people) partly on are familiar with internet. According to the e-Banking education about $34 \%$ ( 81 people) of respondents have taken the necessary training on average and the usage of internet banking is about $50.6 \%$ (134 people) on average are doing. The results show that, although respondents considered their trustrate in the medium and high but was still at a low level of their usage. It is possible that the majority cause of respondents not answering honestly, the hypothesis is not accepted, because the majority of respondents in response to open questions, lack of trust to the system is considered an important factor to failure of usage of this method even in its proposals to increase the security of the system are called; this contradiction to respond to questions relating to the information variable was similar that still leads to the hypothesis is rejected. Although, respondents to questions about the facilities hypothesis, access to the internet, still usage have made large, low or average. Therefore, the hypothesis is rejected means there is no significant relationship between facilities and usage. The results show that usage in all age group 15-24 years compared to other age groups are at a higher level, although the older age classes are going, this usage is less and less. According to information obtained from the tests, women group despite a lot less of them among the respondents are more likely to usage online banking compared to their opponents group, the men have had. About job variable and hypothesis about it, we can say most usage about the working-class, the lowest category in the marketers and is
clearly among the unemployed while the student class have also middle usage. Finally, most usage people with diploma degree and have the rest of people with different education levels what level higher than diploma and have moderate. To provide usage field (usage), the internet banking system by clients, custodians of banking services, should be sufficient attention to cause of behavioral intention and the circumstances are paid facilitator. internet banking authorities can by identifying individuals with potential and high use of their information technologies encourage them for the use of internet banking services and consequently, people also, friends, family members and their partners will be encouraged to use this service. Also, should provide the necessary resources (hardware and software features such as access to personal computers, connect to the internet) and the knowledge required (ability to work with computers and the internet) to customers for use internet banking system, measures carried out. According to the study, the most frequent in term of age related to the age range $15-24$ years, $41.1 \%$ ( 109 people) included. Marketing managers of banks with regard to this matter should plan for preserving this client category (youth group) and plans to attract customers in the age group 25-34 years plan and implement. In term of education $>41.9 \%$ (111 people) customer diploma and $18.1 \%$ (48 people) have a college education. So, the whole focus of the customers, trying to provide up to date and consistent with today's technology, the use of appropriate incentives and promotional programs to attract, retain the loyalty of these customers is essential in a competitive market, marketing managers should consider the bank be.

## SUGGESTIONS

From the marketing perspective, the need for serious consideration of effective components on customer decisions is critical. Therefore, it is suggested, in order to maintain and increase market share in the area of electronic banking services, the following should be considered in the design and supply of internet banking services and the bank's marketing strategy properly be included:

- The website is designed in such a way that the process is easy to use internet banking service for customers
- Services offered through this channel which is designed easy to learn to use it for customers
- Use of the services offered by this channel have atmost flexibility and on the other hand is very user-friendly
- In terms of perceived benefit as far as possible the fastest way to provide services, facilities and available infrastructure is available to customers in such a way that saves significant and tangible time customers
- Promoting, marketing and educate customers effectively design and implementation to customers on the advantages and benefits of understanding and beneficial use of banking services via the internet, compared with more traditional ways of encouraging and be encouraged

Also in the design and offer internet banking systems, more practical aspects, according to customer needs (Cheng et al., 2006). In addition to the suggestions mentioned above, attention will be necessary and useful to the following.

Variety of services through the internet and taking advantage of the removal of time restrictions and location to servicing effectively be considered in the design and delivery of internet banking services, so customers can effectively use it and benefit from the advantages.

Developing and promoting the use of electronic services, useful information and propaganda in this regard at development of electronic banking and the internet effectively.

Efforts to increase awareness and familiarity with a variety of e-Banking services and issues related to their considerable contribution in the formation of people's belief in the benefits, perceived ease of use and ensure the privacy and security will be private.

Government support and planning in order to create and develop the necessary infrastructure to provide online services for internet including internet banking can play an important role in creating a use culture of electronic services and the internet.

In terms of reliability to customers are assured that e-Banking store personal information and privacy protected. Sufficient information to raise awareness and confidence coefficient of customers at technology area used in internet banking will be offered.

Appropriately, take given knowledge and ensure to the customer that mistakes coefficient in internet banking on nil. In order to increase customer confidence, take given sufficient knowledge and confidence in the safety password, password, rulers and mechanisms to be applied to ensure a sense of security to be provided in internet banking for our customers.

It is suggested that, banks to improve security features of their system efforts to attack the confidence and assured customers that there is security in internet banking to transactions of successful (Cheng et al.,
2006). So, in order to more usage of people of internet banking is necessary, officials pay attention to the following:

- Reduce the cost of permanent internet (ADSL)
- Increase internet speed
- Mandating the use of this system in the public and the government that somehow government people are on the government payroll, the result of this process epidemic, individuals and businesses are also welcome
- Mentality of the people than the system security in appropriate advertising to improve
- Disorder networking acceleration in some cases, the motivation for using the internet method to eliminate that have tried to address this parody
- About education in this system, all age groups should arrive at the self-taught
- People's mentality should change about wage customers justify the wage of electronic banking services to visiting the bank in person is minimal and people will be more hidden costs


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