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Optimizing Human Resources Management in Freight Forwarding Operations: Strategies for Efficiency and Performance

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1 Abstract

This thesis explores the optimization of human resources management (HRM) in Freight Forwarding operations, focusing on investigating the role of skills and training initiatives in bridging competency gaps and improving operational outcomes. Freight Forwarding, a critical component of global logistics and supply chain management, requires adept HRM to handle its complex operational dynamics. The study employs a quantitative approach, utilizing data from questionnaires distributed to industry professionals (response rate 45%). Key findings highlight the importance of continuous training and development programs, including technological advancements, developing soft skills, promoting continuous learning, ethical training, and aligning training with business strategy. Moreover, it is essential for companies to rigorously assess the impact of their training programs. The initiatives are found to significantly impact employee performance, job satisfaction, and overall organizational efficiency. These outcomes are derived from a combination of literature and findings from the thesis survey. Specifically, 64,4% of respondents have noticed an improvement in skills after attending training sessions. Furthermore, 80% have reported an increase in performance after participating in training for freight forwarding, and 88% believe that training has positively impacted the productivity of their entire team. Finally, 84,5% of respondents consider training programs to be of great importance for career development. The research also identifies major skill gaps in the industry, such as technical expertise in customs and safety regulations. Closing these gaps by fostering continuous learning and investing in employee training ensures that employees gain essential skills and knowledge to boost performance, job satisfaction, organizational commitment, and overall operational efficiency. The study concludes with an emphasis on strategic HR planning, investment in employee development, and innovative training methods. These strategies are crucial for enhancing the performance and sustainability of freight forwarding operations in a competitive global market.

Keywords

Freight Forwarding, training, Human Resources, operational efficiency, skills, skill gaps, soft skills, performance, efficiency, customs regulations, safety regulations, international trade, evaluation, business strategy, etc

2 Περίληψη

Η παρούσα διατριβή εξετάζει πώς μπορεί να βελτιστοποιηθεί η διαχείριση ανθρώπινου δυναμικού (HRM) στις διεθνείς μεταφορές, διερευνώντας τον ρόλο των δεξιοτήτων και της εκπαίδευσης ,στην κάλυψη των ελλείψεων δεξιοτήτων και στη βελτίωση των επιχειρησιακών αποτελεσμάτων. Ο κλάδος του Freight Forwarding, ένα ζωτικής σημασίας κρίκος της παγκόσμιας εφοδιαστικής αλυσίδας, απαιτεί αποτελεσματική διαχείριση ανθρώπινου δυναμικού για την αντιμετώπιση της σύνθετης λειτουργικής δυναμικής του. Η έρευνα χρησιμοποιεί μια ποσοτική μεθοδολογία, αξιοποιώντας δεδομένα από ερωτηματολόγια που διανεμήθηκαν σε επαγγελματίες του κλάδου (ποσοστό απόκρισης 45%). Τα κύρια ευρήματα υπογραμμίζουν τη σημασία των συνεχών προγραμμάτων εκπαίδευσης και ανάπτυξης, συμπεριλαμβανομένων της τεχνολογικής προόδου, της ανάπτυξης δεξιοτήτων, της ενίσχυσης της δια βίου μάθησης, τη συμμόρφωση με τους κανονισμούς, την ηθική εκπαίδευση, και την σύμπνοια της εκπαίδευσης με τη στρατηγική της επιχείρησης. Επιπλέον, συζητούνται η κρισιμότητα της αξιολόγησης της αποτελεσματικότητας των προγραμμάτων εκπαίδευσης ώστε να επιλεχθούν οι καταλληλότερες στρατηγικές εκπαίδευσης για την εκάστοτε εταιρεία στον κλάδο. Αυτά τα αποτελέσματα προκύπτουν από την σύνθεση των ευρηματων της βιβλιογραφικής και ποσοτικής έρευνας της διατριβής. Συγκεκριμένα, το 64,4% των ερωτηθέντων παρατήρησε βελτίωση στις δεξιότητες μετά τη συμμετοχή σε εκπαιδευτικά προγράμματα. Επιπλέον, το 80% ανέφερε αύξηση της απόδοσης μετά τη συμμετοχή σε εκαπιαδευτικό πρόγραμμα (FF), και το 88% πιστεύει ότι η εκπαίδευση έχει θετική επίδραση στην παραγωγικότητα ολόκληρης της ομάδας. Τέλος, το 84,5% των ερωτηθέντων θεωρεί ότι τα προγράμματα εκπαίδευσης είναι μεγάλης σημασίας για την επαγγελματική ανάπτυξη.Η έρευνα επίσης εντοπίζει σημαντικά κενά δεξιοτήτων στον κλάδο, όπως οι γνώσεις πάνω στους τελωνειακούς κανονισμούς και στους κανονισμούς ασφαλείας. Καλύπτοντας αυτά τα κενά δεξιοτήτων, μέσω της ενίσχυσης της συνεχούς μάθησης και των επενδύσεων πάνω στην εκπαίδευση και ανάπτυξη των εργαζομένων, διασφαλίζεται η βελτίωση της απόδοσης των εργαζομένων, τα επίπεδα ικανοποίησής τους, η πιστότητα προς την εταιρεία, αλλά και η συνολική επιχειρησιακή αποτελεσματικότητα. Η μελέτη καταλήγει εξαίροντας την σημασία του στρατηγικού σχεδιασμού ανθρωπίνων πόρων, την επένδυση στην ανάπτυξη των

εργαζομένων και τις καινοτόμες μεθόδους εκπαίδευσης ακολουθώντας τα τεχνολογικά δεδομένα και τις εξελίξεις.

Λέξεις – Κλειδιά

Διεθνείς μεταφορές, εκπαίδευση, ανθρώπινο δυναμικό, αποτελεσματικότητα, δεξιότητες, κενά δεξιοτήτων, τεχνολογία, αποδότικότητα, Freight Forwarding, τελωνειακοί κανονισμοί, κανονισμοί ασφαλείας, επίλυση προβλημάτων, αναλυτική σκέψη, ελλείψεις, ανταγωνιστικό πλεονέκτημα, απόδοση,   κτλ

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5 List of Abbreviations & Acronyms

FF: Freight Forwarders

HR: Human Resources

AI: Artificial Intelligence

IoT: Internet of things

ML: Machine Learning Applications

SCML: Strategic Supply Chain Management and Logistics

HRD: Human Resources Development

FWA: Flexible Work Arrangements

CSR: Corporate Social Responsibility

IATA : International Air Transport Association

FIATA: International Federal of Freight Forwarders

FTE: Full-Time Equivalent

ICC : International Chamber of Commerce

ICAO: International Civil Aviation Organization

LCL: Less-Than-Container Load

FCL: Full Container Load

NLP: Natural Language Processing

OCR: Optical Character Recognition

LMS: Learning Management System

BI: Business Intelligence

EBlL: Electronic Bill of Landing

PoW: Proof of Work

PoS: Proof of Stake

PoA: Proof of Authority

UAVs : Unmanned Aerial Vehicles

OCR : Optical Character Recognition

NLP : Natural Language Processing

KPIs : Key Performance Indicators

1. Freight Forwarding Operations

1.1 Brief Historical Overview of Freight Forwarding

The evolution of Freight Forwarding is intricately linked to the history of global trade and logistics. The roots of Freight Forwarding can be traced back to ancient traders who organized caravan routes to transport goods across continents. During the medieval period, guilds and merchant associations played a role similar to modern Freight Forwarders (FF), facilitating trade logistics across Europe and Asia. (1)

The Silk Road (130 B.C.E. - 1453 C.E.) was a vital trade network linking Europe and East Asia. Traders faced challenges like poor infrastructure and banditry, which they countered by traveling in caravans using camels. Caravanserais provided rest and trading posts, fostering commerce and cultural exchanges. This trade route significantly influenced the cultural and technological development of connected regions. (2)

The Industrial Revolution (1760-1830) transformed Freight Forwarding through mass production and global trade, requiring organized logistics systems. Specialized firms optimized delivery times and costs using various transport modes. The 1920s saw commercial air cargo innovation (3). Post-World War II, the International Civil Aviation Organization (ICAO) and the Chicago Convention promoted air freight via international regulations—containerization enhanced efficiency by reducing costs. Modern advancements in air, road, rail, and sea transport have solidified freight forwarding's essential role in global commerce, adapting to technological progress and complex shipping demands. These adaptations leverage modern technology to address the complexities and demands of increasingly intricate shipping routes.

1.2 Modern Functions and Roles of Freight Forwarders

The role of a FF involves coordinating the movement of goods from one location to another on behalf of a customer. This service, often conducted commercially, may utilize various transportation methods such as road, rail, air, sea, or a mix of these. The FF must possess specialized knowledge to guarantee that all relevant documentation adheres to the standards set by customs, insurance, and legal regulations (including IATA Conventions, Maritime Law, ICC Codes, and other international rules that govern global transport) (4).

Freight forwarding has traditionally revolved around the management of data and information. Before the advent of affordable information technology, FF relied heavily on paper documents, telephone communications, and mechanical duplication and printing devices as standard tools to collect, validate, transcribe, and disseminate shipment details. Additionally, they possessed extensive, often highly specialized knowledge crucial for orchestrating the complex flow of goods worldwide. Their relationships and connections with related businesses, contacts, and trading partners were, and continue to be, essential to the global management of shipments.

As technology advanced, forwarders adopted early information systems, which were initially focused on accounting, with operational functionalities being added later. The motivation to implement these systems in the UK was driven by the development of port community systems and customs authorities, which facilitated electronic customs entries. This technological shift spurred the creation of numerous small software companies to meet the growing demand and encouraged forwarders to appreciate the benefits of digital information sharing. By the mid-to-late 1980s, they had access to more sophisticated systems that could handle everything from freight quotations to bookings and automatic documentation handling. These integrated systems provided significant competitive advantages, even though networking capabilities were limited. Today, the industry continues to evolve with new players entering the market, necessitating even established companies to enhance their technological capabilities. This ongoing development has seen a shift towards more federated technology models where various software applications are integrated across platforms, enhancing operational efficiency despite the challenges of maintaining data consistency across multiple systems (5). Further than the development of various software applications, the integration of advanced technologies such as Artificial Intelligence (AI), Machine Learning Applications (ML), blockchain, and the Internet of Things (IoT) is significantly enhancing efficiency, transparency, and security within the freight forwarding industry. FF have had to adapt to these technological changes, which highlight the transforming potential to enhance forecasting accuracy, decision-making, and operational efficiency in logistics and to remain competitive in the global market (6).

Describing the core functions of a forwarder, we could say that the forwarder acts as an intermediary between the carrier and the shipper, sourcing various transportation solutions and generating revenue by organizing comprehensive delivery services. As agents, forwarders often have greater adaptability to market fluctuations because their investments in physical infrastructure are significantly lower than those of shipping or airline companies. Generally,

the responsibilities of forwarders encompass booking space on ships or aircraft, operating as non-vessel operating carriers, coordinating both local and international shipments, handling essential documentation and customs clearance, and offering delivery and distribution services in the most cost and time-efficient way. Additionally, they provide information services, warehousing, consolidation, and manage other related formalities. They also serve as a crucial link between shippers and transportation services ensuring compliance with international laws and regulations. FF use their knowledge of varying customs processes to facilitate smoother import and export operations. They handle necessary documentation, pay tariffs and taxes, and ensure that shipments meet all legal requirements, thereby reducing the risk of delays and penalties for businesses, especially in developing countries, where there are difficulties due to unclear regulatory environments (7). However, ensuring compliance with international trade laws, regulations, and customs requirements is not the only strategy a forwarder uses to manage risks associated with global logistics. They also have to use comprehensive insurance coverage to mitigate financial risks due to lost or damaged goods, delays, and other unforeseen events.

Furthermore, is important to mention that the forwarder's agenda is slightly different from carriers, shippers, and consignees since the first ones tend to target LCL (Less than container loaded) customers for consolidation while liner carriers focus more on attracting FCL (Full container loaded) cargo, the second ones they just want to ship the cargo without any other concern, and the consignee's they just need to receive the cargo in the way they want (8). So, the forwarder must take into account all these different agendas and coordinate respectively to serve his customer properly.

As a service-oriented industry, a competitive advantage based only on cheaper prices is not enough. Improving customer service satisfaction has become a critical strategic and survival issue for forwarders to maintain competitiveness and ensure sustainability. Service quality is a primary managerial goal aimed at achieving customer satisfaction, especially when service quality issues have been already addressed for liner shipping and third-party logistics.

A FF is not merely a component of the supply chain; rather, it serves as a logistical consultant, adept at selecting the appropriate mode of transport tailored to the client's specific requirements. They provide tailored solutions, evaluating various options for optimal choices. Their role extends beyond moving goods, encompassing strategic partnerships and advice to meet client objectives effectively. Clearly, the role of a FF extends beyond simply transporting goods from one location to another; it encompasses the provision of tailored logistical solutions

that align with the client's unique needs. Essentially, a FF acts as a strategic partner, ensuring that logistical tasks are accomplished while advising on the most effective strategies to meet client objectives.

2. The Role of Human Capital in Freight Forwarding

2.1 Importance of HR Management in Freight Forwarding and Logistics

Effective Human Resources (HR) management is vital in the Freight Forwarding industry, ensuring efficient global transportation and enhancing business performance. This chapter explores HR's critical role, showing how HR practices lead to operational excellence and competitiveness. Robust training development helps firms address skill gaps and swiftly adapt to market changes and technological innovations (9).

HR management practices, particularly those focused on skill development and employee training, are fundamental in boosting operational efficiency in Freight Forwarding operations. Such practices guarantee that employees are adequately prepared for their responsibilities while creating a supportive workplace that encourages and retains highly skilled staff. This, in turn, minimizes operational interruptions and boosts productivity.

In the Freight Forwarding industry, effective HRM is crucial, as exemplified by DHL's comprehensive skill development programs. DHL Group offers targeted training to enhance operational efficiency and employee potential through a blend of online and classroom-based sessions. This initiative supports lifelong learning, allowing employees to tailor their development paths while HR professionals design succession plans. In 2023, DHL employees invested over 4.7 million hours in training, with the company allocating €216 million annually for staff development (10). The Certified initiative creates "certified" experts, fostering a culture of excellence and integrating business operations (11). These HRM strategies emphasize continuous learning, skill enhancement, and a supportive work environment, contributing to DHL's recognition as a top workplace and a leading freight forwarder globally (12).

FedEx is another example of a company where effective human resource management practices have contributed significantly to its success. The company's HR strategies emphasize creating a supportive and inclusive workplace that promotes diversity and employee development. The

company's philosophy, People-Service-Profit, focuses on ensuring employee satisfaction to improve service quality and drive profitability. This approach includes various programs like the Advance in Management and Tuition Assistance Programs, which support employee development and career advancement (13). These initiatives highlight how FedEx leverages human resources management to enhance operational efficiency and maintain its position as a leading global express transportation company.

As per DHL's and FedEx case studies above, effective HR practices impact various aspects of operational performance, from employee retention and safety compliance to customer satisfaction. HR management directly influences employee engagement and turnover rate. In Logistics and Freight Forwarding, especially where the cost of replacing skilled employees can be high, reducing turnover is essential for maintaining operational efficiency and knowledge within the organization (14). Furthermore, HR's role in training and development is critical in ensuring compliance with safety standards. Regular up-to-date training programs with the latest safety regulations help reduce workplace accidents and ensure a safer working environment. This not only helps in complying with legal requirements but also reduces costs associated with workplace injuries (15). Finally, well-trained employees are more likely to provide better customer service. HR practices focusing on employee satisfaction and service training are directly linked to higher customer satisfaction levels, which are critical in the competitive freight forwarding industry (16).

Integrating these HR practices in Freight Forwarding operations requires a strategic approach where HR goals are aligned with business objectives. Reducing turnover not only cuts costs but also builds a more experienced workforce capable of meeting high safety standards and delivering exceptional customer service. Moreover, these practices foster a proactive work culture where continuous improvement is encouraged, further enhancing compliance and customer relations.

By considering these aspects, Freight Forwarding companies can leverage HR management as a strategic tool to improve various performance metrics crucial for their success.

2.2 Key Skills and Competencies in Freight Forwarding

The success of Freight Forwarding operations hinges not only on the robustness of logistical and operational frameworks but also significantly on the competencies and skills of the professionals who manage these processes. This chapter provides a comprehensive overview of the essential skills required for success in the freight forwarding industry, categorizing them into technical and soft skills.

The landscape of Freight Forwarding demands a unique blend of technical knowledge and practical skills to navigate the intricate web of global supply chains. Technical skills encompass a deep understanding of transportation modes, customs regulations, and the latest technological tools that enhance tracking and efficiency. Operational skills involve the day-to-day management of logistics tasks, from warehouse operations to route optimization and risk management. However, soft skills including communication, critical thinking, and problem-solving, are equally vital, bridging the gap between technical expertise and practical execution. These skills collectively ensure that FF can adapt to dynamic market conditions, comply with international laws, and meet the ever-evolving demands of clients and stakeholders.

This chapter delves into these skill areas, illustrating their impact on the efficacy of Freight Forwarding operations and highlighting the training and development pathways that can cultivate these essential competencies. Through this exploration, we aim to outline a framework that identifies the pivotal skills necessary for industry professionals to thrive in an increasingly globalized and digitized marketplace.

To underline the complexity and the multi-faceted nature of the freight forwarding role, Here is an overview of the key responsibilities that define the role of a FF:

- Calculation of Logistics Costs: FF calculate the weight, volume, and cost of goods to determine the most efficient shipment method.

- Client Consultation: They inform clients about various shipping options, timelines, transfers, and regulatory requirements that could impact the shipment.

- Documentation Preparation: This includes creating essential shipping documents such as bills of lading, packing lists, dock receipts, and certificates of origin to ensure legal compliance and smooth logistics.

- Shipment Monitoring and Updates: FF provide regular updates on shipment status to exporters, consignees, or insurers, enhancing transparency and tracking.

- Packaging and Labeling Verification: They ensure that exported goods are properly packaged and labeled following international standards.

- Financial Management: This involves preparing invoices and cost quotations for freight transportation, and handling or arranging payment of freight or insurance fees.

- Route Selection: Selecting optimal shipment routes based on the nature of goods, transit times, sustainability and security needs is crucial for maintaining cost-efficiency and safety.

- Record Keeping: Maintaining records of goods dispatched or received is essential for tracking and accountability.

- Load Consolidation: They consolidate loads with a common destination to reduce shipping costs for individual shippers.

- Space Reservation: FF reserve necessary space on ships, aircraft, trains, or trucks to ensure that goods can be shipped as planned.

- Rate Negotiation: They negotiate shipping rates with freight carriers to obtain the best possible terms.

- Logistical Arrangements: This includes arranging delivery or storage of goods at their destination and ensuring that all documentation meets customs, insurance, and regulatory requirements.

- Customs and Compliance: FF make arrangements with customs brokers to facilitate smooth customs clearance and comply with all applicable duties, taxes, and paperwork.

- Continuous Learning: Keeping current with legislation, political situations, and other factors affecting freight shipping is vital for forwarders to adapt and provide informed recommendations. (17)

The diverse responsibilities managed by FF require a comprehensive set of technical skills that are essential for navigating the complex global logistics landscape and ensuring the smooth execution of each task. In the context of the freight forwarding industry, "technical skills" refer

to the specific knowledge and abilities needed to execute specific tasks and operations effectively associated with managing the movement of goods across international borders. These skills are typically developed through formal education, specialized training, and hands-on experience. Technical skills in Freight Forwarding are crucial because they directly impact the efficiency, cost-effectiveness, and compliance of shipping operations. Professionals equipped with these skills are better prepared to handle the logistical challenges of international trade, leading to successful and profitable operations. Here is a breakdown of technical skills entailed in Freight Forwarding :

- Understanding logistics networks and supply chain management is crucial for efficient global operations, involving the coordination of product movement from manufacturers to customers via various transportation modes.

- Essential skills include route optimization, inventory management, and cost reduction while maintaining service quality. Proficiency in handling air, sea, road, and rail transport, along with knowledge of customs regulations and international trade laws, ensures compliance and efficient customs clearance.

- Mastery of industry-specific software and emerging technologies like blockchain, IoT, and AI enhances operational forecasting and real-time tracking.

- Additionally, skills in financial management, risk assessment, and security measures are vital for safeguarding cargo. Maintaining high service standards and continuously improving operational processes are key to meeting industry norms and customer expectations.

- Additional Qualifications: Master's degree in logistics, supply chain management, or a related field, Language proficiency relevant to the regions of operation, Certifications in logistics or supply chain management (18).

Besides technical skills, soft skills are considered vital for ensuring smooth operations and client relationships. Communication skills, despite variations in perceived importance over the years, remain crucial for effective management and coordination across multicultural and geographically dispersed teams. Additionally, skills such as adaptability, creativity, and flexibility are increasingly vital, underscoring the need for senior managers to respond dynamically to the rapidly evolving supply chain challenges. Furthermore, behavioral skills is crucial for coordinating between various international parties, including shippers, carriers, and

customs officials (19). Strong negotiation skills enable FF to secure favorable terms and manage costs efficiently. Furthermore, adaptability is essential in this dynamic field to handle unexpected changes in regulations, shipping delays, and global market conditions.

These soft skills complement technical expertise, enhancing service delivery and fostering long-term business success. Soft skills such as decision-making, communication, and cross-functional capabilities are highlighted as crucial for effective management within complex supply chain environments. While technical skills are necessary, soft skills are equally vital in ensuring operational success and leadership effectiveness in the dynamic field of freight forwarding and logistics (20). However, considering that the industry is experiencing significant shifts in technology and global trade regulations, this consequently leads to evolving skill demands within the sector. Technological advancements, the changes in global trade regulations (for example Brexit), the exponential growth of e-commerce, and the increasing need for sustainability in logistics lead to a growing need for professionals who have strong analytical skills and are willing to evolve in ongoing education and professional development. The sector requires a blend of traditional logistics skills combined with new competencies in technology, regulatory compliance, and strategic risk management.

2.3 Human Capital in Freight Forwarding, Overview in Existing Research

The dynamic and globally integrated nature of the Freight Forwarding industry necessitates a continuous reevaluation of the skills and competencies required to thrive within it. As strategic supply chain management and logistics (SCML) become increasingly critical to economic and organizational success worldwide, understanding the role of human capital within this context grows in importance.

The purpose of this literature review is to explore and critically analyze the existing body of research regarding the impact of employee skills and training programs on operational efficiency and performance in Freight Forwarding operations. This review aims to address two fundamental research questions: How do employee skills influence the efficiency and performance of Freight Forwarding operations? And, what role do employee training programs play in enhancing these skills and subsequently improving operational outcomes? The scope of this review encompasses a thorough examination of global and regional studies, encompassing various methodologies and contexts, to provide a comprehensive understanding

of the relationship between HRM practices and operational efficiency in the Freight Forwarding industry. By synthesizing diverse findings, it identifies key competencies and training strategies for optimized performance. The review highlights current knowledge, identifies research gaps, and provides insights for HR managers to enhance organizational effectiveness, framing subsequent analysis and proposing actionable strategies for the industry.

It is crucial to underline the importance of strategic planning in aligning the supply chain with business objectives to maximize efficiency, reduce costs, and improve service delivery. Key strategic choices include supply chain structure, partner selection, and technological investments. Understanding internal processes and market conditions is essential to synchronize supply with demand. Integrating strategic planning with operations ensures a competitive advantage and meets consumer expectations in a dynamic market (21).

Significant studies in human capital within the Freight Forwarding industry show the importance of HR as vital assets that significantly contribute to a company's market value through knowledge, skills, and experience. While many Freight Forwarding companies are trying to provide a competitive advantage to their clients by offering lower prices than the ones provided by competitors, some others seek to be superior over their competitors by having a qualified labor force with exceptional abilities. A skilled workforce secures a competitive edge by adapting to market changes and prioritizing quality. Organizational effectiveness depends on aligning employee management with strategic goals and analyzing internal and external employee relations. Investing in human capital is a strategic investment, not just a cost, driving long-term competitive advantage.

A personnel strategy should integrate human elements to execute business strategies and gain competitive advantages. It should enhance personnel management strengths, leverage opportunities, mitigate risks, and address improvements. Organizations should consider competitors, their objectives, strategies, strengths, and weaknesses. Research indicates that a company's market competitiveness heavily depends on the selection and quality of its human resources (22). Proper HR strategies can shape a company's employees into a crucial competitive tool, equipped to handle market complexities and drive enduring growth.

Another key factor contributing to business competitiveness is the importance of crafting HR practices that focus on people, performance, and information management. Defining the organization's structure, reporting relationships, work processes, and workspace is crucial for

sustaining a competitive edge. Understanding the business context and internal and external environments is essential for effective HR operations. Articulating a clear HR vision aligned with corporate objectives ensures HR supports organizational goals. Investing in robust HR practices—covering people management, performance enhancement, information dissemination, and workflow optimization—builds a competent and motivated workforce. Establishing comprehensive HR governance maintains accountability and transparency. Detailed action plans enable effective strategy implementation while developing HR competencies ensuring the team has the skills to drive the organization forward and adapt to changing business needs (23).

After designing an HR strategy aligned with business goals, it is crucial to identify the key skill competencies of a FF. As mentioned in the previous chapter, key competencies in Freight Forwarding encompass a broad range of skills that ensure efficient and effective management of logistics operations. A blended mix of technical and soft skills, -such as proficiency in logistics software and systems, understanding of transportation management, warehousing operations, and supply chain technologies (24)- regulatory knowledge (25), communication skills (26), problem-solving abilities (27), analytical skills (28), capabilities to lead and manage logistics teams (29) and of course commitment to meet customer needs are the most crucial skills that help FF to navigate the complexities of global logistics, ensuring efficient, compliant, and customer-focused operations. Developing these competencies requires a strategic approach to training and development, focusing not only on immediate operational needs but also on future industry trends and challenges.

Training programs in Freight Forwarding on the other hand are critical for enhancing these competencies, directly impacting operational efficiency and performance. Effective training initiatives encompass a variety of approaches, including on-the-job training, formal education, workshops, and continuous professional development programs. These programs aim to bridge competency gaps by providing employees with up-to-date knowledge of logistics technologies, regulatory compliance, and best practices in supply chain management (30). Some researchers have argued that the primary justification for training is its significant contribution to productivity and organizational performance (31). However, there is limited empirical evidence to support the idea that human resource development (HRD) positively impacts organizational performance (32). Considering the difficulties in measuring performance, a more fruitful approach might be to investigate the connection between training and favorable

workplace attitudes, which have been shown to positively correlate with organizational effectiveness (33). It is essential to conduct longitudinal studies to better understand the long-term impact of training programs on both individual and organizational performance.

One of the work-related attitudes being explored for its influence on managing employee behavior is organizational commitment. This concept is increasingly recognized as a significant factor in explaining work-related behavior due to its presumed impact on performance (34). According to researchers, the ultimate goal of training and any HRD effort is to enhance performance. Generally, organizational commitment refers to the degree of attachment an employee feels towards their organization (35). A committed employee is characterized by their loyalty to the organization during both good and challenging times, regular attendance, dedication to completing their work and often going beyond what is required, protection of company assets, and alignment with the organization's goals (36).

Previous research has shown that organizational commitment also influences training. Specifically, higher organizational commitment can increase motivation for participating in training, improve knowledge retention, and enhance the transfer of training. Organizational commitment affects the training process, regardless of whether the increased commitment is a training objective. Past research indicates that higher organizational commitment leads to positive outcomes such as reduced turnover, decreased absenteeism, and increased extra-role performance. Understanding the relationship between employees' perceptions of training and their commitment levels can offer valuable insights for HRD managers. The theoretical framework for this investigation is based on the psychological contract and the employment relationship, which are rooted in social exchange theory (37). Psychological contracts reflect employees' beliefs about their employment relationship and their expectations based on perceived promises from their organization. These contracts influence organizational behavior and are affected by HRM practices (38). HRD managers play a role in defining and maintaining these psychological contracts, and training can be managed to foster job involvement, motivation, and organizational commitment. Employees often view training as a right and a benefit of employment (39). Organizations must understand and manage psychological contracts to foster a positive and productive work environment.

Whether training directly impacts operational performance or indirectly influences it through employee commitment, any organization aiming to excel must select the most appropriate training programs and evaluate their effectiveness. Well-designed training initiatives foster a

skilled and dedicated workforce, driving organizational success. Refining these programs ensures strategic goals are met and maintains a competitive edge. Notable training methods in freight forwarding include:

1. On-the-job training (OJT) is a highly practical approach to employee development, where individuals learn by performing their job duties under the guidance and supervision of experienced colleagues or mentors. This method provides job-specific skills and hands-on experience in the work environment, helping employees quickly become proficient in high-skill, precise tasks. Additionally, OJT is cost-effective as it leverages existing workforce and workplace resources, minimizing the need for external training programs and venues (40). OJT can be customized to the specific needs of the organization and the individual, making it a flexible and adaptive training method (41). The effectiveness of OJT hinges on skilled trainers, quality instruction, and a supportive environment. OJT fosters continuous learning, collaboration, and knowledge sharing, involving senior employees in training newcomers. This approach enhances team cohesion, employee engagement, and retention.

2. In-house training programs refer to professional development and skill enhancement initiatives conducted within the organization. These programs are customized to meet the company's specific needs, effectively addressing unique business challenges and operational requirements. Unlike generic external training, in-house programs target particular skills and knowledge gaps within the organization, ensuring training is highly relevant and immediately applicable to daily tasks (42). This targeted approach is more likely to result in improved performance and productivity as it aligns closely with organizational objectives.

In-house training promotes community and teamwork among employees by facilitating shared experiences and insights. It incorporates company-specific processes and technologies, making learning practical and relatable. Additionally, it is cost-effective, reducing expenses associated with travel, accommodation, and external training fees (43). Leveraging internal expertise not only enriches the training content but also boosts the confidence and morale of the trainers.

3. External seminars and online courses provide FF with specialized knowledge and industry best practices. Featuring expert instructors, these programs offer insights into trends, technologies, and regulatory changes. Online courses are flexible and accessible, while seminars are interactive and immersive, promoting networking and idea exchange, and enhancing professional development. Online courses offer flexible learning for FF, featuring

video lectures, interactive modules, quizzes, and discussion forums. Freight Forwarders Associations (FIATA) hosts seminars and workshops on Freight Forwarding topics such as customs regulations, dangerous goods handling, and global logistics strategies, enhancing participants' engagement and knowledge (44).

4. Other training methods for FF include job rotation, mentoring and coaching, and knowledge sharing through communities of practice. Job rotation involves moving employees through various positions within the organization to give them exposure to different tasks and functions (45). Mentoring and coaching involve pairing less experienced employees with seasoned mentors who provide guidance, advice, and support (46). Coaching also involves a structured relationship focused on developing specific skills and improving performance (47). Finally, creating platforms where employees can share knowledge, experiences, and best practices. Communities of practice involve groups of people who share a concern or passion for something they do and learn how to do it better through regular interaction. (48).

The Freight Forwarding industry requires continuous reevaluation of skills and competencies to remain competitive. While the literature review provides a comprehensive overview of the impact of employee skills and training programs on operational efficiency and performance in freight forwarding, several gaps remain that warrant further investigation:

- Empirical Evidence on HRD Impact: Although the theoretical benefits of HRD on organizational performance are well-documented, there is limited empirical evidence directly linking HRD to measurable improvements in performance. Future research should focus on longitudinal studies that track the direct impact of HRD initiatives on operational metrics.

- Specific Training Program Effectiveness: There is a need for more detailed studies comparing the effectiveness of different training methods specifically within the freight forwarding context. Understanding which methods yield the best results can help organizations effectively tailor their training strategies.

- Global vs. Regional Practices: The review includes both global and regional studies, but there is a lack of comparative analysis that distinguishes between the effectiveness of HRM practices in different geographical and cultural contexts. Comparative studies could provide insights into best practices that are universally applicable versus those that are region-specific.

- Technological Advancements: The rapid pace of technological change in logistics and supply chain management calls for ongoing research into how new technologies can be integrated into training programs. Studies exploring the impact of digital tools, simulations, and e-learning platforms on skill development and operational performance are needed.

- Impact on Employee Well-being: While the focus has been on operational efficiency and performance, the impact of training programs on employee well-being, job satisfaction, and work-life balance is less explored. Understanding these aspects can provide a more holistic view of the benefits of training.

2.4 Challenges in Developing and Retaining Skilled Personnel

Freight Forwarding is a labor-intensive industry and the performance of these freight forwarding companies can be greatly influenced by the quality and characteristics of their workforce. A remarkable finding from a recent analysis involving over 600,000 individuals from various fields, such as research, entertainment, politics, and sports, shows that high performers are up to four times more productive than their average counterparts. (49). Research into various businesses indicates similar productivity enhancements among top performers and shows that this productivity differential increases with the complexity of a role. In professions like freight forwarding which demand high levels of information processing and interaction, such as management and software development, top performers can be as much as eight times more productive than their average peers (50) .

Productivity gap between average performers and high performers, by job complexity, %

|	
Low complexity	50
Medium complexity	85
High complexity	125
Very high complexity	800
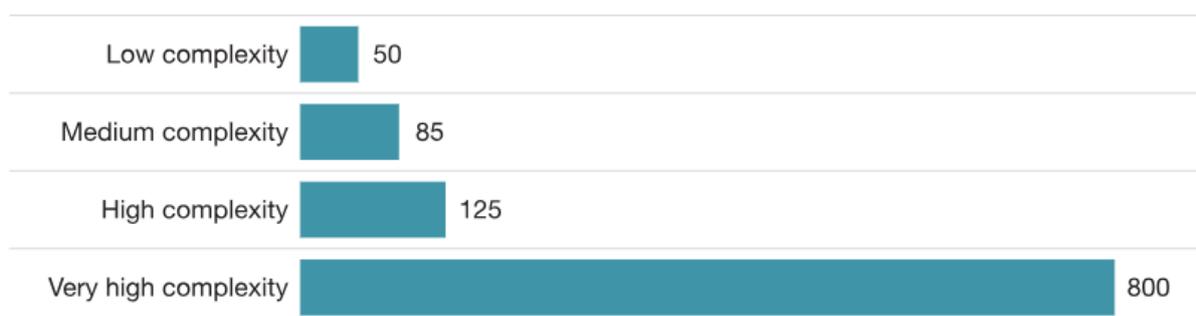
Image 1: The relationship between quality of talent and business performance

The transition from the Industrial Age to the Information Age has profoundly reshaped talent management, emphasizing skilled managerial talent within organizations. This era emphasizes intellectual capital over physical assets, marking a pivotal shift where skilled individuals become critical intangible assets. The growing scarcity of such talent, exacerbated by changing demographics and economic conditions, has fueled a persistent war for talent. This is not a temporary challenge but a fundamental aspect of the contemporary business landscape, demanding innovative strategies for attracting, developing, and retaining essential managerial talents. However, surveys indicate a lack of confidence among managers in their companies' talent management efforts, with significant concerns about the pace of development, retention of high performers, and effective removal of underperformers. Despite recognizing the importance of excelling in the war for talent, only a small fraction of companies feel their efforts are adequate, highlighting a crucial need for a strategic reassessment and prioritization of talent management practices (51) .

 It is reported that the annual employee turnover rate in the forwarding industry in the Greater China region could reach as high as 27% with an estimated training cost of $3,500 per new employee. Beyond salaries, hiring expenses include recruiting, training, and benefits. Businesses invested over $92 billion in training from 2020 to 2021. Onboarding demands significant time and financial resources, potentially taking six months to recoup the investment. Benefits should reflect overall investment needs, not just salary with an estimated training cost of $3,500 per new employee (52). Beyond salaries, hiring expenses include recruiting, training, and benefits. Businesses invested over $92 billion in training from 2020 to 2021. Given these costs, prioritizing retention and development of skilled employees is essential for a company's strategic plan (53).

Considering the pivotal role that skilled employees play in sustaining competitive advantage in today's knowledge-driven economy, their retention and development should be integral to a company's strategic plan. Investing in their growth boosts productivity and innovation, helping the organization navigate competitive challenges. Effective retention strategies include career development programs, recognition, and supportive work culture (54). Continuous skill enhancement and leadership development prepare employees for current and future demands, ensuring long-term success through a loyal and competent workforce.

2.4.1 Identifying Skill Gaps in the Industry

In the fast-evolving landscape of the freight forwarding industry, identifying and addressing skill gaps is crucial for maintaining competitive advantage and operational excellence. By examining industry-specific demands, technological advancements, and shifts in global trade patterns, we aim to outline the key areas where skills are lacking and propose strategies to bridge these gaps effectively. Understanding these dynamics is essential for developing targeted training programs. Through this analysis, companies can better prepare their workforce to meet the challenges of a rapidly changing market environment.

The logistics sector, including freight forwarding, is experiencing significant skill shortages across various roles. The skill gaps are attributed to a combination of factors including the rapid pace of technological advancements, educational mismatches where training programs do not align with industry needs, and demographic shifts like an aging workforce. These shortages impact operational efficiency and the ability to meet customer demands effectively. Companies are forced to increase wages and employ other measures to attract and retain staff, further elevating operational costs. In response to these challenges, the industry has seen initiatives such as Logistics UK's electric vehicle (EV) training courses to bridge the skill gaps. There is also significant advocacy for government support in facilitating more such training programs. The sector has proactively engaged with government entities to ensure that logistics and freight forwarding concerns are addressed in policymaking. This includes reforms in apprenticeship levies and other funding models to support training in the industry (55).

Globally, there is a shortage of logistics skills, more severe in developing countries, particularly at the managerial level. This mismatch affects both developed and developing regions, but developing countries struggle more with filling managerial and technical roles. Developed countries have more resources to manage these gaps. These shortages reduce logistics efficiency, increase operational costs, and lower service quality (56).

Some of the skill gaps that are often observed: 1. lack of advanced knowledge in logistics planning, inventory management, and supply chain optimization, 2. inability to analyze and interpret data for decision-making, (57) 3. difficulty in understanding complex customs regulations, compliance, international trade laws, export-import regulations, (58) 4. problem in communication, both written and verbal, especially with international clients and stakeholders,

(59) 5. inability to solve complex logistics problems and think critically about operational challenges (60).

Building on the foundation of identifying and addressing skill gaps through tailored training and recruitment, it is equally important to consider the interpersonal dynamics within the workforce. Aligning personality traits with job roles enhances individual and organizational performance, fostering a more adaptive and resilient workforce. Traits like conscientiousness and extraversion are vital; conscientious employees ensure accuracy and efficiency, while extraverted individuals excel in client management and sales. Mismatches, such as individuals high in neuroticism in high-stress roles, can lead to performance issues and higher turnover rates. By incorporating personality assessments, companies can enhance job satisfaction, reduce turnover, and optimize performance. This holistic approach to recruitment and management not only addresses skill gaps but also supports a competitive, efficient, and resilient workforce. Integrating these strategies ultimately leads to improved individual and organizational outcomes in the freight forwarding industry (61).

Implementing flexible work strategies in the freight forwarding sector attracts and retains top talent by offering a better work-life balance. Options like remote work, flextime, and compressed workweeks enhance job satisfaction and employee well-being, allowing greater control over schedules and locations. Flexible arrangements reduce work-family conflict and commuting stress, leading to higher job satisfaction and loyalty. During disruptions, such as the global pandemic, companies with flexible practices maintained operations with minimal disruption. Thus, flexible work arrangements are essential strategies for fostering a resilient, satisfied, and committed workforce in the fast-paced and unpredictable freight forwarding industry (62).

Many companies use stock options to attract top talent, offering a persuasive incentive alongside a high base salary. Stock options reduce the employer's initial financial outlay and promise substantial future profits for employees. Linking stock options to performance can also boost productivity, as employees work harder to increase their earnings (63).

Finally, employee satisfaction and development are boosted by perceptions of Corporate Social Responsibility (CSR) activities, which correlate with job satisfaction, trust, and commitment. Key factors include economic, legal, ethical, philanthropic, and labor responsibilities. Aligning CSR efforts with employees' values enhances satisfaction and engagement. Keeping employees

informed about CSR strategies and integrating these with professional development ensures they feel valued. Continuous feedback helps adjust CSR policies to meet employee needs better (64).
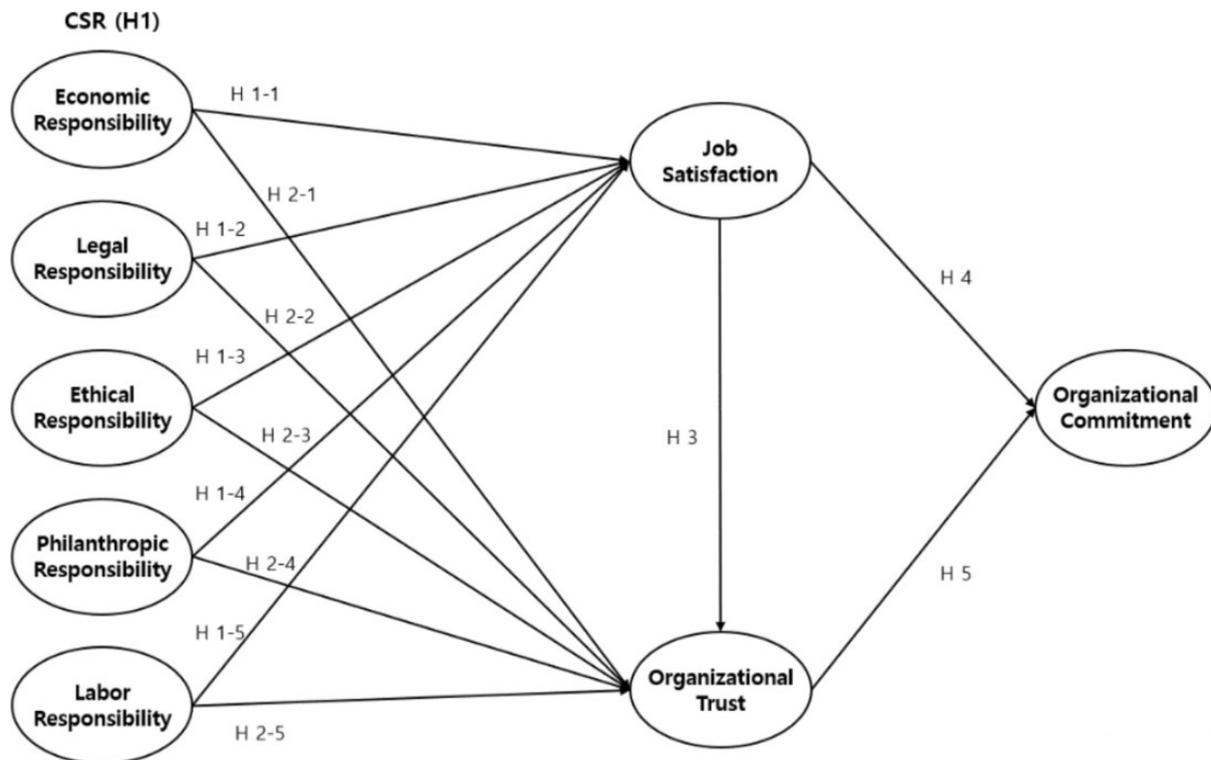
Image 2 : The effect of corporate social responsibility recognition on organisational commitment in global freight forwarders

The findings revealed that talent development is the most effective factor affecting employee engagement, differing from previous studies that highlighted talent acquisition as the most crucial. This research underscores the necessity of focusing on talent development practices to enhance employee engagement, suggesting that organizations should invest in training and career development opportunities to align employee goals with organizational objectives, thus fostering a more engaged and productive workforce (65).

3. Training and Development Initiatives for Freight Forwarding Professionals

3.1 Technological Advancements and Their Impact on Training Needs

3.1.1 Blockchain Technology

Blockchain technology, initially known for Bitcoin, is a decentralized platform that enhances transaction efficiency, transparency, and reliability by eliminating intermediaries. It supports multi-stakeholder business models requiring trust and transparency, improving supply chain processes in freight forwarding. Blockchain optimizes tracking, process coordination, and stakeholder information sharing, digitizes collaboration tools and payments, and reduces trade disputes and unforeseen costs (66). Blockchain technology enhances trade opportunities by providing access to services and infrastructure, reducing data discrepancies and disputes from paperwork errors (67). It ensures transparent, efficient, and secure transactions through smart contracts and decentralized encryption, reducing cyberattack risks and boosting supply chain efficiency (68). Future research will focus on integrating blockchain with supply chain management and digital innovations.

Prominent shipping companies MSC and MAERSK are enhancing blockchain technology in their operations. MSC uses WAVE's electronic Bill of Lading (eBl), digitizing the traditional process for faster and more secure transactions (69). As a Digital Container Shipping Association member, MSC supports developing open-source eBL standards, potentially saving the industry over $4 billion annually by 2030 (70). MAERSK's TradeLens platform (71) developed with IBM, enhances supply chain visibility and data sharing, involving over 175 organizations and significantly reducing document processing times (72).

Despite its benefits, blockchain implementation faces significant challenges. Effective integration requires identifying the industry sector, outlining supplier resources, and targeting specific countries. Establishing user connections and managing network access keys are crucial. Security considerations include deciding on blockchain infrastructure and private network management. Handling smart contracts necessitates choosing a proof method, such as Proof of Work (PoW), Proof of Stake (PoS), or Proof of Authority (PoA). Defining digital identities, supporting smart contracts, peer-to-peer networking, and managing digital ownership are essential. Additionally, scalability and governance of smart contracts must be strategically managed (73).

Integrating blockchain in logistics can enhance efficiency, reduce costs, and increase transparency. Companies should focus on digital solutions like eBL and prioritize employee training to ensure smooth adoption and optimal use of these advanced systems.

3.1.2 Integrating Artificial intelligence (AI)

Integrating artificial intelligence (AI) into logistics has significantly enhanced decision-making and operational efficiency. The labor shortage in the supply chain and especially in Freight Forwarding, poor data communication - often failing to refresh their performance data or distribute it timely across managers, supply chain models that can not properly reflect potential developments within supply chain operations or consider the issues affecting the industry (74), are the main reasons that traditional supply chain management solutions need an AI upgrade.

AI technologies are transforming the supply chain by optimizing operations, improving service delivery, and enhancing logistics management. AI-driven predictive analytics help logistics companies forecast demand, optimize inventory, and plan workforce needs. AI algorithms determine optimal routes and delivery schedules, reducing fuel consumption and ensuring efficient deliveries. AI systems automate document processing using Optical Character Recognition (OCR) and Natural Language Processing (NLP), speeding up data entry, reducing errors, and streamlining workflows for significant time and cost savings. This technological shift drives traditional FF to adopt digital solutions, offering real-time shipment visibility and end-to-end solutions through AI and data analytics. Efficient shipment planning, powered by AI, optimizes routes and transportation modes, enhancing customer satisfaction and loyalty by reducing transit times, lowering costs, and ensuring reliable deliveries.

AI technologies in Freight Forwarding present challenges and considerations such as data privacy and security, requiring compliance with regulations like GDPR and employing encryption and access controls. Regular audits are essential to identify vulnerabilities. Ethically, AI can perpetuate biases, necessitating unbiased data and transparency. Implementing AI may require workforce upskilling to adapt to new roles and technologies, ensuring operational efficiency (75). Developing AI-specific standards, sharing knowledge among organizations, and fostering partnerships between academia and industry can ensure responsible AI practices in logistics, (76) building stakeholder trust and aligning with societal values (77).

Organizations should invest in comprehensive training for employees to effectively collaborate with AI systems, covering data analysis, algorithms, and interpreting AI insights. This enhances productivity and decision-making. Encouraging continuous learning and providing ongoing support are crucial for successful AI implementation.

3.1.3 Internet of Things (IoT) in Freight Forwarding

Digitalization aims to create a new information society that is managed by information and communication technologies. This transformation is characterized by data exchange, automation, cyber-physical systems, IoT, cloud computing, unmanned vehicles, and 3D printing. IoT facilitates innovations like drone delivery, robots, and unmanned vehicles in logistics, enhancing production planning, resource allocation, and cost reduction. The concept of IoT, integrates objects into a network that communicates in real-time without human intervention, utilizing technologies like wireless communications and microelectronics. Despite its potential, IoT faces challenges such as the lack of standardization and security concerns. However, IoT's application in logistics, from warehouse operations to final deliveries, significantly improves production efficiency, customer service, and safety by enabling real-time tracking, automation, and data analysis. For instance, companies like Amazon use IoT to automate warehouse management, reducing human error and enhancing supply chain efficiency (78). Implementing drones in the logistics chain is becoming a priority for major companies like Google, Amazon, and DHL, which are developing and testing their Unmanned Aerial Vehicles (UAVs). Walmart also plans to use drones in logistics centers to enhance inventory management by capturing up to 30 photos per second. This use of UAVs, integrated with the Internet of Things, aims to significantly reduce warehouse workers' time on inventory processes minimize human errors, and contribute to optimal decision-making. Enhancing the understanding of the problem and improving the system under investigation (79). Additionally, IoT, once integrated with cloud computing systems, can help minimize risks in operations and support decision systems in predicting future needs. (80)

A notable case study in this context involves logistics companies developing simulation-based training tools. These tools utilize IoT data to create realistic training scenarios, enabling employees to gain hands-on experience in managing IoT-enhanced logistics operations. This approach improves employees' technical skills and enhances their ability to respond to real-world challenges efficiently.

IoT faces several challenges, including security and privacy issues from numerous connected devices, leading to unauthorized data access and cyberattacks. Integrating cross-functional systems and legacy infrastructures poses compatibility issues. Managing heterogeneous devices from various suppliers is complicated by a lack of unified standards. High initial investments in infrastructure and skilled personnel are significant barriers. Additionally, scalable infrastructure is needed to handle increased data and processing complexity, and continuous data transmission by IoT sensors raises electricity demand and power consumption challenges (81). In any case, IoT is an important tool that with continuous organizational support, training, collaborations, and a set of specific regulations can be valuable for the future.

3.1.4 VR, AR, Mobile Learning Platforms etc.

The integration of Virtual Reality (VR), Augmented Reality (AR), and mobile learning platforms is increasingly transforming the logistics and freight forwarding industry. These technologies are being used to enhance training, operational efficiency, and overall user experience.

VR and AR technologies are being leveraged to create immersive training environments for logistics professionals. These technologies enable employees to engage in realistic simulations, which help them grasp complex logistics processes and scenarios without the risk associated with real-world training. (82) For instance, AR can overlay digital information onto physical warehouse environments, assisting workers with inventory management and navigation. VR, on the other hand, can simulate various operational scenarios, such as cargo handling and equipment operation, providing hands-on experience in a controlled setting. This approach significantly improves knowledge retention and operational readiness (83).

Mobile learning platforms offer flexible, on-the-go training essential for the fast-paced logistics industry. They provide access to training modules, videos, and real-time updates, promoting continuous learning and upskilling. These platforms ensure employees stay competent with advanced technologies like IoT and AI, fostering an interactive learning environment and enhancing operational efficiency in freight forwarding.

3.2 Developing Soft Skills for Enhanced Interpersonal Dynamics

Soft skills, such as communication, teamwork, problem-solving, and leadership, are essential in freight forwarding for smooth operations and effective organizational dynamics. Unlike hard skills, soft skills are interpersonal and broadly applicable. Intense competition for skilled personnel highlights the increasing value of these attributes in attracting and retaining talent (84).

Employers typically hire individuals for job openings based on the required skill level for each position, traditionally emphasizing hard skills. These technical abilities are easier to evaluate quickly. However, as businesses navigate an evolving competitive landscape, the necessary employee skill sets are also shifting. In today's environment, characterized by rapid technological advancements (85) and global interactions, employees must possess strong interpersonal communication skills to collaborate effectively with diverse teams. The workforce now includes a blend of individuals from various age groups, including those nearing retirement, and people from different ethnicities and genders. This generational diversity has heightened the demand for soft skills, which are essential for fostering understanding and teamwork among employees. (86) Considering the diverse and intricate nature of the required skills and logistics and supply chain management (LSCM) functions, coupled with an increasing shortage of LSCM talent, institutes, and education providers have begun to focus on soft skills and lifelong learning (87).

As organizations strive to navigate complex and fast-paced markets, the emphasis on soft skills has grown significantly, highlighting their essential role in enhancing team dynamics and overall organizational performance (88). Unlike hard skills, which are technical and specific to certain tasks, soft skills encompass a range of personal attributes and interpersonal abilities that enable individuals to communicate, collaborate, and lead within a team effectively. The most important soft skills in Freight Forwarding are communication skills, teamwork and collaboration (89), problem-solving and critical thinking, relationship management (90), adaptability, leadership, knowledge of the market, analytical skills, negotiation, time management, and understanding cultural diversity.

Communication skills, the most well-known and desired soft skill, are crucial in freight forwarding for effective interactions with customers, stakeholders, and colleagues. These skills

encompass verbal and written communication, active listening, and conveying complex information clearly, especially in English. Freight forwarders must listen attentively, ask appropriate questions, and respond thoughtfully. Effective communication improves coordination with organizations like trucking companies and steamship lines, aiding in international and domestic freight movements. It is essential for negotiating contracts and transportation costs and maintaining client updates throughout shipments. Accurate writing skills are vital for preparing precise and professional documents, including arrival notices, delivery orders, invoices, and compliance documentation (91).

Teamwork and collaboration are essential soft skills in logistics, involving multiple stakeholders like suppliers, transporters, and customers. The diverse cultural backgrounds of team members pose challenges, but fostering team spirit unifies the group, enabling efficient coordination and swift goal attainment, which is crucial for smooth operations (92).

Problem-solving and critical thinking are crucial for freight forwarding, requiring immediate solutions to daily challenges, often across different countries and time zones These skills ensure smooth operations, maintain supply chain efficiency, and aid strategic decision-making, making logistics processes resilient and adaptable (93).

Relationship management in logistics involves strategically developing and maintaining partnerships with suppliers, clients, and stakeholders. It fosters trust and cooperation, improving coordination and efficiency. Effective relationship management helps manage risks, resolve conflicts, and seize growth opportunities, relying on strong interpersonal and communication skills for long-term success (94).

Adaptability is crucial in freight forwarding, enabling professionals to swiftly respond to new regulations, market fluctuations, and supply chain disruptions. This skill enhances operational performance, customer satisfaction, and efficient freight movements, ensuring success in the dynamic and unpredictable logistics industry (95).

Leadership in logistics combines technical expertise and strong interpersonal skills to drive organizational success. Effective leaders inspire teams, make strategic decisions, foster collaboration, and focus on continuous improvement. They optimize processes, manage resources, mitigate risks, and develop talent to adapt to industry demands, ensuring ongoing success (96).

Market knowledge is crucial for FF, encompassing current trends, regulations, and economic conditions. Staying informed about trade policies, fuel prices, and technological advancements enables them to anticipate disruptions, optimize routes, and negotiate better terms. This expertise enhances service quality, fosters long-term partnerships, and maintains competitive advantage in global trade. (97)

Negotiation skills enable freight forwarders to secure favorable terms with carriers and clients. Effective negotiation involves understanding needs, market knowledge, and strategic communication, fostering beneficial agreements, mitigating conflicts, and enhancing company reputation and reliability. (98)

Time management is crucial for FF to coordinate shipments across time zones and meet strict deadlines, ensuring seamless logistics operations and effective client communications. (99) Meticulous planning and organization are required to synchronize activities between countries, preventing delays and ensuring timely shipments. By prioritizing tasks, setting clear timelines, and utilizing time management tools, FF optimize workflows and enhance operational efficiency (100). This skill helps avoid costly penalties, maintain customer satisfaction, and ensure all parties are aligned for smooth, timely transportation processes.

Understanding cultural diversity is crucial for FF to navigate international trade complexities effectively (101). This involves recognizing and respecting different cultural norms and practices, allowing them to tailor communication and operational strategies to build stronger relationships and avoid misunderstandings, ensuring smooth logistics operations (102).

Organizations should invest in training programs to develop soft skills through workshops, seminars, and role-playing exercises. These programs enhance interpersonal skills like empathy, respect, and reliability, crucial for building strong relationships with colleagues and stakeholders. Trust, the cornerstone of successful teams, enhances communication, fosters cooperation, and promotes shared responsibility in logistics (103). When trust is present, team members openly share information, support each other, and commit to common goals, increasing efficiency and effectiveness. Trust encourages initiative, and innovation, and reduces fear of judgment while strengthening resilience to navigate challenges and disruptions confidently (104). Additionally, conflict resolution training fosters effective communication, empathy, and problem-solving, strengthening relationships (105), promoting a harmonious workplace, improving teamwork, and boosting productivity by addressing underlying issues

(106). Finally, providing training in soft skills, mentorship, and coaching enhances employees' emotional intelligence, helping logistics professionals navigate workplace complexities, leading to improved teamwork and better customer relations (107).

As logistics operations become more complex and customer service more emphasized, investing in both hard and soft skills training is crucial for organizations to gain a competitive advantage and address skill shortages, ensuring workforce retention and operational efficiency.

3.3 Evaluating the Effectiveness of Training Programs

Evaluating training programs offers valuable insights into their strengths and weaknesses, helping to identify which participants gained the most and the least from the training. This evaluation also assists in determining the financial benefits and costs associated with the program, enabling a comparison of different programs' cost-effectiveness. By examining the outcomes, the effectiveness of the training can be assessed, ensuring that these outcomes align with the program's objectives. Training outcomes can be classified into cognitive outcomes, skill-based outcomes, affective outcomes, results, and return on investment (ROI) (108). These categories provide a comprehensive framework for assessing the impact and value of the training program. Selecting the correct measure for evaluation depends on training objectives (109).

Different evaluation designs can be applied to training programs. A basic key metric for evaluation is assessing whether participants have acquired the intended knowledge and skills is a fundamental step. Pre- and post-training assessments, quizzes, and practical demonstrations can measure this. This kind of evaluation design is usually more costly and time-consuming; however, it is considered reliable to use the results and make decisions (110).

Evaluating training's impact on operational efficiency and productivity is crucial. Key performance indicators (KPIs) like order accuracy, delivery times, and customer satisfaction provide quantifiable data to assess training effectiveness. Monitoring these metrics before and after training shows the integration of new skills. Improved order accuracy, faster delivery times, and increased customer satisfaction reflect training benefits (111). These metrics provide a comprehensive view of training's effectiveness in boosting operational performance.

Determining the financial benefits of training programs is crucial for many companies. Calculating the Return on Investment (ROI) measures the financial return for every dollar

invested in training, indicating the value gained. ROI compares training costs, including expenditures and time, against benefits like improved employee performance and reduced error rates. A positive ROI signifies successful training that enhances operational efficiency and contributes to organizational goals (112). To accurately measure ROI, organizations can employ various metrics, such as increased productivity, enhanced quality of work, and lower turnover rates (113). These metrics help understand whether the training investments yield profitable returns, justifying further investments in employee development programs.

To ensure the effectiveness of training programs, evaluating them using several best practices is crucial (114). Aligning training with business goals is essential; this ensures that the skills developed through training directly contribute to the organization's strategic objectives, enhancing relevance and impact (115). Continuous improvement requires regularly updating training content based on feedback and performance data. Engaging stakeholders, like managers and team leaders, in evaluations provides insights into training effectiveness and suggests areas for further development by observing employee performance changes (116). Finally, utilizing technology, such as learning management systems (LMS) and data analytics tools, can streamline the evaluation process by automating the collection and analysis of data, making it easier to track training outcomes and identify trends. This approach helps organizations maintain high standards in their training programs and continuously adapt to new challenges and opportunities.

Evaluating training effectiveness is crucial in logistics and supply chain management. Using diverse evaluation methods and best practices ensures training enhances employee skills and contributes to business success. Continuous improvement of training programs helps organizations maintain a competitive edge in a dynamic industry.

3.4 The Role of Leadership in Promoting Continuous Learning

Continuous learning is vital for competitive advantage and efficiency in logistics. Effective leaders foster ongoing education by encouraging lifelong learning and providing resources and support. This ensures teams remain adaptable and capable of meeting the industry's evolving demands.

Here are some leadership strategies that can encourage lifelong learning :

- Creating a learning culture involves leaders demonstrating a commitment to personal and professional development, encouraging curiosity, and rewarding continuous improvement, thereby inspiring teams to pursue learning.

- Aligning training with business goals ensures relevance and enhances employee motivation and performance.

- Mentorship and peer learning programs enable experienced employees to guide newer colleagues, fostering knowledge sharing. Integrating learning with daily work through regular training sessions and industry conferences aligns education with job responsibilities, highlighting its immediate benefits (117).

- Promoting a growth mindset emphasizes embracing challenges (118) and learning from failures (119).

- Leveraging technology, such as learning management systems and data analytics tools, streamlines evaluation by automating data collection and analysis, making it easier to track training outcomes and identify trends (120).

Ultimately, leadership plays a crucial role in promoting continuous learning by setting the tone for a learning culture, aligning training with business objectives, fostering mentorship, integrating learning into daily activities, promoting a growth mindset, and leveraging technology. Effective leaders ensure their teams remain competitive and adaptable.

3.5 Regulatory Compliance and Ethical Training

In today's complex business environment, regulatory compliance and ethical training are crucial for corporate governance and risk management. These programs ensure employees adhere to legal and ethical standards, fostering accountability, transparency, and ethical decision-making, essential for sustaining long-term success and stakeholder trust (121).

Training employees on regulatory compliance helps protect the organization from legal risks and penalties. Understanding and following industry regulations ensures that the company operates within the law, avoiding fines, sanctions, and potential lawsuits (122). Also, ethical training promotes integrity and transparency, enhancing an organization's reputation and building trust with stakeholders (123). It increases employee satisfaction, morale, and retention,

while compliance with regulations and best practices improves operational efficiency, leading to long-term business success.

In the freight forwarding industry, regulatory compliance involves adhering to trade, customs, transportation safety, and environmental laws, while ethical training instills values like honesty and fairness. Together, they ensure legal compliance, streamline operations for efficiency, build trust and reputation with stakeholders, and mitigate risks by addressing potential compliance issues early (124).

For both regulatory compliances and ethical standards, the best-implementing practices are considered of course: 1. Corporate responsibility: Large multinationals should invest in comprehensive compliance and ethics training for all workforce levels. Smaller logistics companies can benefit from industry-wide initiatives supported by larger firms, ensuring widespread dissemination of best practices and training resources (125). 2. Code of Conduct: Develop a comprehensive code of conduct that outlines the ethical standards and expectations for all employees. This document should be easily accessible and regularly referenced in training sessions. 3. Training programs: Develop detailed training programs covering all relevant regulations, including international trade laws, customs procedures, transportation safety standards, and environmental regulations. These programs should be updated regularly to reflect changes in legislation. 4. Leadership Involvement: Ensure that senior management and leaders actively participate in and endorse ethical training programs. Their involvement underscores the importance of ethics in the company culture. 5. Recognition and Rewards: Recognize and reward exemplary ethical behavior to reinforce its importance and motivate others. Thorough onboarding compliance and ethics training, coupled with recognition, boosts employee engagement and commitment to organizational standards.6. Governments can play a crucial role by setting competence standards and relaxing certain regulations that might hinder training initiatives. For example, adjusting visa quotas can facilitate the admission of international logistics trainers.

Implementing effective regulatory compliance and ethical training programs is essential for the freight forwarding industry. By adopting best practices, companies can enhance their operational efficiency, reduce risks, and build a culture of integrity and compliance. This not only benefits the organization but also contributes to the overall trust and reliability of the global supply chain.

3.6 Strategic Alignment of Training with Business Goals

Aligning training programs with business goals maximizes their impact on organizational performance, enhances employee productivity, and fosters continuous improvement (126). This approach equips the workforce with relevant skills to tackle challenges and seize opportunities, ensuring sustained business success and maximizing ROI, especially for logistics staff (127).

Effective training programs require collaboration between companies, educational institutions, and professional associations to ensure relevant, up-to-date content. Multi-national corporations can support industry-wide initiatives, benefiting smaller firms and elevating industry standards. According to Michael E. Porter, such collaboration is crucial for creating shared value and driving industry innovation (128). Additionally, collaborative networks between organizations and academic institutions can significantly enhance the quality of training programs, making them more aligned with current and future business needs (129). By pooling resources and expertise, stakeholders can create a more skilled workforce, fostering a competitive and efficient industry landscape.

Key strategies for effective training programs include regular assessments, external training expertise, and blended learning approaches. Conducting thorough needs assessments identifies specific skills gaps, ensuring resources are effectively utilized to improve efficiency and achieve business goals (130). Companies should update training programs to reflect evolving needs, leveraging external trainers, industry experts, and partnerships with universities. Blended learning combines classroom, online, and experiential methods for flexible, real-world skill application (131).

By strategically aligning training initiatives with business goals, freight forwarding and logistics companies can prepare their workforce for current and future challenges. Establishing metrics to evaluate training effectiveness, including qualitative and quantitative measures, and gathering regular feedback, ensures continuous improvement and alignment with strategic objectives and industry needs.

4. Quantitative Research Approach

4.1 Quantitative Research Scope and Objectives

In this chapter, we delve into the methodological approach adopted for this research, focusing on the quantitative survey conducted within a medium Freight Forwarding company in Greece. The primary aim was to explore the correlation and impact of employee skills and training programs on operational efficiency and performance.

The quantitative method was selected for this survey due to its ability to allow for objective measurement and statistical analysis of data, providing a clear, numerical representation of results. This objectivity reduces biases and enhances the reliability and validity of the findings (132). The use of statistical tools to analyze data helps in identifying patterns, relationships, and trends, which is particularly useful in understanding the extent to which certain factors influence outcomes (133). Additionally, the replicability of quantitative studies by other researchers, a fundamental aspect of scientific research, adds to the credibility of the findings (134).

Furthermore, quantitative methods enable the collection of a wide range of data, including demographic information, attitudes, behaviors, and opinions (135). This comprehensive approach provides a holistic view of the factors affecting operational efficiency in freight forwarding and logistics (136). By encompassing a broad spectrum of data, these methods ensure a detailed and nuanced understanding of the research questions.

In the context of optimizing human resources management in a medium-sized freight forwarding company, quantitative research offers several distinct advantages over qualitative research. Quantitative research relies on numerical data, which can be objectively measured and statistically analyzed. For a freight forwarding company, this means that HR decisions can be based on concrete data rather than subjective opinions. Quantitative data allows for precise measurement and comparison across different variables, such as employee performance, job satisfaction, and turnover rates. This precision facilitates the identification of specific factors that impact operational efficiency and performance. Additionally, among other tools survey was preferred as a method, due to quick and cost-effective data collection. Also, the flexibility offered by this survey was the most suitable tool for this kind of profession, as freight forwarders have demanding schedules and it would be very difficult to arrange personal

interviews. Finally, Surveys can be designed to ensure respondent anonymity, which can encourage more honest and candid responses, especially on sensitive topics (137).

The survey collected demographic data -from a high successful Freight Forwarding company in Greece,- including age, education, industry experience, and job roles, to understand workforce composition and its impact on operational efficiency. This data contextualizes findings, accounting for variations in employee backgrounds. It enables nuanced analysis of training programs' effects across workforce segments and ensures sample representativeness for generalizing results to the broader industry

Demographics (sections 1 to 5)

Age Groups: The majority of respondents were aged 26-32 (37,8%) and 33-40 (44,4%), with smaller groups aged 18-25 (13,3%) and other age ranges.

Education Levels: Most respondents hold a Master's degree or Bachelor's

Role Rank: The respondents predominantly hold senior-middle-level positions (60%), indicating that insights are from experienced professionals.

1.What age group do you belong to?
45 απαντήσεις

Legend:
- 18-25
- 26-32
- 33-40
- 40
- 52
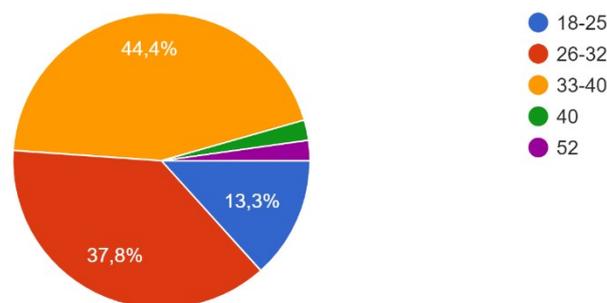
3.How would you rank your role in your company?

45 απαντήσεις

- Junior-Entry Level
- Senior-Middle Level
- Management-Executive Role
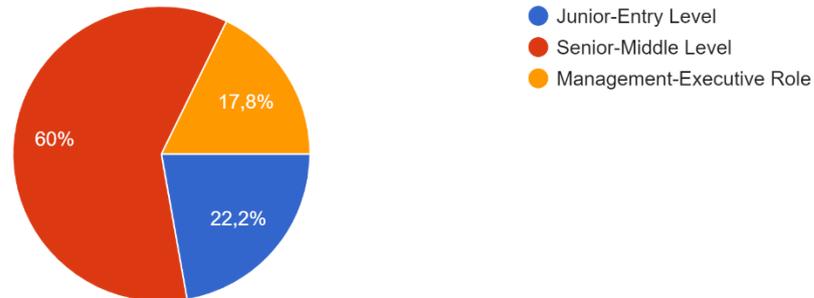
Table for Age

Age Group	Count	Percentage
18-25	6	13,3%
26-32	17	37,8%
33-40	20	44,4%
40	1	2,2%
52	1	2,2%

Table for Education

Education	Count	Percentage
Bachelor's Degree	21	47,6%
Graduate of Private educational Institution	1	2,2%
Master's Degree	23	51,1%

Table for Role in Company

Role	Count	Percentage
Junior-Entry Level	10	22,2%
Senior-Middle Level	27	60 %
Management-Executive Role	8	17,8%

Table of years of Experience in FF

Years of Experience	Count	Percentage
Less than a year	6	13,3%
1-5 years	23	51,1%
6-10 years	13	28,9%
more than 10 years	2	4,4%
25	1	2,2%

Table of experience in different FF companies

Experience in different FF companies	Count	Percentage
1 (Only in 1 FF company)	33	71,1%
2	14	15,6%
3	5	13,3%

The demographic trends reveal significant insights into HR management practices. Younger employees predominantly occupy senior and middle-level positions, and few employees are over 40. This distribution reflects the demanding nature of the profession, requiring high vigilance, attention to detail, and quick response to challenges. Younger professionals are likely better suited to handle extended hours and continuous alertness, bringing fresh perspectives and innovative problem-solving approaches. Most respondents 51,1% have 1-5 years of industry experience, and 71.1% have only worked for one company, indicating a stable workforce. This stability suggests employee loyalty but highlights the need for effective onboarding and training programs to quickly equip new employees with essential skills.

 This methodological approach aligns with the study's objectives, ensuring robust, reliable findings applicable to the broader industry, and contributing valuable insights into the role of employee skills and training in enhancing operational performance.

4.2 Case Study in Marine Logistic and Freight Forwarding Company

Selecting an appropriate focal organization for in-depth quantitative research within the complex industry of Freight Forwarding is a crucial decision that significantly impacts the research's comprehensiveness and pertinence. The selected company serves as the primary

entity for investigating improvements in HRM practices related to skilled workforce and operational efficiency. (138)

The scope of this quantitative research is centered around a highly successful company in the Freight Forwarding industry, which has shown remarkable growth and innovation over its 11 years of existence in Greece. Starting with a modest workforce of 10, the company has expanded to employ 150 individuals, with 100 dedicated to FF and the remaining 50 occupying various administrative roles such as accounting, reception, HR, and personal assistance. This impressive growth trajectory places the company among the top five well-known FF in the region and has earned it a reputation as one of the best workplaces in the industry, according to personal observations.

A key factor in the company's success is its innovative web-based maritime platform, allowing customers to manage orders, track shipments, and generate reports, surpassing competitors' outdated methods. Additionally, the company's 15-day intensive training program for new hires focuses on software tools, freight forwarding basics, customs regulations, and client communication, reducing the need for basic training later. This commitment to operational excellence and employee development makes the company an ideal case study for examining the impact of employee skills and training programs on operational efficiency and performance, highlighting HRM's role in enhancing organizational performance in the freight forwarding industry. The company's commitment to efficiency, sustainability, and customer-centric excellence aligns with the research objectives. (139).

4.3 Application, Process, Ethical Issues and Barriers

In this study, a quantitative method is employed to explore the impact of employee skills and training programs on operational efficiency and performance within the freight forwarding industry. The questionnaire was developed based on existing literature to ensure it covered all relevant aspects of human resources management in freight forwarding. It was tested with individuals outside the company to ensure clarity and comprehensibility before being administered to the target population.

The process involves designing a detailed questionnaire to capture various aspects of employee skills, training programs, and their perceived impact on operational efficiency. The

questionnaire includes demographic questions, Likert scale items to measure attitudes and perceptions, (140), and open-ended questions for qualitative insights. (141) The survey has been distributed to 100 FF within the company resulting in 45 responses. It was open for 20 days. The distribution was primarily conducted through company emails. However, to increase participation, reminders were sent, and direct messages were also utilized via professional networks like LinkedIn. Interestingly, the response rate from personal emails was higher than that from formal company emails, highlighting the importance of personalized and friendly communication in encouraging participation

Ethical considerations are paramount in conducting this research. Informed consent was obtained from all participants, ensuring that they are fully aware of the study's purpose, procedures, and their right to withdraw at any time. Confidentiality and anonymity of respondents will be maintained to protect their privacy. Data were stored securely, and only aggregated results will be reported to prevent the identification of individual respondents.(142) Additionally, the research will adhere to ethical guidelines set forth by institutional review boards and professional associations.

Several barriers may be encountered during the research process. One potential barrier is the reluctance of employees to participate due to time constraints or fear of repercussions. To mitigate this, the importance of the research will be communicated clearly, emphasizing confidentiality and the voluntary nature of participation. Another barrier is the potential for response bias, where participants may provide socially desirable answers. This was addressed by ensuring anonymity and encouraging honest responses.

By addressing these applications, processes, ethical issues, validity concerns, and barriers, this study aims to provide robust and reliable insights into the impact of employee skills and training programs on operational efficiency in the freight forwarding industry.

4.4 Validity and Reliability Test of the Questionnaire

Ensuring the validity of the research is crucial. Content validity will be established through a thorough literature review and consultation with experts to ensure the questionnaire comprehensively covers all relevant aspects of employee skills and training. Construct validity will be verified by using established scales and measures where possible. (143). Pilot testing

the questionnaire with a small sample will help refine questions and improve clarity, ensuring that the instrument accurately captures the intended constructs (144).

Cronbach's alpha is a measure of internal consistency, indicating how closely related a set of items are as a group. It is considered a measure of scale reliability. Here are the steps to conduct a Cronbach's alpha validity test in our Questionnaire :

Cronbach's Alpha Formula:

$$\alpha = \frac{k}{k-1}\left(1 - \frac{\sum \sigma_i^2}{\sigma_{total}^2}\right)$$

	Variance of each item
Customer Service	0.79
Logistics and Supply Chain	0.96
Time Management	1.02
Customs Regulations	1.29
Technology Tools	0.79
Real-World Scenarios	0.65
Satisfaction with Training	1.05
Effectiveness of Training	0.7
Total Variance	16.5

Applying the formula

(k)=8

a=0.71 which is acceptable (145).

This result indicates a good level of internal consistency among the survey items (146).

5 Analysis of Findings

5.1 In-depth Analysis of Survey Results

This chapter examines the impact of employee skills and training programs on operational efficiency and performance through an analysis of questionnaire data. The questionnaires gather demographic information (as presented in subchapter 4.1), assess experience and skills, evaluate training programs, and understand expectations for personal development. This

comprehensive analysis provides insights into how competencies and training initiatives influence organizational performance outcomes.

Demographics (sections 1 to 5)

Age Groups: The majority of respondents were aged 26-32 (37,8%) and 33-40 (44,4%), with smaller groups aged 18-25 (13,3%) and other age ranges.

Education Levels: Most respondents hold a Master's degree or Bachelor's

Role Rank: The respondents predominantly hold senior-middle-level positions (60%), indicating that insights are from experienced professionals.

Skills Impact (section 6)

Attention to Detail, Communication Skills, and Problem-Solving are highlighted as critical skills that positively impact the freight forwarding industry. This suggests a need for meticulousness and effective communication in daily operations

6. In your oponion,which skill has the most positive impact on the Freight forwarding industry?
45 απαντήσεις
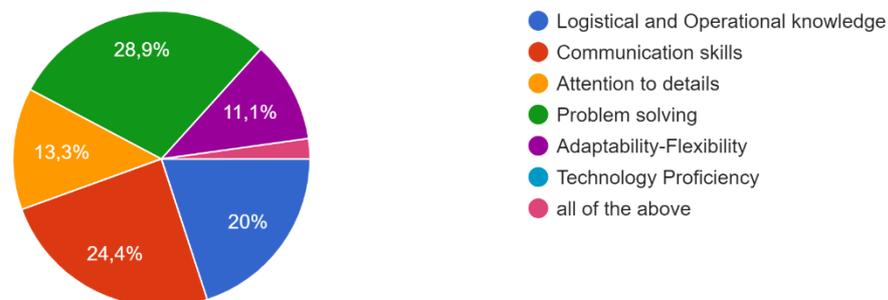
Both employees and the company share the same perspective regarding the essential skills for success in the workplace. Employees believe that attention to detail, communication skills, and problem-solving are the most important skills. This aligns closely with the company's job advertisements, which specify the following required skills: teamwork and collaboration, excellent verbal and written communication, organizational skills with initiative, strong attention to detail, the ability to prioritize in a complex, fast-paced environment, a hands-on approach with a can-do attitude, excellent problem-solving abilities, and a sense of accuracy and responsibility (147). By comparing these perspectives, it is evident that employees and

employers agree on the critical skills needed, indicating a shared understanding of what is required to excel in their roles.

Employee skill proficiency (sections 7 to 11)

The survey responses reveal a diverse range of proficiencies across key areas critical to the freight forwarding industry. Proficiency in customer service and relationship management (Section 7) was generally rated as moderate to high (33,3% rated with 3 out of 5 and 20% rated with 4 out of 5), indicating that while employees are fairly skilled in this area, there is potential for improvement. This contrasts with the high proficiency ratings in logistics and supply chain management (Section 8), where most respondents scored themselves a 4 out of 5 (**46,7%**), reflecting a robust capability in handling logistics operations, a cornerstone of the freight forwarding business. In terms of organizational and time-management skills (Section 9), responses showed more variability, with ratings often between 3 (22,2%), 4 (**48,9%**), and 5 (24,4%). This suggests a need for targeted development in these areas to ensure optimal efficiency and productivity. Comparatively, proficiency in customs regulations and international trade (Section 10) was notably lower, with many respondents rating themselves with 2 out of 5 (24,4%) or 3 out of 5 (**37,8%**). Only 9 respondents out of 45, scored themselves high (4/5 and 5/5). This low proficiency highlights a significant gap in critical knowledge that directly impacts compliance and operational effectiveness in international logistics.

Lastly, the adoption of technology tools (Section 11) received high ratings, typically 4 (33,3%) or 5 (**53,3%**), indicating that employees are comfortable and proficient with the technological aspects of their roles. The disparity between the high proficiency in technology adoption and the lower ratings in customs regulations and organizational skills underscores the need for a balanced training approach that addresses technological fluency and the intricate regulatory and managerial aspects of freight forwarding.

Training and skill improvement (sections 12 to 16)

Respondents strongly agreed (**60%**) that skill improvement positively impacts job performance, aligning with the literature on continuous learning's role in enhancing operational efficiency. Most training was on-the-job (**80%),** conducted internally through seminars and real-world scenario exercises, helping contextualize learning. A considerable number of respondents received formal training **(51,1%)** specific to freight forwarding, though its

frequency and quality varied. The data indicates a reliance on day-to-day job training **(55,6%),** with a significantly lower percentage of training occurring in other areas such as software tools, customer service, and logistics management.

15. If yes, what areas did the training cover?
45 απαντήσεις
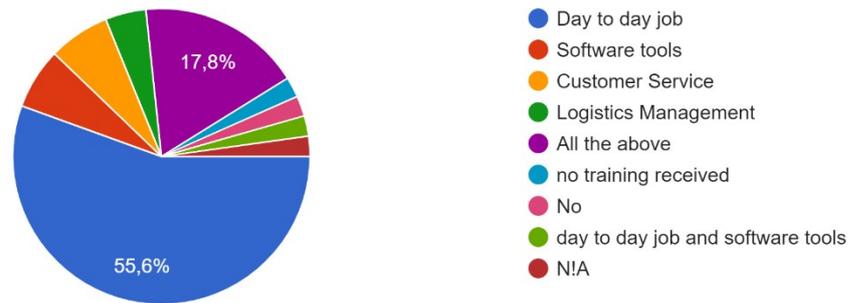
Section 16 highlights that on-the-job training is the predominant form of training, followed by online courses and external seminars. This method is beneficial for contextual learning and immediate application of skills. The preference for on-the-job training reflects its practicality and effectiveness, but the varied incorporation of real-world scenarios points to an area where training programs can be enhanced. By integrating more practical exercises and real-world scenarios, companies can ensure that their employees are better prepared for the challenges they will face in their roles.

16. What form does most of your training take?
45 απαντήσεις
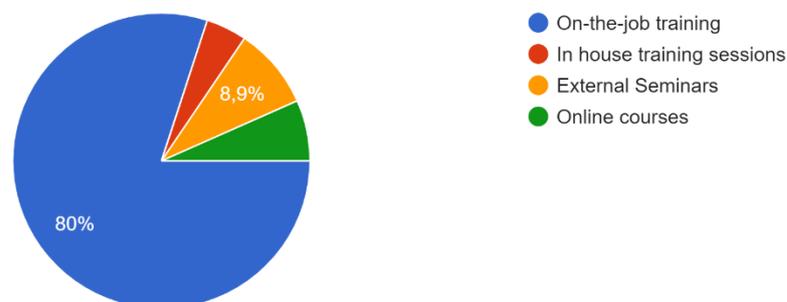
Effectiveness of training programs (section 17-22)

Respondents indicated mixed levels of satisfaction regarding the incorporation of real-world scenarios and practical exercises in their training programs. While some participants acknowledged the presence of practical elements, others felt that the training could be more hands-on and directly applicable to their daily tasks. This variance suggests an opportunity for improvement by integrating more scenario-based training to better simulate real-world challenges.

17. How well do the training programs you attend incorporate real-world scenarios and practical exercises?

45 απαντήσεις
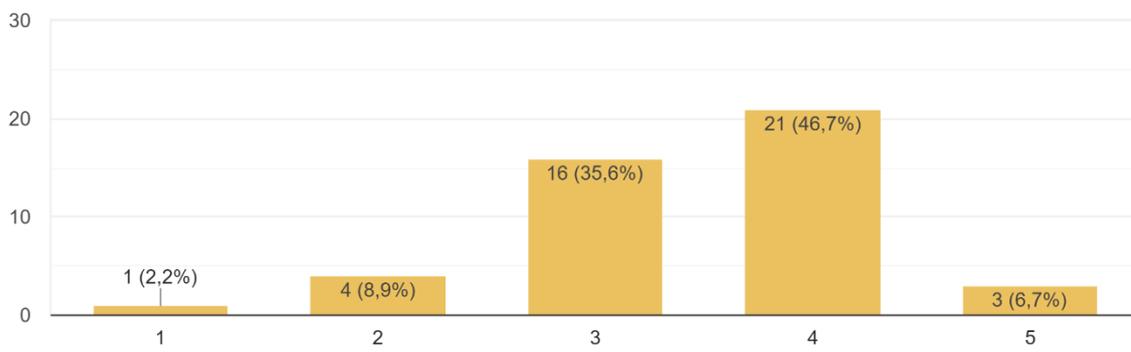
Training updates occur at varying frequencies, from rarely **(15,6%)** to whenever new information arises **(44,4%),** leading some respondents to feel inadequately informed. This inconsistency highlights the need for a structured and regular training update approach. Satisfaction with training and development opportunities also varied, with 35.5% moderately satisfied, but 50% (13 respondents scored 2/5 and 9 respondents 1/5), rating their satisfaction lower, indicating gaps in continuous support. Many respondents noted inadequate resources, causing time constraints and added pressure, emphasizing the importance of proper training and resourcing. While most felt confident in their skills **(60%**) there is a significant percentage where respondents are not sure about their skills and knowledge (response Maybe gathered 28,9% and response No 6,7%). There is a clear need for ongoing development to enhance competence and confidence further.

20. Are there sufficient resources allocated to complete tasks efficiently within your team?

45 απαντήσεις
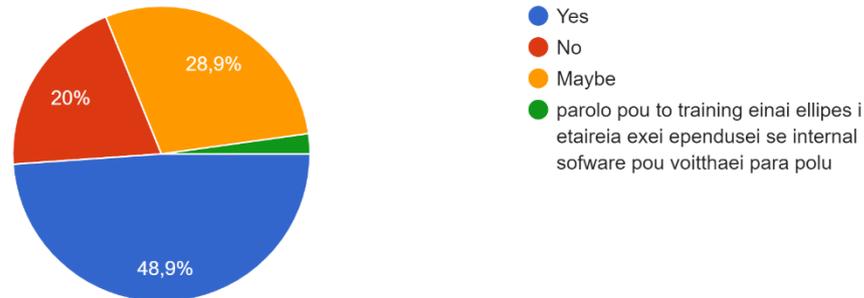
- ● Yes
- ● No
- ● Maybe
- ● parolo pou to training einai ellipes i etaireia exei ependusei se internal sofware pou voitthaei para polu

28,9%
20%
48,9%

21. Do you feel adequately equipped with the necessary skills and knowledge to perform your job effectively?

45 απαντήσεις

- ● Yes
- ● No
- ● Maybe
- ● I would like to see improvement
- ● oxi,apla kanw tin douleia k rwtaw sunexeia tous pantes akoma k meta apo 4 xronia empeirias

28,9%
60%
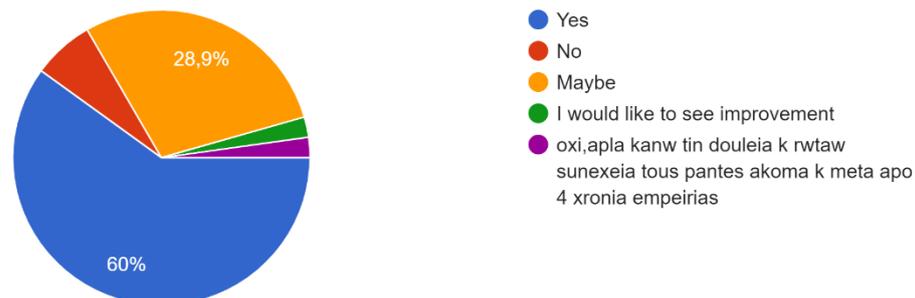
In section 22 ,the effectiveness of training programs in preparing employees to follow new procedures was seen as adequate by most respondents, although there were mentions of a lack of continuous support and follow-up **(48,9%).** Ensuring that training is not a one-off event but part of an ongoing developmental process is crucial for adapting to new procedures and maintaining high-performance levels.

The findings suggest that while there are strong elements within current training programs, particularly in technology adoption and logistics management, there are significant areas for improvement. Regular, structured training updates, better integration of real-world scenarios, and ensuring sufficient resources can enhance the overall effectiveness of these programs, according to respondents' suggestions. Moreover, addressing the gaps in continuous support and follow-up training can further improve employee satisfaction and operational efficiency.

Improvements in Skills and Methods (section 23)

Most respondents indicated noticeable improvements in their skills or methods after attending specific training sessions **(64,4%).** This highlights the effectiveness of targeted training in enhancing employee capabilities, which is critical for maintaining high-performance levels in the competitive freight forwarding industry.

Barriers in Adopting New Processes (section 24)

Time constraints **(17,1%),** resistance to change **(24,4%),** and a lack of continuous support **(20%)** were the most frequently mentioned barriers to adopting new processes after training. These issues suggest a need for more structured follow-up support and time management strategies within training programs to ensure that new processes are seamlessly integrated into daily operations.

Comfort with New Skills and increase in performance (sections 25-30)

Respondents reported increased comfort with new skills and processes after training **(75,6%),** highlighting the positive impact on employee confidence and competence. Most noted performance improvements following company-provided freight forwarding training, often due to enhanced technical skills and better operational understanding. This led to greater efficiency and productivity. While performance gains varied, there was general agreement that training programs boost departmental productivity **(80%)** and efficiency, underscoring the importance of continuous skill development. Recent training focused predominantly on hard skills **(42,2%)**, with 37.8% of training addressing both soft and hard skills equally, and only 1,6% focusing on soft skills. A more balanced training approach, incorporating both hard and soft skills, would better equip employees for their roles. In sections 29 and 30 , respondents reveal that they rate the increase in performance with 3 out of 5 (42,2%) and 4 out of 5 (35,5%), and the majority believe that training programs positively impact departments' productivity and efficiency (**88,8%** have scored over 4/5).

27. What kind of skills the training offered focuses on more recently?
45 απαντήσεις

Strategies for Enhancing Productivity and Efficiency (sections 31-32)

Respondents suggested several strategies to enhance productivity and efficiency, including adopting advanced technology and automation, improving communication and collaboration, and optimizing supply chain and logistics processes. These recommendations align well with broader industry trends identified in the literature. The critical role of technology and automation in streamlining logistics operations and reducing manual errors is well-documented (148).The importance of effective communication and collaboration in improving supply chain efficiency is also highlighted across multiple studies (149). Additionally, the necessity of optimizing logistics processes to enhance overall operational performance is a common theme in the literature (150). These strategies reflect a consistent understanding that integrating innovative solutions is essential for maintaining competitive advantage and improving productivity in the logistics sector.

 Following some of the respondents' suggestions and some others in Appendix A.

'*By automating routine tasks such as booking, documentation, and billing, freight forwarders can drastically reduce manual errors and enhance efficiency. Automation streamlines operations and allows staff to focus on higher-level tasks, driving overall productivity.*'

'*More time should be allocated for case discussions within the operation department.*'

'*In my opinion, some good investments would be in data analytics, AI data management, and regular KPI reporting to allow the company to focus on the worst-performing indicators or those that are more relevant or important. This will enable the company to distribute its resources more adequately by prioritizing those focus areas. Other examples include*

implementing tracking technology and end-to-end automation of forwarding operations through IT systems, which will require training.'

'Trainers should be up-to-date and well-versed in their jobs.'

Additionally, their responses highlighted the importance of ongoing training and skill development for career advancement within the company, with 35,6% scoring it a 4 out of 5 and 48,9% scoring it a 5 out of 5.

32. How important is ongoing training and skill development for career advancement within the freight forwarding industry?
45 απαντήσεις
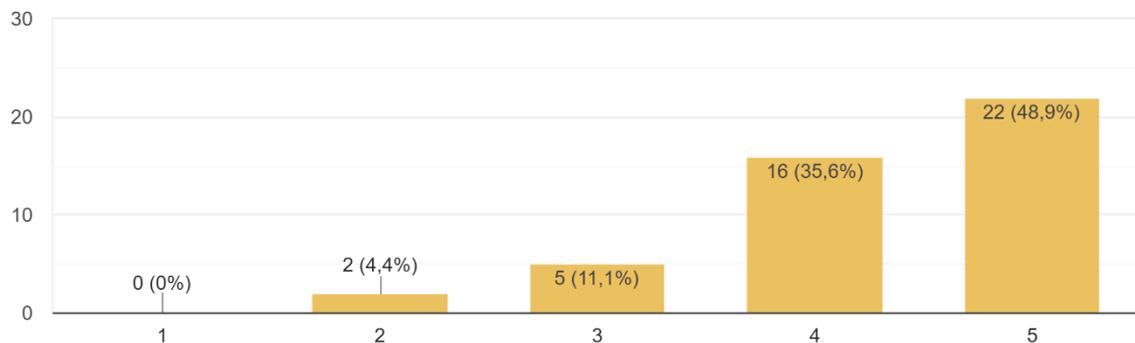
Desired Areas for Professional Development (section 33)

Respondents expressed a desire for more professional development opportunities, particularly in areas such as internal seminars based on real cases **(31,1%),** advanced logistics management (26,7%) , international trade regulations (20%), and technology adoption (13,3%). These areas are critical for adapting to the evolving demands of the industry and ensuring that employees have the necessary skills to drive organizational success.

Attitudes Towards New Training Sessions and Additional Comments (sections 34 & 35)

The general sentiment towards new training sessions was positive, with many respondents expressing excitement (**46,7%** reported very excited, 37,8% excited) about upcoming learning opportunities. Additional comments highlighted the need for more formalized and

comprehensive training programs focusing on safety regulations, optimal routes, etc regularly updated to reflect industry changes (Appendix A).

5.2 Summary Findings and Discussion

The results provide valuable insights into the demographic composition, skill proficiency, and perceptions of training programs among industry professionals.

Younger Workforce: The industry is dominated by younger professionals, particularly in senior and middle management roles, reflecting the dynamic and demanding nature of the job. It is also revealing that, as a startup 11 years ago, the company chose to select young employees to train them according to their needs, rather than hiring senior staff. Indeed, research indicates that organizations increasingly prioritize the recruitment of younger employees for tailored training programs over senior hires, as this strategy facilitates the development of a workforce that is closely aligned with the company's specific cultural and operational requirements while also proving to be more cost-effective (151). The predominance of younger professionals could imply a preference for fresh perspectives and a willingness to embrace new technologies. However, this outcome contrasts with other reviews, which emphasize the importance of education and experience in logistics roles and indicate that logistics professionals tend to be older (152). Also, there are concerns about the retention of institutional knowledge as older employees move up or out of the organization. Companies should consider mentorship programs where experienced employees can transfer their knowledge to younger staff.

Skill gaps : The survey responses reveal a diverse range of proficiencies across key areas critical to the freight forwarding industry. Significant technical skill gaps were evident in customs regulations, international trade, and safety, where many respondents rated their proficiency as low. This gap in critical knowledge directly impacts compliance and operational effectiveness in international logistics, underscoring the need for focused training in these areas. However, the respondents feel confident with their soft skills in contrast with other research, which shows a lack of communication skills, problem-solving abilities, and time management (153). This discrepancy suggests a potential overestimation of soft skill

competencies among industry professionals, highlighting the need for ongoing assessment and development in these areas to ensure comprehensive proficiency across all critical skill sets.

The identified skill gaps highlight a critical area for improvement. These deficiencies could lead to non-compliance with international regulations, resulting in fines and delays that harm operational efficiency. Training programs should be tailored to address these specific gaps, possibly through partnerships with educational institutions that specialize in international trade and customs regulations.

Satisfaction with training programs: Regular and structured training updates, along with better integration of real-world scenarios, are essential to enhance the overall effectiveness of training programs and ensure employees are well-equipped to handle their roles. Respondents indicated mixed levels of satisfaction regarding the incorporation of real-world scenarios and practical exercises in their training programs. Some acknowledged the presence of practical elements, while others felt the training could be more hands-on and directly applicable to their daily tasks. The literature supports the need for practical, hands-on training to enhance employee skills effectively(154). However, the survey highlights a greater variance in satisfaction levels, suggesting that while some programs are effective, others may need significant improvements to meet employee expectations fully.

6. Conclusions and recommendations

6.1 Conclusions

This study focuses on two pivotal aspects: the impact of employee skills and training programs on operational efficiency and performance in the freight forwarding industry. By examining these elements, the research aims to highlight key skills, skill gaps, and training needs that can optimize performance and efficiency.

The Freight Forwarding industry has evolved rapidly, driven by factors such as global conflicts, the COVID-19 pandemic, Brexit, and environmental concerns, necessitating continuous adaptation and improvement. The literature review suggests that while training directly enhances operational performance (155), some researchers argue that its impact is mediated through increased employee commitment (156). Key findings from the study reveal a

demographic trend towards a younger workforce, particularly in senior and middle management roles. This shift reflects the industry's dynamic nature but raises concerns about retaining institutional knowledge.

 The survey identified significant technical skill gaps in customs regulations, international trade, and safety, critical for compliance and operational effectiveness in international logistics.

Despite confidence in their soft skills, respondents contrast with other research showing deficiencies in communication, problem-solving, and time management skills (157). This suggests an overestimation of soft skills, highlighting the need for ongoing training and assessment to ensure comprehensive proficiency in all essential areas.

Training and development initiatives are crucial in addressing these challenges, particularly with the integration of technological advancements such as blockchain (158), AI (159), and IoT(160), as well as VR, AR, and mobile learning platforms (161). Evaluating the effectiveness of training programs (162) and the role of leadership in promoting continuous learning (163) are essential for success. Ensuring regulatory compliance and ethical training (164), alongside the strategic alignment of training with business goals (165), enhances overall operational efficiency and performance. However, even some varied perceptions of training sessions, that the survey revealed, suggest new challenges in employee engagement. Maybe these challenges should be extensively covered in future research.

 Ultimately, training not only reduces knowledge gaps and improves employee skills, but it also fosters employee loyalty. These improvements lead to better performance, reduced operational errors, and a competitive advantage in the market.

6.2 Limitations of the study

While this study provides valuable insights into optimizing human resources management in freight forwarding operations, several limitations should be acknowledged:

Sample Size and Representativeness: The findings are based on a limited sample size, which may not fully represent the entire freight forwarding industry.

Geographic Scope: This study focuses on a specific region (Greece), which may limit the generalizability of the findings to other parts of the world.

Technological Advancements: The rapid pace of technological change in logistics may render some findings obsolete.

Time Available for Data Collection: The time available for data collection was constrained, which may have affected the comprehensiveness of the gathered data.

Limited Access to Possible Participants: The study faced challenges (Some employees were unavailable due to their participation in the Poseidonia exhibition, while others were occupied with an excessive workload) in accessing a broader pool of participants, which may have influenced the variety of perspectives and responses obtained.

By addressing these limitations, future research can build on the findings of this study, offering deeper insights and more comprehensive solutions for optimizing human resources management in the freight forwarding industry.

6.3 Practical Implications

The Freight Forwarding industry is currently facing significant challenges due to labor shortages, particularly in Greece. Studies indicate that this shortage is expected to worsen in the future, posing a critical threat to operational efficiency and service delivery (166). The current survey conducted in this research highlights a pronounced skills gap in key areas such as customs regulations, international trade, and safety. These skills are crucial for maintaining compliance and ensuring smooth logistics operations, yet many companies struggle to train their staff properly to avoid operational failure (167).

Moreover, the expectations of new generations entering the workforce are shifting. Generation Z and Millennials prioritize flexible working schedules and other benefits over the traditional notion of lifetime employment with a single company (168). As a result of the survey, 13,3% of the employees belong to the very young age group 18-25. This percentage is quite important, especially in comparison with the percentage of the age group over the 40s (4,4%). This outcome requires companies to adapt their employment practices to attract and retain younger talent. Offering flexible work arrangements, such as remote work options and flexible hours, opportunities for career development, and a healthy work environment can enhance job satisfaction and loyalty among younger employees, making the organization more appealing to top talent (169).

In addition to attracting new talent, retaining employees over 40 is essential for the industry's success. These experienced professionals can serve as mentors to younger employees, providing valuable knowledge and stability within the organization. Their retention is vital for maintaining a competitive advantage, as they bring a depth of industry experience that is difficult to replace (170). Additionally, attracting older talent could help reduce skill gaps in customs and safety regulations, as they were indicated in survey results.

Innovative training practices are another critical component for future success. New companies in the freight forwarding industry should look to major players like DHL and FedEx as models for best practices. These organizations have set the standard for training and development, continuously investing in their workforce to enhance skills and operational capabilities (171). Emulating these practices can help new entrants to quickly scale their operations and compete effectively.

Furthermore, companies must stay proactive in mitigating risks by leveraging forecasting tools and investing in human capital. By predicting market trends and potential disruptions, organizations can develop strategies to navigate uncertainties and maintain operational continuity. Investing in employee training and development not only improves immediate performance but also builds a resilient workforce capable of adapting to future challenges.

In conclusion, the freight forwarding industry must address labor and skills shortages, adapt to the changing expectations of the new workforce, retain experienced employees, and emulate successful training practices from industry leaders. By taking into account the current and future implications discussed, and by acting proactively, companies can enhance their operational efficiency, mitigate risks, and secure a competitive advantage in a dynamic market environment. This proactive approach is one of the key inspirations behind the current study, aiming to provide actionable insights for the industry's future success.

6.4 Suggestions for Future Research

Future research should consider larger and more diverse samples to improve the generalizability of the findings. Extending the timeline for data collection would enable the inclusion of a larger sample size and more detailed responses, enhancing the robustness of the findings. Comparative studies across different regions are recommended to understand how HRM practices vary globally and to identify region-specific challenges and solutions.

Enhancing collaboration with industry organizations and professional associations could provide greater access to a more diverse pool of participants, thereby improving the representativeness of the sample.

Ongoing research is necessary to stay abreast of new technologies and their impacts on HRM practices in the freight forwarding sector. Future studies should explore a wider range of HRM practices, employing mixed methods approaches to gain a comprehensive understanding of their effectiveness. Longitudinal studies are essential to track changes and developments over time, providing insights into the long-term effects and sustainability of HRM practices.

Additionally, future research should focus on emerging technologies, conducting detailed analyses of different types of training programs, and examining the impact of cultural differences on HRM practices. This holistic approach will contribute to a deeper understanding of optimizing human resources management in freight forwarding operations and provide valuable recommendations for industry stakeholders, policymakers, and educational institutions.

6.5 Final Thoughts and Discussion

The Freight Forwarding industry necessitates a constant reevaluation of skills and competencies to maintain competitiveness. Key competencies such as technical skills (172), regulatory knowledge, and problem-solving abilities (173) are critical, and effective training methods like on-the-job training (174), in-house programs (175), external seminars, and online courses (176) are essential for skill development and organizational performance. Despite the comprehensive overview provided by the literature review on the impact of employee skills and training programs on operational efficiency, gaps remain, particularly in empirical evidence linking HRD initiatives directly to performance metrics, the effectiveness of specific training programs, regional versus global practices, technological advancements, and the impact on employee well-being.

Survey findings reveal a younger workforce, particularly in senior and middle management roles, reflecting the industry's dynamic nature. This trend towards hiring younger employees for tailored training programs aligns the workforce with company-specific cultural and operational needs but raises concerns about retaining institutional knowledge.

Significant skill gaps in customs regulations, international trade, and safety have been identified through the survey. When these findings are juxtaposed with the demographic profile of the workforce, particularly the age and seniority levels, it becomes evident that these deficiencies are predominantly present among senior employees. Specifically, 35 out of 45 respondents classified themselves as senior or executive-level employees, and 20 out of 45 respondents rated their proficiency in customs regulations as below 3 on a 5-point scale. This identification highlights two critical points. First, it underscores the high complexity of customs and safety regulations. Second, it emphasizes the necessity for targeted and continuous training in these areas. Employees must remain updated with new legislation and procedures to ensure compliance and operational efficiency. Being a senior employee does not negate the need for training to stay aligned with international trade regulations and business strategies.

Personal reflections highlight the surprising persistence of skill shortages in critical areas, even in innovative companies with advanced training and technology use. While employees reported adequate resources, there remains a need for continuous support to adopt new processes. The company's strong emphasis on soft skills like problem-solving and critical thinking helps mitigate technical skill deficiencies.

Moving forward, structured plans for ongoing training and continuous learning are vital to bridging skill gaps, retaining employees, and maximizing operational efficiency. Additionally, companies need to anticipate future labor needs, including flexible working arrangements, the tendency, and ease of young employees regarding the adoption of technological upgrades (177), employee well-being, and development within a healthy and productive workplace. By taking these factors into account and advocating for government support to promote such development initiatives, companies can address labor shortages, reduce turnover, enhance operational efficiency, and achieve high performance.

The success of a company is undoubtedly influenced by many factors; however, operational efficiency and productivity, which are critical elements of success, are affected by the level and skills of employees. In a rapidly changing world, particularly in the demanding transportation market, companies must research future trends in the labor market and invest in the best training practices. This aims to improve results and ensure the longevity of the company itself.

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Appendix A: Respondents Suggestions for Enhancing Productivity and Efficiency

'More training sessions, both internally and externally, should be conducted. Seminars on freight forwarding should be more frequent.'

'Adjust the management based on your team's characteristics and needs, have a fundamental structure, reward hard workers by any means, and show at every possible opportunity that teamwork is the best way to thrive.'

'Training should not only occur when there is a specific problem but also for our development. For example, we had unofficial training for Brexit, but never for improving service quality or proposing sustainable routes, etc.'

'Continuous training, both internally and externally, via focused professional qualifications, would be a good first step to enhance efficiency and productivity. However, both efficiency and productivity also depend on many other factors beyond training initiatives, such as adequate compensation, employee satisfaction, commitment, and motivation, which are beyond the scope of this survey.'

'Online or physical meetings and presentations of our work, cooperation processes, and updates should occur at least once every 2-3 months with our customers. This approach would improve the daily workload for both sides.'

Ongoing training and skill development were deemed crucial for career advancement within the freight forwarding industry. Respondents emphasized the need for continuous learning opportunities to stay competitive and advance professionally, reflecting the dynamic nature of the logistics sector.'

Appendix B: Questionnaire

1.What age group do you belong to?
2.What is your highest level of education?
3.How would you rank your role in your company?
4.How long have you been working in the Freight Forwarding industry?
5.In how many Freight Forwarding companies have you worked worldwide?
6. In your oponion,which skill has the most positive impact on the Freight forwarding industry?
7. Rate your proficiency in Customer Service and Relationship Management.
8.Rate your proficiency in Logistics and Supply Chain Management.
9.Rate your proficiency in organizational and time-management skills.
10.Rate your proficiency in customs regulations and internaional trade.
11. Rate your proficiency in technology tools adoption in your company.
12. Do you believe that improving your skills has a significant impact on your job performance?
13.Have you received formal training specific to freight forwarding?
14. If yes, have you received the training by your company?
15. If yes, what areas did the training cover?
16. What form does most of your training take?
17. How well do the training programs you attend incorporate real-world scenarios and practical exercises?
18. How frequently do you receive training updates?
19. How satisfied are you with the training and development opportunities provided by your company?

20. Are there sufficient resources allocated to complete tasks efficiently within your team?
21. Do you feel adequately equipped with the necessary skills and knowledge to perform your job effectively?
22. How effectively do the training programs prepare you to follow new procedures introduced in the company?
23. Have you noticed any improvements in skills or methods after attending specific training sessions?
24. What barriers, if any, do you face in adopting new processes even after training sessions?
25. On a scale of 1 to 5, how comfortable were you with new skills or processes before the training sessions?
26. On a scale of 1 to 5, how comfortable were you with new skills or processes after the training sessions?
27. What kind of skills the training offered focuses on more recently?
28. Have you noticed any increase in you performance at work after having received freight forwarding related training at your company?
29. If yes to what extend?
30. Please indicate how much you agree with the following statement: Training programs positively impact your department's productivity and efficiency.
31. In your opinion, what strategies or improvements could enhance productivity and efficiency in freight forwarding operations?
32. How important is ongoing training and skill development for career advancement within the freight forwarding industry?
33. What areas of professional development or training would you like to see offered by the company?
34. How do you feel when you learn that the company has arranged new training sessions in the upcoming weeks?

35. Feel free to add any additional comments, suggestions, or concerns! You can also add your email address here if you want to receive the survey results. Thank you!

Author's Statement:

I hereby expressly declare that, according to the article 8 of Law 1559/1986, this dissertation is solely the product of my personal work, does not infringe any intellectual property, personality and personal data rights of third parties, does not contain works/contributions from third parties for which the permission of the authors/beneficiaries is required, is not the product of partial or total plagiarism, and that the sources used are limited to the literature references alone and meet the rules of scientific citations.