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The Effect of Service Quality on Customer Satisfaction at Traxon Logistics Chennai

*S Sumiya ᵃ, Hameed Jasir J ᵇ, S Suresh Navaneetha Kumar ᶜ

ᵃ Assistant Professor, MEASI Institute of Management 147 Peters Road, Chennai 600014
ᵇ Second Year MBA Student" MEASI Institute of Management 147 Peters Road, Chennai 600014
ᶜ Professor, Rajalakshmi School Of Architecture, Thandalam, Chennai 602105

A B S T R A C T

The growing dependence of enterprises on worldwide supply networks has made goods forwarding more important than ever. Customer satisfaction is, in this case, a critical component of the success of goods moving companies. Positive feedback from clients increases the likelihood that they would use the same shipping company again and might even refer others to them. Conversely, unhappy clients are more likely to switch to other service providers, which could result in significant financial losses for the goods moving company. Although it is crucial for goods forwarding, not much research has been done on customer satisfaction.

The study's findings will have a significant impact on the freight forwarding industry because they shed light on how businesses can boost financial performance while also increasing customer satisfaction and loyalty. This study will help develop more efficient strategies for managing customer relationships in this vital industry by shedding light on the factors that drive customer satisfaction in freight forwarding.

Keywords: Service Quality, Logistics, Customer Satisfaction

1. INTRODUCTION

1.1 Meaning:

International commerce and the transfer of commodities across national borders are made possible by freight forwarding; it is a crucial aspect of world trade. With companies depending more and more on worldwide supply networks, goods shipping is more important than ever. In this case, a key component of the success of goods shipping companies is client happiness. Satisfied clients are more likely to refer other people to the shipping service provider and to utilise them again in the future.

Customer retention measures the loyalty of clients to a brand over time, while service quality assesses aspects like reliability, responsiveness, assurance, empathy, and resources. Effective management of the supply chain, from sourcing raw materials to delivering finished products, enhances logistics efficiency and customer satisfaction.

Research Methods: Surveys, interviews, focus groups used to gather customer insights and experiences. Statistical analysis used to identify patterns, trends, and factors related to satisfaction

Customer Retention: Measure of Service Quality to a brand or business. Loyal customers continue to use services over time and are likely to recommend the company.

Service Quality: Overall level of quality of company's services. Evaluated based on factors like reliability, responsiveness, assurance, empathy, and physical resources.

Supply Chain Management: Coordination of activities involved in production and delivery of goods and services. Well-managed supply chain improves logistics operations and enhances customer satisfaction.

Order fulfilment encompasses the entire process of receiving, processing, and delivering customer orders. It involves the seamless coordination of logistics activities such as

1.2 INTRODUCTION TO LOGISTICS INDUSTRY:

FREIGHT FORWARDING

Business Dictionary defines goods forwarders as people who spend significant time in masterminding and delivery of product for the benefit of shippers." A wide range of services are usually provided by them, including tracking inland transportation, setting up delivery and fare reports, scheduling payload space, arranging freight charges, combining freight, load protection, and filling protection claims.

LOGISTICS

The comprehensive management of the essential operational functions of the store network is known as logistics. It is a technique for managing the development stockpile as well as the goods materials from the point of extreme utilisation of the relevant data stream. The goal of logistics in military science is to keep the armed forces supplied while sabotaging the enemy's supply lines because an armed force without supplies and transportation is defenceless.

Distribution

The operations and warehouse sector is seeing an increase in interest due to the implementation of flexible working hours and the growth of online shopping. There is a growing need for distribution centres, storage facilities, and other man-made enterprises in general.

Multi-Platform Network

Network Across Multiple Platforms Right now, companies of all sizes are attempting to determine how to operate supplies in the field more efficiently and successfully by utilising omni-channel distribution tactics. These companies manage delivery both offline and online with same efficiency. The visitors can experience anxiety due to the varying levels of risk and demand.

Focus on Multimodal Operations

Following the epidemic, the use of air, sea, and air for transportation management has increased. The assistance unit for any kind of conveyance administration that improves the request for proposals..

Assiduity connection and advanced force situations

Regardless of size, distribution networks and low force scenarios have hurt companies of all kinds. Advanced force scenarios and the assiduity relationship Furthermore, many companies chose to maintain enhanced force scenarios as safety precautions, especially for expensive goods. All enterprises, regardless of size, have their viability and continuity assessed

Showing up to the last stretch

Retailers should check the location of dispersion centres in order to gauge the traps based on territory. To ensure optimal inflow operations with limited budgets, it is imperative for individuals involved in exporting and worldwide operations to assess the exporting strategy position by position as well as the risks associated with each destination.

Conceptual Framework:

Dependent Variable:

Customer Satisfaction: Customers' contentment after interacting with a product or service, reflecting their evaluation of quality, service, and company interactions.

Independent Variables:

- **Service Quality:** Excellence in products/services, including performance, features, and design, influencing customers' satisfaction and perception of value.

- **Pricing:** Perceived value in relation to cost, including affordability, transparency, and discounts, affecting customers' satisfaction and purchase decisions.

- **Physical evidence:** Logistics is heavily reliant on the physical characteristics and calibre of packaging materials as well as the legibility and precision of labelling. In addition to safeguarding the products, attractive packaging raises brand awareness.

- **Internet Service:** Internet services make it easier to integrate with e-commerce systems, giving online retailers smooth order fulfilment, inventory control, and processing. Integration improves the purchasing experience for customers and guarantees delivery on schedule.

- **Customers Loyalty:** Consumers respect logistics companies who reliably deliver their goods undamaged and on schedule. Building trust and loyalty requires meeting delivery deadlines and guaranteeing the safe arrival of items.

1.10 PROBLEM STATEMENT:

- Inefficient Route Optimization and Delivery Management Traxon Logistics faces challenges in optimizing delivery routes and managing deliveries effectively, leading to increased costs, longer delivery times, and customer dissatisfaction. Current systems lack real-time tracking, coordination, and fail to adapt to dynamic variables such as traffic conditions and delivery priorities. This results in missed delivery deadlines, inefficient resource utilization, and increased operational complexities.Without a comprehensive solution, Traxon Logistics risks losing competitive advantage and customer trust in an increasingly demanding market.

Conceptual Framework:
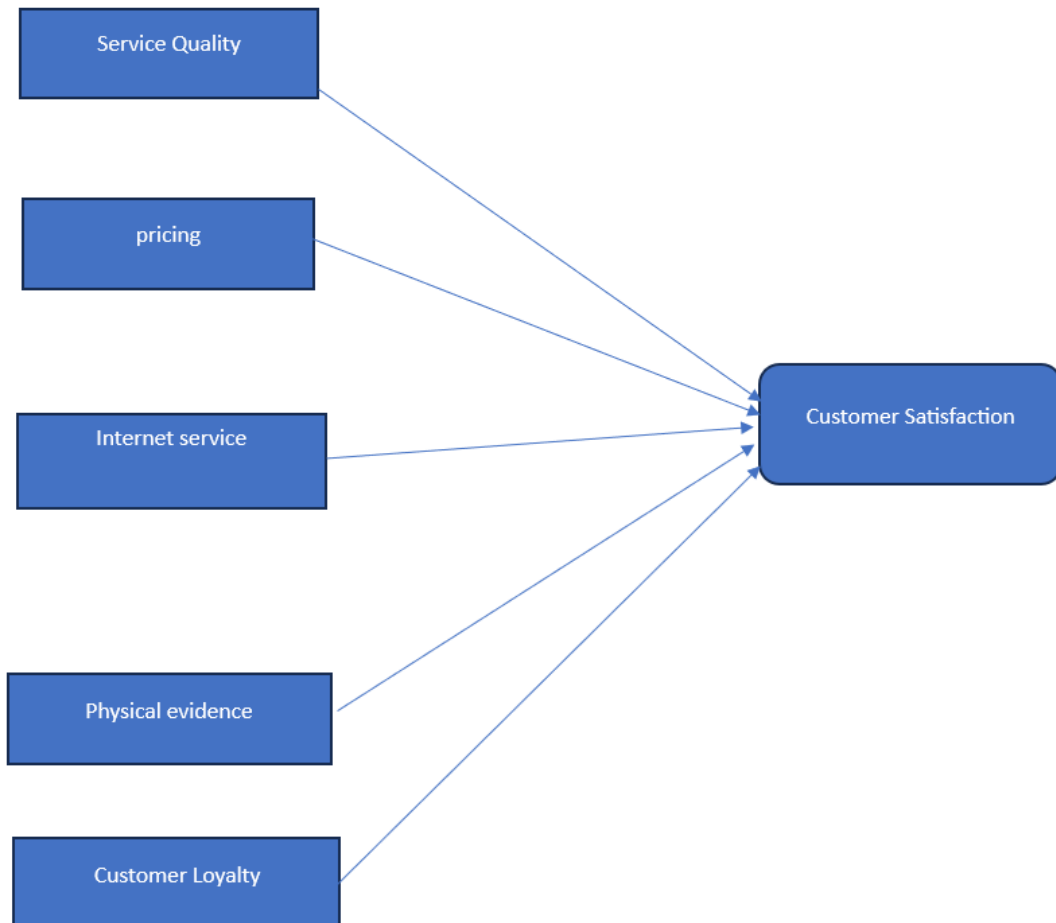
1.11 NEED FOR THE STUDY:

To guarantee prompt delivery of goods, Traxon Logistics probably oversees intricate supply systems. Understanding supply chain management techniques, such as inventory control, warehousing, transportation, and distribution, can be aided by researching the business. Worldwide Operations Traxon Logistics may conduct business internationally or form alliances with other nations. Analysing the business might reveal information on handling international logistics, such as cross-border transportation.

1.12 OBJECTIVES OF THE STUDY:

PRIMARY OBJECTIVE:

To Analyse Traxon Logistics' overall performance in terms of important indicators including customer happiness, cost-effectiveness, accuracy, and delivery time. Analyse the market position of Traxon Logistics by looking into its share of the market, the competitive environment, and its potential for expansion into new areas or industries

SECONDARY OBJECTIVES:

> ➢ To Evaluate the effectiveness of TraxonLogistics's processes for inventory management, warehousing, and transportation in order to pinpoint areas in need of enhancement and optimisation.

> ➢ To find Utilise surveys, feedback analysis, and comparisons with industry benchmarks to gauge how satisfied customers are with Traxon Logistics' services.

> ➢ To Analyse how much Traxon Logistics uses blockchain, artificial intelligence, and the Internet of Things in its operations, and assess the effects on productivity and client satisfaction.

> ➢ To Examine the sustainability programmes offered by Traxon Logistics.

1.13 SCOPE OF THE STUDY:

> ➢ Time Frame: Ascertain whether the time period being examined spans historical data to analyse patterns, or if it is a fixed timeframe such as months or years. Take into account if the study will concentrate on a specific seasonally or if it must account for changes in demand over time.

> ➢ Geographical Location: Specify the study's geographic scope, including local, regional, national, and worldwide areas. Take into account the distinct logistical opportunities and problems brought about by various places, such as urban versus rural areas or several nations with disparate infrastructures and legal systems.

> ➢ Departmental Focus: Determine which individual divisions or operations—such as supply chain optimisation, inventory management, transportation, or warehousing—will be looked at within the logistics industry. Choose whether the study will include one department, several departments within one organisation, or cooperation across various supply chain organisation

Review Of Literature

Akıl and Ungan., (2022) Investigates the connection between consumer pleasure, loyalty, and the quality of e-commerce logistics services. The authors highlight the importance of well-planned operations management quality in the online company sector, as it can significantly impact Service Quality and dependability. The literature study covers prior studies on the quality of logistics services, customer happiness, and loyalty as well as the part e-commerce plays in driving the growth of the logistics sector. This study explores the relationship between survey-based empirical methodology, customer satisfaction with logistics services, and loyalty in e-commerce. The findings suggest that reliability and Service Quality are impacted by the quality of operations management. The study also finds that Service Quality modifies the relationship between quality and consistency in coordinated operations management, highlighting the importance of focusing on Service Quality to drive.

Lai and Jang., (2022) The factors that affect customers' satisfaction with parcel locker services in last-mile logistics are examined in this article. The authors stress the importance of last-mile logistics in the e-commerce industry since it is the last stage in the delivery process and can significantly affect customer satisfaction. The writing survey discusses previous research on Service Quality in the operations sector as well as the growing popularity of package storage services as a last-mile transportation option.

Gupta and Mathiyazhagan (2022) examines, within the context of Indian logistics service providers, the relationship between customer satisfaction and service quality characteristics. The literature review emphasises the importance of understanding customer expectations and perceptions, as well as the logistics industry's service quality and customer happiness. The authors look at the various aspects of administration quality, such as effects, affirmation, consistency, responsiveness, and empathy, as well as how this affect Service Quality.

Wang, Xiang, and Others (2021) examines the possibility of modifying costs and Service Quality in relation to cold chain operations. Cold chain logistics is a crucial component of the supply chain that benefits perishable commodities such as food, medications, and other products. The writing survey goes over previous research on cool chain coordinated operations, including issues like maintaining temperature control, enhancing delivery routes, and modifying costs and Service Quality. The study proposes a paradigm for cold chain logistics that strikes a balance between cost and client satisfaction.

Kaswengi and Lambey-Checchin (2020) Investigate the role of logistics service quality (LSQ), product quality (PQ), and perceived convenience (PC) in the retailer-customer relationship of food drive-throughs, and their impact on Service Quality. The authors emphasized the significance of LSQ, PQ, and PC in influencing customer perceptions of service quality and loyalty through a comprehensive literature review. In the context of food drive-through restaurants, their study found that Service Quality was significantly influenced by all three factors.

Bosona (2020) With an emphasis on "Urban Freight Last Mile Logistics - Challenges and Opportunities to Improve Sustainability," Bosona's "A Literature Review" (2020) aims to offer a thorough analysis of the literature in this area, with a particular focus on identifying the barriers and chances to improve sustainability. The article looks at possible remedies for the problems last mile logistics encounters, such as air and noise pollution,

3. RESEARCH METHODOLOGY

The methodical structure and procedures used in the research process are referred to as research methodology. It includes the overarching plan and technique used to solve a problem or research issue, gather pertinent data, assess, and interpret the findings, and make insightful judgements.

3.1 RESEARCH DESIGN:

A creative research design is the result of painstaking planning, which includes a carefully thought-out plan, a complex framework, and a well-thought-out investigation method. Its two goals are to solve the riddles surrounding research topics and to do exact control over factors that could affect the results. This layout acts as a compass, pointing researchers in the direction of the many kinds of information and sources that are pertinent to the specifics of the research topic at hand.

Descriptive research is the skilfully selected research approach for this assignment, tastefully crafted to reveal the nuances of the topic. Inherently, this study has 31 descriptive in character, it values careful data collecting and thorough observation. An organised questionnaire that is carefully crafted to encapsulate the core findings of the study acts as a conduit for obtaining priceless information.   .

3.1.2 DESCRIPTIVE RESEARCH

This analytical approach looks outward, embracing the rich diversity of human experiences, occasions, and circumstances. It perfectly captures the essence of the current world, serving as a monument to the power of observation. Researchers set out on a journey of discovery through its lens, uncovering the minute elements that mould our perception of the world around us.

3.2 SAMPLING METHODOLOGY:

A technique for selecting sample members from a population is called a sampling method. Non-probability sampling was used in the study to choose the samples.

3.2.1 POPULATION:

Customers of 300 are the study's population. The population is made up of all components, including people and things, that fit the requirements for being included in a study group and from which representative samples are drawn for in-depth analysis. The population as a whole is known as the Universe.

3.2.2. SAMPLING FRAME:

The source material or apparatus from which a sample is taken is referred to in statistics as a sampling frame. It is a list of every member of a population that is eligible for sampling; this list may consist of people, homes, or organisations. The study's sample frames consist of Traxon Logistics clients.

3.2.3 METHOD OF SAMPLING:

CONVENIENCE SAMPLING

The study employed Non Probability Purposive Sampling sampling as its sample technique.

3.3 DATA COLLECTION METHODOLOGY:

In order to obtain data for this study, surveys were utilised. A survey is a type of research tool that uses standardised questionnaires or interviews with a chosen sample of participants to gather data. Despite the fact that a survey questionnaire is commonly misinterpreted of actuality, it is only a single phase of a longer survey process.

3.3.1 DATA COLLECTION METHOD:

Primary and secondary data are both included in data collecting. The information provided above has been acquired by the researcher.

The data collected for the projects comprises of

• Primary data

• Secondary data

1. Primary data:

By using a systematic questionnaire to conduct the survey, data from primary sources have been gathered.

2. Secondary data:

The official and unofficial records of the company have been used to compile secondary data. Secondary data has been gathered through journals, periodicals, websites, yearly reports, and other publications.

3.3.2 DATA COLLECTION INSTRUMENT QUESTIONNAIRE:

A set of targeted or survey questions designed to extract particular data from participants.

33 It achieves four main objectives: 1) compile pertinent data, 2) standardise data, and 3) make information easy to analyse. 4) To provide variety and interest in the questions. 5) Reduce prejudice in the creation and posing of questions.

3.4 PILOT STUDY

Before beginning a full-scale inquiry, a pilot study is an essential first step in the research process that is meant to test, validate, and improve research tools and procedures. This little investigation enables Researchers should optimise their methods for gathering data, evaluate the efficacy of their questionnaires, ascertain whether sampling and recruitment tactics are feasible, and interpret preliminary results.

The response takes on for pilot study is 20. The quality and dependability of the ensuing primary study are improved by researchers by resolving any problems and making the required changes at this point. Pilot studies ensure a more fruitful and perceptive research endeavour by reducing potential risks and problems, saving time and money.

RELIABILITY TEST

Reliability Statistics	
Cronbach's Alpha	N of Items
.702	34

INFERENCE

For research purposes, a Cronbach's Alpha of more than 0.7 is usually regarded as appropriate, while a value more than 0.7 is frequently regarded as very good. Thus, your scale exhibits good internal consistency with a value of 0.702, suggesting that the items are trustworthy indicators of whatever it is that you are evaluating.

3.5 HYPOTHESIS

Hypothesis: The study's hypothesis is that a number of variables, such as pricing, Service quality, Internet service, physical evidence, have an impact on Customer satisfaction. It is theorised that all of these elements influence how service quality and make decisions in the marketplace.

3.6 TOOLS AND TECHNIQUES

1. Correlation

2. Chi-square test

3. Friedman Test

4. One Way ANOVA

4.1 STATISTICAL ANALYSIS

4.1.1 CHI SQUARE

Null hypothesis (H0): There is no association between Service Quality and choosing Logistics service at Traxon Logistics.

Alternative hypothesis (H1): There is a association between Service Quality and choosing Logistics service at Traxon Logistics.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	67.777[a]	45	.016
Likelihood Ratio	44.952	45	.474
Linear-by-Linear Association	.715	1	.398
N of Valid Cases	108		

INFERENCE:

The Pearson chi square significant value is p<0.005. At one percent level, null hypothesis is rejected and therefore there is association among Service Quality and choosing Logistics service.

4.1.2 CORRELATIONS

Null Hypothesis: There is no association between Service Quality and customer satisfaction at Traxon Logistics.

Alternative Hypothesis: There is a association between Service Quality and customer satisfaction at Traxon Logistics

Correlations		Internetservice	Service equality	serqual	prices	Physicalevidence	Customersatisfication
Internetservice	Pearson Correlation	1	.365[**]	.394[**]	.277[**]	.188	.206[*]
	Sig. (2-tailed)		.000	.000	.004	.052	.033
	N	108	108	108	108	108	108
Servicequality	Pearson Correlation	.365[**]	1	.214[*]	.123	.079	.111
	Sig. (2-tailed)	.000		.026	.206	.416	.252
	N	108	108	108	108	108	108
Serqual	Pearson Correlation	.394[**]	.214[*]	1	.233[*]	.170	.150
	Sig. (2-tailed)	.000	.026		.015	.079	.120
	N	108	108	108	108	108	108
Prices	Pearson Correlation	.277[**]	.123	.233[*]	1	.281[**]	.184
	Sig. (2-tailed)	.004	.206	.015		.003	.056
	N	108	108	108	108	108	108

Physicalevidence	Pearson Correlation	.188	.079	.170	.281**	1	.368**
	Sig. (2-tailed)	.052	.416	.079	.003		.000
	N	108	108	108	108	108	108
Customersatisfication	Pearson Correlation	.206*	.111	.150	.184	.368**	1
	Sig. (2-tailed)	.033	.252	.120	.056	.000	
	N	108	108	108	108	108	108

INFERENCE:

The correlation coefficients reveal significant correlations between Internet service, service quality with significance at a level of $p < 0.01$. This shows interdependency, indicating that changes in one variable correspond with changes in other variables, emphasising their mutual impact in the scenario under investigation.

4.1.3 ONE-WAY- ANOVA

Null Hypothesis: There is no significant association between the internet service and its service quality at Traxon Logistics

Alternative Hypothesis: There is a significant association between the internet service and its service quality at Traxon Logistics

Descriptives								
Service Quality								
					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
1	18	15.5556	1.61690	.38111	14.7515	16.3596	14.00	21.00
2	74	15.7568	2.60564	.30290	15.1531	16.3604	7.00	22.00
3	15	15.6000	2.32379	.60000	14.3131	16.8869	12.00	20.00
4	1	21.0000	.	.	.	.	21.00	21.00
Total	108	15.7500	2.45378	.23611	15.2819	16.2181	7.00	22.00

ANOVA					
Service Quality					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	28.584	3	9.528	1.609	.042
Within Groups	615.666	104	5.920		
Total	644.250	107			

INFERENCE:

The ANOVA results demonstrate that there are significant differences in mean scores between groups for consumer Internet service, price, and Service Quality, Customer Satisfactions with p-values below 0.05. This shows that various groups may differ in these characteristics. But for brand equity and nevertheless, the p-values are greater than 0.05, indicating that there are no appreciable variations in the mean scores between the groups. Therefore, we deduce that while brand equity and advertising are largely constant, there are notable differences in Internet service, pricing, and customer satisfactions among groups.

4.1.4 FRIEDMAN TEST

Null Hypothesis: There is no association between Service Quality and prices at Traxon Logistics.

Alternative Hypothesis: There is a association between Service Quality and prices at Traxon Logistics.

Ranks	
	Mean Rank
Internet service	4.61
Service quality	3.75
prices	4.93
Physical evidence	2.17
Customer satisfaction	4.09

Test Statistics^a	
N	108
Chi-Square	306.381
df	5
Asymp. Sig.	.000
a. Friedman Test	

INFERENCE:

From the table, it was observed that the P value is less than 0.01 and hence null hypothesis is rejected at 1% significance level. Therefore, it was concluded that There is a significant difference in the mean rank of Service Quality and prices at Traxon Logistics.

4.2.5 ONE SAMPLE T TEST

Null Hypothesis: There is no association between prices and customer satisfaction at Traxon Logistics.

Alternative Hypothesis: There is a association between prices and customer satisfaction at Traxon Logistics.

One-Sample Statistics				
	N	Mean	t	Sig. (2-tailed)
Service quality	108	21.2407	68.258	.000

prices	108	23.8981	66.705	.000
Physical evidence	108	17.5370	63.556	.000
customer satisfaction	108	21.7130	56.210	.000

INFERENCE:

Since p values is < 0.05, null hypothesis is rejected. hence there is significance difference between male and female clients with respect to Reliability, Responsiveness and Cost Factors of prices and customer satisfaction at Traxon Logistic

CONCLUSION:

The study "The Effect of Service Quality on Customer Satisfaction " provides insightful information about the relationships that exist between customer satisfaction,demographic,characteristics,andservicequality.Significant relationships between customer satisfaction, service quality, and demographic factors such gender, income level, and marital status were found in the study. Remarkably, different demographic groups were found to place differing degrees of emphasis on variables including pricing, dependability, and internet service.Furthermore, the study emphasises how crucial it is to provide customised services and marketing plans in order to cater to the various demands and preferences of Traxon Logistics' clientele. Traxon Logistics may better align its offers with the expectations of different demographic groups by employing gender-specific marketing methods, broadening recruitment efforts and providing income-based service packages.

BIBLIOGRAPHY:

Yoganandan, G., Vasan, M., &Vértesy, L. (2022). Evaluating the effect of logistics service quality on customer satisfaction and loyalty. *International Journal of Services and Operations Management*.

Gupta, A., Singh, R. K., Mathiyazhagan, K., Suri, P. K., & Dwivedi, Y. K. (2022). Exploring relationships between service quality dimensions and customers satisfaction: empirical study in context to Indian logistics service providers. *The international Journal of logistics management*, *34*(6), 1858-1889.

Lin, X., Mamun, A. A., Yang, Q., &Masukujjaman, M. (2022). Examining the effect of logistics service quality on customer satisfaction and re-use intention. *PloS one*, *18*(5), e0286382.

Anabila, P., Ameyibor, L. E. K., Allan, M. M., &Alomenu, C. (2022). Service quality and customer Satisfaction in Ghana's hotel industry: The mediation effects of satisfaction and delight. *Journal of Quality Assurance in Hospitality & Tourism*, *23*(3), 748-770.

Oh, H., & Lee, H. (2021). A study on cross-border e-commerce with logistics service quality impact on customer satisfaction using AHP technique. *Journal of Korean Society of Transportation*, *39*(2), 204-219.

Al-Slehat, Z. A. F. (2021). Determining the effect of banking service quality on customer Satisfaction using customer satisfaction as a mediating variable: An applied study on the Jordanian commercial banking sector. *International Business Research*, *14*(4), 1-58.

Hendrawan, A., Fauzi, A., &Sembiring, B. K. F. (2021). Effect of Service Quality and Company Image on Customer Satisfaction & Customers as Intervening Variables (Case Study of Brilink Agent PT Bank Rakyat Indonesia (Persero) TBK. Medan Region Office). *International Journal of Research and Review*, *8*(8), 196-202.