



PSG College of Arts & Science

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One Day National Level Seminar on

National Logistics Policy 2022 **Transformation in Logistics** **Sector**

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A BOOK
ON
NATIONAL LOGISTICS
POLICY-2022
TRANSFORMATION IN
LOGISTICS SECTOR

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IMPACT OF DIGITALIZATION IN LOGISTICS INDUSTRY

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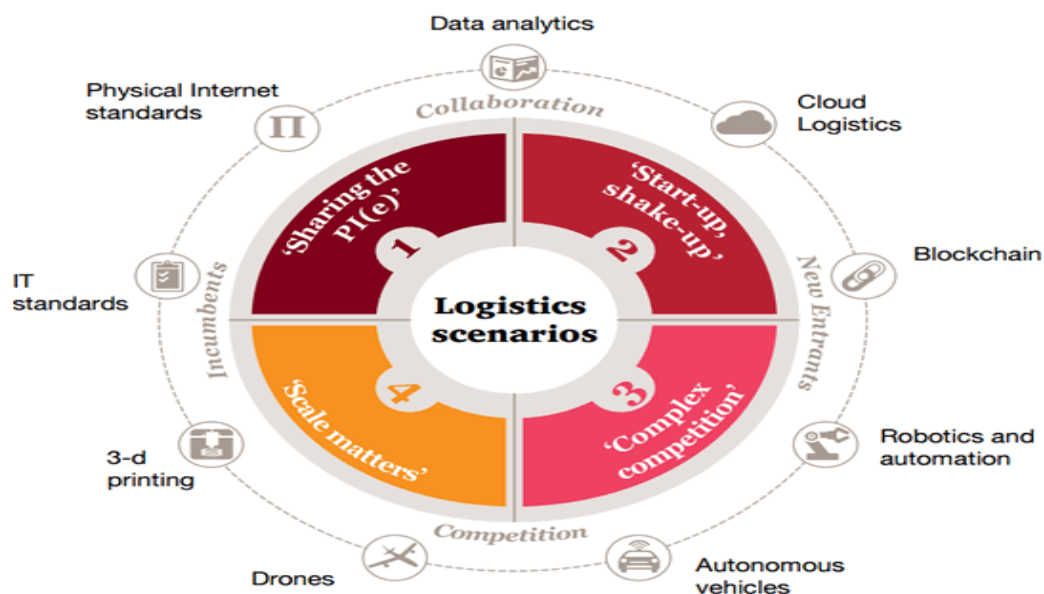
ABSTRACT

Digital transformation has a major influence on the logistics and supply chain business. By using digital technologies, companies can improve their operations effectively. Advanced digital knowledge and artificial intelligence has transforming the logistics industry in an effective and efficient way. The main advantage of introducing digital technology is cost savings. Innovative and new technology is developed in logistics industry to modernize products to the customer as fast as they want it. The purpose of the study is to analyse the impact of digitalization in logistics industry.

Keywords: Digitalization, Logistics Industry, Supply Chain

INTRODUCTION

Digital Transformation is continuing process in the logistics industry. Businesses can use digital technologies to improve the speed and accuracy of their customer service. Companies can provide faster and more accurate customer service by using chatbots, cloud and AI-powered customer service. It is an essential component for companies looking to achieve greater agility and flexibility in their operations.



It has most significant impact on the logistics sector. Some of the innovative digital transformation technologies are

- ❖ Big data and machine learning

- ❖ Internet of Things (IoT)
- ❖ Cloud logistics
- ❖ Mobile applications
- ❖ Artificial Intelligence
- ❖ 5G technology
- ❖ Robotic Process Automation
- ❖ Unified Platforms
- ❖ Telematics with live GPS
- ❖ Blockchain

OBJECTIVES OF THE STUDY

1. To study the impact of digitalization in logistics industry
2. To identify the customer preference towards digitalization in logistics

DIGITALIZATION IMPACT IN LOGISTICS INDUSTRY

ENHANCED PRODUCTION

Companies in the logistics industry are benefiting from the most recent digital technologies. Many groups use cloud-based software from service providers to automate their supply chain. To centralize their activities they must do so. Logistics organizations will ultimately realize the necessity of a single technological platform for information flow automation in the future. As a result, they will be able to serve their consumers with consistently high-quality service. Most shipping organizations are now using blockchain-enabled digital shipping solutions. Developments in digital technology, consumers can now follow the growth of their purchases from start to end. Customers and logistics companies both benefit from the ability to track goods. They save both time and money by using it. Companies no longer need to tell customers when they can expect their products to arrive. As a result, clients may obtain the information directly over the internet. Automatic messages may also be sent to customers if there are any changes. When all participants in the shipping process have access to the same information, trust grows, and bottlenecks are reduced or eliminated.

EFFICIENT ROUTING

Investment in new technology has brought about another change in the logistics industry improved routing. Companies are investing in hi-tech software that ensures drivers don't get lost along the way, resulting in delivery delays. Improved routing resulted from better investment in new technologies in the logistics business. Enterprises are placing money into

innovative technologies to prevent delivery delays caused by drivers getting lost. Driving to the location has become a lot more efficient because of digital technologies.

Traffic accidents and unforeseen delays are reduced through digitalization. Logistics organizations save money because of efficient routing since trucks travel the shortest distances and consume the least amount of petrol. Digital technology has also made identifying the most efficient routes drivers can take to get to their destination easier. Interestingly, such software comes in handy when routes face congestion issues because of road works, traffic accidents, and unexpected delays. The driver receives advice on alternative roads to use. Efficient routing (thanks to digitization) helps logistic companies save money because vehicles use the shortest routes, drive fewer miles, and utilize less gas.

IMPROVED NAVY DEFENSIVE MAINTENANCE

Digital technology now feasible for logistics businesses to carry out preventative maintenance on their carriages. Using remote diagnostics solutions, companies can keep an eye on their fleets. They'll be able to see which vehicles need service this way. There are several advantages to spotting maintenance issues with a car as soon as they arise. As a result, vehicle downtime is reduced since possible faults are addressed before they may arise. There is a decrease in costs. Because of this, customers know they can rely on the logistics company to deliver on its promises. Digital technology makes it possible for logistics companies to perform preventive maintenance on their vehicles. Predictive maintenance tools allow firms to analyze their cars remotely. This way, they can work out which vehicle requires maintenance. Early identification of vehicles in need of maintenance brings many benefits. For example, downtime of vehicles reduces because potential issues are resolved before they can occur. The result is cost reduction. Customers can also count on the logistics firm for reliable services.

LOGISTICS INTELLIGENCE

Data has grown as a significance of the digitization of logistical procedures. Advanced data analytics and business intelligence must be prioritized as areas for future investment. Decision-making in a regular company context is not difficult, but intelligent judgments still exist, such as marketing strategy decisions. These need Cognitive Computing-based solutions and AI assistance. As a result of advances in cognitive computing and AI-enabled digital technologies, the logistics sector can tackle difficulties such as improving customer experience and reducing costs.

INCREASED EFFICIENCY

The latest digital technology is helping various logistical companies increase efficiency. For instance, many companies turn to cloud-based software from providers to digitize their supply chain. Doing so is essential in centralizing their operations. With time, more and more

logistic companies will understand the importance of a unified technology platform to ensure the automation of information flow. Eventually, they can provide customers with quality and consistent services.

SUPPORTS TO BUILD FAITH BETWEEN DEALING PARTNERS AND INVOLVED PARTIES

Most shipping companies are joining blockchain-enabled digital shipping solutions. It is a smooth move that builds trust between trade partners. It is also a significant step towards the logistics industry realizing its vision to promote technological advancement in every aspect of its operations. Digital technology has also made it easy for customers to track their orders from start to finish. Tracking shipments is a boon for both customers and logistics firms. It saves them time and money. Companies no longer need to answer clients when they can expect their delivery. Instead, customers can access the information themselves online. A firm can also send an automated message to clients if any changes occur. When information is relayed to all the parties involved in the shipping process, trust builds, and bottlenecks reduce or are eliminated.

BETTER TRANSPARENCY AND VISIBILITY

Transparency and visibility are important it helps companies make better decisions. For example, by tracking the movement of goods and materials in real-time, companies can better understand where things are in the supply chain and how long it will take for them to reach their destination. This can help companies make better decisions about production and inventory management. Digital technologies can be used to improve supply chain visibility in several ways like

- ❖ Radio-frequency identification (RFID) uses radio signals to track objects. It can trail inventory, manage orders
- ❖ **Global positioning system (GPS)** is a technology that uses satellites to track objects such as vehicles and shipments
- ❖ Sensors are devices that can track the temperature, humidity, pressure, and other attributes of objects.

IMPROVED CUSTOMER EXPERIENCE

Today, customers expect a high level of service and they are willing to switch providers if they don't get it. To stay competitive, companies need to focus on improving the customer experience. Companies that focus on delivering a great customer experience are more likely to succeed than those that don't. Digital technologies have had a significant impact on the customer experience. They have made it easier and faster for companies to interact with customers and they have helped improve customers' perceptions of companies.

CONCLUSION:

Digitalization in the logistics and supply chain management (L&SC) industry is of increasing strategic importance for businesses as it impacts established paradigms, business models and industry boundaries. Capacity to collect and analyse big data, upgraded visibility and connectivity of information in combination with a physical network with fast and reliable delivery options will have a significant impact on logistics productivity and supply chain networks.

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