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Investigation and Evaluation of Gaps in Implementation of the Role of Quality in Improvement of 137 Plan Performance in Organization of Tehran Municipality (District 22)

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ABSTRACT

This research investigates the gaps in implementation of quality role in improvement of 137 plan performance in Tehran Municipality (district 22). Quality gaps were investigated using Parasuraman Model (SERVQUAL). Four gaps were investigated: the gap resulted from failure to recognize customers' expectations, criteria and inappropriate plan for service quality, gap resulted from failure to access service criteria and incompatibility between performance and commitments. This research aims to investigate the gaps in implementation of 137 project in district 22 based on SERVQUAL model and presenting solutions for reducing the gaps in data collection. A questionnaire (with 5-point Likert scale) was used for collecting data. Its reliability was supported by Cronbach's alpha and its reliability was supported by scholars. This questionnaire contains 20 questions. The questionnaires were distributed among 400 respondents who had had contact with 137 systems at least once. Based on SERVQUAL model, 7 variables which caused gaps in the model were selected as independent variables and 7 hypotheses were developed. Finally, all research hypotheses were supported and information had the greatest gap compared to other variables.
KEYWORDS: Tangibility, Reliability, Responsiveness, Assurance, Empathy

INTRODUCTION

Public services play vital roles in creating a stable environment for investment and economic development. Services like public education, hygiene, well-served roads, healthy potable water, clean air and social security are necessary for economic growth and national development. Therefore, it should be admitted that services are not subsidiary activities but they are very important activities. Services facilitate production activities in an economy. Services account for global economic changes. In order to present appropriate services, it is important to pay attention to the following points; open-system viewpoint emphasizes on customer's participation in service provision process. "Service process is the very product". Therefore, strategic, marketing and behavioral issues should be considered. The role of IT as a key in continuous improvement, productivity and service quality is inevitable. Today, millions of people die as a result of air pollution. This air pollution comes from urban life, industry and traffic. Millions of people take stress resulted from rush to their work environment and a lot of money is spent on urban traffic. Sometimes, watching waste materials scattered on every corner of cities makes us disgusted. In a metropolis like Tehran, increasing trend of vehicles and failure to build roads correspondingly has made it difficult for citizens to live there.

All aforementioned issues emphasize on the important role of city and municipality services in everyday human life. We can dare say that almost all people in today's world receive urban services including commercial, political, cultural and social services. Promotion of urban services level can influence all different aspects of urban life. In this regard, service quality management can be used as a valuable instrument for promotion of services. In Tehran municipality, 137 system has been established to serve customers in a better manner. Therefore, every step taken to improve municipality performance can provide citizens with a better life.

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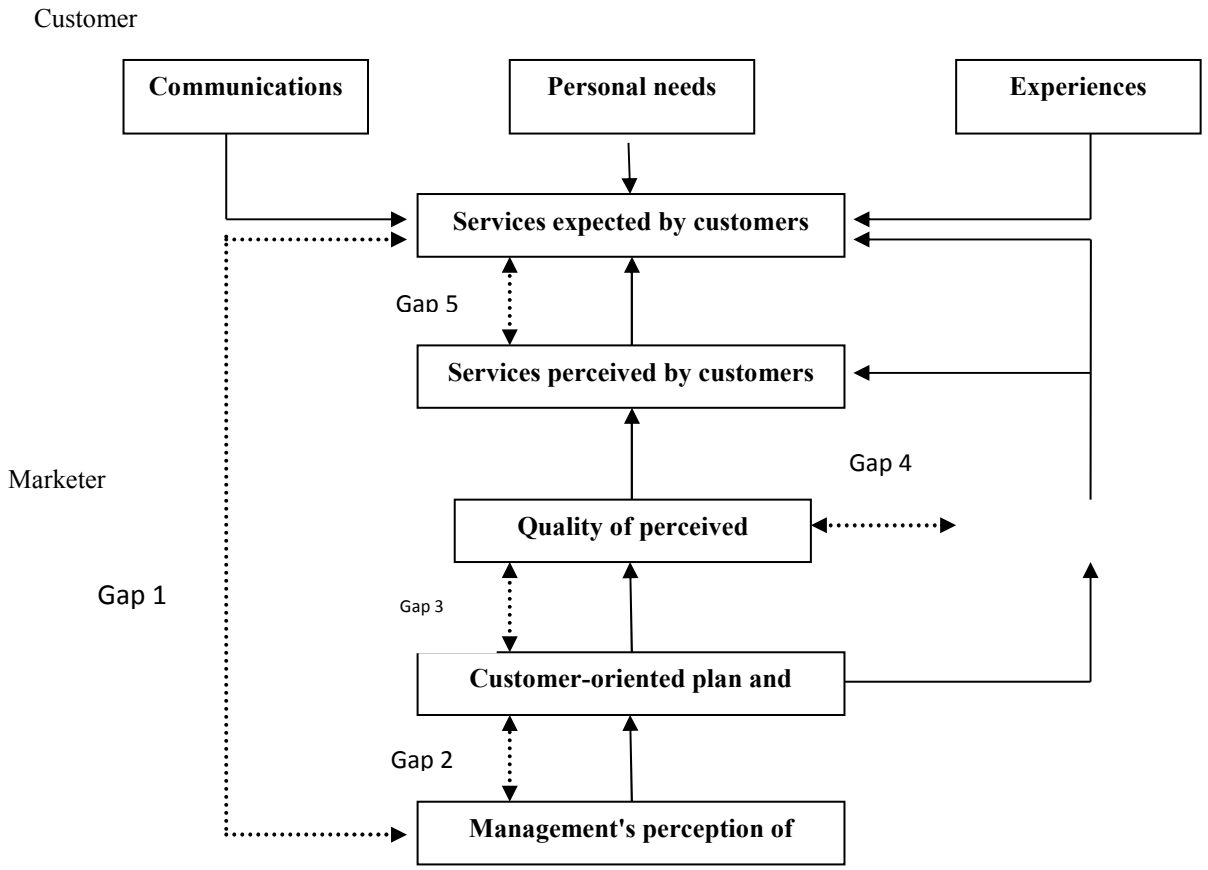

Parasuraman et al. GAP model (Zeithaml 1996)

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This study deals with service marketing and service quality management approach. It is based upon gaps model in implementation of the role of service quality. This model investigates the gaps resulted from management's failure to perceive expectations concept from customers' viewpoint, failure to understand and recognize main features of service quality by managers and employees, main features of service quality and the services received by customers and customers' expectations levelas a result of their experiences in other environments. Totally four gaps were investigated.

Research hypotheses

1. Management's success at perceiving citizens' expectations can improve 137 Plan.
2. Appropriate relationship between employees of Tehran Municipality Organization and citizens can improve 137 plan.
3. Employees' knowledge about features of service quality can improve 137 plan performances.
4. Employees' enjoyment of necessary skills can improve 137 plan performance.
5. Employees' tendency to do their duties can improve 137 plan performance.
6. Provision of proper information by citizens for employees can improve 137 plan performances.
7. Failure to commit service beyond organizational capabilities can improve 137 plan performances.

Theoretical literature

Service quality: one of the main ways for service institutes to be differentiated from their competitors is permanent high-quality service offering.many companies have understood that serving customers with high-quality services can bring competitive advantage. This advantage finally results in higher sales and profits. In order to reach this goal, it is enough to respond positively to customers' expectations from service quality (Kotler, 2000, 817). A customer expects to receive a value when purchasing a product or service. In this paper, value is defined as a benefit obtained as a result of transaction. Although this trade-off is usually attributed to price and quality but an analysis of details show that it is beyond that. In general,high-quality services are those which enable customers to feel that they have received a value in a transaction.

Productivity in public sector:

In traditional definitions, productivity is the ratio of output to input. Subsequent definitions, however, defined productivity as a ratio which links inputs to final outputs and considers issues like quality and effectiveness of products and services(BLS, 1988). This has been regarded as definition of productivity in other definitions. Regarding public sector productivity, however, definitions point to products and services produced in public sector and citizens expectations and demands have been considered in them. In general, public sector productivity refers to responsiveness and being sensitive to citizens' "needs" and "expectations"by spending "resources" properly. This definition is an appropriate framework doe measuring productivity in public sector. It is obvious that the main goal of public organizations is to respond to citizens' needs and expectations and when this goal is fulfilled by optimal use of resources, productivity has been achieved. In this approach, productivity has two elements, an element which refers to determination of citizens' expectations and needs and another element which deals with resources used. regarding the first element, when an organization manages to respond to citizens' expectations and needs is regarded as a productive organization. Regarding the second element, however, the amount of resources used is important in productivity. Resources used for presenting public services are mainly received from the addressees of the services. In many cases, several resources are combined. These resources can be formed by a combination of public and private sectors capitals and capitals resulted from receiving taxes, tolls and public income. Productive organizations are those which use their resources optimally. The first element is effectiveness and the second element of productivity is efficiency. Measurement of these two items determines productivity in public sector. From another viewpoint, effectiveness is looking at outside of an organization and efficiency is looking at inside of an organization. In order to measure efficiency, an organization deals with its internal operation and way of spending resources rather than determining how much money a service costs and how much justifiable it is according to standards. When measuring effectiveness, an organizations looks outside to find out the impacts ofservices on population and customers (Alvani and Riahi, 2003, 36).

What is 137 Plan?

137 is a three-digit phone number which belongs to Tehran Municipality and citizens can contact this phone number to announce their demands in all urban issues field. In fact, 137 is a communication bridge and system for receiving citizens' demands.

RESEARCH METHODOLOGY

This is a survey research. A survey is a subset of descriptive studies. Identification of a subject is aimed in this research in which descriptive methods and statistical analyses were used. Moreover, this method is used for investigation of distribution of features of a statistical population and can be used for responding to other types of questions.

a) How is the nature of circumstances?
b) What a kind of relationship is there between events?
c) How is the existing condition?

In a survey, a researcher mainly looks for important or significant factors which are effective in recognizing the past and present. In fact, this research methodology deeply investigates relationships between factors which cause change or growth. In this research, research methodology was descriptive and in terms of target, it was an applied research with descriptive and inferential analyses. Further, library and field study were used for collecting data.

Statistical population of the research included all residents of district 22 of Tehran Municipality Organization. About 108000 people lived in the aforementioned district. This district included a diverse population in terms of gender, literacy, age, lifestyle, marital status and… we assumed p*q product as equal to 0.25 in order to determine sample volume of residents of district 22 of the municipality because the product of the two numbers is maximized when both numbers are equal. Therefore, we will have: p=q=0.5. thus, sample size, assuming an unlimited statistical population is as follows (confidence level=0.95):

Formula for determining sample size in an unlimited population:

$$n = \frac{\left(Z^{\alpha}/_{2}\right)^{2} \times pq}{(\varepsilon)^{2}}$$

$$n = \frac{1.96 \times .5 \times .5}{(.05)^{2}} = 400$$

Table 1: research demographic variables

variable	dimensions	frequency	Frequency percentage
gender	male	322	80/5%
	female	78	19.5%
age	25-32	254	63/5%
	36-50	105	26/3%
	51-65	34	8/5%
	65-80	7	1/8%
education	High school and below	191	47%
	Associate's degree	78	19/5%
	Bachelor degree	110	27/5%
	Master and above	21	6%

Analysis

Hypothesis test:

1. first hypothesis test: Management's success at perceiving citizens' expectations can improve 137 Plan.

Kai-squared test was used for testing this hypothesis.

H0: management's success does not improve the Plan.

H1: management's success improves the plan.

Table 2.the observed and expected frequencies for the first hypothesis

	Observed frequency	Expected frequency	remainder
Very low	0	100	-100
low	28	100	-72
average	170	100	70
high	157	100	57
Very high	45	100	-55
total	400		

Table 3. Kai-squared tests for the first hypothesis

	Success
Kai-2	163.58
df	3
Sig.	0.000

The results of table 3 show that the calculated Kai-squared (X2=163) is significant in 5% alpha anddf=3. In other words, there is a significant difference between observed and expected frequency. Therefore, H0 is rejected and researchhypothesis is supported. As it can be seen in the table, the greatest frequencies are in average and large levels. Consequently, it can be said that management's success in residents' expectations perception improves the plan.

2. second hypothesis test: Appropriate relationship between employees of Tehran Municipality Organization and citizens can improve 137 plan.

Kai-squared test was used for testing this hypothesis.

H0: appropriate relationship between municipality employees and residents does not improve the plan.

H1: appropriate relationship between municipality employees and residents improves the plan.

Table 4.the observed and expected frequency in the second hypothesis

	Observed frequency	Expected frequency	Remainder
Very low	2	80	-78
low	49	80	-31
average	116	80	36
high	167	80	87
Very high	66	80	-14
total	400		

Table 5.kai-squared test for the second hypothesis

	Relation
Kai-squared	201.32
df	4
Sig.	0.000

The results of table 5 show that the calculated Kai-squared (X2=201.33) is significant in 5% alpha and df=4. In other words, there is a significant difference between observed and expected frequency. Therefore, H0 is rejected and research hypothesis is supported. As it can be seen in the table, average and high levels had the greatest frequencies and very low level had the lowest frequency. Consequently, it can be said that an appropriate relationship between employees of municipality improves 137 plan performance.

3. third hypothesis test: Employees' knowledge about features of service quality can improve 137 plan performances.

Kai-squared test was used for testing this hypothesis.

H0: employees' awareness of service quality features does not improve the plan.

H1: employees' awareness of service quality features improves the plan.

Table 6.the observed and expected frequency for third hypothesis

	Observed frequency	Expected frequency	Remainder
Very low	0	100	-100
low	44	100	-56
average	141	100	41
high	153	100	53
Very high	62	100	-38
total	400		

Table 7: kai-sqaured test for the third hypothesis

	Awareness
Kai-squared	90.70
df	3
Sig.	0.000

The results of table 7 show that the calculated Kai-squared (X2=90.7) is significant in 5% alpha and df=3. In other words, there is a significant difference between observed and expected frequency. Therefore, H0 is rejected and research hypothesis is supported. As it can be seen in the table, the greatest frequencies are in average and large levels. Consequently, it can be said that employees' awareness of service quality features can improve 137 plan performance.

4. fourth hypothesis test: Employees' enjoyment of necessary skills can improve 137 plan performance.

Kai-squared test was used for testing this hypothesis.

H0: employees' enjoyment of necessary skills does not improve the plan.

H1: employees' enjoyment of necessary skills improves the plan.

Table 8.observed and expected frequency for the fourth hypothesis

	Observed frequency	Expected frequency	Remainder
Very low	12	80	-68
low	65	80	-15
average	170	80	90
high	113	80	33
Very high	40	80	-40
total	400		

Table 9. Kai-squared test for the fourth hypothesis

	Enjoyment
Kai-squared	195.47
df	4
Sig.	0.000

The results of table 9 show that the calculated Kai-squared (X2=201.33) is significant in 5% alpha and df=4. In other words, there is a significant difference between observed and expected frequency. Therefore, H0 is rejected and research hypothesis is supported. As it can be seen in the table, average and high levels had the greatest frequencies and very low level had the lowest frequency. Consequently, it can be said that employees' enjoyment of necessary skills improves 137 plan performance.

5. fifth hypothesis test: Employees' tendency to do their duties can improve 137 plan performance.

Kai-squared test was used for testing this hypothesis.

H0: employees' tendency for doing their duties does not improve the plan.

H1: employees' tendency for doing duties improves the plan.

Table 10: observed and expected frequency for the fifth hypothesis

	Observed frequency	Expected frequency	Remainder
Very low	7	80	-73
low	36	80	-44
average	140	80	60
high	160	80	80
Very high	57	80	-23
total	400		

Table 11: kai-squared test for the fifth hypothesis

	Tendency
Kai-squared	222.42
df	4
sig.	0.000

The results of table 11 show that the calculated Kai-squared (X2=225.43) is significant in 5% alpha and df=4. In other words, there is a significant difference between observed and expected frequency. Therefore, H0 is rejected and research hypothesis is supported. As it can be seen in the table, the greatest frequencies are in average and large levels. Consequently, it can be said that employees' tendency for doing duties improves 137 plan performance.

6. sixth hypothesis test: Provision of proper information by citizens for employees can improve 137 plan performances.

Kai-squaredtest was used for testing this hypothesis.

H0: presenting proper information by residents to employees does not improve the plan.

H1: presenting proper information by residents improves the plan.

Table 12.observed and expected frequency for the sixth hypothesis.

	Observed frequency	Expected frequency	Remainder
Very low	0	100	-100
low	16	100	-84
average	84	100	-16
high	195	100	95
Very high	105	100	5
Total	400		

Table 13.kai-sqaured test for the sixth hypothesis

	Info.presentation
Kai-squared	163.62
df	3
Sig.	0.000

The results of table 13 show that the calculated Kai-squared (X2=163.63) is significant in 5% alpha and df=3. In other words, there is a significant difference between observed and expected frequency. Therefore, H0 is rejected and research hypothesis is supported. As it can be seen in the table, the greatest frequencies are in average and large levels. Consequently, it can be said thatpresenting proper information by residents to employees can imporve137 plan performance.

7. Seventh hypothesis test: Failure to commit service beyond organizational capabilities can improve 137 plan performances.
Kai-squared test was used for testing the hypothesis.
H0: not committing services beyond capabilitiesdoes not improve the plan.
H1: not committing doing services beyond capabilities improves the plan.

Table 14.observed and expected frequency for the seventh hypothesis

	Observed frequency	Expected frequency	Remainder
Very low	4	80	-76
low	38	80	-42
average	163	80	83
high	136	80	56
Very high	59	80	-21
Total	400		

Table 15.kai-sqaured test for the seventh hypothesis

	Non-commitment
Kai-squared	225.07
df	4
Sig.	0.000

The results of table 15 show that the calculated Kai-squared (X2=225.1) is significant in 5% alpha and df=4. In other words, there is a significant difference between observed and expected frequency. Therefore, H0 is rejected and research hypothesis is supported. As it can be seen in the table, the greatest frequencies are in average and large levels. Consequently, it can be said thatnot committing doing services beyond organizational capabilities can improve 137 plan performance.

Table 16.constructs ranks

	Mean of ranks
success	3.45
relation	4.15
awareness	3.73
enjoyment	3.88
tendency	4.20
Info.presenting	4.09
Non-commitment	3.55

Table 17. Friedman test

number	400
Kai-squared	163.06
df	6
Sig.	0.000

The results of Friedman test show that P-Value is smaller than 0.01. in other words, the ranks of variables have significant differences and the results can be written as follows: $p<0.01$, df=6, Kai-squared=163.06

Conclusion

By referring to the results of the research, we come to solutions for improving service offering process in 137 plan system in Tehran Municipality. Considering the fact that the investigated gaps mentioned in all dimensions were significant, all gaps existing in SERVQUAL model should be improved but because the 137 system has had the weakest performance in informing, this defect should be improved as soon as possible. This is because many respondents believed that the 137 system is a useful means for promoting qualitative level of citizens' lives and has many capabilities but they believed that many people still do not have a good knowledge about this 137 system.

REFERENCES

AlvaniSeyyed Mahdi and RiahiBehrouz, measurement of service quality in the public sector, Center for Iranian Education and Industrial Research Press, first printing, 2003.

Barnes James, secrets of customer relationship, McGraw-hill, 2001

Best John, research methodology in educational and behavioral sciences, translated by Hasan Pasha Sharifi and NargesTaleghani, Roshd publications, eighth printing, 2000.

David Jobber, Principles and Practice of Marketing , McGraw-hill, 2006

Delavar Ali, theoretical and scientific fundamentals of research in humanities and social scinces, Roshd publications, 2004.

Educational book for Tehran citizens, lets learn about 137 more, center for urban services management, first printing, 2008.

EsmaeelpourHasan, international marketing management, Negah-e-Danesh publications, fourth printing, 2004.

Fitz Simons James E and Fitz Simons Mona J, service management, translated by Seyyed Mohammad A'arabi and DavoudIzadi, published by cultural studies office, first printing, 2003.

Hortz Jack, seven service strategy keys, translated by SeyyedMohamamdA'arabi and DavoudIzadi, cultural studies office press, second printing, 2005.

IbrahimiAbdolhamid, Venous Davar, Rousta Ahmad, marketing management, SAMT publications, sixth printing, 2002.

KamaliKamel and Dadkhah Mohammad Reza, marketing and market management, ShahrAshoub publications, first printing, 2000.

Ken Blanchard, fond of customer, translated by Ali Mohammad Goudarzi and Amir Tofighi, Rasa publications, first printing, 2005.

Khaki Gholam Reza, research methodology with an approach to thesis writing, Baztab publications, third printing, 2007.

Khaki GHolam Reza, research methodology in management, Islamic Azad University press, third printing, 2004.

KiganVaren J, global marketing management, translated by AbdolhamidIbrahimi, published by cultural studies office, second printing, 2004.

Kotler Philip, marketing management, translated by BahmanForouzandeh, Atropatpublictions, second printing, 2005.

Kotler Philip and Armstrong, Gary, marketing principles, translated by BahmanForouzandeh, Atropat publications, third printing, 2000.

Kotler, Philip, 10 unforgiveable mistakes in marketing, translated by KambizHeidarzadeh, KasaKavosh publications, third printing, 2007.

Kotler Philip, Philip Kotler answers your questions in marketing, translated by KambizHeidarzadeh and Reza Radfar, KasaKavosh publications, first rinting, 2007.

Kotler Philip and Trias D. Bes Fernando, creative marketing, translated by KambizHeidarzadeh and Reza Radfar, KasaKavosh publications, first printing, 2005.

Kteora Philip and Graham John L, international marketing, translated by HashemNikouMaram and Mohamamd Ali Abdolvand, Islamic Azad University Press, first printing, 2004.

Lavlock Christopher and Right Laren, principles of marketing and services, translated by AbolfazlTajzadehNamin, SAMT publications, first printing, 2003.

Sekaran, Oma, research methodologies in management, Mohammad Saebi and Mahmoud Shirazi, published by supreme institute for management and planning teaching, second printing, 2002.

Woodrouf Helen, service marketing, translated by Mohammad Ibrahim Goharian and Mostafa Kouhestani, first printing, 2006.