



# The Impact of Service Quality on Customer Satisfaction by Using SERVQUAL Model

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## ABSTRACT

This study is about the impact of service quality on customer satisfaction by using SERVQUAL model. The purpose of this study is to investigate the effect of the 5 components of service quality (SERVQUAL) on customer satisfaction. All customers of Melli Bank in Tehran city 501 branches are the statistical population.. The research method is based on descriptive - survey and data analysis method is by structural equation modeling by using Lisrel software 8.54. The results indicate that the 5 dimensions of SERVQUAL (reliability, trust responsibility, empathy, tangible factors) service quality have a positive impact on customer satisfaction.

## 1- Introduction:

Today, service quality and customer satisfaction are strategic issues of service organizations. In today's competitive world, providing high quality services is a necessity for service organizations particularly banks. Providing high quality services is essential to the survival and profitability of organization. Need to understand and measuring of service quality with respect to benefits that providing high quality service such as maintaining customers, customer loyalty, attract new customers and etc. has for organizations is taken into consideration. By measuring quality of services we can identify the strengths and weaknesses of the provided services and do programs of improving the quality and enhance customer satisfaction based on it. Researches indicate that customer satisfaction, customer retention and profitability are related to each other. And also the rate of customer retention determine market share and customer satisfaction is the main factor in maintaining them as well. (Rust & Zahorik1993).

On the other hand, it should be noted that banks as the most major financial institutions in each country plays an important role in the financial and monetary markets and also in attracting and encouraging people to save, accumulate low capital and unleashing them in the fields of manufacturing and services (Zarei and Mahmoud Abadi, 1389).

Today, the development of financial markets, intense competition, competitors, and more than ever need of people to banking services has led the banks to be customer-oriented. On the other hand, they try to mobilize resources and allocate these resources to the different economic plans - both government and private. Therefore, banks in order to survive and achieve their objectives, urgently need the trust and satisfaction of the customers that ultimately leads to enhance their demand of banking services. So, these institutions should have sufficient consideration to the affecting factors over internal and external customer satisfaction. ( Davar and Saffarian, 1383). Since customer satisfaction is the initial results of service quality based on considered dimensions by Parasuraman et al (1985); therefore, by being aware of the quality of service for customers, banks can continue their activity successfully by a plan to pay attention to these factors, with the aim of providing customer satisfaction which ultimately lead their loyalty in today's competitive world. On the other hand, knowing the competitors` status and having related information about customer will be in a more complete way of strategic planning about profitability and attracting of the customers.

According to the mentioned content, in this study it is intended to use the SERVQUAL model to measure the amount of the relationship between service quality and customer satisfaction in Melli Bank in Tehran city.

### **Literature Review and hypotheses development:**

Navaratnaseelan & Elangkumaran (2014), by studying the impact of service quality on customer satisfaction with bank employees, concluded that there is a significant and positive correlation between service quality and customer satisfaction. Therefore, the more maintaining a high quality service, the more customer satisfaction and low-quality services, reduce customer satisfaction, and even lead to loss of customers.

Markovic & Jankovic (2013), by studying the relationship between service quality and customer satisfaction and according to the SERVQUAL model found out that service quality, is the

predictor of customer satisfaction, and therefore the variables of 5 dimensions in SERVQUAL model of service quality, reliability, empathy and staff competency and tangible factors have the greatest impact on customer satisfaction.

Razak (2013), by a comparative assessment of the SERVQUAL model in measuring customer satisfaction toward offered quality of services by Islamic banks found out a positive relationship between service quality dimension and customer satisfaction.

Amanfijnr (2012), by studying of service quality and customer satisfaction in government agencies, found that there is a positive relationship between service quality and customer satisfaction. And thus improving service quality is an important factor in creating customer satisfaction which is necessary sufficient steps to be done in this area.

Chingang & Lukong (2010), in their study entitled Evaluation of service quality and customer satisfaction by using SERVQUAL model, concluded that the SERVQUAL model for measuring the quality of service is not the right tool. Because it does not well overlap, and also customer expectations and their understanding of satisfaction is more than the service quality. It should be noted that in this study, only reliability is expressed as a component of quality of service.

Prabhakar (2010), by studying of service quality (SERVQUAL) and its effect on customer satisfaction, found that SERVQUAL service quality dimensions (tangible factors, reliability, responsiveness, empathy and assurance) make a positive impact on customer satisfaction and hence dimensions of quality of service is a critical factor on customer satisfaction.

Olaleke (2010), by study of the relationship between service quality and customer satisfaction in the banking industry, found out that there is a significant relationship and outstanding affect between service quality and customer satisfaction.

Amin and Isa (2008), by examining the relationship between perceived service quality (SERVQUAL) and customer satisfaction in banking, found that there is a significant relationship between dimensions of service quality (SERVQUAL) and customer satisfaction and these dimensions are considered important factors in creating and attracting customers` satisfaction.

Nargesiyan (1392), by investigating the affecting factors on banks customer satisfaction by using SERVQUAL model, concluded that the four dimensions of reliability, responsibility, assurance and empathy are effective on customer satisfaction of researched Bank, but the tangible factors do not impact on customer satisfaction of service quality.

Abouei ardakan (1391), by assessing the relationship between service quality and customer satisfaction on customer behavioral decisions found that quality services has a positive impact on customer satisfaction and their behavioral decisions.

Samadi and Eskandari (1390), by evaluating the effect of service quality on Melli bank customer satisfaction based on SERVQUAL model, found that customer expectations of tangible factors, reliability, assurance and empathy is higher than their perception and the existing gap represent customer dissatisfaction with the provided quality of services by the bank. Also in terms of customers, reliability dimension has a higher priority than other factors.

### **Theoretical Foundations of Research:**

Quality is a factor that customer determines it; that is if a service meets or exceeds customer's expectations, is the qualified and if the service will be lower than customer's expectations, this does not necessarily mean that the quality is low, but it can cause customer dissatisfaction; therefore, the quality of service is evaluated by customer`s expectations. (Nargesiyan, 1391) .

Different definitions presented about quality of services which it can be pointed to the following definitions:

Gronroos says quality, the size and direction of discrepancy between customers' perceptions of service and their expectations. ( Gronroos, 1998). Crosby believes that quality has no meaning but what does the customer really wants. In other words, when a product is qualified that is in compliance with the wishes and needs of customers. Quality should be defined as the product compliance with customer requirements (Crosby, 1984).

For measuring customer perceptions of service quality, various scholars have tried many. One of the developed models in the quantitative measurement of service quality belongs Parasuraman et al (1985); by using the five components of quality of services they created a tool that can be used to evaluate the quality of service from the customer`s idea. These instruments are known in the literature of quality with SERVQUAL (Parasuraman et al, 1985).

SERVQUAL scale in its original shape has 5 dimensions and 22 components that half of the components will measure consumer`s level of expectations of special service, and the other half will measure perceived level of service quality offered by a particular organization. Service

quality is measured by the difference between customers` perception and their expected level of service (Gorji, 1387).

The basic dimensions of service quality based on SERVQUAL model is as following:

- A) Physical dimensions:** physical dimensions include facilities, equipment, personnel and communication products. All these provide an image that customer (especially new customers) will consider it for evaluation.
- B) Reliability:** the ability to do services is in a reliable form so that the customer's expectations to be provided. In other words, the reliability is fulfilling obligations, ie, if the service organization commits time of delivery services, delivery service methods and costs of services will have to act.
- C) Responsibility:** responsibility means the willingness to contribute to the customer. After service quality, this one emphasis on demonstrating the sensitivity and awareness towards requests, inquiries and customer complaints. Standard definition of responsibility is the period of time the customer has to wait for assistance, or answers to his questions.
- D) The warranties and guarantees:** Warranties and guarantees indicate organization staff competency and ability to induce a sense of trust and confidence to the customers towards the organization. These dimensions of service quality are particularly important in the services that have higher risk.
- E) Empathy:** that is with considering the spirit of individuals, treat in a special form. So that customers be satisfied that the organization understand them and they are important for the organization (Parasvrman et al, 1985).

### **Customer Satisfaction**

In today's competitive economy, client orientation and customer satisfaction are the first law of business and violation of it make the market will be removed. Companies are always willing to take high levels of customers satisfaction with creation of their loyalty achieve benefit. For this reason, it is crucial to measure customer satisfaction.

Customer satisfaction is obtained by comparing customer expectations with function of service and product supplier:

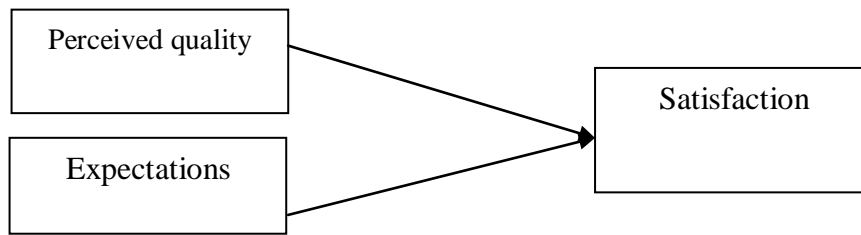


Figure 1. Patterns of formation of customer satisfaction

Customer satisfaction as a feeling or attitude of a customer towards a product or service after using is the main result of marketing activity which acts as a communication between the various stages of consumer buying behavior (Jamal and Naser, 2002), Figure 1 shows the formation of customer satisfaction. In associated with service quality and customer satisfaction, many researches have been done, and many of them focus on the fact that there are a correlation between service quality dimensions and customer satisfaction ( Rezaee Golabadi, 1385), which customer satisfaction through his loyalty to the organization will result increased profit. Replicated purchase by customer, purchasing new products by customers with the least expenditure of advertising and also buying goods by new customers who have been desired by satisfied customers is one of the ways that lead to increased customer satisfaction and profit of organization (Zarei Mahmoud Abadi, 1389).

A loyal customer is not readily absorbed by competitors advertising, and on the other hand, a loyal customer to the brand, shows less sensitivity to price changes, because he is sure about receiving the value after purchasing, that is a loyal customer is more prepared to pay higher prices. Here the conception of the winner - the winner is proposed. Through the provision of the value that is the provision of customer expectations and perhaps higher than his expectations, he feels the sense of winning and the organization in earning customer loyalty, and consequently the acquisition of profits and revenue and market share will win as well (Hill, 1385).

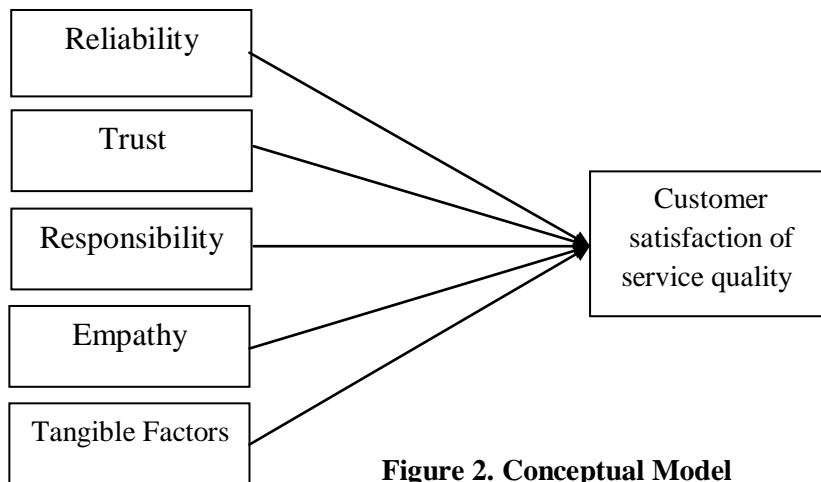
Therefore, the customer will experience satisfaction in many ways:

- 1 - overall and based on products (type of service) of organization;
- 2 - Superior characteristics of performance in product of organization;
- 3 - How to make calls and interact with customer;
- 4 - Organizations, agencies and various branches of the organization and even based on the appearance of buildings;

- 5 - How an organization communicate with the customer before buying the product;
- 6 - How an organization communicate with the customer after purchasing the product (Mousavi, 1388).

**A conceptual framework of research:**

By reviewing of research literature and backgrounds, the conceptual framework of this study is as follows:



**Figure 2. Conceptual Model**

**Objectives and hypotheses of research:**

The intended purpose of this section is as follows:

- 1 - Evaluating the effects of reliability on customer satisfaction of Melli Bank;
- 2 - Evaluating the effects of trust on customer satisfaction of Melli Bank;
- 3 - Evaluating the effects of responsibility on customer satisfaction of Melli Bank;
- 4 - Evaluating the effects of empathy on customer satisfaction of Melli Bank;
- 5 - Evaluating the effects of tangible factors on customer satisfaction of Melli Bank;

Also, the hypotheses of this of research are:

- 1 - Reliability has a positive impact on customer satisfaction of Melli Bank.
- 2 - Trust has a positive effect on customer satisfaction of Melli Bank.
- 3 – Responsibility has a positive impact on customer satisfaction of Melli Bank.
- 4 - Empathy has a positive impact on customer satisfaction of Melli Bank.
- 5 - Tangible factors have a positive impact on customer satisfaction of Melli Bank.

### **3-Methods:**

The present study is functional in terms of objective and its methodology is descriptive - survival. For data analysis, structural equation modeling using Lisler 8.54 software is used. The research statistical population represents all branches of the National Bank in Tehran. Based on information obtained from the website of the Central Bank, the branches of Melli Bank in Tehran in are 501 number in 1393(2014). For selecting sample according to complete specifications and geographical area of 501 branches, first 5 banks were selected randomly from each of the 22 districts of Tehran and then 8 questionnaires were distributed randomly among bank customers in each branch. After reviewing the returned questionnaires, 792 questionnaires were completed correctly and completely. Therefore, analysis of hypotheses on the same questionnaires was one. The data gathering tool includes service quality questionnaires (SERVQUAL) with 22 folds which evaluate 5 components of reliability, trust, responsibility, empathy and tangible factors. As well as other functional questionnaires, customer satisfaction with 15 folds will assess a matter of satisfaction among customers.

### **4- Result:**

#### **Validity or reliability of the questionnaire:**

KMO index is used to analyze the questionnaire. The value of this index for the data of this study for the service quality of SERVQUAL questionnaire was 0/913 and for a customer satisfaction questionnaire was 0/938. This index ranges from zero to one. And when the value of this index is closer to one a desired sample size of data are more appropriate for analysis. Bartlett's test was also used to examine how the correlation matrix. Bartlett test for all three questionnaires, as



shown in Table 1 is smaller than the value of 0/05. The assumption of the correlation matrix which is unique will be rejected and the result show factor analysis is appropriate for identifying the structure of the variables.

**Table 1. The KMO and Bartlett's test statistic**

0/913	KMO test		Service quality of SERVQUAL questionnaire
16701/650	$\chi^2$	Bartlett's test	
406	Free degree		
0/000	Sig		
0/938	KMO test		Customer satisfaction questionnaire
8640/914	$\chi^2$	Bartlett's test	
136	sig		
0/000	Free degree		

### **The reliability of the questionnaire:**

**A - Retest method:** For this purpose, we first designed a questionnaire on a group of 35 people and the experiment was performed in two weeks. After this, the correlation between these two phases was calculated. The Correlation of service quality SERVQUAL questionnaire was 0/837 and for customer satisfaction questionnaire was 0/745, which is an acceptable value.

**B - Cronbach's alpha:** Another way to measure and estimate questionnaire was calculating the Cronbach's alpha coefficient. Cronbach's alpha values for a sample of 40 groups for questioners of SERVQUAL service quality was 0/806 and for customer satisfaction questionnaire is equal to 0/713, which is an acceptable value.

Table 2. Demographic characteristics of the statistical sample

<b>FREQUENCY PERCENT</b>	<b>FREQUENCY</b>	<b>TYPES</b>	<b>VARIABLE</b>
52/7	417	female	<b>gender</b>
47/3	375	male	
63/5	503	single	<b>Marital status</b>
36/5	289	married	
7/6	60	15-20	<b>age</b>
32/4	257	21-30	
33/1	262	31-40	
20/8	165	41-50	
6/1	48	More than 50	
17	135	Diploma and under	<b>education</b>
13/5	107	Associated diploma	
50	396	B.A/ B.S	
17	135	M.A/ M.S	
2/4	19	Higher than M.A/ M.S	

As the data shown in Table 2, 7/52% of the sample was female and 47 /3% of them were men. Most of the cases (63/5%) were single, most respondents were (33/1%) aged 31 to 40 years, and most of them (50%) have a bachelor degree.

According to the above description, in this phase we evaluate the relationships between structures of research. To this end, the research model was implemented in Lisrel. Verification and analysis of the measurement model have been useful in the early stages of studies, because they can help to assess research instrument and develop the structures. Also structural model analysis can illuminate the theoretical weaknesses and help to interpret research findings and will have a major contribution in future plan studies; based on this, structural equation modeling involves two major stages of model plan and model. In model plan researcher by using all relevant ideas, research and available information plan the model and in this phase of the model of the causal relationships between variables will be explain. Causal relationships between variables can represent hypothesis that are derived causal relationships between manifest and latent variables from theoretical space. The next step is to test suitability and compliance of these theories with empirical data that have been collected in a certain community (Kalantari, 1388).

### **Model Fit Test:**

Purpose of assessing the fitness entire model is to determine to what extent entire model empirical data is used to adjust and compromise.

There are a wide set of fitness criteria and indicators that can be used to measure the goodness of fit entire model. Unfortunately, none of them are superior than others in all respects.

Depending on since specific fitness indicator sample size, estimation methods, the complexity of the model, the assumptions of normality or a combination of the above conditions, acts differently.

So different people depending on various indicators for model may be used to model fitting (Kalantari, 1388).

In this section, a conceptual model in the form of a diagram outlining the path and the goodness of fit is measured by using various methods. A structural equation model actually represents a mixture of the path diagram and confirmatory factor analysis.

The estimated coefficients are shown in Figures 3 and 4 standard and will see a number of significant structural model. Some indicators goodness of fit the bottom of the shapes are visible.

Research variables in the following table along with their abbreviated names are given.

Table 3. Table abbreviation of Research variables

Figure 3. Coefficients, standard estimates of the structural model

Figure 4. Significant numbers of structural model

Based on the model, it is clearly seen that the relationship between all components of the research was the basic model of the is positive and significant. Therefore, the research model is confirmed.

Discussion and conclusions before the start of the extracted model is worth noting that one of the best indicators of structural equation model fitness fitness indicators root mean square error of approximation (RMSEA) is.

The amount of deflection per degree of freedom is the same as the test for models which have good fitness, you have a little less than 08/0. The model number mean square error more than the 08/0. Poorly fitting. Another indicators fitness divided by the square of the degrees of freedom. This value should be less than 3. (Homan, 1384).

According to the chi-square value of the output LISREL 43/1696 and 614 degrees of freedom is calculated. Thus, the chi-square divided by the degrees of freedom equal to the conceptual model of the 762/2 that amount is acceptable.

The fitness indicators the model output root mean square error of approximation equal to 071/0 of the show. That amount is acceptable. The suitability of the above mentioned indicators show little difference between the conceptual model of this study is to investigate the observed data.

### **Test the hypothesis:**

First hypothesis: Reliability has a positive impact on customer satisfaction Bank Melli.

Structural equation corresponding output in charts 3 and 4; levels vary significantly between job satisfaction and reliability equal to (29/6) is greater than (96/1) and showing - indicates that the relationship between Reliability and customer satisfaction level of confidence (95%) is significant. Also according to the path coefficient between these two variables (64/0) is the result, the National Bank is to ensure a positive impact on customer satisfaction. So the first research hypothesis is confirmed

Second hypothesis: Trust has a positive effect on customer satisfaction Bank Melli. Accordance with the output of structural equation shown in Figures 3 and 4, the level of significance between the variables of trust and job satisfaction equal to (76/3) is greater than (96/1) and represents the relationship between trust and customer satisfaction in confidence level (95%) is significant. Also according to the path coefficient between these two variables (39/0) is the result; Trust Bank Melli has a positive impact on customer satisfaction. Thus, the second research hypothesis is confirmed.

Third hypothesis: Bank Melli of accountability on customer satisfaction has a positive impact. Structural equation corresponding outputs are shown in Figures 3 and 4; levels vary significantly between accountability and job satisfaction equal to (81/5) is greater than (96/1) and represents - it represents the link between responsibility flexibility and customer satisfaction level of confidence (95%) is significant. Also according to the path coefficient between these two variables (58/0) is the result; Bank Melli has a responsibility to have a positive impact on customer satisfaction. Therefore, the third research hypothesis is confirmed.

The fourth hypothesis that empathy has a positive impact on customer satisfaction Bank Melli.

Structural equation corresponding outputs are shown in Figures 3 and 4; levels vary significantly between empathy and job satisfaction equal to (09/4) is greater than (96/1) and indicates that the relationship between empathy and customer satisfaction confidence level (95%) is significant. Also according to the path coefficient between these two variables (41/0) is the result; empathy Bank Melli has a positive impact on customer satisfaction. Thus, the fourth hypothesis of the study is approved.

Hypothesis V: Bank Melli tangible factors on customer satisfaction has a positive impact.

Structural equation corresponding outputs are shown in Figures 3 and 4; levels vary significantly between the tangible factors and job satisfaction (19/5) is greater than (96/1) and show - indicate

that the relationship between factors tangible and customer satisfaction level of confidence (95%) is significant. Also according to the path coefficient between these two variables (53/0) is the result of factors has a tangible positive impact on customer satisfaction Bank Melli. Thus, the fifth hypothesis of the study is approved.

## **5- Conclusions:**

The purpose of this study was to investigate the impact of service quality on customer satisfaction with the national bank. Findings from this study showed that the 5 components of SERVQUAL service quality (reliability, trust responsibility, empathy, tangible factors) National Bank branches in Tehran on customer satisfaction has a positive effect.

Therefore, it can be stated that customer satisfaction is one of the main requirements of the elements and management systems in firms and businesses including banks is considered; In determining their success in profitability since it is very important. Thus the creation and implementation of the same quality, service satisfaction, the strength for such institution in today's competitive market poses and it is of great importance.

## **6- Research Suggestions:**

According to the results of the present study was to further enrich the customer satisfaction, the following suggestions are offered:

- 1 - Identification of implicit and explicit needs of customers and the expansion of banking services;
- 2 - Educate, persuade bank employees to deal effectively with customers and solving their problems;
- 3 - Elected officials and qualified staff (empirical and ethical) for banking;
- 4- Establishing an exchange network of clients within the bank and ongoing assessment of customer feedback on their satisfaction and quality of services provided to clients and a bank in the critical and constructive,

5 - In-service training courses to enhance the knowledge of bank employees in connection with their service provider (reducing the gap between expectations and perceptions of customers).

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