

Chapter 9

Supply Chain Modernization: The Case of Turkish Companies in 3PL and 4PL Logistics Applications

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ABSTRACT

The global supply chain applications are evolving and changing globally. In order to increase success, some processes are now transferred to other firms. By such implementations, it is aimed to focus on the core business and to be successful. 3PL is the use of an external entity to perform some or all of the operations. The 4PL approach is a revolutionary approach to supply chain management. 3PL and 4PL activities are used for many purposes by multinational companies for increasing the productivity and efficiency and for decreasing the overall operational costs. Like all countries, Turkey also faces strategic organizational changes in terms of logistics activities. Modernization of logistic professes are widely examined in the literature. The scope of this chapter is the logistics modernization processes of Turkish companies, and it aims to inform about the modernization processes in Turkey by examining successful real-life examples.

INTRODUCTION

The total size of the logistics industry in Turkey is determined to be around 80 billion US dollars according to the Business Consulting Firms. The study was published by Brand Research with the name of Turkey Logistics Industry Survey 2011(Ozbek et al., 2013). This study was based on the logistics sector that has a share of 22% at Turkey's GDP with a great potential in terms of growth. On the other hand, the 3PL market was estimated to be nearly 22 billion US dollar. It is another fact that the logistics industry was seen to have grown by approximately 45% in past three years. In the same study, although the industry has grown steadily since 2002, the share of 3PL has increased by only 7%, which means that there is a growth potential not yet realized for 3PL companies. This data shows that 3PL logistics in Turkey will considerably increase. Businesses have focused on making improvements in their logistics activities in terms of customer satisfaction, together with reducing their costs (Gencer, 2016). While

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some businesses are serviced by 3PL companies, others manage their own logistics networks themselves. Logistics activities have a great potential to increase (Yıldız et al., 2017).

The global supply chain applications are evolving and changing globally. In order to increase success some processes are now transferred to other firms (Ozcan, 2008). By such implementations, it is aimed to focus on the core business and to be successful. Logistics applications are also facing this reality (Gencer, 2017). Factors such as globalization, reduced supply times, customer harmonization and outsourcing have influenced the formation of third party logistics services. 3PL is the use of an external entity to perform some or all of the supply chain functions internally (Gencer et al., 2017). On the other hand, the 4PL approach is a revolutionary approach to supply chain management. Differences in 4PL approach from other outsourcing sources; to offer holistic supply chain solutions and to create values that will affect the entire supply chain (Kara, 2018).

CONCEPTUAL FRAMEWORK

Businesses, whether outsourcing or performing logistics activities on their own initiative, aim to keep operating costs at a minimum level and to maintain customer satisfaction by keeping service quality at the highest level (Akkucuk, 2009). For this reason, enterprises want to work with companies that want to have high quality among the 3PL enterprises in order to carry out their logistics activities, in addition to being the most suitable to their own corporate identity and having the lowest costs (Ozbek et al., 2013). The origin of the logistic word is Greek. Logistics is a science and it was used as an account bookmaking concept. Another meaning is economical resourcefulness (Akkucuk, 2011). Logistics is a word which was used in military terminology more recently. But recently it has become used mainly in businesses. In terms of logistics, many meanings are taken in many places. Things are put under the name of logistics. It is important to know that a logistical process is. It is an old idea that shipment is equivalent to logistics. Shipping only should not come to mind. Today, however, logistics is now represented by more serious sectors with the addition of several sections and process; it has gained more serious meanings (Gencer et al., 2016). The most general one is that it is the process from the first point of a goods or service since reaching to the final buyer. If we think of a good or service as a product, for example, we can consume biscuits every day and this package comes as a package of biscuits. This biscuits can pass from a set of phases so that we can get to it in a certain way. Logistics is everywhere including customs, insurance, etc. these are things that are called processes.

It is thought that it is possible to sell every property that we can show to everywhere in the world. One of the most important points for buyers and sellers is price (Akkucuk et al., 2016). This factor naturally holds a great place in logistics companies including cost analysis or logistics information. Therefore it is possible to have a desired logistics at the desired time. In the case of military units, the meaning of transportation is the section about the transportation of the continents and the health needs in peace and voyage times. The logistics comes in the meaning of mathematical logic. When logistics is mentioned, as a consequence, we can describe logistics in three main sections. The first one is national logistics, the second is geo logistics and the last one is military logistics.

Furthermore, technology is one of the most important events of the world which has an important place in meeting and supplying human demands. Machines, devices, and methods, that are formed in order to collect, control, process and transmit information and power in the industry sector. On the other hand, technology is a Latin word. It means having knowledge to create and use devices such as the construc-

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