



INVESTIGATING THE EFFECT OF DESIGN FEATURES IN THE E-PAYMENTS SERVICE
TOOL(CASE STUDY: SADERAT BANK)

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Abstract

Today, bank payments have changed from the physical electronic form, and with the introduction of new technologies into the banking sector, electronic payments have become easier. The main purpose of this study is to study the effect of design indicators on the performance of electronic payment instruments. The research method is applicable in terms of purpose and descriptive survey method. The population of this study is customers of SADERAT BANK in Tehran, with a sample of 384 people selected. Library method and survey method were used for the collection method, using a questionnaire to collect information. The software used is smart PLS and partial least squares method. Finally, the results showed that the cash prize, customer commitment to damages, payment method, and the method of transferring information on the customer electronic payment service tool were effective. However, the physical control and acceptability features of the customer electronic payment service tool are not effective. Also, the results showed that RFID card has a moderating role on the effect of cash prizes and commitment to customers in damaging the customer's electronic payment service tool. And this is where the RFID card does not have a moderating role on the effects of physical control features, payment methods, and acceptability of customer electronic payment service tools.

Keywords: Design Features, E-Payments Service Tool

I. INTRODUCTION

Payment systems is one of these widely-deployed information systems . Payment systems have a variety of different types that offer solutions to facilitate payment for all people in the community. Today's payment systems have reached a level of technology that has transformed traditional payment systems. Traditional payment systems have been modified to operate in a cyber space, and new e-payment issues have emerged, requiring a new and improved payment system for on-line purchases as well as non-line purchases continuously increased (Bahle, 2012). Payment systems are a vital part of the economic and financial infrastructure of a country. Their good performance in the safe and timely transfer of funds is their most important influence on the overall performance of the economy. But payment systems can have a serious risk for subscribers (Quinn et al., 2016).



In this way, these systems can transfer problems from one part of the economy to other sectors as a channel. These risks and facilities are the main reason for the interest of banks in the design and operation of these systems(Choi et al., 2015).

Paying systems, inspired by day-to-day technologies, are always offering the mechanisms that attract customers. Therefore, it is desirable to have an electronic payment system with indicators that initially use it to gain trust and confidence in customers and reuse the customer, and then, by meeting the satisfaction of the individuals lead to their loyalty in the proper use of this type of systems (Quin et al., 2016).

Today, payment instruments are considered as the main pillar of banking in Iran, and today banking has grown exponentially using payment mechanisms. Therefore, Iranian banks, and especially the Bank of SADERAT, should insist on systems of other advanced countries to provide more system equipment and keep their payment systems with the successful technologies in the field of banking and information technology. In the present study, due to the great importance of payment system tools in Iran's banking system, this question is answered that how the design features are effective in electronic payment service tools ?

II. THEORETICAL FRAMEWORK

In the era of information and communication technology, the constructive, effective and sustainable engagement with the global economy requires not only high quality and low-cost goods and services to be traded and traded, but also using international standards of different countries and international organizations should be applied. One of these standards is the attention, commitment and observance of the use of modern day and new technologies in business, which is becoming increasingly important day by day. Banks that seek to highlight themselves in a crowded competitive market must increasingly use technology to optimize their decision-making, provide more personalized services, improve their efficiency and improve their business processes.

The use of technology to solve these challenges is necessary. Payment systems are also a vital part of the country's economic and financial infrastructure. Their good performance in the safe and timely transfer of funds is their most important contribution to the overall performance of the economy (Quin et al., 2016). In this way, these systems can transfer problems from one part of the economy to other sectors as a channel.

These risks and facilities are the main reason for the interest of banks in the design and operation of these systems (Choi et al., 2015). An electronic payment system should have indicators that initially use it to gain trust and confidence in customers and reuse the customer, and then, by satisfying the wishes of the individuals, try to obtain their loyalty to the proper use of such systems (Quin et al., 2016).

Payments made through electronic transmission systems have higher security than payments by the traditional way because electronic money transferring systems are designed in such a way that the possibility of theft, theft, loss and non-transferability reaches as little as possible. Because of this feature, most people often want to use these systems instead of traditional payment systems. The eminent feature of electronic transmission systems is its high speed. It can be said with certainty that electronic payment systems are much faster than traditional



payment systems. Also, the mechanism for transferring funds to users is much simpler and easier than traditional ones, and, on the other hand, the cost of electronic money transfer systems is far lower compared to the traditional system of transfer of funds.

The present study can be considered in several directions. As a significant growth in money circulation in payment systems, both in terms of the number of exchanges and in terms of the value of money transferred, it is very important and essential to examine the payment system tools. And the remarkable growth of technology makes it much faster to go in cash and pay. Therefore, effective mechanisms must be identified in the movement and progress of these systems.

Also, given the crucial role of payment systems, it is not very difficult to understand that stopping and disrupting the operation of this system can have many effects on the financial markets that they serve. So these systems should be properly designed and implemented.

And disruptions in electronic systems are becoming less and less expensive to pay, and even their errors are much less than manual system errors, which ultimately are an alternative to electronic systems for handheld systems. Finally, a good and proper payment system with proper indicators and infrastructures can properly reflect on the economy and help the government and the central bank in various economic policies.

III. LITERATURE REVIEW

Salimi (2015) in his research investigated "Banking Electronic Services and its Effect on Employee Satisfaction in Customers Confrontation"

Finally, the results showed that e-services increased employee satisfaction in direct relationship with employees.

Arab Mazar (2013) investigated on the application of computer and information technology in financial information by Iranian companies and his results indicated that the use of computers would make the company's financial information more efficient.

Atayi (2013) investigated on information technology infrastructure factors. Finally, the results of his research showed that costing can play a decisive role in the various stages of creating and launching information technology.

Ismaili et al. (2009) examined the quality of electronic services and their dimensions. Finally, the results of the research showed that the quality of electronic services has different indices, which organizations must always try to upgrade them.

Sherafat et al. (2007) reviewed the electronic payments and people's attitudes about them. Finally, the results showed that the traditional payment method has problems that have led public service providers to turn to different payment methods. These methods have many advantages. But the most important factor affecting these methods is the level of customer familiarity and desire and culture in using these methods.

Kevin et al. (2016) investigated on the effect of design features on the e-payment service tools. Finally, the results of their research showed that the mentioned characteristics affect the on the tool of electronic payment service of customers.



Beckham (2016) investigated the factors in creating information technology in banks. Finally, his research results showed that customers, employees and costing system are the most important factors in the implementation of information technology in banks.

Hang (2014) explores the importance of IT in organizational success. Finally, his research results showed that information technology can play a full role in the success of the organization.

Sinari and Al Nawaim (2012) investigated the use of mobile technology in the e-participation of citizens. Finally, the results of their research showed that by connecting government and citizens using electronic citizen, it is possible to help in controlling problems and threats.

Patrick et al. (2012) investigated a digital divide among urban youth in Malaysia. Finally, the results showed that Internet opportunities and negative Internet activities are two-edged blade that governments should control.

Hypothesis of Research

Hypothesis 1: A cash prize is effective on the customer electronic payment service tool.

Hypothesis 2: Commitment to customers affects customers' electronic payment service tools.

Hypothesis 2: Commitment to customers affects customers' electronic payment service tools.

Hypothesis 4: The method of payment is effective on the customer electronic payment service tool.

The hypothesis 5: The method of transferring information is effective on the customer electronic payment service tool.

Hypothesis 6: Acceptability is effective on the customer electronic payment service tool.

Hypothesis 7: RFID card has a moderating role on the effect of a cash prize on customer electronic payment service tools.

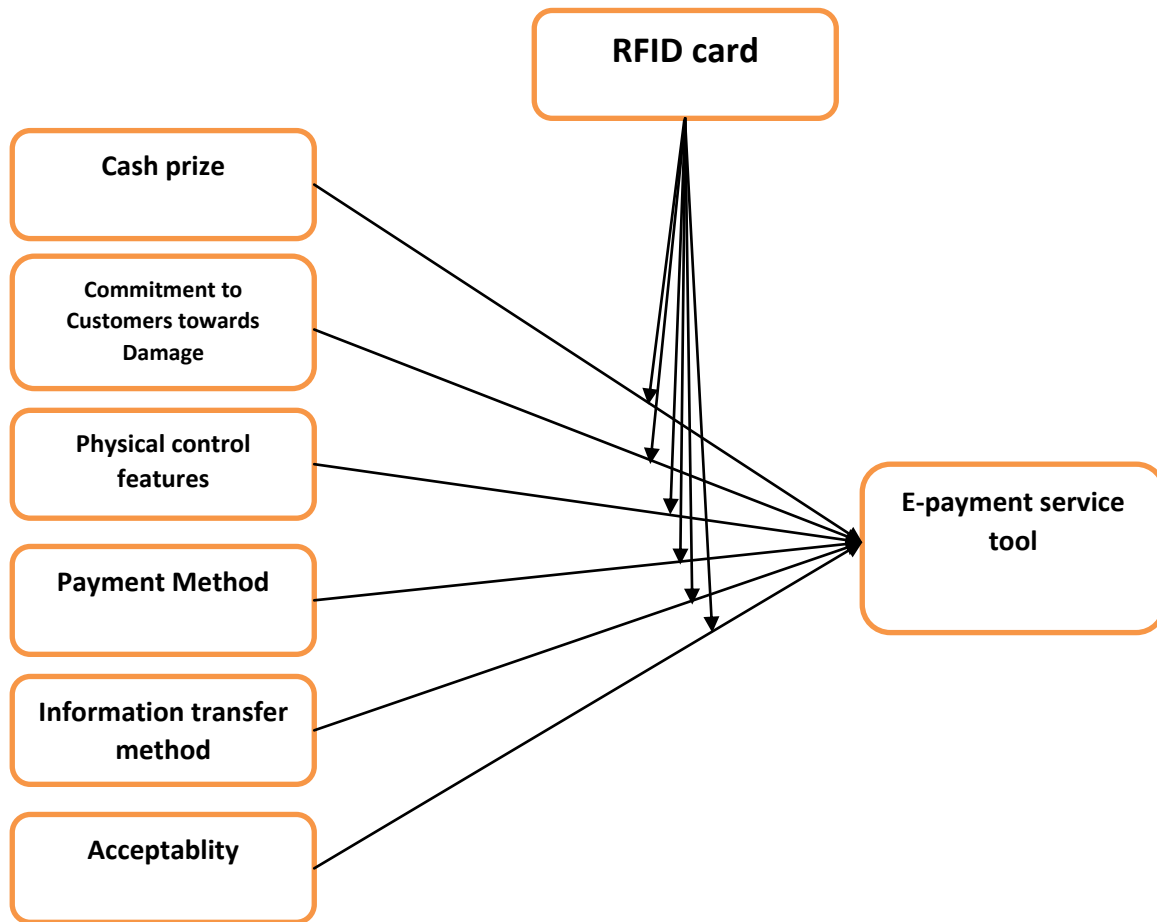
Hypothesis 8: RFID card has a moderating role on the impact of customers' commitment to the cost of electronic customer service tools.

Hypothesis 9: RFID card has a moderating role on the effect of physical control features on customer electronic payment service tools.

Hypothesis 10: The RFID card has a moderating role in the impact of the payment method on the customer electronic payment service tool.

Hypothesis 11: RFID card has a moderating role on the effect of the method of data transfer on the customer electronic payment service tool.

Hypothesis 12: RFID card has a moderating role on the acceptability of the customer electronic payment service tool. The conceptual model of the research is as follows:



Graph 1) Conceptual model of research

IV. METHODOLOGY

The present research is based on applied research in order to apply its results in banks. The present study was conducted with two survey methods and correlation. Considering that the research data are collected using a questionnaire and a survey method, the research method is survey. Also, due to the fact that relations between variables are examined with each other, the implementation method is correlation.

In the library section in this research, documents study was used as secondary data and for definitions of existing variables and concepts based on the use of internal papers and dissertations, which are taken from available resources and finally regularly, we put together the appropriate texts and used this research. And in the field, a questionnaire has been used. The questionnaire used in this research is standard and therefore, it has a reliable validity. Also, the reliability of the questionnaire has been evaluated through Cronbach's alpha and alpha value of 0.901. The research community of the various branches of SADERAT Bank in Tehran is also the research community. And given the fact that the community is unlimited, so 384 people



have been selected as samples. Structural equation modeling (SEM) is used for data analysis. The software used for analyzing the data is SPSS software package and Smart PLS software package.

V. RESULTS

The highest number of respondents were men as 72.2%, and women as 27.8% make the respondents. 0.174 were below 20 years; 0.497 percent of respondents were between the age of 21-30, 0.193 were between 31-40 years and 0.084 were between 41-50 and 0.052 of respondents were 50 years old. 0.045 percent of those were with a diploma and under diploma, 0.247% were upper diploma, 0.555 % had a bachelor's degree, and 0.153% had a master degree or higher.

Descriptive explaining of variables

In this section, the status of the variables of the research is analyzed. In fact, the purpose of this is to determine the cognitive status of the community of variables.

Table (1): A descriptive study of variables

Variables	Mean	D	Min	Max
Electronic payment service tool	3.44	.10	1.00	5.00
RFID card	2.39	.16	1.00	5.00
Cash prize	3.36	.18	1.00	5.00
Commitment to Customers towards Damage	3.48	.16	1.00	5.00
Physical control features	3.51	.15	1.00	5.00
Payment Method	3.50	.07	1.00	5.00
Information transfer method	3.48	.12	1.00	5.00
Accessibility	3.49	.09	1.00	5.00

Testing Hypotheses Using Structural Equation Modeling (PLS)

The main hypothesis of the study was tested using the structural equation model (partial least squares approach), the main hypothesis test results were reflected in Figures (2) and (3).

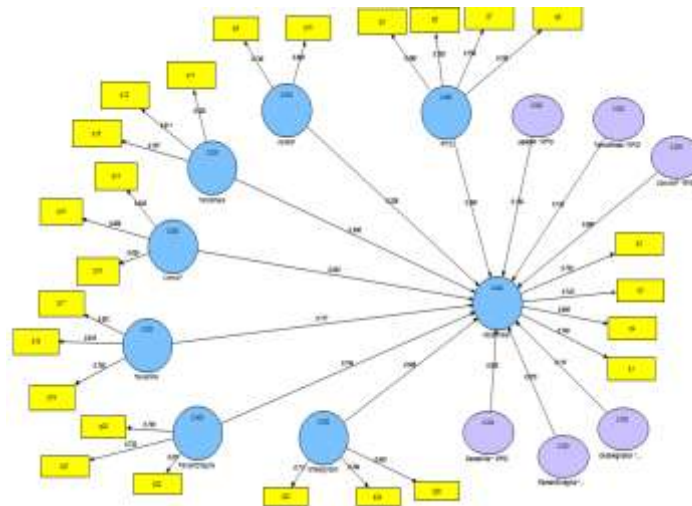


Chart 2) Measurement of the final model and the results of the hypotheses in the standard

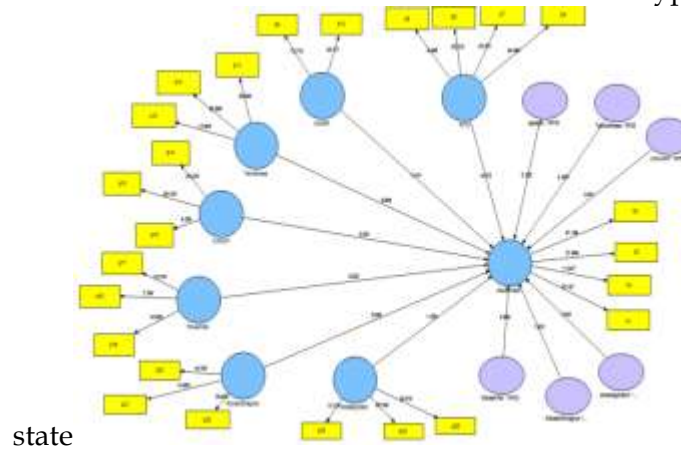


Diagram 3) Measurement of the final model and the results of the hypotheses in the significant state

Summary of test results of hypotheses is shown in Table (2).

Table (2): Summary of test results of hypotheses

Hypothesis	Path coefficient	Sig	Result
Hypothesis 1: A cash prize is effective on the customer electronic payment service tool.	0.228	3.49	Confirmed
Hypothesis 2: Commitment to customers affects customers' electronic payment service tools.	0.606	2.88	Confirmed
Hypothesis 2: Commitment to customers affects customers' electronic payment service tools.	0.003	0.41	Rejected
Hypothesis 4: The method of payment is effective on the customer	0.777	2.82	Confirmed



electronic payment service tool.

The hypothesis 5: The method of transferring information is effective on the customer electronic payment service tool.	0.754	2.83	Confirmed
Hypothesis 6: Acceptability is effective on the customer electronic payment service tool .	0.086	1.45	Rejected
Hypothesis 7: RFID card has a moderating role on the effect of a cash prize on customer electronic payment service tools.	0.159	2.20	Confirmed
Hypothesis 8: RFID card has a moderating role on the impact of customers' commitment to the cost of electronic customer service tools.	0.156	2.46	Confirmed
Hypothesis 9: RFID card has a moderating role on the effect of physical control features on customer electronic payment service tools.	0.090	0.97	Rejected
Hypothesis 10: The RFID card has a moderating role in the impact of the payment method on the customer electronic payment service tool.	0.062	0.53	Rejected
hypothesis 11: RFID card has a moderating role on the effect of the method of data transfer on the customer electronic payment service tool.	0.075	1.07	Rejected
hypothesis 12: RFID card has a moderating role on the acceptability of the customer electronic payment service tool.	0.110	1.04	Rejected

VI. DISCUSSION AND CONCLUSION

The results show that the cash prize has a positive effect on the customer electronic payment service tool. Customer's electronic payment service tool cash prize is a reward on behalf of the companies offering these types of cards for each use, the cardholder will be credited. This amount is a small percentage of the customer's purchase, which is returned to the customer in a variety of ways.

The best way that some organizations and companies offer to their customers is an instant cash reward, which at the same time uses a card to return a certain percentage of the purchase amount to the customer's account.

Also, the results showed that the commitment to customers has a positive effect on the damage to the customer electronic payment service tool. Some customers do not respond when they get undesirable services, while others are beginning to spread negative advertisements about the organization they are looking for.

From this study, it can be concluded that electronic payment service providers can, by establishing compensation mechanisms, consider the protest process as an opportunity to strengthen their relationship with customers, and adopt their policies and procedures in their organization to maximize customer satisfaction, or even train their employees to make these policies more effective.

On the other hand, physical control features do not have any effect on the customer electronic payment service tool, and this is where the method of payment has a positive effect on customer electronic payment service tool.



Payment methods will save money, increase the productivity of firms and industry, reduce search costs, provide more and easier and less costly access to information, reduce entry restrictions, more suppliers, and increase competition.

Economic operators around the world, especially in advanced and developing countries, are increasingly expanding their e-commerce exchanges using the latest technology findings, especially ICT. Also, the method of transferring information has a positive effect on the customer electronic payment service tool. The method of data transfer requires the ability to track and confirm transactions. This will ensure that the transaction is authorized by the individuals and payment mechanisms.

However, consumers may be afraid of disclosing financial information, credit, and the amount of their expense through trading or other electronic products without information and permission. With the growth and development of data transfer methods, the rate of crimes that deal with the storage and transmission of customer data is increasing.

Also, the results showed that acceptability has no effect on customers' electronic payment service tools. But the RFID card has a moderating role on the impact of the cash prize on the customer electronic payment service tool. Also, the RFID card has a moderating role on the impact of customers' commitment to the loss of electronic customer service tools. But the RFID card does not have a moderating role on the effects of physical control features on the customer electronic payment service tool.

Also, the RFID card does not have a moderating role on the impact of the payment method on the customer electronic payment service tool. And the RFID card does not have a moderating role on the effect of the method of transferring information to the customer's electronic payment service tool. Finally, the RFID card does not have a moderating role to affect the acceptability of the customer's electronic payment service tool. Therefore, according to the results of the research, the following suggestions are presented:

- Managers are suggested to consider awards and promotional gifts for customers through electronic payment service tools.
- Banks must meet the expectations, demands and needs of the customers based on what they have undertaken. And at the promised time should provide the electronic payment service tool.
- Banks have not been able to properly implement the physics issue of the payment instrument, so fundamental changes in tools should be made that can ultimately achieve the desired goal in order to provide more appropriate services.
- Payment methods in electronic payment service tools should be easy to use so that they can easily use this system if customers are not aware of this system.
- Banks upgrade and improve the software system so that account information can be easily tracked through the Internet for customers.
- Managers should introduce familiarized and promotional programs to introduce customers with RFID card technology.



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International Journal of Business Quantitative
Economics and Applied Management Research

ISSN No: 2349-5677

Volume-5, Issue-5, October-2018

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