

The Role of Transportation in Logistics Chain

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Abstract

Transportation is needed to ascertain the state of moving products. The growth in the skill and management principles enhance the movement of load, delivery Speed, service quality, operation costs, the usage of facilities and energy saving. Transportation serves an important part in the control of logistic. Assessing the current state, a strong system needs a clear frame of logistics and a proper transport to execute and techniques to connect the producing procedures. The aim of the paper is to define the role of transportation in logistics for the action of further improvement. The research was undertaken to define and understand the basic views of logistics and its various applications and the relationships on either side of logistics and transportation.

Introduction

The article under review is on the topic, “the role of transportation in logistics chain”. In this review, a summary of the article will be given, so readers of the review can have an idea of what the article is about. The second stage in the review, will look at the structure of the article. It will be based on the article structures’ effectiveness, whether it’s been laid out orderly manner for readers to easily understand. Also, whether all the necessary sub-sections such as, abstract, introduction, and conclusion have been included in the article. A critique of the article will then follow. The critique will be based on the following, the articles’ accuracy, authority, objectivity, currency, and coverage, this will be followed by an examination of the only table included in the article. Figures are included in an article to help the reader understand the article better, as such, it should be relevant in the article, well cited and also well labelled, in order to serve its purpose in the article.

The last aspect to be looked at will be the article’s availability and reliability. All articles should be readily available for easy access and also the information it contains should be reliable.

Keywords: Transportation system, Logistics, Components, Inter relationships.

Article summary

Transportation is very important in logistics, as it affects the efficiency of the whole logistics process. Therefore, revising the present state of transportation for its improvement is in the right direction, which is the aim of the paper. The paper starts by giving an overview of logistics. It involves the planning, control and well-planned implementation of the flow of goods and services. The authors also give a brief development of logistics, as starting in the 18th and 19th centuries, a necessity resulting from the need for the flow of military logistics of World War II. Transportation according to the article cost more in the supply chain process and it’s also the most important. It plays the role of connecting processes in the supply chain and also determines the service quality of the supply chain.

The objective of the authors was to find ways to improve the current structure of transportation system in the supply chain. They proposed the inclusion of e-business in the logistics process. This could lead to lower cost to the system. The authors concluded that, there is a strong relationship between the transportation and logistics systems, the success of logistics depends on improvement in transportation systems.

Article structure

The authors of the article, “the role of transportation in logistics chain”, began the article with a brief abstract, the abstract failed to give the whole executive summary of the article, it left out the

findings of the article as well as the conclusion, which are important parts of an abstract. It only gave the objective of the article which is not enough for an abstract.

There was a substantive introduction section, which included the objective of the study. After the introduction, the article was divided into four main sections including the references. They are,

- Overview of Logistics
- Interrelationship between Transportation and Logistics
- Discussions and Conclusions,
- References

These sections are important in any research as they give the focus of the research, and tell readers what to expect in the article. The literature on the subject is contained in the second and third sections of the article. They give a general background of the topic under study, which is critical in any research. The fourth section is on discussions and conclusion of the study. The conclusion summarises the discussion section of the study. A well-structured referencing was developed at the end of the work. Two clear and well labelled diagrams, and a graph are found in the second and third section of the article.

Article critique

Authority

The article under review was published in the “Proceedings of the Eastern Asia Society for Transportation Studies”, aimed at publishing high quality conference proceedings. It publishes only high-quality articles which support excellence in transportation research. The authors are two professionals in academia. Srenivas, M. M was at the Alluri Institute of Management Sciences Warangal, A.P., INDIA, at the time of publication, and Dr. T. Srinivas was also at the Department of Mathematics, Kakatiya University Warangal at the time of publication. The both have written and published several research works, showing they are experienced researchers.

Accuracy

The accuracy of the article is established in the fact that, references have been provided for works the authors cited in the article so that readers can verify the information provided. Thus, the article contains correct information and is based on proven facts. The authors in this article consulted works of other scholars in the research area, this is evident in the works which were cited at the end of the article. The evidence, provided in the form of references at the end of the article shows the authors provided accurate information, which make the information in the article credible.

Currency

There are different types of information, some of which are time sensitive, which is why it is important to determine the currency of an article. The article under review was published in 2005, which is twelve years old. The information contained in this article is an old research work. Thus, the article contains older information on “the role of transportation in logistics chain”. Research involves gathering the most recent studies in the research domain, the sources of scholarly work cited by the authors in this article are all current, from the year 2000 to 2015.

Relevance

The Eastern Asia Society for Transportation Studies was founded in the year 1994. The aim of the society is to support high standard research in transportation. The Society as part of its activities organizes biennial International Conferences. Papers accepted to be presented at these conferences are peer-reviewed and are of high academic standards. Thus, for the article to be accepted and presented means it is of high quality and relevant in the field of transportation studies. The article's is written in a language the ordinary person can understand; the reader does not need any technical background to understand the article. It will also be useful for players in transportation or supply chain business.

Objectivity

The article under review does not have evidence to suggest the authors have been biased in the research undertaken, this is so because the information provided by the authors are duly referenced.

Thus, the information provided is substantiate with other published sources. Also, the source and the objective of the article is made clear from the beginning of the article. The evidence of the objectivity of this article is in the fact that it was published in Proceedings of the Eastern Asia Society for Transportation Studies, which publishes high quality conference proceedings. It publishes only high-quality articles which are of relevance to international society.

Stability

The authors of this article are from academia and are experienced authors. They are at the top in their field, and are experienced authors who have many research items, articles and conference Paper to their names. As such they are very much aware of the requirements in producing high quality scholarly articles. As such the article is stable.

Analysis of graph/image/table

Figures and graphs can differ in representation, structure and flexibility. They are used in articles to give a better understanding of issues. There are two figures in the article, and one graph. The figure one "Overview of Logistics System" is well labelled, but the figure itself is not readable, and its explanation in the article is not quite clear enough. The second figure "Logistics historical development" is labelled well and also readable compared to the first one. The third one "Cost ratio of logistics items", has been labeled as a figure, but it is a graph presentation.

Recent advances related to the topic

The article under review was on "the role of transportation in logistics chain.", and there have been recent advancement in this area to help improve the performance of supply chain management (Jacobson, 2011). These major developments in transportation have made transportation in the supply chain much safer, less disruptive, smarter and less expensive (Al-Matawah, 2015). One of such development is the introduction of social media for logistics. The use of Face book and Twitter by companies such as UPS and FedEx in on the rise.

Companies use social media to interact with their customers on the update and location of their loads or order (Viswanadham 2014, Gartner IT Glossary, 2012b, Gartner IT Glossary, 2012c, Brin, 2011). The flow of information is vital in the delivery of goods from one point to the other. This is why the development of information systems for analysis, planning and decision of transportation in the supply chain has been a great asset (Torin 2007). Transport information systems have been applied in-vehicle eCall in an accident situation. In the case of an accident, the ecall automatically through in-vehicle sensors place an emergency call to the nearest emergency point.

The can give information such as time of accident, location, and the direction the vehicle was traveling, with vehicle identification if any (Tyagi, Kalyanaraman, Krishnapuram, 2012). Bluetooth technology has been developed to calculate and make travel time analysis. It has the advantage of being inexpensive, gives accurate point to point analysis (Joshi, Rajamani, Takayuki, Prathapaneni, Subramaniam, 2013). There have also been developments that have limited the incidence of disruption due to human error in the supply chain (U.S. Department of Transportation 2016).

Most of transportation accidents occur as a result of human mistakes and mechanical failures (Annabelle and Dee-Ann 2016). There have been developments of autonomous vehicles which have the potential of reducing most of the human error (Randall 2016).

Conclusion

In every supply chain, transportation is very important as it can affect the efficiency of the process. It is therefore very vital for researchers to always find ways of improving the transportation system. What the authors in this article did was to determine the important role transportation plays in the supply chain and the need for its improvement. Modern transportation systems cannot do without the introduction of transport information systems technology. In the delivery of goods there need to be the exchange of information between those involve in the transport process including customers as well.

According to the article there is a positive relation between an efficient supply chain and an improved transportation system.

The article adds to the body of knowledge on the effect of transportation in supply chain management. It provides a comprehensive survey of the advantages of an improved transportation system. Also, it is relevant to current supply chain management problem. Based on the conclusion of the article it will be very much important to review the transportation system to be able to provide a stronger concept on transportation applications in the logistics activities.

Source

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