

Efficiency in intermodal transportation



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Introduction

The Intermodal transportation is the efficient method to transport freight containers from one point to the other. However, the intermodal transportation system is experiencing inefficiencies and delays. For instance, the shortage of personnel in the industry makes it difficult for supplies to reach on time; the laborers are exhausted resulting in accidents and quitting. Additionally, many trucks are needed for a trip and the drivers are usually faced with the problem of traffic jams during rush hours. Sometimes products get lost at the time of delivery and technology is not in a position of tracing the products. As the population increases so as the requirement for larger and better transportation; this impacts ports infrastructure and prompts city to construct more and better gateway to enhance demands of importation and exportation.

The efficiency of Intermodal Transportation in the Supply Chain Management Industry

The Supply Chain Management (SCM) industry involves the transportation and storage of raw materials, work-in-process inventory, and of finished products from the source point to the point of consumption. Therefore, the supply chain management entails the management of the movement of goods and services. The intermodal transportation system can be more efficient in the supply chain management industry as it aids in the movement of goods and services from one destination to the other through integration of air, road, sea and railway modes of transport. The Intermodal

transportation system can be more efficient and provide better support to the supply chain management industry as explicitly discussed in the subsequent paragraphs.

The construction of the good road transport networks that limits the chances of traffic jams is efficient to support the operations of the supply chain management industries. Road transport involves the transportation of small batches of products or containers from one destination to another by road (Lu & De, 2016). Road transport is the most famous mode of transport globally, because of the variety of benefits it offers to supply chain management of firms and industries. For instance, most of the producers and consumers are accessible to some road system. Therefore, this makes it easier for rapid transportation of the loads from light industries to other modes of transportation or terminals where they can be fetched for further transportation.

The transportation of goods and services from one destination to another within the countries which are connected with the road network is very easy and effective as it allows for the door to door services. The supply chain management can benefit from the road network system in the outsourcing of the raw materials and human capital. The road networks can also be used to link with other modes of transport to ensure safer transportation of the goods and services to the final destinations. For instance, the ports and harbors are connected with the road network to facilitate the movement of goods from overseas to the final destinations. In addition, the railway terminals are connected with the road system to facilitate the transportation of the products to their final destination, especially to areas which are not

accessible by the train or regions that lack the railway lines (Günther & Kim, 2015).

Moreover, road transport is also efficient as it provides door to door delivery of goods and services or raw materials to the industry. Therefore, it can provide efficient support for the supply chain management in the supply of raw materials from the source point to the industry for the conversion into finished products. The road transport can be modified to ensure that the trucks do not experience traffic jams in the process of transportation. The reduction of the traffic jam can be enhanced through the construction of separate ways for the trucks to speed up the arrival of the products to the final destinations. Road transport hence is significant for the door to door picking and delivery of materials thus making it possible for goods to be transported both in upstream and downstream the supply chain.

Additionally, the introduction of containerization in the supply chain has established more significance for the road transportation since standardized containers can be transported by roads to various destinations. The containers' can be fixed with the refrigerators to enhance the transportation of perishable items from one destination to the other; in the case, trucks are stuck in the traffic jams to reduce the chances of damages to the items.

The other mode of transport is water transport; the water transport entails rivers, seas and oceans. Many of the nations are accessible through the oceans. The water transport is the most cost-effective and the oldest means of transport for the heavy goods and bulk cargoes. In addition, waterways are the natural routes which do not need a large sum of money for the construction. The construction of the large harbors can improve the

efficiency of the water transport, as it can allow more ships to load or offload the goods. The harbors are connected with the road system to ensure that the goods are transported to the final destination without delays. The water transport is not vulnerable to the traffic jams; therefore, it is significant for the supply chain management in the transportation of items overseas.

The transportation of the bulk products is cheaper with the use of the water transportation through ships and large ferries. Moreover, the lower cost of handling the containers is possible through the use of the water transport. The water transport system is not liable to accidents; therefore, it can ensure safe delivery of the materials from the source country to the ports. The supply chain management can reduce the damages that can occur in the process of transportation as a result of accidents experienced by the trucks on the roads by opting for the waterway transport. The ships are also managed by more than one driver to ensure that the ships are driven in turns to avoid the exhaustion of the drivers which may result in delays because the accidents are very rare with the water transport (Szyliowicz, Zamparini & Reniers, 2016). The ship can transport both the human and capital resources from one country to another since it involves bulk transportation. Therefore, the industries which are involved in the importation of the human resources can use the waterways to accomplish their needs.

In addition, the water transport system is efficient for the transportation of goods and services to the island countries. Some countries are not accessible through the road networks, for example, Madagascar. Therefore, the process of exportation and importation is best executed through water

transport, which is also cost-effective. This water mode of transport is also significant for the supply chain management since no country is an independent producer of all the raw materials for its products. The country of Madagascar can outsource for the raw materials for its industries from other nations through the means of water transport. The supply chain management for Madagascar prefers water transport to air because of the efficiency in terms of the cost of transport. Moreover, the ship engineers usually accompany the ships in the process of transportation of the goods and services to ensure that the delivery is successful. The incorporation of the ship engineers in the process of transportation ensures that technical breakdowns are dealt with in the process of movement of goods towards the final destinations.

The air transport is faster and is significant for the transportation of the perishable products like flowers. Therefore, the supply chain management should consider the fastest means of transport in the transportation of the perishable goods. Additionally, the aircraft are released with the more than one pilot to ensure that the pilots are not exhausted in the process of the journey. Therefore, this increases the confidence of the supply chain manager of the safety of the products. The air transport is also significant for cross-boundary transportation of goods and services. For example, in the global environment, the firms are restructuring their supply chain. The combination of the air and road transport in the intermodal system is efficient for the supply management to facilitate the movement of the products to the point where the airplanes cannot land (McDonald, 2010). For instance, some industries are not spacious enough for the airplanes to land.

Moreover, the trains are the best mode of transport in the movement of the freight containers. The economic blocs have made it a priority to construct a joint railway line to facilitate the movement of goods and services within the economic bloc. For instance, the East Africa economic bloc has constructed the railway line that connects the three countries within the bloc. The three countries include Kenya, Uganda and Tanzania. The railway line that connects the three countries facilitates the movement of goods and services within the three countries. Additionally, the railway line terminals are connected with the roads to facilitate the movement of the goods to the final destination (Konings, Priemus & Nijkamp, 2011). The intermodal transport system is efficient for the transportation of the supply chain as it facilitates the exportation and importation of the materials and services, not only within the country but also across the borders of the country.

Conclusion

In conclusion, the intermodal transport system facilitates the transportation of goods and services within and across the countries. The common modes of transport include water, air, road and railways. The linkage between the modes of transport facilitates the movement of products and services from the source to the final destination. The air transport is significant for the supply chain to move the perishable products. In addition, the air transport can be used in the supply chain to transport products which are required urgently at the final destination. However, the air transport final destination is connected with road network to facilitate the movement of the products into the industry or market. The water and railway are also significant for the transportation of the heavy containers or bulk products. Therefore, in the <https://assignbuster.com/efficiency-in-intermodal-transportation/>

case of the raw materials, these modes of transport are significant for the supply of the raw materials from the source. Therefore, the intermodal transport system supports the supply chain management of the industry in the movement of the goods from the source to the final destination.

References

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