

## **Section MANAGEMENT**

---

*Nurana Sadigova*

*Azerbaijan State University of Economics (UNEC)*

*ORCID: 0009-0001-1679-1228*

*E-mail: [sadiqova.nurane@gmail.com](mailto:sadiqova.nurane@gmail.com)*

*Magsud Mirzayev*

*Azerbaijan State University of Economics (UNEC)*

*ORCID: 0000-0002-0369-3522*

*E-mail: [magsud-mirzeyevev@unec.edu.az](mailto:magsud-mirzeyevev@unec.edu.az)*

*Nurkhodzha Akbulaev*

*Azerbaijan State University of Economics (UNEC)*

*ORCID: 0000-0003-4271-9550*

*E-mail: [nurhodja\\_akbulayev@unec.edu.az](mailto:nurhodja_akbulayev@unec.edu.az)*

<https://doi.org/10.30546/200310.505.2026.1058>

### **An Investigation into the Relationship Between Service Quality and Customer Satisfaction in Cargo Companies in Azerbaijan**

#### **Abstract**

This study examines the relationship between service quality and customer satisfaction in cargo companies operating in Azerbaijan. The research is based on the SERVQUAL model, which is widely used in the service management literature to evaluate service quality across diverse sectors. SERVQUAL conceptualizes service quality through five fundamental dimensions: tangibles, reliability, responsiveness, assurance, and empathy and posits that these dimensions collectively shape customers' perceptions and evaluations of service performance. Within the scope of the present study, each of these dimensions was assessed to determine its relative influence on customer satisfaction in the cargo industry, where timely delivery, transparency, and operational efficiency are of critical importance. The empirical component of the research is grounded in data gathered from 114 participants who regularly use cargo and delivery services. The dataset was analyzed to evaluate how customers perceive service quality and to identify which dimensions most strongly predict their satisfaction levels. Overall, this study contributes theoretically to the service quality literature while offering practical implications for the strategic development of cargo service providers in Azerbaijan.

**Keywords:** Customer Loyalty, Service Quality, Customer Satisfaction, Cargo Companies

#### **Introduction**

The rapid transformation of global markets and the digitalization of the logistics sector have significantly altered customer expectations regarding cargo services. In an increasingly competitive environment, service quality has become a strategic determinant for businesses seeking to achieve

sustainable competitive advantage and maintain customer loyalty. Within the service management literature, service quality is defined as the extent to which the delivered service meets or exceeds customer expectations (Parasuraman et al., 1988; Sureshchandar et al., 2002). In the cargo and logistics sector, delivery reliability, responsiveness to customer inquiries, transparency in communication, shipment security, and technological competence are widely recognized as the key determinants of customer satisfaction.

Advancements in digital technologies particularly real-time tracking systems, automated status notifications, and user-friendly digital interfaces have transformed the nature of interaction between cargo companies and their customers (Wang et al., 2018). However, the literature emphasizes that technology-driven improvements alone are insufficient; human centered service elements such as empathy, problem-solving ability, and effective complaint management continue to play a decisive role in shaping customer satisfaction and behavioral intentions. This highlights the need to examine service quality components based on both technological efficiency and human interaction within the cargo sector.

In Azerbaijan, the rapid expansion of e-commerce and the growing demand for cargo services have further increased the importance of measuring service quality and analyzing the determinants of customer satisfaction. Despite the sector's growth, academic studies investigating the relationship between service quality and customer satisfaction within the Azerbaijani context remain limited.

Accordingly, the present study aims to systematically evaluate the perceptions of cargo service users in Azerbaijan regarding service quality and to examine the impact of these perceptions on overall customer satisfaction. The primary objectives of the study are as follows:

1. To determine the importance customers, assign to various dimensions of service quality;
2. To analyze the effect of service quality dimensions on customer satisfaction;
3. To identify the service attributes considered most critical by customers within the Azerbaijan context.

This research contributes to the logistics service quality literature from a theoretical perspective and provides practical insights for cargo companies seeking to enhance service performance, strengthen customer trust, and improve competitive positioning.

## **Literature Review**

Quality of service is the most important factor driving customer satisfaction in cargo shipping and logistics. There are several models to measure service quality, among them being Parasuraman, Zeithaml, and Berry's (1988) SERVQUAL model. It calculates service quality based on five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Several authors have applied SERVQUAL for measuring logistics services effectiveness in customer satisfaction (Bienstock et al., 1997).

Studies of cargo companies emphasize the importance of delivery speed, reliability, and security as dimensions of service quality (Mentzer et al., 2001). Stank et al. (2003) established through a study that logistics service quality influences customer loyalty. Customer expectations in cargo transport have also evolved with digitalization, requiring real-time tracking and seamless communication (Wang et al., 2018).

Thai (2013) examined service quality in the maritime transport sector and demonstrated that service quality has a direct impact on customer satisfaction and loyalty. Feng et al. (2020) also examined the impact of logistics service quality on e-commerce and concluded that reliability and responsiveness

are key factors in sustaining customer retention.

Cargo firms tend to use the SERVPERF model, which is performance-based measurement instead of expectation-based measurement. Cronin and Taylor (1992) state that the model offers a better measure of customer satisfaction through the measurement of perceived service performance.

Literature further indicates that newer technologies such as AI-based logistics, blockchain tracing, and IoT-based monitoring have enhanced the quality of cargo services (Ding et al., 2021). Companies implementing these emerging technologies have enhanced customer satisfaction due to greater transparency and efficiency (Zhao et al., 2022). Others argue that despite technology advancement, human touch and personalized services still remain crucial for customer satisfaction (Ladhari et al., 2017).

### **Population and Sample**

The population of this study consists of customers who regularly use the services of cargo companies operating in Azerbaijan. The research employed a convenience sampling method. This method is frequently preferred in-service quality studies due to its accessibility and ease of participation. Data were collected through online survey platforms and social media channels. Valid responses were obtained from a total of 114 participants. Participants were selected from individuals who had used cargo and delivery services at least once in the past year. The demographic distribution of the sample exhibits diversity in a manner that represents cargo users in Azerbaijan's urbanized regions (particularly Baku and its surroundings). This approach enhances the generalizability of the research and aims to reflect customer perceptions in the cargo sector.

### **Materials and Methods**

As presented in Table 1, the majority of respondents participating in the study fall within the 27–35 age category (45.6%). This indicates that this age group constitutes the predominant users of cargo services. Participants aged 26 and below also represent a substantial proportion of the sample (42.1%), suggesting that the findings largely reflect the perspectives of a younger population. In contrast, the number of respondents aged 36 and above is considerably lower, implying that the survey primarily reached younger individuals.

In terms of gender distribution, female respondents (67.5%) outnumber male respondents by nearly a two-to-one ratio. This disparity may suggest that women engage with cargo services more frequently than men. Analysis of cargo service usage frequency demonstrates that more than half of the respondents (51.8%) report using such services occasionally. This suggests that cargo services hold a significant role in daily life, although they have not yet become a fully regularized practice for many users. The proportion of respondents who use cargo services frequently (32.5%), combined with the relatively small share of those who use them rarely (15.8%), indicates a generally elevated level of demand for these services. Overall, both the demographic profile and usage frequency data suggest that courier services are predominantly utilized by a young and largely female population, with usage occurring at a moderate yet increasing rate.

Age	n	%
Under 26	48	42.1
27-35	52	45.6
36-44	12	10.5

44 and above	2	1.8
<b>Total</b>	114	100.0
<b>Gender</b>	<b>n</b>	<b>%</b>
Female	77	67.5
Male	37	32.5
Total	114	100.0
<b>How often do you use courier services?</b>	<b>n</b>	<b>%</b>
rarely	18	15.8
sometimes	59	51.8
often	37	32.5
<b>Total</b>	114	100.0

**Table 1.** Demographic Characteristics of the Respondents  
**Source:** Prepared by the author based on the conducted research

### Research Hypothesis

This study aims to examine the relationship between service quality and customer satisfaction in cargo companies operating in Azerbaijan. In line with the purpose of the research, the following hypothesis has been formulated:

**H1:** Perceived service quality in cargo companies operating in Azerbaijan has a positive and statistically significant effect on customer satisfaction.

**H1.1.** There is a positive and statistically significant relationship between the *perceived service quality dimensions tangibles, reliability, assurance, empathy, and responsiveness* and customer satisfaction in cargo companies operating in Azerbaijan.

### Research findings

The reliability analysis demonstrates that both scales used in the study exhibit excellent internal consistency. The Service Quality scale achieved a Cronbach’s Alpha of 0.947 across 15 items, indicating a very high level of reliability and suggesting that the items consistently measure the same underlying construct. Similarly, the Customer Satisfaction scale yielded a Cronbach’s Alpha of 0.925 for 6 items, which also reflects excellent internal consistency. According to widely accepted reliability thresholds, Cronbach’s Alpha values above 0.90 are considered excellent, confirming that both measurement instruments are highly dependable for empirical analysis.

**Table 2.** Results of Reliability Analysis

Scale	Cronbach's Alpha	N of Items
Service Quality	0.947	15
Customer Satisfaction	0.925	6

**Source:** Prepared by the author based on the conducted research

Upon examining the correlation analysis in Table 3, it is evident that there are positive and statistically significant correlations between Customer Satisfaction (7) and all other variables, with values ranging from 0.711 to 0.920. The correlation coefficients of 0.7 and above indicate a strong relationship, suggesting that there is a robust correlation between the two variables. Service Quality has a significant and strong effect on customer satisfaction, with a direct or indirect relationship with all other sub-dimensions. The dimensions of Tangibles, Reliability, Assurance, Empathy, and Responsiveness play crucial roles in enhancing customer satisfaction. Moreover, a strong relationship exists between Empathy and Responsiveness, where an empathetic approach toward customers

increases responsiveness, thereby improving customer satisfaction. Service Quality and Reliability exhibit the highest correlations, highlighting the importance of service reliability and quality in influencing customer satisfaction.

The results of the correlation analysis indicate that each dimension of service quality significantly contributes to enhancing customer satisfaction in cargo companies. These findings are consistent with Hypotheses H1 and H1.1, both of which propose that service quality positively and significantly impacts customer satisfaction.

**Table 3.** Correlation Analysis

Size	Mean	Std. Deviation	1	2	3	4	5	6	7
Service Quality (1)	3.6450	.71365	1						
Tangibles (2)	3.7544	.75915	.816**	1					
Reliability (3)	3.7456	.73980	.861**	.674**	1				
Assurance (4)	3.7398	.76907	.905**	.664**	.785**	1			
Empathy (5)	3.6082	.91448	.909**	.626**	.671**	.817*	1		
Responsiveness (6)	3.3772	.87858	.893**	.647**	.686**	.717*	.829**	1	
Customer Satisfaction (7)	3.7032	.74363	.920**	.711**	.808**	.859**	.849**	.805**	1

\*\* Correlation is significant at the 0.01 level (2-tailed).

Source: Prepared by the author based on the conducted research

### Results and Discussion

The findings of this study indicate that all dimensions of perceived service quality tangibles, reliability, assurance, empathy, and responsiveness are positively and statistically significantly related to customer satisfaction in cargo companies operating in Azerbaijan. Correlation coefficients ranging from 0.711 to 0.920 demonstrate strong relationships, confirming that service quality is closely associated with customer satisfaction. These results support Hypotheses H1 and H1.1, which propose a positive and significant relationship between service quality and customer satisfaction.

Among the service quality dimensions, reliability and overall service quality show the highest correlations, highlighting the critical role of dependable and consistent service delivery in shaping customer satisfaction. Additionally, the strong relationship between empathy and responsiveness suggests that customer-oriented and empathetic approaches improve responsiveness, further enhancing satisfaction. This aligns with the SERVQUAL framework, where reliability and responsiveness are considered core elements of perceived service quality (Parasuraman, Zeithaml, & Berry, 1988).

The study confirms that delivery reliability is a key determinant of customer satisfaction. Variability in delivery times can lead to dissatisfaction, while real-time tracking, transparent communication, and guaranteed delivery schedules are highly valued by customers (Mentzer et al., 2001; Wang et al., 2018). Positive service experiences directly contribute to repeat business and long-term customer relationships (Stank et al., 2003). Cargo companies that invest in technology, employee development, and customer care are more likely to achieve higher customer satisfaction and retention.

Technological tools, such as real-time shipment tracking and automated notifications, enhance perceived service quality (Wang et al., 2021). However, human interaction, especially in complaint handling and problem resolution, remains crucial (Ladhari et al., 2017). Furthermore, this study highlights regional and market-specific expectations, as local customers in Azerbaijan prioritize transparency, communication, and reliability over speed and cost efficiency, supporting the notion that cultural and contextual factors shape perceptions of service quality (Zeithaml et al., 1990).

In conclusion, the study provides strong evidence that improving service quality across all dimensions significantly contributes to higher customer satisfaction in cargo companies. Managers should focus on maintaining reliability, responsiveness, and empathetic customer service while leveraging technology to meet evolving customer expectations in the local market.

## **References**

1. *Bienstock, C. C., Mentzer, J. T., & Bird, M. M. (1997). Measuring physical distribution service quality. Journal of the Academy of Marketing Science, 25(1), 31-44.*
2. *Cronin, J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. Journal of Marketing, 56(3), 55-68.*
3. *Ding, X., Liu, C., & Li, Z. (2021). The role of artificial intelligence in enhancing logistics service quality. International Journal of Logistics Management, 32(4), 785-804.*
4. *Feng, Y., Zhang, X., & Chen, J. (2020). The impact of logistics service quality on customer satisfaction in e-commerce. Electronic Commerce Research and Applications, 39, 100902.*
5. *Guliyev, A. A., & Abesadze, N. (2025). The impact of import dependency on the labor market (A political economy perspective). UNEC Journal of Economics and Management Advances, 1(1), 18–29.*
6. *I-Ming Wang & Chich-Jen Shieh (2006) The relationship between service quality and customer satisfaction: the example of CJCUC library, Journal of Information and Optimization Sciences, 27:1, 193-209, DOI:10.1080/02522667.2006.10699686*
7. *İslamlı, İ., & Aliyev, Y. (2016). Socio-Economic Impact Of Financial Literacy: The Of Case Baku. ASSAM International Refereed Journal, 3(6), 11-20.*
8. *Ladhari, R., Souiden, N., & Dufour, B. (2017). The role of emotions in utilitarian service settings: The effects of emotional satisfaction on product perception and behavioral intentions. Journal of Retailing and Consumer Services, 34, 10-18.*
9. *Mentzer, J. T., Flint, D. J., & Hult, G. T. M. (2001). Logistics service quality as a segment-customized process. Journal of Marketing, 65(4), 82-104.*
10. *Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. Journal of Retailing, 64 (1), 12-40.*
11. *Rafiq, M., & Jaafar, H. S. (2007). Measuring customers' perceptions of logistics service quality of 3PL service providers. Journal of Business Logistics, 28 (2), 159-175.*
12. *Sadigova, N., & Mirzayev, M. (2025). Service Quality As A Determinant Of Patient Satisfaction: An Empirical Study In The Healthcare Sector. Journal Of Economic Sciences: Theory & Practice, 82(1).*
13. *Stank, T. P., Goldsby, T. J., & Vickery, S. K. (2003). Effect of service performance on customer satisfaction in logistics. Journal of Business Logistics, 24(1), 19-38.*

14. Sureshchandar, G. S., Rajendran, C., & Anantharaman, R. N. (2002). *The relationship between service quality and customer satisfaction—a factor specific approach*. *Journal of services marketing*, 16(4), 363-379.
15. Thai, V. V. (2013). *Logistics service quality: A new conceptual model*. *The International Journal of Logistics Management*, 24(1), 19-35.
16. Wang, Y., Chen, K., & Xie, J. (2018). *The impact of digitalization on logistics service quality*. *Computers in Industry*, 98, 32-41.
17. Wang, Y., Han, J. H., & Beynon-Davies, P. (2021). *Understanding blockchain technology for future supply chains: A systematic literature review and research agenda*. *Supply Chain Management: An International Journal*, 26 (1), 62-84.
18. Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1990). *“Delivering quality service: Balancing customer perceptions and expectations”*. Free Press.
19. Zhao, H., Sun, P., & Li, B. (2022). *Blockchain applications in cargo tracking: Enhancing service quality and customer satisfaction*. *Supply Chain Management Review*, 28(3), 45-60.