**SERVICE QUALITY OF FREIGHT FORWARDER IN IMPORT AND EXPORT OPERATIONS**

**Aswini Krishna \* Dr.S.Vasantha\*\***

\*ASWINI KRISHNA, MBA, School of management studies, Vels Institute of Science Technology and Advanced Studies (VISTAS), aswinikrishna2000@gmail.com

\*\* Corresponding author: Dr. S. VASANTHA. Professor, School of Management Studies, Vels Institute of Science Technologies and Advanced Studies (VISTAS), vasantha.sms@velsuniv.ac.in

ORCID

[**https://orcid.org/0009-0008-4535-9291**](https://orcid.org/0009-0008-4535-9291) **(Aswini Krishna),** [**https://orcid.org/0000-0003-2087-1340**](https://orcid.org/0000-0003-2087-1340) **(Vasantha S)**

**Abstract**

The objective of this study is to assess the level of service that freight forwarders offered for import and export operations. A goods forwarder is a person or company that plans the transportation of large orders from producers or manufacturers to markets or final distribution destinations on behalf of individuals or companies. To facilitate the shipping of goods, forwarders will enter into a contract with a carrier. The goal of the study was to evaluate the quality of logistics services provided by the goods forwarder. Most of the time, a forwarder is more of an expert in supply chain management than a carrier. Stated differently, a goods forwarder is a non-asset-based third-party logistics service, or what the freight industry would refer to as a "travel agent." A forwarder will contract with asset-based carriers to transport cargo that ranges from manufactured goods to unprocessed agricultural products. To meet customer demands,logistics management, also referred to as supply chain control, plans, executes, and controls the storage, forward and reverse movement of goods, services, and related data between the point of origin and the point of consumption. Chennai, an industrial hub in India, is home to a specific subset of clients and customers who were the focus of the study. The primary objective of this project is to "evaluate the logistics service quality of the goods forwarder." Evaluating the quality of service provided by goods forwarders to their clients is essential. To research the wide range of services provided by goods forwarders, ascertain the demands of their customers, and evaluate the quality of service through the application of key performance indicators. Primary data is collected through questionnaire survey method to evaluate the service quality of the freight forwarders

**KEY WORDS:**

Freight forwarder,Service quality, Supply chain management, Logistics management and Key performance indicators.

**1. Introduction**

The main goal of the study is to ascertain the level of service quality offered by the product forwarders. . Determining customer satisfaction based on the goods forwarder's services is the main objective of this project. It also highlights how important it is to create an export-import invoice, clear customs, and get a shipping bill number from the customs office.

 The objective of the paper is to examine level of service that freight forwarders offer to their wide range of clients. Freight forwarders play a critical role in the efficient movement of goods across international borders. They offer a range of high-quality services, such as precise documentation, prompt delivery, effective communication, tracking capabilities, and problem-solving ability. These elements improve clients' smooth logistical experiences, which raises customer happiness and boosts supply chain effectiveness. As an intermediary between shippers and carriers, goods forwarders provide essential services such as space scheduling, cargo planning, documentation organization, and more. They focus on raising the caliber of their services in order to satisfy client demands and boost profitability. Knowing what customers wants, communicating clearly, anticipating their inquiries, training staff, fostering long-lasting connections, and keeping an eye on customer satisfaction are all ways to improve customer service.

 Achieving dependability requires using real-time tracking systems and collaborating with reputable carriers. Being flexible is necessary to meet the diverse needs of clients. Sales support is essential in the product forwarding sector for efficient problem response, seamless operations, and customer satisfaction through technology. Personalized services, excellent communication, real-time visibility, predictive analytics, and continual development through feedback analysis are a few strategies to increase customer satisfaction in logistics. As experts in supply chain management, they interact with carriers to ease the flow of goods. Although they don't transport the items themselves, they work with carriers to move cargo, which can range from manufactured commodities to unprocessed agricultural products. Freight can be moved using a variety of vehicles, including trucks, trains, ships, and aero planes. Frequently, a single shipment will use more than one kind of carrier. Managing overseas shipments, including processing customs paperwork and other associated duties, is the area of expertise for international freight forwarders. Ninety percent of all international freight is handled by water, making shipping a major means of moving both persons and cargo. Under the International Maritime Organization's supervision, the shipping sector uses well-traveled maritime lanes for operations. In nations with strong commerce, the shipping industry is greatly impacted by export-import activity. When compared to flying, sea transportation is thought to be both safer and more economical. Almost a million seafarers currently oversee a varied fleet of about 50,000 foreign trade ships, which includes bulk carriers, cruise ships, container ships, ferries, and specialty vessels.

Approximately 95% of India's trade, measured in volume and 70% in value, is carried out by sea, according to the ministry of shipping. There are 187 minor ports and 12 large ports in India. In 2018, cargo traffic was recorded at 1.052 million metric tons (MMT). By 2019, it is expected to exceed 2.016 MMT. The nation's trade and economic development are greatly aided by India's ports and shipping industry.

Among the twelve principal ports in India, Chennai Port is the second-biggest port in the country by volume of cargo handled annually. Located in the northeast corner of Tamil Nadu, it serves the regions of Tamil Nadu, Pondicherry, South Andhra Pradesh, and portions of Karnataka. It is situated on the southeast coast of India at latitude 13.06' N and longitude 80.18' E. Located on the eastern coastal plains, a level coastal plain, it has grown from small beginnings 125 years ago to become a major east coast centre for India. Although the international marine route is around 600 nautical miles away, its strategic location, close access to the market, low pricing, and dedication to safety and security make ita preferred port for trade.

DOCUMENTATION

ON TIME DELIVERY

TECHNOLOGIES

SERVICE QUALITY

FREIGHT RATES

OPERATIONS

BUSINESS RATES

**2. LITERATURE REVIEW**

Olga n gutnikova, Liliya e. Pavlunenko, Svetlana yu teskhla (2022) the objective of this research is to assess the quality of services and suggest models for the quality management system. It suggests techniques to improve result objectivity as well as service indicators that fully represent its degree of quality. The caliber of commercial businesses and disparities discovered in legal documents led to the creation of a modified strategy that, when applied, can improve the efficiency of quality control systems.

Olusola ralph aluko, Godwin lroroakpo ldoro and Modupe cecilia mewomo (2020). The aim of this study is to examine the relationship between client satisfaction metrics and perceived service quality, with a particular emphasis on engineering consultancy services used in construction projects. Ten key managerial and technological indicators that are essential for assessing customer satisfaction were identified by the study. These results point to a way for professional service providers to priorities staff training, continuously improve their professional development, and regularly improve both technical and management aspects of their services.

Nazlican gozacan and Cisem lafci (2020) the study highlights the growing importance of operational efficiency in the logistics industry, with a focus on the efficient transportation and storage of goods, services, and information from the point of origin to the final consumer. Meeting consumer requests requires effective logistics management. The study uses 116 key performance indicators (KPIs) that were found through a review of the literature, with a particular emphasis on the top five KPIs that are used most frequently.

Sheng teng huang, Emrah bulut, Okan duru (2019). The objective of this research is to improve the quality of services provided by international goods forwarders and to pinpoint workable business strategies that would raise customer satisfaction levels. Nations and businesses gain greatly from international trade, which makes it easier to interchange goods and gives consumers a wide range of options for what to buy. Customer relationship management is one of the most important technical metrics. The goods forwarding industry functions in a very competitive environment and is vulnerable to replacement by other logistics service providers.

Dr. Ali mohamed and Abbas kamali (2018) This article examines strategies for improving On Time Delivery (OTD) in Bahraini businesses in order to provide them a competitive advantage. It looks at efficient techniques based on international norms and academic literature. On-time delivery is essential for maintaining consumer confidence and business longevity, both of which increase profitability. Key Performance Indicators (KPIs) are utilized to assess punctual delivery, guaranteeing items are shipped out on time. This approach helps Bahraini businesses continue to grow and thrive in the marketplace.

Milorad kilibarda et al (2016) the purpose of this study is to investigate how consumers in different market categories see the caliber of goods forwarding services. The results show that different market groups receive different levels of quality from goods forwarding companies when it comes to logistics services. Furthermore, the service structure affects the expectations and quality perceptions of the customer. The research methodology and results have practical consequences and establish a foundation for improving logistics and forwarding services.

Dr. Mike iravo and R. George ochre (2016) Lead time is a crucial component of the supply chain that affects all parties involved and accounts for a significant amount of logistical success. The results indicate that variability in lead time across production, shipping, and customs brokerage turnaround times, as well as receipt and inspection velocity, significantly impacts quality, cost, timely delivery, and overall quality within the rapidly evolving telecommunications sector. The primary objective of this study is to identify the factors contributing to lead time variability and assess its ramifications on inbound logistics performance.

Yiting xing, et al (2013).The service industry, accounting for 80% of the US's GDP, is crucial for a nation's competitiveness. The paper examines the state of operations research (OR) in the service sector, identifying new requirements and limitations. It categorizes recent OR-related articles into five active sectors: transportation, warehousing, information and communication, human health and social assistance, retails and wholesales, and financial and insurance services. Future research directions are discussed.

Changfeng, Zhu qingrong, Wang (2010).The consumption time of every link and its operational efficiency may affect the entire freight forwarding time, which can influence the transit period of freight, as well as the formulation and achievement of the transportation organizations scheme and the transportation contract. Transit period is defined as the time is taken for transporting freight from origination to χ destination with corresponding organization methods.

Angappa gunasekaran, Bulent kobu (2007) Metrics and performance measures are essential for effectively managing logistics operations in this cutthroat global environment. In the setting of a new organizational environment, prioritizing particular metrics becomes crucial even though classic performance measurements are still useful. The order of importance is determined by a review of the literature and conclusions drawn from documented case studies. The report also makes recommendations for possible directions for further investigation in this field.

**3. Objectives of the study**

1. The primary objectives of this study is to assessing the service quality of freight forwarders and customer satisfaction regarding the overall service provided by these forwarders.
2. To examinethe Key Performance Indicators (KPIs) in freight forwarding operations; and analyzing the effectiveness of employees within freight forwarding companies.

**4. Research Gap**

Freight forwarders encounter numerous challenges and considerations in sustaining client relationships and enhancing customer satisfaction. These include timely delivery, document management, and employee responsiveness to customer inquiries within the freight forwarding company. Thus, this study was conducted to address these issues. Its main aim is to assess the logistics service quality of the freight forwarder.

In order to attain the above primary objective, the under mentioned specific objectives were considered:

* + - * To identify the client requirements and technical measures to assess service quality
* To determine key performance indicators to evaluate service quality

**5. Methodology**

Research methodology is a structured approach employed to methodically address research inquiries. It can be viewed as the systematic study of how research is conducted, encompassing various steps typically undertaken by a researcher to investigate a problem, along with the rationale behind these steps.

 In this survey, the sampling technique employed is convenient sampling The sample size consists of 50 respondents for this study. Questionnaires are distributed to participants via Google Forms, and their responses are subsequently recorded for analysis.

Research design refers to the framework of research methods selected by a researcher. It is tailored to the specific type of research being conducted, whether it is a survey, correlation study, or regression analysis. Essentially, a research design serves as a comprehensive blueprint guiding a research study toward its objectives. It facilitates the collection, measurement, and analysis of data, providing a detailed plan of action for the researcher. By defining the problem and identifying relevant data, it streamlines the research process, maximizing efficiency.

The descriptive research design is a methodical approach employed to provide a systematic description of a population, situation, or phenomenon, without altering variables. Its objective is to address questions related to what, where, when, and how, but not why. This form of research utilizes a diverse range of research techniques, encompassing both qualitative and quantitative methods like surveys and observations.

**6. Primary data.**

In this research, data is gathered directly from customers and clients of a logistics company through a questionnaire method.

Secondary data - The information was collected from the company magazines, various books and alsofromtheinternet.

The sample size refers to the number of sampling units selected from the population for clients and customer’s of freight forwarding company. The sample size of this research is 50.

The researcher utilized the mean and standard deviation for response analysis.

**7. Results**

The study's results rely on the presumption that participants have provided information in the survey.

**TABLE 1: Descriptive statistics of service quality**

|  |
| --- |
| **Descriptive Statistics** |
| **SERVICE QUALITY** | **Mean** | **Std.** **Deviation** |
| I feel happy for overall service provided by the company | 4.22 | .648 |
| The company follows Strategies for preventing cargo damage and loss | 3.90 | .863 |
| The company provides quick and efficient response for enquires | 3.94 | .890 |
| The company give more importance to Resolve all complaints/ solve problems | 3.66 | .961 |
| I feel the company provide accurate service at first time | 3.58 | 1.032 |

INFRENCES

In the table above, the average and variability of respondents are determined according to their perceptions of service quality. Among the various factors, the statement "I feel happy with the overall service provided by the company" stands out with the highest average score of 4.22 and a standard deviation of 0.648.

**TABLE 2: Descriptive statistics of Documentation**

|  |
| --- |
| **Descriptive Statistics** |
| **DOCUMENTATION** | **Mean** | **Std.** **Deviation** |
| The company facilitate documents leads to the efficiency of the shipment | 3.90 | .931 |
| Company gives more focus on Fulfillment of shipment status updates | 3.66 | 1.018 |
| I am happy with their safe transactions, invoices and their documentation procedure | 3.74 | .986 |
| The company take initiatives to maintain complete set of documents | 3.72 | .970 |
| The company have freight bill accuracy  | 3.38 | 1.105 |

INFRENCES

Table 2 presents the averages and standard deviations of respondents' ratings related to their documentation experience. Of all the factors considered, the statement "The Company’s facilitation of documents enhances the efficiency of shipment" receives the highest mean score of 3.90, with a standard deviation of 0.931.

**TABLE 3: Descriptive statistics of Technologies**

|  |
| --- |
| **Descriptive Statistics** |
| **TECHNOLOGIES** | **Mean** | **Std.** **Deviation** |
|  The company using tracking system and IOT devices for improving operational efficiency  | 3.90 | .909 |
| Company facilitate the technology knowledge affect the shipment process | 3.94 | .935 |

INFERNCES

Table 3 showcases the averages and standard deviations of respondents' assessments concerning technologies. Among the various factors analyzed, the statement "The Company’s facilitation of technology knowledge impacts the shipment process" receives the highest mean score of 3.94, with a standard deviation of 0.935.

**TABLE 4: Descriptive statistics Operations**

|  |
| --- |
| **Descriptive Statistics** |
| **OPERATIONS** | **Mean** | **Std.** **Deviation** |
| 13) I am satisfied with their utility services (Factory, CFS, Warehouse) stuffing | 4.02 | .769 |
| 14) The company’s network connection is very attractable to customers | 3.68 | .957 |
| 15)The company provide more importance to equipment utilization of shipment | 3.90 | .839 |

INFERNCES

Table 4 presents the averages and standard deviations of respondents' assessments related to documentation. Among all the factors considered, the highest mean score is attributed to the satisfaction with stuffing services provided by utility facilities (Factory, CFS, and Warehouse). Specifically, this statement attains the highest mean of 4.02, with a standard deviation of 0.769.

**TABLE 5: Descriptive statistics of Key performance indicators**

|  |
| --- |
| **Descriptive Statistics** |
| **ON TIME DELIVERY** | **Mean** | **Std.** **Deviation** |
|  I feel that company manages on-time delivery rates | 3.92 | .900 |
| The company manages transit days in shipment | 3.48 | 1.266 |
| The company follows real time monitoring to improve on-time deliveries  | 3.70 | .974 |
| The company follow some Strategies to manage lead time | 3.56 | 1.033 |
| The company try to fulfill order accuracy without cargo damage | 3.70 | 1.147 |

INFRENCES

Table 5 showcases the averages and standard deviations of respondents' evaluations concerning key performance indicators. Among all the factors examined, the highest mean score is attributed to the statement "I feel that the company effectively manages on-time delivery rates." Specifically, this statement attains the highest mean of 3.92, with a standard deviation of 0.900.

**TABLE 6: Descriptive statistics of Key performance indicators**

|  |
| --- |
| **Descriptive Statistics** |
| **FREIGHT RATES** | **Mean** | **Std.** **Deviation** |
| The company maintain average freight rate per ton more than their competitors | 3.92 | .900 |
| I feel freight forwarding company act important role in freight payment | 3.48 | 1.266 |

INFERNCES

Table 6 presents the averages and standard deviations of respondents' evaluations regarding key performance indicators. Of all the factors analyzed, the statement with the highest mean score is "The Company maintains an average freight rate per ton higher than its competitors." Specifically, this statement achieves the highest mean score of 3.92, with a standard deviation of 0.900.

**TABLE 7: Descriptive statistics of Key performance indicators**

|  |
| --- |
| **Descriptive Statistics** |
| **BUSINESS RATING** | **Mean** | **Std.** **Deviation** |
| I feel happy about their employee co-ordination | 4.02 | .979 |
| The company frequently meet delivery deadlines for imported and exported goods | 3.94 | .913 |
| The company staffs are always polite and helpful | 3.96 | .807 |
| I am interested to continue with freight forwarder | 4.02 | .795 |

INFERNCES

Table 7 showcases the averages and standard deviations of respondents' assessments concerning key performance indicators. Among all the factors examined, the statement "I feel satisfied with the coordination among employees" receives the highest mean score. Specifically, this statement achieves the highest mean of 4.02, with a standard deviation of 0.979.

**TABLE 8: CORRELATION**

Correlation Analysis between Service Quality, Documentation, Technology, Operation, KPI-On Time Delivery, KPI-Freight rate and KPI-Business rating.

H1: There is a significant relationship between Service Quality, Documentation, Technology, Operation, KPI-On Time Delivery, KPI-Freight rate and KPI-Business rating.

|  |
| --- |
|  **Correlations** |
|  | Service Quality | Documentation | Technology | Operation | KPI\_On Time Delivery | KPI\_ Freight rate | KPI\_ Business rating |
| Service Quality | 1 | .635 | .487 | .488 | .571 | .264 | .385 |
| Documentation |  | 1 | .342 | .264 | .426 | .448 | .285 |
| Technology |  |  | 1 | .044 | .385 | .329 | .136 |
| Operation |  |  |  | 1 | .268 | .269 | .584 |
| KPI On Time Delivery |  |  |  |  | 1 | .259 | .280 |
| KPI Freight rate |  |  |  |  |  | 1 | .276 |
| KPI Business rating |  |  |  |  |  |  | 1 |

INFRENCES

The correlation analysis presented the relationship between evaluate freight forwarding operations with various measurements, namely Service Quality, Documentation, Technology, Operation, KPI-On Time Delivery, KPI-Freight rate and KPI-Business rating. The hypothesis (H1) posits a significant relationship between these measurements. The correlation reveals notable associations among the evaluation of service quality with different measurements for freight forwarding.

 Firstly, there is a Strong positive correlations with Service quality and each of the other metrics. Documentation (r = 0.635), Technology (r = 0.487), Operation (r= 0.488), and KPI for On-Time Delivery (r = 0.571), Freight Rate (r= 0.264), Business Rating (r= 0.385). There is a Moderate positive correlation with documentation and other metrics. Service Quality (r = 0.635), Operation (r = 0.426), and KPIs (r = 0.448 for On-Time Delivery, Freight Rate (r = 0.285). There is a Weak positive correlation with technology and other metrics. Service Quality (r = 0.487) and moderate positive correlation with Operation (r = 0.329).There is a moderate positive correlation with operation and other metrics. Service Quality (r = 0.488) and KPIs On-Time Delivery (r = 0.584), Freight Rate (r = 0.269).There is a Positive correlations with Key performance indicators and other metrics, with moderate correlations between On-Time Delivery and Service Quality (r = 0.571) and between Freight Rate and Documentation (r = 0.285).

 Overall, the analysis suggests that there are significant correlations among service quality, documentation, technology, operational efficiency, and KPIs, highlighting their interconnectedness and influence on each other within the system.

**8. Findings of study:**

* The statement "I feel happy with the overall service provided by the company" achieves the highest mean score of 4.22, with a standard deviation of 0.648, the lowest mean score is attributed to the statement "I feel the company provides accurate service the first time," with a mean of 3.58 and a standard deviation of 1.032.
* The statement "The Company’s facilitation of documents enhances shipment efficiency" achieves the highest mean score of 3.90, with a standard deviation of 0.931;the lowest mean score is attributed to the statement "The Company has freight bill accuracy," with a mean of 3.38 and a standard deviation of 1.105.
* The statement "The Company’s facilitation of technology knowledge impacts the shipment process" achieves the highest mean score of 3.94, with a standard deviation of 0.935, the lowest mean score is attributed to the statement "The company utilizes tracking systems and IOT devices to enhance operational efficiency," with a mean of 3.90 and a standard deviation of 0.909.
* The statement "Satisfaction with stuffing services provided by utility facilities (Factory, CFS, and Warehouse)" achieves the highest mean score of 4.02, with a standard deviation of 0.769, the lowest mean score is also attributed to the statement "Satisfaction with stuffing services provided by utility facilities (Factory, CFS, and Warehouse)," with a mean of 4.02 and a standard deviation of 0.769.
* The statement "I feel that the company effectively manages on-time delivery rates" achieves the highest mean score of 3.92, with a standard deviation of 0.900, among all variables. The statement "The Company manages transit days in shipment," with a mean of 3.48 and a standard deviation of 1.266.
* The statement "The company maintains an average freight rate per ton higher than its competitors" achieves the highest mean score of 3.92, with a standard deviation of 0.900, the statement "Freight forwarding companies play an important role in freight payment," with a mean of 3.48 and a standard deviation of 1.266.
* The statement "I feel satisfied with the coordination among employees" achieves the highest mean score of 4.02, with a standard deviation of 0.979, the statement "The company frequently meets delivery deadlines for imported and exported goods," with a mean of 3.94 and a standard deviation of 0.913.
* The correlation analysis presented the relationship between evaluate freight forwarding operations with various measurements, namely Service Quality, Documentation, Technology, Operation, KPI-On Time Delivery, KPI-Freight rate and KPI-Business rating. There is a Strong positive correlations with Service quality and each of the other metrics. Documentation (r = 0.635), Technology (r = 0.487), Operation (r= 0.488), and KPI for On-Time Delivery (r = 0.571), Freight Rate (r= 0.264), Business Rating (r= 0.385).

**9. Conclusion:**

The investigator acquired comprehension about the pivotal function of information and its efficient conveyance throughout an establishment, encompassing departments to departments as well as departments to consumers. All important stakeholders' interests, wants, and requirements should be taken into account while managing performance—not just a small group of them. The planning, evaluating, and monitoring of performance-related activities should be coordinated with the organization's strategic goals. Systems and processes should place more emphasis on communicating and extracting insights than on merely providing raw performance data. All systems and processes must be in alignment for behavior to be guided towards reaching performance goals.

The main goal should be to create an appropriate organizational culture that will encourage staff members to actively participate and be committed to meeting all performance goals. To measure the degree of client satisfaction with the goods forwarding company's service quality, particular KPIs were chosen for this study.

**10. References:**

1. Gunasekaran, A., & Kobu, B. (2007). Performance measures and metrics in logistics and supply chain management: a review of recent literature (1995–2004) for research and applications. *International journal of production research*, *45*(12), 2819-2840.
2. Aluko, O. R., Idoro, G. I., & Ajayi, S. O. (2022). Perceived service quality of architectural consultancy firms and client satisfaction in building projects in Nigeria. *Journal of Engineering, Design and Technology*, *20*(5), 1057-1072.
3. Berry, L. L., Zeithaml, V. A., & Parasuraman, A. C. S. Q. (1990). Five imperatives for improving service quality. *MIT Sloan Management Review*, *31*(4), 29.
4. Kamali, A. M. A. (2018). The Value of the Just In Time System for enhancing the Supply Chain Performance in Organizations in the Kingdom of Bahrain. *International Journal of Biometrics and Bioinformatics*, *10*(9), 182-188.
5. Gutnikova, O. N., Pavlunenko, L. E., & Tsekhla, S. Y. (2021, November). Comprehensive Approach to Assessing the Quality of Trade Services by Its Indicators. In *International Scientific and Practical Conference Operations and Project management: strategies and trends* (pp. 382-396). Cham: Springer International Publishing.
6. Huang, S. T., Bulut, E., & Duru, O. (2019). Service quality evaluation of international freight forwarders: an empirical research in East Asia. *Journal of Shipping and Trade*, *4*(1), 14.
7. Kilibarda, M., Nikolicic, S., & Andrejic, M. (2016). Measurement of logistics service quality in freight forwarding companies: A case study of the Serbian market. *The International Journal of Logistics Management*, *27*(3), 770-794.
8. Kilibarda, M., Nikolicic, S., & Andrejic, M. (2016). Measurement of logistics service quality in freight forwarding companies: A case study of the Serbian market. *The International Journal of Logistics Management*, *27*(3), 770-794.
9. Gözaçan, N., & Lafci, C. (2020). Evaluation of key performance indicators of logistics firms. *Logistics, Supply Chain, Sustainability and Global Challenges*, *11*(1), 24-32.
10. Ndubi, S. O., Iravo, M., & Ochiri, G. (2016). Effect of lead time variability on inbound logistics performance in Safaricom Limited. *International Academic Journal of Procurement and Supply Chain Management*, *2*(2), 179-205.
11. Aluko, O. R., Idoro, G. I., & Mewomo, M. C. (2021). Relationship between perceived service quality and client satisfaction indicators of engineering consultancy services in building projects. *Journal of Engineering, Design and Technology*, *19*(2), 557-577.
12. Kilibarda, M., Nikolicic, S., & Andrejic, M. (2016). Measurement of logistics service quality in freight forwarding companies: A case study of the Serbian market. *The International Journal of Logistics Management*, *27*(3), 770-794.
13. Aluko, O. R., Idoro, G. I., & Ajayi, S. O. (2022). Perceived service quality of architectural consultancy firms and client satisfaction in building projects in Nigeria. *Journal of Engineering, Design and Technology*, *20*(5), 1057-1072.
14. Sofiyabadi, J., Kolahi, B., & Valmohammadi, C. (2016). Key performance indicators measurement in service business: a fuzzy VIKOR approach. *Total Quality Management & Business Excellence*, *27*(9-10), 1028-1042.
15. Sramkova, E., Kolar, P., & Hunak, J. (2018). Container shipping: the evaluation of quality factors in freight forwarding services. *Transportation Journal*, *57*(3), 258-279.