Evaluating the Effect of Customers’ Trust and Attraction in Electronic Banking: Examining the Trust- Relationship Commitment Model (TRC)

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Abstract: The main aim of the research is to determine the factors which affect the electronic banking customers’ commitment. Accordingly, a model of Commitment-Relation-Trust (TRC) has been fitted with the data accumulated from the subject statistical population. The main approach of this research is the applied approach with the causal strategy. To accumulate the data, standardized questionnaires have been used. The Agricultural Banks of Tabriz are the statistical population of the research in which a sample of 185 customers from these banks, who were chosen in clusters, was studied. After analyzing the confirmed cause and drawing the route diagram by LISREL Software, it was realized that the following variables had direct and meaningful effects: Relation on trust, relation on attraction, common value on the commitment, attraction on commitment and trust on commitment. But according to the accumulated data from the statistical population, the direct effect of common value on the customers’ trust and the direct effect of the opportunistic behavior on the customers’ trust were not conformed.

Key words: Attraction, Trust, Commitment, Opportunistic Behavior, TRC (Trust- Relationship Commitment Model), Agricultural Bank of Iran.

INTRODUCTION

Information service is an aspect of service in which the information is the first value transacted between two parties such as a buyer and a seller. The researchers conducted in electronic marketing and electronic commerce is increased and thus the service quality in the electronic environment has been considered as an important factor in success or failure in electronic commerce. (Santos, 2003). New researches have been conducted on self-serving (Such as the Automatic Transfer Machines) with respect to the electronic business, emphasize the technological applications. (Dabholkar et al., 2003), thus, the managers put much emphasis on the improving the utilized technology to satisfy their customers. However, the managers who replace the traditional business with electronic business should provide the technical infrastructures and also determine suitable aims and strategies. Moreover, they should invest suitably on the cultural and thinking grounds amongst the customers and electronic service providers and their training. (Kassim & Abdulla, 2006). Long term survival and profitability in the electronic market requires the company to admit the trouble of the customers’ more commitment and trustworthiness. To cope with this trouble, the university authorities and performers have commenced the centralization on the theory of the traditional communicative marketing which can also be successfully utilized in the electronic environment. (Keating & et al., 2003). The active managers of the banking industry of our country have also increasingly tended more to utilize the self-serving equipment especially the ATMs to avoid too much crowd in the bank branches. Since the banking industry was held by the state section exclusively to some extent, and thus there were little competition amongst the banks, the managers have not endeavored much to increase the customers’ commitment and trustworthiness and have not provided any programs to increase their electronic services quality. However, today, according to the Article 44 and reduction of the state managed services in the banking arena, and growth of the private banking, the need for more attention to continuing the relation with the current customers is completely felt. This significant aim, will be
met when the active managers in the banking industry, conduct some researches to identify the effective factors on increasing the electronic service quality and consider the factors which increase the customers’ satisfaction to increase the customers’ commitment. Up to the time being, no valuable research has been done to identify the factors which affect the electronic services quality. The authorities of this section have constantly encountered with the issue that on what factors they should invest the commitments of the customers who receive such services. This research endeavors to solve this issue through identifying the effectors factors on the customers’ commitments in this section.

**Literature Review:**

E-banking services presented banks with a more economical substitute for brick and mortar branches. In fact, only 20 percent of banks in the Middle East region (including the Gulf Cooperation Council or GCC countries) provide full transactional e-capacity. However, this number is expected to rise as more banks are spending between 25-30 percent of their information technology (IT) budgets on internet and web-related banking technologies (Kassim, 2005). In fact, the number of internet users in the Middle East has surged to 63.24 million in September 2010 (InternetWorldStats, 2011). Despite these IT developments, there are various psychological and behavioral issues such as distrust in the system (e.g. Aladwani, 2001; Black et al., 2004; Flavian et al., 2003; Stewart, 1999), impersonal treatment (e.g. Flavian et al., 2004), a perceived lack of security (e.g. Black et al., 2001; Sathye, 1999; Sugathi, Balacandher and Balachandran, 2001), privacy (e.g. Mukherjee and Nath, 2003; Swaminathan et al., 1999), ethics (e.g. Mukherjee and Nath, 2003), ease of use (e.g. Sathye, 1999; Wang et al., 2003), openness, etc. that may appear to impede the growth of internet banking. Indeed, a customer’s experience with a company is highly influenced by the environment in which it occurs. Thus, the internet has become a major challenge for the banking business, where customer perception has become essential for its success. Possible explanations could be that internet banking might result in lower switching barriers, more difficult cross-selling activities and that information about customers might become harder to obtain as well as banks might have to compete on a product by product basis (Mols, 1999). Indeed, the internet is the most important distribution channel for financial services. Against this backdrop, the banking industry has been attempting to gather more and more information on aspects that induce people to do their banking over the internet (Gerrard and Cunningham, 2003; Sathye, 1999). Indeed, banking institutions often attempt to make their services more tangible by using different strategies to distinguish them from their competitors. The problem of making services more tangible is particularly complex when they are provided, not in a physical premise, with its own atmosphere, design or personal contact, but over the internet. For example, Wells Fargo bank, tried to force its customers to use PC-based banking services, without much success. Their customers became dissatisfied, and the bank’s profit eroded. Thus, the method by which customers and companies communicate is an integral part of creating an experience (Prahalad and Ramaswamy, 2000). The more environments a company can provide, the richer its customers’ experiences are likely to be. McKnight et al. (2002) suggest that “Disposition to Trust”, “Institution-based Trust”, “Perceived Site Quality” affect customers’ trusting beliefs in the e-commerce context. In addition, they suggest that “Disposition to Trust”, “Institution-based Trust”, “Trusting Beliefs” and “Perceived Site Quality” affect customers’ intention to engage in trust related behaviors with a specific web vendor. They also suggest that “General Web Experience” affect customers’ perceptions of the institutional environment. Similar to McKnight et al., Gefen et al. (2003) suggest that “Institution-based Trust” affect customers’ trust with an e-vendor. However, they separated “Institution-based Trust” into two constructs namely “Structural Assurance” and “Situational Normality” in their research. In addition, they suggest “Knowledge-based trust” is an antecedent of trust; it defined as familiarity with the e-vendor. Contrary to the previous research (Gefen, 2000); “Knowledge-based Trust” did not significant increase trust in an e-vendor. Gefen et al. believed that the effect was mediated by other constructs. They still believe that familiarity does increase trust, but this effect is channeled through other constructs only. Similar to McKnight et al., they suggest trust in the e-vendor will affect customers’ intention to shop online.

**The Theoretical Framework of the Research:**

In the marketing literature, communicative, concept commitment, trust and attraction, play a significant role. Anyhow, the relation amongst commitment, trust and attraction are not clear in the commercial relations. Although there have been much studies done with this respect, it’s not clear how these concept do their duties. Kassim and Abdullah, reviewed the literature related to the electronic banking and then designed a framework which has two specifications. First, in this framework, trust and attraction are related to commitment. Second, the common value, opportunistic behavior and relationships are related to trust and ultimately to attraction. The main variables used in the model are:
• **Attraction:**
  The electronic services are attractive when the service provider offers it with low prices and devises a solution to facilitate the service receiving for the customers. Also, the banking electronic services should be accessible with high credibility amongst the people. Attraction means that some things exist which indicate that the service providers are eager to attract and have the customers. According to what was expressed, attraction may be used in the financial, technological and social structures. As an instance, in the electronic banking, the expenses may be much reduced through utilization of the electronic technologies. Regarding the offered announcements, the customers tend more to pay the least expenses for the electronic services. Moreover, the customers have not used the electronic services probably because the electronic services have not been easily usable. As an instance, the customers will come to result that they may not achieve their aims or their intentions through using the electronic services of the banking industry. In fact, easy utilization is one of the main necessities for registering and having the new users. Generally, if there is an attraction between two groups of user and electronic bank, the relation will be stabilized and improved. As an instance, too much fame of the service provider may also be a factor for utilizing the electronic banking services. In fact, understanding the role of attraction in decision making aimed at customers’ commitment is one of the key factors of service marketing.

• **Trust:**
  The customers’ trust in the electronic services means, the service provider should devise guidelines so the customers may take fewer risks in receiving the services and have a better experience in utilizing the electronic services. Also, the service providers should devise programs, to be able to offer the electronic services professionally. Finally, they should utilize the best possible technologies to offer the electronic services. Trust is one of the important structures in analyzing the transactional relationships. As an instance, in the commitment – trust relationships in the marketing literature, trust is more conceptual and provides certainty in the relationships which results in more reliance and more transactions between the parties. In fact, there is trust in personal level and also in the organizational level. Moreover, when trust is applied as one of the aspects of technology admission, it may play its role in enthusiasm for using the product or in all information transactions and cash amounts. Trust can be obtained through cooperation in settling the disputes and ambiguities and also by balancing the awareness and expectations.

• **Relationships:**
  To improve the relationships, the service providers should have a regular control on the way the electronic services are offered and offer unrivaled information to the customers in the field of electronic services (Kassim & Abdulla, 2006). The answering speed and information quality are the factors which affect the ability of the website to arrange the serve the online customers’ needs. Providing a remarkable environment for the banking services customers attracts them to utilize the electronic services. Therefore, the relationships are expected to be effective in attracting the customers.

• **Opportunistic Behavior:**
  The opportunistic behavior in this model means, the service providers should be honest in offering the electronic services and speed up answering the customers. Also the service providers should try to increase the quality of the services offered to the customers.

• **Common Values:**
  Common values in this research means, providing a highly secure network by the electronic service providers, so that the accounts are safe and immune. Also the electronic service providers should utilize appropriate technologies to protect the customers’ confidential information from being disclosed to the public (Keep them in secrecy) and observe the moralities.

• **Commitment:**
  Commitment is usually expressed as the tendency to save the valuable relations amongst the parties. The customers commit themselves to the service providers because they have attracted the customers’ trust and offer the services as they needed. Meantime, the service providers generate values for the customers too. Therefore, to reach the commitment, the strategies of the organization should be planned customer centered, long term and on the basis of the benefits of the mutual relationships. That’s how the customer is committed to the bank and tends to save his/her relationship with the service provider. However, satisfaction does not merely mean the commitment and dependency of the customer to the bank, but the relationship and cooperation is continued.

**The Conceptual Model of the Research:**

The conceptual model used in this research is the same electronic banking model which was designed and tested by Kassim and Abdullah in 2006 in Qatar. The result of this research is published in the form of an ISI
Article in the credible Journal of International Banking and is accessible through Emerald Database. In this research they endeavored the model is fitted to the data accumulated from the research statistical population. The subject conceptual model is offered as follows:

![Conceptual model](image)

**Methodology:**

According to requirements of the research process, the approach of this research is Applied, its strategy is Causal, its methodological aim is Testing and its data accumulation tool is the Standard Questionnaire. This research is deemed as one of the correlation researches using the “Causal Model”. The analysis techniques of the structural equations, which are developed for completion of the route analysis for determining the route of causes between the variables and identifying and controlling the measurement errors, measures the relations between the bundles of the “Observed variables” with fewer hidden variables by performing the “Confirmatory Factor Analysis” in the first stage and estimates the causal relations supposed amongst the variables in the form of structural function model by narrative confirmation of the latent variables measurement models. This research has seven hypotheses which are as follows:

- **H1:** There is a positive relation between the common value and commitment in the electronic banking.
- **H2:** There is a positive relation between the common value and trust in the electronic banking.
- **H3:** There is a positive relation between the relationships and trust in the electronic banking.
- **H4:** There is a positive relation between the relationships and attracting the customer in the electronic banking.
- **H5:** There is a positive relation between the opportunistic behavior and trust in the electronic banking.
- **H6:** There is a positive relation between the trust and commitment in the electronic banking.
- **H7:** There is a positive relation between the attraction and commitment in the electronic banking.

The asymmetry between the offered information (Ba, 2001; Bejou et al., 1998) and lack of suitable and adequate controls in such systems (Clay and Strauss, 2000) can be one of the effective factors on the customers’ trust at the time of receiving the services. Therefore, high levels of risks in opportunistic behaviors in electronic banking can result in low levels of trust in this industry. Thus, we propose the following hypothesis.

- **H5:** There is a positive relation between the opportunistic behavior and trust in the electronic banking.

The long term relationships between the parties can increase the business duration amongst the groups and undoubtedly will increase the trust and commitment in the parties’ relationships. Regarding the categories of attraction and commitment and according to Mukherjee and Nath’s (2003) findings with respect to the relativity in the marketing canals, we have declared the following hypotheses: (Gronroos, 2001; Morgan and Hunt, 1994).

- **H6:** There is a positive relation between the trust and commitment in the electronic banking.
- **H7:** There is a positive relation between the attraction and commitment in the electronic banking.

**The Local Realm of the Research (Statistical Population) and the Sampling Method:**

Due to too much expenses of census, we have used sampling method in this research to accumulate the data. Amongst the sampling methods, the cluster sampling method is chosen. The researchers have passed the following stages for choosing the cluster sample:

1- The researcher initially has calculated the number of samples required for the research through the scientific formulas. Regarding the fact that the research variables were qualitative, the minimum amount of samples from the research statistical population is calculated using the following formula.

\[
\frac{n}{\xi} = \frac{P(1-P)Z^2a^2}{(1.74 + 1.74)} = \frac{0.25 + 0.07}{130} = 130
\]

In this formula, the maximum variance was deemed 50%, estimate error amount (a) 8 percent and the limitation error (The precision required for the census) (ξ), 7 percent. Also in the said formula, p was deemed as 50 percent because in a research where we cannot obtain a better estimation for p, we can deem
it as equal to 50% and count the sample number. So, the sample number will be in its maximum possible amount. Therefore, the minimum quantity required for this research is 130 samples.

2- The Agricultural Banks in Tabriz City which have Electronic Services (Only ATM) are enlisted and each one of them are designated a code.

3- The four banks are chosen randomly for sampling.

4- Afterwards, 200 questionnaires, regarding the credit of each one of these four banks (Considering the financial resources of the bank) as the weight, are divided in 4 groups.

5- Now, there are a specific number of questionnaires allocated for each bank. The list of electronic service users are exploited for each bank and then the related sample of each bank are chosen randomly using the table of random numbers.

6- The tool for data accumulating in this research is a standardized questionnaire which was used first by Kassim et al in 2006 in Qatar. This questionnaire contain 19 questions, each group of which are studied for measuring 6 main variables of this research. This tool is translated in Farsi in a parallel status and then has been used.

The Method of Analyzing the Data:

To analyze the data in this model, the model finding method of Structural Equation Model (SEM) was used. Model finding of the structural equations, is a very general and strong multi-variable analysis technique rooted from the multi-variable regression and in other words it is the expansion of the linear model which enables the researchers to simultaneously examine a group of regression equations. Model finding of the structural equation is a general statistical approach for examining the hypotheses about the relationships between the observed variables and latent variables which may be called structural analysis of the covariance, causal model finding or LISREL. This method is a blend of regression, route analysis and the confirmatory causal analysis. In this method there are two variable groups: the latent variable and the observed or obvious variables. The latent variable cannot be directly observed and should be evaluated through the observed variables. The observed variables are the meters through which the latent variables should be measured or evaluated. The aforesaid variables are also divided into two groups of out-breeding and in-breeding. The out-breeding and in-breeding variables respectively mean the independent variables and dependent variables in the experimental and non-experimental researches. Exploiting the structural equations, we can simultaneously measure and investigate two structural models. Measuring model or the confirmatory causal analysis section specifies that how the latent variables or the supposed structures are measured in the form of some observable variables. The section of structural model or the structural function, determines the causal relations between the latent variables.

Data Analysis:

The basis of analysis in LISREL program is based in the Covariance matrix amongst the obvious and latent variables. Table 1 illustrates the covariance matrix between the latent variables of the research.

<table>
<thead>
<tr>
<th>Latent variables</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Trust</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2- Attraction</td>
<td>0/57</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3- Commitment</td>
<td>0/51</td>
<td>0/51</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4- Common value</td>
<td>0/20</td>
<td>0/26</td>
<td>0/28</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5- Opportunistic</td>
<td>0/29</td>
<td>0/45</td>
<td>0/42</td>
<td>0/43</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6- Relationships</td>
<td>0/42</td>
<td>0/42</td>
<td>0/58</td>
<td>0/27</td>
<td>0/55</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 2: Shows the direct effects of the out-breeding latent variables on the in-breeding variables (γ -GAMMA).

<table>
<thead>
<tr>
<th>Route Direction</th>
<th>Parameter estimation</th>
<th>Standardized Parameter</th>
<th>Standard error of the estimation</th>
<th>T-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>From the common value on: Trust</td>
<td>0/075</td>
<td>0/075</td>
<td>0/06</td>
<td>-1</td>
</tr>
<tr>
<td>From the opportunistic behavior on: Trust</td>
<td>0/051</td>
<td>0/051</td>
<td>0/90</td>
<td>-0/59</td>
</tr>
<tr>
<td>From relationship on: Attraction</td>
<td>0/42</td>
<td>0/42</td>
<td>0/70</td>
<td>5/46</td>
</tr>
<tr>
<td>From the common value on: Commitment</td>
<td>0/17</td>
<td>0/17</td>
<td>0/8</td>
<td>2/08</td>
</tr>
<tr>
<td>From relationship on: Trust</td>
<td>0/37</td>
<td>0/37</td>
<td>0/7</td>
<td>2/08</td>
</tr>
</tbody>
</table>

Fitness Indexes of the Model:

In the Structural Equations Model Finding using the LISREL software, the amount of fitness of a model is assessed with the observed data, and using the Goodness of FitStatistic Index. In working with LISREL
Software generally, each one of the indexes obtained for the model, does not mean its fitness or lack of its fitness lonely, but they should all be put together and interpreted with each others. Table 2 illustrates the most important ones of this which demonstrates that the model has a relative fitness with the data (Enclosed). The most important indexes of goodness of fitness are:

Table 3, shows the statistics related to goodness of the model value.

<table>
<thead>
<tr>
<th>Fitness Statistics</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square of K</td>
<td>82/43</td>
</tr>
<tr>
<td>level</td>
<td>5</td>
</tr>
<tr>
<td>Meaningfulness Level</td>
<td>0</td>
</tr>
<tr>
<td>Root of average errors of approximation squares</td>
<td>0/30</td>
</tr>
<tr>
<td>Standard roots of the remainders average</td>
<td>0/43</td>
</tr>
<tr>
<td>Index of Fitness Goodness</td>
<td>0/86</td>
</tr>
<tr>
<td>Modified Index of the Fitness Goodness</td>
<td>0/43</td>
</tr>
</tbody>
</table>

![Diagram](image1)

Fig. 2: T Coefficients.

![Diagram](image2)

Chi-Square=74.61, df=5, P-value=0.00000, RMSEA=0.301

Fig. 3: Standard Coefficients of the Model.

![Diagram](image3)

Chi-Square=74.61, df=5, P-value=0.00000, RMSEA=0.301

Fig. 4: The Raw Estimated Amounts of the Factor Loads.
Conclusion:
Regarding the results obtained from experiment the research hypotheses; we can conclude that the managers of Agricultural Banks in Tabriz City can make their clients committed and loyal to their organization through investing on the common values, attraction and trust. In the age when, the state managed banking is being decreased, the managers should pay attention much more to the modern electronic banking methods and customer satisfaction to be able to survive in the industry. If an organization does not invest for increasing its customers’ commitment it will demandingly fail. The issue which is remarkably mentioned in the end about electronic banking is the capability of using it as a trade opportunity for more macro-economical development and developing some parts of the service offering industries especially in the field of expertise service. On the other hand, due to vast presentation of the government in many trading and economical relations, the need for conformity of the state organizations with the electronic commerce is much comprehended today, otherwise the fast and inevitable development of the electronic commerce under the management of a government which has traditional activities within its organizations, does not seem to be much optimistic. With this respect, providing and implementing the general policies in the form of development plans, for creating an integrated information society with the worldwide society can be so optimistic. This improves the development of training means and ultimately the development of the potential opportunities; ultimately the economical and political freedom can support the expedition of the aforesaid trends. However the economical and political liberalization is generally influenced by the electronic communications and commerce and the effect is mutual in deed. Therefore, the decision to implementing the electronic commerce and its dependent components, demands a clear understanding of the way it should be processed and also requires being prepared for confronting with its consequences. Assessment of feasibility of the electronic banking in our country is observable and executable from the elite banking experts and managers in three economical, financial and manpower aspects. From the elite banking experts, implementation of electronic banking is technically feasible on an average to relatively much level. From the elite banking experts, the electronic banking implementation is financially and economically feasible on an average level and from the manpower aspect it is feasible on an average level too. In the technical field, it is recommended to observe the electronic banking security issue in programming, analyzing and implementing the plan. In the financial and economical field, it is recommended to pay attention more to the amount of investment for employees’ retraining, for promoting their essential skills for implementing the electronic banking. With respect to the manpower, it is recommended to pay attention more to train the experts who are able to program, analyze, plan, implement and maintain the electronic banking and the senior managers should pay more attention to programming, planning and mobilizing the electronic banking system. The decision to implement the electronic banking is a strategic decision for which the Legislative Power and the Executive Power respectively are required to provide the legal grounds and complete the executive bases. That’s because, we cannot successfully execute the electronic banking by establishing just one bank, but we should prepare and strengthen the grounds through the entire banking industry along with the related organizations in the country and provide a suitable atmosphere for utilization of the electronic banking.

REFERENCES


