

# Investigating and Measuring the Satisfaction of Cooperators from The Electronic Registration Services of Ardebil's Companies

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## ABSTRACT

Satisfaction of citizens and clients increases public trust and loyalty, national consensus, public participation and national authority, which in the current world are considered as the main indicators of efficiency measurement and development of the administrative and political system. In Iran, the main duty of cooperatives is to provide appropriate services to members to provide inputs of production and after-sales services and marketing. In this regard, commercial activities prior to production and production time and after that should be placed in the context of this type of cooperatives. With all the benefits of the use of information technology in economic and business interactions in the present era, business interactions between cooperatives are less done electronically due to the lower level of technical knowledge of the human resources of its managers, and the members of the cooperatives are weak in discussing the use of information technology techniques and cooperatives have not benefited from ICT technology in doing current affairs. There is also an unhealthy distribution network between producer and consumer that use this messed mechanism. Therefore, network co-ordination and management of value of cooperatives can provide the appropriate mechanism for the electronic business model and increase the satisfaction of cooperators from the existing system. Hence, this research seeks to answer the question of how much is cooperators' satisfaction from electronic registration services?

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## Introduction

Today, in the age of globalization, due to the advancement of knowledge and technology, the speed in communications and the changes that have been created in the values and cultures, expectations and political demands of nations has affected the process of administrative developments. In fact, the accountability of government organizations against citizens caused governments to look at people from a new perspective as private sector clients and try to provide maximum satisfaction for them (Khaki, 2002). On the other hand, almost all transactions go towards electronic, so the importance of e-government becomes more and more (Gregoris et al., 2012). Most successful companies in e-commerce have understood that success or failure is not merely the presence of the company on the Web or the low price, but an important factor in the transfer of high-quality electronic services to the satisfaction of

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customers (Eschenfelder and others, 2007). Satisfaction of citizens and clients increases public trust and loyalty, national consensus, public participation and national authority, which in the current world are regarded as the main indicators of efficiency measurement and development of the administrative and political system (Kazemi, 2000). In Iran, the main duty of cooperatives is to provide appropriate services to members to provide inputs of production and after-production services and marketing. In this regard, commercial activities prior to production and production time and after that should be placed in the context of this type of cooperatives. With all the benefits of the use of information technology in economic and business interactions in the present era, business interactions between cooperatives are less done electronically due to the lower level of technical knowledge of the human resources of its managers, and the members of the cooperatives are weak in discussing the use of information technology techniques and cooperatives have not benefited from ICT technology in doing current affairs. There is also an unhealthy distribution network between producer and consumer that use this messed mechanism. Therefore, network co-ordination and management of value of cooperatives can provide the appropriate mechanism for the electronic business model and increase the satisfaction of cooperators from the existing system (Naseri and others, 2008). Hence, this research seeks to answer the question of how much is cooperators' satisfaction from electronic registration services?

**Importance and necessity of research subject**

Given the development of e-services and the heavy costs in designing, deploying and using them, it is necessary to assess the satisfaction of the services provided. In order to achieve this extremely important goal, we need a scientific and appropriate model for assessing the satisfaction of our customers from the quality of electronic services. In the Islamic Republic of Iran cooperatives, given the extension, development and the high costs for designing and deploying their services, it is necessary to identify indicators of customer satisfaction measurement from the quality of electronic services, in order to be provided receiving feedback and improving these services.

**Conceptual and operational definitions of variables**

Operational definition: The companies' electronic services are operated on the dimensions of the below indicators.

Table 1 - Dimensions of electronic registration services indicators

Concept	Dimensions	Indicators
electronic registration services of companies	System design	1. Satisfactory technical performance 2. Attractiveness in website design 3- Support of all facilities
	System reliability	1. Reliability of electronic registration information 2- Providing the right service at the first time 3- Providing customer expectations and reliability of electronic registration information 4. Joint responsibility of the members of the company in the registration system 5. Trust in the electronic system of cooperative companies 6. Legal and formal registration services
	Accountability	1- Getting answer of users' questions in short time 2- Providing electronic services quickly and accurately 3- Make clear communication between users when visiting the site

		<ol style="list-style-type: none"> <li>4. Ability to meet customer demands in the least time in the electronic system</li> <li>5. Decreasing legal claims by using electronic registration services</li> <li>6- organizing the co-operative activities of in a coherent and transparent structure</li> </ol>
	Security and confidentiality	<ol style="list-style-type: none"> <li>1- Protection of personal information of individuals in the system</li> <li>2. Security of electronic registration systems</li> <li>3. Secretive and confidant contact with customer demand</li> <li>4. Identification of the activities of cooperatives by using registration affairs</li> </ol>
	Quality of information	<ol style="list-style-type: none"> <li>1- Updated electronic registration information</li> <li>2- Appropriate and accurate presentation of the information with the users' need on the website</li> <li>3. Clearly inform third parties and customers</li> <li>4. High quality information available on the system</li> </ol>
	Ease of use	<ol style="list-style-type: none"> <li>1- Access and search information in system</li> <li>2- Ease of use of the website</li> <li>3. Encountering fewer problems when using the system</li> <li>4- reliable and fast operation of the board of cooperative information through the electronic system</li> <li>5. Solving the problems of cooperative offices, labor and social services of the provinces in accessing the records of cooperatives by the services of registration</li> <li>6- Receiving licenses, scores and credits from organizations and institutions, and obtaining bank loans in cooperatives.</li> <li>7. Decreasing current expense by using electronic registration services</li> </ol>

### Conceptual and operational definition of system design

The purpose of designing a web site is how to arrange pages and physical forming the website (Jabariyeh, 2011). The quality of website design for the online user is important because it is considered the interface between the users and the organization. Web design involves the technical function of the website and the appearance of the website (Sukasame, 2010).

The design of the system has been measured with dimensions such as the appearance of web pages and the technical performance of the web site.

### Conceptual and operational definition of reliability

Knowledge and goodwill of employees and their ability to attract trust and honesty (Seyyed Javadin, 2005), reliability refers to the degree which the service provided by the website to what extent is in accordance with promised time, such as e-mail or customer contact, etc. (Sukasame, 2010). It means the ability to perform the services in a reliable way so that customer expectations to be met. In fact, reliability is the fulfillment of obligations, i.e, if a service organization makes promises regarding the time of provision, the manner and cost of services, it must act it (Qalavandi et al., 1391). Reliability is measured by the dimensions specified in the definition, including the performance to the obligations, the provision of the correct services at the first contact and fulfillment of the obligations in accordance with the promised time.

### **Conceptual and operational definition of accountability**

Accountability is the ability to meet customer demands in the least time (Jafari et al., 2014). Online user expects the organization to answer their questions without delay. The quick answer will help users decide more quickly, find answers to their questions and solve their problems (Yang & Jun, 2002). It is also creating an interest in solving problems, creating a willingness in employees to assist the customer, and responding promptly to requests (Wolfenbarger and Gilly, 2003). Accountability to customer demands in the least time, getting answers from the system, solving problems are used easily with the help of an electronic system to measure the response dimension.

### **Conceptual and operational definition of security and confidentiality**

Security is the relative leisure state from threats, attacks, or readiness to confront any threat or attack (Ashuri, 2008). Security and confidentiality represent the level of security and protection of personal information of citizens by the website. One of the main obstacles to the development of the online environment is the lack of trust, which is provoked by a lack of security and confidentiality (Wolfenbarger and Gilly, 2003). In order to measure the security and privacy dimension, structures such as protection of information, privacy has been used.

### **Conceptual and operational definition of system information quality**

What in the form of text, image, audio, multimedia files and other digital formats are available to the audience is the information and content of the system (Jabariyeh, 2011). The information provided by the website should be accurately and easily understood so that users can check what they want to do. In the online environment, information is a very important factor for users in their decision making (Li and Suomi, 2009). The accuracy of information, the reliability of information, the timeliness of information, the relevance of information and the extent of detail information is an important factor for users (Barnes & Widgen, 2007). To measure the quality of the information of system, dimensions such as the suitability of the information with needs of users, the ability to rely on information, the timeliness of information, and the relevance of the system's functions are used.

### **Conceptual and operational definition of ease of use of the system**

Ease of use is the belief of each person about the ease of using a system (Farzin Yazdi and others, 2013). Ease of use refers to the ease of use of the website and the possibilities to search for information. Ease of use is one of the most important dimensions that affect customers' satisfaction and behavior (Yoo and Donthu, 2001). The ease of use perceived is that the use of a particular system in the person's view is so comfortable and without a particular challenge (Farzin Yazdi et al., 2013). In order to measure this, the structures hidden in the conceptual definition, including ease of use, the ability to search and work on the website is used.

### **Conceptual model of research**

In this research, a model is used that was expressed by Wolfenbarger and Gilly in 2003 called E-TAIL, to measure customer satisfaction with electronic services, including four dimensions of website design, reliability, security and customer service. This model was expressed in the research of Jafari et al. (2014) to measure customer satisfaction with e-services and was studied with 6 components:

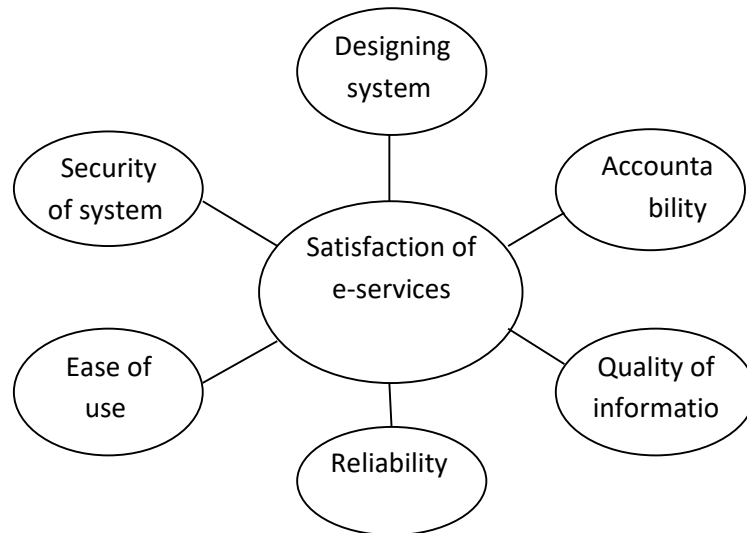


Figure 1. Conceptual model of research

### Satisfaction

Satisfaction is to evaluate customers whether the product and service have met their needs and expectations. In fact, customer satisfaction is the result that is obtained due to satisfy customer needs and represents a kind of mental judgment about the product or service. The result of such satisfaction is to create loyalty in customers, to repeat the purchase, and to recommend it to others to use the company's products and services (Zithamel and Beitnet, 2004). Today, organizations have found that customer satisfaction guarantees the survival of the organization. Customer satisfaction is the desirability that customer gains it due to the various characteristics of the goods and services and it is a source of profitability and reason for the continuation of the activity of organization. Customer satisfaction is the customer's sense or attitude towards the goods or services that acts as an interconnection bridge between different solutions of consumer buying behavior. Customer satisfaction is a key factor in shaping the willingness of future purchase of customers (Hernon et al., 2000).

Today, the failure or success of the organization is determined on the basis of its customers' satisfaction from company's products or services. Customer satisfaction enhances customer loyalty and loyal customers; it spends more cost for purchasing products or services, encourages others to buy from the organization, and ready to pay more for the purchase of products by the organization. Meanwhile, customer satisfaction increases re-purchases and reduces customer complaints. Satisfied customers are less sensitive to price, buy lateral products and are less influenced by competitors and are more loyal (Mohammad Pourzrandi and Najafi, 2012). Studies have shown that it is usually less costly to keep current customers from finding a new customer with a complex process and it is high costly, and attracting a customer is six times more expensive than keeping current customers. Also, customer satisfaction is one of the key factors in success, so it can be concluded that in order to achieve success, the organization must have satisfied customers (Hosseini and Eftekhari, 2011).

### Importance and necessity of customer satisfaction

In most organizations and cultures, customers are paid a lot of attention, but it's unclear whether they really have been paid attention? In the world of production and commerce that competitions become closer every day and more goods are offered, the most important factor is the quality, i.e, the product should have high quality and provided with a good service, and if these two are not given to a customer, you will lose him. The social organization has been ranked and classified as one of the most sophisticated systems known in human knowledge. If

we review our everyday life, we conclude that organizations have influenced profoundly in our life. We are in contact with many organizations and most people spend most of their lives in organizations. In other words, a significant amount of people's time is spent as a customer or client in organizations. Hence, it is necessary that the management methods of organizations to be such that, while meeting human needs, they can provide the satisfaction of customers or clients (Bikzad and Molavi, 2009).

### Research purposes

**Main objective:** The main objective of this research is to determine the satisfaction of cooperators from electronic registration services of companies and their dimensions.

### Hypotheses

**The main hypothesis:** Cooperators are satisfied with the companies' electronic registration services and their dimensions.

### Research method

This research is applied, descriptive - survey and it is a type of cross sectional research in order to study the data associated with a period of time. The statistical population of this study is all cooperators in Ardebil province with 1839 cooperative companies. The statistical sample was 317 using the Cochran formula. For the purpose of precaution, 320 questionnaires were distributed and sampled. In this research, a researcher-made questionnaire was used to collect data after investigating and studying domestic and foreign books and articles related to the subject of the research.

To carry out an experiment, in order to identify problems in the tool or the questionnaire, Table 2 was used by a group of respondents and 20 questionnaires were distributed among the members of the statistical population.

Table 2. Methods used in pre-test

Method	Sample of objective	Reason of using method
Expert group	5 professors	- Evaluation of the relevance of the items used to measure variables (validity of the questionnaire) - Evaluating the relevance of the terms and vocabulary used in the questionnaire - Obtaining comments, critics and suggestions on the questionnaire
Personnel interviews	3 Personnel interviews with cooperators of Ardebil	- Obtaining comments from cooperators on the problems in the questionnaire - Use the results of the interviews in the pre-test
Planning field survey (Data collection)	Distributing 20 questionnaires between Cooperatives in Ardebil province	- Modifying the questionnaire before collecting the main data - Performing appropriate analyzes for reliability of the questionnaire

In this study, for determining the validity of the information gathering tool, a formal or symbolic validity has been used. The initial questionnaire set is provided to some of the management professors and experts in order to comment on the validity of the questionnaire and whether the questionnaire's questions designed measure what is being considered. Then, the opinions of the professors and experts in the questionnaire were considered and the

necessary changes were applied to the questions. Interviews were also conducted as part of the pre-test that was previously discussed.

To assess the reliability of the tool, Cronbach's alpha method, which is the most common method for measuring the reliability, was used. Cronbach's Alpha results: 0.848 system design, 0.845 system reliability, 0.847 system responsiveness, 0.838 system security, 0.846 system information quality, 0.890 system ease of use and 0.837 cooperative satisfaction 0.837.

**Findings**

After completing the questionnaire and collecting data, the variables were coded, descriptive and inferential analyzes were performed and analyzed using SPSS software. 66.7 percent of respondents are men and 33.3 percent are women. The age distribution of 10.7 percent of respondents with the lowest frequency was related to age less than 25 years old and 43.7 percent with the highest frequency are 25 to 35 years old. In terms of education, 8.3% of the respondents with the lowest frequency of education are under the diploma and 46% with the highest frequency are of BA. In terms of employment status, the unemployed people are with the lowest frequency 10.3% and people with free job 45.3% had the most frequency. Also, in the type of cooperative of statistical population, the production and distribution cooperative with 19.7 percent had the least frequency and productive cooperative with 41.7 percent had the most frequency.

**Descriptive statistics of research variables (proprietary data)**

Table 3- Components with the highest average response to questions

Variables	Number	Average	Variance	SD
System design	300	3.4034	0.640	0.79991
System reliability	300	3.4905	0.666	0.81595
System accountability	300	3.4390	0.575	0.75858
System security	300	3.5451	0.867	0.93115
System quality of information	300	3.4068	0.667	0.81584
System ease of use	300	3.33311	1.755	1.32465
Satisfaction	300	3.4211	0.469	0.68456

According to Table 3, system security with an average of 3.5451 has the highest average response with variance 0.867 and a standard deviation of 0.93115.

**Descriptive statistics of research variables in electronic registration indicators and performance improvement in cooperatives**

Table 4- Components with the highest average response to questions

Variables	Number	Minimum	Maximum average	SD
System design	300	2	5 3.4034	0.79991
System reliability	300	2	5 3.4905	0.81595
System accountability	300	2	5 3.4390	0.75858
System security	300	2	5 3.5451	0.93115
System quality of information	300	2	5 3.4068	0.81584
System ease of use	300	2	5 3.33311	1.32465
Satisfaction	300	2	5 3.4211	0.68456

Table 5. Results of the Kolmogorov-Smirnov test

Variables	Number	Average	Value of test	p-value	SD
System design	300	3.4034	0.991	0.280	0.79991
System reliability	300	3.4905	1.737	0.062	0.81595
System accountability	300	3.4390	1.814	0.059	0.75858
System security	300	3.5451	0.1081	0.179	0.93115
System quality of information	300	3.4068	1.864	0.25	0.81584
System ease of use	300	3.33311	1.605	0.012	1.32465
Satisfaction	300	3.4211	1.636	0.009	0.68456

According to Table 5, all the components of electronic registration indicators and performance improvement in cooperatives are larger than the error rate, so the data is normal and the parametric test is used.

**Inferential Analysis (Hypothesis Test)**

After descriptive analyzing demographic data and specific data, in this section, in order to complete the analysis of data, we will examine the hypotheses of the research. Considering that the hypotheses of this research are presented in the form of a main hypothesis and six sub-hypotheses, for inferential analysis and testing of these hypotheses, t student test and correlation coefficient in SPSS statistical software are used.

**The main hypothesis:** Cooperators are satisfied with the electronic registration services of companies.

Considering that the questionnaire data are normal distribution type and the test is related to the comparison of the average of the population, we use the t-student test.

Table 6: Statistical information of t-student of main hypothesis

	mean	Std. Error Mean	Test value $\geq 3$			
			T	Df	Sig(1-tailed)	Mean Difference
Satisfaction	3.4211	0.4128	10.202	299	0.000	0.42113

According to the results of Table 6, the average of satisfaction is 3.4211 and considering the fact that the significance level of the test is less than the error rate ( $0.05 > 0.000$ ), therefore, with 99% confidence, cooperators are satisfied with companies' electronic registration service.

**First sub-hypothesis:** Cooperators are satisfied with the system design.

Table 7: Statistical information of t student of the first sub-hypothesis

	mean	Std. Error Mean	Test value $\geq 3$			
			T	Df	Sig(1-tailed)	Mean Difference
System design	3.4034	0.79991	8.690	299	0.000	0.40337

According to the results of Table 7, the average of system design is 3.4034 and considering the fact that the significance level of the test is less than the error rate ( $0.05 > 0.000$ ), therefore, with 99% confidence, cooperators are satisfied with system design.

**Second sub-hypothesis:** Cooperators are satisfied with the system reliability.



Table 8: Statistical information of t student of the second sub-hypothesis

	Mean	Std. Error Mean	Test value $\geq 3$			
			T	Df	Sig(1-tailed)	Mean Difference
System reliability	3.49050	0.81595	10.307	299	0.000	0.49048

According to the results of Table 8, the average of reliability is 3.4905 and considering the fact that the significance level of the test is less than the error rate ( $0.05 > 0.000$ ), therefore, with 99% confidence, cooperators are satisfied with system reliability.

**Third sub-hypothesis:** Cooperators are satisfied with the system accountability.

Table 9: Statistical information of t student of the third sub-hypothesis

	Mean	Std. Error Mean	Test value $\geq 3$			
			T	Df	Sig(1-tailed)	Mean Difference
System accountability	3.4390	0.75858	9.939	299	0.000	0.43898

According to the results of Table 9, the average of system accountability is 3.4390 and considering the fact that the significance level of the test is less than the error rate ( $0.05 > 0.000$ ), therefore, with 99% confidence, cooperators are satisfied with system accountability.

**Fourth sub-hypothesis:** Cooperators are satisfied with the system security.

Table 10: Statistical information of t student of the fourth sub-hypothesis

	Mean	Std. Error Mean	Test value $\geq 3$			
			T	Df	Sig(1-tailed)	Mean Difference
System security	3.5451	0.93115	10.054	299	0.000	0.54508

According to the results of Table 10, the average of system security is 3.5451 and considering the fact that the significance level of the test is less than the error rate ( $0.05 > 0.000$ ), therefore, with 99% confidence, cooperators are satisfied with system security.

**Fifth sub-hypothesis:** Cooperators are satisfied with the quality of information of system.

Table 11: Statistical information of t student of the fifth sub-hypothesis

	Mean	Std. Error Mean	Test value $\geq 3$			
			T	Df	Sig(1-tailed)	Mean Difference
System quality of information	3.4068	0.81584	8.564	299	0.000	0.40678

According to the results of Table 11, the average of system quality of information is 3.4068 and considering the fact that the significance level of the test is less than the error rate ( $0.05 > 0.000$ ), therefore, with 99% confidence, cooperators are satisfied with system quality of information.

**Sixth sub-hypothesis:** Cooperators are satisfied with the system ease of use.

Table 12: Statistical information of t student of the sixth sub-hypothesis

	Mean	Std. Error Mean	Test value $\geq 3$			
			T	Df	Sig(1-tailed)	Mean Difference
System ease of use	3.3311	1.32465	4.300	299	0.000	0.33108

According to the results of Table 12, the average of system ease of use is 3.3311 and considering the fact that the significance level of the test is less than the error rate ( $0.05 > 0.000$ ), therefore, with 99% confidence, cooperators are satisfied with system ease of use.

**Friedman test:** To compare the average dimensions of cooperatives' satisfaction variables, using the Friedman test, the following results were obtained:

Table 13 - Test of average of independent variables

Ranks	Mean Rank
System design	3.32
System reliability	3.66
System accountability	3.56
System security	3.90
Quality of information	3.52
System ease of use	3.04

Table 14 - Friedman ranking Test

Test Statistics <sup>a</sup>	
N	275
Chi-Square	37.882
Df	5
Asymp. Sig.	.000
<sup>a</sup> . Friedman Test	

Using the results of Table 13, which shows the average of ranks of each dimension of the satisfaction variables and Table 14 containing the main result of the test, it can be observed the k-square statistic with 5 degrees of freedom as well as the significance level of the P-Value test with zero value that indicates rejecting equation of averages according to the high outputs. The final result is that the dimensions of the variables of system satisfaction of the cooperative are different. Accordingly, network security has the highest score and ease of use of system has the lowest score.

### Discussion and conclusion

Test of the general hypothesis of the research: Cooperators are satisfied with the electronic registration services of companies.

In this hypothesis, the satisfaction of cooperators from the electronic registration services of companies was examined. T student test was used to analyze this hypothesis. According to the results of the research hypothesis test and the significance level less than  $\alpha=0.05$ , the research

hypothesis is confirmed based on the satisfaction of the electronic registration system services. The results of this hypothesis are consistent with the findings of Barnes & Widgen (2007), Yu and Dento (2001), Jafari and others (2014) and Parasuraman (2001).

**The first sub-hypothesis:** Cooperators are satisfied with the system design.

In this hypothesis, the satisfaction of cooperators from the system design was examined. T student test was used to analyze this hypothesis. According to the results of the research hypothesis test and the significance level less than  $\alpha=0.05$ , the research hypothesis is confirmed based on the satisfaction of the electronic registration system and cooperators are satisfied with system design. The results of this hypothesis are consistent with the findings of Suksomi (2010), Yu and Dento (2001), Jafari and others (2014) and Wolfinbarger and Gilly (2003).

**The second sub-hypothesis:** Cooperators are satisfied with the system reliability.

In this hypothesis, the satisfaction of cooperators from the system reliability was examined. T student test was used to analyze this hypothesis. According to the results of the research hypothesis test and the significance level less than  $\alpha=0.05$ , the research hypothesis is confirmed based on the satisfaction of the electronic registration system and cooperators are satisfied with the system reliability. The results of this hypothesis are consistent with the findings of Suksomi (2010), Jafari and others (2014) and Wolfinbarger and Gilly (2003) and Parasoraman (2001).

**The third sub-hypothesis:** Cooperators are satisfied with the system accountability.

In this hypothesis, the satisfaction of cooperators from the system accountability was examined. T student test was used to analyze this hypothesis. According to the results of the research hypothesis test and the significance level less than  $\alpha=0.05$ , the research hypothesis is confirmed based on the satisfaction of the electronic registration system and cooperators are satisfied with the system accountability. The results of this hypothesis are consistent with the findings of Yung and Jun (2002) Jafari and others (2014) and Parasoraman (2001).

**The fourth sub-hypothesis:** Cooperators are satisfied with the system security.

In this hypothesis, the satisfaction of cooperators from the system security was examined. T student test was used to analyze this hypothesis. According to the results of the research hypothesis test and the significance level less than  $\alpha=0.05$ , the research hypothesis is confirmed based on the satisfaction of the electronic registration system and cooperators are satisfied with the system security. The results of this hypothesis are consistent with the findings of Jafari and others (2014) and Wolfinbarger and Gilly (2003) and Yu and Dento (2014).

**The fifth sub-hypothesis:** Cooperators are satisfied with the system quality of information.

In this hypothesis, the satisfaction of cooperators from the system quality of information was examined. T student test was used to analyze this hypothesis. According to the results of the research hypothesis test and the significance level less than  $\alpha=0.05$ , the research hypothesis is confirmed based on the satisfaction of the electronic registration system and cooperators are satisfied with the system quality of information. The results of this hypothesis are consistent with the findings of Lee and Somi (2009), Jafari and others (2014) and Barnes & Widgen (2007).

**The sixth sub-hypothesis:** Cooperators are satisfied with the system ease of use.

In this hypothesis, the satisfaction of cooperators from the system ease of use was examined. T student test was used to analyze this hypothesis. According to the results of the research hypothesis test and the significance level less than  $\alpha=0.05$ , the research hypothesis is confirmed based on the satisfaction of the electronic registration system and cooperators are satisfied with

the system ease of use. The results of this hypothesis are consistent with the findings of Yu Dento (2001), Jafari and others (2014) and Barnes & Widgen (2007).

The purpose of this study is to determine the satisfaction of cooperators from electronic registration services of companies. In this research, a theoretical model was presented to better understand satisfaction of cooperators from electronic registration services of companies and examined empirically. In this model, it was emphasized on determining the satisfaction of cooperators from electronic services (system design, system reliability, system accountability, system security, system quality of information, and system ease of use). The structures used to test the theoretical model were conceptualized based on the literature review, and indicators with high reliability and validity were used to measure these structures. The statistical population used for this research is cooperators of Ardebil province with 1839 cooperatives and 885179 cooperators. Sample size was estimated using 319 samples and sampling from unlimited population with 5% error rate, out of which 300 people responded to the thesis questionnaire as statistical sample. To analyze the data, using descriptive statistics to describe the general characteristics of the statistical sample and the normal distribution of the data, the t student test was used to test the hypotheses. To analyze the components of the research, t-student test was used and the results of the statistical tests show that all of the cases affect the satisfaction of cooperators from the electronic registration services of the companies.

### **Recommendations and Suggestions**

- It is suggested that in the design of web site, while considering apparent attractiveness, its technical performance to be satisfactory.
- The system should be approved by the High Council of Informatics and the ICT Guild System and be able to accurately meet the need of users.
- The electronic system should have the ability to respond to the demands of customers in the minimum time.
- In the system, personal information and customer demand are protected and the system has high security.
- The key information required is explained in detail in the system and it should be presented tailored to the needs of users and to be up-to-dated.
- The speed of the website and the ability to search for information should be able to provide customer satisfaction.
- In the system, the process of obtaining licenses and obtaining facilities from banks should be considered seamlessly so cooperators can easily use it.
- The system should be effective in reducing the costs of cooperative companies.

### **Research limitations**

- Since the sample of this research is among Ardebil cooperators. Therefore, there are limitations in generalizing the results of this research to other organizations and cooperatives.
- Due to the scope of the study, there are other variables that are not included in this model.
- The impact of each dimension on increasing customer satisfaction has not been investigated.
- The inherent limitations of the questionnaire, including the lack of accurate control of the respondents in providing accurate and real answers to the questionnaire.

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