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A Comprehensive Study on Liner Agency Operations at Seahorse Ship Agencies Pvt. Ltd – Chennai

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Abstract: The liner shipping industry plays a crucial role in the global logistics and transportation network. Liner agencies function as vital intermediaries that ensure seamless coordination between shipping lines and various stakeholders in the port and logistics ecosystem. This study focuses on the detailed operations of Seahorse Ship Agencies Pvt. Ltd., a Chennai-based firm renowned for its expertise in handling vessel and cargo documentation for both imports and exports. The research seeks to investigate operational procedures, analyze documentation workflows, and evaluate the digital tools employed by the agency. Using a structured methodology combining fieldwork, interviews, and secondary research, the paper applies business analysis tools such as Pareto analysis, Fishbone diagram, and SWOT to derive insights. It concludes by offering data-driven recommendations to overcome inefficiencies and improve productivity. This expanded version also considers future trends in maritime logistics, the potential impact of digitization and artificial intelligence (AI), and regulatory changes within the global shipping sector.

I. INTRODUCTION

The global shipping industry serves as the backbone of international trade, with liner shipping accounting for the transport of around 60% of seaborne trade by value. A liner shipping agency represents shipping companies on the ground, acting as their extended arm to manage operational and documentation responsibilities. In India, with its vast coastline and increasing focus on export-led growth, liner agencies play a pivotal role in enabling supply chain efficiencies. This research paper investigates the inner workings of Seahorse Ship Agencies Pvt. Ltd. in Chennai, a port city that serves as a major maritime gateway to South India. The study covers key areas including vessel handling, cargo documentation, customs compliance, stakeholder communication, and use of enterprise software platforms.

By understanding how Seahorse operates, identifying operational bottlenecks, and suggesting strategic improvements, this project aims to provide a roadmap for evolving from a process-oriented agency into a technology-driven facilitator. Furthermore, the paper considers how liner agencies can future-proof their services against disruptions caused by geopolitical shifts, pandemic-related challenges, and digital transformation. It emphasizes the strategic significance of port-based logistics agencies in contributing to national trade objectives.

Objectives of the Study

The main objectives of this comprehensive study are:

- 1. To understand the standard operating procedures (SOPs) employed by the liner division of Seahorse Ship Agencies.
- 2. To analyze the documentation workflow for both import and export shipments, including Import General Manifest (IGM) filing, Bill of Lading (BL) issuance, and Delivery Order (DO) release.
- 3. To evaluate the use of CargoWise ERP and its integration with Indian customs systems like ICEGATE.
- 4. To identify key issues affecting operational efficiency through root cause analysis.
- 5. To assess internal and external challenges using SWOT analysis.
- 6. To recommend technology-driven solutions and training programs for minimizing manual errors.
- 7. To explore the potential of future digital technologies such as blockchain, AI, and IoT in transforming liner agency operations.
- 8. To assess the impact of regulatory changes, such as the Maritime India Vision 2030, on liner shipping practices.



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II. METHODOLOGY

The methodology adopted is predominantly descriptive and exploratory in nature. It includes both qualitative and quantitative data collection techniques:

• **Primary Data:** Collected through structured interviews with operations and documentation personnel, port officials, and customs intermediaries. Site visits to Chennai Port and the Seahorse office were conducted to observe real-time documentation workflows and client interactions.

• **Secondary Data:** Involves review of internal training manuals, company SOPs, CargoWise user documentation, and relevant publications from regulatory bodies such as DG Shipping and Ministry of Ports, Shipping and Waterways.

• **Analytical Tools Used:** Pareto chart for identifying key problem areas, Fishbone diagram for root cause analysis, and SWOT framework for strategic evaluation. Industry comparisons and benchmarking with global best practices were also considered.

• **Data Period:** Data was gathered and analyzed over a two-month period from March to April 2025.

Overview of Liner Agency Operations

Liner agents perform a variety of tasks that involve coordination with shipping lines, port authorities, customs officials, container freight stations (CFS), and consignees. At Seahorse Ship Agencies, the liner department is segmented into import and export desks, each handling a range of documentation and compliance tasks. Key responsibilities include:

- Manifest filing with customs through ICEGATE
- Container status updates and delivery order issuance
- Bill of Lading generation based on shipper instructions
- Cargo arrival notifications and client coordination
- Invoice generation for freight and ancillary charges

These tasks are facilitated using CargoWise, a globally recognized ERP system for logistics operations. Despite the software's capabilities, gaps exist due to partial digital integration and continued reliance on manual communication channels.

Documentation Practices and Technology Use

Documentation lies at the heart of liner operations. Each containerized shipment must be supported by accurate and timely documents. The study reveals that while Seahorse employs CargoWise effectively for BL generation and shipment tracking, data transfer to ICEGATE is still manual. Moreover, frequent last-minute amendments by customers cause repeated revisions, thereby increasing the chance of human error.

Manual data entry remains a key vulnerability, particularly in generating IGMs and validating container lists. Email continues to be the dominant mode of customer communication, which slows down approvals and increases the risk of miscommunication. There is limited use of data validation tools and no customer self-service portal. These issues compound to cause documentation delays, demurrage charges, and poor customer experience.

Findings and Root Cause Analysis

Based on operational data and staff inputs, the following key issues were identified:

- 1. Incomplete shipper details: Causing frequent revisions.
- 2. Late document submissions by clients: Leading to missed deadlines.
- 3. Manual data entry: Resulting in avoidable errors.
- 4. Frequent last-minute changes: Affecting shipment planning.

These problems were mapped using a Pareto chart which showed that these four issues account for over 75% of operational inefficiencies. A Fishbone diagram further classified the root causes under:

- **People**: Limited training, high staff turnover
- **Processes**: Lack of SOP revision, unclear escalation channels
- Technology: Partial ERP integration, absence of data validation
- Communication: Overdependence on email, delayed responses from clients

SWOT Analysis of Seahorse Ship Agencies Strengths:

- Experienced staff with strong domain knowledge
- Established relationship with major shipping lines and port authorities
- Usage of modern logistics ERP (CargoWise)



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Weaknesses:

- Outdated SOPs not aligned with digital tools
- Lack of process automation and self-service platforms
- High dependency on manual processes

Opportunities:

- Potential to integrate ICEGATE with CargoWise via API
- Use of AI for document classification and approval
- Implementing a customer portal for status checks and uploads

Threats:

- Increased competition from digital freight forwarders
- Regulatory uncertainty and compliance challenges
- Cybersecurity risks in data-heavy operations

Strategic Recommendations

1. **Integration of Digital Platforms**: Build APIs to connect CargoWise directly with ICEGATE to automate document transfers and reduce redundancies.

2. **Client Portal Implementation**: Launch a secure portal for clients to upload documents, track shipments, and receive automated alerts.

3. **Periodic SOP Revisions**: Establish a quarterly review mechanism for operational processes to keep them aligned with system capabilities and client expectations.

4. **Staff Training Programs**: Conduct monthly knowledge sessions on updates in port regulations, system tools, and global best practices.

5. **Feedback and Audit Mechanisms**: Introduce digital feedback loops and monthly operational audits to capture errors and implement preventive actions.

6. **Technology Adoption Roadmap**: Create a roadmap for adopting AI-based tools, blockchain for BL verification, and IoT for real-time container tracking.

Emerging Trends and Future Scope

Looking ahead, liner agencies like Seahorse will face increased pressure to digitize, comply with global regulations, and offer real-time services. Maritime India Vision 2030 lays out an ambitious framework for port modernization and digital logistics corridors. Liner agencies can align with this vision by:

- Joining national logistics platforms (NLP-Marine)
- Participating in paperless trade initiatives
- Engaging in digital skills development for operational staff

Technologies such as artificial intelligence, predictive analytics, blockchain-based bill of lading, and IoT-enabled cargo sensors are transforming how documentation and cargo visibility are managed. Agencies that proactively adopt such tools will gain a competitive edge.

III. CONCLUSION

The study concludes that Seahorse Ship Agencies operates with strong foundational processes but faces challenges due to fragmented systems and manual dependencies. However, with focused investments in technology integration, SOP updates, and stakeholder engagement, it can evolve into a next-generation liner agency. The findings provide a roadmap not only for Seahorse but for other similar agencies aiming to stay relevant in an increasingly digitized logistics environment. Continuous improvement, agile practices, and technology foresight are key to unlocking operational excellence in liner agency operations.

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