

# MIE 463 - PIT 10 - Dispute Resolution in the Shipping Industry

## **Executive Summary**

This report outlines the research, analysis, and findings PIT10 developed to understand and address sources of inefficiency and error in the customer dispute handling system of a large-scale, multinational company operating in the personal and commercial shipping industry. During the course of the project, the PIT utilized a business transformation approach to identify major gaps in the current system and pinpoint opportunities for improvement. Based on these findings, the PIT recommends that the company adopt cycle time analysis and knowledge management tools to enhance the current system.

The shipping industry is an important economic driver and is poised to continue its growth in the era of online shopping and globalization. To understand the specifics of the industry, the PIT has chosen to study the operations and structure of North American shipping giant FedEx as a model representative of the typical practices of the industry. The scope of this project is focused only on the issues in the current dispute handling system, and does not include other phases in the shipping process or issues caused by customer errors.

The PIT has identified that the current state of the dispute handling process is inefficient and non-standardized, and human resources are often used in conflicting or redundant manners. These issues represent significant amounts of wasted resource time, lower profit margins, and poor customer satisfaction. The PIT determined several underlying gaps at the root of these problems: missing standardized processes and training for customer service agents and brokers, a lack of performance management, and the absence of an integrated IT system capable of capturing information and supporting decision making. The main objectives of the PIT in this project are to reduce duplicated efforts, decrease the average dispute resolution time, and establish and optimize standard operating processes.

To conduct a business process analysis of the company, the PIT utilized several business analysis approaches, such as value chain analysis, SWOT analysis, and IGOE identification. The PIT was able to develop an understanding of the current system, including the “As-Is” workflow, critical to quality (CTQ) components, and current-state key performance indicators. To address the shortcomings of the current-state, a future-state system was developed using the visioning approach, accounting for cost of quality considerations and other barriers to implementation. Four major areas of improvement were proposed: integration of standard processes, implementation of a decision support system, bucketing and prioritizing disputes based on their nature, and providing higher customer visibility to the status of their disputes. The PIT ultimately decided to introduce the Dispute Query Log (DQL), a knowledge management IT solution capable of collecting and cleaning data, automatically prioritizing and assigning disputes to agents, and producing regular and ad-hoc reports based on user and corporate requirements.

The PIT utilized the agile development cycle and the 3P Lean method to eliminate waste and reduce the complexity of the dispute handling processes. Several findings were made based on comparisons between the “As-Is” processes and “To-Be” processes, including findings of CTQ and Lean waste analysis. The customer-facing critical to quality characteristics include the average dispute handling time, the accurate filing of CBSA disputes, and the level of visibility a customer has to the process. Internal CTQs include accurate assignment of dispute queries, standard scripts for call-in disputes, and adherence to CBSA guidelines. The Lean analysis found that the major sources of waste are due to non-utilized talent, redundant or duplicate processing of disputes, and frequent passing of disputes from one employee to another. In addition, new key performance indicators were developed to reflect the requirements of the new processes, including average call handling times, average file generation times, specific employee performance, and average work volume per employee.

Several conclusions were drawn by the PIT based on the studies mentioned. The current system enforces employees to work within outdated CBSA regulations and processes, which are no longer necessary and significantly weigh down the dispute handling process. The existing IT system cannot accommodate the functionalities and requirements necessary to implement the DQL system, and should be revamped to enable data and metric collection, parallel processing, resource organization, and efficient data querying and communication. Finally, the PIT determined that prioritizing disputes based on the value of their associated shipments will increase business with high-value customers and improve overall profits.

The PIT is proposing two critical recommendations moving forward: the adoption of a cycle-time based approach to identify process bottlenecks optimize employee allocation, and the implementation of a knowledge management system capable of storing and processing all relevant data and generating communications to pertinent employees and stakeholders. With these additions, the PIT believes that the shipping company will see significant improvements to employee performance, customer satisfaction, and company profits.

