

# Evaluating the Effect of Contact Center on Customer Satisfaction in Iran Khodro Company

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## ABSTRACT

Contact centers are created and used in order to integrate the quality of the services provided by the organizations, and to fulfill such goals, these contact centers use new communicating and networking technologies in a concentrated manner. This research studies the impact of using contact center on customer satisfaction in Iran Khodro Company. According to the research topic the "Descriptive - Survey" research method was employed, and due to its goal, this research also had some heuristic aspects. Questionnaires were used to gather the required data and Single-sample test, linear regression and Freedman test are employed to analyze the data. Customers and experts at the contact center of Iran Khodro Company build up the Statistical Society. According to the normal variables of the research and the results obtained from statistical tests, all of the assumed assumptions in the research were approved, along with an average value of 3.91 existing among individual variables such as quality, speed, integration, accessibility and post-sale performance of the provided services alongside with customer satisfaction. Finally through the use of Freedman test it was identified that the most important factor on customer satisfaction is the quality of the provided services, and the least important one is the speed of accessibility to the services.

**KEYWORDS:** Contact Center; Quality; Quality Service; Customer; Customer satisfaction.

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## INTRODUCTION

Services industry is changing around the world. New technologies have changed the method of service delivery for customers in most organizations. One of the technological paradigms is Information and Communication Technology (ICT) which has distinguished today human life from all past ages and grown the power of organizations in order to serve its customers. Obviously, the amount of sales and income in an organization, and in other words the life of organization, has a direct relationship with the way we respond to our customers and their expectations. In addition, clients and consumers always seek suppliers who provide better goods or services. Understanding this distinction conducts the selection process of required services or goods and helps customers in taking decision to pay more in order to receive better goods or services. Therefore, they consider the appearance and physical characteristics of a product as well as other qualitative indicators. By using the various Information Technology (IT) applications, we can reduce costs, increase the quality, rate, and accuracy in providing services. Nowadays, almost all organizations, institutions, and large or even medium-size companies in developed countries have set up equipped centers to respond to the customers via all communication ways in order to provide better services for their customers, and establish regular communicating with them, so that they can achieve their goals and attract the customer satisfaction. These centers are called contact centers or multimedia contact centers. In addition, this multimedia contact center is one of the tools which can help customer-oriented and service-provider organizations to solve challenges and benefit from new opportunities considering the growth of technology and communications.

This study aims to answer this question whether using the multimedia contact center affects the customer satisfaction in Iran Khodro Company; and "Evaluating the effect of multimedia contact center on customer satisfaction in Iran Khodro Co." is the most important purpose of this study.

### Theoretical overview

Multimedia contact center has forced a lot of organizations to provide better services to customers and keep these services.

### Multimedia contact centers

Multimedia contact centers is equipped centers with modern communication technology through which customers can communicate with experts or agents in center by all methods of communication (telephone, SMS, fax, email, chat), and provide their request (buying, selling, services) at any time, day or night and anywhere around the world; in addition, all these information as well as all recorded events are stored in the relating software such as Customer Relationship Management (CRM) for future utilization. [7]

The contact center is a strategic and important part of most organizations, because they act as intermediaries between customers and organizations, can do a large amount of cheap services by phone, and provide competitive advantage for their organizations. [12]

The contact center indicates services in the digital economy. It is centrally or distributively managed or administered by individuals or groups who answer to the calls or contact the customers. [17]. A multimedia contact center consists of groups of experts as the agents who are classified based on the specialty so that customers are connected by other means of communication as well as phone. Generally, a multimedia advanced contact center should have the capability of fair contact distribution, computer telephony integration, notification, call recording, operation process, caller prediction, image processing, mail processing, video communication, fax management (sending and receiving), SMS management (sending and receiving), administrative reports and tools management [11].

#### **Importance of multimedia contact centers**

Today, communication is one of the most important factors. However, every communication is not profitable for institutions or automotive industry companies. A communication which offers a service is profitable; it leads to better understanding of customers and their needs. Today is the era of dramatic change in technology. ICT (Information and Communication Technology) provides mutual communication without spatial and temporal limitation and make the power of storage, sorting etc available for us. This capability in business means that all information related to the customer calls, can be, recorded, stored and processed, thus customer behaviors can be tracked and predicted. As a result, these contact centers are important tools to respond a wide range of today business concepts. Given the wide range of industrial activities in the automotive industry, it is necessary to communicate through multimedia methods in order to obtain and extract data to accelerate the interaction and eliminate unnecessary traffic. Through this important method, 75 phone calls, more than 8,000 text messages from Iran Khodro Industrial Group customers and stakeholders, 3,000 emails, 9,000 Faxes, 70,000 clicks on website, must be answered. Otherwise, the quality and quantity of communication will be reduced after a short time and ultimately the total interaction will be questioned. As a result, organizations are attempting to run multimedia contact centers to gain a variety of purposes such as [10]:

- Quality management, customer satisfaction, increased organizational effectiveness.
- Get required feedback from products and services customers.
- Provide after-sales services to customers and attract their attention and satisfaction.
- Centralization and integration of information.
- Reduction of additional traffic.
- Customer confidence in a rapid contact with an organization and responsible center.

#### **Attitudes in the contact centers**

There are four attitudes in contact centers and its management. [14]

- **First attitude-** The customer expectation of the services quality has been increased in the past 10 years. The most important factors in today Paradigm are service quality, convenience, accuracy, and value. [11]
- **Second attitude:** the unprecedented growth of non-traditional and uncommon tasks in contact centers such as sale, and support which are now very common [9]
- **Third attitude:** Contact centers have changed into multimedia contact centers which have been created by new technologies such as chat, email, SMS, and fax for easier and faster connections with agents. [21]
- **Fourth attitude:** outsourcing to foreign countries. [11]

Commercial profits resulted from the use of contact centers

- Achieve faster benefits
- Enhance customer's insight
- Protect the geographical distribution
- More flexibility for employees
- Diverse workforce
- Data integration
- Fast response rate [18]

One of the managers' concerns is the high cost of contact centers, and managers are exposed to serious challenges in order to decrease the costs and their usefulness. In this way, four decisions including the resource management, efficient use, and effective use and establishment of technology are among the managers' solutions. In addition, outsourcing can be mentioned as a perfect solution for implementing the management strategies [14].

## Quality

In the past fifty years, quality discussions have changed dramatically and in these developments different attitudes to quality are formed. Each of these attitudes has viewed the concept of quality from a special perspective and expressed unique explanation for it. , There are at least five different attitudes to quality that we will introduce them here:

- The first attitude to quality is defined as the ability to meet customer demands. This definition was first expressed by Edwards in 1968, and then by J.M Juan in 1988. Customer's demands and responsiveness to them is the orientation axis of organization in this attitude, therefore it is called the Customer Oriented Quality.
- The second attitude to quality is expressed in terms of production. This attitude is measured by the compliance of product with a plan or characteristic. Gilmore defines this attitude of quality.
- The third attitude can be considered as product- oriented approach. In this attitude the quality is defined as the valuable features of a product. Leifler presented this interpretation in 1982, and considered the product characteristics as the axis of quality.
- The fourth attitude expresses an abstract concept of quality perception. Pirsig knows the quality independent of product features and subjective impressions; he believes that wherever people see the quality, they recognize it easily.
- The fifth attitude which was provided by Broh is defined as the desirability of a product with a reasonable and acceptable price (for producer). [4]

## Service quality (perceptions and policies)

To better understand the concept of service quality, we first define it:

A – Customer's opinion about the superior nature of service than similar services, with its benefits.

B - The compatibility of different levels of service with customer expectations.

C - The stable compatibility with customer expectations and recognize the customer expectations of specific service.

D - A framework of action and reaction among the service quality, customer satisfaction and support structure.

To provide services, the management should be established on fully codified and planned organizing. To deliver services in a system in an appropriate way the following points should be noted:

- Comprehensive attention to the client.
- Gradual but steady progress in each service.
- Reduce the changeable and non-unpredictable services which cause insecurity.
- Senior management's commitment is the necessary and sufficient requirement for ruling these principles on the organization.
- Participation of all employees. [4]

There are several definitions of service quality; from their basis, the key words of certainty, accountability, integrity, access, courtesy, knowledge, and being tangible can be cited. Most of the papers consider a center with the service quality if it has 5 components as below:

- **To be tangible:** Using the facilities and technologies which consider getting services by an accessible and tangible way.
- **Accountability:** Satisfaction and propensity in delivering services to customer.
- **Credit:** The ability to perform the promised services accurately and correctly.
- **Assurance:** Agents' knowledge and humility, and their ability to ensure customers.
- **Empathy:** kindness and special attention to the customer. [19]

## Customer

Customers are people or operations that consume the results or production of a performance or need them and take advantage of them, because each performance in an organization certainly has a goal so have customers. [1]

Customer is one responsible for transaction and trade in a competitive environment, and gives and gets something in an interactive mode, but visitors does not have interactive and bilateral mode but includes unilateral services in which sellers have more information about a trade issue, however a buyer cannot easily obtain those information, while strongly need them such as: medical, scientific, educational and research services. [6]

## Serving customer

The new concept of serving customers includes new definitions under which only not only the small part in the central organization provide services, but also the entire organization, including the senior managers to ordinary employees, are responsible for customers' the existing and potential needs. Even if a person is not in a position in which directly supports the customer, can support employees who serve customers. A job which is

traditionally called "customer serving" is more complicated than taking orders, taking back the returned product, and responding to complaints. According to this view, serving customer contains all matters involving the company in order to attract customers' satisfaction and help them get maximum value by purchasing products or services. Anything which is added to the physical provided product and differentiates the product from competitors' products is considered as the customers serving.

### **Customer Satisfaction**

Each customer may be satisfied or dissatisfied with the received service or purchased commodity. Satisfaction is a positive feeling which is created in a person after using the goods or services. This Feeling occurs by the relationship between customer's expectations and supplier performance. If received good or service is at the same level with the customer's expectations, he will be satisfied, and if the level of customer services and products is above customer's expectations, the customer will be delighted otherwise he will be dissatisfied.

Degree of satisfaction, dissatisfaction, and delight in people is deferent at any time and case, and always is related to the distance between the level of supplier's expectations and performance in the form of goods and services quality.

Blanchard and Galloway believed that "customer satisfaction results from the customer perception of a valuable transaction or relationship under which price is equal to the ratio of performed quality of services to price and customer's costs." [15]

Customer satisfaction is a result which is obtained from customer's comparison of the expected performance more than just purchasing with the perceived actual performance and paid cost [10].

### **Satisfaction**

Customer satisfaction is the emotional reaction which is obtained from the interaction with the supplier organization or consumer of a product. Satisfaction is resulted from difference understanding between customer expectations and actual performance of product or organization.

Jamal and Nasser define customer satisfaction as a customer's feeling or attitude towards a product or service after using it. [16]

### **Satisfaction Survey**

In general, satisfaction can be examined in three different perspectives that each of them has different criteria; and the general success in attracting the Customer satisfaction can be measured according to the important factors which are granted by organizations or companies to these three perspectives:

#### **1. Measuring the satisfaction from the perspective of observed quality criteria**

Observed quality is often assessed by three criteria: overall quality, observed reliability, and the amount of customer's needs which is met by product or service. Customer perception of quality is the most important indicator of customer satisfaction. [20]

#### **2. Measuring the satisfaction from the perspective of observed value criteria**

Observed value is defined as the total cost divided by quality or overall quality divided by price. The observed value is measured by different methods including the overall assess of value, the expectations of a price which must be paid, and more accurate methods such as van westendorp's Price Sensitivity Meter, and shared analysis.[20]

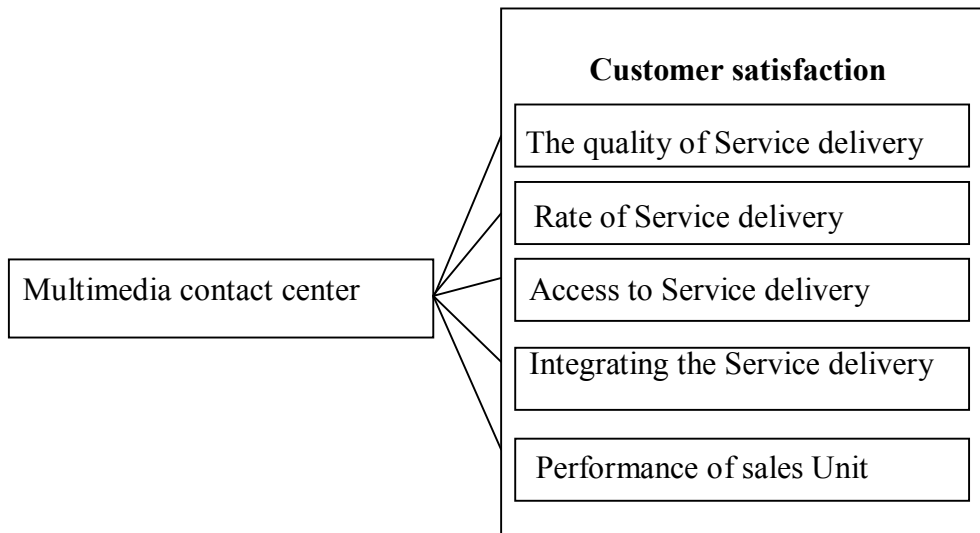
#### **3. Measuring the satisfaction from the perspective of customer loyalty criteria**

Customer loyalty reflects the likelihood of repurchasing the goods or services. The customer satisfaction is a major indicator of repurchase, but it is severely influenced by the evaluation of sufficiency and performance, quality, and the value of goods or services. [20]

### **Conceptual model**

Conceptual model is a kind of designing diagram for extracted variables from the theoretical framework of study [3].

According to the title of research and current findings in the subject literature about the evaluating the effect of contact center on customer satisfaction, the theoretical framework of this research is written and prepared in such a way that guides the researcher in collecting and analysis of data. This model is provided by the researcher. The reason for this model is the work experience in setting up different contact centers in Iran, and collaboration and consultation with Iran Khodro Co. in setting up service delivery center. As it is seen in the model, all the expected factors can be considered in the Customer satisfaction.



**Figure 1:** Conceptual model of the multimedia contact centers impact on customer satisfaction

## RESEARCH METHODOLOGY

### Research Method

The scientific researchers are divided into three categories based on the aim of study: basic and applied researches, and development. [2] The current study is descriptive-survey based on the method and applied based on the aim, because it aims to assess the effect of multimedia contact centers on customer satisfaction. This study is a present orientated study in terms of time, because it focuses on describing the status quo; and during the study we seek to assess the status quo, gather information, and infer the results for present and future applications, and evaluate the existing desirable situation in the future. In a questionnaire which was supplied in order to evaluate the effectiveness of using multimedia contact center on customer satisfaction in Iran Khodro Company, the effective factors and identified components of contact centers on customer satisfaction have been evaluated based on quality, rate, access, integrity in providing services, and the performance of supporting unit; the components of each part are:

**Quality:** The physical evidences, credibility, accountability and confidence.

**Rate:** Rate of getting services and wrap up at the first connection.

**Access:** Access to all telecommunications services and not depend on time and place.

**Integrity:** Being focused on providing services and integration of service delivery.

**The performance of After Sales Service unit:** Diversity of services, new and innovative services, Appropriateness of services compared to products with the customers' expectations, and delivering the services once the customer requests.

**Customer Satisfaction:** The level of Customer satisfaction with the performance of company.

In order to analyze the research data and the hypothesis of research test, the parametric and non-parametric statistical methods including Kolmogorov and Smirnov test for determining the normality of indicators, one-sample Student t-test for determining the normal indicators, Simple Linear Regression Test for abnormal indicators as well as Friedman test for ranking the variables were used.

### Research Hypothesis

The main research hypothesis is "Using multimedia contact center affect on the customer satisfaction Iran Khodro Company".

#### Research sub-hypotheses:

- Service quality affects the customer satisfaction.
- Rate of receiving information affects the customer satisfaction.
- Access to services of organization affects the customer satisfaction.
- Integrating the Services of organization affects the customer satisfaction.
- The performance of managing after Sales Services affects the customer satisfaction.

#### Statistical population and sample

The statistical population in this study is the clients of Iran Khodro Co., in addition are all people referred to this company are considered as clients; since the number of this statistical population is over 10,000, the statistical population of this research is assumed unlimited and a simple random sampling method is used to

determine the number of customers. As the statistical population is specified in the present research, the following formula is used to determine the sample size:

$$n = \frac{N \times (Z_{\alpha/2})^2 \times p(1-p)}{\varepsilon^2 \times (N-1) + (Z_{\alpha/2})^2 \times p(1-p)}$$

In this formula, n: represents the sample size, N: the statistical population size, p: represents the success ratio, and  $\varepsilon$ : represents estimated accuracy. The statistical inference of success ratio in statistical population (p) is important. If researcher could not achieve better estimate for p, he can consider it equal to 0.5 and calculate n. Also In this study, the success ratio has been considered  $p = 0.5$  in the statistical population.  $\varepsilon$  Is also estimated accuracy. In this research,  $\varepsilon$  is considered equal to 0.05. Therefore, the sample size in this study is 340 with the number substitution, which are selected randomly from the statistical population of research.

#### **Data collection tool and its validity and reliability**

The questionnaire used to gather information; in order to gather required information a questionnaire with Likert range was designed based on the described nature of research to identify the factors affecting the customer satisfaction (service quality, rate of response, services delivery, integrating the services, and the performance of After Sales Service unit), which was comprised of 27 questions and distributed between clients and experts of Iran Khodro Co. . To achieve this sample size, 400 questionnaires were distributed and by much effort we successfully collected 340 questionnaires.

The content validity of this questionnaire was considered and prepared by the study of texts, documents, and resources as well as scientific valid texts and research background of questionnaire. In order to validate the questionnaire, all questions were provided by the study and review of various research resources, and to ensure content validity the views expressed by educational experts and number of students, and guidance by faculties were used.

Cronbach's alpha was used to determine the reliability of the questionnaire. In order to calculate the Cronbach's alpha coefficients, first the total sample variance of each sub-question in questionnaire must be calculated u, and then alpha should be calculated by the following equation [2].

$$\alpha = \frac{k}{k-1} \left( 1 - \frac{\sum_{i=1}^k S_i^2}{S_{sum}^2} \right)$$

K is the number of questions in the questionnaire,  $S_i^2$  is the variance question i, and  $S_{sum}^2$  is the variance of whole question. The reliability test was conducted for 340 questions of questionnaire. The calculated value of Cronbach's alpha coefficient for 30 questionnaires was obtained 0.889; therefore it can be argued that given questionnaire has acceptable reliability.

#### **Conclusion**

According to the findings caused by theoretical principles, and analytical results and findings of collected data and based on the parametric and nonparametric inferential statistics, the following results were obtained:

##### **From the perspective of demographics and type of communication**

In terms of connecting with contact center by different ways, the maximum connection was about 53% via phone and the minimum one was about 2.5% via SMS and e-mail. This means that in our society phone is still the best and easiest way of communication between clients and target agencies for receiving the services, and internet and new ways of communication are still underdeveloped and the organization should optimize the communication way of phone with right tools. And also should take advantage of public education in using new technologies.

Women's satisfaction is more than men because they are listeners with emotional personality and their satisfaction can be much easier. Single people are more satisfied than married ones; it can be concluded that married people have higher living expenses and more subjective involvement than single ones, thus keeping them satisfied is much harder. As a result, we should try to meet their requests faster and easier and by the first call. The level of satisfaction with the classification based on education status considering the obtained numbers indicates that satisfaction is inversely related with the level of education; then the people who are in higher education have more scientific and technical information about providing services worldwide and making them satisfied is much harder than those with less education.

##### **From the perspective of inferential statistics of single-sample T test**

**Table 1: Results of the single-sample t test about the questions relating to the main hypotheses**

Average	Standard deviation	Standard error	Significance level	Average
customer satisfaction of Contact center	3.91	1.155	0.062	0.000
Rate of service delivery	4.04	0.069	0.049	0.008
Access to services	3.89	0.055	0.039	0.006
Integration of Services	4.04	0.229	0.016	0.000
After sales Services	4.06	0.029	0.019	0.000

According to the main hypothesis Test, a direct and significant relationship between application of multimedia contact center and customer satisfaction in Iran Khodro Co. with an average 3.91 was approved. Based on the number 3.91 there is a high level of satisfaction and the relationship is positive.

According the result of second hypothesis test, it can be cited that the rate of providing services by organization affects the customer satisfaction. The effect of this index is high with an average 4.04, and there is a positive relationship. The result of third hypothesis test indicates that the level of access to services provided by organization affects the customer satisfaction and according to the average number which is about 3.89, and there is a positive relationship. The result of fourth hypothesis test indicates that the integration of services by organization affects its customer satisfaction and according to the average number which is about 4.4, there is a positive relationship. The result of fifth hypothesis test indicates the performance of after sales services provided by organization affects its customer satisfaction and according to the average number which is about 4.06, there is a positive relationship.

**Table 2: Results of the regression test related to the main hypothesis**

Independent variable	Dependent variable	R	R2	sig
Contact Center	Customer Satisfaction	0.943	0.890	0.000
Service Quality	Customer Satisfaction	0.768	0.590	0.000
Receiving information Rate	Customer Satisfaction	0.519	0.269	0.000
Access to services	Customer Satisfaction	0.618	0.383	0.000
Integration of Services	Customer Satisfaction	0.660	0.446	0.000
After Sales Services	Customer Satisfaction	0.730	0.533	0.000

**From the perspective of inferential statistics in simple linear regression test**

The regression test of main hypothesis suggests that the determinate coefficient among the 340 respondents is calculated  $R^2=0.890$  with a significance level equal to  $\alpha=0.000$ . Since this significance level is lower than the considered significance level  $\alpha=0.05$ , we have sufficient evidences to reject the null hypothesis, therefore the null hypothesis is rejected and the main hypothesis is confirmed. Hence we conclude that us that 89% of customer satisfaction is explained by the multimedia contact center.

The result of regression test between two variable of service delivery quality and satisfaction suggests that 59% of customer satisfaction in first hypothesis is explained by the variable of service quality.

The results of the regression test between two variables of service delivery and satisfaction suggests that 26.9% of customer satisfaction in second hypothesis is explained by the variable of service delivery.

The results of the regression test between two variables of access to service delivery and satisfaction suggests that 38.3% of customer satisfaction in third hypothesis is explained by the access to services.

The results of the regression test between two variables of integration of service delivery and satisfaction suggests that 46.3% of customer satisfaction in fourth hypothesis is explained by the integration of service delivery.

The results of the regression test between two variables of performance of after sale services and satisfaction suggests that 53.3% of customer satisfaction in fifth hypothesis is explained by the performance of after sale services.

**Variables Priority**

**Table 3: The results of Friedman test about the factors affecting customer satisfaction**

Factors affecting the customer satisfaction	Average Rating
Services Quality	4.78
Integration of Services	3.79
Access to services	3.33
Performance of After Sale Services	1.59
Rate of receiving services	1.52

Based on the Friedman test and deriving the variables priority, the most important factor affecting the customer satisfaction is the service delivery quality and the least effective factor on the customer satisfaction is the rate of access to services. And this relationship is statistically verifiable.

## Suggestions

Since the suggestions are put forward based on the results of hypotheses tests, the following cases to increase customer satisfaction can be expressed:

### 1. Staff attitude

At the time of employment, individuals should be tested based on the personal and psychological characteristics. This question should be thought: What is their mood in terms of communicating with customer; and Are they patient and modest in responding to them?

### 2. Appropriate technology

Here we review and compare the rates of serving with other organizations, optimizing, and increasing the rate and quality of services. One of the reasons of dissatisfaction with the system is the low rate of services, and efforts to increase the opportunities arising from the use of appropriate and updated world technology compared to competitors can enhance the customer satisfaction. Center director should evaluate the ways of connecting to the company and try to enhance the rate of service delivery to customer.

### 3. Employee performance

Here we identify the appropriate solutions to improve employee performance, such as: Employing the staffs who act quickly in response to customers and their needs. Managing the respondents, the way of communicating and accountability to customers, the application of new technologies and tools of providing services to increase service rate and quality, as well as using new software of customer relationship management for quick accountability.

### 4. Physical factors

One of the factors of service quality is Physical Factors in the contact center, either in hardware or software. From the hardware aspect: the arrangement of equipment, Personnel uniforms, decoration, and forcing managers of center to take attention of physical factors can be effective on improving the quality of services. For example, using a big LCD for informing, placing the information kiosks, and manufacturing centers in order to provide facilities to local customers. As described in Chapter 2, the staff satisfaction in center has a direct relationship with local customers' satisfaction, therefore a modern and tidy place should be provided for personnel with all welfare services at the resting time. From the software aspect: According to the new technologies in providing data to customers (such as Bluetooth, making appointments systems in center, simple and attractive design of website, regular updated voice response systems using appropriate dialects), center managers should provide maximum effort to improve providing the software services.

### 5. Staff's Technical knowledge

Since, a high average is gained among the indexes, "the staff tendency to help customers" and "employees with appropriate knowledge and skills to answer customer questions", we can gain the customer satisfaction by more focus on their empowerment through education, providing appropriate incentives, and by greater tendency to respond to customers and guide them.

### 6. Staff Training

According the whole indicators in the questionnaire, it can be realized that the way of communicating with clients, optimal use of technology, rate of service delivery, courteous behavior, and many other indicators have direct relationship with personnel training.

### 7. Call center employee satisfaction

There is a direct correlation between employee satisfaction and customer satisfaction in an organization. By providing welfare services, education, etc. we can enhance the employees' satisfaction, and therefore the customer satisfaction will increased.

Finally, the organization should always organize the business activities based on the customer's view, and at any moment use new technologies in the center and always keep the center up to date.

## REFERENCES

1. Brinkerhoff, and Robert Dressler, Dennis, "Measuring productivity: a guide to managers and professionals", translated by Dr. Mahmoud Abdullah Zadeh, Cultural Studies Office Publications, 1377;
2. Sarmad, Zohreh; Bazargan, Abbas; Hejazi, Elaheh, (1385), "Research methods in behavioral sciences", Tehran: Agah Publications;
3. Khaki, Gholam Reza, "Research method in Management", second edition, Tehran: Azad University Press, 1379;
4. Ghaffarian, vafa; Jahangiri, Anahita, "quality management ", Journal of Management, 2008;
5. Kavousi, Seyed Mohammad Reza Vasqaei, Abbas, "Measuring Methods and customer satisfaction", first edition, Sabzan Publication, 1384;
6. Mohammadi, Esmaeil "Customer orientation", Rasa Cultural Institution, second edition, 1382.



7. Aksin.Armony, Mehrotra, 2007. "The Modern Call-Center: A Multi-Disciplinary Perspective on Operations Management Research. *Production and Op-rations Management*", 16:665.
8. Alley. Jason, 2009, "Contact Center Supplier Formation and Consolidation."
9. Armistead, C. Kiely, J. Hole, L. and Prescott, J, 2002, "An exploration of managerial issues in call centers", *Managing Service Quality*, Vol. 12 No. 4, pp. 246-56.
10. Beerli A., Martin J.D., Quintana A,2004,"A model of customer loyalty in the retail banking market", *European Journal of Marketing*, Vol. 38, No. 1/2, pp. 253-275
11. Berkley, S, 2005, "An interview with the call center school founding partner, Maggie Klenke",*Greatvoiceco.com*, available at: [ww.greatvoiceco.com/wp\\_maggiiek.html](http://ww.greatvoiceco.com/wp_maggiiek.html)
12. Callaghan, G. and Thompson, P, 2001, "Edwards revisited: technical control and call centers", *Economic and Industrial Democracy*, Vol. 22 No. 1, pp. 13-37.
13. Charles. Jobs, Deena Burris, David Butler, 2007, "The social and economic impact of the call center industry In Ireland", West Chester University, Chester, Pennsylvania, USA
14. Eric P. Jack, Tom A. Bedics and Charles E. McCray, 2006, "Operational challenges in the call center industry: a case study and resource-based framework", Graduate School of Management, School of Business, University of Alabama at Birmingham, Birmingham, Alabama, USA.
15. Hallowell R,1996,"The relationship of customer satisfaction, customer loyalty and profitability: an empirical study", *International Journal of Service Industry Management*, Vol. 7, No. 4, pp. 27-42
16. Jamal A., Nasser, K,2002," Customer satisfaction and retail banking: an assessment of some of the key antecedents of customer satisfaction in retail banking", *European Journal of Marketing*, 20/4, pp. 146-160
17. Key Note 2003, "Call Centers", July, available at: [www.keynote.co.uk](http://www.keynote.co.uk) (accessed 10 August 2003)
18. Nucleus Research, 2008,"Evaluating the On-Demand contact center", November, 2008
19. Parasuraman A., Zeithaml V.A. and Berry. L, 1995,"A conceptual model of service quality and its implication for future research." *Journal of Marketing*, 49, 41-50.
20. Scott, M; Smith Ph.D., 2007, "How to Measure Customer Satisfaction: Satisfaction Measurement and Theory ."
21. Totty, P, 2004, "CU call centers move to multichannel", *Credit Union Magazine*, Vol. 70 No. 5.