



Evaluating Electronic Trust In Payment Internet Banking (Case Study: Bank Melli Of Iran)

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ABSTRACT

In this research, the condition of electronic trust of Melli Bank clients with regard to electronic payments in both status quo and desired situation is studied. For this purpose, 202 bank clients who have used the electronic payment services of this bank at least on one occasion within two-month period of study are selected as the sample group. In order to measure the variables of study, a questionnaire designed by the researcher was used and distributed among the samples after its reliability and validity were confirmed. Subsequent to gathering the data, the relationship between the model's variables was studied using the structural equations model as well as Lisrel software.

According to the results of this study, the relationship between electronic trust and the variables of perceived security, perceived privacy and perceived trustworthiness was not confirmed in Melli Bank status quo; however the relationship between perceived security, perceived privacy and perceived trustworthiness was confirmed with 95% of confidence. In order to investigate the degree of relationship between the variables, the correlation coefficient was used. The correlation coefficient of perceived trustworthiness and perceived security as well as perceived privacy was respectively 0.88 and 0.93, indicating a direct and significant correlation between them.

In addition, according to study results, the relationship between electronic trust and the variables of perceived security and perceived trustworthiness was not confirmed in Melli Bank desired state, but the relationship between perceived trustworthiness and perceived security and perceived privacy as well as the relationship between electronic trust and perceived privacy were confirmed with 95% confidence. For the desired state, the correlation coefficient between perceived trustworthiness, perceived security and perceived privacy was respectively 1.02 and 0.90. Also, the correlation coefficient between electronic trust and perceived privacy was estimated at 0.85, indicating a direct and significant correlation between these variables.

KEYWORDS: Electronic Payment, Electronic Trust (e-trust), Structural Equations (Lisrel).

1. INTRODUCTION

One of the undeniable features of development is information technology (IT). With its ever-increasing advances, IT proposes new solutions for more economic and powerful planning and implementation of daily activities of organizations (Connolly and Bannister, 2007). Today, it is not possible to separate IT from organizational planning and development. In the present era, the IT has led to numerous changes and evolutions in different economic, social, cultural and political aspects and has challenged various organizations to change and to achieve more proper position. To this aim, banks, as economic organizations, require to develop IT as well (Gritzalis, 2008). It is axiomatic that as the full mirror of economy, banks have significant roles in collecting small amounts of money and using them in national projects. Prominent achievements have currently been recorded with regard to studies into electronic payment. However, the issue of security and trust and particularly competitive trustworthiness are still the biggest obstacles for online payments (Connolly and Bannister, 2007). Therefore, it is necessary to constantly conduct studies and assessments on online security and style so to improve different elements of electronic trust and to eliminate customers' concerns in addition to develop online payment (Kong and Hung, 2006). The majority of researchers believe that electronic commerce (e-commerce) can only be successful when the public would trust the cyber environment. Thus, the issue of trust is of great importance in e-commerce and should be the subject of studies. Among the major reasons of lack of popularity of e-commerce for individuals and corporations is lack of trust. In fact, customers do not have enough trust in the Internet corporations and thus do not demonstrate a tendency for establishing trades with them (Gefen and Straub, 2003). Not only in short-term, but also in long-term trust is the main issue and main obstacle for identification of potentials of e-commerce in attracting customers (Gauzente, 2004).

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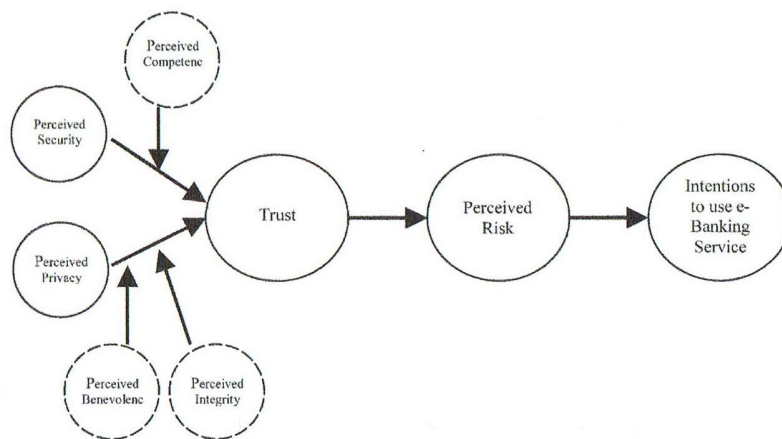
In spite of all advantages of e-commerce for banks, online transactions and communications provide vast grounds for misuse of technology and even criminal acts (Karake, 2002). These problems are not limited to such organizations and are just parts of the expansive problems that information and computer systems all around the world are dealing with. Each year, many organizations are targeted by security-related crimes, from virus attacks to commercial frauds such as stealing sensitive commercial data and confidential data related to credit cards. Such security attacks will impose millions of dollars of loss as well as interruption of activities of corporations. Many reporters and cost consultants have estimated the damage of security-related defects at billions of dollars. Meanwhile, what is more important than having an accurate figure for such losses, is the fact that with the increase in the number of users of information systems, easy access to data and the ever increasing technically knowledgeable users, it can be assumed that the number of misuses of technology and security breaches will increase (Piri and Imani, 2008). Therefore, the present study aims to measure the electronic trust and improve negative indices so to take steps towards the enhancement of electronic trust of customers of Melli Bank with regard to online payments and to pave the grounds for desirable and scientific competition through comparison of the results.

2. Models of Electronic Trust

In order to choose the most appropriate model for an electronic business model, mechanisms of confidence are compared with the interactions between participants. The behavior of a certain model might affect the way users interact with one another, the type of available data, the way data are credited or delivered, the type of environment used, and the proper model of e-commerce. The mechanisms of trust are used to contribute to development of the framework of a model of trust for each model of e-commerce (Pittayachawan, Singh, 2004).

The literature related to trust provides a useful ground for investigating customer's confidence and its consequences with regard to e-commerce. Many researchers mistake confidence with its consequences. This mistake can be solved through proposing an easy model of trust in e-banking. Figure (1) demonstrates such a model. Two main consequences of trustworthiness in e-banking, i.e. customers' understanding of security and privacy, have been identified. Adam et al. (1999) claimed that guaranteeing security and privacy are the fundamental prerequisites of commercial activities that involve sensitive data. They added that customers' concern for privacy and security are the obstacles of e-commerce

Figure 1: Proposed Model of E-trust for E-banking (Yousafzai, Pallister, and Foxall, 2003)



In 1999, Cheskin claimed that the first and most significant stage of creating trust in customers is to offer guarantee to them that their information will remain confidential. Finally, Hofmann et al. (1999) called security and privacy as the key stimuli of e-trust. Belanger et al. (2002) pointed to lack of literature on e-commerce for conceptualization of security and privacy as the distinguishing issues and their relationships. This conceptual ambiguity is usually proposed discussing which type of web feature increases customer trust and how these features are put on the websites. The question regarding if the customers observe these features in their distinguishing aspects or not has remained unanswered.

Environmental control in the field of e-banking deals with customers' concerns about transfer of online data as well as the existing threats against online security, including fear from hackers and data robbers. In addition, given that the concept of security and privacy are different from one person to another, therefore, application of the terms perceived security and perceived privacy have been preferred to determine how the changes in these perceptions affect the level of trust. The impact of these variables on trust has been proposed so that through the customers' perception on trust in banks is balanced.

In one sense, this model does not include everything and it does not attempt to include all possible consequences for trust. It focuses on the attraction of the most important consequences of trust based on different paths resulting from previous studies (Yousafzai, Pallister, and Foxall, 2003).

Definition of Some Parts of the Proposed Model of Trust for Electronic Banking:

- **Perceived security**

Security is defined in terms of a threat that leads to the creation of conditions and events that leave potential impacts on the causes of financial problems related to the data or network resources in the form of loss, disclosure, data modification, deprivation of services or fraud, loss and misuse (Yousafzai, Pallister, Foxall, 2003).

- **Perceived Privacy**

Goodwin (1991) defined customer’s privacy as the capability to control the presence of other people in the environment while having transactions in the market or the behavior of the consumers and distribution of the information related or presented during the transactions or the behavior towards the absent people. Privacy in the model of Figure 2.2 is defined as the customers’ perception about their capability for supervision and monitoring of the information about themselves (Yousafzai, Pallister, Foxall, 2003).

- **Perceived Integrity**

It means an honesty that creates trust and keeping up to one’s commitment (Yousafzai, Pallister, Foxall, 2003).

Complexity in the perception of trust encourages researchers to conduct famous and international study on the issues related to trust in e-commerce. Due to the need to investigate and categorize the concept of trust in e-commerce, different models on trust were created in order to provide a better and more focused understanding on how trust affects the duty aspect of e-commerce.

Ch. Hostin (2007) explored the models of e-trust in the two leading e-commerce journals, including “Journal of E-commerce” and “International Journal of Human-Computer Studies”. Table (1) presents the articles on this issue.

Table 1: Studies on Trust in E-commerce (Hussin, Dahlan, Bahari, 2009)

IJEC	Author	Subject
	Tan and Thoen (2000)	General model of trust for e-commerce
	Lee and Turban (2001)	Model of trust for internet shopping of consumers
	Koufaris, Kambil and Labarbera (2001)	Consumer behavior in web-based trade: an experimental study
	Pavlou (2003)	Acceptance of e-commerce by customers: merging trust and risk with TAM
	Suh and Han (2003)	The impact of customer’s trust and perception of security control on acceptance of e-commerce
	Gupta and Walter (2004)	An experimental study of change of customer’s direction from traditional shopping channels to electronic: an attitude of process of shopping decision
IJHCS	Mahmood, Begchi, and Ford (2004)	Online shopping behavior: experimental study in several countries
	Deleon, and McLean (2004)	Assessment of success of e-commerce: application of the success model of information systems of DeLeon and MacLean
	Miles, Howes and Davies (2002)	A framework for understanding human factors in web-based e-commerce
	Gabner-krauter and Kaluscha	An experimental study into online trust: a vital revision and assessment
	Reigelsberger, Sasse and McCarthy	Obstacles of researcher: assessment of trust in communication via computer
	Corritore, Kracher and Wiedenback Reigelsberge, Sasse and McCarthy	Online trust: concept, evolving subjects, a model Mechanisms of trust: a framework for research and design

3. Research Background (Literature)

Majid Salavati (2004) conducted a study titled “investigation of the factors affecting acceptance of the technology of e-banking in Melli Bank of Iran (central branches of Tehran)” at Mazandaran University. This study attempts to identify different factors affecting the acceptance of e-banking and is performed using a questionnaire on 330 personnel in the central branches of Tehran. Based on the different questionnaires that were gathered about e-banking, technology acceptance and the like, the questionnaire used in this study was organized and was randomly distributed among the personnel of the central branches of Melli bank in Tehran as per educational degree. In order to specify the path of research, different models and theories were used. In addition, the model of technology acceptance was used. This model includes different factors for technology acceptance, as follows:

Mental norm, mental image, perception of easiness, perception of usefulness, purpose of application, relationship with job, quality of outcome, provability of results, voluntarily, actual use of the system.

This study concluded that all the abovementioned factors except for voluntarily influenced the effective application of the system (*Safayi Tadikalayi, Salavati, 2009*).

Another study conducted by Kim, Ferrin, and Rao (2008) titled “a decision-making model based on trust in e-commerce: the role of perceived trust and risk and their consequences”, attempted to answer the following questions: Do trust and risk play important roles in the purchase decisions of customers in e-commerce? What are the consequences of trust and risk on this ground? How trust and risk affect on internet purchases of customers? In order to answer these questions they first developed a theoretical framework in which they used the process of decision-making based on trust for customers who used a particular website for their purchases. Secondly, they tested the proposed model using the technique of modeling of structural equations and collected the data on shopping behavior of customers through the web server. Then, they investigated the hypotheses of the model.

The results of this study indicated that customers’ trust in the internet and their perceived risk have significant impacts on their shopping decisions. The position of the customer with regard to trust, credit, concerns about privacy, concerns about security, quality of the information of websites and the credit of customers have significant impacts on the trust of internet customers of a website (*Kim, Ferrin, Rao, 2008*).

Another study was also conducted by Teo and Liu (2004) titled “customers’ trust in e-commerce in the US, Singapore, and China”, which investigated the history and consequences of consumers’ trust in these countries. The results indicated that the credit and trustworthiness of the system of an internet seller and the position of the customer towards trust have positive correlation with customer trust. Customer trust has also positive correlation with attitude and has a negative correlation with perceived risk. Eventually, the results of the study were discussed (*Teo and Liu, 2004*).

Two main criteria specifically ease of application in addition to usefulness have been investigated during the past decades to determine the acceptance of different data systems. However, these criteria might not fully explain the behavior of consumers in an emerging environment such as the internet banking. In a study conducted by Suh and Han (2002) titled “the impact of trust on the acceptance of internet banking by customers”, trust has been considered another criteria that affects the acceptance of e-banking. This study was done on 845 cases on the internet and studies the behavior of users of e-banking. The results of analysis and statistical studies using modeling of structural equations indicated that trust has a significant impact on the acceptance of e-banking (*Suh, Han, 2002*).

The study conducted by Cobitt, Thanasankit, & Yi (2002) titled “trust and e-commerce: a study on customer’s perceptions”, identified a number of key factors related to trust in B2C and proposed a framework that is based on a series of fundamental relationships between these factors. The findings demonstrated that people are more tended to do their shopping on the web if they perceive a high degree of trust in e-commerce and have more experience in working on the web. The levels of customers’ trust might be affected by the level of perceived trend in the market, quality of website, technical trust and experience in using the web. It seems that those with a high level of perceived website quality show higher level of perceived market trend and trust in e-commerce. In addition, those with higher levels of trust in e-commerce are more probable to participate in e-commerce. The findings complete the previous findings about e-commerce (*Cobitt, Thanasankit, and Yi, 2003*).

A study was also conducted by Connolly and Bannister (2008) titled “factors affecting trust of Irish customers in e-shopping”. This study used a measurement tool that was already validated to investigate the existence and significance of certain factors that were assumed to forecast customer trust in e-shopping in Ireland. 858 individuals were studied using the study tools, focusing on a number of key structures that were identified in the literature as potential forecasting factors of trust. The results indicated that trust of Irish customers in the internet shopping is rooted in certain factors. The first one is perceived integrity of the seller. The second factor is the seller’s perceived trustworthiness. The first factor includes social consequences of trust, while the second one includes the technical ones (*Connolly and Bannister, 2008*).

4. RESEARCH METHOD

4.1 Type of Research Method

The present study is an applied research in terms of its objectives. It is causative in terms of the method of study and is considered a descriptive-survey in terms of the nature and method of dealing with the research questions. In addition, it is based on statistics to perceive, explain, analyze, assess, and investigate the accuracy of collected data.

4.3 Statistical Population & Sample

The statistical population of this study includes all customers of Melli Bank who have used the electronic payment at least once within the two-month period under study. Given that the size of statistical population is not exactly specific in this study, a formula needs to be used to determine the sample size in an unlimited population:

$$n = \frac{Z_{\alpha/2}^2 \times pq}{E^2}$$

$Z_{\frac{\alpha}{2}}$: is the normal change corresponding to the confidence level of $(\alpha-1)$. This study has the confidence level of 95% and it is equal to 1.96.

P : is the ratio of population that has the feature of using electronic payment of the bank at least once within the two-month period under study.

Q : is the ratio of the population that does not have the feature of using electronic payment of the bank at least once with the two-month period under study.

E : is the acceptable error.

In the above formula, in order to determine the standard deviation of population, a primary sampling was used. Therefore, the study questionnaire was randomly and separately distributed among 50 customers who have used the service of electronic payment of Melli Bank. Given the difference of the measured standard deviation, the value of the standard deviation of the questionnaire through a supplementary sample was obtained 0.61 for the Melli Bank. The estimated sample size was also calculated as follows:

$$n = \frac{(1.96^2) \times (0.62 \times 0.38)}{0.067^2} \cong 202$$

4.4 Data Gathering Tool

In order to collect the data, the questionnaire designed by the researcher was used. In order to design the questionnaire, first library studies of the models related to the issue under study was used. Among the related models, the model proposed by Yousafzai et al. (2008) was selected and the variables were extracted as follows:

- Trust
- Perceived security
- Perceived privacy
- Perceived ability
- Perceived integrity
- Perceived benevolence

In order to localize the variables, 20 experts in the field of banking were asked through a questionnaire to approve or disapprove the variables or to add new variables to the above list. At this stage, all the above variables were confirmed by the experts and no extra variable was added.

Given that this model was already used by Yousafzai et al. (2009) and the indices related to variables were stated in their article, thus the indices used in that article were used to design the questionnaire. In order to determine the reliability of the primary questionnaire (42 questions), it was given to experts and consultants. This led to elimination of some questions and revision of some others. The revised questionnaire was presented again to the experts and was approved. Then, it was offered to the experts of Melli Bank in order to confirm its content to be uploaded on the website. Since the website had certain limitations in terms of the number of questions, the questionnaire was revised again and eventually a questionnaire including 32 questions was uploaded on Melli Bank’s website.

4.4. Reliability & Validity of Questionnaire

Given that the questionnaire used in this study was designed by the researcher, its validity was confirmed by the university supervisor and experts of Melli bank. However, in order to determine the reliability, Chronbach’s alpha and SPSS software were also used. The value of alpha for the entire questionnaire in both status quo as well as desire status was obtained as stated in Table (2), thus the reliability of the questionnaire was confirmed.

Table 2: Obtained Values for Chronbach’s Alpha Coefficient

No	Questionnaire Title	Chronbach’s Alpha Coefficient
1	desire status	0.923
2	status quo	0.938

Research Findings

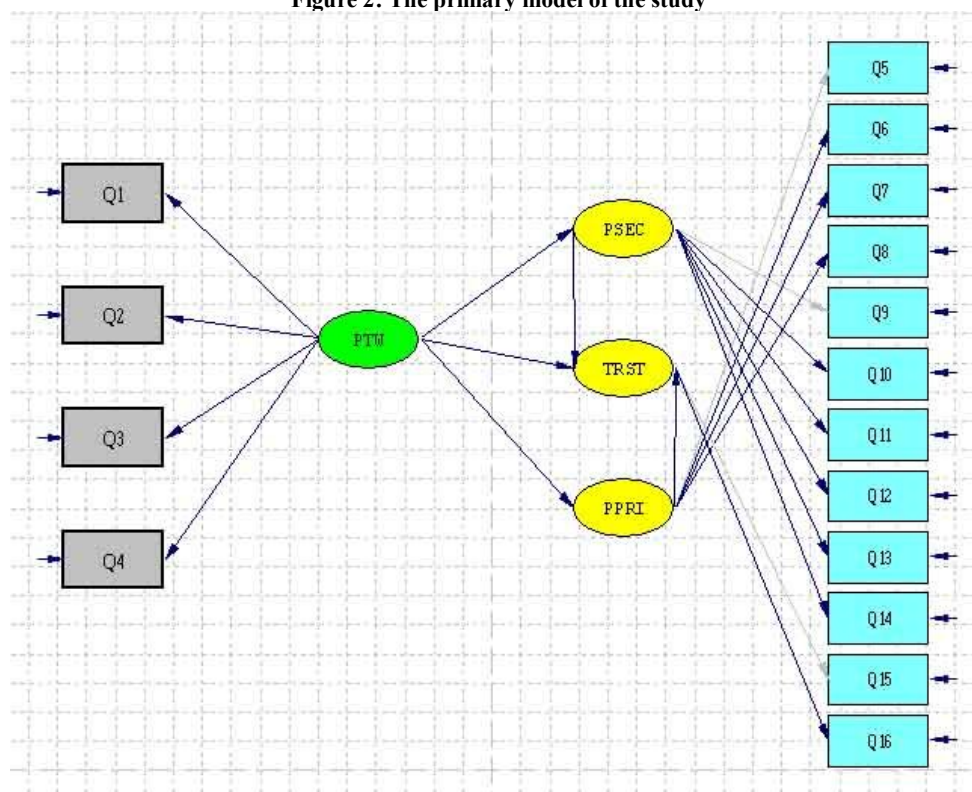
As it was mentioned before, among the models related to electronic trust, this study selected the model proposed by Yousafzai et al. (2008) and the related variables were extracted:

- Trust
- Perceived security

- Perceived privacy
- Perceived ability
- Perceived integrity
- Perceived benevolence

Based on this, the primary model of the study is as follows:

Figure 2: The primary model of the study



In this model, the variables of electronic trust, perceived security, perceived privacy and perceived trustworthiness are introduced as four latent variables of the model. The perceived trustworthiness includes three variables of perceived ability, perceived integrity and perceived benevolence. Based on the proposed model, the relationship between the study variables can be demonstrated as the following structural equations:

$$TRST = \alpha + \beta_1 PTW + \beta_2 PSEC + \beta_3 PPRI$$

$$PSEC = \gamma + \mu_1 PTW$$

$$PPRI = \delta + \mu_2 PTW$$

Since this model was already used by Yousafzai *et al.* (2009) and the indices related to variables were mentioned in their article, thus the indices used in that article were used to design the primary questionnaire. After confirmation of the reliability and validity of the questionnaire, eventually a questionnaire containing 32 questions (16 questions to study the status quo and 16 questions to study the desired status) were confirmed by the Bank experts and were uploaded on the website of Melli Bank.

5.1 Examination of the Status Quo of Melli Bank Based on the Proposed Model

5.1.1 Examination of the Significance of the Correlation between Variables of the Model based on t-test

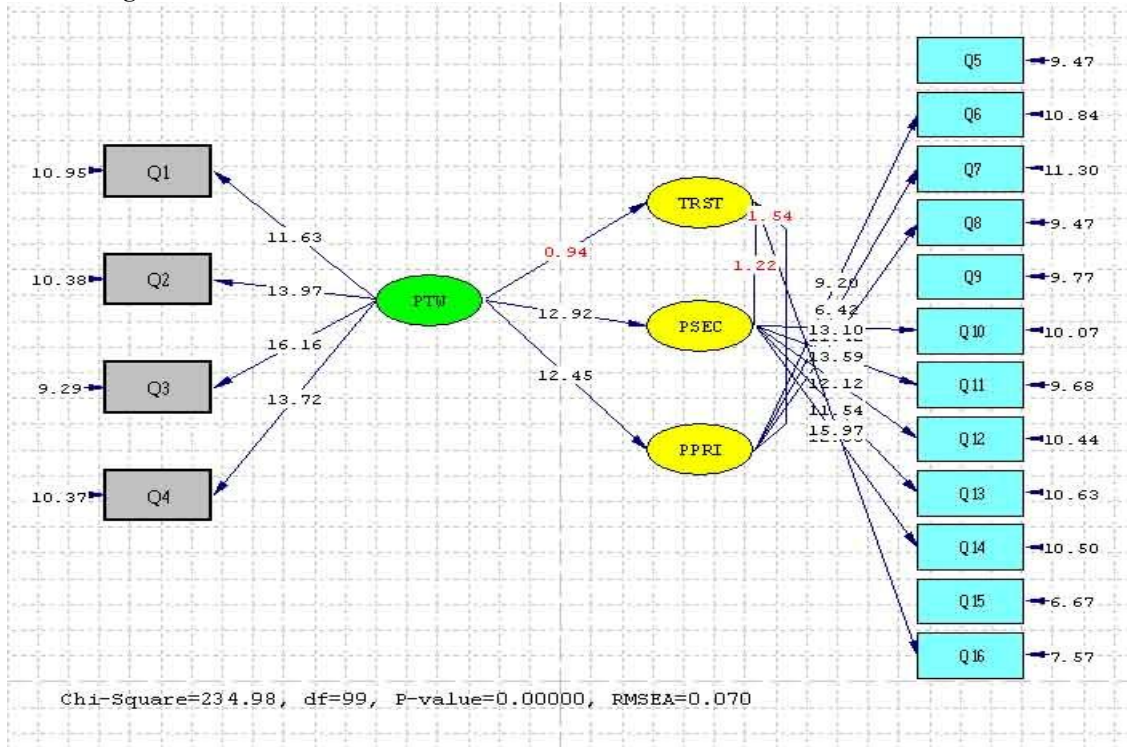
Based on the results obtained in Figure 2, the correlation between the variable of electronic trust and the variables of perceived security, perceived privacy, and perceived trustworthiness is rejected in the status quo due to the fact that the value of estimated t statistic is lower than the critical value of t statistic at the significant level of 95% (1.96). Therefore, in the current situation, the significant correlation between the variable of electronic trust and the variables of perceived security, perceived privacy, and perceived trustworthiness is not confirmed. However, in the status quo, the correlation

between the variable of perceived trustworthiness and the variables of perceived security and perceived privacy is confirmed at the confidence level of 95%. The range considered for RMSEA index is as follows:

- A. RMSEA < 0.05 good fit
- B. 0.05 < RMSEA < 0.08 acceptable fit
- C. RMSEA > 0.10 not acceptable fit

The value of RMSEA index in this study is 0.07, indicating that the model of the study is in the acceptable range. The value of calculated statistic for the t-test (234.98) is higher than the critical value, confirming the study model.

Figure 3: t Statistic related to Correlation between the Latent Variables of the Model



5.1.2 Correlation Coefficient between Latent Variables of the Model

Given that the correlation between the variable of perceived trustworthiness and the variables of perceived security and perceived privacy is confirmed at the confidence level of 95%, the impact of these variables can be interpreted according to the following Figure. According to the findings, perceived trustworthiness has significant impact on perceived privacy and perceived security, with the correlation coefficients of 0.93 and 0.88 respectively.

5.2. Examination of the Desired State of Melli Bank Based on the Proposed Model

5.2.1 Examination of the Significance of the Correlation between Variables of the Model based on the t-test

Based on the results obtained in Figure 4, the correlation between the variable of electronic trust and the variables of perceived security and perceived trustworthiness is rejected in the desired state due to the fact that the estimated t statistic value is lower than the critical value of t statistic at the significance level of 95% (1.96). Therefore, in the desired state, the significant correlation between the variable of electronic trust and the variables of perceived security and perceived trustworthiness is not confirmed. However, in the desired state, the correlation between the variable of perceived trustworthiness and the variables of perceived security and perceived privacy and the correlation between electronic trust and perceived privacy is confirmed at the confidence level of 95%.

Figure 4: Examination of the Correlation Coefficient between the Variables of the Model

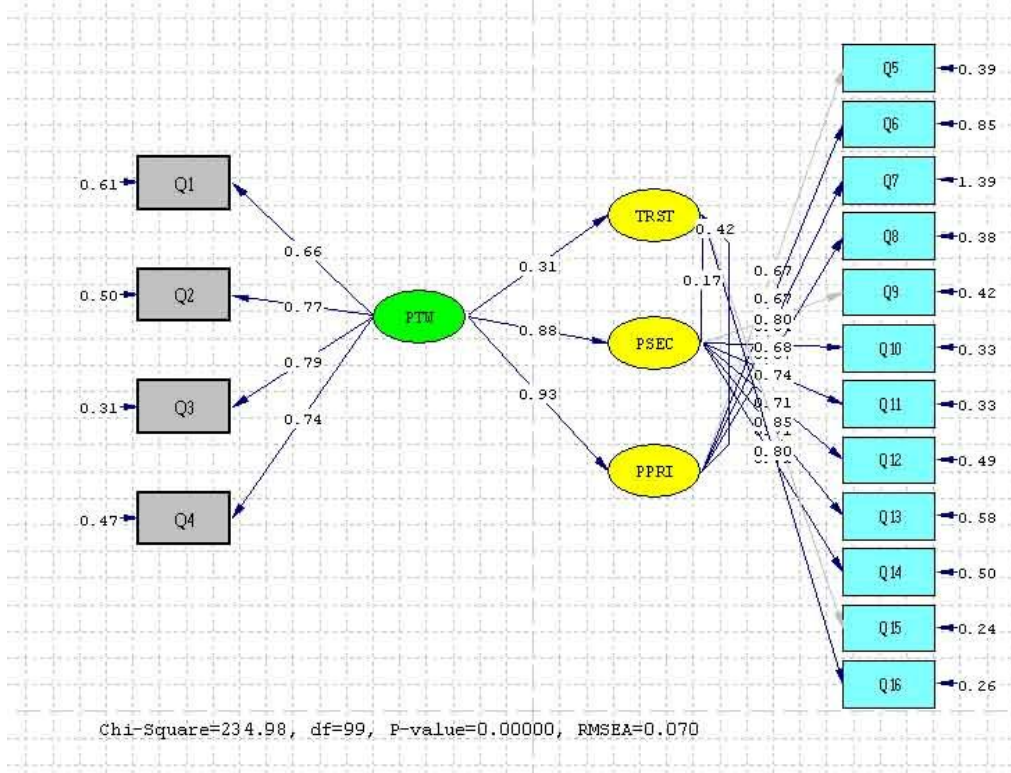
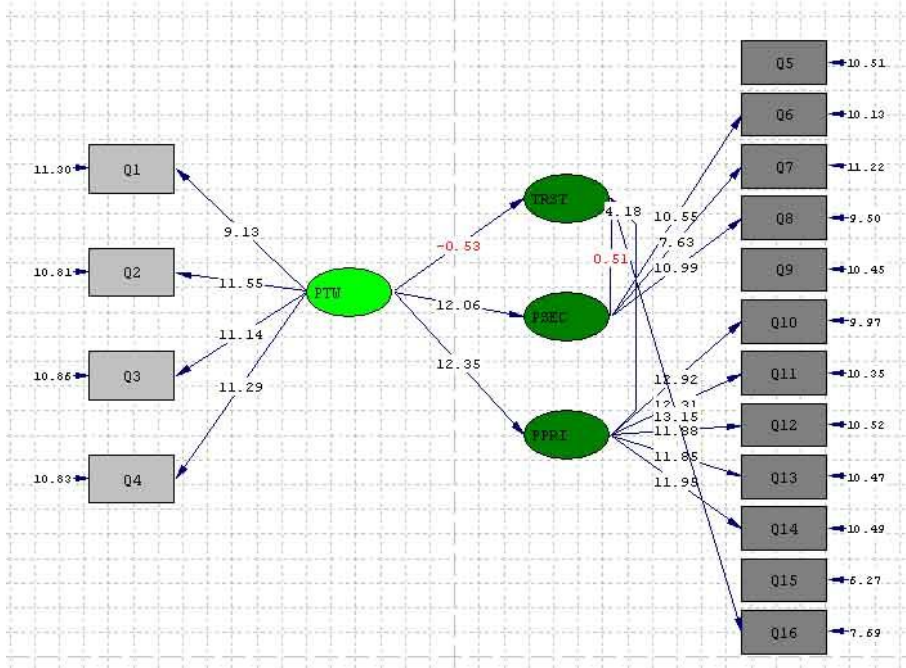


Figure 5: t Statistic related to Correlation between the Latent Variables of the Model

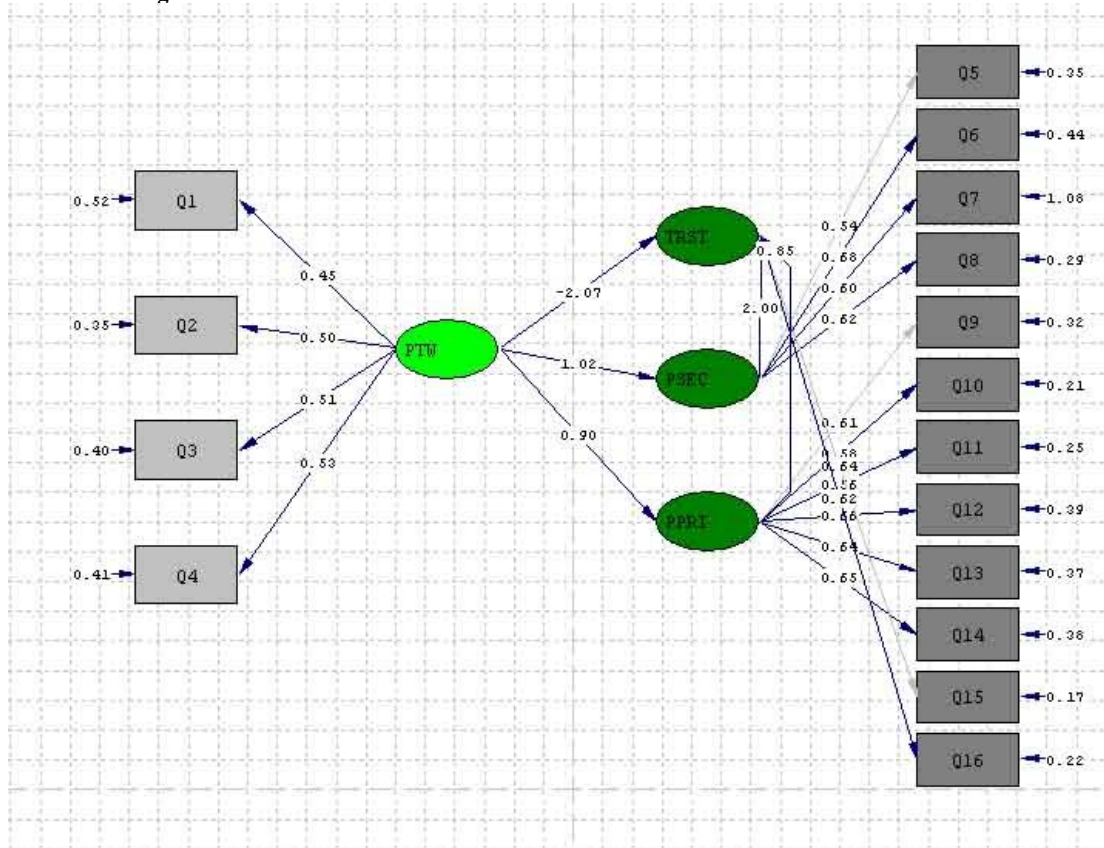


5.2.2 Correlation Coefficient between the Latent Variables of the Model

In view of the fact that the correlation between the variable of perceived trustworthiness and the variables of perceived security and perceived privacy is confirmed at the confidence level of 95%, the impact of these variables can be

interpreted according to the following Figure. According to the findings, perceived trustworthiness has significant impact on perceived privacy and perceived security, with the correlation coefficients of 1.02 and 0.90 respectively. In addition, the correlation between electronic trust and perceived privacy is confirmed at the confidence level of 95% and with the correlation coefficient of 0.85.

Figure 6: Examination of Correlation Coefficient between the Variables of the Model



6. Conclusion and Suggestions

The comparison of the status quo as well as the desired state of Melli Bank indicates that there is no significant correlation between perceived security, perceived privacy, perceived trustworthiness and electronic trust in the status quo. However, based on the findings of this study, in the desired state, perceived privacy has left significant impact on the electronic trust of customers. Strengthening of the factors affecting privacy can lead to establishment and enhancement of electronic trust in customers. Therefore, it is suggested that banks provide necessary clarification and transparencies about the parties that have access to the payment data of the customers. Also, the system flexibility and sharing of users’ data must be enhanced and on the whole a secure environment needs to be provided in the cyber environment of electronic payment for users and customers.

Although perceived trustworthiness does not have a direct significant impact on the electronic trust, it indirectly influences electronic trust through perceived security and privacy. Thus, it is recommended that measures be adopted so that customers would have round the clock access to the services of internet payment so that they can manage their transactions on time and at the minimum required time and in case of unpermitted transactions, the customers must be given the assurance that such transactions will be modified in the shortest time possible.

Comparing Present Results to Results from Previous Studies:

Results from the study show that there is a meaningful relationship between perceived privacy and electronic trust, in desire status. It is also confirmed by Yousafzai et al's (2009) study. Although the relationship between perceived trustworthiness as well as perceived security and electronic trust was not found in this study, Yousafzai et al's study indicates that there is a meaningful relationship between perceived security and electronic trust as well as perceived trustworthiness and electronic

trust. The difference can result from various factors, yet it is obvious that the two studies are conducted in completely different environments, so they brought about different results.

7. REFERENCES

1. Azar, A. & Momeni, M. (2008), *Statistics and its application in management*, SAMT Publication, 11th edition
2. Hafiznia, M. (2009), *An introduction to research methodology in humanities*, SAMT publication
3. Hasani, F., Soltani, S., & Zorabiye, F. (2008), *Management of e-banking*, Sabzan Publication, 1st edition
4. Hanafizadeh, P., Rezaee, M. (2011) *e-commerce*. Torment Publication. 5th edition.
5. Khodadad Hosseini, S.H., Shirkhodayee, M., Keronai, A. (2009). The factors affecting customer trust in e-commerce (B2C model) *Quarterly of teacher of humanities*. Year 13, issue 2
6. Sarmad, Z., Bazargan, A., Hejazi, E. *Methodology of research in behavioral sciences*. Agah publication. 17th edition
7. Shakeri, A., Charsooti, S.K. (2007) *investigation of the vital factors of success in implementation of e-banking in Iran*. MA thesis
8. Shokhmakro Bonab, M., Khodadad Hosseini, S .H. (2005) *Investigation of the factors affecting customer's trust in e-commerce*, MA thesis. Tarbiat Modares University
9. Salavati, M., Safayi Tadikalani, A. (2004) *investigation of the factors affecting acceptance of the technology of electronic banking in the Iranian Melli Bank (central branches of Tehran)*. MA thesis, Mazandaran University
10. Taleb, S., Gholipour Sooteh, R. (2009) *Investigation of the effect of e-banking on customer satisfaction in Eqtesad Novin Bank*. MA thesis. University of Tehran
11. Abbasinezhad, H., Mehrmoosh, M. (2010) *E-banking*. SAMT publication, 3rd edition.
12. Azizi, S. (2004) *Competitive advantage in e-commerce*. *Tadbir Monthly* 14 (143)
13. Latifi, F., Mosen Kashani, N. (2010) *Electronic trust: investigation of role of experience of internet shopping and knowledge of customers with regard to application of data and mechanisms of security*. *Quarterly of Commercial Studies* 55:235-267
14. Madhooshi, M., Zali, M., and Amani, M.R. (2005) *Assessment of the features of different systems of electronic payment from the perspective of Iranian users*. *Humanities and Social Sciences Research journal* 5 (19)
15. Mozhdai, N., Jalali, A.A, and Mehraban. (2007) *Architecture of models of electronic business*, Fourth National Conference of E-Commerce, Tehran: Office of Development of E-commerce. Ministry of Commerce
16. Noroozi, M.R., Sarighalam, N. (2009) *Trust in electronic commerce*. *Social, Economic, Scientific, and Cultural monthly* 110: 100-108.
17. Hashemian, M., Isaee, B. (2010) *Analysis of the success factors of acceptance of electronic banking with competitive advantage attitude (Case study: Saman Bank)*. MA thesis, Mehr Alborz Institution of higher Education
18. Chang, L., Hu, J., LI, L., *Flexible supply chain performance measurement*, IEEE, 2006, PP. 1-5.
19. Connolly, R. and Bannister, F., *Factors influencing Irish consumers' trust in internet shopping*, *management research news*, 2008, Vol.31, No.5, pp.39-58.
20. Corbitt, B., Thanasankit, T. and Yi, H., *Trust and e-commerce: a study of consumer perceptions*, *electronic commerce research and application*, 2003, pp. 203-215.
21. Gunasekaran, A., Lai, K. h., Cheng, T. C., *Responsive supply chain: A competitive strategy in a networked economy*, *The international journal of management science*, 2008, No.36, pp. 549-564.
22. Gustavsson, m. and Johansson, A., *Consumer trust in e-commerce*, Bachelor Dissertation of Kristianstad university, International business program, 2006, pp. 1-80.
23. Hussin, A., Dahlan, H. and bahari, M., *A consumer perception trust model for e-commerce*, technology university of Malaysia, 2009, pp.1-159.