Investigation on Relationship between Service Quality and Customer Satisfaction (Case-study in Iranian Shahid Rajayi Port)

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Abstract

The nature of the services is that, the customer himself involves in the process of service providing. This means that the customer’s perception of the quality is not only affected by the output service, but it is affected by the process of service providing as well. This study aims to assess the customer’s satisfaction of the offered services in Iranian Shahid Rajayi Port and to investigate the relation between such satisfactions with the dimensions of services quality. This research was conducted in Iranian Shahid Rajayi Port on 2011 as a descriptive survey. In this regard, a sample of 216 customers was selected. To analyze the data, the researchers used the mean, standard deviation, and Pearson correlation coefficient. In the area of satisfaction of overall services quality, the lowest mean belonged to the shipment companies, and the highest mean belonged to the investor companies. The correlation coefficient between customer’s general satisfaction and the dimensions of service quality was confirmed for the variables of tangible factors, responsiveness, and accessibility; and it was confirmed for the dimensions of trust, knowledge, satisfaction, and recovery. The results of the mean shows that the goods owners and shipment companies are dissatisfied (or relatively dissatisfied) with all dimensions, and the investor companies are satisfied with the tangible factors, knowledge, accessibility, but dissatisfied with the other factors. So the managers and policy makers can use the findings and results of this research to re-assign the resources and planning new strategies to improve the service quality.

Keywords: Customer Satisfaction, Dimensions of Service Quality, Service Quality, Shahid Rajayi port.

1. Introduction

Service sector has grown significantly in recent years so that its contribution in gross global product has been more than the other sectors. It is obvious that the fundamental procedures of the second half of the 20th century have led to a transition in economics from industrialism to the services (Raajpoot, 2004). Accordingly, services play a vital role in marketing program of many trade companies, and the superiority of the service, is a part of customers’ demanded package of value. Thus in competitive free markets, some strategies like providing high-quality services have absorbed many customers (Parasuraman et al., 1985). At the other hand, in today’s complicated and competitive markets, the ability to gain and maintain customers’ loyalty is a critical factor for lots of organizations (Bendapudi & Leone, 2002).

Due to some reasons like the lesser number of the customers, their maintenance in using the services, the importance of reinforcing the long-term relations of the organization with the customers, deeper and closer relations with the customer, and emerging professional customers, it is necessary for the service companies to pay special attention to the customers’ loyalty to the organization (Jayawardhen et al. 2007). Satisfaction is the customers’ reply to the success of the organization. Indeed, the satisfaction reflects the customers’ reaction to the features of the provided services and commodities, and it is a source of competitive advantage (Megha, 2009). In a competitive atmosphere in which the companies compete each other to obtain the customers’ attention, customer’s satisfaction is a key element for the superiority and an important factor in organization’s success because it leads to more benefits and higher customers’ loyalty (Gitman & McDaniel, 2005).

Customer’s satisfaction is the focal point of the marketing. The ability to satisfy the customers is critically important for several reasons. First, if the customers are dissatisfied, they will promote their dissatisfaction against the organization. Second, there is a strong positive relation between the customers’ satisfaction and their loyalty and organization’s benefits (Andaleep & Conway, 2006). Customer’s satisfaction is defined as a level of service quality that meets the customers’ expectations (Wang, 2000). Customers’ satisfaction is their emotional reaction resulted from their interaction with the offering organization or consuming the products (either commodities or the services). Satisfaction results from the understanding of the difference between the customers’ expectations and the real performance of the organization in providing the services. It shows that to what extent the provided product or service by the organization has managed to meet the customers’ need and expectations (Gitman & McDaniel, 2005). The quality of the services is the customers’ judgment on the nature of the services, while the satisfaction is the customers’ judgment on the effects of the services (Schneider & White, 2005). Oliver believes that any product (service or commodity) has to be experienced to be a base for the judgment on customers’ satisfaction (Oliver, 1997).

The growth and development of global trade in recent decades and consequently, the significant growth of marine transportation...
has brought several economic opportunities for Islamic Republic of Iran. Today, the importance of the ports in economic cycle of the countries and its role in global economics is obvious. The reasons of such an importance can be summarized as follow:

- It is the most important doorway: ports are the gateway of 100 percent of Iranian oil exportation and 80 percent of all export and import of the commodities in the country; moreover, approximately 90 percent of the transportation of the commodities is being done through the seas.
- It is an important cycles in the chain of global supply.
- Is has a vital role in economic cycle, employment, and incomes. It is an important factor in importing modern technologies, and an important factor in the economic mutation of many countries (like Singapore and Hong Kong).

Shahid Rajayi Ports Complex locates in 20 km west of Bandar Abbas, with the coordinates 27.7° N 56.4° E. The port locates at the entrance point of Persian Gulf, at the beginning point of Strait of Hormuz and the north of Qeshm Island. Regarding its strategic position and its access to the railways, Shahid Rajayi has been always an important port for the businessmen and investors. As the largest port of Iran, Shahid Rajayi port plays its role as the gateway of 60 percent of Iranian exports and imports. Looking at the growth of some ports including the ports of the region and their tendency toward being customer-based, and the existing potential of Shahid Rajayi Port and the comparison between this and other ports of the region one can find that Shahid Rajayi has failed to use all its capacities and lose the existing advantages against its competitors due to its neglect for marketing, lack of customer-orientation, and failing in creating comprehensive plans. If the port intends to be survived in confronting the globalization, there will be no other choice than making changes in its processes and customer-orientation. Regarding the mentioned issues, and regarding the fact that the Iranian ports are the economic agencies who have not been paid enough attentions in researches and studies, the researcher decided to study the service quality in Shahid Rajayi Port. Thus, since studying the customer’s satisfaction can be the first step in fulfilling the customers’ satisfaction and loyalty, the objective of this study is to assess the customers’ satisfaction of the provided service in Shahid Rajayi Port and studying its relation with the dimensions of service quality. The ports can use the findings of this research in planning, implementing, and reviewing their own policies and procedures. Studying the customer’s satisfaction can be the first step toward the fulfillment of customers’ satisfaction and loyalty.

2. Literature review

2.1 Service Quality

Service is an action or implementation which is being done by one party for another, although its procedure is necessarily intangible and won’t lead to the ownership of none of the parties (Lovelock & Wright, 2002). Kotler believes that the services are among economic activities that make benefits and advantages for the customers in specific time and place due to making the desirable changes in the receiver of the services. Lovelock and Wright confirm Kotler’s theory. They believe that the services are a kind of economic activity whose consequence is to make value and benefits for the customers by facilitating the desirable changes in specific times and places (Lovelock & Wright, 2002). Service is a set of explicit and implicit advantages which is provided by using the supportive and facilitator commodities (Lovelock & Wright, 2002).

Quality is a multidimensional phenomenon; thus understanding the service quality is not possible without identifying the important dimensions of the quality. Groenroos refers to 3 dimensions of the quality including output technical quality, obligatory quality of the service encounter, and the mental image. Service quality is one of the most important factors in the success of service organization in today competitive environment. Any sort of the decrease in customers’ satisfaction due to the low quality of the service is a big concern for the service organizations. Today the customers are more sensitive to service standards than ever, and their expectation of the service quality has increased along with the competitive procedures (Fullerton, 2003). So, lots of marketing experts believe that the service organizations have to monitor the customers’ expectations of the services quality (Namasivayam & Hinkin, 2003). There are several definitions for service quality some of which are as follow:

- Service quality contains 3 dimensions: physical, situational, and behavioral. In other words, service quality is to focus on what is delivered to the customer, the situation of its providing, and the way of its providing (Winsted, 2000).
- It is the continuous attention of the organization to meet the needs and wants of the customers (ka-shing etal, 2004).
- It is the difference between the customers’ expectations of the received services and their perception of the received services (Winsted, 2000).

Reviewing the literature of service quality shows that the third definition which is based on not confirming the customers expectation has been the dominant definition over the years, though recently just its perceptual parts is being used in the literature (Grobsy etal, 1990).

In the area of service quality, two models are more acceptable among the researchers:

- Service quality model, containing the dimensions of being tangible, trustworthy, responsiveness, guaranty, and sympathy (Ross & Omachonu, 2003).
- Functional service quality model, containing the dimensions of technical and functional quality (Hartlin etal, 2003).

Although the above models can be applied in the consumption markets, their application in trade/industrial markets will face several problems. The interactive approach was offered by the marketing and industrial purchase group to solve the mentioned problems and to evaluate the quality of trade services)
Michael & Thomas (2007). This model focuses on buyer-seller interaction, and its unit of the analysis is communication. According to interactive model, two components (exchange and communication) shape the perceptions of any trade service.

2.2 Dimensions of Service Quality

Brady et al. showed that there is a relation between service quality and customer’s satisfaction on the basis of cultural backgrounds. Moreover, the quality of the services has a significant effect on customer’s satisfaction (Brady, 2001). Sureshchandner et al. showed that there is a strong relation between service quality and customer’s satisfaction. They emphasized that these two concepts are completely distinctive structures in the eyes of the customers (Sureshchandner et al., 2003). Mojahed et al. showed that there is a positive and statistically significant relation between customer satisfaction and the dimensions of service trust, guaranty, sympathy, tangibility, physical environment (Muzahir & Noorjahan, 2009). Pariseau et al. conducted a research on the service quality in two commercial faculties in northeast America. They found that the dimensions of guaranty, responsiveness, sympathy, trust, and tangibility are respectively the most important dimensions for the students (Pariseau & McDaniel, 1997). Galloway’s study in De Montfort University on the quality perception of internal and external customers of the educational services showed that the students were more or less affected by the responsiveness, superficial, and personal dimensions (Galloway, 1998). In a study on service quality of a Singapore hospital, Lim and Tang showed that the responsiveness was the lowest-ranked dimension of the quality in the patients’ perception, while according to the researchers’ expectation, this dimension had to be the second important dimension. In this research, the guaranty that was expected to be the most important dimension was perceived as the fourth one (LimPC, 2000).

The findings of a research conducted by Tomovick et al. on the effective factors of service quality of international students of trade faculty showed that the students perceive the tangibility (magnetism of the environment and equipments) as one of the most important dimensions of the educational service quality. They expected the faculty to employ expert and qualified academic board and the professors help them solving their different problems (Tomovick et al., 1986).

In another study, Azman et al. showed that responsiveness, guaranty, and sympathy are the most important dimensions of service quality (Bittner & Zeithaml, 2003). Responsiveness is the tendency of the service provider to provide the needed services at the soonest time and in the best way; guaranty is qualification and the obeisance of the human resources in absorbing the customers’ trust in the process of service providing; sympathy is to understand the customer’s needs and to pay special attention to their special needs. If the provided services by an organization meet the customers’ needs and expectations that will lead to more satisfaction of the customer (Azman et al., 2009).

2.3 Customer’s Satisfaction

Generally, customer’s satisfaction can be defined as the attitude judgment about the purchase. It is to be mentioned that satisfaction is based on service encounter (Grosby et al., 1990). There is a different between “customer’s satisfaction” and “service encounter quality”: the former is an emotional evaluation after consumption, while the latter is the customer’s cognitive judgments about the behaviors of the service provider during the purchase. In business markets, there are significant differences between the consumers according their decision units. Evaluating the satisfaction of different members of any purchase center who are in contact with the trade (or industrial provider) is necessary for assessing the customer’s satisfaction of the business. Although the members of the purchase center follow the company’s goals, but they have their own motivations and goals, and they evaluate the performance of the service or product on the basis of their own preferred standards (Ladda, 2007). Accordingly, Schumpeter presents a new definition for satisfaction: “the evaluation of purchase center members of their purchase experience, product usage, and their relation with the service or product during the times” (Grosby et al., 1990). This definition offers a basis for conceptualization and assessment of the business customer’s satisfaction. It regards the perceptions of the service quality as a determinant factor in customer’s satisfaction. There are several evidences confirming the fact that the functional judgments about the service play a vital role in shaping the customer’s satisfaction of the business (Grosby et al., 1990).

2.4 Relation Between Customer’s Satisfaction and Service Quality

Service quality and customer’s satisfaction are two different concepts with different definitions. Service quality is the general evaluation of customers’ experience with an organization, while satisfaction is the evaluation of particular experiences with the organization. With regard to the relation between service quality and customer’s satisfaction one can ask if the satisfaction gives rise to judgments about the quality, or the judgments about quality will lead to customer’s satisfaction (Schneider & White, 2005). It seems that there is an agreement on the answer of the question: judgments about the quality will lead to satisfaction ( Parasuramam, 1998). According to tentative findings, service quality is prior to customer’s satisfaction; and customers expectation is applied as the standard for comparing the satisfaction and dissatisfaction of the customer. Customer’s satisfaction is the result of experiencing real service in confronting the organization and customer’s expectation of the organization. There is a close relation between the perceived service quality and the customer’s satisfaction so that the both are the result of customer’s experience with the organization (Heskett & Swe, 1997). According to Brink et al., the customers evaluate the services on the basis of provided service quality and the level of their obtained satisfaction. These two concepts of service quality and satisfaction are the main focus point of the
organization because they are the factors to be assessed quantitatively. The reason for such an assessment is that the organizations will make themselves distinctive from other organizations by providing higher-quality services and absorbing the customers’ satisfaction (Brink & Berndt, 2005). Brink and Bernard believe that although every successful organization intends to provide the services that satisfy the customers, but this is not the only aim of the organization but other aims like gaining the competitive advantage and obtaining more benefits are other important goals of the organization (Lovelock & Wright, 2002).

Main Hypothesis: the customers of Iranian Shahid Rajayi Port are satisfied with the quality of provided services in the port. Subsidiary hypotheses:

H1: Customers are satisfied with the tangible factors in Shahid Rajayi Port;
H2: Customers are satisfied with the responsiveness of the staff in Shahid Rajayi Port;
H3: Customers are satisfied with the staff’s knowledge in responding the issues in Shahid Rajayi Port;
H4: Customers trust the services provided by the staff in Shahid Rajayi Port;
H5: Customers are satisfied with the accessibility of staff and services in Shahid Rajayi Port;
H6: Customers are satisfied with the recovering of the problems in Shahid Rajayi Port;
H7: There is a significant relation between satisfaction and service quality in Shahid Rajayi Port.

3. Methodology

Conceptual model of service quality was proposed by Parasuraman et al in 1985. The model then became the standard tool for measuring the service quality and was known as servqual. Parasuraman et al identified 10 indexes that contained all features and characteristics which are important for the customers. These 10 indexes include physical dimension, confidentiality, responsiveness, ability (knowledge), good behavior, trust, security and immunity, accessibility, communication, customers understanding.

Servqual model was applied in different studies on service industries like universities, banks, credit cards, repairs and maintenance, and communications. Then the ten mentioned dimensions were abstracted and combined in 5 general dimensions as follow:

- Physical dimensions (equipments and facilities, staff appearance, physical environment of the organization);
- Trust (the ability to provide the promised services in a continuous, confident, and correct way);
- Security and assurance (the knowledge and skills of the staff and their ability to inspire the sense of trust in the customers, including communications, security and safety, good behavior, authenticity, and confidence);
- Responsibility (tendency to help the customers and providing due services); and
- Sympathy and paying special attention to the customer (to care and pay attention to the customers by the staff during providing the services, including to understand the customers, and to be accessible for the customers).

This research was conducted in Iranian Shahid Rajayi Port on 2011. Regarding its objective, the research is a practical research whose data has been gathered through a descriptive survey.

The target population of this research includes the investor companies C(who have hired the land to establish buildings and supplying needed equipment for their investment and activities), owners of the commodities A (the people who refer to the port to receive their imported goods), and shipment companies B (the companies who transport the imported/exported goods via the ports of the country). The selection of this target population for the research has been done on the basis of the importance of these customers in the process of port’s activities.

In the research, simple random sampling method was used for the owners of the commodities and shipment companies, and census method was used for the investor companies. The following two formulae were applied to determine the sample size of shipment companies and owners of the commodities. The size of the statistical sample comprised 215 questionnaires.

\[ n = \frac{N \cdot Z^2 \alpha / 2 \cdot p \cdot q}{\varepsilon^2 (N - 1) + Z^2 \alpha / 2 \cdot p \cdot q} \]

\[ n = \frac{z^2 \alpha / 2 \cdot p \cdot q}{\varepsilon^2} \]

The data of the research was gathered via field activities including questionnaires, interviews, observation, and opinion polls. At the other hand, some information and data were gathered through archival studies and internet searches. The questions...
of the questionnaire were written on the basis of Parasuraman’s service quality model. Moreover, the questions were designed as a 5-questions package with Likert scale. A questionnaire was designed for the whole statistical population including 5-option questions (“Completely Agree”, “Agree”, “No Idea”, “Disagree”, and “Completely Disagree”). The questions were totally 26 ones. The questions were designed on the basis of the research hypotheses including 1 main hypothesis and 7 subsidiary hypotheses.

**Fig.A2. Structure of the questionnaire**

- **Tangibility**
  - Neatness of physical environment
  - Physical appearance
  - External design
  - Equipment updating
  - Neatness of staff appearance
  - Properness of hall and parking lot
  - Behavior of the staff
  - Paying attention to the customers
  - Promptitude of meeting the requests
  - Service accordance with customers’ needs
  - Managing the customers’ crowd

- **Responsiveness**
  - RES1
  - RES2
  - RES3
  - RES4
  - RES5

- **Knowledge**
  - Staff’s expertise and experience
  - Way of communication
  - Extent of precision
  - Time of caring the requests
  - Simplicity of processes
  - Safety of loading and unloading
  - T1
  - T2
  - T3
  - T4
  - T5
  - T6

- **Trust**
  - TRU1
  - TRU2
  - TRU3
  - TRU4

- **Accessibility**
  - ACC1
  - ACC2

- **Recovery**
  - REC1
  - REC2
  - REC3
  - REC4

- **Satisfaction**
  - SAT1
  - SAT2
  - SAT3

Preliminary Experiment: to assess the validity of the questionnaire, the researchers used the experts’ opinions and advices, and interviewed with the port’s experts, managers, and some customers, and gathered and classified the data to plan the questionnaire. Besides, to plan the questionnaire of customers’ satisfaction, the researchers provided all the service operations and finally planned the questions based on the basis of service process. After the questions and evaluating information planned, the researchers conducted a meeting with the experts and some authorities of the port to gather their revisory and complementary opinions to be used in the final designation of the questionnaires to be distributed.

To evaluate the reliability of the questionnaire, researchers used a preliminary sample (including 30 persons). These persons were the representatives of the companies that were the members of the statistical sample. After the questionnaires were collected, the reliability of the questionnaire was tested using Cronbach’s Al-pha. Accordingly, the reliability of data gathering tool of the study is shown in table 2. Referring to the table, it can be claimed that the test has been highly reliable.

SPSS software has been used to analyze the statistical and deductive data. Moreover, to determine the correlation between the variables, hence used Pearson’s hypotheses test method, and to rank the variables Friedman’s test is used.

### 4. Findings

#### 4.1 Demographic Data analysis

Gender: %94.4 male, %5.6 female

Education: %33.9 bachelor or higher, %66.1 lower than bachelor

Work experience: %39.6 more than 7 years, %60.4 less than 7 years

Organizational position: %51.2 the representatives of shipment companies and goods owners, %22.3 goods owners, and %26.5 managers and supervisors of shipment companies and investors.

#### 4.2 Data Analysis

The main objective of the research has been to study the rate of satisfaction among customers of statistical population of the services provided by the port.

Since one of the main marketing rules is to provide the needed services and products to the customers, so, understanding the rate of satisfaction of the port’s customers is vitally important. In other words, the importance of all the mean components was assessed. In this study, the researchers consider the average score (3) for satisfaction, and the scores less than 3 were considered for dissatisfaction.

The results of data analysis of the table 2 for group “A” (goods owners) show the fact that the highest mean score belongs to variables T5, ACC1, and SAT2. This assessment shows that the goods owners have been satisfied with these 3 variables and dissatisfied with other cases. The results of data analysis of group “B” (shipment companies) show that the highest mean scores have belonged to variables T3, T5, ACC1, and SAT2. In other words, shipment companies have been satisfied with these variables and dissatisfied with the others.

The results of data analysis of group “C” (investor companies) show that the highest mean score has belonged to variables T5, T4, T5, RES1, RES2, KNO1, ACC1, REC1, REC2, REC3, and SAT2; this assessment reflects the fact that investor companies are satisfied with these 11 variables and dissatisfied with the others. The assessed mean SQ score for group “A” is equal to 2.7, for group “B” is equal to 2.6, and for group “C” is equal to 2.9. This assessment shows that the customers are not satisfied with what has been assessed.
According to Table 3, “goods owners” and “shipment companies” are dissatisfied or relatively dissatisfied with all the variables, and “investor companies” are satisfied with tangible factors, knowledge, and accessibility but they are dissatisfied with the other variables.

Table A4. Statistical sample’s dissatisfaction of port’s services

<table>
<thead>
<tr>
<th>Variable</th>
<th>Goods Owners (score less than 3)</th>
<th>Companies (score less than 3)</th>
<th>Investors (score less than 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of caring the requests</td>
<td>TRU3</td>
<td>TRU3</td>
<td>REC3</td>
</tr>
<tr>
<td>Managing customers’ crowd</td>
<td>RES5</td>
<td>RES5</td>
<td>RES5</td>
</tr>
<tr>
<td>Simplicity of processes</td>
<td>RES4</td>
<td>TRU4</td>
<td>REC3</td>
</tr>
<tr>
<td>Service accordance with customers’ needs</td>
<td>RES4</td>
<td>TRU4</td>
<td>REC3</td>
</tr>
<tr>
<td>Promptitude in recovering the issues</td>
<td>REC4</td>
<td>TRU2</td>
<td>TRU2</td>
</tr>
<tr>
<td>Safety of loading and unloading</td>
<td>RES4</td>
<td>TRU4</td>
<td>SAT3</td>
</tr>
<tr>
<td>Cooperation with the customer</td>
<td>REC1</td>
<td>TRU1</td>
<td>SAT1</td>
</tr>
<tr>
<td>Promptitude in recovering the issues</td>
<td>REC4</td>
<td>TRU2</td>
<td>TRU2</td>
</tr>
<tr>
<td>Equipment updating</td>
<td>REC5</td>
<td>TRU1</td>
<td>SAT1</td>
</tr>
<tr>
<td>Promptitude in recovering the issues</td>
<td>REC4</td>
<td>TRU2</td>
<td>TRU2</td>
</tr>
<tr>
<td>Cooperation with the customer</td>
<td>REC1</td>
<td>TRU1</td>
<td>SAT1</td>
</tr>
</tbody>
</table>

Table A3. The rate of sample’s satisfaction & Dissatisfaction of research’s variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Goods Owners</th>
<th>Shipment Companies</th>
<th>Investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>Dissatisfaction</td>
<td>Dissatisfaction</td>
<td>Dissatisfaction</td>
</tr>
<tr>
<td>Tangibles</td>
<td>2.8</td>
<td>2.9</td>
<td>3</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>2.4</td>
<td>2.4</td>
<td>2.8</td>
</tr>
<tr>
<td>Knowledge</td>
<td>2.7</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>Trust</td>
<td>2.6</td>
<td>2.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Accessibility</td>
<td>2.9</td>
<td>2.8</td>
<td>3</td>
</tr>
<tr>
<td>Recovery</td>
<td>2.5</td>
<td>2.5</td>
<td>2.8</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>2.9</td>
<td>2.8</td>
<td>2.8</td>
</tr>
</tbody>
</table>
### Table A5. Statistical sample’s satisfaction of port’s services

<table>
<thead>
<tr>
<th>Goods Owners (score 3 or higher)</th>
<th>Shipment Companies (score 3 or higher)</th>
<th>Investors (score 3 or higher)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff neatness</td>
<td>Staff neatness</td>
<td>Staff neatness</td>
</tr>
<tr>
<td>T5</td>
<td>T5</td>
<td>T5</td>
</tr>
<tr>
<td>Location and position of the port</td>
<td>Location and position of the port</td>
<td>Paying attention to the customers</td>
</tr>
<tr>
<td>ACC1</td>
<td>ACC1</td>
<td>RES2</td>
</tr>
<tr>
<td>Decision-making in the services</td>
<td>Decision-making in the services</td>
<td>Behavior of the staff</td>
</tr>
<tr>
<td>SAT2</td>
<td>SAT2</td>
<td>RES1</td>
</tr>
<tr>
<td>External design</td>
<td>Cooperation with the customer</td>
<td>T3</td>
</tr>
<tr>
<td>T3</td>
<td>SAT2</td>
<td>ACC1</td>
</tr>
<tr>
<td>Equipment updating</td>
<td>Staff’s expertise and experience</td>
<td>T4</td>
</tr>
<tr>
<td>T4</td>
<td>KNO1</td>
<td>T1</td>
</tr>
<tr>
<td>Neatness of physical environment</td>
<td>Ability to correct the issues</td>
<td>T2</td>
</tr>
<tr>
<td>T1</td>
<td>ACC2</td>
<td>ACCESSIBILITY OF THE STAFF</td>
</tr>
<tr>
<td>Accessibility of the staff</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 6. Results of Pearson correlation test

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Significance Level</th>
<th>Pearson Correlation</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Tangibles</td>
<td>0</td>
<td>0.679*</td>
</tr>
<tr>
<td>H2</td>
<td>Responsiveness</td>
<td>0</td>
<td>0.588*</td>
</tr>
<tr>
<td>H3</td>
<td>Knowledge</td>
<td>0</td>
<td>0.544*</td>
</tr>
<tr>
<td>H4</td>
<td>Trust</td>
<td>0</td>
<td>0.505</td>
</tr>
<tr>
<td>H5</td>
<td>Accessibility</td>
<td>0</td>
<td>0.552*</td>
</tr>
<tr>
<td>H6</td>
<td>Recovery</td>
<td>0</td>
<td>0.516</td>
</tr>
<tr>
<td>H7</td>
<td>Satisfaction</td>
<td>0</td>
<td>0.582</td>
</tr>
</tbody>
</table>

### 4.4 Discussing the Results

The obtained results show that:

- \( H_1 \): Customers are satisfied with the tangible factors of Shahid Rajayi Port. According to the statistics \((r = 0.679 \& \text{sig 0})\), this hypothesis is confirmed.

- \( H_2 \): Customers are satisfied with the responsiveness of the staff of Shahid Rajayi Port \((r = 0.588 \& \text{sig 0})\). The second hypothesis is confirmed.

- \( H_3 \): Customers are satisfied with the knowledge of the staff of Shahid Rajayi Port \((r = 0.544 \& \text{sig 0})\). The third hypothesis is confirmed.

- \( H_5 \): Customers are satisfied with the accessibility of staff and services of Shahid Rajayi Port \((r = 0.552 \& \text{sig 0})\). The fifth hypothesis is confirmed.

- \( H_4 \): Customers trust the services provided by the staff of Shahid Rajayi Port \((r = 0.505 \& \text{sig 0})\). This Hypothesis is confirmed.

- \( H_6 \): Customers are satisfied with the ability of recovering the issues in Shahid Rajayi Port \((r = 0.516 \& \text{sig 0})\). This Hypothesis is confirmed.

- \( H_7 \): There is a significant relation between the satisfaction and service quality in Shahid Rajayi Port \((r = 0.582 \& \text{sig 0})\). This Hypothesis is confirmed.

Since the obtained correlation coefficient is positive, the relation among these variables is positive as well, but this relation cannot be a strong one. The other hypotheses are as follow:

- \( H_8 \): Customers trust the services provided by the staff of Shahid Rajayi Port \((r = 0.505 \& \text{sig 0})\). This Hypothesis is confirmed.

- \( H_9 \): Customers are satisfied with the ability of recovering the issues in Shahid Rajayi Port \((r = 0.516 \& \text{sig 0})\). This Hypothesis is confirmed.

Since the obtained correlation coefficient is positive, the relation among these variables is positive as well, but this relation cannot be a strong one.

The results of this study show that the customers evaluated the services at an average and lower than average level. Thus there is a need to improve service quality and to increase customers’ satisfaction in all dimensions, particularly in the dimensions of trust, satisfaction, and recovery. According to table 2, among 26 designated items as service quality items, group A are satisfied with 3 components and dissatisfied or relatively dissatisfied with remaining 23 components; group B are satisfied with 4 items and dissatis-

### 4.3 Hypotheses Analysis

Using Pearson Correlation coefficient test, the relation between the variables was studied in 7 hypotheses. The results of the test show a suitable value for all 7 hypotheses as shown in table 6. Calculated statistic shows that the probability of confirmation of hypothesis zero (negation of researcher’s claim) in all hypotheses is not equal to zero. In other words, the researcher claim, i.e. the relation between the variables is just confirmed for the dimensions of tangibility, responsivity, and accessibility, and it is confirmed for other dimensions. Since the obtained correlation coefficient is positive, the relation among these two variables is positive as well. But according to the statistics, this relation cannot be a strong one.
fied or relatively dissatisfied with remaining 22 items; and group C are satisfied with 11 items and dissatisfied 15 components. The results show that the highest satisfaction belongs to group C and the lowest satisfaction belongs to group A.

General statistic show that the SQ mean score (according to table 2) is lower than average in all three groups. This fact reflects that the statistical population is relatively dissatisfied with the services of the port.

Moreover, according to the obtained results (Table 3), among the 7 variables of the research (tangible factors, responsiveness, knowledge, trust, accessibility, recovery, and satisfaction), shipment companies and goods owners are dissatisfied with all cases (score lesser than 3), and investor companies are satisfied with tangible factors, knowledge, and accessibility but dissatisfied with other variables. The researchers considered 10 cases that have obtained the least scores as the biggest problems and the causes of being dissatisfied with Iranian ports. These cases are as shown in the following table (4) for 3 statistical populations. Moreover, the highest rate of dissatisfaction of group A belonged to variables TRU3, RES5, and REC3; the highest rate of dissatisfaction of group B belonged to variables RES5 and REC3; and the highest rate of dissatisfaction of group C belonged to variable REC3. The statistic shows that groups A and B are commonly dissatisfied with variable TRU3. Table 5 shows that all groups are commonly satisfied with T5. But the general results reflect the fact that the three groups are commonly dissatisfied with tangible factors, responsiveness, trust, and recovery. So the officials have to pay more attention to these factors.

**Fig.A3. Highest rate of dissatisfaction in statistical population**

5. **Conclusion**

One of the most fundamental ways of being distinctive among the competitors for any organization is to evaluate the quality of the interactions between the customers and its staff, and to promote such an interaction in comparison with its competitors. This issue is more important in service trades because their customers are stronger and more professional, and their competitors are more knowledgeable.

Intending to study the dimensions of service quality and its relation with customers’ satisfaction, hence proposed some hypotheses on the basis of literature review. Using statistical hypothesis test and calculating Pearson correlation coefficient on 7 hypotheses of the research, it was found that 7 hypotheses related to tangible factors, responsiveness, and accessibility and trust, knowledge, satisfaction, and recovery were confirmed. Finally, on the basis of this research, it is concluded that service quality has a significant effect on the satisfaction of customers of Shahid Rajayi Port and it is convene to the Parasuraman’s Service Quality Model (Olorunniwo, et al. (2006)). Data analysis show that the authorities of Shahid Rajayi Port have to pay special attention to service quality, to provide such a quality for the statistical population, and to do their best attempts to meet their customers’ expectations.

5.1 **Suggestion**

Due to the results of the research and the responders’ scores for each of assessed variables, the researchers propose the following suggestions. In this regard, some suggestions are offered to compensate the shortages and to meet the expectations in Shahid Rajayi Port.

1. It is suggested that the authorities of the port build a hall and parking lot in accordance to the needs of the clients.
2. It is suggested that a special group of different members supervise the related departments that are responsible for providing the services. Through such supervision, the organizational flexibility in responding the customers’ needs can be guaranteed and the appropriate programs can be planned and implemented whenever needed (paying attention to customer’s voice, measuring the customer’s satisfaction.
3. It is suggested that the Iranian Sailing and Ports Organization conducts continuous training courses in a scientific, systematic targeted manner on the basis of the needs of service providing departments.
4. It is suggested that Shahid Rajayi Port controls its contractors in order to increase its promptitude and to promote the level of safety in loading and unloading processes (equipment safety, safety programming, control, etc).
5. It is suggested that Shahid Rajayi Port devolve the will and responsibility to its staff so that they would be accessible whenever needed.
6. It is suggested that Shahid Rajayi Port conducts introducing courses to reinforce the sense of participation and being exceptional among its personnel.
7. It is suggested that Shahid Rajayi Port provides suitable services to show its attention to the customers.

It is to be mentioned that studying services and service quality has never been taken seriously in Iran. Thus, in the future researches, the researchers can approach the issues like identifying the strategies of promoting the quality of service encounter in service industries, the ways of promoting customers’ loyalty on the basis of the
quality of service encounter, and analyzing the personal role of the staff in promoting the customers’ loyalty to service organizations.

5.2 Limitations of the research
The most important barrier that the researchers faced was the reluctance of the authorities of Sailing and Ports Organization of Hormozgan Province of Iran in cooperating with the researchers and the difficulty of persuading the responders to cooperate (due to the crowd of the clients of the port and their necessity to receive the prompt services). The most important limitation of the research was that the study has been limited to a particular case so that the results cannot be generalized.

6. References


