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Exploring the Impact of Task Ownership on Operational Efficiency and Employee Satisfaction in Logistics Operations

Case Study

School of Management
Master´s thesis in Strategic Business Development
Master of Science in Economics and Business Administration

Vaasa 2025

UNIVERSITY OF VAASA
School of Management
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Topic of the Thesis: Exploring the Impact of Task Ownership on Operational Efficiency and Employee Satisfaction in Logistics Operations: Case Study
Degree: Master of Science in Economics and Business Administration
Degree Programme: Strategic Business Development
Supervisor: Jukka Partanen
Completion year: 2025 **Pages:** 110

ABSTRACT

Task ownership – a management model in which individuals are assigned full responsibility for a task´s entire lifecycle – has emerged as a strategy to enhance both operational efficiency and employee satisfaction in logistics operations. This thesis investigates the relationship between task ownership, workflow performance, and workforce engagement, addressing a notable gap in its practical application within complex logistical environments. The study focuses on a single case study of a global logistics provider, referred to as "Company X," with particular emphasis on its Airfreight Import operations.

A mixed-methods research design is employed, combining qualitative insights from participant observation, focus groups interviews, and action research with quantitative analysis of internal operational performance data. This dual approach enables a holistic examination of how task ownership influenced workflow efficiency, error rates, and financial performance, as well as its impact on job satisfaction, task autonomy and employee adaptation. The findings reveal that the implementation of task ownership significantly improves both operational outcomes and employee experiences, offering actionable insights for logistics practitioners and strategic decision-makers.

In terms of academic contribution, this study advances existing literature by offering an in-depth exploration of task ownership within a real-world logistics context. The findings also support the broader application of task ownership model within Company X – particularly in extending the model to Ocean Freight imports – demonstrating its scalability. Finally, the study identifies opportunities for future research, including the integration of task ownership with emerging technologies such as automation and artificial intelligence, further emphasizing its relevance in the rapidly evolving logistics industry.

KEYWORDS: Task ownership, operational efficiency, employee satisfaction

VAASAN YLIOPISTO
School of Management
Tekijä: Joram Mustajärvi
Tutkielman nimi: Exploring the Impact of Task Ownership on Operational Efficiency and Employee Satisfaction in Logistics Operations: Case Study
Tutkinto: Master of Science in Economics and Business Administration
Oppiaine: Strategic Business Development
Työn ohjaaja: Jukka Partanen
Valmistumisvuosi: 2025 **Sivumäärä:** 110

TIIVISTELMÄ

Task ownership on johtamismalli, jossa yksittäiselle työntekijälle annetaan täysi vastuu tehtävän koko elinkaaresta. Task ownership on saavuttanut suosiota strategiana, jonka avulla voidaan parantaa sekä operatiivista tehokkuutta että työntekijöiden tyytyväisyyttä. Tässä tutkimuksessa tutkitaan task ownership -strategian, suorituksen tason sekä henkilöstön sitoutumisen välistä suhdetta logistiikka-alalla. Tutkimuksen kohteena on globaali logistiikkatoimija, jota kutsutaan tässä tutkimuksessa nimellä ”Yritys X”, ja erityisesti sen lentorahdin tuontitoiminnot.

Tutkimuksessa käytetään useampaa tutkimusmenetelmää. Siinä yhdistyvät niin laadulliset havainnot (osallistuva havainnointi, ryhmähaastattelut ja toimintatutkimus) kuin määrällinenkin analyysi siitä, miten task ownership -strategia vaikuttaa työn tehokkuuteen, virheiden määrään ja taloudelliseen tulokseen sekä työntekijöiden tyytyväisyyteen, itseohjautuvuuteen ja sopeutumiseen. Tulokset osoittavat, että task ownership -strategian käyttöönotto parantaa merkittävästi sekä operatiivista suorituskykyä että työntekijäkokemusta. Lisäksi tutkimus tarjoaa konkreettisia kehitysehdotuksia sekä logistiikan asiantuntijoille että päätöksentekijöille.

Tutkimuksessa hyödynnetään aiempaa kirjallisuutta ja tarjotaan samalla uudempaa, käytännönläheistä analyysiä task ownerhip -strategiasta logistiikkakontekstissa. Tulokset auttavat myös Yritys X:ää soveltamaan ja jatkokehittämään mallia tarpeisiinsa sopivammaksi. Lopuksi tutkimus tunnistaa myös tulevaisuuden tutkimusmahdollisuuksia, kuten task ownership -strategian yhdistämistä kehittyvään teknologiaan, kuten automaatioon ja tekoälyyn, mikä korostaa sen ajankohtaisuutta nopeasti muuttuvassa logistiikka-alassa.

AVAINSANAT: Task ownership, operational efficiency, employee satisfaction

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List of Abbreviations and Terms

AFRI	Airfreight Import
GTOM	Global Trade Operations Management
JCM	Job Characteristics Model
JDR	Job Demands-Resources
IKO	Integrated Key Objectives
KPI	Key Performance Indicators
OTP	On-Time Performance
PD	Performance Dialogue

1 INTRODUCTION

Logistics operations are at the heart of global trade, ensuring the efficient movement of the goods and services across regions. As one of the largest contributors to national GDP´s worldwide, the logistics sector plays a pivotal role in shaping operational performance, customer satisfaction, and organizational competitiveness (Rodrigue & Notteboom, 2010). Effective management of logistics is not only essential for economic growth but also for maintaining a competitive edge in increasingly dynamic and complex markets (Heskett et al., 1994). Companies operating in this sector face mounting pressures to enhance operational efficiency, reduce costs, and meet growing customer expectations. These challenges have intensified with the rise of globalization, digitalization, and evolving supply chain complexities (Christopher, 2016). Consequently, businesses have sought innovative management approaches that optimize both operational performance and well-being. One such approach is **task ownership**, a management model where a single individual oversees the entire lifecycle of a task (Deloitte, 2023). This approach has gained prominence as a potential solution to operational inefficiencies and workforce challenges. Rooted in lean management and workload optimization theories, task ownership has been associated with enhanced accountability, reduced error, and improved job satisfaction (Hackman & Oldham, 1976; Womack & Jones, 1996). This concept aligns with operational efficiency principles by eliminating waste and enhancing process flow, while also addressing the psychological and motivational needs of employees (Bakker et al., 2014). However, despite its theoretical benefits, the implementation of task ownership within high-pressure and complex logistical environments presents unique challenges that warrant further exploration (Huo et al., 2014).

However, the practical application of task ownership within logistics operations remains underexplored, particularly regarding its simultaneous impact on operational efficiency and employee satisfaction. While frameworks such as the Job Characteristics Model (Hackman & Oldham, 1976), and Job Demands-Resources Model (Bakker & Demerouti, 2007) offer valuable perspectives on engagement and motivation, their direct

application in logistics settings – especially under high operational pressure – has received limited empirical attention. Studies on lean management and operational efficiency (Womack & Jones, 1996; Fernandez et al., 2020; Dey et al., 2011) typically focus on process improvement, yet often overlook employee-centric dimensions such as autonomy, adaptation, and motivation. Moreover, research connecting task management and accountability to technological integration or organizational culture in logistics remains scarce (Huo et al., 2014; Choi et al., 2020). Scholars have called for more context-specific, action-orientated research in logistics to bridge this gap (Naslund, 2002; Palsson & Hazen, 2007). This study contributes to the call by empirically exploring how task ownership affects both operational and human performance outcomes within a global logistics environment.

The purpose of this study is to address this gap by investigating the effects of task ownership in a real-world logistics context. Specifically, it examines how end-to-end task responsibility influences operational efficiency and employee satisfaction within the Airfreight Import division of global logistics company, referred to as “Company X”. The central research question is: *“How does task ownership impact operational efficiency and employee satisfaction in logistics operations?”* Using a mixed-methods approach, the study combines qualitative data from employee interviews, focus groups, and participant observation with quantitative analysis of internal performance Metrics. These include workflow efficiency, error rates, and timeliness indicators, along with job satisfaction, autonomy, and employee adaptation. By providing empirical evidence across both performance and human dimensions, the study aims to offer practical and theoretical insights into the viability of task ownership in complex, fast-paced logistics environments.

The contributions of this study are threefold. First, it extends to the literature on task ownership by providing empirical evidence from a real-world logistics setting, an area where prior research has primarily remained conceptual of focused on other industries (Hackman & Oldham, 1976; Huo et al., 2014). Second, the study bridges the gap between

operational performance metrics and employee-centric outcomes by integrating Lean Management, the Job Characteristics Model, and JD-R Model in a logistics-specific framework. This dual focus highlights how task ownership can simultaneously drive workflow efficiency and enhance employee satisfaction. Third, the study contributes methodologically by employing a mixed-methods approach – combining quantitative data from employee interviews and focus groups with quantitative performance metrics – to provide a more holistic understanding of the phenomenon. The remainder of this thesis is structured as follows: Chapter 2 reviews the relevant literature and theoretical foundations related to task ownership, operational efficiency, employee satisfaction, and its application in logistics operation. Chapter 3 outlines the research methodology, including data collection and analysis methods. Chapter 4 presents the results of the study, while chapter 5 concludes the thesis by discussing the implications, contributions to literature and practice, limitations, and recommendations for future research.

2 LITERATURE REVIEW

This chapter reviews the existing literature on task ownership, operational efficiencies, and employee satisfaction, providing a theoretical foundation for the study. Task ownership is explored as a conceptual model, highlighting its role in enhancing accountability, efficiency, and employee satisfaction. The review also examines operational efficiency in logistics, emphasizing its critical importance to supply chains, and employee satisfaction, focusing on the Job Characteristics Model to understand how well-structured tasks influence outcomes (Hackman & Oldham, 1976).

Key theoretical frameworks, including *Lean Management* (Womack & Jones, 1996), *Workload Management* (Bakker et al., 2014), and the *Job Characteristics Model* (Hackman & Oldham, 1976), are integrated to highlight their relevance to the research objectives. As noted by Huo et a. (2014), by identifying gaps in literature, the review formulates hypotheses to guide the empirical analysis, addressing the dual impact of task ownership on operational performance and employee outcomes. This chapter situates the research within the broader academic discourse, contributing to the understanding of effective task ownership model in logistics.

2.1 Task Ownership: Conceptual Model

Task ownership is a management model emphasizing individual responsibility and accountability for the entire lifecycle of a task. By assigning a single employee full responsibility – from planning and execution to follow-up – companies aim to enhance both operational efficiency and employee satisfaction (Hackman & Oldham, 1976; Huo et al., 2014). In logistics, where precision, seamlessness, and coordination are critical, task ownership has emerged as a promising strategy to streamline workflows, improve accuracy, and boost employee engagement. Task ownership ensures that an individual oversees every phase of task, reducing the risks associated with task fragmentation, such as miscommunication, delays, and errors. By reducing handoffs common in traditional

workflows, task ownership fosters a heightened sense of accountability and ownership, which ultimately leads to improved outcomes.

2.1.1 Job Characteristics Model (JCM)

The Job Characteristics Model (JCM), developed by Hackman and Oldham (1976), offers a comprehensive framework for understanding how job design impacts employee motivation and satisfaction. The model identifies **five core job characteristics** – skill variety, task identity, tasks significance, autonomy, and feedback from the job – as key drivers of **three critical psychological states**: experience meaningfulness of work, experienced responsibility for of the outcomes of the work, and knowledge of the actual results of the work activities. These psychological states, in return, lead to several positive outcomes, including high internal work motivation, high-quality work performance, high work and job satisfaction, and reduced absenteeism and turnover. (Hackman & Oldham, 1976). The interphases of the job characteristics model are presented below:

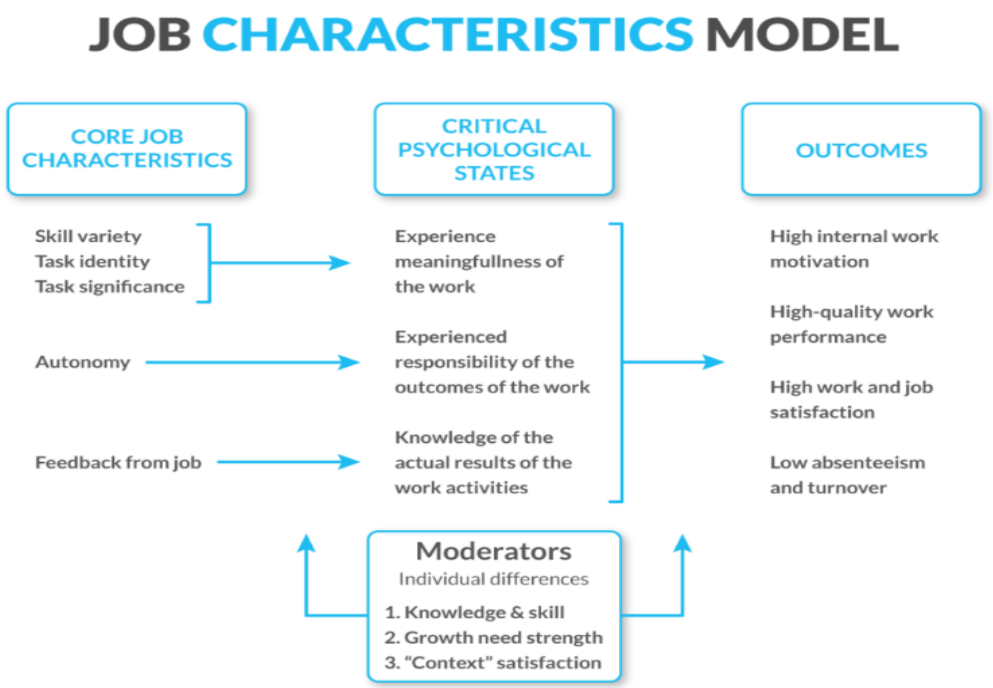


Figure 1. Job Characteristics Model (JCM)

Figure 1 illustrates the relationship between the core job characteristics, psychological states, and outcomes. In the context of task ownership, the model highlights how assigning end-to-end responsibilities enhances job satisfaction and performance by fostering autonomy and task significance.

2.1.2 Applying JCM to Task Ownership in Logistics

Task ownership aligns effortlessly with the principles of Job Characteristics Model (JCM). By assigning employees full responsibility and control for an entire task lifecycle, companies can amplify critical dimensions of JCM, particularly autonomy and task identity. For instance, a logistics operator managing an entire shipment cycle – from scheduling and coordinating to final delivery – develops a deeper connection to their work through heightened task significance and a sense of ownership. This holistic involvement fosters accountability and enhances the operator´s perceived value within the company. Autonomy, a cornerstone of both task ownership and JCM, empowers employees to make decisions, address challenges, and innovate within their roles. Additionally, consistent feedback, a key dimension of JCM, ensures that employees receive insights into their performance, enabling them to identify areas of improvement and celebrate achievements. This feedback loop is essential to task ownership, as it enhances employees´ knowledge of their contributions and strengthens their sense of accountability. Employees who witness the tangible results of their efforts are more likely to experience motivation and sustained engagement (Hackman & Oldham, 1976).

Empirical studies further validate the link between JCM dimensions and employee satisfaction. Research by Bakker et al. (2014) highlights that job characteristics such as autonomy and task significance significantly enhance employee engagement and performance, particularly dynamic and demanding environments. Task ownership in logistics naturally aligns with these findings, equipping employees with the psychological and practical tools needed to navigate the complexities of their roles confidently and purposefully.

2.1.3 Challenges and Moderators

The successful implementation of task ownership model is contingent on overcoming specific challenges and leveraging moderating factors that influence outcomes. While task ownership is associated with benefits such as improved accountability streamlined workflows, and enhanced employee satisfaction, its effectiveness depends on navigating organizational complexities and addressing individual differences within the workforce (Hackman & Oldham, 1976; Womack & Jones, 1996; Huo et al., 2014). This section examines the primary challenges of task ownership and explores the moderators that shape its effectiveness.

While the Job Characteristics Model (JCM) highlights the positive outcomes of well-designed jobs, it also emphasizes the importance of individual differences and contextual factors as moderators. For instance, an employee´s growth needs strength – the desire for personal development – plays a pivotal role in shaping their response to autonomy and task significance (Hackman & Oldham, 1976). Employees with high growth needs are more likely to excel within task ownership model, leveraging autonomy and task identity to foster motivation and engagement. Conversely, employees with lower growth needs may struggle to adapt without additional support structures. In the logistics sector, characterized by high-pressure and time-sensitive tasks, companies must proactively address these challenges. Providing tailored training programs and ensuring access to necessary resources are essential for equipping employees to succeed under the demands of task ownership. Such initiatives enhance both operational performance and employee well-being (Bakker et al., 2014; Huo et al., 2014).

Challenges in Task Ownership

Logistics operations are inherently characterized by *complex workflows*, *strict deadlines*, and *high-pressure environments*, which pose significant challenges to implementing task ownership model. As noted by Bakker et al. (2014), high task complexity can result in cognitive overload, where employees struggle to manage the demands of an entire task lifecycle. Additionally, the time-sensitive nature of logistics operations increases stress

levels, potentially impairing decision-making quality and overall operational performance.

Transitioning to task ownership often necessitates substantial workflow adjustments, which may encounter resistance from employees accustomed to traditional systems. According to Kotter (1996), *resistance to change* often stems from fear of failure, uncertainty regarding new responsibilities, or perceptions of increased workload. Without effective management strategies, this resistance can undermine the successful adoption of task ownership, especially in logistics, where stability and predictability are highly valued.

Organizational constraints further complicate the implantation of task ownership model. Limited resources, rigid hierarchical structures, and insufficient communication channels can inhibit the autonomy required for task ownership to thrive. As Womack and Jones (1996) and Bakker et al. (2014) point out, hierarchical cultures often discourage independent decision-making, leading to delays in real-time operations. In logistics, rigidity can hinder the dynamic decision-making processes essential for maintaining operational efficiency.

Employees often lack the comprehensive skills required to manage the entire lifecycle of a task effectively, particularly in the logistics sector, where tasks are multifaceted and require specialized expertise. *Skill gaps* can lead to inefficiencies, errors, and a diminished employee confidence, ultimately compromising operational outcomes (Hackman & Oldham, 1976; Bakker et al., 2014). Huo et al. (2014), highlights that these challenges are particularly evident in managing international shipments, where logistics professionals must navigate complex processes, including customs regulations, documentations accuracy, route optimization, and vendor coordination. The cross-border nature of these tasks necessitates a deep knowledge base and continuous training to ensure compliance with legal requirements and industry standards.

To address these challenges, companies mut invest in structured *training programs* and provide access to essential resources. Structured training initiatives tailored to specific logistics processes, such as simulation-based modules for customs procedures, can help bridge skill gaps and enhance employee capabilities. Additionally, decision-support tools and automation can alleviate cognitive load, allowing employees to focus on value-added activities. For instance, digital platforms for real-time shipment tracking or automated documentation systems can significantly improve efficiency and employee confidence (Womack & Jones, 1996; Hackman & Oldham, 1976). These approaches empower employees to take full responsibility of their tasks, providing better outcomes for both the company and its workforce.

Moderators Influencing Task Ownership

The effectiveness of task ownership model is shaped not only by the structural design of tasks but also by several moderate factors. These moderators – ranging from individual traits to organizational context – can either enhance or inhibit the intended outcomes of task ownership. By understanding these influences, companies can tailor task ownership models to optimize their impact on operational efficiency and employee satisfaction (Hackman & Oldham, 1976; Huo et al., 2014; Bakker et al., 2014).

Growth need strength refers to individual´s natural desire for personal development and challenging work. Employees with high growth need strength are more likely to thrive under task ownership model, as they derive satisfaction from autonomy, responsibility, and meaningful tasks (Hackman & Oldham, 1976). Conversely, individuals with lower growth need strength may feel overwhelmed or disengaged when required to take on extensive responsibilities. In dynamic and high-pressure environments, such as logistics, identifying employees with high growth need strength can help ensure that task ownership models are well-received. Tailored training and gradual role adjustments can support employees with lower growth need strength to adapt effectively (Bakker et al., 2014).

Organizational culture plays a pivotal role in moderating the success of task ownership model. Cultures that emphasize collaboration, open communication, and continuous learning enhance the likelihood of task ownership yielding positive outcomes. On the other hand, hierarchical or rigidly structured cultures may suppress the autonomy and initiative required for task ownership to succeed. In logistics operations, a culture of feedback and shared accountability allows employees to proactively identify inefficiencies and propose solutions, aligning with the principles of task ownership (Edmondson, 1999).

Per the findings of Huo et al. (2014), *the characteristics of tasks* – such as clarity, complexity, and required autonomy – moderate how effectively employees can embrace task ownership. When tasks are overly complex or lack clarity, cognitive overload and stress can diminish performance, whereas well-defined tasks support focus and goal attainment. For instance, managing international freight shipments involves multifaceted processes such as customs clearance and route optimization. Breaking these into clear, manageable, and well-defined tasks within the framework of ownership prevents ambiguity and support performance.

As noted by Demerouti et al. (2001), *leadership and managerial support* act as critical moderators in the success of task ownership. Managers who provide clear expectations, constructive feedback, and regular coaching foster employee confidence and motivation. In contrast, a lack of managerial or leadership guidance may lead to uncertainty and disengagement. In logistics teams, managers who actively engage in mentoring employees can improve their task execution and encourage ownership of outcomes, thereby reducing error rates and delays.

Referring to the work of Womack and Jones (1996), *the availability of adequate resources and technological tools* significantly influences the success of task ownership. Employees who have access to decision-support systems, real-time data, and automated processes are better equipped to handle the responsibilities associated with task

ownership. Digital tools, such as shipment tracking systems and predictive analytics reduce cognitive load and enable data-driven decision-making, empowering employees to perform their roles more effectively.

Moderators such as individual growth needs, organizational culture, task characteristics, leadership support, and resource availability are critical to the success of task ownership model. By addressing these factors, companies can maximize the positive impact of task ownership on both operational efficiency and employee satisfaction (Hackman & Oldham, 1976; Edmondson, 1999; Bakker et al., 2014; Huo et al., 2014). In the logistics sector, understanding and addressing these moderators is particularly important given the industry´s dynamic and high-pressure nature (Demerouti et al., 2001).

2.2 Operational Efficiency in Logistics

Operational efficiency is pivotal for achieving success in the logistic industry, where the primary objective is to deliver goods with accuracy, speed, and cost-effectiveness while minimizing waste (Rodrigue & Notteboom, 2010). Efficient logistics operations not only lower operational costs but also significantly enhance customer satisfaction, thus becoming a cornerstone of competitive advantage in globalized marketplace. The complexity of modern supply chains, driven by globalization and rapid technological advancements, demands an innovative approach to ensure efficiency. Traditional models often struggle to adapt to these complexities, making it essential for companies to implement frameworks that streamline operations, reduce redundancies, and optimize resource allocation (Christopher, 2016).

According to Shah and Ward (2003), operational efficiency in logistics is intrinsically linked to process optimization strategies, such as *lean management principles*. Lean management, with its focus on minimizing waste and improving process flows, provides a structured approach to achieving efficiency in high-pressure environments. By identifying non-value-adding activities and enhancing workflow integration, lean

methodologies align operational goals with customer expectations, ensuring cost savings, without compromising service quality (Womack & Jones, 1996).

The combination of Lean and Agile practices offers a complementary framework for enhancing operational efficiency and adaptability. While lean principles focus on waste elimination, process efficiency and value creation, Agile methodologies emphasize flexibility, responsiveness, and continual improvement (Womack & Jones, 1996). Together, these frameworks address the unique challenges of logistics operations, where dynamic demands and complex workflows are prevalent (Bakker et al., 2014).

2.2.1 The Five Principles of Lean Management

Lean management, developed by Toyota in the mid-20th century provides a systematic approach to improving operational efficiency by eliminating waste and focusing on value creation. The lean philosophy is especially relevant in logistics, where inefficiencies can arise from redundant processes, miscommunication, and delays. By emphasizing streamlined workflows, enhanced process flow, and value-added activities, lean principles address these challenges and ensure that every step of the process contributes to the customer´s satisfaction (Womack & Jones, 1996).

Figure 2 illustrates the five core principles of lean management – defining value, mapping the value stream, creating flow, establishing pull, and pursuing perfection. These principles provide a structured framework for identifying inefficiencies and improving operational performance in logistics. A detailed discussion of each principle is provided below:

Figure 2. The Five Principles of Lean Management

1. **Define value:** Lean begins with identifying value from the customer´s perspective. In logistics, value may involve delivering goods on time, ensuring order accuracy, and maintaining cost-effectiveness. Value is defined by what the customer is willing to pay for, and all non-value-added activities – such as delays, redundant inspections, or excess inventory – are categorized as waste. For example, logistics companies can add value by optimizing delivery schedules to meet customer expectations while minimizing costs (Womack & Jones, 1996; Shah & Ward, 2003).
2. **Map value stream:** Entails analyzing every step in the workflow to identify activities that contribute to value and eliminating those that do not. This principle is particularly applicable to logistics, where mapping the journey of the shipments – from its origin to its destination – can help identify redundancies, bottlenecks, and delays that hinder efficiency. For example, value stream mapping can reveal inefficiencies in warehouse operations or transportation routes, enabling companies to redesign processes and improve overall performance (Rodrigue & Notteboom, 2010).

3. **Create flow:** Involves ensuring that the workflows progress smoothly without interruptions or bottlenecks. In logistics, this principle can be applied by optimizing warehouse layouts to reduce unnecessary movements, enhancing communication between supply chain teams, or implementing automated systems to manage inventory. Ensuring seamless flow of operations reduced lead times and enhances service quality, enabling logistics companies to meet customer demands efficiently (Shah & Ward, 2003).
4. **Establish pull:** Lean systems operate on a pull basis, where work is initiated based on demand rather than forecasts. For logistics, this principle is embodied in just-in-time (JIT) delivery model, which align inventory levels with real-time demand. By establishing pull systems, logistics companies can reduce excess inventory, minimize storage costs, and respond more flexibly to customer needs (Womack & Jones, 1996). This approach not only reduces waste but also improves the responsiveness of the entire supply chain.
5. **Pursuit perfection:** The goal of lean management is the pursuit of perfection through continuous improvement. While perfection is an aspirational goal, the interactive process of evaluating and refining workflows ensures sustained progress. In logistics, this principle can be applied by regularly analyzing delivery routes, optimizing inventory levels, and incorporating employee feedback into operational strategies. For instance, a logistics company might use advanced analytics to refine delivery schedules or conduct regular team reviews to identify improvement opportunities. Pursuing perfection ensures that lean management remains adaptable to the dynamic nature of the logistics industry (Fernández et al., 2022).

Lean management principles are closely aligned with the objective of operational efficiency in logistics. By focusing on value creation and waste elimination, lean strategies can significantly enhance process flow, reduce operational costs, and improve service quality. Research has shown that lean principles are highly effective in addressing

the challenges of modern logistics, such as fluctuating demand and the need for rapid delivery (Shah & Ward, 2003; Womack & Jones, 1996).

2.2.2 Core Principles of Agile Methodologies

Agile methodologies, originally developed in the context of software development, have been increasingly adopted across various industries, including logistics, to enhance operational efficiency and adaptability. Agile focuses on iterative processes, flexibility and responsiveness, enabling companies to navigate dynamic and complex environments effectively (Beck et al., 2001). In logistics, these principles are valuable for addressing challenges such as demand variability, supply chain complexity, and the need for rapid decision-making. The Twelve Principles of Agile, illustrated in Figure 3, form a backbone of this methodology. Each principle aligns with specific operational goals in logistics:

Figure 3. The Twelve Principles of Agile Methodologies

1. **Customer satisfaction**: Logistics teams prioritize meeting customer expectations by delivering value efficiently and reliably.
2. **Changing requirements**: Agile encourages adaptability to evolving customer demands and market conditions, ensuring flexibility in operations.
3. **Frequent delivery**: Short, iterative cycles enable logistics teams to deliver consistent results, such as timely shipments and service updates.
4. **Regular communication**: Open communication among stakeholders, including suppliers and customers, ensures alignment and swift decision-making.
5. **Motivated individuals**: Empowered and engaged employees are critical to maintain efficiency and foster innovation in logistics workflows.
6. **Face-to-face meetings**: Agile highlights the value of direct communication to resolve issues quickly, which can be adapted to virtual meetings in global logistics.
7. **Measure outputs**: Tracking key performance indicators (KPIs) such as delivery time and error rates help assess progress and identify improvements areas.
8. **Sustainable development processes**: Promotes practices that maintain operational consistency without overburdening employees and resources.
9. **Technical excellence & good design**: Leveraging automation and advanced technologies ensures high-quality outcomes in logistics operations.
10. **Simplicity**: Focuses on eliminating unnecessary steps and optimizing workflows to maximize value.
11. **Self-sufficient teams**: Cross-functional teams are encouraged to take ownership of their tasks, aligning with the concept of task ownership.
12. **Continuous improvement**: Regularly reflecting on processes to identify inefficiencies and implement changes to foster a culture of excellence.

In the context of logistics, the principles of Agile methodologies provide a framework for enhancing flexibility, responsiveness, and efficiency. For instance, fostering close collaboration among supply chain partners allows logistics companies to swiftly address evolving customer requirements, ensuring a high level of service. Agile´ s emphasis on regular reflection and adaptation empowers logistics teams to identify inefficiencies and

implement improvements, resulting in streamlined operations and optimized workflows. Agile methodologies align operational strategies with customer expectation, bridging the gap between process efficiency and customer satisfaction. For example, measuring KPIs like delivery accuracy and lead time ensure that performance improvements are data-driven and customer-focused. Additionally, principles such as simplicity and self-sufficient teams resonate strongly with the logistics sector´s need for streamlined operations and empowered employees, which are critical for achieving sustainable competitive advantage (Beck et al., 2001; ProjectManager, 2022).

2.2.3 Key Challenges and Enablers

Operational efficiency in logistics is shaped by dynamic interplay of internal and external factors. While frameworks such as Lean Management provide structured approaches to enhance efficiency, their practical implementation presents a unique challenge. At the same time, key enablers such as technological advancements and collaborative practices can mitigate these barriers. This section explores the key challenges and enabling factors that influence operational efficiency in logistics, grounding the discussion in established theories and research (Rodrigue & Notteboom, 2010).

Challenges

Globalized logistics networks inherently involve high complexity, requiring coordination across diverse regions, regulations, and stakeholders. As Rodrigue and Notteboom (2010) emphasize that the increasing interconnectedness of supply chain introduces unpredictability, ranging from geopolitical risks to natural disruptions. These complexities can lead to inefficiencies such as miscommunication and delays. Supply chain management theories advocate for the integration of collaborative systems and streamlined communication channels to address these challenges. For example, Lean Management principles focus on reducing unnecessary steps and aligning workflows to minimize disruptions (Womack & Jones, 1996).

Fluctuations in customer demand pose a significant challenge, making it difficult to align inventory and operational capacities with real-time requirements. Christopher (2016) emphasizes that demand variability can lead to overstocking, understocking, and strained resource allocation during peak periods. Demand-driven supple chain theories suggest leveraging predictive analytics and real-time data to respond more efficiently to shifting market conditions. By aligning operational capacities with actual demand, logistics companies can reduce inefficiencies and enhance customer satisfaction (Heskett et al., 1994).

While modern technologies such as automation, The Internet of Things (IoT), and blockchain offer significant potential to enhance logistics operations, their implementation often faces barriers. High costs, compatibility issues with legacy systems, and insufficient training for employees impede technological adoption (Huo et al., 2014). The Technology Acceptance Model (Davis, 1989) emphasizes the importance of user-friendly interfaces and comprehensive training programs to overcome these barriers. Companies that adopt phased integration strategies and prioritize employee readiness typically experience greater success in technological implementations.

Human resource challenges, including resistance to change and unclear role definitions, also hinder operational efficiency. Bakker er al. (2014) emphasizes the importance of psychological frameworks, such as the Job Characteristics Model (JCM), in addressing these barriers. Clear communication, structured training, and employee empowerment are essential for overcoming resistance and fostering alignment with organizational objectives. Change management theories, such as those proposed by Kotte (1996), further underscore the importance of structured approaches to employee engagement during periods of operational transformation.

Enablers

Standardized processes reduce variability and enhance consistency in logistics operations. Shah and Ward (2003) argue that standardized workflows enhance

scalability and minimize the risk of errors. For instance, establishing uniform procedures for order fulfillment ensures that operations are repeatable and efficient across different regions.

The use of date analytics has revolutionized logistics by enabling predictive modeling and proactive decision-making. Real-time analytics provide enhanced visibility into supply chain operations, allowing companies to reduce lead times and optimize resource allocation. Predictive analytics enables companies to forecast demand spikes and preemptively adjust inventory and capacity, aligning operations with market conditions. These practices resonate with Agile methodologies, which emphasize responsiveness dynamic environments (Heskett et al., 1994; Womack & Jones, 1996).

Cross-functional collaboration is another critical enable, fostering better communication and alignment between departments and stakeholders, which is essential for achieving operational efficiency. Collaborative logistics strategies, such as integrated supply chain planning where suppliers and logistics providers share forecast and operational data, have been shown to reduce redundancies and improve workflow integration. Huo et al. (2014) highlights that such practices enhance efficiency and improve customer satisfaction by ensuring seamless coordination across supply chain.

Finally, the synergy between task ownership and these methodologies further enhances operational efficiency. By fostering autonomy and accountability, task ownership drives operational outcomes while simultaneously boosting employee satisfaction. Research indicates that empowered employees are more engaged and motivated, contributing positively to both organizational performance and workforce well-being (Bakker et al., 2014).

2.3 Employee Satisfaction and Adaptation

Employee satisfaction and *adaptation* are pivotal to organizational success, specifically in fast-paced and high-pressure sectors such as logistics. Employee satisfaction refers to the degree to which individuals feel fulfilled, valued and motivated in their professional roles. On the other hand, *adaptation* is the capacity of employees to adjust to new tasks, roles, or organizational changes. Together, these factors directly influence operational efficiency, productivity, and workforce retention, making them critical in the implementation of model like task ownership (Bekker et al., 2014; Hackman & Oldam, 1976).

2.3.1 Theories of Employee Satisfaction

Employee satisfaction is a multifaceted concept shaped by a psychological and organizational factor. Among the prominent frameworks that help explain workplace satisfaction are *Maslow´s Hierarchy of Needs* and *Herzberg´s Two-Factor Theory*. These theories provide structured approaches to understanding how employee well-being can be nurtured through thoughtful job design and supportive environments.

Maslow´s Hierarchy of Needs

Maslow´s Hierarchy of Needs (1943) categorizes human motivation into five ascending levels: psychological needs, safety needs, social belongings, esteem, and self-actualization. Thus, pyramid structure suggests that individuals prioritize satisfying low-level needs, such as physical safety requirement, before seeking higher-level fulfillment. Each level builds upon the previous one, making progression contingent on meeting foundational needs. These five levels are:

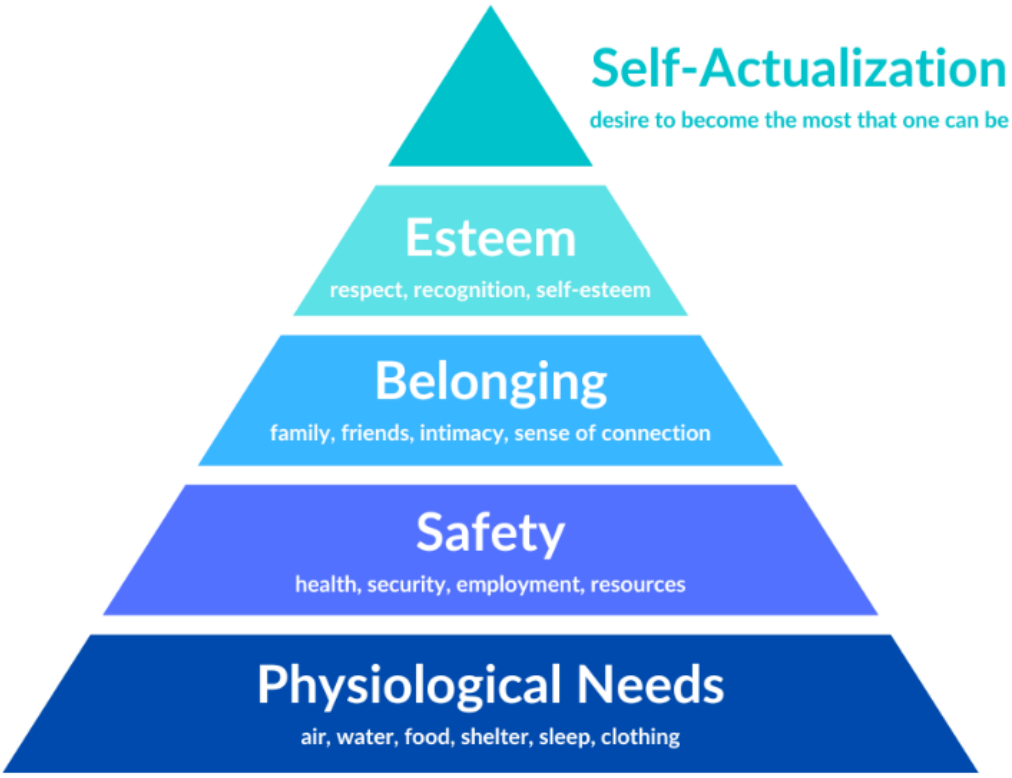


Figure 4. Maslow´s Hierarchy of Needs

1. **Psychological needs**: These form the base of Maslow´s hierarchy, encompassing essential requirements like food, water, shelter, and rest. Without this, employees cannot function effectively. In logistics, this translates to providing fair wages, adequate breaks, and safe working conditions.
2. **Safety needs**: Once basic survival needs are satisfied, individuals seek security and stability, both personally and professionally. Job security, compliance with safe standards, and access to health insurance are critical in addressing this level of need.
3. **Social belongings:** A sense of connection and camaraderie is central to employee motivation. In logistics, fostering teamwork, peer support, and open communication ensures that employees feel valued and integrated into their workplace.
4. **Esteem needs**: Recognition and personal achievement are crucial at this stage. Esteem encompasses both self-esteem (confidence and independence) and

recognition from others (status and respect). Task ownership model aligns with this level by providing employees with the autonomy to manage tasks independently and take pricing on their contributions.

5. **Self-actualization**: At the end of the pinnacle of the hierarchy, self-actualization involves pursuing one´s potential, creativity, and personal growth. In logistics, this might include professional development opportunities, such as leadership training or advanced certifications in supply chain management. Employees who reach this level often become innovators within their companies, driving efficiency and solving complex challenges.

Maslow´s Hierarchy of Needs framework provides valuable insight for logistics companies seeking to enhance employee motivation and satisfaction. In the logistics sector, addressing these needs through structured support and task ownership model not only enhances employee well-being but also drives organizational performance. By ensuring that employees progress through these levels, companies can foster a motivated and engaged workforce.

Herzberg´s Two-Factor Theory

Frederick Herzberg´s Two-Factor Theory, also known as the *Motivation-Hygiene Theory*, distinguishes between two sets of factors that influence job satisfaction: *hygiene factors* and *motivators*. Hygiene factors are external elements related to the work environment that prevent dissatisfaction but do not inherently create motivation. Conversely, motivations are intrinsic to work itself, promoting fulfillment and driving higher levels of engagement and performance (Herzberg et al., 1959).

Hygiene factors include foundational workplace elements such as organizational policies, quality of supervision, salary, interpersonal relationships, and working conditions. While their absence can lead to dissatisfaction, their presence does not inherently motivate employees. For instance, in the logistics sector, transparent scheduling policies and equitable overtime compensation ensure that employees feel treated fairly. Additionally,

maintaining clean, organized warehouses and implementing stringent safety measures can significantly enhance employees' perception of security and comfort in their workplace (Herzberg et al., 1959; Sethi, 2023).

On the other hand, motivators pertain to elements that directly influence an employee´s sense of achievement and purpose, including recognition, responsibility, advancement opportunities, and the essential value of the work itself (Herzberg, Mausner & Snyderman, 1959). Task ownership model in logistics exemplifies this, as they allow employees to take full responsibility for specific tasks, fostering a sense of autonomy and accomplishment. Recognizing high-performing employees and offering clear pathways for career advancement further reinforces motivation and job satisfaction. For instance, employees who meet or exceed delivery targets or resolve supply chain bottlenecks are more likely to feel valued when their contributions are acknowledged publicly or through tangible rewards (Sethi, 2023).

Application in the Logistics Sector

Herzberg´s Two-Factor Theory is highly applicable to the logistics sector, a field characterized by demanding operational requirements and high-pressure environments that can significantly influence employee satisfaction. To prevent dissatisfaction, logistics companies must prioritize hygiene factors by providing fair wages, clear expectations, and safe working conditions. By addressing these foundational aspects, companies can create a stable and secure work environment, enabling employees to focus on their tasks without undue stress. For instance, maintaining well-maintained warehouses and ensuring compliance with safety standards can enhance employees´ physical and psychological security, which forms the baseline for satisfaction (Herzberg et al., 1959; Sethi, 2023).

In addition to hygiene factors, companies striving to enhance employee satisfaction must also focus on motivators – factors that directly influence employees´ intrinsic engagement and fulfillment. Empowering employees through task ownership can foster

a sense of autonomy, responsibility, and purpose. When employees are entrusted with managing tasks end-to-end, they often experience higher levels of job satisfaction, as they can see the tangible results of their efforts. Additionally, recognizing employees´ achievements, where through acknowledgement or career advancement opportunities, reinforces their motivation and commitment to organizational goals. For example, celebrating the accomplishments of logistics professionals who efficiently resolve supply chain bottlenecks or achieve timely deliveries can build a culture of recognition and appreciation, aligning employee well-being with company success (Herzberg et al., 1959; Sethi, 2023).

Figure 5 below summarizes Herzberg´s Two-Factor Theory, illustrating the distinction between hygiene factors and motivators and their respective roles in shaping employee satisfaction and motivation.

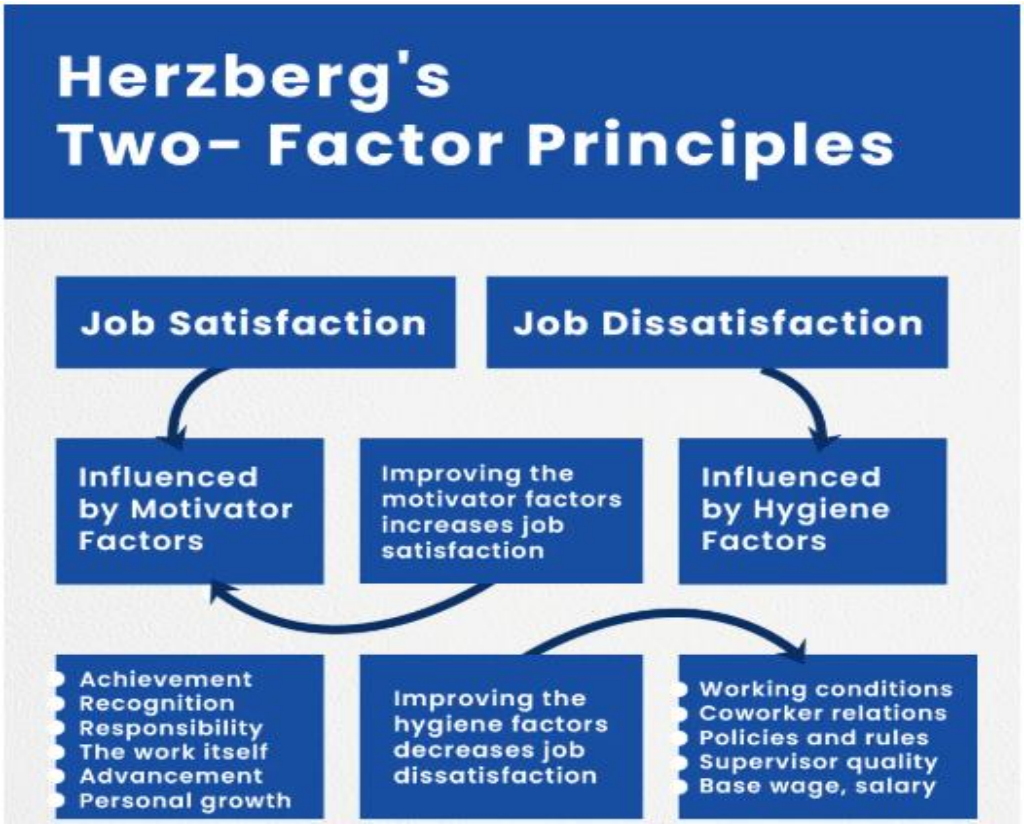


Figure 5. Herzberg´s Two-Factor Principles

Herzberg´s Two-Factor Theory provides a nuanced understanding of employee satisfaction in the logistics sector by separating the factors that eliminate dissatisfaction from those that actively foster motivation. In a field where extrinsic stability and intrinsic engagement are equally critical, the theory offers actionable strategies for designing work environments that align operational goals with employee well-being. Companies that successfully balance these factors are better equipped to enhance workforce morale and sustain operational excellence (Herzberg et al., 1959; Sethi, 2023).

2.3.2 Theories of Employee Adaptation

Employee adaptation refers to the process by which individuals adjust to changes in their work environment, roles, or organizational culture (Lazarus & Folkman, 1984). In industries like logistics, characterized by dynamic and unpredictable conditions, the ability of employees to adapt is critical for sustaining operational performance and fostering workplace resilience. Adaptation mechanisms are influenced by organizational structures, available resources, and individual coping strategies (Fernández, García, & López, 2022).

Several theoretical frameworks provide insights into the process of adaptation, including the *Transaction Model of Stress and Coping* (Lazarus & Folkman, 1984), *Organizational Socialization Theory* (Van Maanen & Schein, 1979), and *the Job Demands-Resource (JD-R) Model* (Bakker & Demerouti, 2007). These models highlight the cognitive, emotional, and contextual factors that influence employees´ responses to changes and stressors, offering actionable strategies for companies to support their workforce during transitions. By leveraging these frameworks, logistics companies can enhance both employee well-being and operational outcomes, creating a more resilient organizational culture.

Transactional Model of Stress and Coping

The Transactional Model of Stress and Coping, developed by Lazarus and Folkman (1984), provides a comprehensive framework for understanding how individuals perceive and respond to changes or stressors in their environment. This model is particularly relevant in high-pressure industries like logistics, where employees often navigate complex operational demands and dynamic workflows. The model emphasizes *two key cognitive processes* that shape an individual´s response to stressors. Lazarus and Folkman´s (1984) transactional model of stress and coping is presented below:

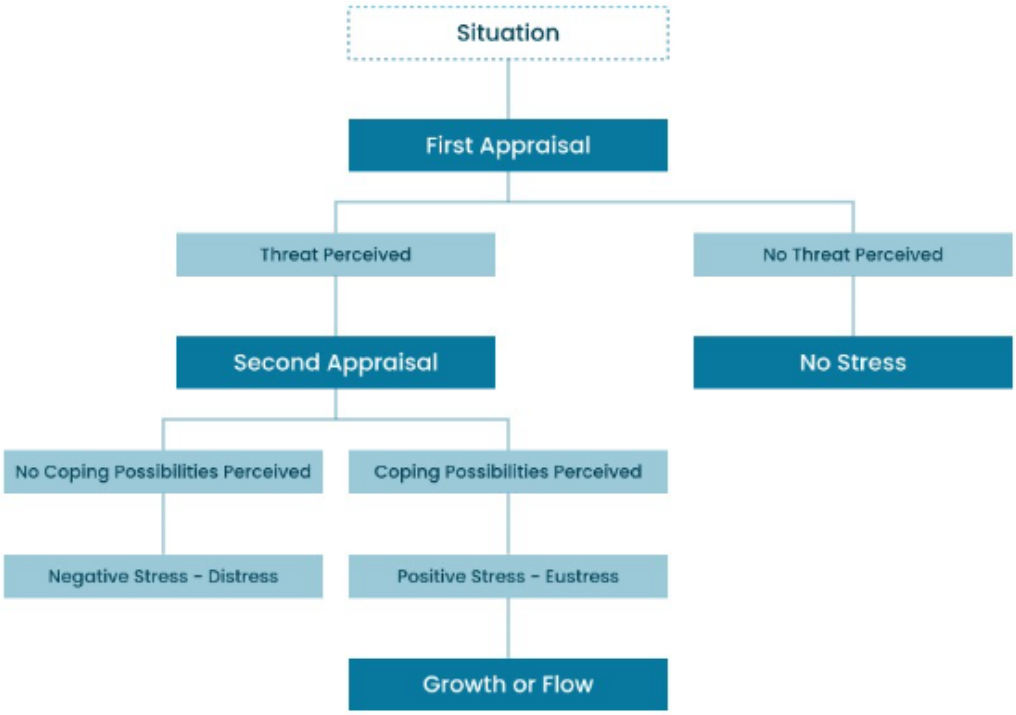


Figure 6. Transactional Model of Stress and Coping

The first stage is *Primary Appraisal*, where individuals evaluate whether a specific change or situation represents a threat, challenge, or opportunity. For instance, a shift in operational procedures – such as implementing task ownership model – may initially be perceived as a threat to job security or comfort due to the required adjustments. The second stage is *Secondary Appraisal*, where after determining the nature of the change,

individuals evaluate the resources and strategies available to manage the stressor. These resources may include personal skills, organizational support, or external tools. Employees who perceive themselves as well-equipped to handle the situation are more likely to adapt successfully.

In logistics, employees frequently encounter rapid technological advancements, changes in regulatory policies, and evolving operational models such as task ownership. These transitions can be overwhelming, especially if employees lack the necessary resources or support to navigate them effectively. For instance, the introduction of automated systems in warehouse management might initially be viewed as a threat due to its potential to disrupt established workflows. However, with adequate training programs, clear communication, and managerial support, employees can reframe this change as an opportunity for growth, skill development, and enhanced efficiency (Lazarus & Folkman, 1984).

Recent research emphasizes the critical role of resilience in managing stress and adapting to organizational changes. Tailored training programs, mentorship, opportunities, and workshops focused on building coping mechanisms are increasingly recognized as effective strategies for enhancing resilience in high-pressure environments (Smith et al., 2021). Furthermore, companies that foster open communication and encourage feedback create a psychologically safe environment, enabling employees to address challenges proactively.

The Transactional Model of Stress and Coping underscores the critical role of organizational support systems in enabling successful adaptation. By providing employees with the tools and resources needed to navigate transitions, companies not only enhance individual coping mechanisms but also improve overall operational efficiency and employee satisfaction. This dual focus ensures that both human and organizational outcomes are optimized, even in challenging and fast-evolving and complex logistics environments.

Organizational Socialization Theory

Organizational Socialization Theory, introduced by Van Maanen and Schein (1979), explores the process through which individuals learn and adapt to the values, norms, and expected behaviors within a company. This theory emphasizes that successful socialization is critical for new employees to integrate effectively, feel a sense of belonging, and contribute meaningfully to organizational objectives. This is particularly critical in logistics, where the rapid assimilation of complex workflows and cultural alignment are essential for achieving operational goals.

The theory identifies three distinct stages that employees experience during their integration into a company. The first stage is *Anticipatory Socialization*, that occurs before individuals formally join a company. It involves gathering information about the company´s culture, values, and job expectations through sources like job advertisements, interviews, or personal networks. In logistics prospective employees might anticipate the high-paced nature of supply chain operations based on industry insights or conversations with recruiters (Van Maanen & Schein, 1979). The second stage is *Encounter Stage*, which begins once individuals join the organization and start to experience its culture and workflows firsthand. Employees often face reality shock, and they reconcile their expectations with the actual organizational environment. Structured onboarding programs, training sessions, and mentorship can mitigate this shock, helping employees adapt more quickly to their roles and responsibilities (Bayer et al., 2007). The third stage is Change and Acquisition, where employees fully internalize the company´s culture, norms, and workflows, becoming effective contributors. Successful adaptation during this phase is marked by improved job performance, reduced turnover intentions, and enhanced job satisfaction (Choi et al., 2020).

In logistics operations, the complexity of workflows and the dynamic nature of supply chain management amplify the need for effective socialization strategies. Employees who undergo comprehensive onboarding and socialization processes are better

equipped to handle the challenges of task ownership model, technological integrations, and coordination with cross-functional teams (Van Maanen & Schein, 1979; Choi et al., 2020). Providing a structured training programs on inventory management systems, transportation regulations, or customer service protocols ensures that employees understand their responsibilities and reduced errors. Mentorship programs and peer support also play a crucial role in informal learning, creating a support network that enhances employee confidence and facilitates adaptation (Bauer & Erdogan, 2011). Furthermore, regular feedback mechanisms, such as performance evaluations and constructive discussions, help employees align with organizational goals and continuously refine their skills, enduring they remain effective contributors in dynamic logistics environments (Choi et al., 2020).

Organizational Socialization Theory provides a robust framework for understanding and optimizing adaptation processes. By implementing structured onboarding, mentorship programs, and continuous feedback mechanisms, logistics companies can better equip employees to navigate operational complexities. These strategies not only support individual adaptation but also enhance organizational performance and resilience in the competitive logistics sector (Van Maanen & Schein, 1979; Choi et al., 2020).

Job Demands-Resources (JD-R) Model

The Job Demands-Resources (JD-R) Model developed by Bakker and Demerouti (2007), provides a comprehensive framework for understanding how job demands and resources interact to influence employee well-being, engagement, and performance. The model classifies workplace factors into two categories: job demands and job resources. *Job demands* are the physical, emotional, or cognitive efforts required by a role, such as tight deadlines, workload pressure, or complex decision-making tasks. Excessive demand can lead to strain and burnout, especially in high-pressure industries like logistics. *Job resources* include tools, support systems, and opportunities that help employees manage job demands. Resources may range from advanced technology and training programs to supportive leadership and team collaboration.

Adaptation occurs when employees effectively leverage available resources to meet or exceed demands. According to Fernández et al. (2022) logistics professionals managing intricate supply chains often rely on digital tools for real-time tracking, clear instructions to streamline workflows, and cohesive teamwork to resolve challenges. These resources enable employees to perform their tasks efficiently while maintaining their well-being. Conversely, an imbalance – where job demands exceed available resources – can lead to heightened stress, reduced job satisfaction and lower productivity.

Recent studies underscore the growing importance of digitalization and automation in enhancing job resources within the logistics sector. Advanced technologies, such as predictive analytics and real-time tracking systems, improve operational efficiency while alleviating employees´ cognitive and emotional burdens (Fernández et al., 2022). Additionally, supportive leadership and inclusive organizational cultures serve as key resources, fostering resilience and empowering employees to navigate high-pressure situations more effectively Choi et al., 2020).

According to Bakker and Demerouti (2007), the JD-R Model is specifically relevant in the logistics sector due to the industry´s dynamic and high-stakes environment. Logistics professionals frequently encounter demanding schedules, fluctuating workloads, and complex coordination tasks. By ensuring an optimal balance between job demands and resources, companies can support employee adaptation, prevent burnout, and enhance overall performance. Providing resources like advanced planning tools, comprehensive training, and collaborative team structures enables employees to manage demanding roles more effectively. Excessive demands without adequate resources can deteriorate stress and hinder adaptation. Companies that proactively address these imbalances can foster a sustainable workforce, aligning operational goals with employee well-being.

2.3.3 Employee Satisfaction and Adaptation in Logistics

Logistics operates in dynamic and high-pressure environments that demand precision, efficiency, and adaptability (Choi et al., 2020). These characteristics make employee satisfaction and adaptation essential for maintaining operational excellence and achieving organizational objectives. Satisfaction reflects the extent to which employees feel valued, motivated and fulfilled in their roles, while adaptation refers to their ability to adjust to changes in tasks, roles, or organization processes. Both concepts are deeply interrelated, as employees who are satisfied with their roles are more likely to adapt effectively to evolving operational demands, and successful adaptation can enhance satisfaction by reducing uncertainty and fostering confidence (Bakker & Demerouti, 2007; Van Maanen & Schein, 1979).

According to Fernández et al. (2020), employee satisfaction and adaptation in logistics are interdependent processes. Satisfied employees are more likely to embrace organizational changes readily, while effective adaptation can lead to higher job satisfaction by reducing role ambiguity and enhancing confidence. Task ownership model in logistics often requires employees to take on new responsibilities, which may initially pose challenges. When these frameworks are implemented with adequate training and support, employees are more likely to adapt successfully, ultimately leading to greater satisfaction and improved performance.

Employee Satisfaction in Logistics

Employee satisfaction in logistics is influenced by a combination of industry-specific factors, such as demanding work conditions, task autonomy, and recognition for individual contributions. Hackman and Oldham´s (1976) Job Characteristics Model (JCM) highlights the importance of autonomy, task significance, and feedback in enhancing job satisfaction. These factors align closely with the logistics sector, where task ownership provides employees with greater responsibility and ownership over their roles.

Logistics professionals often value clarity in communication, fair compensation, and opportunities for career advancement. According to Bakker and Demerouti (2007), employees who perceive their work as meaningful and aligned with organizational goals tend to exhibit higher levels of satisfaction. Additionally, Choi et al. (2020) emphasize that recognition for performance, whether through monetary rewards or public acknowledgement, significantly boosts morale in high-pressure environments. The demanding nature of logistics operations – such as adhering to tight delivery schedules. managing international shipments and resolving supply chain bottlenecks – amplifies the importance of robust support systems. Fernández et al. (2022) underscore that employees are more likely to experience job satisfaction when provided with structured training programs, access to advanced technological tools, and responsive leadership. For instance, employees trained in real-time tracking systems or automated inventory management are better equipped to meet operational demands, leading to greater satisfaction and sense of accomplishment.

Employee Adaptation in Logistics

Adaptation in logistics involves employees´ ability to adjust to organizational changes, such as the adaptation of new technologies, the implementation of ownership models, or reconfiguration of processes. Van Maanen and Schein´s (1979) Organizational Socialization Theory highlights the importance of onboarding and training in fostering successful adaptation. In logistics, structured onboarding processes, clear role definitions, and mentoring programs can significantly enhance employees´ ability to integrate into complex workflows and align with organizational objectives.

The Job Demands-Resources (JD-R) Model further explains the importance of balancing job demands with adequate resources in promoting adaptation. Logistics professionals face considerably job demands, including fluctuating workloads, time-sensitive tasks, and complex decision-making scenarios. Providing adequate resources – such as digital tools for route optimization, real-time tracking systems, or predictive analytics – can reduce stress and enhance adaptability (Fernández et al., 2022). For instance, employees

equipped with advanced planning tools are better prepared to handle unexpected disruptions in supply chain operations. Additionally, fostering a culture of continuous learning is essential for adaptation. Smith et al. (2021) highlights that offering employee's opportunities for professional development, such as training in advanced supply chain technologies or leadership skills, enables them to thrive in evolving operational landscapes. Companies that prioritize employee development create an adaptive workforce capable of meeting dynamic industry demands while maintaining high performance.

2.3.4 Challenges and Practical Implications

Employee satisfaction and adaptation in logistics operations are shaped by several challenges that can hinder their effective realization. The logistics industry is characterized by high-pressure environments, rapid technological advancements, and global supply chain complexities (Choi et al., 2020); Bakker & Demerouti, 2007). These dynamics necessitate robust strategies to address the barriers that employees face while navigating their roles. At the same time, identifying actionable solutions to these challenges offers companies opportunities to enhance both employee well-being and operational efficiency (Fernández et al., 2022).

Challenges

According to Bakker & Demerouti (2007) one of the significant challenges in logistics is the demanding nature of logistics work. Employees in logistics operations often face intense pressure due to strict time constraints, variable shipment volumes, and the constant need to respond to unforeseen disruptions across global supply chains – all of which contribute to operational stress and cognitive overload. These high-pressure environments often lead to burnout, reduced job satisfaction, and increased turnover if not managed effectively. Additionally, global logistics operations often involve culturally and linguistically diverse teams, which can create communication barriers and misunderstandings. Such barriers can hinder collaboration and affect the efficiency of onboarding or adapting employees to new roles (Van Maanen & Schein, 1979).

According to Fernández et al. (2022) rapid technological advancements introduce another layer of complexity for employees, while beneficial for operational efficiency, can pose challenges for employees. Digital tools, automation systems, and real-time tracking technologies require employees to adapt to new workflows and learn new skills. For employees unfamiliar with these systems, the integration of advanced technologies can lead to stress, resistance, and skill gaps. As stated by Choi et al. (2020), the limited availability of resources, such as training programs, managerial support, or technological infrastructure, can further hinder employees´ ability to adapt effectively. Companies operating under such constraints may struggle to provide the necessary support to meet the demands of modern logistics roles.

Practical Implications

Referring to the work of Bauer & Erdogan (2011), to address these challenges, companies can implement tailored training and development programs. Structured training initiatives that focus on specific skill gaps and real-world scenarios can better prepare employees for evolving responsibilities. Scenario-based training in logistics can simulate real-world challenges, enabling employees to build the skill needed to navigate their roles effectively. Effective leadership plays a pivotal role in fostering both satisfaction and adaptation. Managers who provide clear communication, regular feedback, and consistent recognition of employee efforts can create a supportive work environment that enhances morale and job performance. (Choi et al., 2020).

Strategic integration of technology also holds promise in reducing job demands and enhancing workflow efficiency. User-friendly digitals tools and comprehensive training programs can help employees adopt to new systems with ease, alleviating technological stress (Fernández et al., 2022). Additionally, fostering a culture of inclusion and collaboration can help bridge communication gaps among diverse teams. Team-building initiatives and diversity management programs can strengthen relationships among

employees and improve problem-solving capabilities, contributing to a more cohesive workforce (Van Maanen & Schein, 1979).

Drawing on the research of Bakker and Demerouti (2007), continuous feedback mechanisms are essential for maintaining alignment with organizational goals and addressing employee concerns. Regular performance evaluations, combined with open communication channels, enable employees to refine their skills and fain confidence in their roles. These mechanisms not only boost morale but also drive operational improvements, ensuring employees remain engaged and productive.

Overall addressing the challenges associated with employee satisfaction and adaptation in logistics requires a multifaceted approach that combines effective leadership, robust training programs, strategic technology use, and cultural inclusivity (Choi et al., 2020; Bakker & Demerouti, 2007). By understanding and mitigating these barriers, companies can create environments that promote employee well-being while achieving operational excellence. This integrated approach provides logistics companies with a competitive advantage, aligning human resource strategies with the dynamic demands of the industry (Fernández et al., 2022).

2.4 Theoretical Framework

The theoretical framework serves as a foundation for understanding how task ownership impacts operational efficiency and employee satisfaction in logistics. By integrating Lean Management, the Job Characteristics Model (JCM), and Workload Management, this framework provides a comprehensive lens to explore the dual impact of task ownership. Each theory contributes uniquely, addressing both organizational and human factors, which are essential for achieving operational excellence in dynamic logistics environments.

2.4.1 The Theoretical Backbone of Task Ownership in Logistics

Lean Management emphasizes the elimination of waste, optimization of processes and creation of customer value (Womack & Jones, 1996). In logistics, Lean principles are particularly relevant as they focus on streamlining workflows, minimizing redundancies, and enhancing efficiency. By adopting Lean Management, companies can align their operational practices with task ownership model, where a single employee oversees end-to-end responsibilities. This approach reduces delays and errors by eliminating inefficiencies in handoffs (Shah & Ward, 2007). Recent studies emphasize the adaptability of Lean Management principles in logistics, specifically in high-pressure environments where precision and speed are critical (Fernández et al., 2022). For instance, applying Lean practices in warehouse management has been shown to improve resource allocation and reduce idle time, directly impacting operational efficiency.

Hackman & Oldham´s (1976) *Job Characteristics Model* focuses on how specific job attributes influence employee motivation, satisfaction, and performance. Its five core dimensions- skill variety, task identity, task significance, autonomy, and feedback – align closely with the concept of task ownership. Employees who take full responsibility for task´s lifecycle experience higher level of motivation and engagement due to increased autonomy and task significance (Bakker & Demerouti, 2014). In logistics, the JCM is particularly applicable as it demonstrates how well-designed roles can mitigate stress and enhance job satisfaction, even in high-pressure scenarios. Recent research supports this, indicating that autonomous work environments improve both employee and employee well-being and productivity, especially in industries like logistics that demand rapid decision-making and adaptability (Smith et al., 2021).

Workload Management theory explores the balance between job demands and the resources available to employees. Bakker and Demerouti´s (2007) the Job Demand-Resource (JD-R) model highlights how excessive demands without adequate resources can lead to burnout, while balanced demands promote productivity and job satisfaction.

In logistics, the JD-R model underscores the importance of providing employees with adequate training, technological tools, and managerial support to navigate complex workflows. Research confirms that effective workload management is crucial in preventing employee exhaustion and maintaining high levels of performance in operationally demanding roles (Choi et al., 2020). This framework complements Lean Management and JCM by addressing the critical balance between operational expectations and employee well-being.

2.4.2 Integration, Synergies, and Applications of Theories in Logistics

The integration of Lean Management, the Job Characteristics Model (JCM), and Workload Management provides a comprehensive framework to examine task ownership in logistics. Each theory contributes unique insights, but their combined application enables a holistic approach to understanding the dual impact on operational efficiency and employee satisfaction.

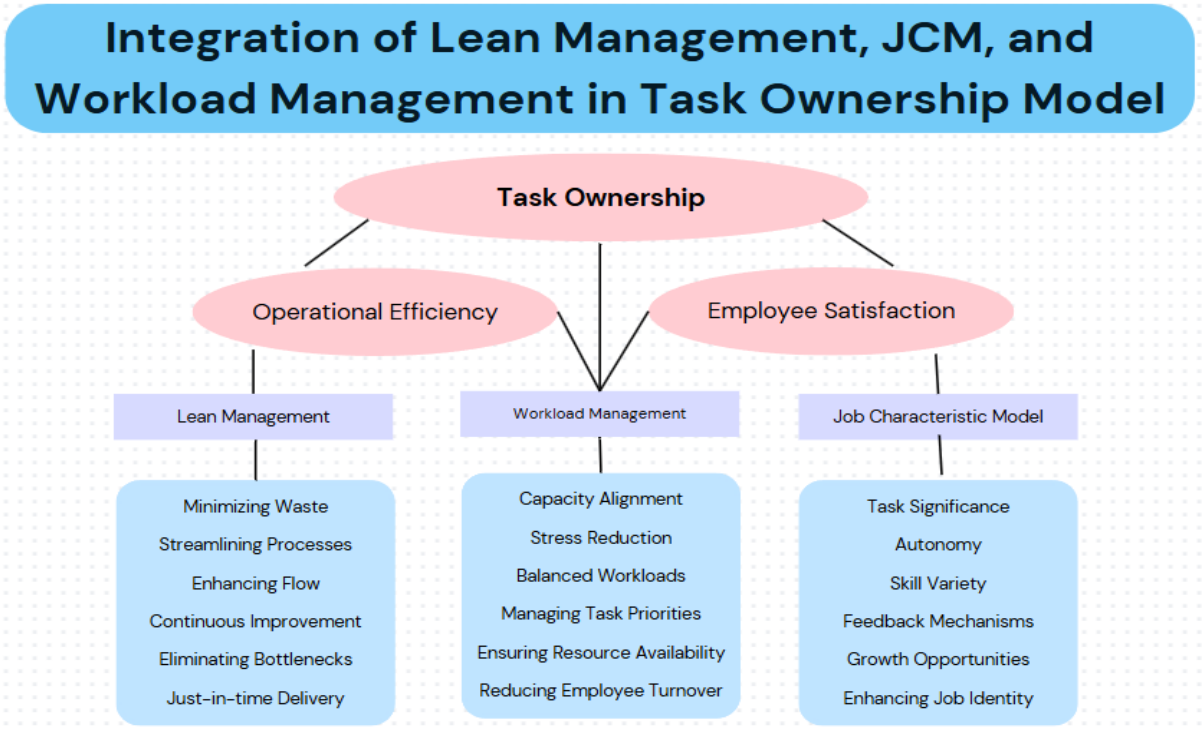


Figure 7. Integration of Key Theories in Task Ownership Model

The conceptual diagram (Figure 8) visually represents the integration of Lean Management, Job Characteristics Model (JCM), and Workload Management within task ownership model in logistics. Task ownership serves as the central construct, driving two critical outcomes – *operational efficiency* and *employee satisfaction*– supported by the synergies between theories. Each theory contributes aligns with specific facets of task ownership, while their combined contributions create a comprehensive framework that addresses both organizational goals and employee well-being. This integration not only highlights theoretical synergies but also underscores their practical implications. Together, these frameworks enable logistics companies to align their operational strategies with human resource considerations, optimizing both processes and workforce well-being. As detailed in the subsequent sections, this approach empowers companies to enhance performance while fostering a motivated and adaptable workforce.

Synergies Between Theories

Lean Management focuses on eliminating waste and streamlining processes to enhance operational efficiency (Womack & Jones, 1996). When applied alongside Job Characteristics Model, which emphasizes employee motivation and satisfaction through well-designed roles, these principles create a balance between process optimization and human well-being (Hackman & Oldham, 1976). Workload Management complements these frameworks by addressing the critical balance between job demands and available resources, ensuring that operational goals do not overwhelm employees (Bakker & Demerouti, 2007).

For instance, a logistics company implementing Lean Management to reduce bottlenecks in supply chain processes can simultaneously use JCM principles to design tasks that foster autonomy and task identity. Incorporating Workload Management ensures employees have access to the adequate resources then need – such as training, technology, and managerial support – to effectively handle their roles without burnout (Smith et al., 2021). Together, these theories form a cohesive framework that aligns

operational objectives with employee well-being, creating a synergy that drives both efficiency and satisfaction.

Practical Applications in Logistics

The integration of these theories is particularly relevant in the dynamic and high-pressure logistics sector. Lean Management principles can guide the process of redesigning to minimize non-value-adding activities, while JCM ensures that redesigned tasks remain engaging and fulfilling for employees. Workload Management adds a layer of sustainability by aligning task demands with available resources, mitigating risks of fatigue and disengagement.

For example, in the task ownership model, assigning employees end-to-end responsibility aligns with JCM´s emphasis on autonomy and task significance, fostering satisfaction and engagement. At the same time, Lean principles streamline the processes of employees oversee, reducing redundancies and inefficiencies. Workload Management ensure that employees have the capacity to meet these responsibilities, by providing training, clear guidance, and access to support systems (Fernández et al., 2022). By integrating Lean Management, the Job Characteristics Model, and Workload Management creates a robust theoretical framework for analyzing task ownership in logistics. This multifaceted approach ensures that both organizational objectives and employee needs are prioritized, fostering sustainable operational excellence alongside improved employee satisfaction.

3 METHODOLOGY

This chapter outlines the research design, data collection methods, and analytical techniques used in this study. Given the complex nature of logistics operations, a dual focus on operational efficiency and employee satisfaction, this research adopts a mixed method approach, integrating both quantitative and qualitative data collection methods. By combining these approaches, the study ensures a comprehensive and holistic examination of the impact of task ownership in logistics operations.

The research design is structured to address the research question: *How does task ownership impact operational efficiency and employee satisfaction in logistics operations?* To answer this, the study examines operational performance metrics (efficiency, error rates, and financial performance) and employee-centric variables (job satisfaction, task autonomy, and adaptation). The mixed-methods approach enables triangulation, ensuring that findings are validated across multiple data sources and providing deeper insights into the interplay between task ownership, workflow efficiency, and workforce well-being (Bryman, 2012; Creswell & Plano Clark, 2017).

3.1 Research Design and Approach

This thesis employs a mixed-methods approach, combining both quantitative and qualitative methodologies to enable a robust analysis that captures the complexities of operational processes and human experiences (Bryman, 2012; Creswell & Plano Clark, 2017). This integrative approach is particularly suited for exploring multifaceted phenomena like task ownership, where both measurable performance metrics and subjective employee perceptions are critical (Bryman, 2012).

The research is grounded in a pragmatic paradigm, which emphasizes the use of methods that best address research questions rather than adhering strictly to a single philosophical tradition (Creswell & Plano Clark, 2017). Pragmatism allows for flexibility in choosing the most effective tools and, which is essential for capturing the operational

and human complexities inherent in logistics tasks. This facilitates a balanced integration of quantitative data (e.g., operational metrics) and qualitative insights (e.g., employee experiences).

A convergent parallel design is employed in this study, where quantitative and qualitative data are collected and analyzed simultaneously but independently. The results from both strands are then merged during the interpretation phase to provide a comprehensive understanding of the research problem (Creswell & plano Clark, 2017). This design ensures that the operational impacts of task ownership are examined alongside the human factors, allowing for a holistic analysis of its effectiveness in logistics operations.

- **Quantitative Component**: Focuses on analyzing operational metrics such as workflow efficiency, error rates, and financial performance within Company X´s Airfreight Import operations.
- **Qualitative Components**: Captures employee perspective on job satisfaction, task autonomy, and adaptation through focus groups, participant observation, and semi-structured interviews.

The research employs a single-case study approach, focusing on Company X, a global logistics provider recognized for its comprehensive range of air, ocean, road, and rail freight services. The case study method allows for an in-depth examination of task ownership within a real-world context, providing rich, detailed insights into its practical implementation and outcomes (Yin. 2018). Company X´s Airfreight Import operations are selected as the focal point due to their dynamic nature and the recent integration of task ownership model. The fast-paced workflows and complex coordination requirements in this division present a unique opportunity to analyze how end-to-end task responsibility influences both operational performance and employee satisfaction in a high-pressure logistics environment. The findings from this study may also have broader implications, offering insights that can be applied to other logistics sectors, such as Ocean Freight Imports. To illustrate this methodological structure, **Figure 8** outlines the convergent parallel design employed in this study:

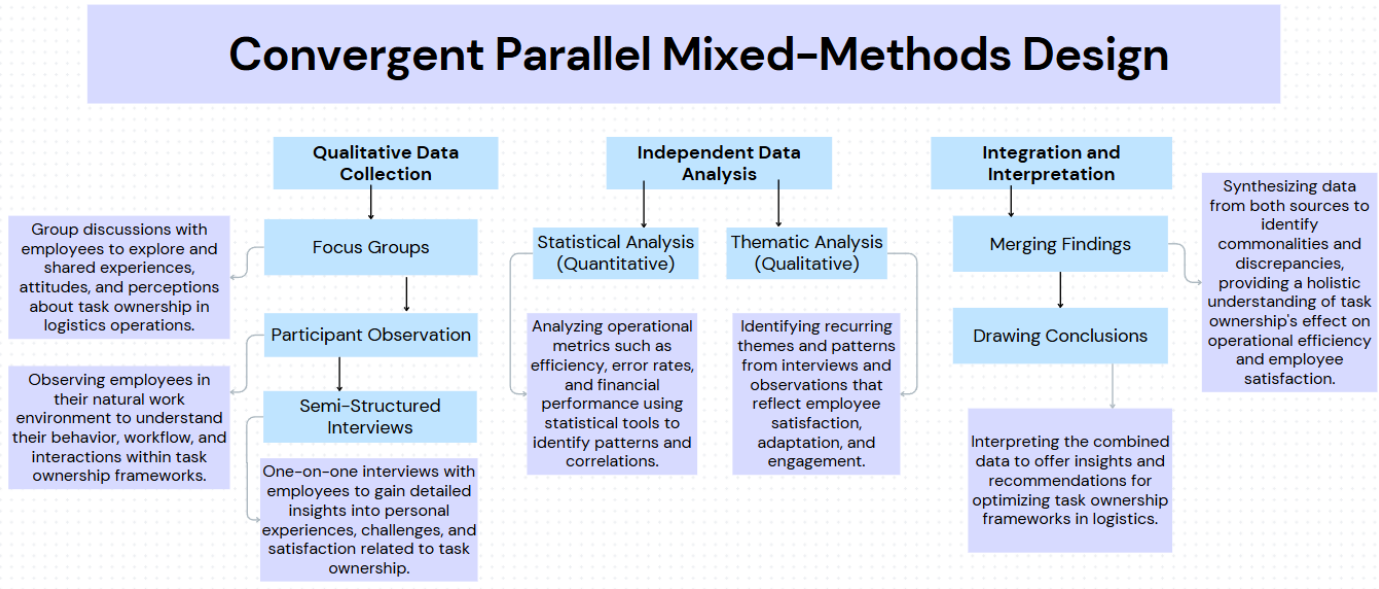


Figure 8. Convergent Parallel Mixed-Methods Design

Figure 8 represents the overall research framework, utilizing a convergent parallel mixed-methods design where qualitative and quantitative data are collected and analyzed independently. This approach ensures methodological rigor by maintaining the distinct strengths of each method while allowing for comprehensive interpretation. The integration of these findings provides a holistic understanding of task ownership´s impact on both operational efficiency and employee satisfaction within logistics operations.

The rationale for employing a mixed-methods design stems from the need to address both objective and subjective aspects of task ownership. Quantitative data provides measurable evidence of operational improvements or inefficiencies, while qualitative data provides offers context and depth, revealing how employees experience and adapt to task ownership model. Thus, dual approach ensures that the study captures the full spectrum of impacts, from workflow optimization to employee engagement.

3.2 Data Collection Methods

A combination of quantitative and qualitative data collection methods was used to investigate the impact of task ownership on operational efficiency and employee satisfaction within logistics operations. This mixed-method allows for a comprehensive examination of both measurable performance indicators and the more nuanced, subjective experiences of employees. While competitive data offers objective insights into operational outcomes such as efficiency and error rates, qualitative data provides depth and context by capturing employee perspective on job satisfaction, autonomy, and adaptation (Creswell & Plano Clark, 2017).

3.2.1 Operational Efficiency Metrics

The quantitative component of this research focuses on analyzing operational metrics derived from Company X´s Airfreight Import operations. These metrics were selected to objectively evaluate the influence of task ownership on key performance indicators (KPI), including workflow efficiency, error rates, and financial performance. Workflow efficiency was measured by evaluating the throughput time, which captures the duration required to complete a task from initiation to final delivery. Error rates were quantified by tracking the frequency of operational mistakes, such as shipment delays, documentation errors, and miscommunications, all of which are critical indicators of process effectiveness in logistics. Financial performance was evaluated through an analysis of cost reductions and profit margins, with particular attention to the efficiencies gained from task ownership model (Company X, 2024).

Data for these metrics was extracted from *Company X´s internal performance databases* and operational reports of one year period. This timeframe allowed for a detailed examination of performance trends before and after the implementation of task ownership. To analyze the data, *descriptive statistics* were employed to summarize performance patterns, while *inferential statistical methods* were used to identify

correlations and causal relationships between task owners and operational outcomes (Bryman, 2012; Company X, 2024).

3.2.2 Focus Groups, Participant Observation, and Action Research

To complement the quantitative data, qualitative methods were employed to capture the lived experiences of employees navigating the task ownership model. This approach provides critical insights into how task ownership affects job satisfaction, autonomy, and adaptation within high-pressure logistics environments. Three primary methods were utilized: focus groups, participant observations, and action research, all of which offered unique perspectives on the human side of operational change.

Focus groups were conducted to explore shared experiences and perceptions of task ownership among employees. As a method, focus groups allow for dynamic group interaction, where participants can build on each other´s ideas, reveal collective norms, and co-construct meaning (Morgan, 1997; Krueger & Casey, 2015) In this study, three focus groups were organized, each comprising ten employees from various roles within the Airfreight Import team, including customer service, freight coordinators, and supervisors. The diversity of participants ensured a broad spectrum of insight across different levels of responsibility. Discussions were guided by a *semi-structured interview* protocol, which covered topics such as task autonomy, job satisfaction, workload management, and adaptation to new roles. Open-ended questions encouraged participants to elaborate on their experiences, while the flexible format allowed the facilitator to probe deeper into emerging themes. Each session lasted approximately *60 to 90 minutes* with informed consent obtained from all participants. The conversation was transcribed and subjected to *thematic analysis* to identify recurring patterns and insights related to task ownership (Braun & Clarke, 2006; Company X, 2024).

Participant observation was employed to gain direct insights into the day-to-day realities of task ownership in practice. As a qualitative method, participant observation enables researchers to understand behaviors and social dynamics in their natural context

(Spradley, 190; DeWalt, 2011). The researcher adopted a *non-participatory observer role*, minimizing interference while closely monitoring key aspects such as task autonomy, collaboration, and coping strategies in response to the demands of task ownership. Observations focused on how employees managed tasks independently, made decisions and interacted with colleagues within the framework of their new responsibilities. Field notes were taken systematically, combining descriptive observations with reflective commentary (Emerson et al., 2011), offering nuanced insights into the implementation of task ownership.

Action research was integrated as a dynamic, participatory approach to explore how task ownership model evolves in real-time within Company X´s Airfreight import operations. Action research involves a cyclical process of planning, acting, observing, and reflecting, which engages both researcher and participants in collaborative problem-solving (Kemmis & McTaggart, 2000; Company X, 2024). In this study, employees and managers were encouraged to actively participate in refining task ownership processes by identifying challenges and proposing solutions during regular feedback sessions and weekly meetings among the team. These iterative cycles allowed for continuous adjustments and improvements to the task ownership model based on real-world experiences. The action research component provided rich qualitative data and contributed to practical outcomes by fostering a culture of continuous improvement and shared responsibility within the company (Reason & Bradbury, 2001).

The combination of focus group, participant observation, and action research provided a well-rounded view of the impact of task ownership. While focus groups captured collective employee perceptions and experiences, participant observation allowed for the identification of behaviors and dynamics that may not have been fully articulated in group discussions. Action research added an additional layer of engagement, ensuring that the research process itself contributed to meaningful changes within the company. Together, these methods enriched the qualitative data, providing a nuanced

understanding of how task ownership affect both individual and team-level outcomes in logistics operations.

Both quantitative and qualitative data were collected concurrently, in line with the *convergent parallel design* of this study. While each dataset was analyzed independently to maintain methodological rigor, the findings were integrated during the interpretation phase to provide a holistic understanding of task ownership´s impact. This triangulation of data sources enhanced the validity and reliability of the research by ensuring that conclusions were drawn from multiple perspectives, thereby reducing the risk of bias (Creswell & Plano Clark, 2017). Quantitative data contextualized these results within the lived experiences of employees, providing a comprehensive picture of the framework´s effectiveness.

3.2.3 Overview of Data Collection

To complement the in-depth description of each method, this section provides an overview of all data collection techniques used in this study. **Table 1** summarizes the types of data collected, participant groups, quantity of data points, and the specific research objectives addressed. This structured overview enhanced transparency and ensures alignment between the chosen methods and the core goals of the research.

Method	Participants	Quantity	Research Objectives
Employee Interviews	Airfreight Import team members	10 interviews	To explore personal experiences with task ownership, autonomy, and job satisfaction
Questionnaire	Airfreight Import team members	10 responses	To measure perceived autonomy, accountability, and adaptation
Focus Groups	Airfreight Import team members	3 groups, 6–8 participants each	To gather shared insights on workflow changes and team dynamics
Participant Observation	Airfreight Import team members	~2 months observation period	To capture real-time behavior, communication patterns, and task handling
Action Research & Meetings	Managers and team members (weekly team meetings)	15 documented sessions	To support iterative learning, feedback collection, and framework refinement
Operational Performance Data	Company X internal systems	Full-year 2024 data	To assess changes in KPIs such as timeliness, OTP, file accuracy, and consolidation

Table 1. Overview of Data Collection

3.3 Introduction of the Case: Task Ownership in Airfreight Import Operations

The figure 9 below illustrates the Task Ownership model implemented in Airfreight Import operations of Company X. This model exemplifies how end-to-end responsibility is structured within the organization, centralizing accountability, streamlining processes, and fostering both operational efficiency and employee satisfaction. By assigning a single individual comprehensive oversight of the entire shipment lifecycle, the model ensures that tasks are executed with precision, consistency, and minimal delays – key tenets of Lean Management and Workload Optimization (Company X, 2024).

At the core of this model is the task ownership, which drives the sequential flow of activities, reducing the fragmentation often seen in traditional logistics workflows. This model also reflects core dimensions of the Job Characteristics Model (Hackman & Oldham, 1976) – particularly autonomy, task identity, and task significance – by giving employees full control and visibility over their tasks from start to finish (Company X, 2024).

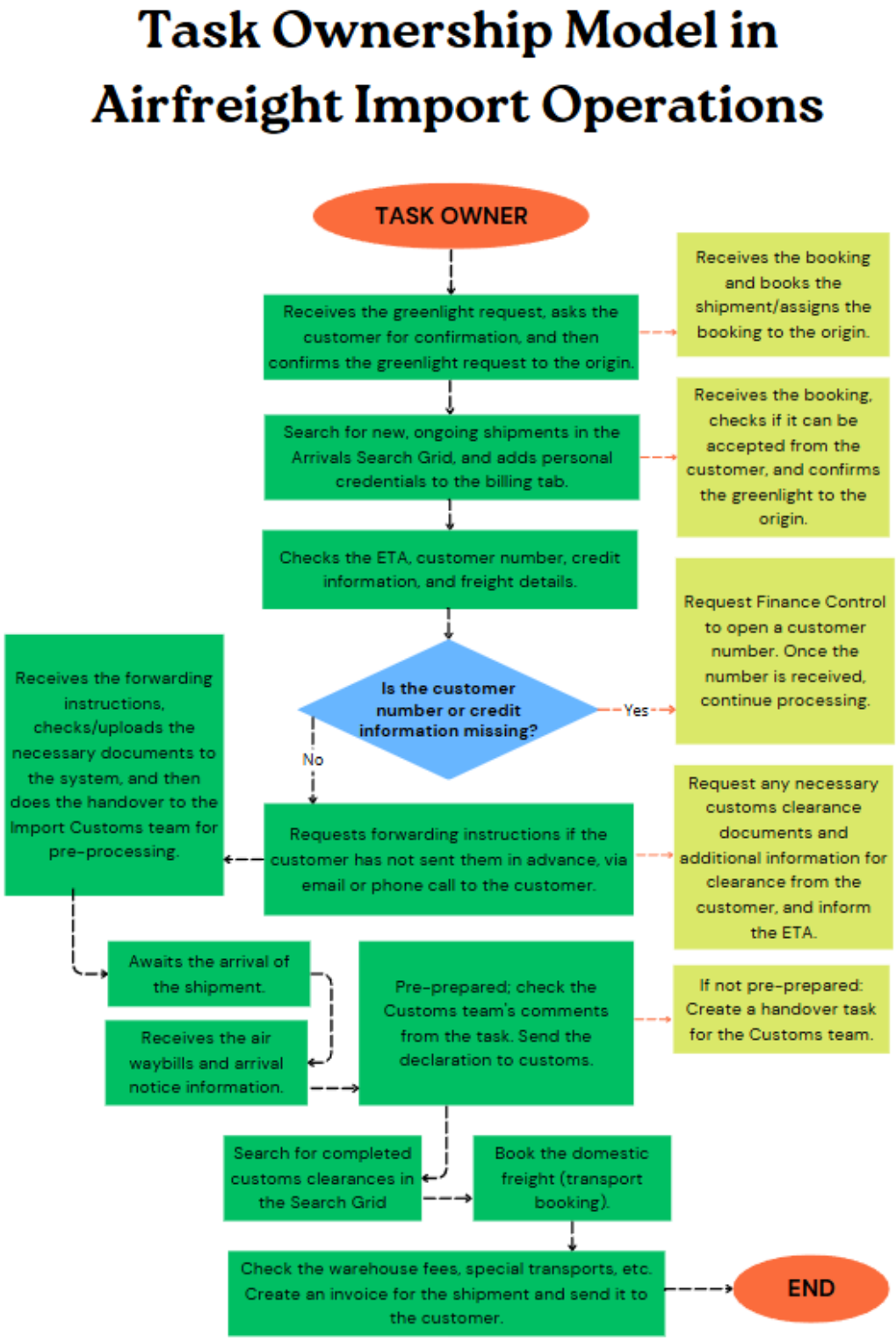


Figure 9. Task Ownership Model in Airfreight Import Operations

1. *Task owner receives the greenlight request, communicates with customer, and confirms approval to the origin:* This initial step embodies autonomy and

responsibility. The task owner is not merely a passive recipient of tasks but actively engages in customer communication, verifying shipment details, and confirming the greenlight to the origin. This immediate engagement fosters task identity, as the task owner initiates the process they will oversee through completion. Upon receiving the booking, the task owner either books the shipment directly or assigns the task to the origin, ensuring there are no gaps in communication that could lead to delays.

2. *Monitors shipments via the arrivals search grid and updates billing credentials*: The employee tracks both new and ongoing shipments, reflecting continuous process oversight. Adding personal credentials to the billing tab reinforces ownership of financial accountability, connecting operational actions with financial outcomes. Revalidating bookings with customers ensures alignment with customer expectations, a critical aspect of customer satisfaction and operational accuracy.
3. *Checks critical shipment details: ETA, customer number, credit status, and freight documentation*: This stage emphasizes attention to detail and proactive risk management. By reviewing key shipment details early in the process, potential issues like credit limit or missing documentation are identified and resolved swiftly, minimizing bottlenecks. This proactive behavior aligns with Lean principles of eliminating waste and enhancing flow.
4. *Determines if customer number or credit information is missing*: If yes, the task owner independently requests Finance Control to open a customer account number. Once received, they continue to process without managerial intervention, demonstrating autonomy and problem-solving skills. If not, the process proceeds seamlessly, maintaining workflow continuity and reducing downtime.
5. *Request forwarding instructions if not pre-provided by the customer*: Active communication with customers to obtain forwarding instructions underscores the task owner´s role in client relationship management. This ensures that operational workflows align with customer expectations, reinforcing task

significance by connecting the task owner´s actions to broader organizational goals. Gathering customs clearance documents and informing the customer of the shipment´s estimated time arrival (ETA) ensures compliance with regulatory requirements and enhances the accuracy of the customs process.

6. *Receives forwarding instructions, uploads documentation, and handover to the Import Customs team*: This step highlights the integration of technology and process optimization. By uploading documents into the system and coordinating with customs, the task owner ensures that the handover is smooth, transparent and compliant with legal requirements. This stage embodies Lean Management by streamlining processes and reducing redundant communication loops.
7. *Awaits shipment arrival while ensuring pre-arrival documentation is in order*: During this phase, the task owner monitors shipment progress, ensuring readiness for the arrival. This reflects anticipatory management, a key component of both Lean and Agile methodologies, where potential delays are mitigated by preemptive action.
8. *Receives air waybills and arrival notice information*: The task owner´s role in this phase is crucial for maintaining data integrity and ensuring that all documentation matches the shipment details. This reinforces their sense of control over the process and contributes to job satisfaction through clear feedback loops.
9. *Prepares customs documentation*: if prepared, the task owner reviews comments from the customs team and submits the declaration to customs, ensuring compliance and timely processing. If not pre-prepared, the task owner creates a handover task for the customs team, demonstrating flexibility in adapting to varying workflow demands.
10. *Searches for completed customs clearances in the search grid*: This step emphasizes continuous monitoring and quality control, ensuring that no shipment is delayed due to overlooked customs requirements.
11. *Books domestic freight for final delivery*: After customs clearance, the task owner is to organize domestic transport, ensuring the shipment reaches its final

destination efficiently. This step highlights the integration of operational coordination with customer service.

12. *Verifies warehouse fees, special transportation requirements, and additional charges*: Financial accountability is central to task ownership, with the task owner ensuring that all fees are accurate and justified, reinforcing their connection to the financial outcomes of their tasks.
13. *Creates and issues the invoice, sending it to the customer for final billing*: The final stage of the task ownership cycle involves financial reconciliation, where the employee ensures that billing is accurate and timely. This reinforces their responsibility for both operational and financial aspects of the task, contributing to a sense of task significance and completion.
14. *End of the task ownership cycle*: The cyclical nature of this process allows task owners to see the tangible results of their efforts, reinforcing task identity and intrinsic motivation.

This Task Ownership model is central to both qualitative and quantitative data collection methods in this study, providing a structured approach to analyze the impact of task ownership. For the qualitative aspect, the model guides focus groups, participant observation, and semi-structed interviews by pinpointing key stages where task owners experience autonomy, task significance, and responsibility, revealing insights into job satisfaction, engagement, and adaptation. Quantitively, the model identifies clear stages to measure workflow efficiency, error rates, and financial performance, allowing for precise correlation between specific tasks and operational outcomes. Additionally, the model integrates theoretical framework, aligning with the Lean Management principles by emphasizing workflow optimization, reflecting Job Characteristics Model (JCM) components such as autonomy and feedback, and illustrating the effects of workload distribution on employee well-being as outlined in the Job Demands-Resource (JD-R) Model. This comprehensive approach ensures a holistic understanding of task ownership´s influence within logistics operations.

3.3.1 Global Trade Operation Management (GTOM)

In the dynamic landscape of international logistics, the Airfreight Import team plays a pivotal role in facilitating seamless global trade. Central to this operation is Global Trade Operations Management (GTOM), a comprehensive framework designed to optimize the complexities associated with airfreight imports. This study delves into the specific functions, services, technological advancements, customer-centric strategies, and benefits of GTOM within the context of the Airfreight Import team. (Company X, 2025)

The primary objective of GTOM for the Airfreight Import team is to streamline the import process, ensuring that goods move efficiently and compliantly across borders. Airfreight imports are often subject to stringent regulations and customs requirements that can vary significantly from one country to another. By employing GTOM principles, the Airfreight Import team ensures that all shipments adhere to international trade laws, thereby minimizing the risk of delays, fines, or penalties that can arise from non-compliance. This focus on compliance not only protects customers but also enhances the overall efficiency of their supply chains. Also, the Airfreight Import team offers a range of specialized services under the GTOM framework. One of the critical components is customs brokerage, which involves managing the clearance of imported goods through customs. This service encompasses the preparation and submission of necessary documentation, ensuring that all regulatory requirements are met. Additionally, the team provides advisory services to help customers navigate the complexities of tariffs, duties, and import regulations. By offering expert guidance, the Airfreight Import team empowers businesses to make informed decisions regarding their import strategies. (Company X, 2024)

Technological innovation is a cornerstone of GTOM for the Airfreight Import team. The team utilizes advanced digital platforms that enhance visibility and control over the airfreight import process. These platforms enable real-time tracking of shipments, electronic management of documentation, and timely updates on customs clearance status. Such technological advancements not only improve operational efficiency but

also provide customers with greater transparency and peace of mind regarding the status of their imports. Furthermore, data analytics tools are employed to analyze trade patterns and compliance risks, allowing the team to proactively address potential issues before they escalate. (Company X, 2024)

A customer-centric approach is essential to the success of GTOM within the Airfreight Import team. Understanding that each customer has unique needs, the team tailors its services to meet the specific requirements of various industries and markets. This customization includes providing dedicated support and training to help customers effectively navigate the complexities of airfreight imports. By fostering strong relationships with clients, the Airfreight Import team ensure that they are equipped to handle the challenges of global trade with confidence. (Company X, 2024)

The benefits of GTOM for the Airfreight Import team are significant. By streamlining the import process, operational efficiency is enhanced, reducing delays, and improving the speed of delivery for imported goods. Effective customs management and compliance practices also lead to cost savings, as businesses avoid penalties and optimize their duty payments. Company X leverage the GTOM services of the Airfreight Import team gain a competitive advantage, ensuring timely and compliant delivery of their products to markets around the world.

3.3.2 Data Analytics

Data Analytics is a driving force behind the daily operations of the Airfreight Import team. Every day, vast amounts of data are generated through various activities, such as processing shipments, managing customs documentation, and interacting with customers. This data is essential for optimizing operations and enhancing decision-making within the team. The data produced by the Airfreight Import team is complex and multifaceted, arising from numerous touchpoints and interactions with customers and stakeholders. Figure 11, at each step of the import process, data is generated, including numerical figures like shipment volumes and transit times, as well as textual

information such as delivery addresses and customs declarations. Each of these data points plays a crucial role in understanding and improving the shipment lifecycle, where every step contributes valuable insights. (Company X, 2024)

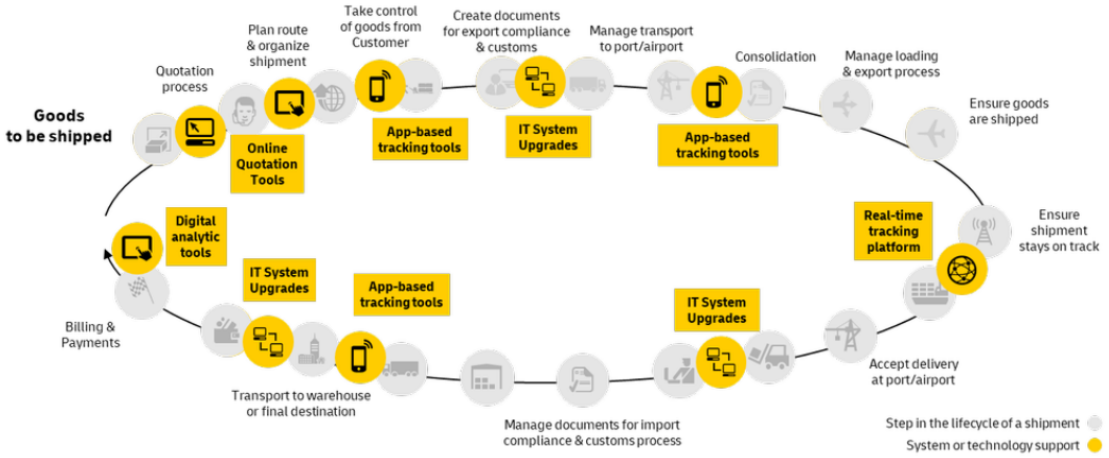


Figure 10. The Lifecycle of the Shipment

Data Analytics becomes particularly evident when examining processes like the quotation phase of airfreight imports. For instance, when customers enter relevant information into an online tool, such as the dimensions and weight of their shipments, this data forms the foundation for accurate pricing and service offerings. This reliance on data underscores the importance of effective data management and analysis in the Airfreight Import team's daily operations. Incorporating Data Analytics into the strategy of the Airfreight Import team is essential for driving improvements and enhancing service quality. By leveraging data analytics, the team can help individuals perform their tasks more effectively, provide better services to customers, increase operational efficiency, reduce carbon emissions, and support business growth. The correlation between high-quality data and informed decision-making is critical; the more accurate and comprehensive the data, the more reliable the insights that can be drawn, leading to improved outcomes. (Company X, 2024)

A typical Data Analytics project within the Airfreight Import team begins with a specific business question that needs to be addressed. Successful projects require not only a substantial amount of high-quality data but also a thorough understanding of the import processes and challenges faced by the team. Advanced algorithms are utilized to analyze data, uncover correlations, and identify patterns that can inform strategic decisions. Importantly, successful Data Analytics initiatives are collaborative efforts, involving the expertise of business professionals, data scientists, and IT specialists working together to find solutions to the identified questions and implement these solutions within existing operational frameworks. (Company X, 2024)

3.4 Data Analysis

This study employs a mixed-methods approach, which necessitates the use of both quantitative and qualitative data analysis techniques. To ensure methodological rigor, each dataset is analyzed separately before being integrated to provide a holistic view of how task ownership influences both operational efficiency and employee satisfaction.

Quantitative analysis centers on operational performance metrics collected from Company X´s Airfreight Import operations. Descriptive statistics, including measures of central tendency (mean, median) and variability (standard, deviation), are utilized to summarize the data and identify trends. Inferential statistics, such as correlation analysis and t-tests, are applied to determine the relationships between task ownership and operational outcomes. Excel is employed for data visualization and statistical calculations, facilitating the creation of charts and graphs that illustrate the findings clearly and effectively (Field, 2018).

Qualitative data analysis aims to uncover the nuanced experiences of employees with task ownership model. Data collected from focus groups, participation observation, and semi-structured interviews are transcribed and analyzed using thematic analysis, a method that identifies recurring patterns and themes within the qualitative data (Braun & Clarke, 2006). The analysis follows a structured process of coding the data, identifying

key themes related to job satisfaction, autonomy, and adaptation, and interpreting these themes in relation to the research objectives. NVivo software is used to organize and code qualitative data, enhancing the reliability and consistency of the analysis (Creswell & Poth, 2018).

The final stage of the data analysis involves integrating the quantitative and qualitative findings to provide a comprehensive understanding of task ownership´s impact. This integration is achieved through a convergent parallel design, where the results from both data strands are compared and synthesized during the interpretation phase (Creswell & Plano Clark, 2017). By merging statistical evidence with thematic insights, the study offers a holistic perspective that highlights both the operational benefits, and the human experiences associated with task ownership in logistics operations.

3.5 Ensuring Study Credibility

Ensuring the credibility of this research involves a comprehensive approach to reliability, validity, and triangulation, all of which are critical for establishing the trustworthiness and robustness of the study´s findings (Creswell & Plano Clark, 2017; Bryman, 2012).

Reliability pertains to the consistency and stability of the research methods and results over time. To ensure reliability in the quantitative data, standardized procedures for data collection and analysis were implemented. Operational metrics such as workflow efficiency, error rates, and financial performance were sourced from Company X´s internal systems, which maintain high standards of accuracy and consistency. The use of established statistical tools and software like Excel further supports the reliability of quantitative analyses. For qualitative data, consistency was achieved by using structured interview protocols and observation checklists, ensuring that data collection was uniform across all participants and settings (Yin, 2018).

Validity refers to accuracy and appropriateness of the research tools and methods in capturing the intended phenomena. In this study, construct validity was ensured by

aligning data collection methods with the theoretical constructions of task ownership, operational efficiency, and employee satisfaction. For instance, interview questions and observation criteria were directly linked to key concepts from the Job Characteristics Model and Lean Management principles. *Internal validity* was strengthened through careful design of the study´s methodology, including the use of control variables and cross-checking data sources to minimize biases and confounding factors. *External validity*, or the generalizability of the findings, was considered by selecting a representative case within the logistics industry and discussing how the insights might apply to other contexts, such as Ocean Freight operations (Shenton, 2004; Company X, 2024).

Triangulation was employed as a strategy to enhance both reliability and validity by integrating multiple data sources, methods, and theoretical perspectives. *Methodological triangulation* involved in combining quantitative analysis of operational metrics with qualitative insights from focus groups, participant observations, and semi-structured interviews. This approach allowed for a more comprehensive understanding of task ownership´s impact, capturing both measurable outcomes and personal experiences (Flick, 2018). *Data triangulation* was achieved by collecting information from various sources within Company X, including different teams and managerial levels, to ensure a well-rounded perspective. *Theoretical triangulation* involved applying multiple theoretical frameworks – Lean Management, Job Characteristics Model, and Workload Management – to interpret the findings, providing a richer, multi-dimensional analysis.

By rigorously addressing reliability, validity, and triangulation, this study ensures that its conclusions are both credible and robust. The methodological rigor not only strengthens the trustworthiness of the findings but also contributes to the broader academic discourse on task ownership in logistics, offering a model for future research in similar high-pressure, dynamic environments.

4 RESULTS

This chapter presents the findings of the study, integrating both quantitative and qualitative data to examine the impact of task ownership on operational efficiency and employee satisfaction and adaptation in logistics operations. The results are derived from 10 employee interviews and questionnaire responses, as well as internal operational data for the whole 2024 year from Company X covering the entire year of 2024. A comparative analysis is conducted between the initial and later months of the year to evaluate potential improvements in operational performance. Additionally, insights from focus groups, participation observation, and action research are incorporated to provide a comprehensive understanding of how task ownership influences workflow efficiency, job satisfaction, task autonomy, and employee adaptability.

The qualitative findings explore employees´ perspective, experiences, and challenges related to task ownership, highlighting key themes such as workload management, motivation, and operational performance. The quantitative findings analyze Company X´s operational data to specify efficiency improvements, error rates, and financial performance trends linked to the implementation of task ownership.

4.1 Qualitative Findings: Employee Perspective on Task Ownership

This section presents the qualitative findings from the study, stemmed from employee interviews, focus groups, and participant observations within the Airfreight Import team at Company X. The analysis highlight's themes related to employee satisfaction, task ownership, workload management, and adaptation to new responsibilities. These themes are examined through the lens of relevant theoretical frameworks, including Job Characteristics Model, Job Demands-Resources, and Lean Management principles.

4.1.1 Clarity of Responsibilities and Role Perception

One of the core aspects of task ownership is ensuring that employees have clear and well-defined responsibilities. According to the survey results, most employees reported a high level of clarity regarding their responsibilities within the task ownership model, with an average rating of 5.8 out of 7. However, 10% of respondents rated their role clarity below 5, indicating that while most employees understand their tasks, some still struggle with certain aspects of their roles. Several interviewees emphasized that having full ownership over a task enhances their ability to manage shipments effectively. Employees who rated their role clarity highly expressed appreciation for the structured approach of task ownership:

> "Managing the shipment from start to finish makes me responsible. I want to handle shipments well and correctly. This was challenging in the old operational method where responsibilities are divided among many people." – interviewee A
>
> "Taking care of the task from beginning to end makes me responsible. It makes easier to handle the whole process since everything is in my hands." – interviewee B

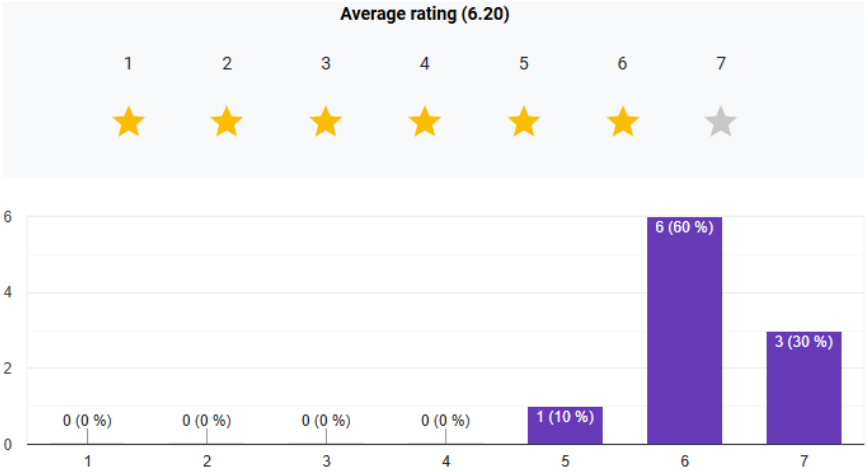
Picture 1. Clarity of Responsibilities and Role Perception

From theoretical perspective, Job Characteristics Model (JCM) highlights task identity and task significance as key factors in job satisfaction, which aligns with these findings. Employees who perceive a strong connection between their work and the final outcome are more likely to feel engaged and motivated. However, challenges emerged in cases where employees returned from sick leave or had to manage unfamiliar shipments, leading to uncertainty and inefficiencies. This suggests a need for enhanced handover documentation and a structured onboarding process to ensure a smooth transition and continuity of tasks. By addressing these games with improved handover documentation and targeted training, company X can ensure that employees maintain high levels of role clarity even after absences or when handling unfamiliar tasks or shipments. One respondent explained:

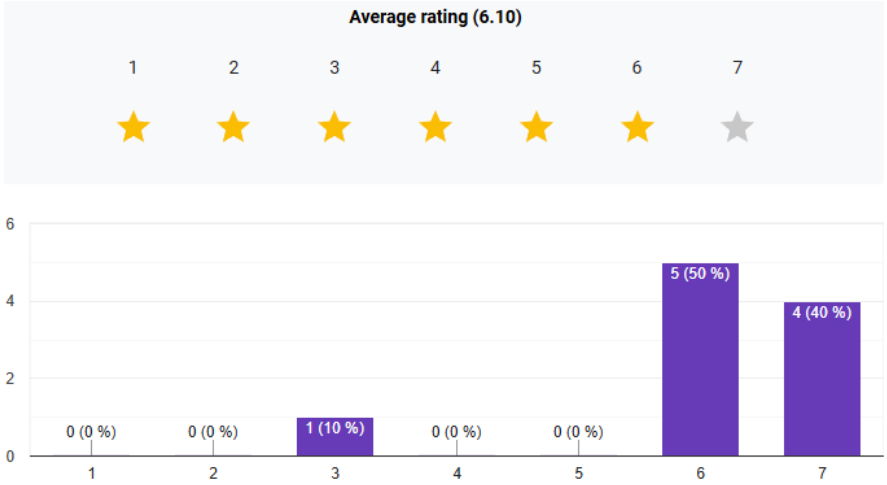
> "When I come back from sick leave, I don't know where to continue even if the handover instruction is clear. It takes time to catch up with ongoing shipments and in what phase to continue." – interviewee E

4.1.2 Autonomy and Accountability

One of the core principles of task ownership is its ability to enhance autonomy and accountability, reducing inefficiencies caused by fragmented workflows and excessive handovers. Employees reported high levels of autonomy, rated 6.2 out of 7, and strong feelings of accountability for their tasks, rated 6.1 out of 7. These findings align with the Job Demands-Resources (JD-R) Model, which identifies autonomy as key job resource that enhances engagement and motivation. However, the model also cautions that excessive responsibility without sufficient support and training can contribute to stress and cognitive overload.



Picture 2. Autonomy in Task Ownership



Picture 3. Accountability in Task Ownership

Employees valued autonomy since it allowed them to structure their work according to priorities. Several interviewees emphasized the benefits of having more control over their daily workload, stating that it improved task efficiency and communication. A couple of interviewees explained:

> "I can decide myself how to start my day, which jobs require immediate action, and what can wait for a while. Having my own clients helps me manage shipments efficiently." – interviewee B
>
> "Your own actions matter, and you can influence the outcome. It is easier to keep track of the progress, both internal and external

> communication is more direct, and there are fewer handovers." - interviewee C

However, while increased autonomy allows for greater efficiency, it also introduces a heavier cognitive load. Employees must now handle a broader range of responsibilities, requiring multi-tasking and strong organizational skills. Some employees expressed concerns over the increased complexity of their roles, highlighting the need for additional support, clearer task structures, and improved workload management. One employee explained:

> "You are responsible for more process steps, so there is a lot to remember and manage" – interviewee E

From a theoretical perspective, autonomy and accountability are central to Job Characteristics Model (JCM), which identifies task significance, task identity, and autonomy as drivers of job satisfaction. However, excessive autonomy without sufficient guidance, training, or support systems may lead to stress and inefficiencies, as seen in some responses. Addressing these concerns through mentorship programs, structured handovers, and improved process documentation could enhance the benefits of task ownership while minimizing cognitive overload.

4.1.3 Workload Management and Stress Factors

One of the potential drawbacks of task ownership is the impact it has on workload management and employee stress levels. While employees appreciate the autonomy and responsibility that comes with task ownership, survey results indicate mixed experiences regarding workload balance. The average rating for workload manageability was 5.1 out of 7, suggesting that while most employees find their workload manageable, a significant portion of 30% rated it below 5, indicating that task ownership can sometimes become overwhelming.

Picture 4. Workload Management

Similarly, work-related stress levels varied among respondents. When asked how often they feel stressed due to workload, employees provided an average rating of 4.3 out of 7, highlighting that while stress is present, it is not overwhelming for the majority. However, 40% of respondents rated their stress level at 4 or higher, indicating that workload challenges are a concern for a notable portion of the team.

Picture 5. Stress Factors

Interviews and observations revealed that task ownership provides a sense of control over work processes, yet handling multiple tasks simultaneously can lead to cognitive

overload. Employees noted that while having end-to-end responsibility improves task visibility, it also requires strong multitasking skills. A couple of interviewees wondered and explained:

> "Being a multitasking professional is sometimes quite demanding. At imports, we are supposed to know customs matters even though the customs expertise is concentrated in another team. " – interviewee A
> “You are responsible for more process steps, so there is a lot to remember and manage.” – interviewee E

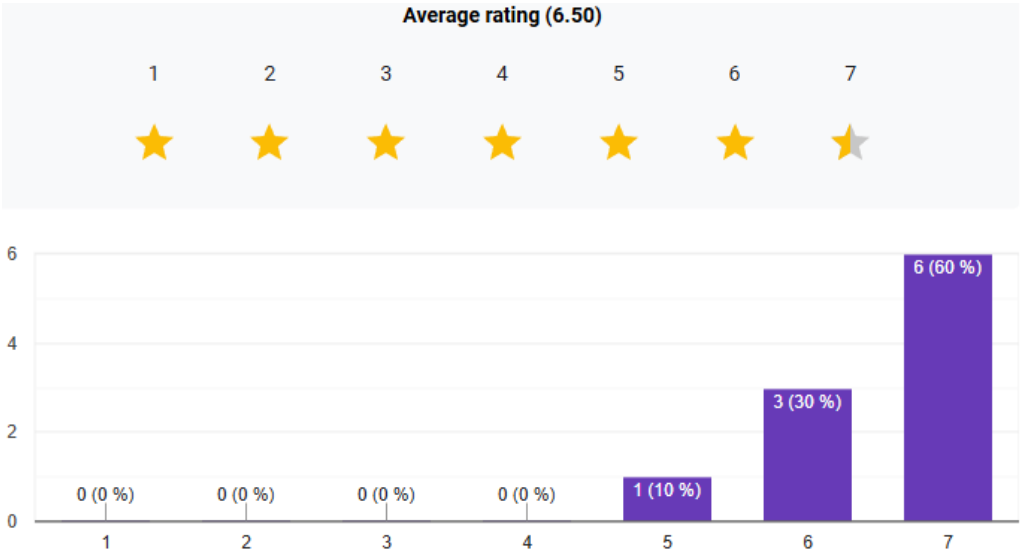
The Job Demands-Resources (JD-R) Model provides a useful framework for interpreting these findings. The model states that high job demands, such as intensive multitasking and cognitive overload, can lead to stress and burnout if not balanced with sufficient job resources like training, technological tools, and managerial support. Employees who lack the necessary resources may struggle with workload management, negatively affecting both job satisfaction and performance. To address these challenges, some employees suggested clearer prioritization guidelines and additional automation tools to streamline repetitive tasks. One interviewee emphasized the need for structured handover processes to reduce stress when resuming work after an absence:

> “When I come back from sick leave, I don’t know where to continue even if the handover instruction is clear. It takes time to catch up with ongoing tasks or shipments.” – interviewee E

From a theoretical perspective, these strategies align with Lean Management principles, which emphasize eliminating unnecessary workload burdens through process optimization, and the JD-R Model, which stresses balancing job demands with sufficient resources. By implementing these enhancements, Company X can further refine its task ownership model to maximize both efficiency and employee well-being.

4.1.4 Impact on Employee Motivation and Engagement

A key advantage of task ownership is its positive impact on employee motivation and engagement. Survey results indicate high motivation levels, with an average rating or 6.5 out of 7, suggesting that autonomy and accountability enhance employees´ commitment to their roles. Employees identified several factors that contribute to their motivation, including recognition and appreciation from colleagues and management, understanding their personal contributions to the company´s success, and customer interactions and service satisfaction.



Picture 6. Impact on Employee Motivation and Engagement

From the Job Characteristics Model (JCM) perspective, task significance and autonomy are critical factors in motivation, and these findings strongly support this theoretical framework. Employees who see the direct impact of their work on customers and operational outcomes are more likely to experience higher job satisfaction and engagement. Several employees emphasized the value of autonomy in strengthening their motivation:

> “Having my own clients, and knowing their requirements makes it motivating to handle their shipments. It is always rewarding to share

> good news with them when work has been done correctly." – interviewee F
>
> "Knowing that my work directly impacts the process motivates me. I can work more efficiently when I know what task are under my responsibilities." – interviewee B

However, not all employees experienced increased job satisfaction, with some reporting negative effects of broadened responsibilities. While task ownership enhances engagement by empowering employees, it can also weaken expertise by requiring individuals to handle a wide variety of complex tasks instead of specializing in a particular function. One employee noted:

> "There are many tasks that come up at the same time. It feels like the role has changed into a mess. There is no longer any in-depth expertise." – interviewee A

4.1.5 Employee Adaptation and Areas for Improvement

Adapting to the task ownership model has been a moderately smooth process, with employees rating their adaptation at 5.2 out of 7. While most employees have adjusted well to the increased autonomy and accountability, challenges remain in ensuring a seamless transition, particularly for new employees or those handling highly complex shipments.

Picture 7. Employee Adaptation

It occurred in the interview that key adaptation challenges are lack of clear handover procedures, especially when returning from sick leave or handling unfinished tasks nor shipments. Also, difficulties in prioritizing tasks during peak workload periods, leading to inefficiencies and delays. Lastly, limited guidance on handling complex shipment cases, which require extensive knowledge and decision making. One employee highlighted the need for structured onboarding to help new team members navigate the model more effectively:

> "For new employees, it might be worthwhile to focus on understanding the whole process before handling tasks independently." – interviewee D

From a theoretical standpoint, these findings align with Organizational Socialization Theory, which suggests that successful adaptation relies on structured learning experiences, mentorship, and gradual role integration. New employees require clarity and support during their early phases to internalize operational processes and expectations effectively. By refining the onboarding and adaptation process, Company X can ensure that employees not only transition more smoothly into the task ownership model but also feel confident and well-supported in their roles.

4.2 Quantitative Findings: Key Performance Metrics

This chapter presents the quantitative findings of the study, focusing on the impact of task ownership on operational efficiency in Company X´s Airfreight Import operations. The data was collected from internal performance reports, tracking key operational metrics before and after the implementation of the task ownership model. By analyzing these metrics, this study aims to provide empirical evidence of how task ownership has influenced workflow efficiency, on-time performance, error rates, and shipment consolidation processes.

To accurately define the relationship between task ownership and operational efficiency, six key performance indicators (KPIs) were selected. These indicators were chosen to measure workflow efficiency, timeliness, accuracy, and optimization efforts in the airfreight import process. Each metric represents a critical aspect of logistics performance and provides insights into how end-to-end responsibility influences operational outcomes. The six KPI´s examined in this study are:

1. **AFR Timeliness Index**: measures the punctuality of air freight shipments.
2. **AFR Gross On-Time Performance (OTP)** : evaluates the percentage of shipments delivered as scheduled.
3. **AFR Failed Gross OTP Without Exception** : identifies shipments that missed delivery deadlines due to uncontrollable issues.
4. **AFR Sick Files** : tracks the number of shipments with processing errors.
5. **AFR File Auto-Rating** : measures the success rate of automated shipments rating and billing.
6. **AFR Consol Ratio** : evaluates the efficiency of consolidating shipments.

Summary of Key Performance Indicators and Their Relevance to Task Ownership

Metric	What It Measures	Relevance to Task Ownership	Theoretical Connection
AFR Timeliness Index	% of shipments delivered on time	Full accountability ensures better tracking and planning	Lean Management: Reducing delays
AFR Gross OTP	Overall % of shipments meeting deadlines	Improved coordination leads to higher reliability	JD-R Model: Higher engagement with responsibility
AFR Failed Gross OTP Without Exception	% of shipments that failed due to internal errors	Ownership reduces controllable failures	Workload Management: Preventing inefficiencies
AFR Sick Files	% of problematic shipment records	Proactive management improves data accuracy	Lean Management: Reducing rework and errors
AFR File Auto-Rating	% of shipments rated automatically without manual input	Ownership ensures accurate data entry	Lean Management: Minimizing manual interventions
AFR Consol Ratio	Efficiency of shipment consolidation	Employees should optimize consolidation opportunities	JD-R Model: Managing cognitive load while balancing responsibilities

Table 2. Summary of Key Performance Indicators

By comparing early-month vs, end-to-month results, this section examines whether task ownership has led to measureable improvements in these operational metrics. Additionally, theoretical connections to Lean Management, Workload Management, and the Job Demands-Resources (JD-R) Model will be explored to understand the relationship between process optimization and employee workload management. The findings will provide insights into whether streamlining task ownership enhances operational efficiency without overburdening employees, contributing to both improved performance and sustainable work practices.

4.2.1 AFR Timeliness Index

The AFR (Air Freight) Timeliness Index measures the punctuality of air freight shipments, evaluating how well shipments are delivered on time compared to scheduled delivery expectations. A higher index indicates improved adherence to delivery timeliness, reflecting the effectiveness of operational processes and employee engagement, while lower scores suggest delays or inefficiencies in shipment handling. Under the task ownership model, employees are accountable for managing shipments from start to finish, proactively monitoring and mitigating delays in real time, which is essential in the fast-paced air freight logistics environment.

In the task ownership model employees are responsible for managing shipments from start to finish, ensuring they monitor potential disruptions in real time and take corrective action when necessary. This model enhances an individual's ability to coordinate with customs brokers, liaise with overseas offices, and proactively manage customer expectations, leading to improved timeliness performance. These findings align with Lean Management principles, which emphasize eliminating non-value-added activities and reducing shipment delays through efficient workflow streamlining.

4.2.2 AFR Gross On-Time Performance (OTP)

The Gross OTP metric calculates the percentage of airfreight shipments delivered on schedule, excluding external factors such as weather condition, customs hold, or regulatory delays. This metric provides a comprehensive view of the logistics operation´s ability to consistently meet customer delivery expectations, allowing company X to indicate its performance in a controlled environment. By focusing on internal operation efficiencies, the Gross OPT metric helps to identify areas where improvements can be made to enhance overall service delivery.

As employees handle shipments end-to-end, they are better equipped to track, adjust, and ensure timely coordination throughout the entire logistics process. Employees reported that being the sole responsibly party for a shipment improves their ability to coordinate with freight forwarders, resolve clearance bottlenecks, and ensure sooth cargo transitions. These findings also align with the JD-R Model, which suggest that greater autonomy and task significance lead to increased job engagement and efficiency in high-pressure environments.

4.2.3 AFR Failed Gross OTP Without Exception

This metric is crucial indicator that measures the percentage of air freight shipments that failed to meet their scheduled delivery times without any exceptions. This metric specifically excludes shipments that experienced delays due to uncontrollable factors, such as severe weather conditions or customs holds, providing a clearer picture of operational performance. A high rate of failed gross OTP without exceptions signifies potential issues within the logistics process, indicating that internal inefficiencies or mismanagement may be contributing to delays.

A high failure rate suggests that internal coordination, process adherence, or employee decision-making may require improvements. By tracking and analyzing this metric, Company X can pinpoint problem areas and introduce corrective measures such as

refined process standardization, targeted employee training, and improved digital tracking systems. Under the task ownership model, the ability of employees to own and track each shipment´s progress is expected to reduce the occurrence of preventable delays, reinforcing accountability and process optimization as core components of operational efficiency.

4.2.4 AFR Sick Files

The AFR Sick Files metric is an essential measure that tracks the volume of air freight shipments classified as problematic or non-compliant, which can lead to delays, increased costs, and potential disruptions in the supply chain. Sick files typically arise from a variety of issues, including incomplete or incorrect documentation, improper labeling, failure to meet regulatory requirements, or discrepancies in shipment details. By closely monitoring the number of sick files, Company X can gain critical insights into their operational processes, identifying weaknesses and areas that require immediate attention to enhance compliance and efficiency across the logistics chain.

Reducing sick files requires a combination of process standardization, clear handover procedures, and real-time tracking. Employees operating under task ownership reported being responsible for a shipment end-to-end allows them to identify potential issues earlier in the process, preventing escalations that would result in a sick file. However, employees also highlighted the need for continuous training in complex compliance requirements, particularly for shipments involving customs clearance, hazardous materials, or special handling procedures. From a theoretical perspective, the Workload Management Model suggests that reducing errors and increasing autonomy can help alleviate cognitive overload, allowing employees to focus on high-value tasks instead of corrective work associated with sick files.

4.2.5 AFR File Auto-Rating

The AFR File Auto-Rating metric is a pivotal component of the air freight logistics process, designed to streamline the rating and invoicing of shipments automatically. This system leverages advanced algorithms and data analytics to evaluate shipment details, such as weight, dimensions, destination, and service type, to determine the appropriate charges without manual intervention. By automating the rating process, organizations can significantly reduce the time and effort required to generate accurate freight quotes and invoices, enhancing overall operational efficiency, and minimizing the potential for human error.

The implementation of task ownership has allowed employees to better oversee the rating process, ensuring that all required data is entered accurately from the initial stages of shipments processing. This metric highlights the balance between automation and human oversight – while automation streamlines the process, employees remain critical in ensuring data accuracy and compliance. Employees suggested that enhanced training on system functionalities and automated rating logic would further reduce discrepancies and increase efficiency. This improvement aligns with Lean Management principles, as automation eliminates wasteful manual tasks, allowing employees to focus on proactive shipment management rather than reactive billing corrections.

4.2.6 AFR Consol Ratio

The AFR Consol Ratio is a critical performance metric that measures the effectiveness of consolidating air freight shipments. This ratio indicates the proportion of shipments that are successfully consolidated into larger loads for transportation, as opposed to being shipped individually. A higher Consol Ratio signifies efficient use of resources and capacity, leading to reduced shipping costs and improved overall operational efficiency. By effectively consolidating shipments, Company X can maximize cargo space, minimize fuel consumption, and decrease the environmental impact of air freight operations.

Under the task ownership model, employees are empowered to actively seek consolidation opportunities, ensuring that compatible shipments are bundled together whenever possible. However, some employees noted that coordination challenges with overseas partners sometimes limit their ability to optimize consolidation, highlighting the need for enhanced communication protocols between global branches. The strategic application of consolidation aligns with Lean Management, which emphasizes resource optimization and the reduction of unnecessary transportation costs. Additionally, integrating predictive analytics tools may further enhance employees' ability to identify and execute consolidation opportunities, leading to long-term cost savings and environmental benefits.

4.3 Comparative Analysis: Early vs. End-of-Month Performance

This section presents a comparative analysis of operational performance before and after the implementation of the task ownership model in Company X´s Airfreight Import operations. By evaluating early-month vs. end-to-end month results, this study examines how task ownership has influenced workflow efficiency, shipment timeliness, error reduction, and employee workload. Task ownership assigns end-of-end responsibility, allowing them to monitor shipments comprehensively, look for issues proactively, and minimize process inefficiency. To measure the impact of this approach, six key performance indicators (KPIs) were analyzed over time.

To ensure objective assessment, performance data from prior to full adoption of task ownership was compared with end-to-end results after employees had fully transitioned into their new responsibilities. This comparison highlights measurable changes in operational efficiency, revealing which areas have improved, which have remained stable, and where challenges persist. In addition to performance metrics, employee feedback from interviews, meetings, observations were analyzed to understand how changes in task responsibility affected daily operations, workload management, and overall job satisfaction. This dual approach aligns with Lean Management principles as

well by identifying opportunities for process optimization while also considering the human factor in operational efficiency.

4.3.1 Operational Performance Trends and Improvements

This section analyzes the month-over-month performance trends of key operational metrics in Company X´s Airfreight Import operations, focusing on the improvements observed after implementing the task ownership model. A comparison between early-month and end-of-month performance data allows for an assessment of the effectiveness of the new model in enhancing workflow efficiency, reducing errors, and increasing on-time delivery rates. The integration of both qualitative insights from employees and quantitative performance data enables a holistic assessment of the model's impact.

KPI	Early-Month Performance	End-of-Month Performance	Change
AFR Timeliness Index	88.99%	93.41%	↑ +4.42%
AFR Gross On-Time Performance (OTP)	89.35%	83.77%	↓ -5.58%
AFR Failed Gross OTP Without Exception	55.00%	21.69%	↓ -33.31%
AFR Sick Files	1.03%	1.53%	↑ +0.50%
AFR File Auto-Rating	76.56%	80.46%	↑ +3.90%
AFR Consol Ratio	45.00%	66.27%	↑ +21.27%

Table 3. Key Performance Metrics Results

Overall Trends in Key Performance Metrics

The data shows a consistent upward trend in most performance indicators over time. IKO Achievement, which means the overall success of operational targets, increased

from 71.2% in February to 108.5% in December, signaling a significant improvement. This suggests that employees become more proficient in managing shipments from start to finish as they gain experience under the task ownership model.

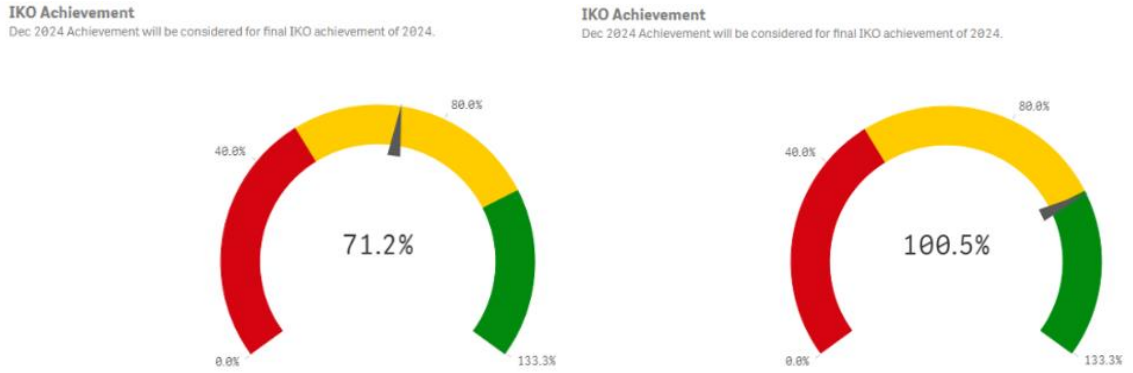


Table 4. Comparison of KPIs : Early vs End-of-Month Performance

KPI	Refresh Date	Actual Performance	Entry Target	Target	Max Target	IKO	IKO Status
AFR timeliness Index	29-Feb-24	88.99%	86.00%	90.00%	92.50%	87.36%	Above Max
AFR gross On-time performance	29-Feb-24	89.35%	85.00%	88.00%	92.00%	111.27%	Below Max
AFR FailedGross OTP without Exception	29-Feb-24	55.00%	50.00%	40.00%	25.00%	0.00%	Above Max
AFR Sick files	29-Feb-24	1.03%	3.50%	3.00%	2.50%	133.33%	Above Max
AFR File auto-rating	29-Feb-24	76.56%	72.00%	78.00%	83.00%	87.99%	Below Max
AFR Consol Ratio	29-Feb-24	45.00%	56.00%	70.00%	75.00%	46.53%	Below Target

Table 5. Airfreight Import Performance Index Early Month 2024

KPI	Refresh Date	Actual Performance	Entry Target	Target	Max Target	IKO	IKO Status
AFR timeliness Index	31-Dec-24	93.13%	86.00%	90.00%	92.50%	133.33%	Above Max
AFR gross On-time performance	31-Dec-24	89.12%	85.00%	88.00%	92.00%	109.35%	Below Max
AFR FailedGross OTP without Exception	31-Dec-24	21.69%	50.00%	40.00%	25.00%	133.33%	Above Max
AFR Sick files	31-Dec-24	1.53%	3.50%	3.00%	2.50%	133.33%	Above Max
AFR File auto-rating	31-Dec-24	80.46%	72.00%	78.00%	83.00%	116.38%	Below Max
AFR Consol Ratio	31-Dec-24	66.27%	66.00%	75.00%	80.00%	51.47%	Below Target

Table 6. Airfreight Import Performance Index End-Of-Month 2024

Improvements in Timeliness and Workflow Efficiency

The AFR Timeliness Index, a critical measure of delivery punctuality, increased from 88.99% in the early months to 93.41% by the end of the study periods. This improvement aligns with employee feedback highlighting greater autonomy in managing their task, allowing them to proactively monitor shipments and resolve delays faster. The results

suggest that when employees take full ownership of their tasks, they become more invested in ensuring timely deliveries.

> "Managing shipments from start to finish makes me responsible. I want to handle them correctly, and with task ownership I can track everything directly instead of relying on different teams."- Interviewee B

Similarly, the AFR Gross On-Time Performance (OTP) initially fluctuated, starting at 89.35% before slightly decreasing to 83.77% by the end of the data period. While the OTP remained relatively strong, this dip could be attributed to increased workload pressure during peak periods. Employee responses in qualitative interviews highlighted that task ownership brings a higher level of responsibility, which while motivating, can also increase stress during high-demand periods.

> "I appreciate having full control over my shipments, but during peak periods, the pressure can be overwhelming. Managing everything alone means that any delays reflect on me directly." - Interviewee F

Reduction in Operational Errors and Avoidable Delays

One of the most notable improvements observed was in the AFR Failed Gross OTP Without Exception metric, which tracks shipments that failed to meet on-time delivery targets due to controllable internal factors. This metric saw a dramatic decline from 55% in early months to 21.69% by the end of the analysis. The reduction in failed OTP cases suggests that task ownership contributed to better tracking, communication, and shipment coordination.

> "I now keep track of the entire shipment process. If something looks off, I fix it immediately instead of waiting for someone else to handle it." – Interviewee C

Additionally, AFR Sick Files metrics – which measures problematic shipments with documentation or processing issues – remained relatively low throughout the study,

starting 1.03% and slightly increasing to 1.53%. The slight increase may indicate that some employees still face challenges in handling complex shipment cases independently, reinforcing the need for ongoing training and clear documentation procedures. This aligns with the insight from the JD-R Model, which indicates that while autonomy can enhance engagement and efficiency, it must be paired with adequate resources and training to mitigate workload pressure.

Improvements in Automation and Shipment Consolidation

The AFR File Auto-Rating metric, which measures the percentage of shipments processed automatically without manual intervention, improved from 76.56% to 80.46%. This suggests that process automation efforts were enhanced due to employees becoming more familiar with auto-rating systems and ensuring accurate input of shipment data.

> "When I know that I am responsible for the entire process, I make sure that everything is correctly entered in the system. It reduces errors and speed up automated processes." – Interviewee D

Meanwhile, the AFR Consol Ratio, which measures how effective shipments are consolidated, remained below target, starting at 45% and increasing to 66.27%. This improvement signifies a higher degree of efficiency in grouping shipments, allowing for cost savings and optimized cargo utilization. However, despite this notable increase, the ratio still falls short of the target of 75%, indicating that there is room for further optimization in shipment consolidation processes.

> "Consolidating shipments is easier when I handle the entire process. I can anticipate which shipments can be grouped together instead of waiting for someone else to make the decision." – Interviewee D

Interpretation and Theoretical Implications

The observed performance improvements align with Lean Management principles, which emphasize process efficiency, waste reduction, and optimized resource utilization.

The increase in on-time deliveries and reduced OTP failures reflect more effective workflows, supporting the notion that task ownership fosters a higher sense of accountability and proactive problem-solving among employees. Furthermore, JDR-model suggests that while autonomy can enhance engagement and performance, it must be balanced with adequate resources and workload management. The fluctuation in OTP and workload-related concerns expressed by employees highlight the importance of providing continuous training and support to sustain high performance under the task ownership model.

4.3.2 Challenges and Limitation of Task Ownership Implementation

While the implementation of task ownership model in Company X´s Airfreight Import operations has resulted in notable improvements in efficiency, accountability, and timeliness, it has also introduced several challenges that require strategic refinement. The qualitative insights from employees, combined with operational performance data, reveal key limitations that have impacted workflow, workload management, and overall employee well-being.

Increased Workload and Cognitive Load

One of the most frequently mentioned challenges among employees was the intensification of workload due to the broader range of responsibilities under task ownership. Unlike the previous workflow model, where tasks were divided among multiple team members, employees now manage shipments from start to finish, requiring them to handle multiple process steps, documentation, and communication tasks simultaneously. Several employees noted that while this increased accountability was beneficial, it also led to stress, difficulties in prioritization, and occasional bottlenecks.

> “You are responsible for more process steps, so there is a lot to remember and manage.” – Interviewee E.

This aligns with the JD-R Model, which suggests that while autonomy and responsibility enhance engagement, excessive demands can lead to burnout and decreased job performance if not counterbalanced with sufficient resources (Bakker & Demerouti, 2007). The slight increase in AFR Sick Files (1.03% to 1.53%) indicates that some employees struggled with the increased cognitive load, particularly when managing documentation accuracy and compliance requirements.

Challenges in Workload Balancing and Peak Periods

Task ownership requires employees to own their task entirely, but this model also limits flexibilities when workloads fluctuate significantly. During peak operational periods, several employees found it difficult to manage time-sensitive shipments efficiently, as the model made task delegation more complicated:

> "There are many tasks that come up at the same time. It feels like the role has changed into a mess. There is no longer any in-depth expertise." – Interviewee C

The AFR Gross On-Time Performance (OTP) metric, which started at 89.35% but fall slightly to 83.77% may reflect the impact of peak workloads, where employees had less capacity to manage multiple urgent shipments simul. Under the previous system, urgent tasks could be distributed more dynamically, but task ownership placed the burden on individual accountability, requiring more advanced time management skills and prioritization strategies.

Handover and Absence Management Issues

Another limitation in the task ownership model is difficulty in managing absences, particularly for employees returning from sick leave or vacation. Unlike in the previous model, where tasks were shared among multiple team members, new structures made it harder for employees to reintegrate into ongoing shipments:

> “When I come back from sick leave, I don’t know where to continue even if the handover instruction is clear. It takes time to catch up with ongoing shipments and in what phase to continue. “– Interviewee E

This issue highlights the need for a more structured handover process, where employees can seamlessly transition back into their roles without delays. From an operational perspective, ensuring a well-documented digital handover system – where updates, pending tasks and shipment statuses are clearly logged and accessible – would help mitigate this challenge.

Struggles with Complex Shipments and Process Optimization

While task ownership has improved overall efficiency, certain complex shipment cases require additional support. Employees handling intricate logistics tasks (such as special customs clearance, large-scale consolidation, or multi-leg shipments) found that task ownership sometimes lacked built-in mechanisms for specialized support:

> “Some customs-related issues should be handled by the customs team, not us. I often must deal with clearance problems that I don’t feel fully qualified to solve.”- Interviewee A

This limitation is relevant when looking at AFR Consol Ratio, which, despite increasing from 45% to 66.27%, still falls below 75% target. Employees noted that the process for shipment consolidation remained inconsistent, suggesting that more cross-team collaboration or automated consolidation planning tools may be necessary to improve performance.

Even though task ownership model has successfully improved many key performance indicators (KPIs), these challenges highlight areas that require further refinement. Addressing workload balance, handover efficiency, and specialized ensuring sustainable employee engagement. By integrating these strategic adjustments, Company X can

further enhance the benefits of task ownership while mitigating potential downsides associated with workload complexity and individual accountability.

4.4 Summary of the Key Findings and Revised Model

The findings of this study highlight significant improvements in operational efficiency and employee satisfaction following the implementation of the task ownership model in Company X´s Airfreight Import operations. The integration of both qualitative and quantitative data provides a comprehensive understanding of the model´s impact, demonstrating measurable performance gains in shipment processing, timeliness, and accountability while also revealing areas requiring further optimization. The result confirms that task ownership fosters employee engagement, proactive problem-solving, and streamlined operations, though its effectiveness depends on structured support mechanisms, such as workload management strategies, enhanced training, and technological integration.

4.4.1 Key Findings from Qualitative and Quantitative Data

The study revealed that task ownership positively influences employee engagement, accountability, and operational efficiency. Employees reported high levels of autonomy (6.2/7) and accountability (6.1/7), reinforcing the idea that taking full responsibility for shipments improves motivation and proactive problem-solving. The shift from fragmented workflows to an end-to-end responsibility model resulted in faster decision-making, improved internal and external communication, and reduced bottlenecks in shipment handling. Interviewees highlighted that having direct control over their tasks allowed them to mitigate issues more efficiently, reducing unnecessary delays and handovers. One employee emphasized:

> “I now keep track of the entire shipment process. If something looks off, I fix it immediately instead of waiting for someone else to handle it.” – Interviewee C

From an operational perspective, key performance indicators (KPIs) demonstrated significant improvements following the implementation of task ownership. The AFR Timeliness Index increased from 88.99% to 93.41%, affirming that employees were better equipped to ensure on-time deliveries. Similarly, the AFR Failed Gross OTP Without Exception saw a sharp decline from 55% to 21.69%, suggesting that preventable delays were notably reduced due to enhanced tracking, shipment monitoring, and problem resolution. The AFR File Auto-Rating improved from 76.56% to 80.436%, indicating that employees adapted well to automated systems and streamlined rating processes, reinforcing the role of technology adoption in logistics efficiency.

However, challenges were also observed. The AFR Consol Ratio, which evaluates shipment consolidation efficiency, remained below the target, improving from 45% to 66.27% but still not reaching the desired goal of 75%. Similarly, AFR Sick Files increased slightly from 1.03% to 1.53%, pointing to ongoing difficulties in documentation accuracy and shipment processing. These findings suggest that while task ownership fosters efficiency and accountability, continued training and refinement of documentation processed are needed to mitigate administrative errors and optimize resource utilization. Employes also reported experiencing higher stress levels during peak periods, indicating the need for structured workload management to prevent burnout.

These insights align with the JD-R Model, which emphasizes that increased job autonomy can enhance engagement but must be balanced with proper support systems. Employees who had clear responsibilities and structured processes performed more effectively, while those who struggled with unclear documentation and high workloads experienced challenges in adapting to the new model.

4.4.2 Integration into the Revised Model

The findings reinforce and expand upon existing theoretical frameworks while identifying areas that require further refinement for optimizing task ownership in high-

pressure logistics environment. Lean Management principles were evident in the reduction of non-value-added activities, such as excessive handovers and miscommunication, which led to efficiency gains. Employees, when given full ownership over tasks, engaged more actively in process improvement and problem resolution, reflecting core elements of continuous workflow optimization.

The Job Characteristics Model (JCM) further supports these findings, particularly in relation to tasks identity and autonomy. Employees reported increased motivation when handling shipments independently, suggesting that seeing a task through from start to finish provided a sense of ownership and accomplishment. However, workload management remains a critical factor, as indicated by the stress experienced during peak periods and the slight increase in documentation-related errors. The Job Demands-Resources (JD-R) model aligns with these observations, emphasizing that while autonomy serves as a resource that enhances engagement, it must be balanced with adequate training, structured support, and workload distribution strategies.

These findings necessitate a refinement of the original Task Ownership Model to reflect the dynamic interplay between operational efficiency and employee well-being. While the implementation of task ownership has substantially enhanced shipment timeliness, reduced avoidable delays, and fostered greater accountability, challenges related to workload distribution, documentation accuracy, and shipment consolidation indicate the need for additional structural support. To optimize the model, several refinements are introduced, focusing on enhanced onboarding and training programs, improvements in shipment consolidation strategies, and workload balancing mechanisms. Establishing structured onboarding modules and targeted training for documentation accuracy will reduce administrative errors and mitigate increases in AFR Sick Files rates. Additionally, refining shipment consolidation protocols through data-driven planning tools will facilitate better resource utilization, addressing the AFR Consol Ratio shortfall. Moreover, workload balancing strategies, including dynamic tasks allocation models and collaborative support mechanisms, will help employees manage responsibilities

efficiently, especially during high-demand periods. By integrating these refinements, the Task Ownership Model evolves into a more structured yet adaptable model, optimizing both operational efficiency and employee engagement.

4.4.3 Revised Task Ownership Model

Building upon the operational task process outlined in 3.2.3 Task Ownership Model in Airfreight Import Operations, the revised model integrates key refinements identified in this study. While 3.2.3 provides a structured step-by-step operational process, for executing shipments under the task ownership model, the revised model (Figure 13) serves an enhanced strategic model that optimizes employee workload management, process efficiency, and training effectiveness.

A major refinement focuses on structured training programs to address documentation challenges and administrative accuracy - a critical issue linked to the increase in AFR Sick Files (1.03% to 1.53%). By implementing enhanced onboarding programs, mentorship initiatives, and standardized process documentation, the model ensures that employees are equipped with the necessary knowledge and support to handle shipments from start to finish efficiently. Improved handover procedures further mitigate workflow disruptions when employees are on leave or handling unfamiliar shipments, ensuring continuity and process consistency.

Additionally, Workload distribution emerged as another critical area requiring refinement, particularly during peak operational periods. While task ownership fosters autonomy and accountability, excessive workload pressure can reduce efficiency and increase stress levels. To address this, the revised model introduces a structured workload balancing mechanism, enabling dynamic task allocation based on shipment volume, employee capacity, and real-time operational needs. Employees highlighted that while managing shipments independently fosters engagement and problem-solving, having a flexible support system—such as peer-assist models—helps alleviate cognitive overload without compromising ownership principles.

Another key refinement involves shipment consolidation optimization, as reflected in the AFR Consol Ratio (45% to 66.27%). While employees benefited from managing shipments end-to-end, further improvements in consolidation strategies are necessary to enhance efficiency and reduce unnecessary shipment handling costs. The revised model incorporates automated consolidation tracking tools and improved coordination mechanisms between teams to ensure that shipments are grouped optimally, thereby reducing logistical redundancies, and improving cost-effectiveness.

Another refinement focuses on shipment consolidation optimization, particularly reflected in the AFR Consol Ratio (45% to 66.27%), which, despite improvement, remains below the target threshold (75%). While employees benefited from managing shipments end-to-end, further enhancements in consolidation strategies are needed to increase efficiency and minimize handling costs. The revised model integrates automated consolidation tracking tools and improved coordination mechanisms between teams to ensure shipments are grouped optimally, thereby reducing logistical redundancies, and improving cost-effectiveness.

These refinements are supported by theoretical frameworks that emphasize efficiency, motivation, and workload balance. Lean Management principles are reinforced through workflow optimization, elimination of non-value-added activities, and continuous process refinement. The Job Characteristics Model (JCM) underscores the role of task identity and autonomy in motivating employees, while the Job Demands-Resources (JD-R) Model highlights the need to balance autonomy with workload management to sustain long-term employee well-being.

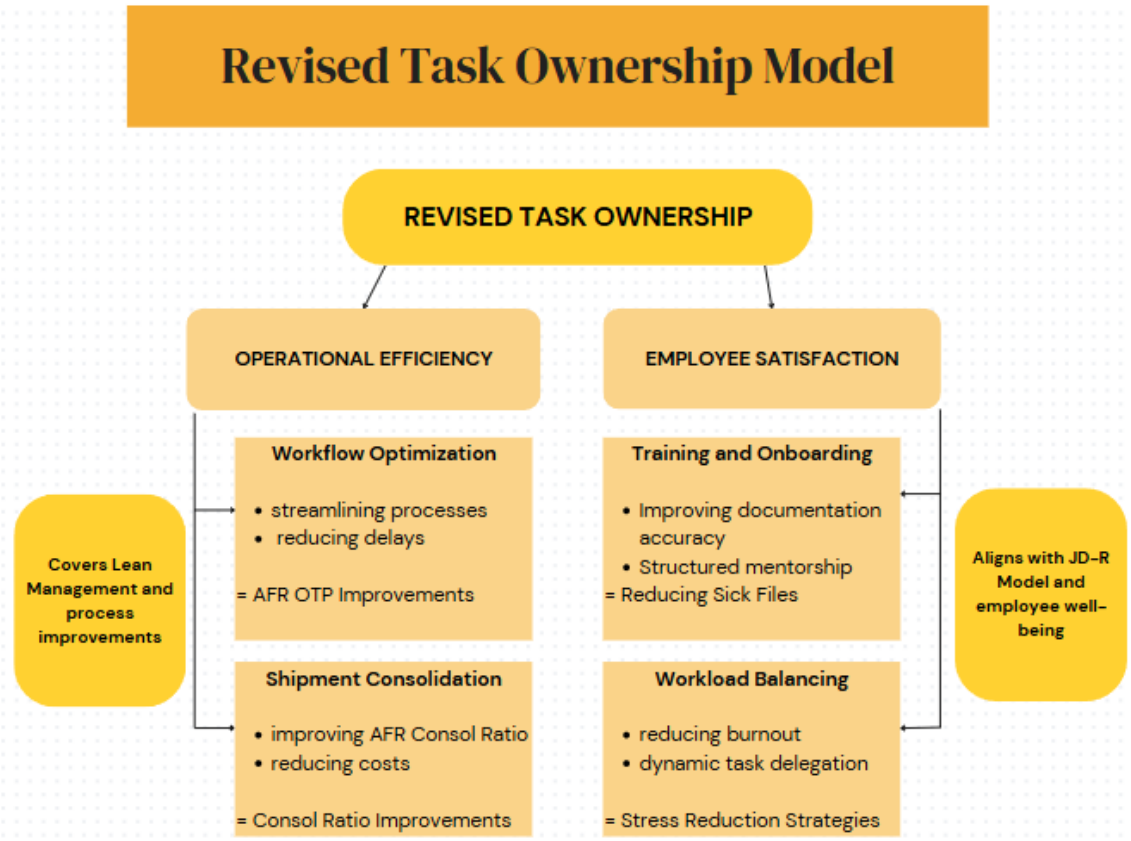


Figure 11. Revised Task Ownership Model

Figure 13 illustrates the Revised Task Ownership model, integrating key refinements identified in this study. The model optimizes operational efficiency through workflow improvements and enhanced shipment consolidation while addressing employee well-being through structured training programs and workload balancing strategies. These refinements ensure a sustainable model that enhanced both productivity and job satisfaction.

5 DISCUSSIONS

This chapter provides a critical synthesis of the study´s findings and reflects on their broader implications. By integrating both qualitative and quantitative insights, the research offers a nuanced understanding of how task ownership affects both operational efficiency and employee satisfaction within the logistics sector. Situated within the context of Company X´s Airfreight Import operations, findings support the utility of task ownership in complex, fast-paced environments and extend prior research on employee engagement and workflow optimization. The discussion is structured into three sections: Theoretical contributions, managerial implications, and avenues for future research.

5.1 Theoretical Contribution

This study contributes to existing theory by applying and expanding upon three prominent frameworks: Lean Management, the Job Characteristics Model (JCM), and the Job Demands-Resources (JD-R) Model. While these frameworks have been widely used to examine performance and motivation, their intersection within high-pressure logistics operations remains underdeveloped. This thesis responds to the gap by providing empirical evidence on how task ownership operates in such settings.

Lean Management principles were reinforced by the observed efficiency gains across key metrics, including timeliness, reduction of delays, and improved consolidation. These outcomes align with Lean´s emphasis on eliminating non-value-adding activities and improving workflow. Similarly, the JCM is supported through findings that indicate enhanced employee autonomy, task identity, and sense of purpose. Employees reported higher engagement when responsible for the full shipment lifecycle, suggesting that comprehensive task control increases essential motivation.

In parallel, the JD-R Model provides a lens through which the study´s findings on stress and workload can be interpreted. While autonomy and responsibility were empowering, employees also experienced periods of cognitive overload, particularly during high-

volume phases. This duality underscores the JD-R perspective that autonomy, while a motivating resource, must be balanced against job demands through adequate support systems.

By contextualizing these theoretical frameworks within a logistics setting, the study advances their applicability and highlights the need for integrated frameworks that account for both operational and human outcomes in task design.

5.2 Managerial Implications

From a practical standpoint, the findings offer actionable insight for logistics companies seeking to implement or refine task ownership models. The introduction of task ownership in Company X´s Airfreight Import operations led to measurable improvements in operational performance, including an increase in the AFR Timeliness Index from 88.99% to 93.41% and a reduction in Failed OTP Without Exception from 55% to 21.69%. These improvements suggest that entrusting employees with end-to-end responsibility enhances responsiveness and accountability, ultimately improving service quality.

In terms of employee experience, task ownership was found to strengthen autonomy and engagement. Participants reported higher levels of responsibility and motivation, with autonomy rated at 6.2/7 and motivation 6.5/7. These responses indicate that employees felt more empowered and connected to the outcomes of their work, confirming the motivational potential of the model. However, these findings also point to the importance of implementation strategy. Employees expressed challenges related to documentation accuracy and stress during peak periods, emphasizing the need for structured onboarding programs, peer support systems, and workload balancing. The revised Task Ownership model presented in this study integrates these refinements, offering a more sustainable version of the model that balances performance expectations with employee well-being.

Beyond the immediate scope of Company X, the model holds relevance for other departments, such as Ocean Freight or Customs Clearance team – and potentially for companies in other industries. Its scalability lies in its flexibility, allowing it to be tailored to various operational demands while maintaining its core principles of accountability, autonomy, and workflow optimization.

5.3 Limitations and Avenues for Future Research

Despite its contributions, this study is subject to several limitations. The first pertains to the timeframe of the operational data. As the analysis focused exclusively on metrics from the year 2024, it was not possible to conduct a year-over-year comparison that would further validate the long-term impact of the task ownership model. The inclusion of 2023 data – prior to implementation – would have strengthened the empirical foundation and clarified causal relationships.

Second, the qualitative component was limited to a single operational team within Company X. While the insights gained were valuable, the specificity of the context limits broader generalizability. Other logistics settings – such as Ocean Freight or Road Freight – may involve different workflows and team dynamics that influence task ownership differently. Future research across departments or companies would help validate the model and adapt it to varying operational and cultural environments.

Third, a notable limitation of this study stems from the dual role of the researcher, who simultaneously operated as both a practitioner within Company X and the primary researcher of this study. While this insider position enabled unique access to data, contextual understanding, and trust among participants, it may also have introduced certain biases. Participants might have been hesitant to share candid or critical perspective due to concerns about confidentiality, perceived power dynamics, or a desire to present the implementation of task ownership in a favorable light. Despite implementing measures such as anonymized responses and creating a safe environment

during interviews and focus groups, the potential influence of social desirability bias cannot be fully ruled out.

Lastly, while the revised Task Ownership model presents a strong foundation for task redesigning in logistics, its broader applicability must be tested. Companies with different cultural settings, digital infrastructures, or team dynamics mare require adaptation. Further research should explore how the model performs in various industries – such as healthcare, manufacturing, or professional services – where task continuity and accountability also play critical roles.

In addition to broader replication, future research should explore how digital technologies – such as artificial intelligence (AI), real-time tracking systems, and automation platforms – can enhance or constrain task ownership implementation. These tools are increasingly central logistics operations, influencing how tasks are assigned, executed, and monitored. While they can improve efficiency and reduce manual workload, they may also introduce challenges related to complexity, data accuracy, or employee adaptation. Equally important is the role of leadership, transparent communication, and a culture of trust and psychological safety can significantly influence how employees experience autonomy and accountability. Investigating how these technological and cultural elements interact could provide deeper insights into the conditions necessary for successful and sustainable task ownership across different operational environments.

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APPENDICES

Appendix 1. Interview Cover Letter

Hello,

My name is Joram Mustajärvi and I am a Strategic Business Development (SBD) student from University of Vaasa, Finland. I am currently conducting research for my Master´s thesis, which I am writing in collaboration with “case company”, where I have worked for nearly four years. The topic of the study is Exploring the Impact of Task Ownership on Operational Efficiency and Employee Satisfaction in Logistics Operations. This research aims to examine how assigning end-to-end responsibility for tasks affects workflow efficiency, error rates, and financial performance, as well as its influence on job satisfaction, task autonomy, and employee adaptation. By analyzing operational data alongside qualitative insights from employees, the study seeks to bridge the gap between theoretical expectations and practical outcomes.

To achieve this, I am seeking to interview employees from Airfreight import operations who have relevant experience and knowledge of task ownership in logistics. The findings will provide valuable insights for “case company”, and positive results from this research may support the potential expansion of task ownership model to Ocean Import operations, contributing to broader organizational improvements.

If you have any questions or concerns regarding participation in this study, please feel free to reach out to me via email. Your input is highly valued, and I sincerely appreciate your time and support in advancing this research.

Thank you in advance for your consideration!

Appendix 2. Questionnaire for Airfreight Import Team

Thank you for participating in this survey. The purpose of this questionnaire is to gather insights into how the task ownership model impacts operational efficiency and employee satisfaction within the Airfreight Import team. Your responses will contribute to academic research and help improve future practices. The survey is anonymous, and your answers will be treated confidentially.

General Information:

1) How long have you worked in the logistics industry?
2) How long have you worked in the Airfreight Import team?
3) Have you received training in the task ownership model?
4) If yes, how would you rate the effectiveness of the training?

Perceptions of task Ownership:

5) How clearly do you understand your responsibilities within the task ownership model?
6) How would you rate the level of autonomy you experience in your work?
7) To what extent do you feel accountable for the tasks you handle?
8) How does task ownership impact your ability to complete tasks efficiently?
9) What aspects of task ownership help you perform your tasks more efficiently?
10) Are there any challenges you face while taking ownership of tasks?

Impact on Workload and Motivation:

11) How manageable is your workload under the task ownership model?
12) How often do you feel stressed due to workload?
13) How motivated do you feel to complete your tasks when you have full ownership?
14) What factors contribute most to your motivation at work?
15) How does task ownership influence your motivation compared to previous work models?

Operational Performance:

16) How would you rate the impact of task ownership on the accuracy of your work?

17) Has the task ownership model reduced task delays and errors?

18) How would you evaluate the efficiency of communication and coordination in the task ownership process?

19) Can you provide an example of a situation where task ownership improved operational efficiency?

20) What suggestions would you make to improve operational processes under this model?

Adaptation and Future Improvements:

21) How easy was it for you to adapt to the task ownership model?

22) Do you feel adequately supported when adapting to new responsibilities?

23) How useful have the resources and tools provided been in supporting your task ownership responsibilities?

24) What additional resources or training would help you adapt more effectively?

25) Are there any aspects of the task ownership process that you would recommend changing?