
| RESEARCH ARTICLE

Logistics Operations of Customs Brokerage Firms in Sta. Clara, Batangas: Basis for Business Strategy

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| ABSTRACT

This study examined the logistics operations of Customs Brokerage Firms in Brgy. Sta. Clara to check the efficiency and service quality from the perspectives of Customs Brokerage Employees and Customs Brokerage Clients. The study employed a quantitative research design to analyze the ServQual dimensions such as Reliability, Responsiveness, Assurance, Empathy and the Delivery of Service factors such as Service Quality, Timeliness and Cost of Service from the Customs Brokerage employees and clients. Results revealed that most people rated operations as "Very Efficient" to "Excellent" with Assurance and Reliability earning the highest scores and it shows that the company has good compliance practices and technical skills. The results from ANOVA revealed that there were no significant differences in the perceptions of employees and clients when grouped according to their respective profiles, implying consistent service performance across respondent categories. Overall, the findings demonstrated that customs brokerage firms in Sta. Clara, Batangas operated effectively and maintained satisfactory logistics performance. The study concluded that further enhancements in digitalization, communication systems, and continuous skills development are necessary to strengthen competitiveness and sustain client satisfaction. Based on these findings, the study recommended the adoption of technology-enabled solutions, structured training programs, and process optimization strategies as a basis for improving logistics operations and supporting long-term business growth.

| KEYWORDS

Customs Brokerage, Logistics Operations, SERVQUAL, Client Satisfaction, Business Strategy

| ARTICLE INFORMATION

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

For many years, the logistics operations of Customs Brokerage Firms have been essential in effective and smooth international trade minimizing delays and one of the experts who can provide cost saving options for the logistics operations. These companies navigate the complexities of customs clearance, regulatory compliance, and customs and tariff laws. Developing strategies for business efficiency and operations would serve as foundation within the sector especially when focused on the customs clearance, regulatory compliance and customs and tariff laws. (RCS Logistics, 2024)

Transparent cost structures and trustworthy communication were necessary for efficient logistics operations because it guarantees that customers were always informed throughout the transactions (Geodis, 2024). The global disruptions and

geopolitical concerns and post pandemic supply chain disruptions have pointed out the importance of accurate information on right delivery time and right pricing. Businesses are able to improve forecast on the selling prices and adjust based on the inputs from Customs Brokers. In global trade set-up, being able to collaborate with Customs Brokers as agents of trade facilitation given the heavy restrictions on goods is necessary for operational efficiency and to prevent unnecessary delays and unwanted charges. (Gunasekaran et al,2022)

The satisfaction of Clients which can be affected by transparency, communication and effective problem solutions has also stand out as important consideration in measuring loyalty and the reputation of the business. On the other hand, the responsive communication make sure that customers are regularly informed about the status of shipments, and transparent cost breakdowns are factors in developing trusts of clients. (Kim et al.,2023). Moreover, identifying the problems and having it resolved effectively improves the service provider's reputation and the client loyalty follows. (Lee & Park, 2024).

An enhanced logistics operations can create a solid business strategy. Firms will be able to meet client expectations and foster long term trust through the simplified and effective customs clearance, documentation procedures, strict regulatory compliance. The service enhancements, adaptability in response to regulatory changes and faster processing times are further strengthened by these operational strengths (Zhang et al., 2024; Kim et al., 2023). Those Clients who are satisfied on the services are more motivated to recommend the business, returns back and offer valuable feedback, which can contribute to the growth of the business operations. (Gunasekaran et-al., 2022).

Consequently, the excellent client satisfaction and efficient logistics operations increases profitability, improves brand reputation, bring in new customers and develops lasting relationships. Among other streamlines Customs Brokerage Services, the documentation accuracy and regulatory compliance decrease delays and enhances service quality and strengthens the client satisfaction. The utilization of real-time tracking systems, as well as the tailored logistics solutions for instance will help businesses stay competitive and capable of responding to shifts in market demands. (Lee & Park, 2024).

The Customs Brokerage firms in Sta. Clara, Batangas encountered specific challenges caused by both local and international operational dynamics and it includes complex trade regulations, proper customs procedures and meeting the increasing client demands for open and straightforward communication. Because the performance of Customs Brokers had a direct impact on client satisfaction, business growth and industry competitiveness, the role of these professionals is vital in handling the challenges encountered in trade. However, despite their importance, there is no research that has been done on how logistics operations particularly the customs clearance, accurate documentation, and regulatory compliance, influence client satisfaction in the context of Customs Brokerage in Sta. Clara, Batangas. The lack of academic study in this sector proves that there should be more focused research.

In international trade, the changing trade laws and the increasing reliance on digital technologies for compliance continued to influence logistics operations (Kim et al., 2023). During the COVID-19 pandemic, the geo-political conditions and economic concerns emphasized the need for a flexible and strong logistics system. The importance of efficient customs clearance and compliance procedures in reducing the delays in deliveries and managing cost pricings for trade has been repeatedly emphasized in the literature. (Geodis,2024).

In the Philippines, the government implemented strict rules in Customs Clearance and Tariff laws where Customs Brokerage Firms are expected to be compliance and always updated on the changing procedures set by the Bureau of Customs (PH Bureau of Customs, 2023). Moreover, the businesses in Sta. Clara, Batangas is also expected to adapt to the growing demands and to consistently keep up on the changing procedure given that the area is a growing logistics hub.

The involvement of the Philippine in multi-lateral trade agreements such as the ASEAN Free Trade Area (AFTA) and the Regional Comprehensive Economic Partnership (RCEP) was a significant move because the Philippines became more knowledgeable and updated on compliance with the international standards and gave the Philippines the perspective on how it can improve its regulations. With this, it benefited Customs Brokerage firms to also strengthen their capabilities in terms of Customs Clearance and regulatory alignment.

The government agencies such as the Bureau of Customs, Local Government Units (LGUs) and other related agencies like Food and Drug Administration, Bureau of Plant Industry just to name a few has very important roles in ensuring smooth flow of goods. Strong collaboration and communication are essential to keep the regulatory requirements aligned between the government sector and the businesses. (Smith et al.,2022).

There is a large volume of researches about logistics operations, however there is a notable gap in understanding how the ServQual Dimensions such as Reliability, Responsiveness, Assurance and Empathy affects client satisfaction and how do clients assess the delivery of service factors. Current studies are focused on general logistics or industries beyond customs brokerage. Moreover, many studies overlooked perspectives of both clients and employees which are necessary to evaluate the service quality and to identify which areas need improvement.

This study filled these gaps by looking at the logistics operations of customs brokerage firm in Brgy. Sta. Clara, Batangas with a focus in examining employees perceived efficiency of logistics operations with regards to the ServQual dimension and in clients' assessment on delivery of service factors. With this, the study had provided a business strategy to enhance the service quality and improve the client satisfaction as well.

1.2 Statement of the Problem

In order to evaluate the logistics operations of Customs Brokerage Firms in Brgy. Sta. Clara, Batangas, this study investigated at how Custom Brokerage Employees and Clients perceive operational efficiency and delivery of service.

Specifically, the study answered the following questions:

1. What is the profile of the respondents in terms of the following:

1.1 As to employees

1.1.1 Number of years of experience in the industry;

1.1.2 Educational background;

1.2 As to clients

1.2.1 Type of transactions;

1.2.2 Years of engagement with the customs brokerage firm; and

1.2.3 Frequency of transactions?

2. How do employees perceive the efficiency of logistics operations with regards to the following SERVQUAL dimensions:

2.1 Reliability of service;

2.2 Responsive of the firms to the client needs;

2.3 Assurance; and

2.4 Empathy?

3. Are there significant differences in the perceived SERVQUAL dimensions of logistics operations when grouped according to the profile of employees?

4. How do clients assess the following delivery of service dimensions:

4.1 Service quality;

4.2 Timeliness of service delivery; and

4.3 Cost of service?

5. Are there significant differences in the assessed delivery of service dimensions when grouped according to the profile of clients?

6. Based on the findings of the study, what proposed business strategies can be developed from the perspectives of employees and clients?

1.3 Hypotheses

The following null hypotheses were tested.

H1: There are no significant differences in the perceived SERVQUAL dimensions of logistics operations when grouped according to the profile of employees.

H2: There are no significant differences in the assessed delivery of service dimensions when grouped according to the profile of clients.

1.4 Scope and Limitations

This study examined the logistics operations of Customs Brokerage Firms in Brgy. Sta. Clara, Batangas by evaluating the point of views of the two groups of respondents: (1) Employees and (2) Clients.

For the employees, the study applied the ServQual dimensions such as the Reliability, Responsiveness, Assurance and Empathy to measure the perceived efficiency in logistics operations.

For the clients, on the other hand, the study assessed the service delivery factors such as (1) The Service Quality, (2) Timeliness, and (3) Cost of Service. This three are factors to identify if clients are satisfied with the service being provided by the Customs Brokerage Firms.

The data were gathered from the Customs Brokerage Firms' employees and client in the middle management or supervisory level only and who had been transacting to Firms in Brgy. Sta. Clara Firms who are operating for five years and above. A self-made survey questionnaire was used to collect, tabulate, analyze and interpret the respondent's data.

The study was conducted during the First and Second Semesters of AY 2024-2025.

1.5 Significance of Study

This study can provide meaningful insights to the Customs Brokerage Firms in Brgy. Sta. Clara, Batangas by evaluating the point of view of employees' assessment using the ServQual dimensions and clients' assessments through the service delivery factors. The findings will help make the customs brokerage and logistics sectors more efficient, optimize its service delivery and make client satisfied.

Customs Brokerage Firms. Customs Brokerage Firms will clearly benefit from the perspectives of employees of reliability, responsiveness, assurance and empathy. These insights could help firms improve standard operating procedures particularly on the communication processes and enhancing its employee's technical expertise. On the other hand, for the client's results, the firms would be able to understand how the clients view service quality, timeliness and cost of service where the findings would also be beneficial in enhancing the firms' overall service offerings and consistency.

Clients (Importers and Exporters). Importers and exporters will gain clear visibility of the customs brokerage firms in Sta. Clara, Batangas particularly in terms of providing efficient logistics operations more specifically with regards to terms of service, service consistency, lead time, cost savings and transparency. With this, clients can make accurate decisions when selecting service providers and can anticipate areas where Customs Brokers may still improve.

Logistics Service Providers. Logistics Service providers such as trucking companies will definitely gain insights into how customs brokerage operations could influence the timely deliveries of shipments and in understanding that a consistent collaboration and alignment with Customs Brokers are crucial in overall service delivery across the supply chain.

Industry Associations. Customs Brokers Association, Forwarders, Shipping Lines and other industry associations could use the study's findings to evaluate the capacity gaps and industry needs such as more training and capacity building programs, and collaborative efforts and discussions with government agencies to raise operational standards.

Government and Regulatory Authorities. The government agencies such as the Bureau of Customs, Department of Finance, Bureau of Internal Revenue, Tariff Commission and the like may gain insights from the findings of the study to evaluate the effectiveness of current customs processes and to identify which areas require improvements especially those affecting operational delays and cost issues. The insights can support policy updating and streamlining of operational procedures.

Policy makers. Policy makers may use the study's service delivery gaps identified from the actual results of the survey and validate regulatory challenges to develop or update its current reforms to streamline the customs procedures and reduce operational delays.

Researchers and Future Scholars. This study provider further academic literature in the field of customs administration and will contribute to the lack of study particularly in the area of Brgy. Sta. Clara, Batangas where a large number of Customs Administration students graduated. The findings can serve as a foundation for future researches on customs brokerage performances, digitalization, AI integration or cross regional comparisons in logistics service delivery.

1.6 Definition of Terms

For better understanding of this research, the following terms were defined operationally to include conceptual definition and abbreviation of terms.

Assurance. This refers to the ability of the Customs Brokerage employees to provide expertise, credibility, confidence in performing logistics operations. This ServQual dimension assesses how well employees build client confidence.

Business strategy. A business strategy is a comprehensive and forward-looking plan that helps a business in attaining its long term goals such as maintaining competitive advantage and sustainable growth and profitability.

Business Strategy in Logistics Operations. This term refers to the methodical plans, actions or choices made by the Customs Brokerage Firms in order to improve the overall delivery of service.

Client Satisfaction. This refers to the degree of satisfaction or approval with Customs Brokerage Firm's services. This also entails assessing elements like timeliness in communication, service quality and cost of service.

Communication Services. This term refers to the information shared between the Customs Brokerage employees and the clients. It covers communication clarity and responsiveness especially when it comes to shipment related matters.

Compliance with Regulatory Requirements. This refers to the adherence to laws, rules and regulations set by the Bureau of Customs and other government agencies to ensure that imported or exported goods meet all the necessary standards and requirements prior to importation or exportation.

Cost Efficiency. This refers to a quality service provided at a reasonable cost. This is a vital factor in how clients view the value of the service.

Cost of service. This refers to the rates of service provided by the Customs Brokerage Firms to the clients as characterized by brokerage services, pick-up and delivery of shipments, rates on transport services and other related extra costs.

Cost Transparency. This refers to the clarity and straightforwardness of provided rates of services as against the actual billing. It ensures that all charges billed are based on the agreed rates with no hidden charges.

Customs Brokerage Services. This refers to the Services offered by Licensed Customs Brokers that assist importers and exporters comply with customs laws, rules and regulations, clear goods, pay duties and taxes and handle the necessary documentation for imports and exports.

Customs Clearance. A set of tasks performed by Licensed Customs Brokers to ensure that goods can enter or exit a country. This involves documentation, paying duties and taxes and ensuring all regulations are complied.

Empathy. This refers to the ability of Customs Brokerage Employees to show real understanding, responsiveness and care for client needs through clear and polite communication. Empathy in ServQual dimension highlights commitment to offer personalized attention and to ensure that clients feel supported all throughout the process.

Logistics Operations. This refers to a wider range or scope or practices involved in managing the flow of goods including transportation, warehousing, inventory and documentation with regards to customs clearance and shipment delivery.

Problem Resolution. A process in identifying and fixing the issues that arise during customs clearance process such as delays, incorrect documentation or regulatory compliance issues. Each problem resolution requires providing options or remedies to solve the issues.

Reliability of Service. This ServQual dimension refers to the firm's ability to provide consistent and quality service in logistics operations. This dimension is vital in fulfilling the clients demands and expectations.

Responsiveness of the Firm to Client Needs. This ServQual dimension refers to the firm's ability to provide expedient and effective responses to client inquiries, requests and concerns.

Timeliness of service. This refers to delivery of service factor which involves consistency of the firms to the communicated or advertised service and delivery times.

Quality of service. In this study, this refers to the measure of service delivery that is defined by reliability, assurance, tangibility, empathy and responsiveness.

1.7 Related Literature

This part of the study provides discussion of present studies and literature or academic journal that establish the basis for evaluating the logistics operational efficiency and service delivery in Customs Brokerage Firms in Sta. Clara, Batangas. The reviewed works highlight essential concepts such as operational efficiency, documentation accuracy, regulatory compliance, service quality, and client centered practices. These concepts support the assessment dimensions used in this study for both employees and clients.

1.7.1 Logistics Operations in Customs Brokerage Services

In Customs Brokerage, accuracy, timeliness and compliance affect the smooth movement of goods. Academic literature indicates that Customs Brokers play crucial roles in customs clearance documentation to ensure proper compliance with the customs laws, rules and regulations.

Studies highlighted those effective operations of Customs Brokerage is vital to the successful logistics. A study also pointed out that a simplified customs clearance procedure helps minimize delays and unnecessary costs hence would allow businesses to maintain as stable operations in global trade. (Gunasekaran et al, 2022). Moreover, according to Geodis (2024) the proper compliance to the Customs laws, rules and regulations contributes to smoother cross-border transactions and strengthens sustainability of operations.

Accuracy in documentation was found to be crucial. According to Lee and Park (2024), errors in commercial documents can result to shipment delays, fines, penalties and unhappy clients. Moreover, according to their studies, clients depend significantly on proper documentations because it enables them to more efficiently planned expenses, inventory and delivery times.

In Customs Brokerage, compliance with regulatory agencies continuously become a challenge. According to the Bureau of Customs (2023), Customs Brokers must remain current on international trade regulations, tariff classification, valuation guidelines and regional trade agreements. Businesses or firms that successfully align procedure with regulatory requirements experience operational consistency and increased client trust. (Smith et al, 2022)

1.7.2 Customer Satisfaction in Customs Brokerage Services

In logistics operations, client satisfaction is a crucial result of service delivery. The perception of service quality in Customs Brokerage by clients depends on their expectations in terms of accurate documentation, and communication as well as timely clearance and transparent procedures being fulfilled.

As stated by Kotler (2000), the comparison between actual performance and expectations gives satisfaction. According to Parasuraman, Zeithaml, Berry's ServQual Model (1895) major factors that put more influence on customer perceptions are tangibles assurance responsiveness empathy and reliability. These factors weigh much in Customs Brokerage since the client's experience is greatly attached to the competency of the staff and accuracy of the service rendered.

To demonstrate empathy, provide equal attention to all clients, listen carefully to their concerns, and offer the solutions that will adequately address their needs. Empathy in a Customs Brokerage firm is about giving clear instructions, updating customers regarding the status of shipments, and supporting them when something goes wrong. This kind of support will make the customer feel important and inspired to write good reviews about the service.

Timely and transparent updating of shipment status reduces uncertainty which will ultimately facilitate smooth transactions in the supply chain. Firms who keep regular contact with their upstream counterparties are viewed as more reliable and competent.

Responsiveness means happy clients. Studies by Lee and Park in 2024 show that clients want their service providers to promptly act on matters relating to clearance, permits, and any regulatory matter. Building on this, Zhang et al., state that companies which are quick to act and proactive in solving problems have a probability of keeping the clients satisfied as well as staying competitive in the market.

1.7.3 The Role of Transaction Cost Economics (TCE)

A study of the transaction costs in logistics operations will reveal how organizations can minimize such inefficiency costs, such as delays, errors in documentation, and regulatory compliance issues. The original concept of transaction cost economics was first introduced by Coase (1937) and further elaborated by Williamson (1981). They emphasized that to achieve optimal market transactions, the focus should be on minimizing the accompanying transaction costs.

Better logistics will help lower the costs. A study by Gunasekaran et al. (2022) aptly articulates this perspective. When matters such as customs clearance and documentation are proper, then it will be easier to mitigate errors and delays, hence reducing transaction expenses. The saved costs can translate to a better offer of service, which will be on-time and accurate delivery, benefitting both sides: the company and its clients.

Another method that businesses use to gain an edge is by reducing or eliminating transaction costs. This helps them offer competitive rates and service which makes clients satisfied and contented. According to a study by Geodis (2024), businesses that handle logistics smartly to keep transaction costs low tend to do well in drawing in and keeping clients in today's tough global market..

1.7.4 Integration of Theories and Practices

By bringing together the theories like General Systems Theory, Institutional Theory, and Customer Satisfaction Theory, a better grip on how the logistics operations in customs brokerage services impact the client satisfaction and the growth of a business can be achieved.

General Systems Theory. As interpreted by Von Bertalanffy (1968), general systems theory views logistics operations like a big interconnected system. Where each component from customs clearance, documentation, and compliance all need to work together smoothly to achieve the desired outcome which is client satisfaction. Hence, efficient logistics are seen as a systematic effort that requires close collaboration and sharing of resources.

Institutional Theory. External institutional factors, i.e., governmental regulations, trade policies, and international agreements play great roles in shaping logistics operations. Firms that Institutional pressures firms that can adapt to the fit as proposed by DiMaggio and Powell (1983) will place themselves better to achieve operational efficiency and customer satisfaction.

Customer Satisfaction Theory. In the words of Kotler's (2000) theory on customer satisfaction, it is emphasized that service performance should be matched with the expectations of customers to attain satisfaction. From a logistics perspective, firms must ensure operational efficiency and effectiveness to achieve compliance and transparency, which are essential for providing a satisfying service experience for customers.

1.8 Synthesis

The reviewed literature shares perspectives that, while provided from different vantage points, all center around the logistics operations core to overall performance of customs brokerage firms in terms of operational efficiency, regulatory compliance, and client satisfaction. Fast customs clearance will reduce delays in processing; correct paper works will ensure consistent service delivery adherence to trade rules is the answer (Gunasekaran et al., 2022; Geodis, 2024). While fairly broad in perspective regarding logistics operations under a setting of custom brokerage, the focus here narrows further into more specific operational realities in Sta. Clara, Batangas, where firms find a way to balance the requirements of national regulatory bodies with their own localized challenges that pertain to specific regional trade environments.

Dimensions of service quality-reliability, responsiveness, assurance, and empathy remain basic to the understanding of how clients perceive and evaluate performance as articulated by Parasuraman et al. (1985). It is the dimension of service quality that Lee and Park (2024) further emphasize as being facilitated by technology in terms of logistics operations responsiveness and communication. While massive progress has been noted worldwide due to digitalization, results from this study would therefore

describe customs brokerage firms in Sta. Clara as more dependent on process efficiency, personnel competence, and regulatory adaptation to advanced technological systems because of industry limitations and levels of infrastructure for digitalization found within the locality.

Logistics can also be well explained by the Transaction Cost Economics (TCE) framework developed by Coase (1937) and Williamson (1981). It is through reduced delays, errors, or risks on compliance that will indeed reduce transaction costs leading to operational efficiency. This paper becomes consistent with this theoretical perspective since it proves that streamlined documentation processes and minimized procedural errors will reduce the operating costs of the customs brokerage firms in Sta. Clara and make them perform their services more reliably. But whereas general applications of TCE speak to broader benefits associated with reduced costs in large-scale logistical systems, this study impresses upon the fact that such benefits have an immediate and highly specific effect primarily for the smaller brokerage firms within more localized region-specific constraints.

Institutional theory is what DiMaggio and Powell (1983) refer to, it has been readily embraced for explaining how external forces-regulations, policies, and even a country's trade agreement-make organizations behave. While earlier studies have extensively probed institutional pressures either at the national level or international strata, findings from this study reveal that customs brokerage firms in Sta. Clara also have to respond to localized regulatory expectations, port-specific operating guidelines, and regional compliance requirements. Workflows within firms will be influenced by these localized institutional factors and consequently readjusted operational strategies toward compliance-in-action transactions.

There is a dearth of knowledge on how firms particularly in Sta. Clara, Batangas, manage their compliance, and sustain their operational efficiency plus client satisfaction amidst the highly regulated environment and in dealing with infrastructure limitations. It is this gap that this study attempts to fill through practical evidence on the dynamics of such operations besides offering strategies that could be adopted toward addressing challenges peculiar to customs brokerage firms within the locality.

1.9 Theoretical Framework

The theories to approach this study are: (1) Systems Theory by Ludwig von Bertalanffy in 1950 as quoted by Choi, and Lee (2023). Some interrelated parts of logistics operations describe it. If there is a disruption in one part, it may create a cascading effect on the entire performance. (2) Transaction Cost Economics was first introduced by Coase in 1937 but later extended by Williamson in 1981 since this Study is about minimizing transaction costs involving delays and inefficiencies appended with risks in compliance. (3) ServQual Model developed by Parasuraman, Zeithaml, & Berry, 1985 evaluating perceived service quality through reliability, responsiveness, assurance and empathy. Customer Satisfaction Theory discussed by Kotler in 2000 stated that satisfaction comes from the gap between performance and what was expected against actual performance about service. Institutional theory DiMaggio & Powell, 1983 emphasized that firm behavior is determined outside them through government rules plus industry standards. It therefore gives a holistic integrated multi-dimensional approach falling within the focus of this paper on both employee-perceived efficiency plus client-assessed actual delivery of service in a customs brokerage firm.

Systems theory posits that organizations are complex systems comprising interacting components whose collective function makes the whole work. This brings into perspective how all elements of logistics operations- customs, proper documentation, internal coordination, and regulation compliance- are connected. A slight mistake in tariff classification or delay in releasing any document will break the entire cycle of logistics and service delivery. Feedback loops, according to systems theory concept allow adjustments to improve operations based on performance results. Applying this theory therefore shows that coordinated workflows and synchronized interdepartmental communications together with integrated decision making are what sustain high levels of efficiency in customs brokerage firms.

Coase (1937) and Williamson (1981) were the original developers of the transaction cost economic theory. The said approach focused on market exchange costs and how organizations minimized them. In the customs brokerage practice, it defined delay, documentary lapses, rework due to errors, regulatory non-compliance among others in communicating efficiently with clients and government agencies as sources of transaction costs. This paper will therefore provide insight into how firms organize their internal processes through workflow controls or even digital tools that will help eliminate inefficiency and unnecessary costs. Transaction cost economics also explains that predictability of operations is instrumental in assuring clients since stable processes reduce more expense possibilities. The research draws on the theory for analyzing both employee-perceived efficiency and client-assessed service delivery in Sta. Clara, Batangas by understanding firm behavior regarding managing these transaction costs.

The ServQual Model was developed by Parasuraman, Zeithaml, and Berry in 1985, dwelling on dimensions of service quality and their effects on the general evaluation of a particular service. Thus, this paper applies the ServQual model to employees' ratings of logistics operations under four headings: (1) Reliability as accurate and dependable customs clearance activities and

documentation processes; (2) Responsiveness as able to provide updates in a timely manner addressing any concerns plus answering queries from clients; (3) Assurance capturing competence of employees on regulations plus their professionalism dealing with clients; (4) Empathy measuring the understanding specific needs of clients plus extending personalized assistance. The ServQual is very instrumental in such an area of operation among custom brokerage logistics since process accuracy would directly influence interaction quality leading to trust building besides achieving satisfaction for a client.

The Customer Satisfaction Theory by Kotler (2000) varied on how an individual compares the actual service received with what he had previously expected. In this study, this supports the client-side assessment of service delivery in three dimensions: (1) Service Quality by which there is general contentment regarding the performance and dependability of a brokerage firm, (2) Timeliness of Service Delivery-the ability of a firm to fulfill promised schedules, prevent delays, and handle documentation efficiently, and (3) Cost of Service-fairness, transparency and consistency in fees being charged. In line with this theory, therefore, clients develop judgments on service outcomes and hence satisfaction from operational efficiency that will lead to repeat business and long-term partner relationships in customs brokerage.

The Institutional Theory of DiMaggio and Powell (1983) posited that organizational behavior is framed under institutional norms, regulatory requirements, and industry standards; hence, the logistics operations context at Sta. Clara, Batangas involves customs brokerage firms. It is from this very theory that emphasizes how different agencies such as the Bureau of Customs together with port authorities and trade agreements impose dynamism on logistics operations. Firms should always bear in mind that there is an evolving dynamism in institutional pressure involving new tariff policies, revised compliance protocols, and digitalization initiatives being imposed. This framework is also essential in (1) tracing how far the imposition of regulatory demands has effects on operational strategies and service delivery practices and (2) continuous compliance requirements imposing changes in the firm behavioral dynamics, efficiency, and customer satisfaction level toward such services. Logistics operation is here considered a function not only of internal procedural activities but rather more significantly by external governance structures prescribing both the standard for service provision and accompanying operational constraints.

1.10 Conceptual Framework

The ServQual model (Parasuraman et al., 1985) and institutional theory (DiMaggio & Powell, 1983) are the basic paradigms that will anchor probing into the perceived efficiency of logistics operations and an evaluation of delivery of services by some selected customs brokerage firms in Sta. Clara, Batangas.

The employees' perceived efficiency of logistics operations shall be based on the four major dimensions of service quality in the ServQual Model: reliability, responsiveness, assurance, and empathy. It is through these dimensions that employee perception regarding the performance of logistics processes, which include customs clearance, accurate documentation, coordination with regulatory bodies, and procedural requirements, among others, is captured. Through the application of ServQual, this study interprets how staff perceive quality and consistency in internal operations in those particular areas where exactness, timeliness, and support for clients should be instituted. Consequently, it brings out from the perspective of service delivery personnel what happens to be strong and weak in operation.

Institutional theory further identifies the external regulatory influences on the formation of logistics practices, such as through highly legislated environments of governmental policy, trade agreements, port protocols, and standards of compliance from various agencies — for example, Bureau of Customs and Tariff Commission among many others. These are institutional factors to workflow how a business sets up its workflows, adheres to documentation rules, and stays compliant. Even though not being a measured variable in this study research paper, Institutional Theory places this as an important contextual background against which an understanding can be drawn regarding why issues concerning service efficiency and accuracy as well as regulatory adherence still remain the most critical concerns in customs brokerage operations. It also provides illumination on the impact of institutional expectations on employee performance and client experience.

In this framework model, employees' perceived efficiency of logistics operations using the ServQual dimensions of reliability, responsiveness, assurance, and empathy are compared against clients' assessed delivery of service using three service delivery dimensions, such as service quality, timeliness of service delivery, and cost of service. This dual perspective offers a view of inside operational realities as well as outside customer experiences that can be used to balance perceptions of service performance.

This study also checks if there are significant differences in such assessments by the profiles of employees and clients. H1 tests differences in employees' perceptions based on years of experience and educational background. H2 tests differences in the

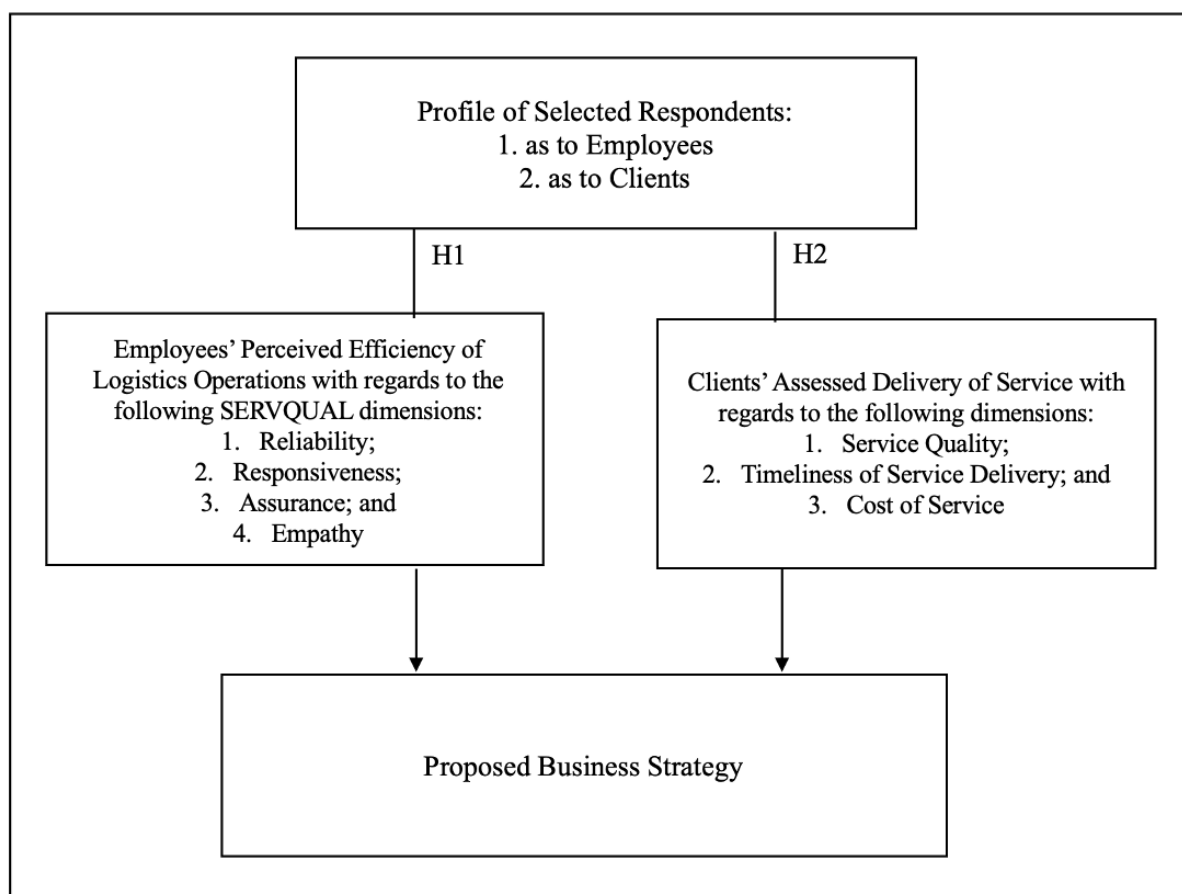
assessment made by clients based on the type of transaction, years of engagement, and frequency of transactions. These comparative analyses will establish whether different respondent groups hold varying perceptions about service efficiency and delivery, thus bringing out the possible inconsistency or uniformity of service experiences.

Such a comparison generates insights about the operational strengths and performance gaps or areas in need of strategic improvement by customs brokerage firms. The analysis revealed that documentation accuracy, communication quality, timeliness of processes, and fairness in service cost are issues that need to be addressed from both the employee and client perspectives. Insights like this are going to inform the formulation of a business strategy for improving logistics efficiency based on evidence, toward upgrading mechanisms for service delivery and achieving better alignment between internal operations and client expectations.

The conceptual framework designs an organized basis for assessing logistics activities from the internal (i.e., employees) and external clients' points of view in relation to the institutional environment where customs brokerage firms operate. Integrating service quality principles with the regulatory context offers a comprehensive analysis that will be valuable for informed strategic planning, operational enhancement, and improving service delivery in the customs brokerage sector in Sta. Clara, Batangas. Clara, Batangas.

Figure 1

Author's Conceptual Framework



CHAPTER 2 METHODS

This section narrated the methodology of the study: design of research, management of data, and sampling plan, statistics used plus ethical considerations.

2.1 Research Design

The study used a descriptive research design; data has been organized in such a way as to provide information about some phenomenon, situation, or population. This design found applicability since it emphasized the nature of problems by focusing on what when where and how aspects related to the research problem rather than offering causal explanations or probing into underlying reasons.

A quantitative research approach was utilized to objectively gauge the assessments of employees and clients as well as to statistically compare their perceptions regarding the forecited variables. This study used a cross-sectional design in determining the logistics operations efficiency among selected customs brokerage firms in Sta. Clara, Batangas. The choice of using a cross-sectional design was appropriate since it permitted gathering information from various categories of respondents at one particular moment thus giving an immediate picture concerning both operational effectiveness and client satisfaction.

2.2 Data Management

The data for this study were taken from the primary sources by distributing a self-made survey questionnaire. Respondents came from the employees and clients of customs brokerage firms in Brgy. Sta. Clara, Batangas. Before actual participation, all potential respondents were oriented on the objectives, procedures, and ethical considerations of the study to be undertaken. They were also required to read and sign an Informed Consent Form (ICF) before being handed the questionnaire. The form explicitly stated their right to refuse participation or withdraw at any stage- without any sanctions as well as their right to ask for clarifications.

The survey questionnaires were given in a printed format and respondents had up to 30 minutes to fill it out at their own speed. Even though the questions were very straightforward, the respondents who felt a bit tired or uncomfortable because of the length of the questions were told to take breaks and finish the survey in a place where they felt at ease.

To protect respondent confidentiality as well as to observe the provisions of the Data Privacy Act of 2012, the anonymization of all personally identifiable information used unique codes or pseudonyms. The storage location was a password-protected digital database known solely to the researcher and research adviser. No raw data shall ever be made publicly available or shared with unauthorized third parties. After study completion, all hard copies were shredded, and digital files were deleted from all storage devices thereby ensuring proper data disposal.

Data were encoded into the Social Statistical Package for analyzing until the target sample size had been met. Descriptive statistics and inferential statistical techniques provided insights upon which proposed business strategy was based. Principles of ethics comprising voluntary participation, confidentiality, and protection of data as well as informed consent were stringently adhered to during the whole process of research.

2.3 Sampling Design

This study used a purposive and quota sampling design. Purposive sampling is defined as a research method in which the respondents are deliberately chosen based on certain attributes rather than selected by random means (Dovetail, 2024). Purposive sampling shall be adopted such that only those respondents who have and can share direct knowledge about logistics operations and service delivery shall qualify to participate in the study. It will apply to two groups: employees and clients of selected customs brokerage firms in Sta. Clara, Batangas.

Quota sampling is a non-probability technique that consists of drawing some fixed numbers or proportions from selected subgroups of the population. In this study, quota sampling shall be applied to set the sample equal to 50% of the eligible population for both employees and clients in each brokerage firm as the target sample so that balanced representation will be attained. This will balance views from the two groups since neither of them would dominate the other in analysis. For employees, half of the total population for middle management and supervisory personnel will include participation; hence decision-makers and logistics managers' participation will be ensured. Similarly, 50% active clients per firm shall be purposively picked so that their experience on custom brokerage service delivery can be compared proportionately.

2.3.1 Sample Population

The data collection was made from identified informants under two groups: (1) Employees of customs brokerage, particularly those falling within middle management and supervisory positions further classified by years of experience in the industry and educational background; and, (2) Clients of the customs brokerage firm categorized according to their type of transactions with the firm, years of engagement with the firm, and frequency of transactions. Arbitrary sampling and quota sampling were used in choosing respondents.

The population data were checked and confirmed with the help of the chosen customs brokerage firms for correctness and good representation. A 50% share was used from each taking part firm's client list. This share matches sample size setting rules where a 50% chance of event happening is often used since it shows the highest possible changeability in the group (Nagwa, 2024). This method also helped make sure that there were enough people in the study to give results that are statistically strong and important.

2.3.2 Respondents

There were two groups of respondents to this study: (1) employees of selected customs brokerage firms and (2) clients transacting with said firms in Sta. Clara, Batangas. The purposive and quota sampling techniques were used in selecting the participants.

The employee group in the study comprised key managerial, supervisory, and operational staff who had direct hands-on engagement with customs processing and documentation as well as client coordination and regulation compliance. Views from this group would best show how well logistics work using four of the ServQual sides, such as trustworthiness, quickness, safety, and caring.

The client group included importers, exporters, and logistics representatives who regularly transacted with those selected customs brokerage firms. Per firm, quota sampling was done to have adequate representation. Each participating firm pointed out about 10-12 clients, thus making a sum total of between 30 and 40 client respondents that would give a balanced and meaningful evaluation on delivery of service in terms of quality, timeliness in delivery, and cost of service.

This type of respondent structure ensured the capturing of both internal-employee perspective and external-client view, which enabled the study to have a full understanding of operational efficiency as well as service satisfaction in the customs brokerage industry.

2.3.3 Research Instrument

The major tool used in this study is a self-made survey questionnaire modified from the ServQual Model developed by Parasuraman et al. (1988) to assess the perceived effectiveness of logistics operations and at the same time evaluate service delivery among customs brokerage firms.

The questionnaire mainly has three sections: the profile of the two types of respondents, perceived efficiency in logistics operations by them, and service delivery assessment. The said parts are specifically formulated for the employee and client respondent group of selected customs brokerage firms in Sta. Clara, Batangas

Uses simple, precise statements and a standard four-point Likert scale, thus being easy to comprehend while maintaining response consistency. Before it is fully distributed, content validation by experts in the area is considered to confirm adequacy in terms of relevance and clarity as well as focus on the objectives of the study.

4 Points Scale for the Perceived Efficiency of Logistics Operations of Selected Customs Brokerage Firms in Sta. Clara, Batangas

Scale	Range	Verbal Description	Verbal Interpretation
4	3.26 - 4.00	Very Efficient (VE)	Strongly Agree (SA)
3	2.51 - 3.25	Efficient (E)	Agree (A)
2	1.76 - 2.50	Less Efficient (LE)	Disagree (D)

1	1.00 - 1.75	Not Efficient (NE)	Strongly Disagree (SD)
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4 Points Scale for the Assessment of Delivery of Services of Selected Customs Brokerage Firms in Sta. Clara, Batangas

Scale	Range	Verbal Description	Verbal Interpretation
4	3.26 - 4.00	Excellent (E)	Strongly Agree (SA)
3	2.51 - 3.25	Good (G)	Agree (A)
2	1.76 - 2.50	Fair (F)	Disagree (D)
1	1.00 - 1.75	Poor (P)	Strongly Disagree (SD)

2.3.4 Control Procedure

Cronbach's alpha. This will test the internal consistency of dimensions in the ServQual scale comprising service reliability, firm responsiveness to client needs, assurance, and empathy. On the other hand, dimensions relating to delivery of service are quality of service, timeliness of service, and cost of service. It shall be administered to 15 respondents who are not part of the study sample; analysis shall calculate Cronbach's alpha for each dimension. A result that returns a value equal to or higher than 0.70 will denote acceptable reliability. Items recording low alpha values shall be revised or removed.

Content Validity Review. To guarantee the accuracy of measurement with regard to intended constructs, expert judgment determined content validity. The panel shall be composed of the following: (1) thesis adviser for academic oversight regarding clarity and relevance, (2) statistician/psychometrician for statistical aspects and quality of the instrument, and (3) customs broker expert for industry relevance and practical application. All experts are requested to rate each item for its clarity, relevance, and adequacy. Appropriate revisions shall be undertaken based on their comments.

Pilot Test/Dry-run. A pilot test for 15 respondents was undertaken to determine the clarity and feasibility of the questionnaire. Comments on its quality, length, and ease of understanding were obtained; therefore, revision was also done based on the results of the pilot test so that a clear and relevant final version could be achieved.

Ethical Approval. The data collection began with the process of seeking ethical approval, i.e., (1) Approval Process by presenting a research proposal and questionnaire to the Office of Graduate School for their perusal and subsequent sanction, and (2) Ethical Considerations about informed consent, confidentiality, and voluntariness of respondents.

2.4 Statistical Treatment

Descriptive and inferential statistical techniques were used in analyzing the perception of the employees and clients relating to logistics operations and service delivery of selected customs brokerage firms in Sta. Clara, Batangas. This analysis answers the statements of the problem and supports business strategies that are developed from empirical findings.

2.4.1 Frequency and Percentage. The categorical variables that describe the respondents by frequency and percentage were summarized. These included characteristics such demographics and professional factors like age, position, and years of experience for employees as well as type of transaction, years of engagement, and frequency of transactions for clients.

This statistical technique was used to answer Statement of the Problem No. 1 which asked about the profile of the selected respondents.

2.4.2 Mean. The mean determined the average responses of employees and clients on the items measured in the survey instrument. For employees, mean scores of perceived efficiency in logistics operations based on the dimensions of reliability, responsiveness, assurance, and empathy of the SERVQUAL tool (Statement of the Problem No. 2) were obtained.

For clients, the mean scores evaluated service quality, timeliness of delivery, and cost of service which pertains to Statement of the Problem No. 4.

The mean provided a quantitative basis as to how clients and employees perceived the firm's operational performance and service delivery.

2.4.3 Analysis of Variance (ANOVA). A one-way analysis of variance was run to see if there would be any significant difference in the perceptions of employees and clients when grouped according to their profile variables.

For employees, SERVQUAL assessment differences when grouped by years of experience and educational background were subjected to an ANOVA test thereby answering Statement of the Problem No. 3.

For clients, ANOVA was used to test whether ratings of service quality, timeliness, and cost have significant differences when categorized by type of transaction, years of engagement, and frequency of transactions which answers the statement of the problem no. 5.

2.5 Ethical Considerations

2.5.1 Conflict of Interest

This study strictly adhered to ethical standards to ensure objectivity and avoid any actual or perceived conflict of interest. The researcher maintained the transparency and neutrality throughout the research process and will not derive any personal or financial benefit from the results.

2.5.2 Privacy and Confidentiality

To uphold the confidentiality and privacy of the respondents, all data was anonymized using unique codes or pseudonyms. The information was stored in a password-protected digital database, accessible only to the researcher and academic adviser. In compliance with the Data Privacy Act of 2012, collected data will not be shared publicly, and all identifiable information will be destroyed after the completion of the study through proper digital deletion and disposal of hard copies.

2.5.3 Informed Consent Procedure

Before participating, all respondents underwent an orientation about the study's objectives, procedures, and ethical safeguards. Each respondent was asked to read and sign the **Informed Consent Form (ICF)** prior to receiving the survey. The ICF was clearly explained their voluntary participation, the right to withdraw at any point without penalty, the use and protection of their data, and contact details should they have any concerns or questions. Only those who provided a written consent was allowed to proceed.

2.5.4 Vulnerability

This study did not involve any vulnerable populations such as minors, the elderly, or individuals with cognitive impairments. The selected respondents were professionals with the capacity to provide informed consent. Nonetheless, the researcher remained vigilant in ensuring that respondents are not coerced, misled, or placed under undue pressure, and their autonomy were fully respected throughout the process.

2.5.5 Assent

Although assent was not applicable for adult professional respondents, clarity and transparency was still ensured. The consent form and survey were written in simple, understandable language. Respondents were encouraged to ask questions before proceeding and reminded of their right to withdraw from the study at any time without negative consequences.

2.5.6 Risk

The study involved minimal risk. However, given that the questionnaire was moderately lengthy, participants may experience fatigue or mild discomfort. To mitigate this, participants were advised to answer at their own pace, take breaks when needed, and complete the survey in a comfortable setting.

2.5.7 Benefits

Participants were assured that their involvement in this study did not result in any form of harm. While there were no direct or immediate personal benefits to the respondents, their participation contributed to generating valuable insights that support improvements in logistics operations and service delivery among customs brokerage firms. The findings of the study have the potential to benefit the industry by informing process enhancements, promoting regulatory compliance, and guiding firms in strengthening client satisfaction. Ultimately, the results may also contribute to more efficient trade facilitation and improved service quality within the broader logistics and customs brokerage community.

2.5.8 Community Considerations

The research respected the rights, dignity, and welfare of all participants by prioritizing their well-being throughout the entire research process. The study carefully considered the potential impact of its findings on the community, particularly the customs brokerage sector in Sta. Clara, Batangas, where improvements in logistics operations and service delivery may influence day-to-day business practices.

2.5.9 Incentives and Compensation

No financial or material incentives were provided to participants in this study. However, participants were assured that their involvement would not result in any adverse effects.

2.5.10 Collaborative Study Terms of Reference

The study complied with the ethical standards outlined in the Data Privacy Act of 2012 (Republic Act No. 10173). The researcher will uphold academic integrity, ensuring that the research is conducted with respect for all participants, and that the results are original and free from plagiarism. The researcher will also respect any collaborative terms of reference, ensuring transparency and cooperation with any partners involved in the study.

2.5.11 Research Output

The researchers strictly implemented ethical procedures throughout the research process to ensure the reliability, validity, integrity of results.

CHAPTER 3 RESULTS

This chapter discusses the logistics operations of customs brokerage firms located in Sta. Clara, Batangas. Findings shall be interpreted based on the research objectives and variables used relating to operational efficiency, service quality, timeliness, cost-effectiveness, and client satisfaction that will empirically result in providing a basis for the proposed business strategies discussed in the next chapter.

3.1 Profile of Respondents as to Employees and Clients

3.1.1 Profile of Respondents as to Employees

Table 3.1.1.1

Profile of Respondent Employees as to Experience Levels

Years of Experience	Frequency	Percent
Less than 2 years	6	33.3

2-5 years	0	0.0
6-10 years	11	61.1
More than 10 years	1	5.6
Total	18	100.0

Table 3.1.1.1 is showing the respondent employees' years of experience in logistics and customs brokerage. It revealed that most employees have accrued more than enough experience and falls within the category of 6–10 years ($n = 11$, 61.1%). This suggests that the workforce has acquired familiarity to an intermediate or possibly an advanced level with the details of logistic processes, customs regulations, and even brokerage operations.

Approximately, one-third of employees ($n = 6$, 33.3%) turned out that they had less than 2 years of experience. This shows a good number of new workforces in the business and it may point to hiring moves meant to keep up with rising trade or just how the company brings in new skills for its shipping work. Also, no respondents fall under the 2–5 years category (0.0%), which could infer how difficult it is to retain employees within these years of experience possibly because they either get promoted to higher positions or transfer to other sectors. This gap is very important in formulating a business strategy since; therefore, it highlights a possible weakness on the part of human resource sustainability particularly on the retention of staff after their first years. Only one individual ($n = 1$, 5.6%) has more than 10 years of experience. This fact already indicates how highly tenured employees are not much visible in Sta. Clara, Batangas customs brokerage firms and though small in number, some valuable institutional memory and expertise lie within them. The absence also indicates that long-term retention and career development programs are fully robust in the sector.

The number of employees with six (6) to ten (10) years of experience speaks to a group who can understand enough and support complicated logistics operations, regulatory compliance, and client coordination. This helps put strength into the operation. The large gap in the 2–5 years range and the low number of highly experienced employees clearly indicate areas that need to be strategically worked on.

There is a high demand for specialized skills in the logistics sector that increases the level of competition for talent. Strong recruitment practices and competitive compensation packages will help attract and retain employees (Ogedengbe et al., 2024). This sector falls under highly regulated operations; thus, training investments and following industry standards reduce the risk involved (Ogedengbe et al., 2024). Organizational resilience and workforce agility will also help other firms to maintain their normal operations when there is a disruption (Esan et al., 2024).

Table 3.1.1.2

Profile of Respondent Employees in Terms Educational Background

Educational Background	Frequency	Percent
BS Degree	17	94.4
with MA units	0	0.0
MA degree	1	5.6
with Doctoral units	0	0.0
Doctorate degree	0	0.0
Post doctorate degree	0	0.0
Total	18	100.0

Table 3.1.1.2 presents the educational attainment of employee respondents from customs brokerage firms. Most employees (n = 17, 94.4%) have a bachelor's degree, and only one respondent (n = 1, 5.6%) has a master's degree. There were no responses reported for having taken graduate-level coursework (e.g., MA units, doctoral units) or advanced postgraduate studies completed (doctoral or postdoctoral degrees).

The workforce is mostly bachelor's degree-qualified which is something that can be customarily anticipated in the customs brokerage industry where a great foundation in business administration, customs administration, logistics, or related fields are typically requirements for entry-level and mid-level positions. The lack of advanced graduate education seen in employees most likely demonstrates an industry preference towards practical skills, field experience, and regulatory knowledge rather than higher academic qualifications.

The presence of only a single master's degree holder (5.6%) affirms that advanced educational attainment is not common among employees of Sta. Clara brokerage firms. This can be attributed to the following factors: (a) bachelor's degree qualifications are adequate for advancement of careers in this particular sector, (b) lack of incentives as well as organizational support to employees to pursue higher education, and (c) the preference for experiential training and certifications such as licensure of customs brokers rather than graduate-level academic credentials.

From a strategic point of view, this shall ensure the maintenance of good operations and technically qualified staff being available while providing an opportunity for companies to invest in capacity-building initiatives, graduate-level training, and professional development programs. Through such investments, higher analytical, managerial, and strategic decision-making skills may be attained which are now more and more needed to successfully navigate the growing complexity of barriers in international trade plus customs rules as well as digital logistics integration.

Workers at customs brokerage firms ought to know well public and private trade laws for them to be successful in the global market. Higher education would provide better knowledge of the complex legal frameworks that are important for good customs operation (Lee, 2023). Global competitiveness is directly related to efficient customs procedures; thus, higher educational qualifications would improve the potential of finding ways to implement efficiency by opening up more trade and increasing economic growth (Oğuz, 2024). Even though encouraging higher educational attainment and structured postgraduate pathways has introduced positive benefits, problems do exist. The training program cannot be implemented due to a lack of funds and the availability of modern training materials (Cherkunov, 2024)

Hence, a balanced approach in consideration of these challenges is very imperative toward successful enhancement of educational profiles in customs brokerage firms.

3.1.2 Profile of Respondents as to Clients

Table 3.1.2.1

Profile of Respondent Clients as to Type of Transactions

Type of Transactions	Frequency	Percent
Import	26	76.5
Import/export	8	23.5
Transshipment	0	0.0
Total	34	100.0

Table 3.1.2.1 Distribution of client respondents by the type of transaction they have with the customs brokerage firm. Most clients (n = 26, 76.5%) said that they are involved with import transactions only while few clients (n = 8, 23.5%) said that they are involved with both import and export transactions. None of them reported to be involved in transshipment activities (0.0%).

Import transactions reveal the dependency of Sta. Clara brokerage clients on inbound logistics because this area serves as an entry point for goods. This trend goes hand in hand with the real character of Batangas Port, a major gateway through which raw materials, industrial products, and consumer goods are imported. The low percentage of clients who perform import and export activities indicates that although some firms participate in the whole cycle of international trade, most are more involved in one leg of the transaction-in this case, importing rather than exporting goods from the country.

It may indicate that Sta. Clara brokerage firms and their clients do not actively participate in performing intermediary logistics node activities of goods being transshipped via the Philippines to other ports. This could be because there is no infrastructure for transshipment in Batangas or most of the activities take place in bigger transshipment hubs in Manila or Subic.

It is through import transactions that the competence of customs brokerage firms in Sta. Clara is put to test concerning documents on import, classification on tariffs, clearance from customs, and related regulations on imports. A smaller group conducting both import and export transactions revealed a market opportunity: firms may widen market participation by advocating for the promotion of export facilitation that will provide help to any client who wishes to diversify into outbound trade. The finding of a missing transshipment service delivers another possible future niche strategy if Batangas was considered for an upgrade or even for increased demand brought about by regional trade agreements.

Customs brokers are pivotal to the import operations process while brokerage firms shall enhance their service delivery on time and sensitivity to the importer by practicing speed, dependability, and flexibility. Firms going through internationalization need an assessment of their export capacity and clear organizational goals; hence, positioning the market clearly monitors export performance that needs adjustment. International cooperation in harmonizing logistics standards will open up the potentiality of transshipment activities; however, this needs political support in alliance with strategic partnership deals because international trade rules are very complex.

Table 3.1.2.2

Profile of Respondent Clients as to Years of Engagement with the Customs Brokerage

Firms

Years of Engagement	Frequency	Percent
Less than 2 years	3	8.8
2-5 years	19	64.7
6-10 years	9	26.5
More than 10 years	3	8.8
Total	34	100.0

Table 3.1.2.2 presents the distribution of client respondents by years of engagement with customs brokerage firms. Most clients, $n = 19$ or 64.7% said they have been engaged with brokerage services within a period of 2–5 years. This was followed by a 6–10 years engagement, $n = 9$ or 26.5%. A much smaller proportion, $n = 3$ or 8.8% indicated less than 2 years engagement and more than 10 years engagement as well. This already totals to 34 respondents which proves that the figure of 18 listed as total in the table is a typographical error.

The dominance of clients in the 2–5-year category highlights that brokerage-client relationships in Sta. Clara are relatively young but already situated mostly within the middle term of lifecycle stage engagement. This pattern indicates that numerous firms have successfully transformed initial engagements into steady partnerships but stumble when trying to carry these relationships further on a long-term basis. This is attested by the fact that nearly one-third of the clients belong to a 6–10-year engagement, which speaks volumes about continuity and satisfaction. Having crossed over the initial stages, clients prefer to keep steady business relations.

A low percentage of clients who have been engaged for more than 10 years could speak either to heightened competition and changing client preferences or structural factors that do not permit long brokerage-client relationships. Similarly, a low number of clients in the category "less than 2 years" speaks to a company that is currently not acquiring new clients at the rate it had previously. The reasons could be market saturation or better brokerage services elsewhere.

Strategies, transparency, and competence are good elements of trust-building which significantly influence client satisfaction and investment decisions. A strong advisor-client relationship enhances client retention and loyalty. Customer Lifetime Value requires effective onboarding and renewal management, Personalized onboarding experiences help recognize the value of offering services to clients by enabling them to realize the value quickly; proactive renewal strategies enhance the retention rate. Client base data analysis optimizes marketing strategies since it helps firms understand their preferences and behavior; thus, firms can reformulate their marketing efforts toward conversion rates and loyalty improvement. Marketing personalization increases

interactions between a client and a firm by raising client satisfaction with that firm; hence, the profitability level in an enterprise improves.

Table 3.1.2.3

Profile of Respondent Clients as to Frequency of Transactions

Frequency of Transactions	Frequency	Percent
Less than 5 entries/month	5	14.7
6-10 entries/month	14	41.2
11-15 entries/month	4	11.8
16-20 entries/month	4	11.8
21-25 entries/month	3	8.8
More than 26 entries/month	4	11.8
Total	34	100.0

Table 3.1.2.3 presents the monthly number of customs brokerage transactions that clients reported, which shows that the largest group of clients ($n = 14$, 41.2%) falls within the range of 6–10 entries per month. This suggests a significant portion of firms to be active with a moderate and regular import/export activity; hence, it reflects the actual scenario of medium-scale trading businesses who frequently need to depend on customs brokerage services but do not fall under very high-volume transactions.

A smaller though significant proportion of clients ($n = 5$, 14.7%) made less than 5 transactions in a month—most probably micro, small, or even seasonal traders. The rest of the client groups fall fairly evenly among higher buckets of transactions per month: 11–15 entries ($n = 4$, 11.8%), and 16–20 entries ($n = 4$, 11.8%) as well as more than 26 entries in a single month ($n = 4$, 11.8%). The smallest group was those transacting 21–25 entries per month ($n=3$, 8.8%).

The distribution proves that Sta. Clara brokerage houses basically serve medium volume clients, they also transact with a diversified type of clients from low volume up to high-volume traders. High-frequency users are very significant. Their existence. More than 26 entries per month. 11.8%. It means that some brokerage houses are carrying intensive logistics operations for large-scale trading businesses. Where there is a large-scale trading business, logistics must be efficient and expertise on compliance and advanced documentation management must be in place.

Medium volume transactions also mean that customs brokerage firms have to make service models available on the scale and prioritize making their operations very efficient as volumes increase while still keeping the smaller client affordable. High volume clients further indicate logistics prowess that will be needed: digital systems managing transactions, even more expedited clearance processes, and special client servicing arms.

This result also speaks of openings for evolution in business strategy. Firms may work out varied service packages, for instance, affordable solution offerings for low-frequency clients and premium, technology-enhanced services for high-frequency clients. This way, brokerage firms can widen their client base while ensuring the loyalty of high-volume users whose operations go a long way in ensuring stability in Revenue.

Customs brokers in the Philippines have achieved very solid and credible reputations not only for high ratings on quality but also on dependability, which essentially keeps the client's content across varied volumes of transactions with different clients.

Most firms allow for flexible operation which addresses the needs of small and big traders plus being cost-effective hence attracting a large number of clients due to competitive pricing. Advanced information systems and technology integration become service differentiation factors, thus emphasizing the technological competency of a customs brokerage company in choosing one. Logistics has an important place in controlling transactions regarding foreign trade; transportation, warehousing, and the customs procedure are determined within this scope for efficient fulfillment of activities under a customs brokerage.

3.2 Respondent Employees' Perceptions on the Efficiency of Logistics Operations in terms of Selected ServQual Dimensions

Table 3.2.1

*Respondent Employees' Perceptions on the Logistics Operations as to
Reliability of Service*

Reliability of Service	Mean	Interpretation
The firm consistently meets delivery deadlines and maintains a reliable performance record in customs operations	3.72	Very Efficient
The firm maintains a high level of accuracy in processing customs clearance and documentation.	3.61	Very Efficient
The firm is dependable in resolving issues or problems related to customs clearance.	4.00	Very Efficient
The firm strictly adheres to all regulations in processing customs documents and ensures compliance at all times.	4.00	Very Efficient
Reliability of Service Weighted Mean	3.83	Very Efficient

Table 3.2.1 presents ratings on how customs brokerage firms at Sta. Clara, Batangas practiced service reliability. This has resulted in a mean score of 3.83 interpreted as "Very Efficient". Hence, these firms can be considered to possess good logistics operation reliability.

Across the indicators, the highest rating goes to the dependability of firms in resolving

issues or problems related to customs clearance ($M = 4.00$, Very Efficient) next to their strict adherence to regulations and compliance at all times. Meanwhile, this simply denotes that like any other service provider firm, customs brokerage firms put first in their line of priorities regulatory compliance and client assurance when considering factors that can inject risks because of penalties, delays, or shipment held-up. It falls within what has been strategized as a need for compliance-oriented operations in logistics, where legal accuracy and timeliness are paramount. Respondents perceived firms to be consistent in meeting delivery deadlines as well as maintaining reliable performance records, rated at 3.72, Very Efficient. This is slightly lower than the other indicators but still high enough to affirm the firms' operational efficiency in ensuring timeliness, which is a very critical factor in client satisfaction as well as a determinant of who wins the battle for business among logistics operators.

The indicator that rated the lowest was about the firms' ability to maintain a high level of accuracy in processing customs clearance and documentation ($M = 3.61$). This clearly points out where small mistakes can happen even within a generally strong performance-most likely attributable to the complexity of requirements related to documentation or simply because of large volumes being processed. It therefore underscores, reiterates, emphasizes the necessity for staff training on an ongoing continuous constant basis as well as investments in digital documentation systems and upgraded quality control procedures to maintain accuracy.

Net assessment of the data shows that customs brokerage firms in Sta. Clara are very reliable partners in logistics operations. Firms offering such services are highly dependable partners in logistics operations within Sta. Clara. Advanced communication and information technologies can further upgrade quality towards achieving efficient customs services thereby increasing the satisfaction of clients. Slightly lower mean documentation accuracy has indicated the gap which needs to be strategically improved. This gap will be filled by the implementation of digital customs platforms and process automation.

Increasing the professionalism and adaptability of workers raises the quality of service offered in customs brokerage. Competence is explained toward managing complexities in requirements for modern trades, there has to be an understanding first- an explanation that training and development will give workers. Therefore, raising worker competence helps in managing complexities related to requirements of modern trades (Phan & Mohanty, 2024).

Table 3.2.2

Respondent Employees' Perceptions on the Logistics Operations as to *Responsiveness*

Responsiveness	Mean	Interpretation
The firm responds promptly to inquiries related to customs clearance and documentation.	3.78	Very Efficient
The firm resolves issues or delays in customs processes quickly and effectively.	3.78	Very Efficient
The firm provides timely updates regarding the status of customs clearance and compliance.	3.61	Very Efficient
The firm is flexible in accommodating changes in client needs or shipment schedules.	3.67	Very Efficient
The firm provides assistance beyond standard working hours when urgent situations arise.	3.61	Very Efficient
Responsiveness Weighted Mean	3.69	Very Efficient

Table 3.2.2 presents the employees' evaluation of the efficiency by responsiveness, of customs brokerage firms. The overall weighted mean stood at 3.69 interpreted as "Very Efficient" therefore there is a high responsiveness to client inquiries, issues, and urgent concerns.

The indicators that rated highest were the firms' ability to answer inquiries about customs and documentation and whether they could resolve any issues or delays in the customs process quickly and effectively (M = 3.78). This timeliness of the firms in providing client support highlights efficiency that would be a determinant factor toward minimizing interruptions in logistic operations. Client confidence is built-up as a result of such quick responses particularly in a customs brokerage context where delays may carry high financial as well as operational ramifications.

Other responsiveness factors rated lower but still fall within the "Very Efficient" rating are flexibility in initiating changes based on client needs or shipment schedules (M = 3.67) and providing information regarding the status of customs clearance, and compliance, etc., in time (M = 3.61). While this indicates strong performance in these areas, it does leave room to be even more proactive in communication and even more adaptable-a target for improvement to match increasing demands from clients for real-time updates and ever-customized logistics solutions.

The indicator which received the lowest score, though still well within the Very Efficient mark, was support after normal working hours in cases of emergency (M = 3.61). This may indicate that companies are very responsive during regular hours but support after-hours is lacking. International trade and customs clearance are time-sensitive processes hence it is viewed that improvement on extended service availability would further enhance client satisfaction as well as improve competitive positioning.

The introduction of advanced communication systems will play a major role in accelerating and enhancing the effectiveness of customs services. Therefore, with the adoption of digital platforms, customs brokerage firms are able to provide real-time information to their clients hence boosting transparency and accountability (Zimin et al., 2022) (Glazkova & Suhareva, 2022). Improved customer relationship management systems empower better communication and fulfillment of all necessary requirements for prompt and efficient service delivery (Marcetic et al., 2022). To implement continuous service availability via digital channels resulting in minimal disruptions, customs brokerage firms must make after-hours support available which can be implemented through automated systems (Marcetic et al., 2022). Quality in service provision and customer satisfaction can also

be improved if employees are trained well and adequately equipped to handle after-hours inquiry situations (Trakulsunti et al., 2022).

Table 3.2.3

Respondent Employees' Perceptions on the Logistics Operations as to Assurance

Assurance	Mean	Interpretation
The firm demonstrates a thorough understanding of customs regulations and requirements.	4.00	Very Efficient
The firm provides accurate, clear, and trustworthy information regarding customs documentation.	4.00	Very Efficient
The firm shows competence in handling complex customs requirements and documentation.	4.00	Very Efficient
The firm ensures that compliance with customs regulations prevents legal issues or penalties.	4.00	Very Efficient
The firm's expertise in customs clearance and compliance builds my trust in their operations.	4.00	Very Efficient
Assurance Weighted Mean	4.00	Very Efficient

Table 3.2.3 presents the results of the evaluation under assurance, or how well the customs brokerage firms inspire confidence and trust their services based on expertise, accuracy, and compliance. An overall weighted mean of 4.00 interpreted as Very Efficient would simply indicate that these respondents perceive the Sta. Clara customs brokerage firms to be highly competent as well as trustworthy service providers.

All indicators received a mean rating of 4.00, on the level of strong client confidence in various dimensions of assurance. Respondents attested that firms have mastered well the regulations and requirements in customs and are able to relay information accurately, clearly, and credibly regarding documentation in customs. This finding assumes that firms do well in playing their regulatory intermediary role by providing adequate guidance to the client effectively leading through the complex intricacies of custom processes.

Firms were also seen as able to deal well with tough customs needs and papers and in making sure that following the rules stops any legal problems or fines. These scores prove that clients think of the firms not just as quick service givers but also as risk handlers who protect against possible working and legal dangers.

Customs clearance and compliance are areas where expertise fosters trust in the operations of such firms thereby highlighting the strategic value of professional credibility and technical knowledge in long-term client relationships.

. Accordingly, assurance is a critical determinant of client loyalty since trust is a foundation to logistics and brokerage sustained partnership.

Continuous professional development of customs brokers is required to keep pace with swift changes in international trade practices and technological advancement. Training shall dwell on specific customs competencies that need further enhancement for effective performing (Cherkunov, 2024). Teaching the clients about customs requirements and the accompanying documentation will hasten the process and reduce errors, since SMEs encounter problems understanding export documents (Arifin et al., 2022). This, therefore, makes an assessment of and improvement in customs services from a consumer-based approach that focuses on their needs and expectations more likely to enhance client satisfaction and loyalty as well.

Table 3.2.4

Respondent Employees' Perceptions on the Logistics Operations as to Empathy

Empathy	Mean	Interpretation
The firm genuinely seeks to understand and meet my business needs related to customs clearance.	4.00	Very Efficient
The firm listens to my concerns and takes action to address them effectively.	3.94	Very Efficient
The firm provides personalized services that match my specific customs clearance and compliance requirements.	3.78	Very Efficient
The firm's employees are courteous and show genuine interest in resolving my queries.	4.00	Very Efficient
The firm explains the customs process clearly and provides regular updates on my shipments.	4.00	Very Efficient
Empathy Weighted Mean	3.94	Very Efficient

Table 3.2.4 contains the ratings of customs brokerage firms located at Sta. Clara, Batangas on the dimension of empathy or the extent to which they were able to show personalized attention and care in fulfilling the needs of their clients. It posted an overall weighted mean of 3.94 that can be interpreted as Very Efficient meaning to say that respondents rated brokerage firms as highly empathetic in dealing with their clients.

The top indicators were that companies truly try to know and meet business needs tied to customs clearance ($M = 4.00$), that workers are polite and show real interest in solving questions ($M = 4.00$), and that firms explain customs processed in detailed and give regular updates on shipments ($M = 4.00$). These scores show that politeness, quick answers to questions, and regular updates all help client trust and make them feel good.

Moreover, the employees rated the companies as very good at listening to client concerns and taking appropriate action ($M = 3.94$) and being able to provide personalized services specific to customs clearance and compliance needs ($M = 3.78$). The service is still rated as Very Efficient; however, personalization has a lower mean, which may indicate that firms use more standardized service delivery rather not fully customize solutions to the diverse needs of clients. Firms offering more personalized service would be preferred in such a competitive logistics operation by establishing long-term partnerships.

Empathy becomes the social glue in customer interactions, thus significantly determining the customer experiences through emotional engagement and trust (Lehnert & Kuehnl, 2024) (Anderson, 2025). In customs brokerage practice, it uplifts quality service delivery by responding to a client's concern with understanding and personalized attention. This will be important toward sustaining as well as enhancing satisfaction and loyalty from clients (Reyes-Real et al., 2024). Empathy training programs are very good interventions for the development of such major competencies in communication, relationship building, and emotional resilience that would help a service employee be able to offer more empathic and client-focused services (Lajante et al., 2023). Training in empathy and communication skills can difference interactions in service making them more effective while building strong relationships with clients (Andrade, 2023) (Ouhammou & Manar, 2025).

3.3 Significant differences in the Employees' Perceptions on ServQual Dimensions when grouped according to Profile of Respondents

Table 3.3

ANOVA Results: ServQual Dimensions vs. Employees' Profile

Construct	Dimensions	df	Mean Square	F	Sig.	Interpretation	Null Hypothesis Decision
Years of Experience	Reliability of Service	2	.040	.890	.431	Not Significant	Accept the Null Hypothesis
		15	.045				
		17					
	Responsiveness	2	.058	.455	.643	Not Significant	Accept the Null Hypothesis
		15	.127				
		17					
	Assurance	2	.000				
		15	.000				
		17					
	Empathy	2	.009	.693	.515	Not Significant	Accept the Null Hypothesis
		15	.014				
		17					
Educational Background	Reliability of Service	1	.029	.653	.431	Not Significant	Accept the Null Hypothesis
		16	.045				
		17					
	Responsiveness	1	.102	.856	.369	Not Significant	Accept the Null Hypothesis
		16	.120				
		17					
	Assurance	1	.000				
		16	.000				
		17					
	Empathy	1	.003	.236	.633	Not Significant	Accept the Null Hypothesis
		16	.014				
		17					

Table 3.3 contains the results of a one-way analysis of variance that sought to establish if there are any significant differences in employees' perception ratings for brokerage firms' service quality dimensions when grouped according to years of experience and educational background. No statistically significant difference was found in employees' perceptions regarding the service quality dimensions among groups based on years of experience, reliability: $F(2,15)=0.89$ $p=.431$; responsiveness: $F(2,15)=0.46$ $p=.643$; empathy: $F(2,15)=0.69$ $p=.515$ and educational background, reliability: $F(1,16)=0.65$ $p=.431$; responsiveness: $F(1,16)=0.86$ $p=.369$; empathy: $F(1,16)=0.24$ $p=.633$. No test was computed for one of the variables due to a lack of variance.

Studies on audit quality demonstrate that the influence of communication effectiveness and social cognitive capital toward the perception of service quality can be dependent on the educational background of clients (Sarapaivanich et al., 2023). In effect, this proves the initial proposition that though dimensions of service quality are important across different levels, their perceived impact would vary based on educational attainment. There has been relatively scant literature directly linking how much value employees place on different dimensions of service quality with years of experience in employment. However, the continued importance of these dimensions in several studies indicates that their perceived value might remain constant across experience.

In the life insurance business, empathy and assurance are important for achieving customer satisfaction in different demographic groups. This study takes into consideration brokerage firms primarily. Results from various other industries continue to validate the importance of service quality dimensions across different sectors. For example, logistics and airport service determined that reliability, assurance, and empathy create a strong influence on customer satisfaction; hence, it is highly applicable.

3.4 Respondents' Client Perceptions in the Delivery of Service Dimensions

Table 3.4.1

Respondents Clients' Perceptions in the Delivery of Service as to Service Quality

Service Quality	Mean	Interpretation
The firm consistently provides accurate, error-free documentation and delivers services that meet or exceed my expectations in terms of quality.	3.59	Excellent
The firm provides high-quality customer service in terms of clear communication and responsive support.	3.88	Excellent
The firm's personnel demonstrate expertise and knowledge in handling customs processes and regulations.	3.91	Excellent
The firm ensures that all customs procedures are performed in full compliance with applicable laws and regulations.	3.85	Excellent
Service Quality Weighted Mean	3.81	Excellent

Table 3.4.1 shows the overall appraisal on service quality of customs brokerage firms by respondents in Sta. Clara, Batangas, therefore getting a weighted mean score of 3.81 with interpretation as "excellent" which means to say that clients and stakeholders perceive that these firms execute high standard quality service in different dimensions such as documentation, customer service, personnel expertise and compliance to regulations.

The highest rating among all dimensions was for expertise and knowledge in managing customs processes and regulations. This falls under the client's confidence on the technical competence of brokerage personnel. It highlighted the professional skills that are required to deal with complex procedures related to customs. Firms have fully able to perform customs procedures in full compliance with the applicable laws and regulations, which affirmed their effectiveness in minimizing risks relating to non-compliance as well as delays or penalties.

Quality service delivery in communication and responsiveness was also noted ($M = 3.88$, Excellent), thereby proving the capability of such firms to deliver not only technical accuracy but support offered to clients as well. This finding becomes consistent with that found earlier under the dimensions of responsiveness and empathy, thereby providing further support to the argument that it is client engagement practices which express perceptions of quality strongly.

This is the lowest-rated item though rated excellent on which firms have and maintain accurate, error-free documentation and services that meet or exceed clients' expectations. It denotes what is already strongly based but has small areas to further fine-tune the accuracy of documentation and consistency in delivering the same level of service. Since the customs operation is very much dependent on documentation, any small lapse will cast doubt on efficiency as well as client satisfaction and trust.

Digital technologies increase compliance and efficiency within customs services evidenced by the implementation of CEISA 4.0 accurate and timely processing of trade documents. A client-centric approach in customs services underscores understanding and addressing the needs of clients that can be well expressed through digital platforms enhancing communication and service delivery. Though it has strengths in other areas, documentation is an area that requires accuracy.

The shift to digital systems can largely assist in improving accuracy by reducing manual errors and simplifying the processes. The integration of digital systems into the customs operations is very essential towards the improvement of service quality.

Table 3.4.2*Respondents Clients' Perceptions in the Delivery of Service as to Timeliness*

Timeliness	Mean	Interpretation
The firm consistently completes customs clearance procedures and delivery commitments within agreed timelines.	4.00	Excellent
The firm provides timely updates on the status of my shipment and any customs-related issues.	3.74	Excellent
The firm resolves any issues or delays in the customs process quickly and with minimal disruption.	3.68	Excellent
The firm is proactive in informing me of any potential delays and the actions being taken to address them.	3.74	Excellent
Timeliness Weighted Mean	3.79	Excellent

Table 3.4.2 shows how the respondents rated customs brokerage firms on the basis of timeliness, an important dimension of service performance in logistics operations. The over-all weighted mean is 3.79 which falls under the interpretation of "Excellent" meaning to say that respondents rated the firms as very much capable of completing their tasks and fulfilling commitments within agreed timeframes.

Customs clearance procedures and delivery commitments within agreed timelines was the best rated indicator. This finding underscores the firms' strong performance in fulfilling the core expectation of timeliness which is very essential to be able to attain client satisfaction as well as achieve operational efficiency, particularly when dealing with international transactions.

Respondents conveyed that firms timely update on the status of their shipments and all matters concerning customs (M = 3.74) as well as advance notice of any possible delay with corresponding actions that may be taken (M = 3.74). This therefore proves that communication is highly appreciated by the clients, however, there is still space for ample proactive information-sharing particularly when delays are unanticipated or problems with regulations.

The lowest-rating indicator, though still excellent, was their ability to resolve issues or delays in the customs process quickly and with minimal disruption (M = 3.68). This proves the findings of the study that while firms may be extremely reliable in the conduct of standard operations, the responsiveness to sudden disruptions- be it system downtime, port congestion, or document discrepancies- can further be enhanced.

Reputation for reliability requires effective communication. Technology-based advanced communication leads to quality customs services. Hence, the cutting-edge communication and information technologies adoption in the customs services presented by Zimin et al., should be highlighted (Zimin et al., 2022). Strong backup plans are also referred to as measures that will ensure the continuous smooth flow of operations in customs. The experience of the COVID-19 pandemic once again underscored the need for agile and responsive custom procedures against unprecedented challenges, they added.

Adopting simplified customs procedures under a regime of efficient compliance controls will reduce the complexities and costs of border procedures by customs brokerage firms thereby enhancing their role as dependable trade facilitators toward Rbehat & Marafi, 2024. While enhanced communication, tracking and contingency protocols are focused on, consideration is also taken within a broader context of logistics and infrastructure. Transaction costs are minimized by efficient logistic systems supported by modern infrastructure and speed is added to trade accompanied by reliability in it toward Liu, 2024.

Table 3.4.3

Respondents Clients' Perceptions in the Delivery of Service as to Cost of Service

Cost of Service	Mean	Interpretation
The firm offers competitive and reasonable pricing for customs clearance and related services.	3.32	Excellent
The firm offers transparent pricing with no hidden costs or unexpected charges.	3.74	Excellent
The firm provides good value for the money I spend on customs clearance and related services.	3.79	Excellent
I am satisfied with the overall cost-effectiveness of the services provided by the firm.	3.91	Excellent
Cost of Service Weighted Mean	3.69	Excellent

Table 3.4.3 presents the respondents' assessment of the value for money of services rendered by customs brokerage firms in Sta. Clara, Batangas. An overall weighted mean of 3.69 interpreted as 'Excellent' proves that to a large extent, clients believe that the firms render valuable services equivalent to the amount paid for customs clearance and all related processes.

The best-rated indicator was client satisfaction on the overall cost-effectiveness of services, which rated at 3.91 interpreted as Excellent. This shows that clients perceive the firms to be delivering strong returns on investment; in other words, operational efficiency and service quality justify the costs paid. Similarly, respondents also agreed that the firms provide satisfactory value for money in customs clearance and related services rating at 3.79 interpreted as excellent. This further reinforces the perception that fees charged are aligned with service quality outcomes.

They also rated highly for transparent pricing with no hidden costs or unexpected charges (M = 3.74, Excellent). This proves how much value, Transparent billing adds to building up the Credibility of a Brokerage firm. When there is less likelihood of running into disputes because of having Transparent Billing practices Credibility gets Strengthened and Long term Partnerships are formed between Clients and the Brokerage firm.

The provision of competitive and reasonable pricing was rated the lowest, though it still falls within the interpretation of excellent (M = 3.32). This denotes that while clients see great value for money, there might be some sentiments on the consistency of having the most competitive pricing structure in the market. Possible reasons could be attributed to the variations in service inclusions, premium charges for specialized services, or simply by comparison with other alternative brokerage providers.

The customs brokerage market is highly dynamic with changes in international trade, new or amended legislations, and technological progress requiring constant change to stay competitive.(Чымак et al., 2024) The application of tiered pricing models for different client segments where basic to premium services are offered depending on the needs of the clients and their willingness to pay can be used between cost-effectiveness and improved service.(Stepuleva & Makarova, 2024)

Bundled packages may be defined as comprehensive solutions at a discount that motivates the client to involve more services from one provider increasing and enhancing client retention and satisfaction. The orientation on the principles of sustainable development, customs brokerage firms can position itself as front runners in maintaining ethical and responsible business conducts hence attracting environmentally conscious clients.

3.5 Significant Differences in the Clients' Perceptions on the Delivery of Service

Dimensions when grouped according to Profile of Respondents

Table 3.5

ANOVA Results: Delivery of Service Dimensions vs. Clients' Profile

Constructs	Dimensions	df	Mean Square	F	Sig.	Interpretation	Null Hypothesis Decision
Type of Transaction	Service Quality	1	.014	.166	.686	Not Significant	Accept the Null Hypothesis
		32	.085				
		33					
	Timeliness	1	.081	.982	.329	Not Significant	Accept the Null Hypothesis
		32	.083				
		33					
	Empathy	1	.005	.038	.846	Not Significant	Accept the Null Hypothesis
		32	.133				
		33					
Years of Engagement	Service Quality	3	.070	.827	.489	Not Significant	Accept the Null Hypothesis
		30	.084				
		33					
	Timeliness	3	.070	.827	.489	Not Significant	Accept the Null Hypothesis
		30	.084				
		33					
	Empathy	3	.061	.448	.721	Not Significant	Accept the Null Hypothesis
		30	.136				
		33					
Frequency of Transactions	Service Quality	5	.051	.580	.715	Not Significant	Accept the Null Hypothesis
		28	.089				
		33					
	Timeliness	5	.044	.492	.779	Not Significant	Accept the Null Hypothesis
		28	.090				
		33					
	Empathy	5	.072	.512	.764	Not Significant	Accept the Null Hypothesis
		28	.140				
		33					

Table 3.5 shows the results of a one-way analysis of variance on whether or not there is a significant difference in clients' perceptions regarding the quality of service received based on three demographic dimensions: type of transaction, years of engagement, and frequency of transaction. A one-way analysis of variance was made to determine if there exists a significant difference in the clients' perceptions regarding the quality of service offered based on these three factors. It revealed that type of transaction does not significantly affect the perception regarding quality of service, timeliness, and empathy (all $p > .05$).

The results revealed that years of engagement did not produce statistically significant differences in clients' perceptions across the three service delivery dimensions—service quality, timeliness, and empathy (all $p > .05$). This indicates that regardless of how long clients have been engaged with the service provider, their evaluations of service delivery remained consistent. Similarly, frequency of transactions did not significantly influence perceptions of service quality ($F(5,28) = 0.580$, $p = .715$), timeliness ($F(5,28) = 0.492$, $p = .779$), or empathy ($F(5,28) = 0.512$, $p = .764$). These findings suggest that even clients who transact more frequently do not perceive meaningful differences in the quality or timeliness of services rendered compared to those who transact less often.

All constructs of type of transactions, years of engagement, and frequency of transactions returned computed p-values greater than the 0.05 level of significance which means accepting all null hypotheses hence no significant difference on the dimensions of perceived delivery service among clients when grouped according to those demographic or transactional characteristics. A very good indicator that would imply having a relatively uniform service performance for different groups of clients-consistently maintaining a certain level of standard in delivering the services that this particular organization has promised.

Trust and customer loyalty are gained with consistent service delivery. Customers want to find reliance on safety fulfilled through the consistent fulfillment of promises regarding on-time delivery and the quality of the product. This type of consistency builds trust in a long-term relationship with customers (Anderson, 2025). The dimensions by which operational performance in customs brokerage is assessed include quality, speed, dependability, flexibility, and cost. A high rating under these five dimensions denotes having a consistent as well as reliable service delivery process; therefore very important to meet the time sensitivity of importers (Sernero, 2024).

3.6 Proposed Business Strategies

From what the study came up with, some proposed business strategies can be drawn from the employees' and clients' perspectives to improve operational performance and service quality of customs brokerage firms in Sta. Clara Batangas. Strengths in reliability, assurance, responsiveness, and empathy expose strategic opportunities available for workforce development, service differentiation, and technological integration.

The data describe a professional workforce that requires organized retention and career path development programs. A large gap of two to five years of experience exists among employees though most have six to ten years; therefore, mid-career employees are not being retained. Firms should immediately work on structured career development and mentorship programs which inculcate a growth culture and knowledge sharing from senior employees to junior employees. Promotion pathways clearly articulated and incentives for long-term service will make human capital sustainability stronger.

It found that workers rated service reliability and assurance as highly efficient with minimal gaps in the accuracy of documentation and responsiveness beyond working hours. Firms should regularize an institutionalized in-house professional training which will dwell more on the digital documentation system, customs automation tools, and compliance updates to uplift performance on those areas. Training of this nature should be accompanied by investments in technology-driven workflow systems capable of real-time communication support inclusive of automatic notifications, and afterhours support for clients. Such improvements would make efficiency as well as responsiveness better when dealing with time-sensitive custom processes.

Empathy and service culture reveal that while employees are very courteous and understanding of clients, there is little personalization expressed in the delivery of services. Therefore, more empathy and communication training programs should be developed for employees to build emotional intelligence as well as relationship management and problem-solving dimensions. The training would also establish client-oriented service from listening to client needs and customizing support consequently adding firms' professionalism and care to the frontline image. Also, since most employees have only attained a bachelor's degree, management can offer scholarships, tie-up programs with schools or postgraduate support programs that could help enhance analytical skills and strategic decision-making abilities of the workforce.

From the perspectives of the clients, ratings were consistently high across dimensions related to service quality, timeliness, cost- effectiveness, and empathy. Since no significant differences across client demographics by type of transaction, years of engagement or even frequency of transactions were found from the ANOVA results, this infers that service quality is delivered on a very uniform level-consistency-is-competitive-strength that should be institutionalized through standardized operating procedures (SOPs) for institutionalizing reliability and uniformity of service to all categories of clients.

However, the prevalence of import-only clients (76.5%) over those doing both import and export transactions (23.5%) unveils a scope for strategic expansion. Customs brokerage firms may discover export facilitation services through export documentation support, international market advisory, and partnership programs with export-promotion agencies. Firms can diversify their client portfolio from such partnership programs that will also strengthen their role in both inbound and outbound logistics.

Client retention emerged as a strategic focus. A minor share of clients keep their relationships going for more than a decade whereas the major share keeps it within two to five years. This, therefore, indicates that forming an organized client relationship management program that will include tracking client engagement and satisfaction levels plus renewal cycles is likely to enhance client retention. The firm may also introduce loyalty programs where long-term clients can get rewards in the form of discounts on service or exclusive assistance channels. Suggested programs could also include customized onboarding packages for new clients and proactive renewal follow-ups for the existing ones which will enhance partnership sustainability.

They rated the overall cost-effectiveness and transparency as excellent but gave the lowest score to competitiveness in pricing. This clearly calls for flexible and differentiated pricing strategies. Therefore, Customs brokerage firms can implement a basic, premium, and enterprise level of service models that will be aligned based on different volumes of transactions and need levels of clients. Clearance, documentation, and logistics support bundled together as services at discounted rates are affordable to offer easy access and at the same time create loyalty.

Also, timeliness of service delivery is key to client satisfaction. Clients rated the timeliness as excellent but want more proactive communication in case of delays and status updates. Therefore, it calls for the firms to have integrated digital tracking systems and mobile applications that will enable the clients to know the stage which their shipment has reached and on which clearance stage it is. This level of technological advancement will be able to make transparency happen whereby trustworthiness in the firms is attained.

A shared path that links inner productivity with outer satisfaction can further strengthen the match between employee deeds and customer expectations. Making documentation more accurate by machine, receiving quicker assistance through web resources, building concern by means of speaking exercise which will result in work that is better, clearer, more directed toward the client.

Business strategies shall, therefore, underscore a twin yet interlocked pursuit of internal operational excellence and external client relationship enhancement. Employees see investments in workforce development training and technology adoption as valid efforts toward the maintenance of reliability and accuracy. From the clients' point of view, it includes service offerings expansion, loyalty programs, better pricing structures, and improved digital channels. Through such an alignment of strategies, customs brokerage firms in Sta. Clara will be able to enhance their competitive advantage getting consistent service delivery as well as building a long-term trust-based relationship with their clients by being seen as a reliable adaptive client-centered player in the logistics and customs brokerage industry.

CHAPTER 4

DISCUSSIONS

This chapter discusses in detail the results that were obtained in the previous chapter, relating them to the objectives of the study and the relevant literature. It also discusses their implications for logistics operations in customs brokerage firms at Sta. Clara. The discussion identifies main trends, gaps, and opportunities. This has formed the basis upon which new business strategies are being designed in the subsequent chapter.

4.1 Conclusions

This study measured the logistics operations and service quality of customs brokerage firms in Sta. Clara. The study focused on employee efficiency and client satisfaction in key dimensions of services such, reliability, responsiveness, assurance, empathy, timeliness, and cost-effectiveness in Sta. Clara, Batangas. Results generated reflected responses from both employees and clients that rated the performance of the firms as generally very efficient and excellent in all dimensions of service quality.

Profile of Respondents as to Employees and Clients (Based on 3.1). Customs brokerage firms in Sta. Clara, Batangas are supported by a workforce that is largely composed of bachelor's degree holders with moderate to high industry experience, while their clients are mainly importers with regular and moderate-to-high transaction volumes. This indicates that the firms operate within a stable operational environment where both employees and clients possess sufficient exposure to customs brokerage processes. The profile further shows that firms serve a recurring and established client base, which provides a strong foundation for sustained service delivery and long-term business relationships.

Employees' Perceptions on the Efficiency of Logistics Operations in terms of Selected ServQual Dimensions (Based on 3.2). Employees rated the logistics operations of customs brokerage firms in Sta. Clara as Very Efficient, particularly in terms of reliability and assurance. This indicates that firms are consistent in meeting service commitments, complying with customs regulations, and demonstrating technical competence in documentation and clearance processes. However, slightly lower ratings in responsiveness and documentation accuracy suggest that while overall efficiency is high, there remain areas that require operational and technological enhancement.

Significant differences in the Employees' Perceptions on ServQual Dimensions when grouped according to Profile of Respondents (Based on 3.3). The results show that there are no significant differences in employees' perceptions when grouped according to years of experience and educational background. This means that perceptions of reliability, responsiveness, assurance, and empathy are consistent across employee groups, indicating that service delivery standards and internal processes are uniformly applied within customs brokerage firms in Sta. Clara, Batangas.

Respondents' Client Perceptions in the Delivery of Service Dimensions (Based on 3.4). Clients rated customs brokerage firms in Sta. Clara as Excellent in terms of service quality, timeliness, and cost of service. The highest ratings were given to staff expertise, compliance with laws, and the timeliness of delivery, showing that clients highly value regulatory competence, prompt processing, and transparent costing. These findings confirm that customs brokerage firms are able to meet client expectations and provide dependable logistics support.

Significant Differences in the Clients' Perceptions on the Delivery of Service Dimensions when grouped according to Profile of Respondents (Based on 3.5). The results reveal that there are no significant differences in clients' assessments when grouped according to type of transaction, years of engagement, and frequency of transactions. This indicates that customs brokerage firms provide a consistent level of service quality, timeliness, and cost efficiency regardless of client size or transaction volume.

Proposed Business Strategies (Based on 3.6). The study is indicative that the excellent performance of customs brokerage firms in Sta. Clara, Batangas in reliability, assurance, service quality, timeliness, and cost efficiency is a great precursor for strategic business development initiatives to take root. Proposed Strategies advocated under Digitalization, Workforce Development, Client Relationship Management, Service Diversification, and Standardization of Operations are directly hinged on gaps and strengths discovered from SERVQUAL ratings as well as client service delivery assessments—not therefore coming out as merely theoretical recommendations but rather evidence-based actions toward enhancing documentation accuracy and responsiveness to improve the long-term competitiveness of customs brokerage firms in Sta. Clara, Batangas.

4.2 Recommendations

Based on the findings and conclusions of this study, the following recommendations are proposed to improve the logistics operations and service delivery of customs brokerage firms in Sta. Clara, Batangas.

Profile of Respondents as to Employees and Clients. Companies are supported by a workforce with moderate to high experience plus stable bases of recurring import clients, hence, it is recommended that customs brokerage firms enhance employee retention and client continuity programs. Career development tracks and mentoring systems, together with succession planning for mid-career employees to institutionalize the program and prevent the loss of trained personnel, should be included. At the same time, client account management programs need enhancement to sustain long-term relationships with existing importers and encourage higher client loyalty.

In addition, firms should implement structured onboarding and re-skilling programs to support new hires and ensure smooth integration into existing workflows, particularly in highly regulated customs processes. This will help maintain operational continuity despite workforce turnover.

Firms should also segment and manage their client base through key-account management systems so that long-term and high-volume clients receive dedicated support, helping to deepen loyalty and stabilize transaction volumes.

Employees' Perceptions on the Efficiency of Logistics Operations in terms of Selected ServQual Dimensions. Employees rated logistics as very efficient, in the dimensions of reliability and assurance, but documentation accuracy and responsiveness still need further improvement. It thus recommends continuous professional training that firms should invest in, including a customs compliance refresher and documentation quality control system. Adopt automated document checking and workflow tracking to minimize errors as well as improve response time during peak and after-hours operations.

Significant differences in the Employees' Perceptions on ServQual Dimensions when grouped according to Profile of Respondents. Employees across different experience and educational levels showed no significant differences in service perception, hence, it is recommended that firms maintain standardized operating procedures (SOPs) and uniform training programs across all staff levels. Firm-wide performance standards, service protocols, and compliance guidelines should be strictly implemented to ensure that service quality remains consistent regardless of who handles the transaction.

Respondents' Client Perceptions in the Delivery of Service Dimensions. The excellent ratings in service quality, timeliness, and cost of service, hence, customs brokerage firms should sustain these strengths by enhancing client-centric practices. It is recommended that firms strengthen communication systems, provide regular shipment updates, and maintain transparent billing practices. Client feedback mechanisms such as satisfaction surveys and service reviews should be institutionalized to continuously monitor and improve service performance.

Significant Differences in the Clients' Perceptions on the Delivery of Service Dimensions when grouped according to Profile of Respondents. Clients showed consistent service perceptions regardless of transaction type, engagement length, or transaction frequency, hence, it is recommended that firms maintain fair and uniform service delivery policies. Differentiated pricing, loyalty programs, and service packages may be introduced, but these should not compromise the consistency, timeliness, and reliability of core customs brokerage services.

Firms should also regularly monitor client satisfaction across different customer segments using surveys and performance indicators to ensure that differentiated service offerings do not create unintended gaps in perceived service quality.

Proposed Business Strategies. Based on the proposed business strategies, customs brokerage firms should pursue a strategic direction focused on digital transformation, workforce development, client relationship management, and service diversification. The adoption of CRM systems, electronic documentation platforms, and performance dashboards should be prioritized to enhance efficiency and competitiveness. At the same time, export facilitation, advisory services, and long-term

partnerships with government agencies should be developed to expand revenue streams and strengthen the firm's role in national trade facilitation.

Furthermore, firms should develop export facilitation and advisory services to complement import clearance operations, allowing them to diversify revenue streams and better support clients engaged in cross-border trade.

Finally, long-term partnerships with government agencies such as the Bureau of Customs, DTI, and PEZA should be strengthened to improve regulatory coordination, accelerate compliance processes, and position the firms as key partners in national trade facilitation initiatives.

Recommendation for Future Research. Future researchers are encouraged to expand this study by increasing the sample size and covering customs brokerage firms in other ports or logistics hubs in the Philippines to allow for comparative analysis across regions. Including firms from Manila, Subic, and Cebu would provide a broader understanding of how logistics operations and service quality differ under varying regulatory and operational environments.

In addition, future studies may incorporate qualitative methods such as interviews or focus group discussions to gain deeper insights into the experiences of employees and clients, particularly regarding challenges in documentation accuracy, responsiveness, and regulatory compliance. This mixed-method approach can provide richer explanations behind the quantitative results of SERVQUAL and service delivery assessments.

Finally, researchers may also explore the impact of digitalization, artificial intelligence, and automation on customs brokerage performance by examining how electronic documentation, AI-enabled compliance systems, and real-time tracking platforms influence efficiency, transaction costs, and client satisfaction over time.

4.3 Implications of the Study

These results should inspire management practice, human resource development, client relationship management, and policy formulation in the customs brokerage and logistics industry.

Managerial Implications. At the managerial level, the findings highlight the importance of leadership in sustaining both compliance-driven efficiency and client-centered service. The high employee ratings in assurance, reliability, and technical competence indicate that existing management practices are generally effective in maintaining service quality. However, the relatively lower ratings in documentation accuracy and responsiveness during after-hours operations suggest areas where management must strengthen training, digital support systems, and workforce deployment.

Managers should recognize that employees are key value drivers and that their competence directly influences client satisfaction. A culture of recognition, performance appraisal linked to training outcomes, and competency-based human resource frameworks can help sustain high service standards. The use of data-driven management tools such as CRM systems and service performance dashboards can further enable managers to monitor service trends, anticipate client needs, and improve responsiveness.

Strategic diversification beyond import clearance, such as export facilitation and advisory services, may also be considered, particularly given the strong and stable client base revealed in the results. Strengthening linkages with government agencies such as the Bureau of Customs, DTI, and PEZA can further support firms' alignment with national trade facilitation objectives. Overall, managerial effectiveness depends on balancing operational efficiency with empathy-based client engagement to maintain trust, loyalty, and organizational reputation.

Operational Implications. This means that customs brokerage firms in Sta. Clara have achieved a generally standardized and reliable level of service delivery, as reflected in uniformly high client ratings across transaction volumes and engagement levels. This implies that existing standard operating procedures (SOPs) are largely effective. However, the identified gaps in documentation accuracy and responsiveness point to the need for enhanced operational controls and technology-enabled processes.

Digital process integration such as e-clearance systems, automated document verification, and real-time shipment tracking can further improve timeliness and transparency while reducing manual errors that delay processing. After-hours digital support through online portals or automated response systems may also help address client concerns beyond normal office hours. Regular operational audits and structured feedback mechanisms should be maintained to ensure compliance with SOPs and continuous quality improvement.

Employee cross-training and empowerment can further enhance operational flexibility, especially during peak periods or staff shortages, thereby minimizing service disruptions and sustaining service reliability. Overall, the study shows that the long-term competitiveness of customs brokerage firms in Sta. Clara, Batangas depends on the effective integration of managerial leadership, operational discipline, and technology-enabled service delivery grounded in service quality principles.

Human Resource and Training Implications. The gaps that are evidently seen in the workforce between the lower cadre staff and senior employees call for human capital strategies in retention, professional development, and leadership training. Therefore, it mandates the implementation of continuous education and certifications that would most definitely garner knowledge about rules and technical know-how.

Client-Centric and Relationship-Building Implications. This has propelled the accomplishment of a standard by firms with respect to the uniform nature of service delivery; hence, value-added client relationship management should be emphasized to keep such momentum going. The solution could be through the usage of CRM tools and loyalty programs accompanied by any other forms of systems that can give concrete data on how well clients are engaged and trust the firm.

Technological and Policy Implications. It pressed the need to undertake digital transformation initiatives in synchronization with modern by-customs brokerage practices. Technology-based systems will support efficient and transparent compliance leading to trade facilitation, and hence, national competitiveness.

Research and Academic Implications. Ecological sustainability, digitalization, and regulatory reforms in customs operations are factors that future studies may wish to consider as they extend this study. Validation of this result can be done through an expanded sample from other regions, and enrichment of the results by a comparison between public and private customs services.

Theoretical Implications. This study further validates the application of the SERVQUAL Model as an effective framework for evaluating service quality within the logistics and customs brokerage industry (Parasuraman, Zeithaml, & Berry, 1988). The dimensions of reliability, responsiveness, assurance, and empathy—together with operational timeliness—proved to be appropriate measures of both employee-perceived efficiency and client-assessed service delivery in this highly regulated environment.

The consistently high ratings obtained in these dimensions, as well as the absence of significant differences in client and employee perceptions based on ANOVA results, support earlier findings that service consistency and reliability are central to trust and customer satisfaction (Setiono & Hidayat, 2022; Pangestu et al., 2023). The results further extend the SERVQUAL model by demonstrating its relevance in regulatory-intensive settings such as customs brokerage, where compliance, accuracy, and communication strongly shape service quality outcomes.

The uniformity of client perceptions across transaction types, years of engagement, and frequency of transactions indicates the stabilizing effect of procedural consistency on perceived service quality. This supports Anderson's (2025) assertion that reliability and consistency are essential to long-term loyalty and organizational credibility. Thus, this study not only reinforces SERVQUAL theory but also highlights the interaction between regulatory compliance, operational consistency, and empathy-driven service in specialized logistics environments.

Overall, the present study stressed that the competitive continuity of customs brokerage firms in Sta. Clara, Batangas is dependent on the infused synergy of managerial innovation and operational precision, based on the theoretical service quality principle. Through the use of ServQual in a technologically adaptive but management system that is still essentially human, these firms are able to maintain high standards of service quality while performing regulatory requirements on the go and further deepening their role as a trusted partner within the logistics ecosystem of the Philippines.

They may sustain momentum and prepare for long-term development and resilience in the increasingly competitive and automated landscape of global trade by realigning workforce empowerment, digital transformation, and client relationship strategies.

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