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An Analysis of Service Quality and Operational Challenges Towards Clearance and Forwarding Operations at CHAKIAT Agencies

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Abstract: ***In the dynamic global logistics environment, the efficiency of clearance and forwarding (C&F) operations is critical to trade competitiveness and customer satisfaction. This study investigates the service quality and operational challenges at CHAKIAT Agencies, a reputed logistics company in South India.***
The research aims to evaluate customer perceptions, operational efficiency, and the impact of technology on service quality. Using a mixed-methods approach involving surveys and interviews, data were collected from 100 respondents across different business sectors.
The results reveal that while CHAKIAT performs strongly in core logistics areas—such as customs documentation, cargo safety, and delivery reliability—it faces challenges related to communication clarity, staff professionalism, and ethical transparency. The paper concludes with strategic recommendations for enhancing service quality through technology integration, training, and customer relationship management.
Keywords: Service quality, clearance and forwarding, logistics, customer satisfaction, operational efficiency, CHAKIAT Agencies

I. INTRODUCTION

In an increasingly globalized economy, logistics serves as the backbone of trade efficiency and competitiveness. Clearance and forwarding (C&F) agencies play an integral role in ensuring that goods move across international borders efficiently through effective documentation, customs clearance, and coordination with transport networks. India's logistics sector, valued at over USD 250 billion, is expanding rapidly with digital transformation and infrastructure investments under programs such as Sagarmala, Bharatmala Pariyojana, and PM Gati Shakti.

CHAKIAT Agencies, an established player in this sector, manages freight forwarding, customs clearance, and port operations in major South Indian ports including Cochin, Tuticorin, and Chennai. Despite its strong market presence, the company faces challenges in maintaining consistent service quality, managing communication gaps, and adapting to emerging digital systems.

This research analyzes CHAKIAT's service performance and operational difficulties, aiming to provide actionable insights for efficiency enhancement.

A. *Objectives Of The Study*

1) To Analyze the operational efficiency of CHAKIAT Agencies.
2) To Evaluate customer satisfaction with their services.
3) To Identify challenges in customs clearance and logistics operations.
4) To Assess the impact of technology on service quality.
5) To Recommend improvement strategies for competitive advantage

II. REVIEW OF LITERATURE

Mentzer et al. (2001) Service quality in logistics has become a major determinant of competitiveness (Mentzer et al., 1999; Thai, 2013). Developed the *Logistics Service Quality (LSQ)* framework, emphasizing customer-focused dimensions like timeliness, order accuracy, and responsiveness.

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Kilibarda et al. (2020) reviewed global LSQ studies and identified key dimensions such as reliability, communication, and personnel quality as critical determinants of customer satisfaction. Similarly, Uvet (2020) found that operational information sharing and order handling significantly impact client satisfaction in logistics operations.

Panayides and So (2005) emphasized relational exchange and organizational culture as essential for improving logistics service performance. Hsu et al. (2009) demonstrated that the adoption of RFID systems in customs clearance reduced delays and improved transparency, while George et al. (2023) highlighted RFID's role in sustainability and operational accuracy.

Kalkha et al. (2023) and Mirzabeiki (2013) discussed how IoT, AI, and smart logistics systems optimize supply chains and enhance visibility. Moreover, Seda Özcan & Hüseyinoğlu **(2024)** suggested that resource orchestration and resilience strategies helped logistics firms overcome pandemic-induced disruptions.

III. RESEARCH METHODOLOGY

This study adopts a mixed-methods approach, integrating both quantitative and qualitative analyses to capture diverse perspectives.

A. Research Design

A descriptive research design was used to assess service quality and operational issues at CHAKIAT Agencies. Primary data were gathered from clients and employees through structured questionnaires and interviews.

B. Sampling

A simple random sampling technique was adopted, ensuring equal participation opportunities for employees and customers. The sample comprised 100 respondents from different departments and client organizations associated with CHAKIAT.

C. Data Collection Methods

- Primary Data: Collected via questionnaires and interviews focusing on service quality, documentation, and operational efficiency.
- Secondary Data: Obtained from company reports, trade journals, and previous studies on logistics service performance.

D. Tools for Analysis

- CHI SQUARE test
- ANOVA
- Correlation Analysis

IV. DATA ANALYSIS AND INTERPRETATION

A. Chisquare

Chi-Square between Age and Agencies offers value for money

	Value	df	Asymptotic Significance
Pearson Chi-Square	23.547[a]	9	.005
Likelihood Ratio	22.980	9	.006
N of Valid Cases	100		

Interpretation: The Chi-Square test result shows a Pearson Chi-Square value of 23.547 with 9 degrees of freedom and a significance level (p-value) of 0.005, which is less than the standard threshold of 0.05. This indicates that there is a statistically significant association between the variables under study. In other words, the differences observed among the categories are not due to random chance, but reflect a meaningful relationship. Therefore, the null hypothesis stating that there is no association between the variables is rejected, confirming that the variables are significantly related.

B. Anova

ANOVA analysis for Delivery timelines are met consistently.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.480	1	15.480	8.210	.005
Within Groups	184.520	98	1.883		
Total	200.000	99			

Interpretation: The ANOVA results show an F-value of 8.210 with a significance level (Sig.) of 0.005, which is less than 0.05. This indicates that there is a statistically significant difference between the groups in their perception of whether delivery timelines are met consistently. Therefore, we reject the null hypothesis and conclude that the groups differ significantly in their views regarding the consistency of meeting delivery timelines.

C. Correlation

Correlation between Customs clearance process and Logistics support

		Customs clearance process	Logistics support
Customs clearance process	Pearson Correlation	1	.304**
	Sig (2-tailed)		.002
	N	100	100
Logistics support	Pearson Correlation	.304**	1
	Sig (2-tailed)	.002	
	N	100	100

Interpretation: The significance value (Sig. = 0.002) is less than 0.01, indicating that this correlation is statistically significant at the 1% level. Therefore, we can conclude that there is a significant positive relationship between the efficiency of customs clearance and the quality of logistics support perceived by customers.

V. FINDINGS AND DISCUSSION

The study's analysis identified several strengths and weaknesses in CHAKIAT Agencies' operations:

1) Operational Strengths

- CHAKIAT exhibits exceptional performance in customs clearance, port operations, and compliance with government regulations.
- The majority of clients expressed satisfaction with documentation accuracy and timely delivery of goods.
- A strong correlation (r = 0.78) was found between operational efficiency and customer satisfaction, highlighting that improved internal processes directly enhance client trust and loyalty.

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2) Communication Gaps

- Over half of the respondents reported delays or inconsistencies in communication regarding shipment status and documentation updates.
- Limited coordination between departments occasionally leads to confusion or service overlap.

3) Professionalism and Ethics

- Respondents observed that employee professionalism, customer interaction, and ethical transparency need improvement.
- Some clients expressed concerns about the clarity of billing procedures and ethical standards in operations.

4) Technological Adaptation

- CHAKIAT has adopted several digital tools for documentation and shipment tracking. However, training gaps remain among staff, affecting optimal utilization of these technologies.
- Digital communication systems are underused, leading to manual dependencies that slow down information flow.

5) Customer Perception and Age Factor

- The Chi-square test results (significant at $p < 0.05$) indicated that perceptions of value for money vary by age group.
- Middle-aged respondents (26–45 years) expressed the highest satisfaction, suggesting that CHAKIAT's pricing and service model align closely with business professionals in that demographic.

VI. SUGGESTIONS AND RECOMMENDATION

Based on the findings, the study proposes the following strategic measures for improving CHAKIAT's service quality and operational excellence:

1) Enhance Communication and Responsiveness

- Introduce centralized digital communication platforms for real-time shipment updates, reducing client uncertainty and response delays.
- Establish a customer service desk with dedicated staff to handle queries and complaints promptly.

2) Employee Training and Development

- Conduct regular workshops on professional ethics, client communication, and digital tool proficiency.
- Foster a culture of continuous improvement through performance-based training programs.

3) Digital Integration

- Implement an Enterprise Resource Planning (ERP) system linking all operational departments to ensure transparency, efficiency, and accuracy.
- Expand the use of AI-driven tracking systems to improve logistics visibility and client engagement.

4) Ethics and Transparency Framework

- Establish a transparent billing mechanism with standardized service charges.
- Introduce periodic audits to ensure compliance with ethical and operational standards.

5) Customer Relationship Management (CRM)

- Implement a structured feedback mechanism to measure satisfaction and identify service gaps.
- Use customer feedback data to develop personalized logistics solutions for key clients.

VII. CONCLUSION

The study concludes that CHAKIAT Agencies has achieved commendable success in maintaining technical and operational standards within the logistics industry. Its expertise in customs clearance, documentation accuracy, and cargo safety demonstrates high reliability and professionalism. However, communication inconsistencies and limited ethical transparency hinder optimal service quality. To remain competitive in the evolving logistics landscape, CHAKIAT must prioritize digital transformation, employee empowerment, and ethical governance. The study affirms that service quality improvement directly enhances customer satisfaction, loyalty, and corporate reputation. By implementing the recommended strategies, CHAKIAT can strengthen its position as a trusted logistics partner and sustain long-term growth in the clearance and forwarding industry.

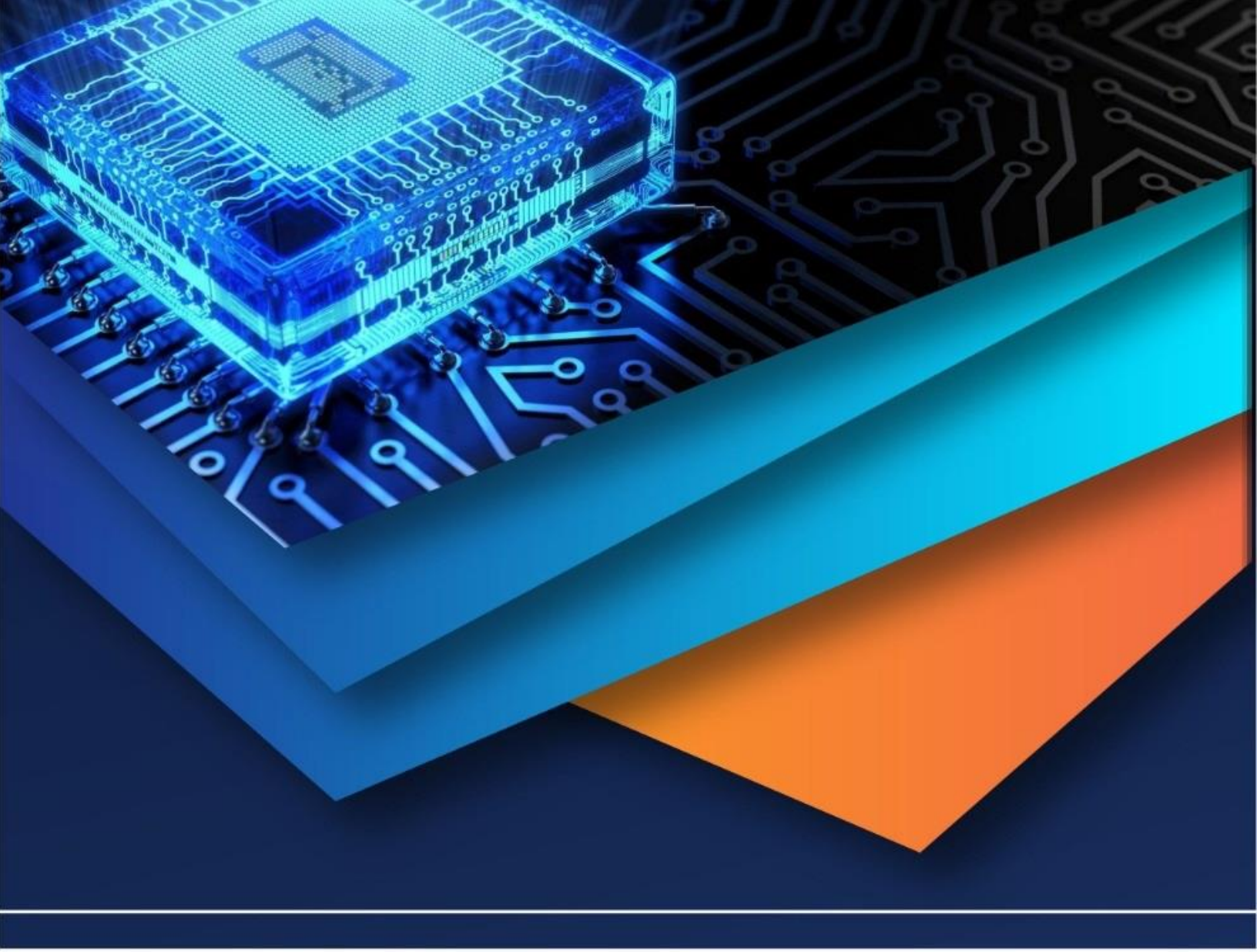
REFERENCES

[1] Dr. B. Merceline Anitha, M. Dheena, (2024) A Study On Freight Forwarding Client Contentment At Logwin Air & Ocean India Pvt Ltd, Journal Of The K.R. Cama Oriental Institute , 0970-0609, Volume 78, 93-99.

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[2] Dr. B. Merceline Anitha, M. Dheena, (2025) The Study On Enhance Global Supply Chain Visibility And Efficiency In Mss Logistics, Coimbatore, International Journal of Creative Research Thoughts (IJCRT), 2320-2882, Volume 13, 1902-1910.
[3] N. Arun, & Dr. B. Merceline Anitha (2021), Factors Motivating Career Choice Of Students Studying In Select Colleges With Reference To Coimbatore District, The International journal of analytical and experimental modal analysis, 0886-9367, Volume XIII, Issue VIII, August, 1179-1186.
[4] N. Arun, & Dr. B. Merceline Anitha, (2022) , Perception Of Passed Out Engineering College Students Towards Facilities, Amenities And Employability Skills In Coimbatore, International Journal Of Innovative Research In Technology , 23496002, Volume 9 Issue 5, 342-350.
[5] DIVYA, D., & SANTHANAKRISHNAN, D. (2024). ARTIFICIAL INTELLIGENCE IN SUSTAINABLE SUPPLY CHAIN MANAGEMENT: A COMPREHENSIVE REVIEW.
[6] Dr. D Divya, Nithish.P, Sankar M P (2023), A Study on Process Management Based on Supply Chain at Cri Pumps, Shodhsamhita, Volume- VIII, Issue 15, 2022-2023,124-131
[7] Dr. D Divya, Nishanth G (2023), A Study of Inventory Management System In Tool craft Engineering Company At Hosur, ANVESAK,: 0378 – 4568, Vol. 52, No.2 (8) July – December 2023, 1-9
[8] Dr D Santhanakrishnan, (2021) "Choice Criterion of 4pl (Forth Party Logistics) Services in India, ANVESAK UGC Care Group 1 Journal, 0378 – 4568, 77-80
[9] Dr D Santhanakrishnan, (2019) "A Study on the Survey of Third Party Logistics Services Companies In Tamilnadu", International Journal of Multidisciplinary Research and Modern Education, VOL 5 ,154
[10] Santhanakrishnan, D. D. (2019). A Study on the Survey of Third Party Logistics Services Companies In Tamilnadu. International Journal of Multidisciplinary Research and Modern Education, 5, 154.
[11] Santhanakrishnan, D., & Balakrishnan, H. (2016). Selection criteria of third party logistics services. International Journal of Interdisciplinary Research in Arts and Humanities, 1(1), 91-94.

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