

Challenges And Opportunities In Logistics At Domestic And International- An Overview

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Abstract : Logistics Management plays a predominant role in distributing goods and services from the point of production to the point of consumption in every stage of life. It is used by B2B, B2C, C2C and G2C. Recently years transportation sector services have drastically change due to an advancement in technology. It helps to develop the economic growth of the country and availability of transport to every individual. On-time delivery, affordable cost and safety delivery are the basic pillars of transportation. Modernization of infrastructure and advancement in technology that increases the strength of the transport sector on the other hand various issues in both domestic and international levels that are affected by transport sector are discussed in this paper. The aim of this article is to provide a clearer knowledge and comprehensive assessment of the present status of the worldwide problems faced by the manufacturer, suppliers and customers in their activities and also discussed on opportunities realting to them. Most of the successful companies convert the challenges into opportunities and finally succeed.

Index Term: Transportation, cost, technology, domestic, International

1. INTRODUCTION:

A main choice in logistics management is to select the mode and carrier of transportation to move the inbound and outbound freight of the company. In making this choice, managers typically see various characteristics as the main criteria, often concentrating on cost and transportation time. Though, this is not a trivial decision, as the method often requires multiple criteria, some of which are not directly measured readily. In addition, the significance of individual variables often varies from sector to sector, business to business, and even from one plant to another within a business. Also, choice of mode and operator is often regarded separately, even at the same place, for inbound and outbound shipments. Mode preference and carrier choice are component of the transportation decision-making process, which involves defining appropriate shipping performance factors, choosing mode of transportation and carrier, negotiating tariffs and service levels and carrier performance assessment. (John Storey and Caroline Emberson, 2006) examines in his articles that all businesses belong to one or more supply chains. As part of its supply chain, it can be defined whether such a business sells directly to the end client, offers a service, generates a product or takes data from the earth. Organizations are currently focused primarily on their instant customers and internal functions and placed relatively little significance on them. Presently, organizations focus mainly on their immediate clients and inner functions and place comparatively little importance on them. Furthermore, given the off-remarked acceptance of the paramount importance of the human and behavioral sphere, the relative ignorance of this in any relevant form, we pay attention to this part. Supply chain management ultimately has to do with particular instructions and techniques influencing behaviors. It is worthwhile and essential the basic logics,

drivers, enablers and barriers.

(Ronald H. Ballou, 2000) Paper shows that the supply chain is an increasing term outlining the relationships between marketing, logistics and manufacturing. Opportunities occur for this term and its application primarily related to managing the logistics channel across corporate legal boundaries, between corporations and their suppliers. To one or several supply chains belong all organisations. Whether a company sells directly to the end customer, provides a service, produces a product or takes information from the earth can be described in the framework of its value chain. Organizations have recently focused primarily on their instant customers and internal functions and placed relatively little significance on them.

2. REVIEW OF LITERATURE

(Rafay Ishfaq and Charles R. Sox, 2010) An efficient and effective logistics strategy is required to study a competitive marketplace. Such an approach seeks to manage deliveries within a reasonable moment and at a competitive price across geographically distributed supply and demand fields. Intermodal logistics networks give a feasible alternative to meet these requirements. In an freight network, through the use of intermodal containers, a cargo utilizes various methods of transport in its trip from origin to destination in a seamless way. The development and governance of such a logistics network, however, is limited by the current transport infrastructure, the position of modal transfer nodes and the pricing structure of logistics. Initially, the development of intermodal logistics led from marketplace globalization. Regional and global trade arrangements such as GATT and NAFTA made possible this globalisation. In the US national freight market, use of intermodal consignments has also been on the increase. Domestic intermodal use has been steadily growing even under present lagging financial circumstances. In comparison with traditional over - the-road (OTR) networks, intermodal logistics use the advantages of its component transport modes to offer a competitive service. Integrating methods into an intermodal logistics network offers the means to transfer shipments that are both economically and operationally feasible between the roots and the locations. The freight networks ' competition is based not only on the lowest price, as well as on shipping capacities. Weight, quantity, access and transit time performance characterize these capacities. The constraints on shipping weight and quantity of

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the OTR network are met by the rail's weight or volume. Limitations on rail transport are overcome by using the freight shipment load-up and distribution route. [22] (Aravindaraj. K & P. Rajan Chinna, 2019) A contemporary on recent development activities and challenges in logistics sector in India reveals in his article that the most of the logistics sector in India are unorganized sector which is nearly 90%. And also said that the Government of India has spends logistics cost approximately 14% when compared to other developed countries. This article also focused on various measures are taken by the Government of India to boost domestic logistics sector in India and also reveals that what are the major challenges faced in logistics sector in India. [3] (Saif Benjaafar, 2014), Carbon-aware shipping and logistics, Environmental Influence of Transport by a Community Sustainable Mobility Strategy released by the European Commission, Globalization, Transport and Environment released in 2010 by the OECD, it is stated that Even though the particular estimates differ, transport-based CO₂ emissions are expected to increase substantially in the coming years. Issues concerning the distribution of pollution in maritime logistics. [23] (Wenting Zhu, 2014), The reasonable emission allocation model studied is a basic requirement for right emission footprint measurement and reporting in the selection of possible logistics alternatives. Although much focus has been paid to allocations of domestic emissions, less importance has been placed on distributions at the cargo level. Another approaches for logistics companies to distinguish themselves competitively on the market is to provide their clients with a message of environmental effectiveness. At the domestic level, significant research from various nations and areas has discussed the distribution of emissions. These define the distribution of emission allowances or objectives based on one or more equity values across areas or nations. [31] Special Economic Zones and its impact on India's export by (Aravindaraj. K & A. Muthusamy) reveals that to generate of additional economic activity to domestic logistics sector and also promotion of investment from foreign sources to increase fund in the logistics sector in India. This will help to create a job opportunities in logistics sector in India. [4] The impact on the environment of altering logistics systems by (Hakan Aronsson, 2006) a extensive review of literature reveals the low rates in logistics on environmental concerns, and results appropriate to structural problems are outlined at a firm point. The assessment is supported by three instances in which companies have introduced various kinds of structural modifications to their logistics systems. Over the past decade, environmental issues have gained growing attention. Transport is one of the main sources of environmental issues, which is anticipated to rise even quicker than the industrialized world's overall GNP development. Global companies are constantly searching for a competitive advantage. Environmental issues are often placed aside in the intensified hunt for operational efficiency with a focus on reduced expenses and shorter lead times. Ecological aspects are in fact at risk of being a future burden if their impacts can not be recognized and measured in the same way as time and cost. [12] (Claudia Archetti, 2016) Minimizing the logistical ratio in the inventory routing problem Inventory routing issues (IRPs) aim to minimize the cost of the total distance traveled over a investment horizon discrete in periods, while ensuring that clients do not incur a stock-out event. In an IRP's ideal solution, At the end of the horizon, clients generally do not

have an inventory. Only if this does not boost the price of the distance covered can some inventory stay. [6] (Teodor Gabriel Crainic, 2015) papers reveals that the In the last two decades, a unique problem on urban distribution in City Logistics has appeared as a major concern in many towns, freight carriers, logistics service suppliers, distributors and residents. Several new ways of organizing and managing distribution and freight transport have been suggested and sometimes tested to adapt to the new citizens ' expectations and urban sustainability objectives. [29] (Tal Raviv, 2015) examined the Operational Research Community is faced with many fresh difficulties compared to traditional systems. Telematics "Intelligent Transportation Systems Technology " on shared survivability systems to stronger organize and handle traffic develop suitable scheduling models and techniques. [28] (Pablo L. Durango Cohen, 2015) The use of shared mobility technologies such as bike sharing, ride sharing or car sharing in latest years is obvious in his article. These systems are gaining popularity as an option to private cars as they have the benefit of decreasing traffic congestion, shortage of parking place, and pollution. Many interesting issues arise from the design and operation of car sharing schemes. These issues vary from internet operational decisions ' long-term strategic issues. On the strategic end of the spectrum, issues such as the monetary, technical and environmental feasibility of deploying fresh vehicle or bike-sharing technologies in a town are raised. [20] The infrastructure of transportation offers mobility and thus access to individuals, products, services and resources. These systems accessibility and level of service determine quality of life and continuity of financial and company development and, in turn, served as a motive to create models to promote their management. (Sandeep Puri, 2012) in this article studied the issues in Indian pharmaceutical industry, This was one of Indian economy's fastest increasing industries, but the medications we take are suffering from severe illnesses: they were not stored and transmitted as they should be. Drug manufacturers face problems in selecting and working with the correct logistics partners and developing the correct transport scheme. [24] (A. Ansari, 2010) in this paper examined the challenges of outsourcing logistics towards third-party Providers, based on the challenges Third-Party Logistics (3PL) suppliers used by shippers. They recognize the main problems that include finding a 3PL with the capacities that fulfill the particular logistics requirement of the shipper, the inappropriateness of information systems between shipper and 3PL, the inability of 3PL to satisfy the future development requirements of a shipper and safety problems. [1] (Franziska Heinicke, 2015) in this article an significant element of infrastructure leadership is the planning of maintenance duties involving the assignment of duties to distinct crews or machines and the perseverance of an execution order. Towards this end, it is necessary to consider various elements. The maintenance provider, on the one side, is interested in decreasing immediate maintenance costs, such as travel expenses. At the other side, by scheduling maintenance duties, priorities must be regarded. Is often performed by laws of engagement, an inflexible technique that first solves priority duties. The findings indicate that ballast tamping is an significant problem for the maintenance of railway infrastructure as a healthy tamped track bed stabilizes the entire track line. The tilling duration varies from track section to track section based on track geometry and traffic quantity. Hence, having a large scheme

that is repeated every tamping period is unrealistic. [11] (Scott B. Keller John Ozment, 2009) in his article reveals that Many strikingly absent from the document are study on the interaction of logistics staff and technology, the role of logistics staff in managing the supply chain, and the significance of raising frontline logistics employment to the next professionalism in order to attain excellence in the supply chain. Academic and commercial literature recognize the human element as critical to attaining organizations ' logistics objectives and complete supply chains. Researchers have endorsed this stance over the years by exploring the nature of significant factors and testing proposals related to logistics staff problems. [25] The survey focused on routing problems by (Christian Schulz, 2013) in several cases, there is still a large gap between the current results of optimization technology and the requirements of real-world apps. As in the past, by combining stronger solution methods with general computer performance gains, effectiveness will be enhanced. These are no longer independent variables, such as hardware designers, due to physical constraints, result in higher speeds for linear algorithms, but in improved parallelism. [5] (Preethi Issac, 2015) Article examines the shortest path problem from source to destination over a collection of arc failure scenarios, taking into account the probability of various situations. A main route is selected, which is the first route to be taken by a driver, along with a number of alternative routes to be used when an impassable highway is found. These routes should minimize the anticipated cost of reaching the destination and be helpful wherever and without warning in natural disaster systems disasters can happen. The finest ways to reduce a disaster's effect on citizens ' well-being is to guarantee appropriate supplies for disasters are accessible. [21] (Josias Zietsman, 2006) This article shows that transit corridor policy-making with mixed-attribute utility theory, this article describes how choices can be made on transport programs and initiatives in the framework of sustainable transport. Therefore, decision-making in the framework of sustainable transport includes assessing a discrete set of options while taking into account conflicting goals. Although the use of methods that include these numerous and overlapping objectives is essential, choice-making in the transportation sector is often carried out using single-objective techniques such as cost-benefit analysis. [14] (Mary J. Meixell, Mario Norbis, 2008) The article reviews the choice of transport mode and the literature on carrier selection. This shows several significant topics it is under-represented in transport choice literature such as environmental and energy usage issues like supply chain security; supply chain inclusion, global development and the role of the web and evolving information technology. This analysis also discovered that the techniques of simulation, case study, and interview is under-represented, and that in this analysis, normative modeling research is only slightly discussed. [17] (Alfonso J. Pedraza Martinez, 2012) the transport and car fleet management features in humanitarian logistics were nearly unexplored by OR scientists in his article. This article offers evidence-based insights into the logistics problems posed by the dual goal of relief and growth, decentralization, allocated financing, and circumstances of field operation. [2] (Konstantinos N, 2012) In a town logistics setting, which is defined by vibrant travel times, it is often a issue to plan hazardous materials distribution paths for servicing a given set of orders within defined time windows. The issue of the allocation of hazardous materials includes

determining the delivery sequence and the respective routes allocated to each truck. Transport of hazardous materials is a significant financial activity. Large amounts of dangerous materials are transported and distributed worldwide annually in city logistics vehicle routing issues. [15] (Diego Cattaruzza, 2014) This article examines the car routing issues that were encountered for excellent distribution in towns. It applies the methodology below. First, it provides an overview of the car path optimization literature in towns. It then categorizes and analyzes the flows of urban logistics. (John E. Spillan Michael A. McGinnis Ali Kara George Liu Yi, 2013), A comparative summary of impact of logistics strategy and integration of logistics on US and China's strong competitiveness. This paper analyze logistics policies in between the Chinese and American manufacturing companies to evaluate the connection with critical success factors. [8]

3. OPPORTUNITIES IN LOGISTICS

(Sven Winkelhaus & Eric H. Grosse 2019) The contextual outcomes studied in Logistics 4.0 include inherent triggers, important technological innovations, human interaction effects and logistics tasks. Technology categorizes existing apps supporting Logistics 4.0: IoT, Cyber Systems, Predictive Analytics, Computing, Mobile Systems, Social Media-based Systems and Supplementary Innovations. Management implications are outlined and open study issues are examined. They offer possibilities to unify and expand existing solutions and identify links and interfaces that are still needed. Regarding the organizational implications used to identify future strategies and methods to fulfill certain logistics tasks in order to generate fresh technology. [26]

CONCLUSION

Although Logistics Management is a fresh word for describing product flow management operations, the idea has been incorporated into Supply Chain Management and Physical Distribution. It is fairly simple to identify boundary-spreading possibilities, at least in a theoretical sense. The challenge continues in attaining the advantages projected, such as the reward system. (Ronald H. Ballou, 2000) in his article examined that the transport is a main feature in the supply chain as it acts as a physical connection between clients and providers, allowing materials and resources to flow. The main function of Logistics Management is to provide flexible transport is to rationalize the flexibility of transport into distinct kinds. In this manner it is possible to determine the role of the kinds of flexibility in providing particular strategic logistics results.

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