

Chapter 9

Factors Influencing the Adoption of Digital Technology in Transportation Among Logistics Service Providers

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ABSTRACT

Digitalization is the use of digital technologies to change a business model and give new profit and value-producing openings; it's the development of moving to a digital business. Digital shipping refers to advanced operations that aim to give ground-breaking forces recounting dissimilar modes of transport and business procedure. Transportation technology points are to reuse and partake information that can prevent vehicle collisions, keep the industry moving, and reduce environmental impacts. Transportation is the association of material across the Earth's face by irrigating, wind, ice, or graveness. It includes the physical process of traction (dragging), suspense (being carried), and saltation (bouncing) and the chemical process of the result. Emerging technologies are technologies that are apparent as proficient in altering the status are robotics, artificial intelligence, drones, IoT, GPS, blockchain, cloud computing, etc. The objectives is to recognize the factor moving transportation costs and the application of digital technologies in the transport sector.

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INTRODUCTION

Driven by new technological trends, adding global competition, and fleetly changing client demands, associations are forced to review how they can take advantage of the upcoming digitization to better manage their supply chain activities (Marinagi et al., 2014) Digital transformation in logistics and transportation helps companies from the sector take advantage of new technologies and stay competitive in a market that is continuously expanding. These include the web, the pall, detectors, data analytics, machine literacy, blockchain technology, and IoT, which ameliorate perpendicular and vertical alignment around force chain network (Singhdong et al., 2021) The conception of digitalization itself is veritably broad, and without going into a discussion about all the instantiations of this process, we took as a base the fact that in the transport digitalization is a large-scale penetration of digital technologies, both at the management level and the technological level (Ding, 2013). The integration of these technologies with the supply network offers easy access to customer needs by effectively sharing the tracking information of product or service deliveries (Korpela et al., 2017) above all, cardinal technologies play a lively and decisive role in the establishment of needed logistics and transport services, and giant information analytics became important for balancing and managing the supply and demand of limited substance assets – e.g. medical supplies (Zhou et al., 2020). Next to this, is ‘Digital supply chain twins’ (Ivanov et al., 2019).

REVIEW OF LITERATURE

The IoT technology is used in many areas at present, such as providing chain management, urban planning, library management, retail tracking, stock control, digital logistics, efficient transportation, home automation, mobile payment, warehouse management, healthcare, and the private domain (Bryukhovetskaya et al., 2020; Zorzi et al., 2010) LSPs play an essential role in the global supply chain by delivering goods or services from suppliers to customers. Globalization has come to a pivotal motorist in shaping business strategies. Leading enterprises have developed products for global requests while also having to reference factors worldwide (Banomyong and Supatn, 2011; Hanif and Kaluwa, 2016) that was circulated to purposely selected members from the populace of the production group of people with knowledge of conveying logistics (Avdeenko and Aletdinova, 2017). The transport sector was one of the first to witness the preface of digital technologies the objective need for the robotization of operation, and increases in the trustability of the transport system pushed transport companies (Tugashev, 2018). There are four key parts of the passage sector making digital progression. In the digitization period,

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