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Key Factors Influencing Logistics And Supply Chain Management

Dr. A. Shameem[1] , T. Deepa Augustine[2] , M. Shashidharan[3]

[1]Professor AMET Business School AMET Deemed to be Univeristy

[2]Assistant Professor Annai Violet Arts and Science College Cum Research Scholar Bharthiar University

[3]Research Scholar AMET Business School AMET Deemed to be Univeristy

ABSTRACT

The Logistics and Supply Chain Managementis the process which links and co operate the operation in producing product or offering services to the needful customers.The efficiency in logistics and supply chain management can eventually make the business successful by optimizing the profit, reducing the cost, eliminating errors, etc. This ultimately meets the customer's demand which leads to customer satisfaction. This mechanism is true with all sorts of business enterprises despite the size of the company which could either be small, medium or large. The motto of the efficient logistics and supply chain management is to ensure sustainable competitive advantage over the competitors.The Transport and Logistics sector is considered to be the crucial sector with respect to the Indian economy. It is the key which facilitates other sectors like primary sector, secondary sector and tertiary sector particularly in operations of Agriculture which is considered to be the back bone of India. The Logistics and Supply chain management faces enormous changes and up gradation in the functioning process in order to suit the customers' demand. This eventually led to many key factors influencing the logistics and supply chain management in order to maintain efficiency and sustainable competitive advantage. In this article the key factors such as cost reduction, Eco friendly mechanism and other relevant aspects are analysed. The transportation cost cutting is essentially the fore most priority in Logistics and supply chain management. Above all cost cutting is the foremost challenge faced by the Logistics Sector. Hence Innovation in process or technology can be the solution expected by the Logistics Industry.

Key words: Logistics and Supply chain management, primary sector, secondary sector and tertiary sector, etc

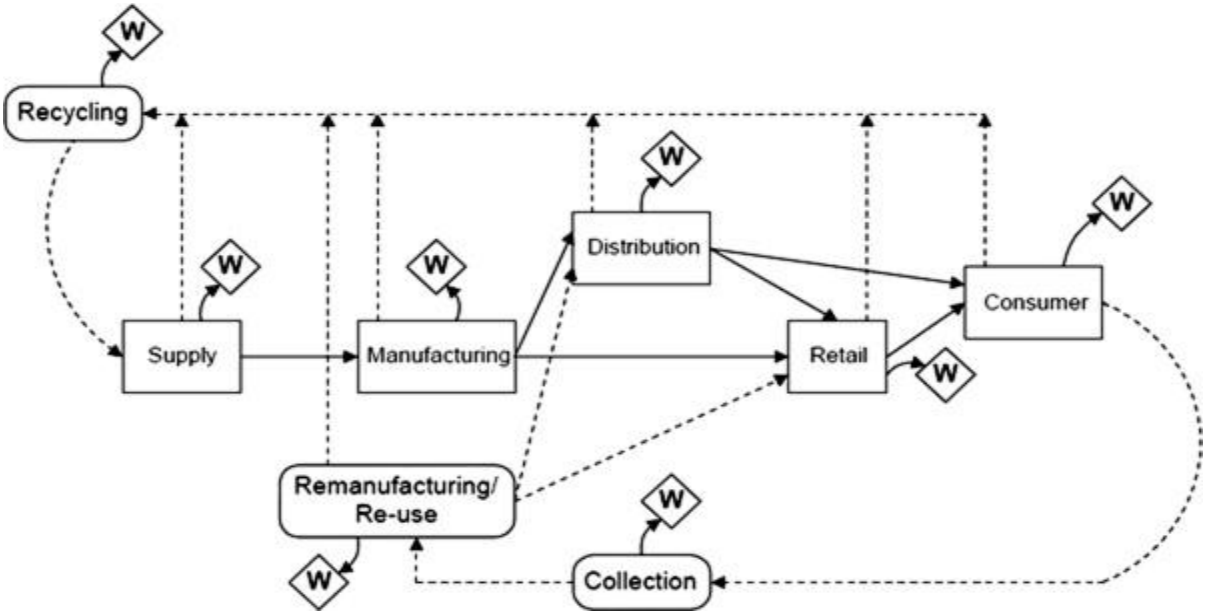
Introduction

The Logistics Industry with respect to Indian economy comprises about 13% of the total Gross Domestic Product (GDP), this fact is comparatively more than the other developed countries. The developed countries like US and other developed countries in Europe comprise around 8% to 9%.

This Factor is well known and it's comparatively less than the other developed countries. This also means that every product produced and service offered comprises of logistics cost into it. The logistic cost could eventually be around 11% of the total cost of the product or service. In Developed countries the logistics cost part in the total product cost is far more less which is about 3 % to 4 % of the total product cost. The Gross Domestic Product (GDP) of India comprises maximum of 55% from service industry, about 26% by the industrial sector and about 18% by the Agriculture. Each every supply chain process is backed up with logistics support which may eventually increase the final cost of the product or service.

Key Factors

The logistics and supply chain management acts as the overall perspective which comprises the operations such as planning, procuring, processing, storing, delivering, etc. Every process ensures value addition in order to meet the customers demand. Hence Logistics and supply chain management is the most essential aspect in any business. Some of the key factors which influencing the logistics and supply chain management are as follows.



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1) Optimisation of Transportation Costs:

Ultimately the cost of the product or service is the key influential parameter; hence reducing the cost particularly the transportation and supply chain cost is the important challenge.In the current scenario the fuel price which is in the increasing trend add much more challenging aspect to the

Product or service cost perspective. This could ultimately increase the product cost were the real value addition cost comprises only meagre part of the total cost. It means the Logistics cost is avoidable to certain extent when separating it from external influences.Some of the techniques in reducing the cost could be as follows

a) Economies of scale: The product has to be produced and shipped in a mass amount so that the cost of individual product could be reduced comparatively.This should substantially support with optimum forecasting.
b) Incorporating Battery/Solar vehicles: The usage of electric vehicle is the new trend adopted in order to reduce the cost. Since the energy cost is comparatively less than the usage of fuel cost.
c) In the business environment optimization of route has also become the advantageous technique. Hub and spoke mechanism helps in optimising the routing techniques.This reduces the total distance the shipment moves which ultimately reduce the overall cost.

2) Improving Customer Service:

In the present scenario the customer demand are getting frequently changed and looking for optimal customisation in view of product delivery without compromising in product quality. Hence customers are looking for end to end solutions, to be precise even the delivery service provider should also support customer with respect to customer service. This perspective will not only satisfy customer but also enhance the organisation to obtain sustainable competitive advantage over other competitors.

Hence the Logistics service provider must be a multi skilled were the service provider should not only fulfil on time delivery but also ensure optimum customer service such as quality, snag rectification, customer query solving and other relevant aspects. The customer satisfaction is all needed when an organisation is looking for growth and to sustain the market.

3) Enhancing Transparency in Logistics &Supply Chain:

The important aspect in the process of logistics and supply chain is ensuring transparency in the due process. The transparency in the process can improve the delivery aspect with respect to time with very less errors. Error elimination not only saves time but also a effective cost saving technique. The tracking of goods becomes very easy when the service provider follows transparency in the supply chain process. When the tracking mechanism is efficient it leads the way forward for effective routing and scheduling for shipment to move hazardless, when error occurs appropriate actions could be taken quickly.The transparency in the process not only benefits the organization but also helps the customer by providing on time information regarding the shipment, this will gain

customers trust over the service provider. Hence the entire flow of product could be efficiently carried forward.

4) Influence of Government Policies:

The implementation of government policies has its own advantages and disadvantages with the logistics and supply chain management. For example, Goods and Service Tax (GST) Act. The aim of the Goods and Service Tax is to enhance the cooperation between states in India. The Goods and Service Tax has its own advantage over the earlier prevailed tax system, particularly when incorporating e-governance where transparency has become the key aspect. It not only fixes the leakages but also eliminate corrupt practices. Hence optimising directly the pertaining financial management of the economy and indirectly enhancing the organisation incorporating such policies. The Goods and Service tax helps in optimising the resource generation and allocation in an effective manner. Likewise the government policies can create adverse effect in terms of pandemic time such as COVID 19. The pandemic situation has decreased the manufacturing production and other relevant sectors together to the greater extent. Such situations 'together with strict government policies has increased the price of product or service eventually led to inflation. Hence the demand for most of the products could not be forecasted in an efficient manner.

5) Sustainable competitive advantage:

The apt logisticsand supply chain management will lead the organisation as a sustainable player in the market. In order to maintain the sustainability the firm has to cooperate and collaborate with each stake holders in the value chain. Whereas the technology implemented is equally important like the other stakeholders. The right implementation of technology can save enormous time and energy which can ultimately save cost. The sustainability in the market can be obtained by reducing the gap between demand and supply in the market. In order to reduce the gap the key bottle necks in the supply chain process has to be identified and to be carefully eliminated. The innovation in the process or in the product is the other dimension were the sustainable competitive advantage could be obtained.Another important move is creating brand image through reducing carbon emission, hence contributing in reducing the climate change.

6) Technological Integration:

Integrating technology in logistics and supply chain management has become the need of the hour and utmost necessary to keep up the phase with equal to the other market players. In order to reduce labour cost and increase accuracy together with speed technology has to be adopted. Identification and elimination of errors has also become easy when technology is incorporated in the

process. The tech incorporation could be in two ways i.e. either through incorporating hardware such as robotics or through incorporating programmes such as Enterprise/Material Resource Planning software or even both. Particularly in case of reverse logistics and customer service the ERP/MRPsoftware tools plays a crucial role. The impact of artificial intelligence in demand forecasting is enormous hence data analytics has become the recent trend in enhancing the organisational efficiency.

7) Eco - Friendly Measures:

In the present scenario the climate change is the important problem to be addressed by the global countries. Both developing countries and developing countries are initiating benchmark measure to fight against the climate change through reducing carbon foot prints. Many carbon neutral countries and companies have even started the process of initiating carbon credit mechanism in terms of financial transactions. The reduction of carbon emission in the supply chain process not only reduces carbon foot prints but also enhance the good will of the brand or the company. The three R's (Reduce, Reuse and Recycle) have become the key mantra to reduce waste as well as to reduce carbon emission. Now aday's choosing vendors and supplier are based upon the carbon emission. Most the vendors and suppliers with least carbon emission are preferable. As per Paris climate deal reducing carbon foot prints has become the key agenda for the organisations around the world.

8) Reverse Logistics in Supply Chain Management

This is a mechanism of customer service in order to enhance the customer satisfaction. The Reverse logistics is enormously utilised in e-commerce sector were the products are returned in case of defect or dissatisfaction. The reverse logistics handle such scenario in a smooth manner, hence improves the performance towards customer satisfaction. The only negative aspect with the reverse logistics is the additional cost incurred during the process. So the reverse logistics has to be utilised in a well optimal manner in order to maintain less cost and less wastage. This can be obtained by choosing the right vendor or third party logistics service providers.

Conclusion

The above discussed were the key factors influencing logistics and supply chain management. These factors can never be compromised at any scenario in order to avoid the adverse effect. Still there are lot more space with respect to innovation and improvement in the logistics and supply chain management. All these factors align together in order to enhance one major important factor which is customer satisfaction, since customers are always the king. The customer satisfaction can alter an organisations demand push mechanism into demand pull which can eventually lead to growth. Though the logistics and supply chain management has its own importance, the success of an

organisation lies with the effective implementation and monitoring of all the key factors. Mere implementation without proper monitoring in a real time basis will not fetch the fruit. Hence all the key factors have its own complicated challenges which must be overcome with adequate experience and knowledge in the field.

References

1) CHRISTOPHER, M. I. (2017). Logistics & supply chain management.
2) Christopher, M. (2016). Logistics & supply chain management. Pearson UK.
3) Frazelle, E. (2002). Supply chain strategy: the logistics of supply chain management. McGrraw Hill.
4) Ballou, R. H. (2007). The evolution and future of logistics and supply chain management. European business review.
5) Bichou, K., & Gray, R. (2004). A logistics and supply chain management approach to port performance measurement. Maritime Policy & Management, 31(1), 47-67.
6) Larson, P. D., &Halldorsson, A. (2004). Logistics versus supply chain management: an international survey. International Journal of Logistics: Research and Applications, 7(1), 17-31.
7) Yazdani, M., Zarate, P., Coulibaly, A., &Zavadskas, E. K. (2017). A group decision making support system in logistics and supply chain management. Expert systems with Applications, 88, 376-392.
8) Grant, D. B. (2005, January). The transaction-relationship dichotomy in logistics and supply chain management. In Supply Chain Forum: An International Journal (Vol. 6, No. 2, pp. 38-48). Taylor & Francis.
9) Hackius, N., & Petersen, M. (2017). Blockchain in logistics and supply chain: trick or treat?. In Digitalization in Supply Chain Management and Logistics: Smart and Digital Solutions for an Industry 4.0 Environment. Proceedings of the Hamburg International Conference of Logistics (HICL), Vol. 23 (pp. 3-18). Berlin: epubli GmbH.
10) Li, X. (2014). Operations management of logistics and supply chain: Issues and directions. Discrete Dynamics in Nature and Society, 2014.