Supply Chain Management and Logistics in New Business Models

Dr. S. Yuvaraj & Ms. R. Nadheya

ABSTRACT

In this globalized world, it’s become more complex to manage logistics and supply chain. The nature of the business and the role of logistics & supply chain are not as same as now as before, this is due to digitalization, advancements in information & technology and changes in consumer buying behavior. The present study is descriptive in nature focusing on the role of supply chain management & logistics in new business models and studying the impact of technology in logistics sectors. Work load of logistics and supply chain management has increased from the emergence of online shops, as they extended their services at a wide range. They not only plan coordinate, warehouse and move the goods from point of origin to point of end-consumer but also helping the online shops to expand their business and increase their market share by attracting more customers through digital marketing, artificial intelligence.

1. Introduction

Developments in IT sector are the major reason for emergence of online shops. Ten years back the role of supply chain and logistics management was not observed. Only in recent years there was a tremendous growth in these sectors. Even this became a major factor which is determining the growth of Indian economy. This change happened mainly because of development in information and technology and the development in electronic gadgets.

Supply chain management plans and controls the flow of goods and services, finance, information from the point of origin to the end consumer. It deals with procurement of raw material to movement of finished goods to the end users at most competitive cost. It fully relied heavily on forecasting the future demand.

Logistics is part of supply chain management, the main role of logistics is planning, coordinating, and storage, packing of products and delivering a right product to the right person at right time. These were the role at earlier times but in this digitalized world it become more difficult for the logistics sector to survive in this competitive business world as because of changes in customer expectation, their behavior, technological advancements, emergence of new business models etc.

2. Background of the Study

In today’s business are not restricted to a certain area or region or country, it’s been spread worldwide. Advancements in information technology had helped to expand the business across the world. Developments in logistics sector created a lot of employment opportunities across the world. In India prime minister scheme of ‘Make in India’ has paved way for development in logistics sector mainly in the area of last mile delivery. The main motive of logistics sector is delivery of the goods to the consumers at right time and at the same time it is the most challenging part too. Nowadays consumers are expecting a same day delivery of goods, this will be made possible only by having a smooth flow of supply chain and logistics services. Late delivery of goods will spoil the company’s reputation which affects the market share of the business.

3. Research Methodology

This study is of descriptive in nature, for which secondary data has been used. Data are collected through reviewing various articles, journals, magazines, websites etc. Based on the reviews, an attempt was made to study about the supply chain management and logistics in new business models.

4. Review of Literature

Deepak mathivathanan et al. (2018) explored the interrelated influences among SSCM (sustainable supply chain management) practices with respect to automotive industry. The results revealed that management commitment towards sustainability and incorporating the triple bottom line approach in strategic decision making are the most influential practices for implementing the sustainable supply chain management. The study suggest that the industrial managers should understand the inter influences among the practices and increases the probability of successful implementation of SSCM practices within the automotive industry. Hannah J. Stolze et al. (2018) studied about the supply chain integration through the lens of network theory, focusing on front-line individual’s decision-making and behaviors to find the cross-functional integration and firm-level outcomes. The study found that execution of marketing and supply chain strategies is dependent on the empowerment and integration of a manufacturer’s frontline employees in retail supply chains. Progress Hove-Sibanda and David Pooe.R.J (2018) examined about enhancing the supply chain performance through supply chain practices and supply chain e-collaboration. It was found that there is a strong positive and significant relationship between supply chain practice & supply chain e-collaboration. Supply chain e-collaboration also shows a positive influence on strategic information sharing. Strategic information sharing has a positive and significant
influence on supply chain competence and supply chain performance. This study concluded that firms can use supply chain practices to enhance their supply chain e-collaboration and supply chain performance.

Dong-Wook Kwak et al. (2017) investigated about the impact of supply chain innovation on risk management capabilities and on competitive advantage. The results revealed that innovative supply chain has a positive effect on risk management capabilities and also has significant impact on enhancing the competitive advantage. Erik Hofmann and Florin Osterwalder (2017) studied about the impact of digitalization on third-party logistics (3PL) business models. The study revealed that logistics service providers face significant digital adversity from new technologies such as autonomous vehicles and 3D printing as well as from platform-based business models and the sharing economy. They also suggested the areas in which 3PLs should concentrate (i.e.) customization of standardized logistics services, the provision of cloud logistics services, platform-based asset and logistics infrastructure sharing, the “physical internet” as a future transportation system and the adoption and integration of 3D printing. Guangwei Song et al. (2016) investigated the importance of product uncertainty, retailer’s visibility and logistics services in customer’s online purchase decisions. The study revealed that high product uncertainty has an impact on customer satisfaction. Logistics services and retailer visibility play an important role on customer satisfaction when buying a product. The study suggested that service quality and customer reviews can reduce the negative impact of product uncertainty and retailer visibility. Lan Wang (2015) analyzed the macro-environment and regional environment of logistics industry development, and elaborated how the logistics firms make innovation to create new business model and summarized three typical business models “product supplier, value-added service supplier and supply chain service supplier”, which show the upgrading route of making profit from the economy scale to integrated service. Luisa Marti et al. (2014) analyzed the impact of customs procedure, logistics costs and the quality of infrastructure for the emerging economies. The results revealed that developments in these factors have a significant growth in country’s trade flow. They also suggested that already many countries like Africa, South America and Eastern Europe are giving utmost importance to these factors to increase their international trade.

5. Objectives
1. To analyze the role of supply chain management and logistics in new business models
2. To study about the influence of technology on the logistics in this changing digital business world

6. Analysis & Discussion

Logistics in Online Shops

Role of logistics are to keep stock of the products, warehousing it and shipping them to the final destination. Everything should be planned and executed in the most cost effective manner. In every business consumers are the real kings who decide the success of the business. Consumers are now engaged in any one of the electronic gadgets like Smartphone, tablet, laptop etc and the advancements in information technology paved way for more online shops to emerge. The most advantageous feature of online shops is door step delivery and also speedy delivery system. Because of this need for supply chain management and logistics have been raised in recent years. It is been difficult for the online shops to handle its customers as they are widely spread all over the world. In order to overcome this logistics and supply chain management has expanded its service. Other than procurement of products, warehousing and shipping the same to end users, logistics has started to concentrate on promoting the sales and profit of online shops by focusing on customer’s needs. By providing real time tracking of movement of goods right from order placed to the delivery, maintaining the search history of the customers which is one of the strategy used to promote sales. They also promote other online shops by using digital marketing strategy (i.e.) promoting the sales of online shops by displacing the advertisements in the middle of the transaction made by the consumers. Another way they use to promote online shops revenue is by rating system. This ratings placed by the customers are the one which determines the market price of the online shops. Modern role of logistics is helping the online shops, customers and also contributing more to the Indian economy.

Digital Supply Chain Management – Online Shops

Digital supply chain means were the every stages of supply chain management are fully built on web based technologies. The main vision of digital supply chain management is to increase the efficiency of work, save more time and money and to gain a competitive advantage. It monitors the real-time inventory levels, carrier locations, time of delivery and also forecasts the future demands, this helps to increase their performance. In a digital supply chain, technologies such as GPS tracking, Radio Frequency Identification (RFID), barcodes, smart labels, location-based data and wireless sensor networks are used. Digital supply chain also uses cloud computing for manage, store and process the information.

Digital Logistics

Advancements in information and communication technologies and developments in digital technologies are considered to be game changing elements which are redefining the logistics world. Logistics sector is moving into a new era called digital logistics where every activity are connected through web based technologies. In order to compete with this digital world logistics are using artificial intelligence (AI) in order to maximize their profits and to reduce the money and time spent. Even they are adopting technologies like self-driving vehicles, internet of things (IoT), augmented reality (AR), big data, robotics and automation, 3D-printing, unmanned aerial vehicles. RPA express which means robotic process automation helps in dealing with the happenings of unexpected things in the transit of goods. The impact of adoption technologies provides an incredible level of optimization in logistics services at a competitive cost.

Digital Marketing in Logistics

Digital marketing are process of marketing the products or services by displacing the advertisements through internet, social media, YouTube, e-mail etc. Digital marketing helps the
logistics in targeting their consumers and helps in understanding the consumer behaviour by using behavioural targeting method. Logistics uses CRM software, marketing automation software, online advertisements and audience targeting software. Most of the logistics businesses are carried only on relationship build on trust between the parties; this is achieved by customer relationship management. Digital marketing helps in attracting the interest of potential consumers.

7. Conclusion

The world of logistics and the supply chain is a complicated one that requires a lot of planning, flexibility and ability to adjust when any unexpected situation arise. Logistics and supply chain management are entered into a new digital era. They are working on technologies to meet its consumers demand. Work load of logistics and supply chain management has increased from the emergence of online shops, as they extended their services at a wide range. They not only plan coordinate, warehouse and move the goods from point of origin to point of end-consumer but also helping the online shops to expand their business and increase their market share by attracting more customers through digital marketing, artificial intelligence etc. by adopting new technologies, supply chain management and logistics tend to have a competitive advantage.

References

10. https://towardsdatascience.com
11. www.sciencedirect.com