

E-Commerce Impacts on Logistics Chain: Customers Perspective

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ABSTRACT: Mobility is an indicator of development across business region. In a country like india, the role of transport is vital. It helps to maintain stable growth of economy. E-commerce is the future trend of business style. It brings many benefits individuals, business and communities. The optimized transportation techniques improves the strong economy, reduced expenditure and cost of the product, safety, moving load, accuracy in delivery, reduced traffic density and less energy intensive to link the channel members. This paper emphasizes the actions required for improving quality of service. The objective of the paper is to define the role of transportation in logistics for the reference of impacts of e-commerce further improvement. The research was supported to logistics managers to comprehend the collective views of logistics and its applications.

Keywords: E-commerce, Transportation, Logistics

I. INTRODUCTION

E-commerce is the future trend of business style. It brings many benefits for both companies and consumers. However it has challenges to meet the requirements of channel members. It is in the hands of management to deciding the right transportation model for their production and selling process. Council of Logistics Management (1991) defined that logistics is 'part of the supply chain process that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements'.

Johnson and Wood's definition (1997) uses 'five important key terms', which are logistics, inbound logistics, materials management, physical distribution, and supply-chain management, to interpret. Logistics describes the entire process of materials and products moving into, through, and out of firm. Inbound logistics covers the movement of material received from suppliers. Materials management describes the movement of materials and components within a firm. Physical distribution refers to the movement of goods outward from the end of the assembly line to the customer. Finally, supply-chain management is somewhat larger than logistics, and it links logistics more directly with the user's total communications network and with the firm's engineering staff.

Yung-yu Tseng (2005) described the e-commerce impacts on transportation are (1) E-commerce expands the market area from regional to global; (2) Ecommerce uses electronic techniques instead of traditional paper works, which promotes the industries' efficiency and competitiveness; (3) The number of trips is increased. On the other hand the average load of single trip is reduced, which means it needs

higher carriage if using the same means of transportation; (4) E-commerce will impact on transport system due to the increased trips; (5) E-commerce might reduce the number of warehouses and the stock cost.

However application and integration of transportation model should be considered for quality transportation services. Some constrains are need to be rectified i.e., Internet security, logical difficulties and online services to customers (door-to-door services). A healthy and successful e-commerce environment is determined by the optimal logistics operation.

The e-commerce pushes the following factors to determining the future of logistics

- Growth of international goods transport
- The change of production and marketing strategy of organization
- The competition and pressure of globalised market; World Trade Organization (WTO),
- Quality of services Efficient Consumer Response (ECR) and Quick Response (QR)
- Revolution of logistics operation by using IT techniques; Radio Frequency ID (RFID)
- Improvement of logistics facilities
- Channel cooperation between members
- Specialized logistics services and Logistics centres

Providing efficient transportation strategies are needed in rapidly changing international market. Online services and e-commerce are growing day by day. The number of online buyers is increased. Now, the companies are realized to adopt suitable transportation model and strategies to apply to meet the necessities. Considering the above factors and formulating the strategies are the key issues for all the

organization. In this context, customer is playing pivotal role in transportation.

The present study has the following objectives.

- To study the socio- economic profile of the respondents.
- To rating the impacts of e-commerce on transportation in customers perspective.

II. RESEARCH METHODOLOGY

The research methodology used in this research is descriptive. 110 creative customers who played in e-commerce transaction with distribution are considered. The respondents (Customers) are using online technologies for their purchase both personal and official purpose that considered for study. The researchers used ‘judgmental sampling technique’. The study based on primary information given by customers and the required information gathered through questionnaire.

ANALYSIS AND INTERPRETATIONS

Table 1: Socio Economic details

S. No.	Particulars	No. of respondents	Percentage (%)	
1	Gender	Male	72	64.8
		Female	39	35.2
2.	Age	Below 25 years	44	39.6
		26 – 35 years	35	31.5
		36 - 45 years	27	24.4
		Above 45 years	5	4.5
3.	Education	HSC	11	9.9
		Graduate	53	47.7
		Post graduate	33	29.7
		Other qualification	14	12.6
4.	Annual Income (in Rs.)	Below 1,00,000	9	8.1
		1,00,000 – 2,00,000	29	26.2
		2,00,001 – 3,00,000	46	41.4
		Above 3,00,000	27	24.3
5.	Years of experience in online purchase	Below 3 years	49	44.2
		4-6 years	36	32.4
		7-9 years	15	13.5
		Above 9 years	11	9.9

From the above table, it reveals that out of 110 respondents, 64.8 percent of the respondents were male and remaining 35.8 percent of the respondents were female. Regarding age, majority (39.6 percent) of the respondents were between the age group of below 25 years. In case of educational qualification, 47.7 percent of the respondents were graduates. The table also reveals that majority (41.1 percent) of the respondents had annual income between Rs.2,00,001-Rs.3,00,000. Inference with regards years of experience in online purchase, majority of the respondents (44.2 percent) used online purchase less than 3 years.

Table 2 Mean rank of customers towards e-commerce impacts on logistics chain

S. No.	Factors	Mean score
1.	Satisfy the demand of the product	2.8512
2.	Geographical pricing of the product	3.8169
3.	Reduction of various costs	3.2147
4.	Delivery on time	3.0162
5.	Availability of services in the region	3.1214
6.	Handling and maintenance support through logistics	2.9765
7.	Safety on delivery	3.6544
8.	Requirement of specialized supervision	3.5551
9.	Settlement of bill	3.8952
10.	Complaints handling and customer care services	3.0549
11.	Issues in accessing online web portals	3.5654

Table 2 shows the mean score of customers towards e-commerce impacts on logistics chain. The high mean score of e-commerce impacts on logistics were settlement of bill (3.8952), Geographical pricing of the product (3.8169) and Safety on delivery (3.6544). The following factors showed low mean score towards impact of e-commerce in logistics chain Satisfy the demand of the product (2.8512), Handling and maintenance support through logistics (2.9765) and Delivery on time (3.0162).

III. CONCLUSION

Maintain time on deliver of products to consumers' hands is a prime need of logistics solution. Integration of logistics and e-business is the future trend. The logistics strategy to reduce cost based on integration of the producers to link the terminal customers. This could reduce expenses and also administer sources more efficiently. The management had formulated new modernized tracking system and strategies regarding customer service that may reduce complaints. Customers and companies could make transaction more efficient and easier through the help of e-commerce and that benefit seen in settlement of bill, geographical pricing and safety on delivery. Also, the logistics solution should strengthen in customer satisfaction regarding the demand of the product, Handling and maintenance support through logistics (all season) and delivery on time.

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