

Stop the Thief?

The Role of Digitalisation in Preventing Cargo Theft in the Shipping Companies

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EXECUTIVE SUMMARY

Reaching a sustainable industry is now possible through digitisation. The current era witnessed an increase in the impact of digital transformation on the economy; this encouraged various sectors to adopt Industry 4.0. Digital supply chain and Industry 4.0 are current buzzwords in all industries that can solve common drawbacks. The logistics sector in particular suffers from numerous weaknesses, one of which is cargo theft. Logistics companies started adopting technology in operations aiming to mitigate cargo thefts and reach a sustainable work environment through their digital supply chains. The Egyptian government intends to participate in the transition into a digital society. This case aims to demonstrate a best practice of digitisation in the logistics sector in the Egyptian market. Global Chains Company was one of the first logistics companies to apply a digital solution through ERP systems. Through the interviews conducted, cargo theft problems and consequences are demonstrated along with the results of applying digitisation to operations and the lessons learned.

BACKGROUND

After 1980, as a result of globalisation, the relevance of SCM expanded significantly among scholars and practitioners. Supply chains become more robust, complicated, and expensive as a result. Today, rivalry is framed as supply chain versus supply chain rather than company versus company. As a result, top management began to see the potential for successful SCM to greatly boost an organisation's worldwide competitiveness. SCM may be considered a conduit for the efficient movement of goods or materials, services, and information from suppliers to end users (Akbari, 2018).

Logistics management is the part of supply chain management that plans, implements, and controls the efficient, adequate forward and backward flow and storage of goods, services, and associated information between the point of origin and the point of consumption in order to meet customer requirements. Logistics activities are divided into two types which are primary and secondary activities. Primary activities are setting customer service goals, transportation, inventory management and information flow, while warehousing, material handling, purchasing and packaging are considered secondary activities (Murphy and Knemeyer, 2009).

In recent years, outsourcing has evolved as a critical component of global supply chain strategy. After the mid-1990s, practitioners saw a noticeable growth in the relevance of supply chain management (SCM). As a result, the study of supply chain management and outsourcing has exploded in popularity. The supply chain is defined as a sequence of end-to-end procedures that result in the production of products or the provision of services to the final consumer. SCM is the process through which management operations and activities are planned and controlled. Outsourcing non-core business services have been a typical supply chain strategy for many enterprises and organisations in growing countries where consumer expectations are expanding. Due to the complexity and development of today's supply chains, logistics is critical to effective operations. Additionally, businesses are increasingly focusing on their core capabilities as logistics has become a popular issue for outsourcing to third-party suppliers. As a result, third-party suppliers have a unique opportunity to impact the efficiency of SCM. According to the 2016 Third-Party Logistics Study, shippers increased their use of logistics outsourcing or third-party logistics (3PL) services by 5% in 2016 (from 68 to 73 percent).

Numerous contemporary businesses have espoused outsourcing some or all of their logistics operations to enterprises known as 3PLs in order to benefit from the expertise and economies of scale provided by 3PLs, thereby reducing costs, increasing efficiency, and improving service, and allowing client businesses to focus on their core competencies. Since its origin, the term "third-party logistics" has been defined in various ways by various researchers. Third-party logistics is described as an inter-organisational interaction between shippers and logistics service providers in a supply chain.

Third-party logistics providers have established themselves as integral players in many supply chains by providing a range of services to client companies, including transportation and distribution, customer support, warehousing and distribution, information technology support, effective route planning, cost reduction, and value-added services to increase customer satisfaction. According to Hendrickx et al. (2020), despite the industry's development, transactional, operational, and repetitive operations continue to be outsourced to 3PLs at a higher rate than strategic, information technology-intensive and customer-facing activities. According to the research, domestic transportation, warehousing, international transportation, customs brokerage, and freight forwarding are the most commonly outsourced operations.

Third-Party Logistics services (3PLs) can be asset-based, in which case they have physical assets such as trucks and warehouses, or they can be non-asset-based, in which case they depend mainly on personal expertise and information systems to provide services including management-oriented solutions,

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