

IMPACT OF QUALITY ON THE ECONOMIC CONDITION OF SERVICE ENTERPRISE – CASE STUDY USING THE SERVQUAL METHOD

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Purpose: The aim of the article is to assess the service quality of a chosen enterprise of the CEP sector using the Servqual method and statistical research. The quality assessment constitutes the basis for drawing conclusions about the possible concatenation between the quality of services and the economic condition of the analyzed organization.

Design/methodology/approach: A critical analysis of literature in the field of service quality and the chosen methods, an examination of documents concerning a certain company, and a diagnostic survey method conducted among customers of a chosen courier company and statistical research have been used.

Findings: Customers are dissatisfied with the quality of services offered by this operator. According to the traditional Servqual methodology, a quality gap was identified between expectations and the service received. All the most important quality characteristics relate to the core of the service. In order to reduce the risk associated with random selection of the research sample and to isolate the answers obtained from respondents who are actual customers of the analyzed organization, correlation coefficients were calculated between the frequency of using the offer and the assessment of the importance and perception of quality determinants. In the majority of cases, frequent use of a given service is negatively correlated with the perceived importance of specific service quality attributes. The type of service used by an operator's customers does not appear to significantly influence the evaluation of individual service quality dimensions; on the contrary, it tends to diminish their perceived relevance.

Research limitations/implications: The results obtained are a valuable source of information for both practitioners (managers of courier companies) and theoreticians (researchers analyzing the processes taking place in the CEP sector and service quality).

Practical implications: The study has practical applications for service sector companies. It is particularly relevant for business practitioners in the CEP industry, as a basis for strategic analysis and holistic quality management.

Originality/value: The paper fills the identified literature gap. It has been shown that there is a wide range of theoretical studies and research in the field of service quality and analysis of the courier services. The conducted research indicated that there is a lack of analysis of the extensive use of the Servqual method in assessing the quality of postal services and statistical research based on this method, resulting in reflection on the links between quality and the economic condition of the company.

Keywords: CEP, service quality, the Servqual.

Category of the paper: Research article.

1. Introduction

Modern society functions within a highly volatile environment. The continuous and rapid changes in socio-economic processes significantly impact the operation of the global economy, individual nations, various economic sectors, and society as a whole. Although the assessment of these phenomena is highly subjective, there is no doubt that modern enterprises operate amidst intense competition, considered not only regionally and nationally but also, in many cases, globally (Wirtz, Tuzovic, Ehret, 2015).

As one might expect, competition is intense in the services sector, whose importance in the global economy is characterized by a growing trend, closely linked to the economic development of individual countries. One of the characteristics of this sector is its high degree of fragmentation. This means that individual services are provided by various economic sectors, and the number of their suppliers and customers is constantly growing (Kwiatkowska, 2015). To differentiate themselves in the market, strengthen their competitive position, and simultaneously strive to maximize profits, many entities operate in accordance with various modern management philosophies and approaches.

In addition to the most popular, traditional price competition, competitive methods in today's market also include non-price competition, including quality. Research shows that quality is a key factor in competitiveness. Achieving an appropriate level of quality enables competition in other areas, and competitiveness itself consists of a number of determinants of varying importance, yet interdependent in some way (Sumardi, Fernandes, 2020).

The possibility of gaining a competitive advantage through quality-related activities is possible when: the quality of a given company's services is higher than that of its competitors; customers rate the quality of a given company's services higher than that of its competitors; and improving quality is linked to the ability to set higher prices for services (Kaur, Kaushik, 2022).

In summary, quality in the services sector is extremely important. This importance stems from the characteristics of the modern economy, in which the services sector plays a significant and ever-increasing role in shaping economic indicators. These characteristics translate into the level of competition in the sector, and both traditional and recent competitiveness assumptions point to quality as a fundamental and still difficult-to-achieve competitive tool (Gillies, 2015).

2. Quality and postal services

Until 1991, postal services in Poland were exclusively delivered by a single provider. However, starting in 2003, the postal market began to undergo gradual liberalization following the implementation of new legislation. 98 postal operators submitted reports for 2024. The value of the Polish postal services market in 2024 amounted to PLN 18.69 billion (an increase of PLN 2.15 billion year-on-year and a growth rate of 13.0%). The overall volume of postal services increased by 110 million items (5.4%). Among the main postal services, letters, parcels, and courier shipments are the most prominent, along with money orders and marketing mail. Courier delivery remains the primary postal service, and has seen significant growth with the development of e-commerce. Compared to 2023, the volume of courier shipments increased by 15.3% and revenues by 16.1%. In 2024, these shipments accounted for 73.3% of the postal market value and 56.6% of the total volume of postal services (UKE Report, 2024). These data indicate the importance of interest in the postal services market among scientists and business practitioners.

In the last calendar year, the analyzed operator recorded a decline in both domestic and international volume (by 7% and 6.5%, respectively). It is worth noting that the analyzed operator's volume decreased by 5.9%, while maintaining a high share of the total volume (45%). Despite the increase in revenues from postal operations (related to price increases), this operator lost its share of revenues relative to its competitors. Furthermore, a 6.7% decline in employment was identified, the highest among its competitors (UKE Report, 2024).

Due to the potential for growth in selected postal service segments (primarily courier services), reports highlight the sector's attractiveness and strong price competition. Ensuring high-quality service is a response to the limited potential for further price pressure.

Quality is a complex and dynamic concept that is difficult to define universally for two main reasons (Urban, 2007). First, it evolves in response to changes in human development—social, technological, and otherwise—which in turn influence both the nature of quality (as it pertains to products, services, or quality of life) and how it is perceived. Second, quality is inherently subjective and shaped by a wide range of determinants, making its assessment and definition context-dependent (Gajewska, 2019, Teklay et al, 2023).

Service quality is largely determined by intangible factors, which are evaluated by individuals with diverse perspectives and expectations (Gawahi, Hosseini, Moheimani, 2023). These evaluations are based on selected quality determinants, which themselves are drawn from a broad array of possible attributes applicable to a product or service. Such attributes may include price, product functionality, warranty duration, and transaction convenience; for services, additional factors such as the durability of the service outcome, the perceived expertise of the service provider, and the quality of interaction between the service user and provider also play a role. The assessment of quality is inherently complex, as it is influenced

by the evaluator's knowledge, prior experiences, and perception of the company. Furthermore, the relative importance of specific quality determinants varies across individuals, adding to the subjectivity of the evaluation process (Solin, Curry, 2023, Stoma, 2012).

3. Research methodology

The study was conducted using the diagnostic survey method. The diagnostic survey method (using a survey technique as the main formula), also known as the survey research method, involves obtaining answers to a set of questions relevant to solving the research problem from precisely defined individuals (respondents characterized by a set of selected characteristics). Surveys are characterized by a lack of dynamic interaction between the researcher and the person being surveyed (Zimba, Gasparyan, 2023).

The questionnaire contained two parts: a metric (including age, gender, education) and a substantive part consisting of questions about containing questions about the assessment of the importance and perceived quality of chosen factors, selected based on the Servqual methodology.

The Servqual method, developed by A. Parasuraman, V.A. Zeithaml, and L.L. Berry, is widely recognized as one of the most universal approaches to measuring service quality. It is grounded in the quality gaps model, which identifies four internal gaps and one external gap that collectively contribute to a decrease in perceived service quality (Kowalik, 2019). The assumptions of the Servqual method focus on the fifth gap. This approach evaluates the difference between customers' expectations and their perceptions of service quality by conducting a detailed analysis, which involves the use of a specially designed questionnaire. The questionnaire is designed by formulating statements for each service quality attribute, assessed from two perspectives: perception and expectation. Each statement is categorized under one of the five quality dimensions (Ghifari, Astanti, 2025):

- tangibles – physical facilities and equipment (T1 – attractiveness of institution, T2 – modernity of equipment, T3 – staff's appearance, T4 – availability of materials),
- reliability – (R1 – punctuality of service delivery, R2 – faultlessness of service delivery, R3 – staff's help in problem-solving, R4 – compliance with the offer accuracy and dependability in service delivery),
- responsiveness – willingness to assist customers (RP1 – efficiency of service delivery, RP2 – transmission of all the information, RP3 – immediate response to requests),
- assurance – employees' competence and courtesy (A1 – staff's competence, A2 – staff's politeness, A3 – staff's trust inspiration, A4 – ensuring the security),

- empathy – personalized attention to customers (E1 – individualized treatment, E2 – willingness to help, E3 – paying attention to customers, E4 – customers’ needs understanding).

Respondents rated these statements using a Likert scale, most commonly a five-point scale, where 5 represents “strongly agree” and 1 represents “strongly disagree”. Following this, the importance of each quality dimension is assessed.

The collected data were processed in a descriptive form and using statistical tests. Spearman correlation coefficients were used in the paper. The significance level was set at 0.05. The study involved about one thousand customers of the analyzed company (Table 1) and was conducted from 2025 January to June in online form. The sample was selected purposively. Before completing the questionnaire, respondents confirmed that they had experience as a customer of the company being analyzed.

Table 1.
Characteristics of respondents

Customers									
Gender [%]		Age [%]				Education [%]			
Male	Female	18-24	25-39	40-59	60<	primary	vocational	secondary	higher
49.74	50.26	14.17	31.27	38.51	16.05	0.84	16.68	52.15	30.33
Total: 100		Total: 100				Total:100			

Source: Author’s calculations.

In light of the considerations undertaken so far during the research process, the following research questions were asked: Does the service quality influence on economic condition of the postal operator? How does the frequency of use of the indicated postal services translate into the assessment of the importance and perception of individual quality determinants? The aim of this study is therefore to show the impact of service quality on the economic condition of the postal operator.

4. Research results and discussion

The respondents assessed the presented attributes in two aspects: perception (how is it?) and expectation (how should it be?) and gave weights to each dimension (the sum of dimensional weights equals 1). Partial results, showing the average of each quality attribute (gap scores), are presented in table 2.

Table 2.
The Servqual's gap score

Dimension	Attribute	Expectation score	Perception Score	Gap score
tangibles	T1	4.034	3.680	-0.354
	T2	4.034	3.458	-0.576
	T3	4.230	3.863	-0.547
	T4	4.269	3.794	-0.475
reliability	R1	4.506	3.560	-0.946
	R2	4.497	3.859	-0.638
	R3	4.414	3.731	-0.683
	R4	4.492	3.961	-0.531
assurance	A1	4.434	3.891	-0.543
	A2	4.335	3.749	-0.586
	A3	4.251	3.681	-0.570
	A4	4.189	3.707	-0.482
responsiveness	RP1	4.352	3.474	-0.878
	RP2	4.220	3.692	-0.528
	RP3	4.275	3.652	-0.623
empathy	E1	4.003	3.463	-0.540
	E2	4.178	3.497	-0.681
	E3	3.902	3.522	-0.380
	E4	4.046	3.473	-0.573

Source: Authors' calculations.

According to the partial results, initial conclusions point to higher expectations from perception. All of the average attributes results are negative numbers. Table 3 presents final results of the Servqual method.

Table 3.
The Servqual score

Dimension	Average of dimension	Importance weight	Weighed score	Average
tangibles	-0.488	0.129	-0.063	-0.113
reliability	-0.700	0.251	-0.176	
assurance	-0.545	0.214	-0.117	
responsiveness	-0.676	0.179	-0.121	
empathy	-0.545	0.164	-0.089	

Source: Authors' calculations.

The presented data indicate an insufficient level of quality of the postal operator in this study. The averages of each dimension are values below 0. The most important dimension of postal service quality is reliability, the least one- tangibles. The correction of the indicator by weights contributed to the calculation of the weighed Servqual indicator, which assumed the value -0,113. In accordance with the principles of the Servqual method, negative value means too low quality. The implementation of improvement in some areas of quality may increase customers' assessment of perception. The highest gap score, which definitely stands out among the determinants, concerns the feature R1 – punctuality of service delivery (-0.946) and RP1 – efficiency of service delivery (-0.878). Moreover, these dimensions are characterized by the highest weight significance (place 1 and 3). These determinants concern the core of the postal service, which indicates a significant problem with the level of quality.

Due to the random selection of the research sample, to further deepen the study, respondents were also asked about their frequency of use of various postal services provided by the analyzed operator. Correlation coefficients were then calculated between the frequency of use of individual postal services and the assessment of the importance (Table 4) and perception (Table 5) of the quality of selected determinants.

Table 4.

Values of correlation coefficients between the use of particular services and the assessment of the importance of Servqual features of service quality

Pair of variables	parcels	courier shipments	financial services	sale of products related to postal services	sale of products not related to postal services
T1	-0.068	-0.016	-0.008	-0.069	0.027
T2	-0.107	-0.136	-0.127	-0.049	-0.008
T3	-0.093	0.050	-0.158	-0.080	-0.066
T4	-0.092	-0.029	-0.088	-0.103	-0.009
R1	-0.046	-0.060	0.064	0.025	0.048
R2	-0.110	-0.014	-0.165	-0.014	-0.003
R3	-0.074	-0.066	-0.018	-0.029	0.010
R4	-0.031	-0.120	-0.012	0.044	-0.006
A1	-0.005	-0.116	-0.204	-0.061	-0.077
A2	-0.020	-0.123	-0.147	-0.051	-0.018
A3	0.076	0.042	0.001	0.018	0.014
A4	0.072	0.010	-0.033	-0.029	-0.042
RP1	-0.061	-0.091	-0.168	-0.009	-0.024
RP2	-0.005	-0.018	-0.085	-0.045	-0.071
RP3	0.029	0.036	0.009	-0.022	0.000
E1	0.046	0.075	0.010	-0.045	0.006
E2	0.049	-0.019	-0.213	-0.035	-0.077
E3	0.049	-0.024	-0.073	-0.049	-0.008
E4	-0.014	-0.038	-0.039	-0.061	-0.011

Source: Authors' calculations.

In most cases, regular service use is negatively associated with the assessment of the importance of individual service quality characteristics. Five statistically significant correlations were identified with respect to the assessment of the importance of quality by respondents using parcel services. The positive correlation here concerns two aspects: instilling trust ($r_s = 0.076$; $p = 0.019$) and a sense of security ($r_s = 0.072$; $p = 0.026$). In six cases, people sending/receiving courier parcels rated the importance of service quality significantly lower, and only in the case of individual treatment did they significantly more often indicate the importance of this characteristic ($r_s = 0.075$; $p = 0.021$). Users of financial services are by far the least demanding customers. In as many as 10 cases, a statistically significant negative correlation was confirmed between the frequency of use of this type of service and the assessment of the importance of individual service quality characteristics. The more frequently these people use financial services, the less they pay attention to quality. The only noteworthy factor in this group was service time ($r_s = 0.064$; $p = 0.050$). Sales of products related to postal services had almost no impact on the assessment of the importance of postal service quality. Only three statistically significant negative correlations were observed. In the case of sales of

products unrelated to postal services, statistically significant negative correlations were found for four features. In summary, it can be said that the type of service used by the operator's customers does not influence the assessment of the importance of individual service quality features; in fact, it weakens their significance.

Table 5.

Values of correlation coefficients between the use of particular services and the assessment of the perception of Servqual features of service quality

Pair of variables	parcels	courier shipments	financial services	sale of products related to postal services	sale of products non related to postal services
T1	0.111	0.015	0.260	0.127	0.098
T2	0.133	0.014	0.212	0.123	0.069
T3	0.061	-0.003	0.214	0.084	0.076
T4	0.102	0.007	0.223	0.118	0.086
R1	0.094	-0.005	0.251	0.094	0.104
R2	0.092	0.034	0.280	0.127	0.136
R3	-0.025	-0.134	0.088	0.039	0.064
R4	0.011	0.002	0.154	0.011	0.074
A1	0.125	0.044	0.304	0.048	0.116
A2	0.024	-0.089	0.126	-0.007	0.058
A3	0.038	-0.045	0.167	0.036	0.087
A4	0.011	-0.102	0.043	-0.044	0.007
RP1	0.068	-0.114	0.088	0.004	0.012
RP2	0.126	-0.003	0.240	0.022	0.086
RP3	0.160	0.017	0.242	0.049	0.111
E1	0.079	-0.095	0.172	0.053	0.111
E2	0.101	0.010	0.222	0.069	0.111
E3	0.087	-0.017	0.138	0.029	0.069
E4	0.078	-0.030	0.167	0.052	0.090

Source: Authors' calculations.

As expected, most regular users of the operator's services rate the quality of these services highly. A statistically significant positive correlation was observed for 13 characteristics for those using parcel sending/receiving services, 16 for those using non-postal product sales services, the highest correlation (18) for those using financial services, and the lowest (7) for those using postal product sales services. However, in contrast to these assessments, five negative correlations appear between the frequency of using courier services and the assessment of service quality, including receiving help in case of problems ($r_s = -0.134$; $p < 0.001$), staff courtesy ($r_s = -0.089$; $p = 0.006$), sense of security ($r_s = -0.102$; $p = 0.002$), efficiency and speed of service ($r_s = -0.114$; $p < 0.001$) and individual treatment ($r_s = -0.095$; $p = 0.003$).

5. Conclusions

Contemporary enterprises function within a highly competitive environment. Although individual industries exhibit substantial differences, organizations across diverse sectors are progressively adopting unconventional approaches as a means to achieve differentiation and maintain a competitive advantage.

Moving on to the summary of the conducted research, it can be stated that customers are dissatisfied with the quality of services offered by this operator. According to the traditional Servqual methodology, a quality gap was identified between expectations and the service received. All dimensions received negative scores. The most important quality dimensions in the analyzed study were reliability and assurance. Among the most important determinants, respondents identified reliability factors, such as punctuality, faultlessness, staff assistance, and compliance with the offer. This means that all the most important quality characteristics relate to the core of the service. Among the ratings, the highest perceptions were identified for compliance with the offer, employees' competence and courtesy, and staff's appearance, but the gap score for each determinant was negative.

In order to reduce the risk associated with random selection of the research sample and to isolate the answers obtained from respondents who are actual customers of the analyzed organization, correlation coefficients were calculated between the frequency of using the offer and the assessment of the importance and perception of quality determinants. In the majority of cases, frequent use of a given service is negatively correlated with the perceived importance of specific service quality attributes. In summary, the type of service used by an operator's customers does not appear to significantly influence the evaluation of individual service quality dimensions; on the contrary, it tends to diminish their perceived relevance. In addition, the majority of regular users of the operator's services provide a favorable evaluation of service quality. This means that customers who regularly use this operator's services are satisfied with the quality of service. This leads to the next research question: what factors influence the negative opinions of customers who do not use or rarely use this operator's services?

Referring to the aim of the article, which was to assess the impact of service quality on the economic condition of the postal operator it can be concluded that service quality may be the determinant of the economic condition of the postal operator. Customers perceive the quality of service as unsatisfactory. This operator has a group of regular customers who indicate significantly higher perceived quality and lower expectations, but potential customers are negative about this operator's quality. They have significantly higher expectations and rate the actual quality significantly lower, which may mean they have abandoned using this operator's postal services, which, given the economies of scale, directly impacts its economic performance.

The study may be useful for the postal services industry and provide a basis for analyzing service quality among competitors. From an economic and management perspective, the study can serve as a basis for further, in-depth analysis and provide a framework for regional, national, and international comparisons.

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