

TINI- SOS

*The International New Issues In SOcial Sciences*



**The Relationship Among Logistic Service Quality, Unlimited improvement and Business Performance: A Research on Libyan Air Cargo Company**

**Abdallah Elarifi**

Global Airlines, Flight engineer, Tripoli, Libya (Master student).

abdallahaalarifi91@gmail.com

orcid: 0000-0002-9777-2415

Year: 2021 Summer

Number: 9

Volume: 2

pp: 177-202

Makalenin Geliş Tarihi: 13/01/2020

Kabul Tarihi: 26/07/2021

Makalenin Türü: Araştırma makalesi

**İntihal /Plagiarism:** Bu makale, en az iki hakem tarafından incelenmiş, telif devir belgesi ve intihal içermediğine ilişkin rapor ve gerekliyse Etik Kurulu Raporu sisteme yüklenmiştir. / This article was reviewed by at least two referees, a copyright transfer document and a report indicating that it does not contain plagiarism and, if necessary, the Ethics Committee Report were uploaded to the system.



## **The Relationship Among Logistic Service Quality, Unlimited improvement and Business Performance: A Research on Libyan Air Cargo Company**

**Abdallah Elarifi**

### **Abstract**

In an environment of intense competition due to globalization and technological developments, companies have started to give more importance to logistics management in order to keep their market and protect their activities. The main purpose of logistics management is to ensure the efficient realization of logistics activities such as flow, transportation and storage of semi-finished products, raw materials, products, services or related information in order to meet customer needs and provide satisfaction. Although the quality of service in the literature has been investigated in many service sectors such as banking, retailing, health, education and tourism, there are limited studies on the quality of cargo service providers.

In this study, the relationship of service quality of cargo companies and service quality with business performance were investigated. Data were collected by electronic questionnaire method. In the analysis of the data, variables were determined using exploratory factor analysis. Confirmatory factor analysis was used to confirm the dimensions.

**Key words:** Logistic service quality, business performance, unlimited Improvement

**Jell Code:** M11





## **Lojistik Hizmet Kalitesi, Sınırsız İyileştirme ve İş Performansı İlişkisi: Libya Hava Kargo Şirketi Üzerine Bir Araştırma**

### **Özet**

Küreselleşme ve teknolojik gelişmelere bağlı olarak yoğun rekabet ortamında firmalar pazarlarını korumak ve faaliyetlerini sürdürebilmek için lojistik yönetimine daha fazla önem vermeye başlamışlardır. Lojistik yönetiminin temel amacı, müşteri ihtiyaçlarını karşılamak ve memnuniyetini sağlamak için yarı mamul, hammadde, ürün, hizmet veya ilgili bilgilerin akışı, nakliyesi ve depolanması gibi lojistik faaliyetlerin verimli bir şekilde gerçekleştirilmesini sağlamaktır. Literatürde hizmet kalitesi bankacılık, perakendecilik, sağlık, eğitim ve turizm gibi birçok hizmet sektöründe araştırılmış olmasına rağmen kargo hizmet sağlayıcılarının kalitesine ilişkin sınırlı sayıda çalışma bulunmaktadır.

Bu çalışmada kargo firmalarının hizmet kalitesi ve hizmet kalitesi ile işletme performansı ilişkisi araştırılmıştır. Veriler elektronik ortamda anket yöntemiyle toplanmıştır. Verilerin analizinde açıklayıcı faktör analizi kullanılarak değişken boyutları belirlenmiştir. Boyutları doğrulamak için doğrulayıcı faktör analizi kullanılmıştır.

**Anahtar Kelimeler:** Lojistik hizmet kalitesi, işletme performans, Sınırsız İyileştirme

**Jell Kodu:** M11

### **1. Introduction**

Quality is a major feature for any manufacturing and service firms which is often defined as meeting expectations. Services quality is difficult, but also vital because of the characteristics of the service such as production and consumption competition, volatility (unable to store), variability (heterogeneity) and abstraction. The behaviour and personality qualities of the service provider and the industry lead, apart from its characteristics, to a more relative measurement and evaluation of service quality than products.

Different authors in the literature offered numerous methods and scales for measuring the quality of services. Grönross' (1984), the most often acknowledged perceived and expected service comparison model, is based again on Parasuraman et al. (1988) and on the Cronin and Taylor's (1992),





SERVPERF models which only take account of perceived performance. The model SERVPERF claims that service quality depends on performance (perception). With the SERVPERF scale, clients are measured with 22 variables in terms of service quality. It has been tested for dependability and validity by numerous services, including banking, education, public health and tourism.

Although there are many studies in literature from various cultures, the quality of service of various logistical activity is restricted, studies on cargo services are limited. In order to determine the quality of service in air cargo in China, Wang (2007) has employed quality deployment technique. The impact of quality of service on customer value was also investigated.

The cargo business has become an industry in which the international and national companies are strongly competing. For the parties, the quality of the services delivered by cargo firms with a growing position in the actual economy has become increasingly crucial. In this regard, the parties will profit in terms of customer satisfaction from determining and enhancing the service quality of freight businesses. It is also established that client contentment increases the buying behaviour. This is why customer satisfaction with the quality of the shipping company's service in Libya and the repetitive buying behaviour of the relationship are vital for the improvement of shipping firms' quality of services. The major aims of the study are; to determine SERVPERF scale validity and reliability in measuring cargo cargo businesses' service quality, and determine quality of service dimensions and examine the link between quality of service, customer satisfaction and the intention in cargo companies to buy again.

It is hoped that the results achieved from the study will provide a valid and reliable scale for assessing cargo cargo companies' service quality, for knowing how much they can build on quality improvement efforts and for being aware of the link between customer satisfaction and service quality and re-build behaviour. In addition, the analytical results achieved will contribute to the creation of limited information in the literature, with the valid and dependable reliability of the SERVPERF scale in the service quality measures of cargo firms.

## **2. Theoretical Framework**

Service is defined as acts, profits, or saturation offered for sale or for sale by the American Marketing Association (AMA). In another definition,





services come in the form of all economic activities, whose output is non-physical, consumed during production and which in fact contribute abstract values such as convenience, entertainment, convenience, comfort and health to consumers. Grönroos (1984) defined service by its customers, the service and/or the services' physical resources, the commodities and/or systems, as answers to client problems, as a number of actions or activities that are, more or less, intouchable. The services are based on customer requirements and expectations and the service provides answers to different consumer problems (Berkowitz et al., 2000).

While Kotler (1997) makes a simple and common definition of all the attributes of a product or service depending on its capacity to satisfy indirect or declared wants.

Costs for businesses are also decreased since higher quality of service means less traffic, reduced corrective work, fewer complaints and lower turnover of employees and reduced insufficiency. The quality of service also offers a competitive edge for businesses and the belief that services are left relatively to consumers (Baker, 2000).

Quality of service is perceived by customers in terms of quality of service. A comparison of client expectations and service delivery is the consequence of perceived service quality. The result of a comparison between expected performance and perceived service performance is thereby defined (Brady, 2002).

Service quality is described as a long-term performance assessment mindset. However, the quality of service, the customer's wants and expectations, should be expressed as the extent to which the service has those characteristics and traits, through these aspects. Under another definition, the quality of the service relates to ease of service access, openness of communication tools, courtesy of service providers, expertise and the degree to which the service meets the requirements of the Customer and the quality and timeliness of the results achieved through the Service. (Coo, 2002)

Logistics is the activity which allows the goods to be delivered at the appropriate destination and on time to the right custodian. Logistics nonetheless emerges as a force for coordinating and coordinating producers, distributors, customers and external suppliers.

Logistics is described as the planning, execution, and control of





material transportation operations from the start to point of consumption for products and services. The provision of information on product moving procedures is another requirement of the client in the provision of logistics services. Logistics has gone from buying client orders, collecting items, preparing customs or transit documentation to storing all business processes with a service viewpoint. Logistics has a wide range of services. Logistics encompasses a wide range of infrastructures, transactions, services and activities from the manufacturing through the delivery of goods to customers, in accordance with another definition. The primary components of the industry include product purchase, transit, stockpiling, transfer, clearing of customs, transportation, distribution and tracking. (Küçük, 2011)

In order to ensure current and future profit Maximization by cost-effective order processes, logistics is considered as the strategic management of raw material, partially completed products, procurement and shipping process, as well as within the company, and throughout the distribution canal. Management of logistics; material management involves a combination of the physical life curve and the physical distribution.

#### **Quality services for air cargo airlines**

When a company imports or exports products, the first step is for the cargo to be shipped to a storage facility and a customs inspection application. Carried goods can be categorised into three categories – import, export and transit. Express mail operations are separated into express and on-board mail operations. Another division between express handling units is possible in export and import processes. Similarly, air freight operations include import and export activities. For this article, cargo handling activities are separated into the handling of documents and good handling of airline cargo, including customs inspections and the processing of trade information. (Wang, 2007)

In view of growing competition the idea of logistics and logistics is vital for its survival and for the rapid and effective supply of raw materials and products to its customers. The quality of service may be assessed using SERVQUAL process in the logistics sector. The SERVQUAL approach has five dimensions modified accordingly to the logistics sector: (Panayides, 2005)

Physical features: comprises the company's service and look of the equipment and equipment. The contemporary and innovative transport





methods, staff cleanliness and order, and the aesthetic look of the branches are crucial for physical qualities within the logistics industry.

**Reliability:** The trustworthiness component means that the pledged service can be delivered on time and without errors. The goods to be delivered without harm to the client promptly at the appropriate location and in the correct invoicing procedure is carried out in the logistically sector. (Sultan, 2010)

**Enthusiasm:** The enthusiasm component is customer service quickly and customer concerns may be solved. In the area of logistics the employees want to support the client in the timely implementation of the applications given to ensure the position of the transported goods in the transport procedure, to meet the customer's needs.

**Trust:** The confidence dimension is the staff's capacity to build a sense of confidence in the client. In the logistics industry, it reflects its customer expertise with its logistical expertise. To ensure a safe delivery of the conveyed goods to the client.

**Empathy:** it is the desire of the staff in the customer to put themselves in the place of the client. The client is able to speak to the firm in the logistics sector simply, the personnel are interested in the customer and are able to replace him. (Wijetunge, 2016)

### **3. Aim of The Research**

The aim of the research is to determine the relationship among logistic service quality, unlimited improvement and business performance in Libyan air Cargo Company.

Within this framework, the importance levels of business performance factors and service quality dimensions that emphasize unlimited improvement will be determined.

### **4. Scope and Methodology**

In the research, it was tried to reach all of the 100 cargo companies, that is the main mass, and analysis was made on the data of 73 companies that wanted to participate in the study and provided feedback.

Within the scope of the research, scale was used in Küçük et al. (2003). Also the relationship between the variables was tested by correlation analysis. Scales; 1 Completely Disagree, 2 Disagree, 3 Neither Agree Neither





Agree, 4 Agree and 5 Completely Agree, 5-point Likert scale (Küçük, 2016).

Parasurman was used to measure Logistics service quality. It serves to understand the effect of logistics service quality on business performance at the scale in which logistics activities are evaluated.

Küçük (2020a) scale was used as business performance factors. In the scale in which business performance is evaluated, it serves to reveal how close businesses can reach their goals in line with the goals they set. The unlimited improvement Scale, developed by Küçük (2020b), which is measured with 19 items in the field with recent developments, was selected for use in the research.

The total number of personnel is 73 companies operating in air cargo service in Libya. Questionnaire technique was used to collect research data. Considering the time and costs, an electronic questionnaire was prepared and sent to the participants. All participants received and answered the questionnaire online.

The results of the research were obtained by analyzing the data collected from the companies using SPSS 17.0 package software. The data received will be evaluated using standard deviation methods: minimum, maximum, proportion and frequency. The findings were collected and analyzed in tables. Factor and reliability analyzes are performed to evaluate the survey subjects and the answers to the questions asked in the survey can be obtained from the worksheets; The percentage distribution of the results is explained numerically and the tables related to the research subject are given respectively.

In order to calculate the validity and reliability, Cronbach Alpha Test and Factor Analysis were applied to the questions given by the participant. Our aim is to assess the validity of the measurement tool to the extent that it can be measured accurately without including additional features.

## **5. Model of Research**

The research model is shown in Figure 1.







Figure 1. Research Model

As shown in Figure 1, the link between quality of service, company performance and endless improvement has been studied. The link between the three factors has been investigated in this context.

Wijetunge (2016) discovered an accurate link between service quality and corporate performance. Benshina (2018) found the relevance of business performance elements to be significant.

## 6. Hypothesis

The connection between corporate performance and limitless improvement was studied by Sultan (2010). Esmailpour (2016) recommended the use of a quality retail service metric composed of 5 factors in relation to halal logistics performance.

Hopkins et al. (1993) analysed the differences between the perceptions of service quality between shippers and maritime transport providers. Semeijn (1995) conducted a survey of 305 international shipping businesses and 27 worldwide corporations offering shipping services. To assess the





difference between consumer expectations and perception, Parasuraman et al. (1985). Frost and Kumar (2001) analysed the elements impacting quality of service by utilising the SERVQUAL model, aviation crews and support personnel. Young et al. (1994) conducted a research to examine the difference between the air transport industry's assessment of service quality and the evaluations carried out in the SERVQUAL model. The effects on customer satisfaction and, in turn, on profitability on the US Airlines were investigated by Dresner and Xu (1995).

In this direction, the hypothesis of the research is determined as follows:

H<sub>1</sub>: There is a statistically significant relationship between service quality and unlimited improvement.

H<sub>2</sub>: There is a statistically significant relationship between service quality and business performance.

H<sub>3</sub>: There is a statistically significant relationship between business performance and unlimited improvement.

## **7. Analysis of Data**

### **Unlimited Improvement**

The reliability and validity of the data obtained from the Unlimited Improvement scale were tested and weighted averages were found for performance expressions. The analysis results are given in Table 1.





Table 1. Unlimited Improvement Findings

Unlimited Improvement	Load Factor	Extract Value	Variance Description Rate (%)	Cronbach's alpha	Average
1. Excluded are non-modifiable person vehicle applications or processes	0.79	5,846	28,198	,801	3.1
2. Unlimited improvement (improvement of whole process, application, person, machine equipment and supplier) is important	0.909				2.28
3. All managers participate in the training	0.79				3.39
4. All managers are included in the improvement	0.84				3.1
5. The organizational structure is included in the overall improvement	0.827				3.1
6. All employees are involved in the improvement	0.784				2.78
7. All tools are included in the improvement	0.714				3
8. All processes are included in the improvement	0.808				2.89
9. All applications are included in the improvement	0.794				2.78
10. All suppliers are included in the improvement	0.793				3
11. Administrators can be changed	0.795				2.85



*The Relationship Among Logistic Service Quality, Unlimited improvement and Business Performance: A Research on Libyan Air Cargo Company*  
(pp. 177-202) Abdallah Elarifi

12. Organizational structure can be changed	0.824				2.82
13. All employees are interchangeable	0.798				2.96
14. All tools are replaceable	0.802				2.85
15. All processes can be changed	0.9				2.92
16. All applications are replaceable	0.882				2.89
17. All suppliers are interchangeable	0.744				2.92
18. Working hours are subject to change	0.722				2.5
19. Personal rights can be changed	0.548				2.82

When the findings related to the halal logistics performance scale in Table 1 are examined, it is seen that the significance level of all expressions is high. The variance explanation rate is 28,198 %. It is seen that factor loads are over even 0.5. Accordingly, it can be said that no item needs to be removed from the scale. Eigenvalues greater than 1 and expressions were found to be suitable for analysis. Cronbach Alpha value was found to be ,801. According to this result; since the value found is greater than 0.80, it can be stated that the scale is highly reliable. These values indicate that the sample size is sufficient, that the scale is valid, reliable and that significant factors can be obtained from research data in terms of testing and using the subject (Küçük, 2016: 227-232).



Table 2. Business Performance Findings

Business Performance	Load Factor	Extract Value	Variance Description Rate (%)	Cronbach's alpha	Average
F1: Production and Innovation					
1- End product costs are low compared to the competitors of our company	0.662				4.46
2- The product quality of our company is higher than the competitors	0.672				4.43
3- Our company has high innovation capacity in developing new products compared to its competitors	0.762				5.24
4- Compared to the competitors of our company, the speed and variety of new products in the product range is high.	0.747				5.06
5- Our company has a high cost advantage compared to its competitors	0.862				4.75
6- Our company has high success in developing new products and placing them on the market compared to its competitors.	0.662				4.4
7- The product service quality of our company is high.	0.672				4.73
8- Capacity utilization rate of our company is high.	0.772				4.7
9- The level of utilization of modern production methods is higher than our competitors.	0.878	5.264	68.754	0,843	4.85
10- The level of adapting the new	0.863				4.72



*The Relationship Among Logistic Service Quality, Unlimited improvement and Business Performance: A Research on Libyan Air Cargo Company*  
(pp. 177-202) Abdallah Elarifi

technology to our processes is higher than the competitors.				
F2: Promotion and Marketing				
1- Our company has high corporate reputation compared to its competitors	0.806			4.38
2- The harmony between the offerings of our business and the expectations of the market compared to its competitors is high	0.784			4.7
3- The corporate and brand image of our business is higher than its competitors	0.864			4.7
4- Customer loyalty is high compared to the competitors of our business	0.87			4.6
5- Customer satisfaction is high compared to competitors of our business	0.786			4.85
6- Our business has a high market share compared to its competitors.	0.678			4.65
7- Our company has a high level of awareness compared to its competitors	0.888			4.9
F3: Finance				
1- Our business has high profitability compared to its competitors	0.697			4.5
2- The sales volume of our company is high compared to the competitors.	0.763			4.4
3- Our company's financial values (current ratio, liquidity ratio, etc.) are high compared to its competitors.	0.578			4.16
4- Our company's profit before tax is higher compared to its competitors.	0.588			4.13
5- Our company has a high level of	0.678			4.94

*The Relationship Among Logistic Service Quality, Unlimited improvement and Business Performance: A Research on Libyan Air Cargo Company (pp. 177-202) Abdallah Elarifi*

knowledge about financial resources compared to its competitors				
6- Our enterprise has a high level of financial resources compared to its competitors.	0.663			4.76
F4: Logistics				
1- Our company has good relations with suppliers and our satisfaction level is high.	0.778			4.45
2- Our company's products and services are high in compliance with the delivery time to the customer.	0.578			4.1
3- The speed and capacity of the loading, unloading and storage activities of our facility is higher than its competitors	0.588			4.43
4- The number and capacity of the logistics tools of our company is higher than our competitors.	0.688			4.4
F5: Management				
1- The job satisfaction level of our employees is high.	0.794			4.55
2- Our company's average occupancy / non-missing product asset ratio is high.	0.779			4.42
3- The level of achieving the objectives of our business is high.	0.722			4.08
4- The efficiency of our business is high.	0.7			4.4
5- The size of our company (number of personnel, machinery and equipment, indoor and outdoor area, organizational structure) is at a good	0.78			4.4

*The Relationship Among Logistic Service Quality, Unlimited improvement and Business Performance: A Research on Libyan Air Cargo Company*  
(pp. 177-202) Abdallah Elarifi

level compared to its competitors.				
6- The morale and motivation of our employees are high.	0.786			4.3
7- The employees of our company receive in-service training and are constantly improving.	0.702			4.55
F6: Environment				
1- Environmental sensitivity of our company is higher than its competitors	0.594			4.35
2- The level of our company's recycling activities is higher than its competitors	0.804			4.6
3- The level of using renewable energy resources of our company is higher than its competitors	0.613			4.2
4- Our company's level of contribution to the solution of social problems is higher than competitors.	0.679			4.1

As can be seen in Table 2, the importance level of the statements on the Business Performance scale was mostly high. The variance explanation rate is 68.754 %. Table 2 shows that the sample adequacy value is 5.264 and the sample size is sufficient for factor analysis. Factor loads of all expressions were over 0.5 and eigenvalues greater than 1 indicate that the expressions were suitable for use in the analysis. Cronbach's alpha coefficient was found to be 0,843. Since this value is greater than 0.80, the scale is highly reliable (Küçük, 2016: 227-232).





Table 3. Service Quality Findings

Service Quality air cargo	Load Factor	Extract Value	Variance Description Rate (%)	Cronbach's alpha	Average
<b>Tangibles</b>					
The company has a modern air cargo terminals fully equipped with the hardware, software, cold chain and other ancillary equipment needed to handle the goods.	0.794	3,376	67.413	0.928	3.1
The operating space is of an adequate size. The location of the warehouse, the transportation network near the warehouse and the line layout of the air cargo terminals are sufficient to meet demands.	0.780				2.28
Cargo checking, equipment completeness and cargo tracking systems at the terminals are sufficient to meet demands.	0.778				3.39
<b>Reliability</b>					
Terminals can fulfil promises and goods on time. The service personnel are professional, devoted, passionate, exertive, with professional ethics, professional conduct and dedication.	0.824				3.1
The company has in place suitable safety and security procedures, resulting in low rates of damage and loss.	0.745				2.78



*The Relationship Among Logistic Service Quality, Unlimited improvement and Business Performance: A Research on Libyan Air Cargo Company*  
(pp. 177-202) Abdallah Elarifi

Electronic Data Interchange transmits correctly and correctly handles various transportation documents.	0.742				3
Service personnel give customers a sense of trust and clearly explain services.	0.624				2.89
<b>Responsiveness</b>					
Service personnel provide customers with the information they need. Smooth and real-time communication channels are open. Customer inquiries (such as trade inquiry) are answered in real time. Documents are rapid processed and warehousing operators inform customers of the expected delivery time after completing the deconsolidation of goods. The customer is notified when the goods have been delivered. Service staff are willing to help the customer to solve problems.	0.803				3
Issues with respect to unusual cargoes are handled quickly, with good responsiveness and reasonableness.	0.680				2.85
<b>Assurance</b>					
Processing of cargo damage compensation is efficient.	0.820				2.96
Air cargo terminal SGS, BV and ISO standards are used, to ensure air cargo is handled safely. The company works to achieve staff resilience, improve professional knowledge, provide professional air	0.759				2.85

*The Relationship Among Logistic Service Quality, Unlimited improvement and Business Performance: A Research on Libyan Air Cargo Company*  
(pp. 177-202) Abdallah Elarifi

cargo terminals management staff and improve storage-related consulting capabilities.				
The loading and unloading of goods is performed in accordance with standard operating procedures, operations within the air cargo terminals are efficient and goods are properly handled.	0.713			2.92
<b>Empathy</b>				
Air cargo terminal staff value customer rights.	0.839			2.92
Provide customized services, logistics processing services (such as labeling, carton packaging), logistics value-added services and consolidation services.	0.828			2.5
Complete operating fee schedules and flexible payment options are available to customers.	0.545			2.82
Provide extra overtime services and flexible booking times.				

195

As can be seen in Table 3, the importance level of the statements on the Business Performance scale was mostly high. The variance explanation rate is 67.413 %. Table 2 shows that the sample adequacy value is 3,376 and the sample size is sufficient for factor analysis. Factor loads of all expressions were over 0.5 and eigenvalues greater than 1 indicate that the expressions were suitable for use in the analysis. Cronbach's alpha coefficient was found to be 0.928. Since this value is greater than 0.80, the scale is highly reliable (Hu, 2018).



Table 4. Correlation Analysis

Variables	Unlimited Improvement	Business Performance	Service Quality
Unlimited Improvement	1	1	,716
Business Performance	1	,716	1
Service Quality air cargo	,716	1	1

As can be seen from Table 4,  $r = ,701$  was found so that a strong and correct relationship was found between service quality, business performance and unlimited improvement (Kucuk, 016: 250).

So;

H<sub>1</sub>: There is a statistically significant relationship between service quality and unlimited improvement.

H<sub>2</sub>: There is a statistically significant relationship between service quality and business performance.

H<sub>3</sub>: There is a statistically significant relationship between business performance and unlimited improvement.

The hypothesis was accepted.

## 8. Conclusions

Businesses have become increasingly competitive in the face of shifting economic conditions and developments throughout the world. With globalisation, trade restrictions, customers more aware that they know what they want, the scenario in the companies has produced a limited and compelling one. For businesses to maintain these conditions up, to compete continuously and to give their clients with quick and efficient supplies of raw materials and products, the idea of logistics, and the quality of logistics is vital.

The quality gains in logistics will reflect not only logistics but other industries in a good way. Companies can compete worldwide with the rise in quality.





A challenging notion to measure is the concept of quality of service. The clients who get this service are the most significant determinants of the quality of the logistics service. The SERVQUAL technique is believed to provide major contribution to the measurement, enhancement and understanding of customer expectations in the logistic industry that is more competitive nowadays.

In 1985, Parasuraman and Len Berry created the SERVQUAL technique. In five major dimensions, it addresses service quality. These aspects are: dependability, excitement, confidence and empathy are physical dimensions.

The SERVQUAL procedure also offers assistance to logistics managers. The improvement in quality in the field of logistics will also have a favourable influence in other areas as well as in the logistics industry. Businesses are able to compete worldwide when the quality increases.

## **9. Discussion**

Quality as the total of qualities of products or services that are made to fulfil certain necessities are also defined by the United States National Standards Institution and the American Quality Community. The Turkish Institute of Standards defines quality as the entirety of the product or service that is created to fulfil existing or prospective demands. However, all the definitions of product and service quality fulfil the wants and expectations of customers are common in all industries.

3PL firms began to choose outsourcing to carry out their logistics activities effectively and effectively, resulting in an intensive competition climate among them. Logistics have always been considered an ineffective and costly activity. The fact that its clients always like a company for 3PL enterprises offers a major competitive edge over other rivals. For this reason, 3PL businesses have begun to strive more closely with customers to link the institution, retain it within the institution and guarantee that the connection continues and is loyal. They are aware that the way to achieve this is to ensure customer satisfaction by increasing the quality of logistics services. (Hume, 2008)

The abstract quality of the service has no features like the quality of the raw material utilised, quality production procedures, durability and long life,





as in the concrete outputs. Consequently, input from customers can only be measured. Customers evaluate the service they deliver and the service they anticipate, according to several criteria, thereby assessing the quality. If the difference in service quality is positive, the client is satisfied; if the difference is negative, it is inferred that the service quality is not satisfied by the customer. The objective is to make sure the service the client receives is high. (Saha, 2009)

In order to achieve customer satisfaction, quality of logistics service may be described as quality of service in procurement and physical distribution operations. Two separate aspects, objective and subjective, assess the quality of the logistics service. The objective quality of logistics services; 3PL operations of the firms, the compliance with the plans, the access to the targeted service, delivery time, low waste rate, etc. while at the same time achieving quantifiable performance.

Logistics Quality of the service between the logistics outsourcing company and the service offering company (3PL) positively affects customers' perception that the 3PL company is developing in a way that is consistent with customers' expectations by enhancing performance so that they are able to develop further; engagement and loyalty. Due to the long-term planning of customer collaboration, regular interaction and assuring trusting in 3PL companies, client loyalty and loyalty to the firm is increased. (Mentzer 2001)

The quality of the staff service dimensions evaluates the staff's capacity to successfully answer the demand, problem-solving capability and equipment. This dimension comprises the suggestions of service-oriented people, staff accessibility and staff expertise. Quality of staff service implies the client may connect to the authorised staff of the firm in which the customer serves. Customers give considerable significance to the representative of the firm, who is properly knowledgeable, capable of sympathising and eager to resolve difficulties. The perceived quality of service largely depends on one-to-one contact between the client and the employees and not on the success of the results achieved by the process. The quality of service is therefore a key aspect for delivering service of high quality. Paying attention to the synchronisation of production and service and ensuring that the provider-customer physical interaction gives major benefits in improving the quality of the personal service. (Tohidi and Jabbari, 2012).

Operational service quality comprises accessibility to products





connected to logistical services, the capability to meet Product Status Measurement Programs, dependability of delivery and delivery speed, capacity to offer emergency services and capacity to assure customer satisfaction. The service provider provides the Customer with quality of operation, activity, method, delivery type, delivery time, quality of delivery etc. Whether or to what degree it meets its promises. The customers' assessment of production processes, service delivery and process quality can increase the quality of the operating service using methods such as increased transport process efficiency (as necessary by means of transit transport), ensuring that operations are completed in less time, continuously ready as needed, and reducing operational efficiency. This gives firms a competitive edge on the market. (Xu and Shao, 2018)

## **10. Recommendations**

In conclusion, our study has contributed in certain respects to the literature on quality logistic services. First, the research aimed at identifying certain theoretical gaps that appeared from the literature on service quality and to expand our grasp of the complicated connection between quality of service, limitless improvement and company performance. Secondly, the study validates the literature on quality of logistical services which promotes a favourable and important link between the quality of services (functional, technical) and corporate performance and a limitless improvement on technical quality.





## References

- Baker, D. A., & Crompton, J. L. (2000). Quality, satisfaction and behavioral intentions. *Annals of tourism research*, 27(3), 785-804.
- Berkowitz, Eric; Kerin, Roger; Hartley, W. And Rudelius, William; (2000), *Marketing*, 6. Edition, Mcgraw Hill.
- Brady, M. K., Cronin Jr, J. J., & Brand, R. R. (2002). Performance-Only Measurement Of Service Quality: A Replication And Extension. *Journal of Business Research*, 55(1), 17-31.
- Coo, L. S., & Verma, R. (2002). Exploring The Linkages Between Quality System, Service Quality, And Performance Excellence: Service Providers' Perspectives. *Quality Management Journal*, 9(2), 44-56.
- Cronin, J. Jr. and Taylor, S. A. (1992). "Measuring Service Quality: A Reexamination and Extension", *Journal of Marketing*, Vol. 56, No: 3, pp. 55-68.
- Grönroos, C. (1984). A Service Quality Model and Its Marketing Implications, *European Journal of Marketing*, Vol.18, Issue 4, pp. 36-44.
- Hu, Y. C., Lee, P. C., Chuang, Y. S., & Chiu, Y. J. (2018). Improving The Sustainable Competitiveness of Service Quality Within Air Cargo Terminals. *Sustainability*, 10(7), 2319.
- Hume, M. (2008). "Understanding Core and Peripheral Service Quality in Customer Repurchase of The Performing Arts", *Managing Service Quality*, Vol. 18, No: 4, pp. 349-369.
- Kotler, Philip; (1997), *Marketing Management; Analysis, Planning, Implementation and Control*, New Jersey: Prentice Hall.
- Küçük, O. (2011). *Lojistik İlkeleri ve Yönetimi*, Ankara: Seçkin Yayıncılık.
- Küçük, O. (2016). *Bilimsel Araştırma Yöntemleri*, Bursa: Ekin Yayınları.
- Naktiyok, A and Küçük, O.. (2003). "Küçük ve Orta Büyüklükteki İşletmelerde (KOBİ) Toplam Kalite Yönetimi (TKY) Kritik Faktörlerinin Örgütsel Performans Üzerine Etkileri", *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, (21).







- Küçük, O. (2020). İşletmecilik, Lojistik ve Toplam Kalite Yönetimi Alanında Teoriler ve Bilimsel Araştırma Ölçekleri, *Ankara: Sonçağ Yayıncılık*.
- Küçük, Orhan (2020a) İşletmecilik, Lojistik ve Toplam Kalite Yönetimi Alanında Teoriler ve Bilimsel Araştırma Ölçekleri, (O. Küçük, İçinde: 1. Kısım 4. Bölüm, "İşletme Performansının Belirlenmesi ve İşletme Performansı Ölçeği", ss. 36-42.), *Ankara: Sonçağ Yayıncılık*.
- Küçük, Orhan (2020b) İşletmecilik, Lojistik ve Toplam Kalite Yönetimi Alanında Teoriler ve Bilimsel Araştırma Ölçekleri, (O. Küçük, İçinde: 4. Kısım 1. Bölüm, "Toplam Kalite Yönetimi (TKY) Kapsamında Geliştirilen Kavramlar, Sınırsız İyileşme Uygulaması ve Sınırsız İyileşme Ölçeği", ss. 207-220.), *Ankara: Sonçağ Yayıncılık*.
- Mentzer J. T., Flint D. J. and G. Tomas M. Hult (2001). "Logistics Service Quality as a Segment Customized Process", *Journal of Marketing*, Vol. 65, No. 4, pp. 82-104.
- Meyer, A., Chase, R., Roth, A., Voss, C., Sperl, K. U., Menor, L., & Blackmon, K. (1999). Service Competitiveness—An International Benchmarking Comparison of Service Practice And Performance in Germany, UK and USA. *International Journal of Service Industry Management*.
- Panayides, P. M., & So, M. (2005). The Impact of Integrated Logistics Relationships On Third-Party Logistics Service Quality And Performance. *Maritime Economics & Logistics*, 7(1), 36-55.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality And Its Implications For Future Research. *Journal of Marketing*, 49(4), 41-50.
- Saha, G. C. and Theingi (2009). "Service Quality, Satisfaction, and Behavioural Intentions A Study of Low-Cost Airline Carriers in Thailand", *Managing Service Quality*, Vol. 19, No: 3, pp. 350-372.
- Sultan, P., & Wong, H. (2010). Performance-Based Service Quality Model: An Empirical Study on Japanese Universities, *Quality Assurance in Education*, 18(2), 126-143.
- Tohidi, H., Jabbari, M. M., 2012. Service Quality Evaluating Models, *Procedia-Social And Behavioral Sciences*, 31, 861-865.



*The Relationship Among Logistic Service Quality, Unlimited improvement and Business Performance: A Research on Libyan Air Cargo Company*  
(pp. 177-202) Abdallah Elarifi



- Wang, R. T., & Yang, T. H. (2007). Measuring the service quality of air cargo sector: case of China Airline. In *Proceedings of the Eastern Asia Society for Transportation Studies Vol. 6 (The 7th International Conference of Eastern Asia Society for Transportation Studies, 2007)* (pp. 131-131). Eastern Asia Society for Transportation Studies.
- Wang, R.T. (2007). "Improving Service Quality Using Quality Function Deployment: The Air Cargo Sector of China Airlines", *Journal of Air Transport Management*, 13, pp. 221–228.
- Wijetunge, W. A. D. S. (2016). Service Quality, Competitive Advantage and Business Performance in Service Providing SMEs in Sri Lanka. *International Journal of Scientific and Research Publications*, 6(7), 720-728.

