

CUSTOMER SATISFACTION IN PORT IDUSTRY (A CASE STUDY OF IRANIAN SHIPPING)

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Abstract: Increasing competition is forcing businesses to pay much more attention to satisfying customer's needs; therefore we are trying to measure the customer satisfaction in maritime transport industry in Iran. Since Maritime transport is considered as one of the most important sectors in Iran. The purpose of this study aims to find out the level of service quality among two most prominent shipping companies like IRISL (Islamic Republic Of Iran Shipping Line) and sea land, port operator and freight forwards and service provider, therefore Identifies and assesses the key determinants of service quality and determines the quality of service offered considering Shahid Rajaie Port (SRP) in Bandar Abbas applying the SERVQUAL model. The purpose of this study is to measure expectation and perception customers in maritime industry in Iran. The primary step is to investigate about SERVQUAL definition in maritime industry. We conduct the in-depth interview with port manager to discover the most important factors in SERVQUAL method. Research found out the comprehensive study, and find out the five generic dimensions (tangible, responsive, assurance, empathy, reliability) which is applicable in port industry. Therefore the questionnaire designed with respect of discovered the attributes in interview and circulated among the customers in two famous ports in Iran to determine the Gap in service quality in port industry.

Keywords: Customer Satisfaction, Shipping Industry, Marketing Strategy, Port Industry

1. Introduction:

Managers in the service sector are under increasing pressure to demonstrate that their services are customer-focused and that continuous performance improvement is being delivered. Given the financial and resource constraints under which service organizations must manage it is essential that customer expectations are properly understood and measured and that, from the customers' perspective, any gaps in service quality are identified. This information then assists a manager in identifying cost-effective ways of closing service quality gaps and of prioritizing which gaps to focus on – a critical decision given scarce resources.

2. Service Quality in Maritime Transport:

Increasingly over past decades, there has been recognition from transport operators that improvement in transport service quality is critical in achieving a differential advantage over competition (Cotham et al., 1969). However, little literature directly addresses the dimensions or determinants of service quality in transport. Such dimensions or determinants are reflected only through the service factors in the selection criteria of transport elements, such as carriers or modes. Pearson's (1980) found the most important criteria are flexibility, first on the quay, speed of transit, reliability and regularity. The issue of carrier selection decisions in liner shipping was examined by Brooks (1985, 1990), in which the carrier selection criteria are frequency of sailings, transit time, directness of sailings, on-time pick-up and delivery, cost of service, cooperation between personnel, carrier flexibility, fast claims response, tracing capability of the carrier, sales representative, carrier's reputation for reliability, past loss and damage experience, informational nature of advertising and carrier appropriateness. Studied by Murphy et al. (1989, 1991, 1992) showed that equipment

availability, shipment information and loss and damage performance are the three most important carrier selection factors among freight forwarders, while for international ports selection factors are equipment availability, loss and damage performance, large shipment capabilities and convenient pick-up and delivery time. Tongzon (2002) found that port efficiency is the most important factor in port choice and performance.

The aims of this study are:

- To identify and assess the key determinants of port service quality by applying SERVQUAL method.
- To determine which main service attributes are more important to port customers.

3. Literature Review:

Shippers contract shipping lines for the carriage of goods. Shipping lines own and operate shipping vessels for the sea transportation of freight. They own the containers, allocate them to users, and manage them throughout the supply chain, penalizing late returns to the docks. Shipping lines deal directly with freight forwarders, importers, exporters, stevedores, container parks, and regulatory authorities. Nearly 100 shipping lines provide scheduled services to Australian ports, and about 25 regularly dock at the container terminals at Port Botany. Many liner shipping services are provided under 'conference' and 'rate agreements' that relate to particular trades and cover markets including ship scheduling and tariffs. For general cargo (containerized and break-bulk), shipping services tend to be provided based on each separate voyage. Consequently shippers of general cargo tend to be locked into a particular 'bundle' of services, i.e. they cannot decide who provides stevedoring services or the level/price of services provided. For bulk cargo such as coal, grain and steel, the shippers, shipping lines and providers of port services tend to be more integrated. Shipping lines, due to their scale, generally have a dominant influence on the terms of their relationships with land side enterprises.

4. Methodology:

- This study aims to examine the research question of how service quality in maritime transport is determined and measured. The questionnaire is the method of data collection and interpretation in this study.
- The study used a sample of 25 shipping companies, port operators and freight forwarders/logistics service providers, employing and using the questionnaire obtain the score for each of the 22 Expectation statements, and then obtain the score for each of the 22 Perception statements.
- The questioners were distributed among operations managers and ideal consumer and ordinary consumer.
- To obtain data, the SERVQUAL model was modified to reflect port activities and adopted. The questionnaire form was developed to test the ratings of expectations and perceptions of port users on service attributions, and pilot-tested. Assuming that customer' proposals for better quality service and satisfaction can be used as a way to customer-focus services, customers' solution proposals were requested.

4.1. Pilot Test:

Researcher has circulated the 190 questionnaires among the customers which participate and used the port service in the main study, therefore researchers carried out the pilot testing study to see whether the questionnaires can obtain the results which researchers required to meet their objectives.

Researchers did several methods to conduct pilot testing:

- Researchers requested the professional executives in the field of port and maritime and professor to review the questionnaires and if there are any ambiguities which researchers haven't noticed.
- Researchers sent out a number of questionnaires to the types of customer which used port service who will be taking part in the main survey.
- Since the researchers found the relevant data, it wasn't necessary to pilot the questionnaires again.

4.2. Validity and Reliability:

Content validity test has been conducted to ensure that the measure include sufficient coverage of the investigated questions, meanwhile the face validity have been done to validate the items of research questionnaire and to ensure that the items are more consistent.

Table 1: Alpha Cronbach's for ordinal customers

Cronbach's Alpha	N of Items	N of questionnaire
0.896	22	384

Table 2: Alpha Cronbach's for managerial

Cronbach's Alpha	N of Items	N of questionnaire
0.958	22	99

5. Data Analysis

5.1. Correlation

First of all, consistency of all the factors which was captured by applying items to total correlation analysis. Under this, correlation of every item with the total of major and the computed value is compare with the standard value .0159. If the captured value is found less than the standard value, then whole statement will drop and will be term as an inconsistency. But if the value is more than the standard value, it term as a consistency. (Table 3)

Table 3: Correlation for 5 dimensions

		Correlations				
		tangible	Responsiveness	Assurance	Empathy	Reliability
tangible	Pearson Correlation	1	.626**	.531**	.541**	.589**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	385	385	385	385	385
Responsiveness	Pearson Correlation	.626**	1	.513**	.440**	.518**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	385	385	385	385	385
Assurance	Pearson Correlation	.531**	.513**	1	.519**	.558**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	385	385	385	385	385
Empathy	Pearson Correlation	.541**	.440**	.519**	1	.599**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	385	385	385	385	385
Reliability	Pearson Correlation	.589**	.518**	.558**	.599**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	385	385	385	385	385
** . Correlation is significant at the 0.01 level (2-tailed).						
<u>Tangible</u> : Q1:question 1, Q2:question2, Q3:question3, Q4:question 4						
<u>Responsiveness</u> : Q5:question5, Q6 question 6, Q7:question7, Q8:question8						
<u>Assurance</u>: Q9:question9, Q10:question10, Q11:question, Q12:question12						
<u>Empathy</u>: Q13:question13, Q14:question14, Q15:question15, Q16:question16, Q17:question17						
<u>Reliability</u>: Q18:question18, Q19:question19, Q20:question20, Q21:question21, Q22:question22						

5.2. Interpretation:

Researcher discovered from table 3, researcher came to know that the tangible variable has strong relationship with responsiveness. (.626), furthermore, the Assurance has more relationship with reliability (.558). empathy has good relationship with reliability (.599).

5.3. Evoked Set – Friedman

Researcher applies K-Related sample – Friedman test as in table 4 .According to mean ranks the 3 least are most important factor and port manager should take into consideration while they make a decision in future marketing strategy to reduce the Gap .these three attributes comes from the following question in the questionnaire. (Q1, Q2 & Q17)

Q1& Q2 are related to Tangible where as the Q17 is related to Empathy.

Table 4: Friedman test (mean)

<i>Ranks</i>	
	<i>Mean Rank</i>
Q1	7.57
Q2	8.76
Q3	11.56
Q4	11.88
Q5	11.37
Q6	12.19
Q7	12.22
Q8	12.13
Q9	11.93
Q10	12.24
Q11	12.14
Q12	12.47
Q13	11.23
Q14	11.76
Q15	11.89
Q16	11.24
Q17	11.14
Q18	11.48
Q19	12.37
Q20	11.63
Q21	11.78
Q22	12.02

Tangible
Q1:question 1,Q2:question2,Q3:question3,Q4:question 4

Responsiveness
Q5:questio5,Q6 question 6,Q7:question7,Q8:question8

Assurance
9Q:question9,10Q:question10,11Q:question12:question12

Empathy
Q13:question13,Q14:question14,Q15:question15,Q16:questi
on16,Q17:question17

Reliability
Q18:question18,Q19:question19,Q20:question20,Q21:questi
on21,Q22:question22

6. Conclusion:

As we found out from the study, there is a significant gap between our customer Expectations and Manager Perceptions in the Iranian port industry. Moreover, Researcher discovered the main three factors which equip the manager by improving the position of SRP (ShahidRajaie Port), the managers should take into consideration discovered attributes with appropriate marketing strategies like Hold, invest and monitor in different point of difference.

Researcher discovered that due to insufficient commitment standards for offering high quality services as result maritime transport should impose standards and missions, furthermore , researcher found out that ambiguity in processes leads to conflict in implement services to the customer as result maritime transport need a integrated control system for eliminate these gaps and also redefinition processes. Researcher suggest that by implementing profound Marketing research about service evaluation periodically and constructing the professional training for staffs to enhance their knowledge and finally creating a Marketing strategy model for customer satisfaction in Iranian ports to construct the Point of difference which extract from the customer needs in Iranian port industry .

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