Identification and Influence of Factors Effective on Acceptance of Citizen Card by City Residents, Case Study: Anzali Port

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Abstract

Considering that significant investment has occurred in the City Bank for the matter of issuance of citizen card, the purpose of this research was responding to the problem that what are influential factors on city residents' use of this card. For data collection about theoretical principles, formulation of research literature and identification of indices, library research and field study were performed. A number of 384 questionnaires were distributed. Research instruments included Pearson's test and linear regression which showed that cognitive perception of simplicity of use, perceived quality of services, organizational-managerial support, tension and anxiety resulting of use of the cards, acculturation for use of the cards, access to them, their efficiency, and advertisements are influential on city residents' use of the citizen card.

Keywords: Acceptance, Citizen Card, City Residents

1. Introduction

Now a day, concepts such as digital technologies, electronic learning, electronic government, electronic exports and many other cases are well known for people. Even though still many of these cases in our country have not been accurately defined and interpretively have not been endemised, yet, sooner or later we are bound to become familiar with these terms and use them (Ali Mohammadi, 2007). Citizen card is a new and different product from the City Bank which contains an intelligent electronic money basket with the purpose of facilitation of daily payments by residents. With possession of this basket, you can with peace of mind and high security perform all of your small and large payments. With the help of magnetic tape present alongside the intelligent chip, this card can be used for rapid purchase and money transfer in the entire banking network in the country. The most important objective of the money basket citizen card is creation of peace of mind for owners and rapidification of small financial processes and for realization of this goal, small payments can be made without need for connection to the network or need to enter card password with high speed.

The city bank has performed major investments regarding citizen card and reports also show that the bank performance has improved compared to the past and the competitors. Yet, it is not clear that how much such diverse programs have a role in this enhancement. Additionally, City Bank has performed various actions in the context of electronic banking such as auto tellers, Pin pad, internal and external networks and high speed lines of data transfer and It has introduced the bank as one of the pioneers in the discussion of IT. Additionally, context has been provided for implementation of competitive strategies (costs leadership and distinction of products) by way of decreasing expenditures of delivery and storage and ... in the banks. Yet, it is still not clear whether these initiatives have increased bank performance or not? Therefore, the main issue of this research is identification of influential factors on acceptance of citizen card by city residents in Anzali Port (Davis, 2012).

Citizen card in addition to capability as a bank card has the possibility to be defined as an identification card, insurance card, digital signing, discount card, BON card and ..., where rapid and trustable payment is provided and it has been designed by the City Bank for general well-fare of citizens. With capability of being an electronic money basket, possibility of payment in domains of city transportation such as bus, metro, park meter and other areas, where in the near future it will be announced as domains of acceptability of citizen money basket by the City Bank, will exits (Bani, 2011).

The City Bank as one of the largest Iranian banks with understanding of the importance of internet banking has compiled an appropriate collection of information and services. Even though, development of substructures and the stage

or preparation in advancement of electronic services by the City Bank has still not reached completion, yet, it appears that the level of activity of the technology compared to capacities and demands of customers is very little and this issue by emphasis of experts means that the existing substructures are not ideally taken advantage of. Therefore, this topic needs to be considered in goal setting and policy making of electronic banking. As a result, with consideration that in the city bank, numerous investments have been made in issuance of citizen card, the purpose of this research is to respond to the problem that what are the factors influential on use of citizens of the citizen card (Bandura, 2010).

2. Theoretical Principles

2.1 Research Background

- Sargezikousheh (2014) has performed a research titled "Evaluation of barrier factors on establishment and development of electronic banking in the province of Sistan and Balouchestan." Results showed that technical-telecommunications, organizational-managerial, cultural-social factors and local environmental factors prevent the establishment and development of electronic banking in the province of Sistan and Balouchestan. On the other hand, the level of impediment of each of these factors is different such that technical-telecommunications hurdles have the most level of impediment and organizational-managerial, local environmental conditions and socio-cultural barriers have the next ranks respectively.
- Amini (2013) performed a research titled "Evaluation of the barriers and challenges in the trajectory of development and enhancement of electronic banking in the Parsian Bank." In this research, obstacles in development and improvement of electronic banking have been divided into four groups which in decreasing order of priority they are: organizational factors, technological factors, managerial factors and ultimately cost factors.
- Suki and colleagues (2014) with performance of extensive research have noted that use of electronic banking services in the competitive market can increase the probability of sustenance in heavy competitive conditions and increase the probability of enhancement of the organization's trade situation.
- Abdollahsalim (2014) in a research in Oman with 225 respondents to questions regarding acceptance and application of modern banking methods such as internet banking has shown that traditional and old habits of individuals, lack of governmental support, weakness in communication systems and low speed of the internet are among major hurdles in expansion of modern banking methods in Oman.

2.2 Research Theoretical Framework

Cognitive perception of simplicity of use of citizen cards: by cognitive interpretation it is meant the conception that citizens have of the citizen cards as a tool for simplified use for facilitation in daily electronic activities (Ashami, 1998).

Perceived quality of services received from citizen card: involves quality of services, well known evaluation of customers from the method of presentation of citizen card and evaluation of the level of their satisfaction (Rostami, 2000).

Organizational-managerial support of citizen cards: supports of senior directors of the City Bank from provision of citizen card and planning in the direction of resolution of problems and barriers of citizen use are called organizational-managerial support of citizen cards (Rezaifar, 2001).

Tension and anxiety resulting from use of citizen cards: tension and anxiety refers to citizens' stress from information security and use of a card that has recently been placed in their possession and they do not have much experience with it (Ashami, 1998).

Acculturation in use of citizen cards: creation of belief and understanding with regards to citizen cards and that use of this product gains public interest is called acculturation of use of citizen cards (Tavasolishakib, 2000).

Accessibility to citizen cards: accessibility to citizen cards refers to simple procurement at accessible locations with low cost (Jalili & Abadi, 2000).

Efficiency of citizen cards: efficiency of citizen cards refers to level of use of this card in various locations for various electronic businesses or in other words, the extent the citizen card can be used for various electronic affairs (Jalili & Abadi, 2000).

Advertisement: advertisement refers to level of informing and awaking citizens of the advantages of citizen cards and encouraging them to use this product by way of media and press (Rousta et al, 1998).

2.3 Research Hypotheses

- 1- Cognitive perception of simplicity of use of citizen cards is influential on their use.
- 2- Quality of services perceived from citizen card is influential on its use.
- 3- Organizational-managerial support of citizen cards is influential on their use.
- 4- Tension and anxiety resulting from use of citizen cards are influential on their use.
- 5- Acculturation in use of citizen cards is influential on their use.
- 6- Accessibility of citizen cards is influential on their use.
- 7- Efficiency of citizen cards is influential on their use.
- 8- Advertisement for use of citizen cards is influential on their use.

2.4 Method of Research

The main purpose of this research was identification and effect of influential factors on acceptance of citizen card by city residents with development of a model of acceptance of technology in Anzali Port. This research regarding time of performance was cross-sectional and regarding results of the study was applied. Regarding process of research implementation, it was combinatorial and regarding purpose of research it was descriptive (case study). Additionally, regarding logic of performing the study, it was inductive. Statistical population of the research included all customers of the City Bank in Anzali Port the number of which was unlimited. Minimally, sample size needed based on unlimited communities was estimated at 384 people. Method of sampling in this research was simple randomization. For data collection in the context of theoretical principles, formulation of research literature and identification of components, library and field studies were used. In evaluation of documents, for collection of information regarding theoretical principles and research topic literature, resources, articles and books needed were used. A questionnaire was used consisting of three sections for description of the outlook of respondents. For evaluation of the reliability of the questionnaire, the Cronbach's alpha method was used. Additionally, for evaluation of validity of the questionnaire confirmation by respected professors and experts was sought. Additionally, the questionnaire used was scored based on a Likert scale such that for each question, 5 choices existed. In the inferential statistics section, the Klotmogorov-Smirnov test, Pearson's correlation coefficient, regression analysis, Durbin-Watson test and co linearity test were used.

2.5 Research Findings

2.5.1 Test of research hypotheses

Hypothesis one: Cognitive perception of simplicity in use of citizen cards is influential on citizens' use of them.

According to Table (1) the value for $r = 0/922$ and considering that $0 < r < 1$, it can be concluded that the correlation is direct and can be interpreted as such that meaningful correlation exists between cognitive perception of simplicity of use of citizen cards and their use and this correlation is strong.

Hypothesis two: Perceived quality of services received is influential on citizens' use of the citizen card. According to Table (1) the value for $r = 0/740$ and considering that $0 < r < 1$, it can be concluded that the correlation is direct and can be interpreted as such that meaningful correlation exists between quality of services received and citizens' use of the citizen card and this correlation is strong.

Hypothesis three: Organizational-managerial support is influential on use of the citizen card. According to Table (1) the value for $r = 0/286$ and considering that $0 < r < 1$, it can be concluded that the correlation is direct and can be interpreted as such that meaningful correlation exists between organizational-managerial support and citizens' use of citizen card and this correlation is weak.

Hypothesis four: Tension and anxiety from using cards is influential on citizens' card use.

According to Table (1) the value for $r = 0/950$ and considering that $0 < r < 1$, it can be concluded that the correlation is direct and can be interpreted as such that meaningful correlation exists between tension and anxiety in sue of cards and citizens' use of them and this correlation is strong.

Hypothesis five: Acculturation in use of citizen cards is influential on city residents' use of them.

According to Table (1) the value for $r = 0/749$ and considering that $0 < r < 1$, it can be concluded that the correlation is direct and can be interpreted as such that meaningful correlation exists between acculturation in use of citizen cards and their use and this correlation is strong.

Hypothesis six: Accessibility to use of citizen cards is influential on their use.

According to Table (1) the value for $r = 0/749$ and considering that $0 < r < 1$, it can be concluded that the correlation is direct and can be interpreted as such that meaningful correlation exists between accessibility to citizen cards and citizens' use of them and this correlation is strong.

Hypothesis seven: Efficiency of citizen cards is influential on citizens' use of them.

According to Table (1) the value for $r = 0/463$ and considering that $0 < r < 1$, it can be concluded that the correlation is direct and can be interpreted as such that meaningful correlation exists between efficiency of citizen cards and their use and this correlation is strong.

Hypothesis eight: Advertisement is influential on use of citizen card.

According to Table (1) the value for $r = 0/922$ and considering that $0 < r < 1$, it can be concluded that the correlation is direct and can be interpreted as such that meaningful correlation exists between advertisement and citizens' use of the citizen card and this correlation is strong.

Table (1). Test of research hypotheses

Use of citizen card	Cognitive perception	Quality of services received	Organizational-managerial support	Tension and anxiety resulting from use of cards	Acculturation in use of citizen cards	Accessibility in use of citizen cards	Efficiency of citizen cards	Advertisement
Pearson correlation	0/922**	0/740*	0/286*	0/950*	0/749*	0/749*	9/463*	0/922*
Pearson correlation	0/000	0/000	0/000	0/000	0/000	0/000	0/000	0/000
Number	384	384	384	384	384	384	384	384

2.5.2 Regression analysis

Considering Table (2), level of significance in all hypotheses is equal to 0/000. Since level of significance in all hypotheses is less than the amount of type one error at a 0/01 level. Therefore, the overall problem hypothesis which evaluates meaningful correlation between the variables is confirmed. For further confirmation, we will evaluate the coefficients of the regression model.

Table (2). ANOVA for research hypothesis

Hypothesis	Source of changes	Sum of squares	Degrees of freedom	Mean square	F	Sig
1	Regression	376/217	1	376/217	2180/455	0/000 ^a
	Remainder	65/911	382	0/173		
	Total	442/127	383			
2	Regression	242/151	1	242/151	462/563	0/000 ^a
	Remainder	199/976	382	0/523		
	Total	442/127	383			
3	Regression	36/685	1	36/685	34/564	0/000 ^a
	Remainder	405/442	382	1/061		
	Total	442/127	383			
4	Regression	365/860	1	365/860	1832/492	0/000 ^a
	Remainder	76/267	382	0/200		
	Total	442/127	383			
5	Regression	254/335	1	254/335	517/359	0/000 ^a
	Remainder	187/792	382	0/492		
	Total	442/127	383			
6	Regression	51/001	1	51/001	49/811	0/000 ^a
	Remainder	391/126	382	1/024		
	Total	442/127	383			
7	Regression	324/357	1	324/357	1052/079	0/000 ^a
	Remainder	117/771	382	0/308		
	Total	442/127	383			
8	Regression	343/019	1	343/019	1322/118	0/000 ^a
	Remainder	99/109	382	0/259		
	Total	442/127	383			

Considering Table (3), it was tested whether the coefficient of the independent variable was equal to zero or not. In case of acceptance of the assumption of a coefficient of zero for the variable, the effectiveness of that variable on the dependent variable is rejected. Since the significance level of coefficients of the independent variable is less than the type one amount of error at a 0/005 level, the hypotheses are confirmed.

Table (3). Coefficient of regression model hypotheses

Hypothesis	Model	Nonstandard coefficients		Standard coefficients	t	Sig
		B	Std. Error			
1	Constant value	0/442	0/082		5/380	0/000
	Cognitive perception	0/890	0/019	0/922	46/695	0/000
2	Constant value	0/311	0/182		1/704	0/089
	Perceived quality of services	1/022	0/048	0/740	21/507	0/000
3	Constant value	2/876	0/223		12/895	0/000
	Support	0/396	0/067	0/288	5/879	0/000
4	Constant value	-0/169	0/103		-1/631	0/104
	Tension and anxiety	1/099	0/026	0/910	42/808	0/000
5	Constant value	-0/694	0/216		-3/212	0/001
	Acculturation	1/264	0/056	0/758	22/746	0/000
6	Constant value	0/901	0/463		1/945	0/052
	Accessibility of the cards	0/880	0/125	0/340	7/058	0/000
7	Constant value	-0/405	0/143		-2/825	0/005
	Citizen card efficiency	1/168	0/036	0/857	32/436	0/000
8	Constant value	0/748	0/097		7/698	0/000
	Advertisement	0/889	0/024	0/881	36/361	0/000

3. Discussion

The City Bank as one of the largest Iranian banks with understanding the importance of internet banking has compiled an appropriate collection of information and services. Even though development of substructures and stage of preparation in development of electronic services of the City Bank is not yet complete, yet, it appears that the level of technology compared to capacities and demand of customers is very little. This topic by the emphasis of experts means that existing substructures are not ideally taken advantage of. Therefore, this issue should be taken into consideration in goal setting and policy making in electronic banking. As a result, for improvement of acceptability of the citizen card system by the people, the following suggestions are made:

First, in the area of electronic services which has the most influence on attraction and acceptance of customers great attention is due and endeavor should be made with attention to heavy competition between organizations in the area to take action for distinction of one's kind of services relative to other organizations and areas.

In this regard, the discussion of provision of various services in the site is a topic that requires need analysis and extensive research for identification of customer needs and priorities. Quantitative and qualitative development of services can lead to increased attraction among the audience and encourage them to seek and use information in the site.

Various services providable can include:

- ✓ Section on question and answer
- ✓ Contact with us
- ✓ Online talk with directors or responsible people
- ✓ Advertisements

Secondly: with regards to better implement ability of system acceptance which can lead to increased satisfaction and fidelity of customers, the following items are suggested:

- ✓ Provision of effective support services for supermarket POS equipment
- ✓ Publication of educational notes for ATM and POS equipment and applied mobile
- ✓ Use of high speed lines in supermarket terminals and omission of weak companies in the matter of responding to customers
- ✓ Classification of customers with consideration of the scale and level of use of their card so the kind of access and limitations are explained

- ✓ Use of web design specialists in the context of more effective design of webs for service institutes of citizen card
- Thirdly: In relation with accessibility of electronic services, the following is suggested:
 - ✓ Development of accompanying software by way of provision of up to dating versions by way of company sites and accepting organizations
 - ✓ Provision of extensive services by way of expansion of company sites and accepting organizations
 - ✓ Wide spread application of card reading equipment

Fourthly: involving and gaining the commitment of accepting company and organization employees to correctly and timely perform their duties with respect to customers has special importance in keeping them satisfied and loyal. Promises should be kept and should be dependable. Performance of promises and capacity for dependence on the word of accepting company and organization employees leads to increased trust in the customer and this has key role in customer satisfaction and loyalty. This matter is not possible without having employees committed who perform their duties with good intention.

Teaching methods of correct communication with the customer to employees by way of holding relevant seminars, customer's perception from their first impression of accepting companies and organizations has significant influence on maintenance and continuation of this relationship. The fact that employees need to be able to establish correct and deserving relationship with the organization's important asset, the customer, needs education. The organization should invite specialists on this topic and by holding educational seminars increase and enhance employee ability in establishment of communications with the customer.

Fifth: is making common place permanent standards of quality and evaluation of quality of services. Now a day, the role of quality of service is not hidden to anybody in new system satisfaction and acceptance. The higher the equality of services, customer satisfaction and their loyalty to accepting companies and organizations will be more. For realization of this important issue, persistent evaluation of the quality of services is a necessity.

Additionally, being able to explain to the customer about illogical demands is one of the valuable resources for gaining customer satisfaction and developing loyal customers, accurate management of conflicts between accepting companies and organizations and the customer. Company employees should prevent occurrence of potential conflicts and in case of disagreements with the customers they should be able to warmly manage it. In this line and for prevention of creation of dispute, employees should have preparedness and ability to encounter illogical customer requests. Cognitive perception of the simplicity of use of citizen cards is influential on their use. Perceived quality of services is also influential on their use of citizen cards.

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