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RESEARCH ARTICLE

An Empirical study of Reverse Logistics in online purchase

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Manuscript Info	Abstract
Manuscript History:	Reverse Logistics is the key in Online purchasing as number of returns are
Received: 11 January 2014 Final Accepted: 22 February 2014 Published Online: March 2014	Moreover there are more chances that the consumer returning back the products due to item not the one he/she expected, or the product broken in transit or wrong item sent. Online e-tailer is more conscious in Forward
Key words: Reverse logistics, returns, Online e- tailer *Corresponding Author G.Thiyagarajan	Logistics and equal importance to be given to Reverse Logistics as well. Reverse Logistics if properly handled, will give customer satisfaction and will lead the customer to purchase more from the same e-tailer. If returns are not properly handled by the e-tailer it will give negative impact in the minds of the consumer and will result in bad mouth about the e-tailer. In this paper, a survey is conducted and the need of proper reverse logistics system for e-
	tailer is clearly demonstrated with the results <i>Copy Right, IJAR, 2014,. All rights reserved.</i>

INTRODUCTION

Twenty-years ago, supply chains were busy fine-tuning the logistics of products from raw material to the end customer. Products are obviously still streaming in the direction of the end customer but an increasing flow of products is coming back. This is happening for a whole range of industries, covering electronic goods, pharmaceuticals, beverages and so on. For instance, the automobile industry is busy changing the physical and virtual supply chain to facilitate end-oflife recovery (Boon et al., 2001; Ferguson and Browne, 2001). Besides this, distant sellers like e-tailers have to handle high return rates and many times at no cost for the customer. It is not surprising that the Reverse Logistics Executive Council has announced that US firms have been losing billions of dollars on account of being ill-prepared to deal with reverse flows (Rogers and Tibben-Lembke, 1999). The return as a process was recently added to the Supply-Chain Operations Reference (SCOR) model, stressing its importance for supply chain management in the future (Schultz, 2002). Reverse Logistics has been stretching out worldwide, involving all the layers of supply chains in various industry sectors. While some actors in the chain have been forced to take products back, others have pro-actively done so, attracted by the value in used products. One way or the other, Reverse Logistics has become a key competence in modern supply chains. In this paper, we present an analysis of reverse logistics issues faced by customer who are purchasing through online.

LITERATURE REVIEW

Definition and a brief history "In the sweat of your face you shall eat bread Till you return to the ground, For out of it you were taken; For dust you are, And to dust you shall return." Genesis 3:19 Though the conception of Reverse Logistics dates from long time ago (as the aforementioned citation proves), the denomination of the term is difficult to trace with precision. Terms like Reverse Channels or Reverse Flow already appear in the scientific literature of the seventies, but consistently related with recycling (Guiltinan and Nwokoye, 1974; Ginter and Starling, 1978). The Council of Logistics Management (CLM) published the first known definition of Reverse Logistics in the early nineties (Stock, 1992): "...the term often used to refer to the role of logistics in recycling, waste disposal, and management of hazardous materials; a broader perspective includes all relating to logistics activities carried out in source reduction, recycling, substitution, reuse of materials and disposal." The previous definition is quite general, as it is evident from the following excerpts "the role of logistics in all relating activities." Besides that, it is originated in a waste management standpoint. In the same year Pohlen and Farris (1992) define Reverse Logistics, guided by marketing principles and by giving it a direction insight, as follows: "...the movement of goods from a consumer towards a producer in a channel of distribution." Kopicky et al. (1993) defines Reverse Logistics analogously to Stock (1992) but keeps, as previously introduced by Pohlen and Farris (1992), the sense of direction opposed to traditional distribution flows: "Reverse Logistics is a broad term referring to the logistics management and disposing of hazardous or non-hazardous waste from packaging and products. It includes reverse distribution () which causes goods and information to flow in the opposite direction of normal logistics activities." In the end of the nineties, Rogers and Tibben-Lembke (1999) describe Reverse Logistics stressing the goal and the processes (the logistics) involved: "The process of planning, implementing, and controlling the efficient, cost-effective flow of raw materials, in-process inventory, finished goods, and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal." The European Working Group on Reverse Logistics, RevLog (1998-), puts forward the following definition Dekker et al., (2003): "The process of planning, implementing and controlling flows of raw materials, in process inventory, and finished goods, from a manufacturing, distribution or use point, to a point of recovery or point of proper disposal". This perspective on Reverse Logistics keeps the essence of the definition as put forward by Rogers and Tibben-Lembke (1999), which is logistics. We do not however refer to "point of consumption" nor to "point of origin." In this way we give margin to return flows that were not consumed first (for instance, stock adjustments due to overstocks or spare parts which were not used), or that may go back to other point of recovery than the original (e.g. collected computer chips may enter another chain).

NEED FOR THE STUDY

The number of returns made by the consumer when purchasing with the online Retailer is the key to understand the number of products reaching consumers safely. This will give more inputs about the Reverse Logistics capability of the e-tailer. Moreover this will give immense idea what the consumer thinks about the online purchase. Consumer is happy about the online purchase or dissatisfied about the online purchase. If the consumer is happy with online purchase he will go ahead with it and if dissatisfied will spread bad mouth about the online purchase. He not only goes for the same e-tailer but also avoid the online purchasing system itself. The need of the study arises to understand the Customers experience about online purchasing and the Reverse Logistics capability of the e-tailer.

OBJECTIVES

- To understand the customer experiences about the online purchase and whether the customer receive the products safely as ordered.
- To understand the Reverse Logistics capability of the e-tailer.
- To measure the level of satisfaction derived by the online purchase of the consumer.
- To assess the future relationship between the consumer and the e-tailer.

RESEARCH METHODOLOGY

RESEARCH DESIGN:

Considering this work as a basic research, this study has followed descriptive research design. An attempt is made in this study to understand an association between the online purchase made by the customers and their association with the concept of customer satisfaction. Data were collected from the potential online purchasing customers of Chennai, Tamilnadu, India.

DATA COLLECTION:

In this study the primary data were collected in Chennai for the study. A questionnaire was designed to collect the primary data from the online purchasing customers of Chennai. POPULATION & SAMPLING FRAME:

A convenient sampling method was used to obtain the data from the customers by mailing a list of customers shopping online in Chennai.

SAMPLING METHOD:

A Sample of 100 respondents was chosen for data collection. It was observed nearly 30 questionnaires were incomplete. They were deleted from actual population which gave a sample of 70 respondents in total.

DATA ANALYSIS:

The data were analyzed using ANOVA, Correlation etc statistical tools.

LIMITATIONS:

The Researcher took all possible care and efforts both at the time of collection of data and during analysis of data. In spite of that while deriving the conclusion, the present study is subject to the below mentioned limitations.

1. The data has been collected from the respondents of Chennai city only. The results are location specific and therefore the conclusions drawn may not be applicable to a different district having different socio-economic conditions.

2. The study relating to returns of product is entirely based on the responses given by the respondents. The views of the respondents are purely based on customer satisfaction, perception, expectation and different other parameters.

RESULTS & FINDINGS

- Many of the experts estimated that as much as 10% of all goods ordered online during the holiday season were going to be shipped back.
- 59% of online e-tailers have return rates of less than 8%.
- Refunds (59%) of products ranked as the leading form of action taken on returned products followed by exchanges (27%) and credit at off-line or online store (11%).



• The three leading products returned were clothing (37%), computer software (24%), and books (12%).



- Majority (95%) of respondents would be inclined not to do business with online merchants who imposed a service charge to return a product to an off-line store.
- The customers returns were mailed back to the online retailer is around 81% vs. returned to an off-line store.
- The online customers said that return policies influence their decision to shop with an e-tailer is 87%.
- Almost 88% of the respondents said they didn't intend to return any items. Of those who returned items, 40% said they found it difficult to return their online purchases, while 60% found it "easy"
- For 42% of the respondents who declared they used customer service, 38% said the experience was negative, 42% said it was positive, while the rest were indifferent.
- The major reasons for returning products are: Items not wanted, Wrong item shipped and Item broken.

CONCLUSION

This survey even though limited to Chennai, we can see from these statistics that Reverse Logistics will be playing a major role for all the e-tailers to satisfy the customers. Currently e-tailers do not have the necessary systems in place to address or handle returns most efficiently. But the e-tailers who are looking for a competitive advantage will understand the need of best managed Reverse Logistics for giving better customer service.

FUTURE SCOPE OF STUDY

- 1. This can be conducted efficiently in more cities where consumers' online purchasing is more.
- 2. To conduct survey with the e-tailer to understand the returns from the customer.
- 3. To understand and examine the e-tailer's capability of Reverse Logistics to satisfy customers.
- 4. This study can be enhanced for mCommerce as well.
- 5. This study can be extended to services along with the products.

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APPENDIX: QUESTIONNAIRE:

1. Name the products you buy online through e-tailer.

- 2. What are the major reasons for returning the goods?
- 3. For returning the products you mail the e-tailer or will contact offline store?
- 4. What is the lead time for getting solution for the returns you made?
- 5. Do you face any issue of e-tailer not accepting the product returns?
- 6. Are the e-tailers handling their own returns or outsourced?
- 7. Mention the RL barriers the e-tailers face when you opt for returning the product.
- 8. How was the Customer Care helpful when you intend to return a product?
- 9. Will you buy from e-tailer who asks for service charge to return a product?
- 10. What will you ask for returning a product? Refund or exchange or credit.