

The Identifying, Evaluating, and Prioritizing the Factors Affecting Customers' Satisfaction with E-service Centers of Iran's Police

Seyed Ali Ziaee Azimi*^a, Mohammad Saidi-Mehrabad ^a

^a Faculty of Industrial Engineering, Iran University of Science and Technology, Tehran, Iran

Abstract

The present research is classified as an applied study employing a descriptive survey design to describe the status quo of the factors affecting customers' satisfaction with the E-service centers of Iran's police, known as 10 + police centers. The research population involves all the costumers of the 10+ police centers, among which 420 individuals were chosen through simple random sampling technique .Furthermore, forty five 10 + police service centers were selected with probability proportional to size. After Determining the validity and reliability of the researcher-made questionnaire, it has been used to collect the required data. Then, a conceptual model was developed using the theoretical framework and background literature. After that, SPSS software was used to examine and make an analysis of the research hypotheses. The findings indicate that all the identified indices to the customers' satisfaction with the 10 + police e- service centers (including trust and confidence, staff performance, system facility, environmental facility, basic amenity, providing sufficient notification, time and cost, easy access to the office) have an effect on the customers' satisfaction. In the end, some practical suggestions were made for an improvement in the satisfaction level of the customers to the 10 + police e-service centers.

Keywords: 10 +police, Measuring the Customer Satisfaction, Improvement in quality of the services.

*corresponding Author email address: sa_zazimi@yahoo.com

1. Introduction

In the government bureaucracies of the countries around the world, the customer satisfaction is considered as one of the main criteria for assessing the state-run organizations. Policing organization is also a state-run organization which has the responsibility of maintaining order, providing the community with security and ensuring the people protection. It goes without saying that policing organization plays an important role in gaining the citizens' satisfaction with the government.

Accordingly, in line with the privatization policy of the government and in order to hold respect in the customers, and also, to help in forming a totally electronic government Iran's police has delegated some of its services to private sector, called 10+ police office, under security considerations and supervision. The number 10 refers to ten services that the Iranian police have provided for people since launching these centers. Undoubtedly evaluating the people's satisfaction with the services offered by 10+ police is necessary in order to overcome possible drawbacks in these centers. Accordingly, this paper mainly focuses on measuring the customer satisfaction with 10+ police on the basis of the suggested indices. Therefore, we outline research questions and objectives as follow:

Primary objective

Our primary objective is to identify, evaluate, and prioritize the factors affecting customers' satisfaction with 10 + police e-service centers.

Secondary objectives

1. Identifying decisive factors in customer satisfaction with 10+ police e-service centers;
2. Measuring customer satisfaction with 10+ police e-service centers;
3. Assessing the overall performance of 10+ police e-service centers at present;
4. Identifying the opportunities, threats, weaknesses and strengths of 10 +police e-service centers;
5. Prioritizing the improvement of the dimensions and indicators of measuring customer satisfaction with 10+ police e-service centers;
6. Offering practical suggestions for improving the overall performance of 10 +police e-service centers based on the research results.

The questions

1. What indicators and dimensions are appropriate for measuring customers' satisfaction with the 10+ police e-service centers?
2. What is the level of customers' satisfaction with the 10+ police e-service centers?

Research hypothesis

The first hypothesis: the 10 + police offices' customers are satisfied with the performance of the staff

The second hypothesis: the 10 + police offices' customers have trust and confidence on 10 + police offices

The third Hypothesis: the 10 + police offices' customers are satisfied with providing sufficient notifications.

The fourth hypothesis: the 10 + police offices' customers are satisfied with the dimension of time and cost.

The fifth hypothesis: the 10 + police offices' customers are satisfied with the dimension of

environmental facility.

The sixth hypothesis: the 10 + police offices' customers are satisfied with the system facility of the 10 + police offices

The seventh hypothesis: the 10 + police offices' customers are satisfied with the basic amenity of the 10 + police offices.

The eighth hypothesis: the 10 + police offices' customers are satisfied with the dimension of easy access to the 10 + police offices.

The ninth hypothesis: clients, providing services in all aspects of 10+ police offices, with their consent.

2. Review literature

2.1. Review of the domestic research

Currently, the number of 10+ police e-service centers has grown to more than 960 throughout the country, while 51 more new centers are to start soon. The electronic services provided by 10+ police are as follow: passport issue and renewal, driving license and renewal, car ticket, appeal against traffic ticket, fuel card issue, department of monitoring public places, military services, record household income data (for allocation of subsidies), and police clearance certificate. The followings surveys have been conducted on customer satisfaction with the e-services provided by 10+ police centers:

In a research entitled “the evaluation of quality of the services provided by 10+ police offices by using the SERVQUAL Model” it was revealed that there was a significant difference between the viewpoints of the senior 10+ police managers and that of people's on the quality of the services offered by Iran's police; and quickness of 10+ police offices in performing the services has been identified as the primary factor to be considered while introducing corrective measures. (Assariannejad & Roumenan, 2011).

In another research entitled “Assessing the Iranian government's success in offering electronic services through 10+ police centers and communication service providers”, which was conducted to assess the customers' satisfaction with the 10+ police offices by adopting GMihelis's multi-criteria satisfaction analysis and Loan & Mclean information system models, the findings revealed that the customers were more contended with the old bureaucratic systems than the services provided by the electronic government. (Haghighi nasab & Abedin & Janfeshan, 2009).

Also, in a research entitled “investigation of the customers' satisfaction with the performance of 10+ police e-services: case study of Kurdistan centers”, it was found that there was a significant difference between the expectations and perceptions of 10+ police customers in Kurdistan province in all aspects of Parasuraman model (Zare & Ghaemi, 2014).

In a research entitled “the privatization of passport issuance services in the 10+ police centers”, it was found that privatization of passport issuance would lead to achievement of objectives of national information technology development, increase in people's satisfaction level while decreasing quality of other three variables of the research, namely office controls, record keeping and security and safety matters (Ghasri & Salehi, 2009). In a research entitled “assessment of people's satisfaction with 10+ police services”, conducted by the office of applied research of Iran's police, contributing factors to people's satisfaction were identified as: gender, quickness of the services, easy access to the services, staff performance and facilities of the 10+ police centers; moreover, the research findings indicated that people, on the whole, were contended with the services provided by these centers. Additionally, in an another research entitled “Assessing 10+

police performance, present situations and processes: case study of Tehran e-service centers” that was administrated by Financial Planning and Budget Section of the Iran’s police, corrective measures were introduced, for reviewing procedures to apply for a passport or to obtain a driving license. As it can be seen in the research literature, no particular locally-made model has ever been proposed to measure customer satisfaction with 10+ police services.

In a study under the title of “Citizen Satisfaction evaluation of police+10 services with approach of citizen relationship management”. The obtained results indicate that the citizens are discontent with the criteria of accessible payment service provider for payment, easy access to the offices by public transportation, favorable treatment of staff to customers, speed and accuracy of performance of staff, tracking service availability for the services. Moreover, on the customers’ opinion, utilizing online services can result in the ease of use and improvement in the tracking service. (Akhondzadeh et al, 2015).

2.2. Review of the international research

In a study titled “models of satisfaction with police service” citizens of Colorado Springs (n=3591) participated in one of four yearly surveys (2002 to 2005) to test two structural equations models. One model used data from 2002 to 2005 and latent variables of victimization, neighborhood safety, enough officers and police response to predict satisfaction with police service. A second model used data only from 2005 and 12 latent variables. The findings revealed that the five-variable model fits the data very well (CFI=0.95). It did not vary from 2002 to 2005. The 12-variable model explained the satisfaction process more completely but fits less well (CFI=0.91). Neither model varied by demographic characteristics of respondents. (Dukes et al, 2009, p.297).

In another study entitled “Differentiating confidence in the police, trust in the police, and satisfaction with the police” it is concluded that “confidence in the police” is the preferred choice when we survey the citizenry about the level of support for the police and when the police is evaluated as a political institution. (Cao, 2015). In a research titled “Exploring citizen satisfaction with police in India: The role of procedural justice, police performance, professionalism, and integrity” older citizens reported higher satisfaction with the police. Among the contextual characteristics, the authors find a positive relationship between perceived police performance, fairness, professionalism, and citizen satisfaction with police. (Madan & Nalla, 2015).

In another paper entitled “Assessing the quality of police services using SERVQUAL” the findings show that while there is a significant shortfall in meeting customer expectations, the police force appears to have a good understanding of what these expectations actually are. (Donnelly et al, 2006).

3. Theoretical framework of the research

3.1. Customer satisfaction

The word satisfaction is derived from two Latin words “Satis” and “Facer” meaning sufficient and carrying out something respectively. As a result, satisfaction means seeking what we are trying to achieve completely. Customer satisfaction or dissatisfaction results from the difference between customer’s expectations and quality that he has received. In other words, the following equation can be used to measure satisfaction. (Oliver, 2010).

Table (1) outlines a variety of definitions of the customer satisfaction provided by scholars and thinkers in the recent years. (Talaee Delshad, 2013).

Table1. The definitions of customer satisfaction

No	Definition of customer satisfaction	Year	Scholar
1	Discrepancies between ideal and actual attribute of service/product	1976	Pfaff
2	Differences between service quality perceptions and customer expectations	1992	Oliver
3	Customer perception of products/services as they are worth his/her money	1996	Teracey
4	When customer feels attributes of product meet his/her expectations and needs	1998	Juran
5	The result of relationships between perceived performance and levels of customer expectation	2000	Miller
6	A balance between major company's products and customer demands and needs	2002	Hill
7	A person good feeling experienced through comparing his/her expectations and actual performance of product	2007	Kotler

3.2. The concepts of citizen-orientedness and customer-orientedness and the differences between them

The concept of citizen-oriented and customer-orientedness difference with customer oriented than in private organizations, and business is meaningless.

The term customer-orientedness refers to the desire to provide the customers with the service that they are willing to receive and are gratified at it; while, the term citizen-orientedness is more prevalent in the government sector. In the case of citizen-orientedness the people and citizen are the first priority.

The objective and mission of the government sector is to serve the interest and good of the public, all the people and individuals are perceived as customers to the government sector. The government institutions to become citizen oriented need to identify the requirements and needs of the citizens. In Switzerland, the local governments make a study of the requirements of their citizens every four years (Kuno Schedler, Lukas Summermatter, 2006).

3.3. Customer satisfaction and its relationship with quality of service

Although satisfaction and service quality have some commonalities, in general satisfaction is a broader concept than quality, because the quality focuses on the aspects of services. From this perspective, the quality of services is considered as part of the satisfaction and their connections are shown in the figure (1). As illustrated in the chart, quality of service represents customers perception of the five dimensions of services, while satisfaction is more comprehensive and includes quality of service, product quality, price and also situational factors and individual factors (Zeithaml & Bitner , 1996).

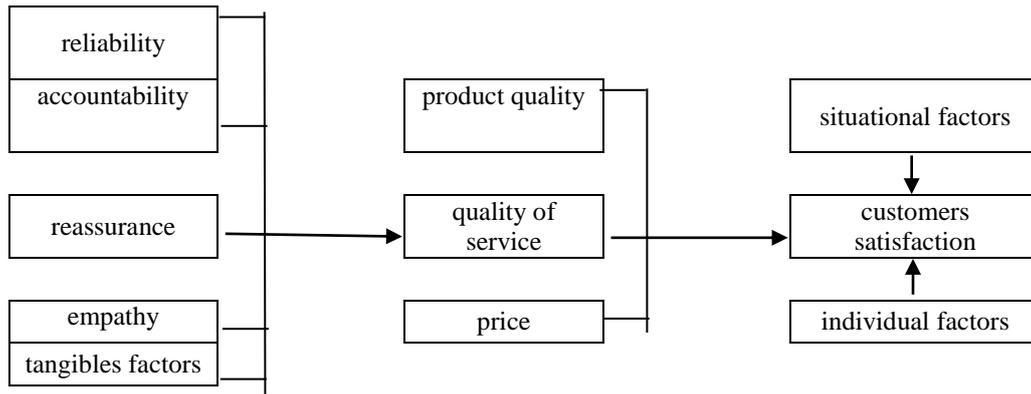


Figure 1. Customers’ perceptions of quality and customer satisfaction (Zeithaml and Bitner, 1996)

3.4. The evaluation models of customer satisfaction

For evaluating the customers’ satisfaction, different models can be used. According to the type of categorizing agreed by Toepfer and Sebastian Paffrath et al (1990), the models for measuring the customer’s satisfaction are divided into two parts; subjective and objective (or theoretical and conceptual). Figure (2) shows types of customer satisfaction models. (Toepfer, 1999).

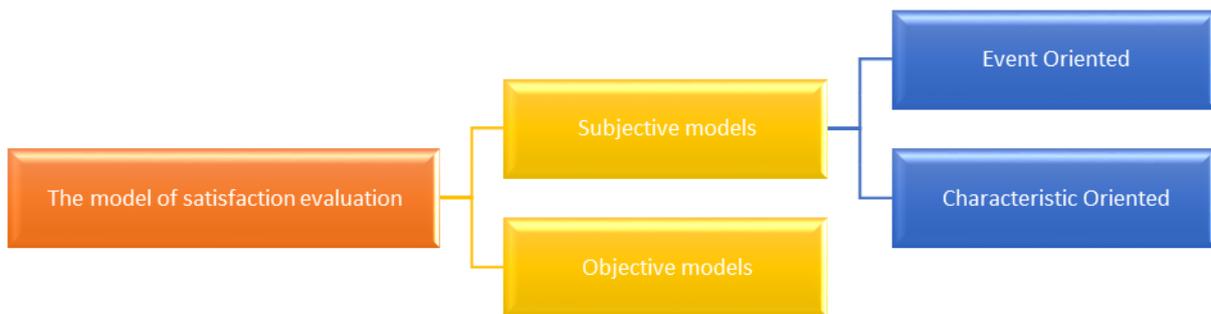


Figure 2. Different types of models regarding customer satisfaction

3.5. The national customer satisfaction indices

Developed countries have invested considerable efforts in R&D to arrive at more accurate understanding of the customer satisfaction measurement. The European Customer Satisfaction Index (ECSI), Swiss Index of Customer Satisfaction (SWICS), Norwegian Customer Loyalty Barometer (NCSB) and the Malaysian Customer Satisfaction Index (MCSI) are some of indices produced to measure customer satisfaction. Table (2) shows some countries customer satisfaction index as well as the year in which each respective index has been created. (Kavoosi & Saghaei, 2013). Therefore, considering the above discussion in the review literature and theoretical framework sections, the indices developed by other countries can be used as criteria in conducting the present study.

Table 2. The national index of customer satisfaction in some countries

Index	Year
Swedish Customer Satisfaction Barometer (SCSB)	1989
American Customer Satisfaction Index (ACSI)	1994
Swiss Index of Customer Satisfaction (SWICS)	1997
European Customer Satisfaction Index (ECSI)	1999
Russian Customer Satisfaction Index	1999
Norwegian Customer Satisfaction Index	2000
Irish Index of Customer Satisfaction	2000
Malaysian Customer Satisfaction Index (MCSI)	2000
South Korea Customer Satisfaction Index	2001

3.6. The conceptual model of the research

According to the theoretical framework and literature, the conceptual model of the research to evaluate customers’ satisfaction with the 10 + police offices (i.e. e-service centers of Iranian police) is illustrated as the following figure (3):



Figure 3. The conceptual model of the research

4. Research Methodology

The present research is classified as an applied study employing a descriptive, survey design to describe the status quo. A diversity of methods have been employed for gathering required data, such as reviewing documentation and online resources, seeking expert opinions, as well as studying topic-related books, papers, magazines, archives of the organizations, theses, etc. available at libraries. Moreover, customers’ feedback has been collected through conducting interviews and administering researcher-made questionnaire. The reliability coefficient of the research was calculated to be 0.959 by Cronbach Alpha which indicated that the questionnaire had very good internal coherence. To determine the contextual validity of questionnaire, it was distributed among managers, scholars and experts in customer service evaluation to ask for their

opinions before conducting field study; and the exploratory and confirmatory factor analysis were performed to confirm the divergent and convergent validity of data collected through questionnaire respectively. The research population consisted of all 10+ police customers in Tehran which was large enough to be considered statistically infinite population. Given large number of 10+ police centers (115 active centers) in Tehran, the number of required centers for the survey was determined through probability-proportional-to-size and multistage cluster sampling. Tehran is divided into 22 divisions and the 10+ police centers are widely dispersed around the city, therefore 1 to 5 centers have been selected from each division which made the number of respective centers to 45. additionally the simple random sampling method has been adopted to select a sample of 10+ police customers, accordingly 3 to 15 questionnaires distributed between them based on the number of times they have visited the centers and, given the infinite number of 10+ police customers, size of the research sample has been determined using formula (1) in which Z is the standard normal statistic which has been calculated to be 1.96 at 95% confidence level. The probability of success, probability of failure, standard deviation and sample size are denoted by p, q, d and n symbols respectively. If value of the product of p cannot be estimated, it can be set to 0.5; since $q = 1 - p$, the value of q is to be 0.5 either. In this situation the variance is 0.25, its maximum value [4]. The d is set to 0.05 as well; therefore the minimum size needed for our statistical sample is calculated to be 385. Finally this number is rounded up to 420 to take the lost probable data into account and making the research more accurate.

$$n = \frac{z_{\alpha}^2 pq}{d^2}$$

F

Formula .1. Sample size determination

5. Research findings

5.1. Descriptive analysis of demographic data

According to the findings, 72 percent of the clients are men and 28 percent are women, 62 percent of which are married and 28 percent are single. The high percentage of clients (40 percent), were from 21 - 30 years of age and 65 percent were university graduates. Furthermore, 47 percent of the clients worked for private sectors, 23 percent worked for public sectors, and 30 percent had other jobs.

As can be seen from the pie chart below, individuals applying for driving license constitute the largest number of clients going to these government e-service offices. Also, the individuals going to these offices for the issues related to the department of monitoring public places make up the lowest clients numbers.

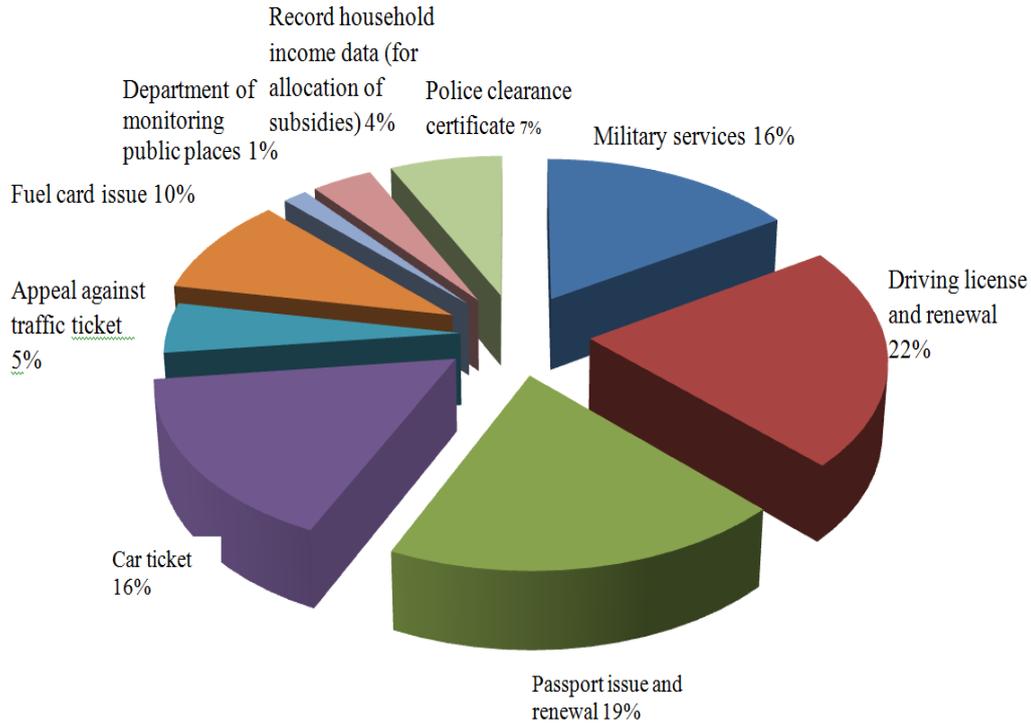


Figure 4. The percentage of customers to the services

5.2. Testing the research hypothesis

The First hypothesis: the 10 + police offices’ customers are satisfied with the performance of the staff.

Table 3. The indices of the dimension of staff performance and the results of t-test

The indices	T	Mean	Sig. (2-tailed)	95% confidence interval of the difference	
				Lower	Upper
Neat and clean appearance of staff	16.075	3.83	.000	.73	.93
Approachability and favourable treatment of staff to customers while coaching them by phone or in person	12.796	3.75	.000	.63	.86
Speed and accuracy of performance of staff	14.338	3.78	.000	.68	.89
Staff’s skills and competence in doing their duties and providing customers with accurate information	20.467	3.95	.000	.86	1.04
Punctuality and regularity in observing office hours	24.410	4.01	.000	.93	1.09
Ignoring any attempts to get served out of order	18.207	3.91	.000	.81	1.01

Table 3. Continued

The indices	T	Mean	Sig. (2-tailed)	95% confidence interval of the difference	
				Lower	Upper
Unceasing efforts to completely fulfil customer's demand when their turn come	18.218	3.90	.000	.80	1.00
Constant presence of staff in the workplace to perform their duties	19.935	3.94	.000	.85	1.04
Adequate number of staffs and counters to serve customers	7.845	3.46	.000	.34	.57
Suitability of office hours during the day	15.852	3.76	.000	.66	.85
Serving customers completely at their first (or second) visit	13.672	3.74	.000	.63	.84
The process of offering services	15.855	3.78	.000	.68	.88
Accountability of director of centre to customers about staff performance	9.158	3.54	.000	.42	.65
Quickness in responding to complaints and the way they are handled	6.414	3.36	.000	.25	.47
Providing customers with all (previously-mentioned 10+ police) services	15.166	3.74	.000	.64	.84

Based on the table 3, the p-value of the indices are all lower than 0.05. Therefore, it can be said that the dimension of staff's performance in all the indices have an impact on the level of customers' satisfaction with the services provided by 10 + police e-service offices. In other words, the first hypothesis is confirmed. Also, as the mean value for the indices is higher than 3, and as the lower and upper 95% confidence interval of the difference are positive, it can be concluded that the 10 + police offices' customers are satisfied with the performance of the staff and the highest satisfaction is related to "Punctuality and regularity in observing office hours" which is 4.01.

The second hypothesis is that the 10 + police offices' customers have trust and confidence on 10 + police offices.

Table 4. The 10 + police offices' customers have trust and confidence on 10 + police offices

The indices	T	Mean	Sig. (2-tailed)	95% confidence interval of the difference	
				Lower	Upper
Confidence about accuracy of the presented services and fulfilling commitments in the due date	17.150	3.77	.000	.68	.86
Trust in the offices as electronic service authority	22.779	3.96	.000	.88	1.05
Trust in the offices to keep people's documents and data confidential	23.527	4.02	.000	.93	1.10

Based on the table 4, the p-value of the indices are all lower than 0.05. Therefore, it can be said that the dimension of trust and confidence in all the indices have an impact on the level of customers' satisfaction with the services provided by 10 + police e-service offices. In other words, the second hypothesis is confirmed, as well. Also, as the mean value for the indices is higher than 3, and as the lower and upper 95% confidence interval of the difference are positive, it can be

concluded that the 10 + police offices’ customers have trust and confidence on 10 + police offices and the highest satisfaction is related to “Trust in the offices to keep people’s documents and data confidential “which corresponds to 4.01.

The third Hypothesis is that the 10 + police offices’ customers are satisfied with providing sufficient notifications.

Table 5. The indices of the dimension of providing sufficient notifications and the results of t-test

The indices	T	Mean	Sig. (2-tailed)	95% confidence interval of the difference	
				Lower	Upper
Use official website to keep people updated with available services provided by 10+ police offices	9.406	3.50	.000	.39	.60
Use SMS to keep people informed about necessary requirements, service costs, physical address and telephone of the offices	3.288	3.19	.001	.08	.30
Provide people with precise information on necessary requirements (e.g. to obtain driving license, etc.), a list of approved doctors (for administering vision test) and their offices, service costs, etc.	13.640	3.64	.000	.54	.73

Based on the table 5, the p-value of the indices are all lower than 0.05. Therefore, it can be said that the dimension of providing sufficient notifications in all its indices have an impact on the level of customers’ satisfaction with the services provided by 10 + police e-service offices. In other word, the third hypothesis is confirmed. Also, as the mean value for the indices is higher than 3, and as the lower and upper 95% confidence interval of the difference are positive, it can be concluded that the 10 + police offices’ customers are satisfied with providing sufficient notifications.

The fourth hypothesis: the 10 + police offices’ customers are satisfied with the dimension of time and cost.

Table 6. The indices of the dimension of time and cost and the results of t-test

The indices	T	Mean	Sig. (2-tailed)	95% confidence interval of the difference	
				Lower	Upper
Affordable cost of the services	3.834	3.22	.000	.11	.33
Affordable cost of folders used to keep passport, driving license and the military service necessary requirements	8.696	3.46	.000	.35	.56
Always-on connection of computers to database server	5.513	3.32	.000	.20	.43
Lead time between completion of a given process (e.g. to get passport) in the office and get it delivered straight to your door	6.737	3.38	.000	.27	.49

Based on the table 6, the p-value of the indices are all lower than 0.05. Therefore, it can be said that the dimension of time and cost in all its indices have an impact on the level of customers' satisfaction with the services provided by 10 + police e-service offices. In other word, the fourth hypothesis is confirmed. Also, as the mean value for the indices is higher than 3, and as the lower and upper 95% confidence interval of the difference are positive, it can be concluded that the 10 + police offices' customers are satisfied with the dimension of time and cost.

The Fifth hypothesis is that the 10 + police offices' customers are satisfied with the dimension of environmental facility.

Table 7. The indices of the dimension of environmental facility and the results of t-test

The indices	T	Mean	Sig. (2-tailed)	95% confidence interval of the difference	
				Lower	Upper
Spacious lounge room	12.452	3.67	.000	.56	.77
Comfortable and relaxed atmosphere of office	10.314	3.57	.000	.46	.68
Illuminance and lightning of office	16.013	3.79	.000	.70	.89
Refurbishment of office building e.g. clean walls, beautiful decoration, etc.	8.837	3.48	.000	.37	.59
Partitioning office into separate rooms and using each one for offering a particular service	14.657	3.69	.000	.60	.78
Providing the customers with tools like application form for military service, passport folders and so on	16.937	3.84	.000	.74	.93
Good ventilation system (cooling-heating)	9.345	3.52	.000	.41	.63
Accessible toilet rooms	.087	3.01	.930	-.11	.12
The suitability of the location of bulletin boards in the office	14.673	3.68	.000	.59	.77

Based on the table 7, the p-value of the indices are all lower than 0.05. Therefore, it can be said that the dimension of environmental facility in all the indices except the index of “accessible toilet rooms” have an impact on the level of customers' satisfaction with the services provided by 10 + police e-service offices. In other words, the fourth hypothesis is confirmed. Also, as the mean value for the indices is higher than 3, and as the lower and upper 95% confidence interval of the difference are positive, it can be concluded that the 10 + police offices' customers are satisfied with the dimension of environmental facility.

Sixth hypothesis is that the 10 + police offices' customers are satisfied with the system facility of the 10 + police offices.

Table 8. The indices of the dimension of system facility and the results of t-test

The indices	T	Mean	Sig. (2-tailed)	95% confidence interval of the difference	
				Lower	Upper
Accessible POS (Payment Service Provider) system for payment , photocopier, photography, ophthalmology and so on	12.281	3.65	.000	.55	.76
Tracking Service availability for the services such as the issuance of passport, driving license and so on	11.442	3.57	.000	.47	.67
Good ticketing system	8.754	3.50	.000	.39	.61
POS system for prompt payment	17.236	3.95	.000	.84	1.06

Based on the table 8, the p-value of the indices are all lower than 0.05. Therefore, it can be said that the dimension of system facility in all the related indices have an impact on the level of customers' satisfaction with the services provided by 10 + police e-service offices. In other words, the sixth hypothesis is confirmed. Also, as the mean value for the indices is higher than 3, and as the lower and upper 95% confidence interval of the difference are positive, it can be concluded that the 10 + police offices' customers are satisfied with the system facility of the 10 + police offices.

Seventh hypothesis is that the 10 + police offices' customers are satisfied with the basic amenity of the 10 + police offices.

Table 9. The indices of the dimension of basic amenity and the results of t-test

The indices	T	Mean	Sig. (2-tailed)	95% confidence interval of the difference	
				Lower	Upper
Availability of copy machine, desk, pen, etc. in the office	9.225	3.54	.000	.42	.65
Availability of Water dispenser/cooler, TV, newspaper, etc. in the office	2.218	3.14	.027	.02	.26

Based on the table 9, the p-value of the indices are all lower than 0.05. Therefore, it can be said that the dimension of basic amenity in all the related indices have an impact on the level of customers' satisfaction with the services provided by 10 + police e-service offices. In other word, the seventh hypothesis is confirmed. Also, as the mean value for the indices is higher than 3, and as the lower and upper 95% confidence interval of the difference are positive, it can be concluded that the 10 + police offices' customers are satisfied with the basic amenity of the 10 + police offices.

Eighth hypothesis: the 10 + police offices' customers are satisfied with the dimension of easy access to the 10 + police offices.

Table 10. The indices of the dimension of easy access to the office and the results of t-test

The indices	T	Mean	Sig. (2-tailed)	95% confidence interval of the difference	
				Lower	Upper
Sufficient number of street signpost on the way to the offices	4.672	3.26	.000	.15	.37
Easy access to the offices by public transportation	14.784	3.71	.000	.62	.80
Adequate parking spaces in surroundings of the office	-10.322	2.38	.000	-.73	-.50
Location of the offices regarding restricted traffic zones	6.698	3.36	.000	.25	.46
Location of the offices regarding which floor they are on	21.048	3.92	.000	.83	1.00
Regional distribution of banking offices in the city	10.235	3.49	.000	.40	.58

Based on the table 10, the p-value of the indices are all lower than 0.05. Therefore, it can be said that the dimension of easy access to the offices in all the related indices have an impact on the level of customers' satisfaction with the services provided by 10 + police e-service offices. In other word, the eighth hypothesis is confirmed. Also, as the mean value for the index of "adequate parking spaces in surrounding of the office" is lower than 3, and as the lower and upper 95% confidence interval of the difference are negative, it can be said that the 10 + police offices' customers are not satisfied with this index.

Ninth hypothesis is that clients, providing services in all aspects of 10+ police offices, with their consent.

Table 11. The results of t-test for the dimensions of customer satisfaction

The Dimensions	Number	T	Mean	Sig. (2-tailed)	95% confidence interval of the difference	
					Lower	Upper
Staff performance	420	20.15	3.7647	.000	.6901	.8392
Trust and confidence	416	25.39	3.9183	.000	.8472	.9894
Providing sufficient notification	416	10.42	3.4483	.000	.3637	.5329
Service cost	419	8.07	3.3423	.000	.2589	.4256
Environmental facility	420	15.83	3.5870	.000	.5141	.6599
System facility	420	17.15	3.6712	.000	.5943	.7482
Basic amenities	419	6.30	3.3377	.000	.2323	.4432
Easy access to office	420	10.42	3.3521	.000	.2857	.4185

Table 12. The result of t-test for the variable of customer satisfaction

The Dimensions	Number	T	Mean	Sig. (2-tailed)	95% confidence interval of the difference	
					Lower	Upper
Customer satisfaction	420	17.29	3.5521	.000	.4893	.6149

Based on the table 11, the p-value of the indices are all lower than 0.05. Therefore, it can be emphasized again that customers are satisfied with the services provided by 10 + police e-service offices in all the indices. In addition, as the mean value for all the dimensions is higher than 3, and as the lower and upper 95% confidence interval of the difference are positive, it can be said that the 10 + police offices’ customers are satisfied with all the dimensions of the 10 + police services. In the table 12 too, the variable of customer satisfaction has been examined in a general way indicating they are satisfied with the services.

5.3. Ranking of Factors Affecting Customer satisfaction according to Friedman test

Friedman test is a statistical test to compare the dimensions and indices of each dimension which prioritize the dimensions and indices based on their average. In Friedman test, at first, a null hypothesis assuming equal dimensions and then, one tailed hypothesis assuming unequal dimensions are tested. Based on the table (13) the level of significance is less than 50.0, it can be concluded that the dimensions differ from one another. In other words, the one-tailed hypothesis is confirmed. Also on the table (14), the dimensions of client satisfaction have been ranked and the dimension of “trust and confidence” has the first rank and the dimension of “easy access to the 10 + police offices” has the last rank.

Table 13. The results of the Friedman test

Number	412
Chi-square	384.168
Degree of freedom	7
Significance	.000

Table 14. The ranking of the dimensions by the Friedman test

The ranking of the dimensions	The dimensions affecting customer satisfaction	The average of the numbers
1	Trust and confidence	3,92
2	Staff performance	3,76
3	System Facility	3,67
4	Environmental Facility	3,59
5	Basic Amenity	3,45
6	Providing sufficient notification	3,35
7	Time and Cost	3,34
8	Easy access to office	3,33

6. Conclusion

The present study was conducted with the aim of identifying and evaluating the factors affecting customer's satisfaction with the 10 + police e-service offices. After, reviewing the theoretical framework and background literature, a conceptual model of the customers for the 10 + police offices was presented which included the following dimensions: Easy access to office, staff performance, system Facility, environmental facility, basic Amenity, providing sufficient notification, time and cost, and trust and confidence. Then, an analysis was carried out based on the statistical results. The results indicate that all the indices of the proposed dimensions have an effect on the customer's satisfaction and the customers are contented with all the dimensions and their belonging indices (except for "adequate parking spaces in surrounding of the office", within the dimension of easy access to office). Moreover, the customers are most satisfied with the indices of "Punctuality and regularity in observing office hours" within the dimension of staff performance and "trust in the offices to keep people's documents and data confidential" within the dimension of trust and confidence. Also, the index of "Accessible toilet rooms" within the dimension of Environmental Facility has no effect on the satisfaction level of the customers. After that, the identified dimensions were prioritized using the Friedman test indicating the dimension of "trust and confidence" has the highest rank and the dimension of "easy access to the offices" has the lowest rank.

Suggestions for improving the dimensions of the model

"The dimension of "Staff performance"

1. Providing directors and employees working at 10+ police offices with regular training on customer interaction skills based on "customer-based" approach;
2. Specialized training of the staff within their sphere of activities;
3. At the discretion of directors of the offices, the number of operating employees should be in proportion to the number of the services;
4. Continual supervision of all the defined operations of the services, while at the same time improving the process, in order to make the way for operating all the services without supervision and achieve greater profitability;
5. Offering all the current expected services; though there are offices that cut back some services like issuance of fuel card or business license as they are not economic. (Correcting the process and improving the system);
6. Establishing a voice-of-customer unit (the customer relationship management) and providing people with an easy access to this unit through all communications tools such as internet, SMS, IVR, telephone, etc. so it would be easier to receive people's comments, complaints or suggestions and respond to them. Although, the phone number 197 has been established for dealing with respective matters, it still needs further improvement and its deficiencies should be corrected. Additionally it should be mentioned that the managers and the employees of the offices have a crucial role in the customer satisfaction, therefore it is recommended to provide managers and employees with regular training on communication and the customer interaction skills;
7. Devising an efficient supervisory performance assessment system to monitor performance of 10+ police offices, based on people's satisfaction, and also between specified intervals and sending feedbacks to the directors of offices and, based on which (people's satisfaction) best centers are identified, their members appreciated and introduced to community they serve by the mass media at every year;

8. The increase in work hour of some offices (if the managers request for it)
9. The attendance of the doctors and the officials of the registration office in the offices or in one building (collecting the services)
10. Using the noncommissioned doctor in offices and increasing the doctors who are in contract with Iranian police across the city.

“Environmental facilities”

1. Considering the number of services offered by 10+ police centers, they need enough room space (as large as bank offices).
2. Enough and suitable seating.
3. Proper partitions having the possibility of the clients to sit in front of them harmonizing and standardizing the partitions used in the offices.
4. Suitable lightning and lamp for the work being carried out in the offices.
5. Refurbishment of office building e.g. clean walls, beautiful decoration, etc.
6. Efficient cooling and heating systems in the offices.

“Trust and Confidence”

1. Use internet to keep people updated (10+ police website).

Information people are not provided with on the 10+ police website is as follow:

- Information about the physical address and telephone number of all offices in each province and city.
- Information about physical address and telephone number and working hour of doctors approved by Iranian police in each province and city.
- Information about customer complaint centers and their telephone numbers.
- Information about status of service request.
- Information about the physical address of Bureau of Consular Affairs, Department of monitoring Public Places, drug testing centers, etc.

2. Use SMS to keep people informed

At the present moment, there are SMS services offered limitedly but, such services must be expanded to provide people with all sort of information on necessary requirements (e.g. to obtain driving license), physical address and telephone number of the offices, service procedures and statues of service request, car tickets, the possibility of paying traffic tickets and other related services to 10+ police offices. **Information offered by the offices (at the time of visit)**

Taking a visit to 10+ police centers, it has been observed a huge difference between them regarding quality and content of information and methods they employed to convey information. Thus, following suggestions have been made to harmonize and standardize methods of conveying information inside the offices as well as increasing the customer satisfaction:

- Install sufficient number of bulletin boards on the office walls where they can be easily seen by customers
- Provide customers with a comprehensive list of services offered by 10+ police offices.
- Use standard format to write necessary requirements to be fulfilled for make use of each one of services and their costs as well as how complaints are to be dealt and putting them in uniform frames.
- Distribute small pieces of papers, about necessary requirements to be fulfilled for using each one of services, and between customers to make them informed (which are done in some offices at the moment).
- Store paper documents ,forms, instructions and guidelines in file folders

- Use standard format for writing the physical address and telephone number of each one of offices and putting them in uniformed frames (now the address of approved doctors for administering vision test is listed on banners).

“Service cost”

1. Optimize the financial resources in order to decrease the service costs.
2. Minimize the lead time between completions of a given process in the office and get it delivered straight to your door (correcting the process).
3. Decrease the frequency of server disconnects and stopping it for good (correcting the computerized subsystem).

“Basic amenity”

1. To necessitate all offices offering bathroom services for their customers.
2. To necessitate all offices having working copy machine, as it is commonly used in the process of gathering customer documents and considered important to bring customer satisfaction.
3. The presence of writing instruments such as desk, pen, etc. in the offices.
4. The existence of basic amenity such as working water dispenser, TV, magazine, as well as connectivity tools like Wi-Fi network, etc. which can be effective in attracting the customer’s satisfaction.

“The easy access to offices”

1. Location of the offices is preferred to be on the ground floor with only few steps (otherwise installing elevator is a must even for the first floor). Because in some cases the presence of applicant is necessary while s/he may suffer from physical disability or other problems.
2. Location of the offices is preferred to be in places with convenient parking spaces.
3. Increasing the number of the offices on the scientific basis, such as location and population index along with dedicating more services to offices, some of which have been included in the answer of the question2 of the research.
4. The offices should be established in main streets having easy access to the public transportation.
5. Naji Research and Development Company can proceed to install the sufficient signs at the time of establishing the offices through an agreement with the municipality.

“System facility”

1. To necessitate all offices installing and using separate ticketing systems for customers of various services, due to the importance and efficiency of this system in keeping the offices in order especially during the peak hours.
2. To necessitate the offices installing POS systems for paying the cost of all services which have not been offered yet concerning the issuance of fuel card.

After offering suggestions about the different aspects of the model we review the questions and the objectives of the research.

3. Offering online or internet services, for example:
 - a. The possibility of registering or completing the profile must be given to the person himself through which the person will be responsible about the accuracy of the data and not the offices (Like in universities).
 - b. The possibility of paying the fines.

- c. The possibility to register the claims, criticisms, ideas or suggestions, offering on time tracking code and proper responding to people.
4. Establishing 24-hour speaking phone system_ and if possible connecting to the operator and giving information about all issues related to the services of the offices.
5. Presenting on time tracking code after each service in the offices and receiving their barcode but there is no proper possibility to follow the services of the passport and department of public places.
6. The possibility of resolving all conflicts and passport problems in the offices and increasing the authorities of the passport officers as there will be no need for the person to personally go to the visa company (correcting the processes)
7. The possibility to resolve the conflicts and the problems of the driving license in offices as there is no need for the person to refer to the traffic police personally, in any circumstances (correcting the processes).
8. The possibility to resolve the conflicts and the problems of the military service in offices as there is no need for the person to refer to the military organization personally, in any circumstances (correcting the processes).

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