

Customer Perceptions of Bus Companies' Service Quality

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Abstract

Although logistics has lots of activities such as customer service, demand forecasting, materials handling, procurement etc. Transportation makes up the most important part of logistics. That's why in this study passenger transportation has been examined through evaluating customer perceptions of bus companies' service quality. A questionnaire has been conducted to 400 students who are studying currently at Ataturk University and SPSS packet program has been utilized in order to assess their perceptions of bus companies' service quality. According to findings of the study there is not a significant difference statistically between genders, ages and education levels with regard to perceptions of students of bus companies.

Key words: Logistics, Service Quality, Customer Perceptions

Özet

Lojistik; müşteri hizmetleri, talep tahmini, elleçleme gibi faaliyetleri kapsamakla beraber, lojistiğin en önemli faaliyet alanını taşımacılık oluşturmaktadır. Bu nedenle bu çalışmada tüketicilerin otobüs firmalarının verdiği hizmet kalitesine ilişkin algılarının değerlendirilmesi yolu ile yolcu taşımacılığı incelenmiştir. Atatürk Üniversitesinde halen öğrencilik hayatına devam eden 400 öğrencinin otobüs firmalarının verdiği hizmet kalitesine yönelik algısını incelemek için yapılan bu araştırmada veriler anket yöntemiyle toplanmış ve SPSS 20 paket programıyla analiz edilmiştir. Çalışmanın bulgularına göre öğrencilerin otobüs firmalarına yönelik kalite algılarının cinsiyet, yaş ve eğitim düzeyleri açısından istatistiki olarak anlamlı bir farklılık göstermediği tespit edilmiştir.

Anahtar kelimeler: lojistik, Hizmet Kalitesi, Müşteri algısı

1. Topic and Importance of the Study

Service sector is one of the fast growing sectors in Turkey. Transport services have an important part in terms of employment and value added which they provide. Passenger transportation is a fast growing activity that supports economic activities largely.

If customer perceptions are taken into consideration, customer demand is high for intercity transport companies. Every year lots of people and especially students are traveling throughout the entire country for purposes of holiday, education, health etc. That is why it is an important issue to consider this kind of topic which has an important and significant effect on people's daily life.

In this study customer perceptions of bus companies' service quality have been examined mainly.

There are two main parts in the study. Literature has been examined in first part and a case study has been conducted in second part of the study.

2. Purpose of the Study

The main purpose of the study is to determine present condition of services which are provided by bus companies. Along with this main purpose, there are other purposes of the study as follows:

-To determine perception of customers related to transport service in terms of service quality.

-To determine demographic characteristics of customers who get services from bus companies.

-To determine differences between genders, among education levels and among ages related to customer perceptions of bus companies' service quality.

- To specify problems about passenger transport sector.

- To help bus companies have regulations on services of bus companies.

3. Introduction

Many developments have occurred in many fields thanks to economic developments after 1980s in Turkey. These developments have affected many sectors in the country and important changes have taken place in the fields of quality, service and management philosophy. Land transportation has gained a big part from these developments too. Too many problems have occurred when land transportation has been employed to carry passenger and load intensively. One of these problems is that services which bus companies provide to passengers during travel are not appreciated by passengers, they are unhappy about efforts of bus Companies. And passengers think that services of bus companies are not enough.

Thousands of people travel by intercity buses every year. Passengers who travel frequently complain about inadequacy of services, and filthiness of vehicles.

4. Literature Review

Because logistics activities include transportation, the subject of logistics will be examined below shortly.

4.1 What is Logistics?

According to definition of European Logistics Association Logistics is a planning, implementing, controlling lay out and material movement and organizing supportive activities related to movement and lay out of these materials in order to reach specific goals in an organization(Güzel,2011:42). Logistics is that part of the supply chain process that plans, implements and controls the efficient, effective flow and store of goods, services and related to information from the point of origin to point of consumption in order to meet customers' requirements (<http://www.clm.l.org>).

Logistics have several activities as follows (Stock, Lambert, 2001:3):

- Customer service
- Demand forecasting
- Inventory management
- Logistics communications
- Materials handling
- Order processing
- Packaging

- Parts and service support
- Plant and warehouse site selection
- Procurement
- Reverse logistics
- Traffic and transportation
- Warehousing and storage

4.2 Logistics' role in the Economy

The improving welfare of customers caused national and international markets for goods and services to expand rapidly. Thousands of new products and services are being sold in every corner of the world. Firms have increased in size in order to meet challenges of markets' expansion. The distribution of products from point of origin to end users has become very important challenge for companies. And distribution of products and services has become significant part of GDP. As a significant component of GDP, logistics not only affects GDP but also interest rates, productivity and other aspects of the economy. In addition to this kind of significant effects, logistics have also enormous effect on flow of goods and logistics is an essential part of whole supply chain that is a kind of bridge between components of supply chain. If there was no bridge such as logistics, goods wouldn't arrive in the right place at right time or in the proper condition. And because of this kind of problems the entire supply chain would suffer enormously.

4.3 Logistics' Role in the Organization

In today's world effective logistics management has been recognizes as a key component of an organization in order to become more competitive. "In the late 1980s and early 1990s, customer service took center stage in many organizations. Even organizations that had previously adhered to the marketing concept were reexamining what it meant to be customer driven." (Stock, Lambert, 2001:6).

4.3.1 Logistics Helps Gain a Competitive Advantage

The marketing concept is a "marketing management philosophy that holds that achieving organizational goals depends on determining the needs and wants of target markets and delivering the desired satisfactions more effectively and efficiently than competitors (Kotler, Armstrong, 1999:14). In this case the most important activity is to meet customer needs. Marketing concept has three important pillars.

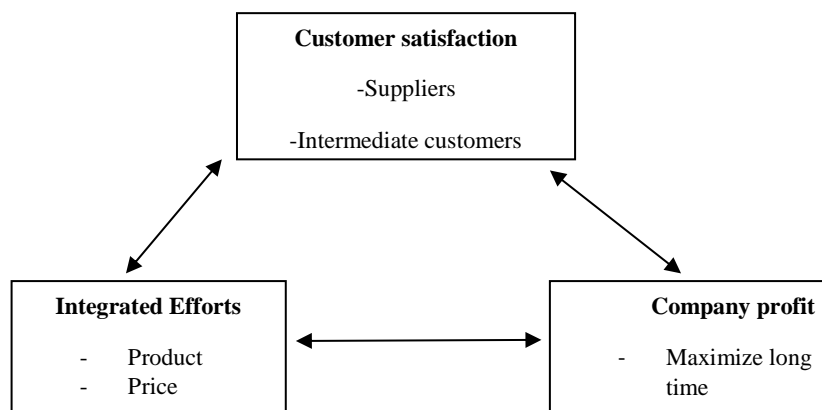


Figure 1: Marketing/logistics concept (Stock, Lambert, 2001, 6).

In order to be a successful firm, products should be distribute at the right time in the right place at the right price with right promotion through logistics. Efforts should be combined both internally and externally to accomplish this sort of mixture. And firms want to do that for an ultimate goal which is maximized long time profitability.

4.4. Service Quality

There is no consensus to define service quality but, it is thought that service quality depends on a customer expectation about a service. That's why concept of expectation here is relative. This subject is thought as conservational by some researchers. In the light of these statements one of the most recognized definition of service quality can be made as follows (Güzel, Kotan; 2013:13);

Service quality is a difference between expectations of customers about a service and customers' perception of real performance of the same service (Caldwell, 2002:162). If obtained service is better than expected service, service quality is perceived high; if vice versa, service quality is perceived low (Altunısık et.all). These perceptions are the most important indicators of a customer's satisfaction. A customer's satisfaction is defined as a state of contentedness related to result of consumption experience (Oliver, Swan, 1989:26).

Result of positive assessment about service quality will affect future behavior intention of customers positively and they will praise the company which they gained service from and customers will share positive thoughts with others about the company (Nadiri, Tümer, 2007:304).

4.5. Service Quality of Bus Companies

Understanding the perception of transport customers related to service quality might be useful to retain existing customers and gain prospective customers from rival companies or alternative modes of transportation. Consequently it is obvious that there is a large research concerning quality of service in transport sector (Redman et al., 2013). In the context of bus transit, Perez et al. (2007) find that the service dimensions can be identified and each has an effect on purchase intention. The stability of the five dimensions of service quality in the bus sector is also supported by the findings of Susniene (2012).

The SERVPERF scale has been modified in transportation sector by de Ona et al. (2014). Some research works that investigate perceptions of transport service quality have used neither SERVQUAL nor SERPERF, instead they have used original measurement methods to evaluate this concept (Craig et al, 2015:2-4).

To summarize, the transport sector has lots of service quality assessments. Some utilizing standard approach via applications of SERVQUAL, SERVPERF while others are using original measurement applications. The standard approach is useful to compare between service provides and different modes while original approaches allow for the specific context of the service under evaluation to be considered.

5. Scope and Limitations of the Study

The students who are studying currently at Atatürk University in Erzurum and gained services from intercity bus companies make up scope of the Study. The students who gained these services once or twice haven't been included in the study under the assumption that they don't have enough experience in order to develop a certain thought related to services of bus companies. Consequently, this study has been limited with

students who gained these services at least three times or more. The most important limit of the study is inadequacy of proper fund and time. That is why, study has been applied to only 400 students at faculty of economics and administrative sciences of Atatürk University in Erzurum.

6. Expected Benefits from the Study

The most important expected benefit from the study is to determine inadequate facets of intercity transport services by identifying assessments of customers related to service quality of intercity bus companies. The other expected benefit is to contribute to enhance level of customers' satisfaction from these services.

The other expected benefit is to determine similarities and differences among intercity transport customers by grouping assessments of customers related to services in the context of demographic features. By this means, the aim is to help intercity bus companies develop more effective marketing strategies for different groups of customers.

7. Hypotheses of the Study

Hypotheses of the study can be written as follows:

H1: Statistically, there is a significant difference between genders according to customer perceptions of bus companies' service quality.

H2: Statistically, there is a significant difference among ages according to customer perceptions of bus companies' service quality.

H3: Statistically, there is a significant difference among education levels according to customer perceptions of bus companies' service quality.

Hypotheses of the study have been tested and results of hypotheses have been interpreted in the section of data analysis.

8. Methodology of the Study

The students who are studying at faculty of economics and administrative sciences of Atatürk University in Erzurum make up universe of the study. This study has been applied to 400 students. Confidence interval is 0,95 and error margin is 0,05 of the study.

9. Method of data collecting

Method of questionnaire has been applied in order to collect data and students have been interviewed face to face. 25 questions have been asked to students in questionnaire. 3 of 25 questions have been asked to ascertain their demographic features (gender, age and education levels). The other 22 questions have been asked to determine customer perceptions of bus companies' service quality. Likert type 5 interval scale has been used in 22 questions except in 3 demographic questions. Scale of questionnaire have been quoted Dr. Ahmet Kızıltan and Research Assistant Fazilet Bektaş. These authors have created this scale based on expressions that are mentioned most frequently when it comes to measure service quality in Turkey. 5 likert type scale has been used in this questionnaire which can be mentioned below; 1. Strongly disagree, 2. Disagree, 3. Neither agree nor disagree, 4. Agree, 5. Strongly agree. The questionnaire has been tested on 10 students before for final version of questionnaire. Falsely and incompletely filled questionnaires have been cancelled. 400 questionnaires have been analyzed in total.

10. Analysis and Assessment of Data

Parametric analysis methods have been used to analyze collected data. These analysis method are; frequencies, mean, std. deviation, one way anova, independent samples T test. Analyses have been conducted by employing SPSS 2.0 statistic packet program. Analyses and comments have been explained as follows:

10.1 Demographic Characteristics of Service Buyers

Education levels, ages, genders of the respondents have been investigated in order to ascertain demographic characteristics of customers and these findings have been presented in Tables.

Table 1.1. Demographic Characteristics of respondents

	Frequency	Percent
Under graduate students	358	89.5
Post graduate students	31	7.8
Doctoral students	10	2.5
Total	400	100.0

When Table 1 is examined in the context of education level; under graduate students (% 89.5) make up the largest part of respondents and post graduate students (%7.8) make up the second largest part of respondents and doctoral students (%2.5) make up the smallest part of respondents.

Table 1.2. Demographic Characteristics of respondents

	Frequency	Percent
18-20 years old	147	36.8
21-23 years old	203	50.8
24-26 years old	41	10.3
27-29 years old	6	1.5
30 + years old	3	0.8
Total	400	100.0

In the context of age; most of students (%50.8) are 21-23 years old, second largest part of respondents (36.7) are age of 18-20.

Table 1.3. Demographic Characteristics of respondents

	Frequency	Percent
Female	228	57.0
Male	172	43.0
Total	400	100.0

In the context of gender; most of respondents (57.0) are female students and percentage of male students is % 43.0.

10.2. Determining Customer Perceptions of Bus Companies' Service Quality

Determining Customer Perceptions of bus companies' service quality have been examined and results have been written in table 2.1 as follows:

Table 2.1. Perceptions of Service Quality

Customer Perceptions	Mean	S. Deviation
1. I don't often change the bus company that I travel by.	3.43	1.201
2. I prefer the bus companies according to where their buses take a break	2.50	1.220
3. Bus attendants are very kind to the passengers.	2.80	1.105
4. Complementary services (serving free drink, meal etc.) on the buses are enough.	2.64	1.210
5. Buses frequently take a break	3.06	1.374
6. Break time of buses is long enough.	3.34	1.222
7. Buses are always clean	2.88	1.154
8. Cooling and heating systems of buses always work well.	2.85	1.209
9. I am pleased with behavior of bus attendants.	2.69	1.170
10. I don't choose the bus company again, if it makes a mistake	1.91	1.076
11. Fees of bus companies are reasonable.	2.52	1.220
12. Complementary services (serving free drink, meal etc.) are frequently offered.	2.39	1.185
13. I complain when the driver violates traffic rules.	2.60	1.161
14. Buses generally comply with departure times.	2.90	1.321
15. Drivers and other staff are very important for me to choose a bus company	3.61	1.226
16. Shuttle services of bus companies are adequate.	2.59	1.229
17. When I give my belonging for storing in bus's baggage I have no doubts about my stuff.	3.17	1.272
18. It is okay for passengers if bus drivers let passengers get in the bus or get off the bus where ever they want.	2.01	1.252
19. When I choose the bus company I check whether it has a record of an accident.	3.15	1.321
20. I haven't encountered with the situation that a seat was sold more than one passenger.	2.91	1.547
21. I think that, it is normal to let passengers watch TV or video on the bus.	4.10	1.192
22. It is okay for passengers if bus drivers talk to others during the travel.	2.15	1.364
Total	2.83	0.389

22 questions have been developed in order to ascertain customer perceptions of bus companies' service quality. Thoughts and expressions of customers in the context of service quality have been written down below;

The highest mean of the study (4.10) belong to expression of "I think, it is normal to let passengers watch TV or video on the bus.", second highest mean of the study (3.61) belongs to expression of "Drivers and other staff are very important for me to choose a bus company. Third highest mean of the study (3.43) belongs to expression of "I don't often change the bus company that I travel by." Second and third highest means of the study can be defined as relatively moderate. The highest mean of the study can be defined as relatively quite high.

The lowest mean of the study (1.91) belongs to expression of "I don't choose the bus company again if it makes a mistake." Second lowest mean of the study (2.01) belongs to expression of "It is okay for passengers if bus drivers let passengers get in the bus or get off the bus where ever they want. Third lowest mean of the study (2.15) belongs to expression of

“It is okay for passengers if bus drivers talk to others during the travel.” Over all perception of service quality (2.83) of the study is relatively low.

If customer perceptions of bus companies’ service quality are taken in to consideration separately according to male and females students in Table 2.2.

Table 2.2. Perceptions of Service Quality According to Genders

Gender of Respondents	N	Mean	Std. Deviation
Male	172	2.8288	.39109
Female	228	2.8246	.38811

Male student perceptions of service quality is 2. 829 and it is relatively low in general (Table 2.2.). And female student perceptions of service quality is 2.825 and it is relatively low too. If one pays attention, there is a slight difference between female and male student perceptions of service quality.

Table 2.3. Perceptions of Service Quality According to Ages

Ages of Respondents	Mean	Std. Deviation
18-20 years old	2.87	0.401
21-23 years old	2.81	0.383
24-26 years old	2.80	0.398
27-29 years old	2.58	0.210
30 + years old	2.94	0.525

18-20 year old student perceptions of service quality is 2.87, 21-23 year old student perceptions of service quality is 2.81, 24-26 year old student perceptions of service quality is 2.80, 27-29 year old student perceptions of service quality is 2.58, 30+ year old student perceptions of service quality is 2.94. This figures are relatively low (Table 2.3.).

If all age groups are taken into consideration, one can observe that, there is a slight difference among different age groups.

Table 2.4. Perceptions of Service Quality According to Education Levels

Education Levels of Respondents	Mean	Std. Deviation
Under graduate students	2.83	0.400
Post graduate students	2.79	0.272
Doctoral students	2.66	0.280

Undergraduate student perceptions of service quality is 2.83, postgraduate student perceptions of service quality is 2.79 and doctoral student perceptions of service quality is 2.66. This figures are relatively low (Table 2.4.)

If all education levels are taken into consideration, one can observe that, there is a slight difference among different education levels.

10.3. Testing the Hypotheses

Independent samples t-test has been employed in order to determine whether perception of service quality differs in terms of genders. And obtained results from the test have been shown in table 3.1.

Table 3.1. Hypothesis Tests of Genders

	Significance	Significance (2-tailed)
Equal variances assumed	0.867	0.915

H₁ is not supported, because $p < 0.915$. This means statistically, there is not a significant difference between genders according to customer perceptions of bus companies' service quality (Table 3.1.).

One way anova has been employed in order to determine whether perception of service quality differs in terms of ages. And obtained results from the test have been shown in table 3.2.

Table 3.2. Hypothesis Tests of Ages

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.722	4	0.181	1.196	0.312
Within Groups	59.627	395	0.151		
Total	60.349	399			

H₂ is not supported, because $p < 0.312$. This means statistically, there is not a significant difference among ages according to customer perceptions of bus companies' service quality (Table 3.2.).

One way anova has been employed in order to determine whether perception of service quality differs in terms of education levels. And obtained results from the test have been shown in table 3.3.

Table 3.3. Hypothesis Tests of Education Levels

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.355	3	0.118	0.780	0.506
Within Groups	59.995	396	0.152		
Total	60.349	399			

As it is seen in table 3.3, H₃ is not supported, because $p < 0.506$. This means, statistically, there is not a significant difference among education levels according to customer perceptions of bus companies' service quality (Table 3.3.).

11. Conclusions and Suggestions

This study has been applied to 400 students who are currently studying at Erzurum Atatürk University to ascertain their perceptions of bus companies' service quality. And these conclusions have been extracted:

- When the customers are examined demographically, in the context of education level; under graduate students (% 89.5) make up the largest part of respondents and post graduate students (% 7.8) make up the second largest part of respondents and doctoral students (% 2.5) make up the smallest part of respondents. And in the context of age; most of students (% 50.8) are 21-23 years old, second largest part of respondents (% 36.7) are age of 18-20. And in the context of gender; most of respondents (% 57) are female students and percentage of male students is % 43.

- One of this study's aims is to determine whether customer perceptions of bus companies' service quality is high or low. And over all mean of perception of service quality is 0.283. Relatively, this is a quite low figure. This means, customers do not think that, service quality of bus companies is enough. And they are not happy about the services quality of bus companies.

- The analyses have been conducted in order to determine whether customer perceptions of service quality differ in terms of demographic characteristics. And there haven't been any differences statistically with regards to education level, age and gender.

These suggestions can be made in the light of conclusions explained above:

- The basic conclusion of the study is that; customers don't think level of service quality is enough. That is why, bus companies should regulate their services better to enhance service quality. In this context, bus companies should respond customers' demands, try to understand them, be reliable and strengthen communication with customers.

- Service receivers have also a significant effect on companies to enhance service quality. That's why, customers should be willing to direct companies to provide high quality services, be aware of their rights and willing to use their rights as a customer, inform companies about their dissatisfaction and their complaints, be persistent in making sure their problems are being solved, inform firms in orally or behaviorally about a desire to gain high quality services, if necessary, incline to firms which provide higher quality.

- In today's world, there is a fierce competition in almost every field and aspect of business life including transport sector. That is why bus companies has not only to compete with each other but also different kinds of transport modes. Consequently, it very important for bus companies to listen to and better understand customer needs in order to survive and sustain in vicious business life.

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