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The Major Reasons for Returns in Online Purchase– A Case Study From Chennai City

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Abstract: Due to online penetration in India, the purchasing pattern of customers is changing. Purchasing happened in PC/Laptop yesterday becomes Mobile by today. Especially in India the Laptops and Mobile purchase is more with respect to Online Retailing Industry. Since the volume is huge daily, the returns happens to be huge as well. Returns eat away the profits of Online Retailing Industry. Indian Government restriction and State Government restrictions also forcing the online retailers to manage returns effectively. So the Organizations are taking measures to implement RL in an efficient manner in order to avoid pilferage due to returns. The aim of the study is to find the reasons for returns in online purchase that should be taken as a note while implementing RL especially in Laptop Industry. The empirical study and analysis will provide results for reasons for returns which acts as an input for RL implementation.

Keywords: Reverse Logistics, Forward Logistics, Laptop Industry, etc.

INTRODUCTION

A critical area of the supply chain is reverse logistics. Traditionally defined as the process of moving product from its point of consumption through channel members to the point of origin to recapture value or ensure proper disposal. Reverse logistics includes activities to avoid returns, to reduce materials in the forward system so that fewer materials flow back, and to ensure the possible reuse and recycling of materials. Returns can affect every channel member from consumers, retailers and wholesalers to manufacturers. Returns are caused for different reasons depending on who initiates them – end consumer, wholesaler or retailer and manufacturer – and on the nature of the materials involved – packaging or products. Reusable packaging is becoming more and more common, especially in Europe where manufacturers are required to take back packaging materials. This paper will focus mainly on reverse supply chain for products. The size of reverse logistics is considerable. According to Stock et al (2001), reverse logistics costs are as high as 4

per cent of total logistics costs, which amounts to an estimated $35 billion in 2001 for the US alone. Consumers cause most product returns. According to a survey of 311 logistics managers in the US in 1998, average consumer returns across retailers are 6 per cent.

REVIEW OF LITERATURE

Although Industry-specific barriers hinder environmental progress, the literature establishes Organizational barriers as the fundamental obstacle to the adoption of environmental practices (Hillary, 2004: Post and Altman.1994). These internal barriers within the firm include the lack of commitment to the environment on the part of workers and management, as well as a lack of training or qualifications in human resources (Hillary, 2004; Post and Altman, 1994; Ravi and Shankar 2005). The introduction of a new technology or innovation in an organization requires an important change in staffing in order to facilitate adaptation to the new technological process (Ravi and Shankar, 2005). In addition, top management must show its commitment to the activities of reverse logistics as well as to other organizations in order to integrate all the members of the supply chain (Ravi and Shankar, 2005).

Rogers and Tibben-Lembke (1999) define reverse logistics as 'the process by means of which goods are transferred from their final destination to the point of origin with the aim of recovering value or of reducing waste'. Reverse logistics is associated with the activities of recycling, repair, reuse and reprocessing, as well as with the tasks of collection, disassembly and the processing of used products, components and/or materials (Kokkinaki et al., 2001).

Reverse logistics is the underlying operational function necessary for extending the life of materials and products and product stewardship, two critical aspects of reducing environmental burden from industrial operations. The motives for returning disposable products from the end consumer to the point of origin may arise for a variety of reasons. Apart from environmental concerns, the most common reasons include defects in the product itself, lack of consumer satisfaction, or surplus stocks at outlets motivated by lower than expected sales (Barsky and Ellinger, 2001). Competitive, marketing, economic and environmental reasons are all factors that have been identified as relevant for the organizational adoption of reverse logistics activities and functions (Ravi and Shankar, 2005).

Owing to the volume of movements involved, and hence the costs of such activities, reverse logistics could enable the firm to achieve an important competitive advantage (Rogers and Tibben-Lembke, 1999). Many organizations consider the barriers confronted when developing these practices to be greater than the advantages that they would obtain as a consequence of their implementation (Rogers and Tibben-Lembke, 2002).

European Countries have stringent law and regulations so Electronics producers work proficiently for proper collection, recovery and removal/disposal of products after end-of-life. (Lambert et al.) There is less research available on the reasons for returns in online purchase in Indian Electronics Industry. Indian online buying is growing exponentially, especially customers are buying Electronics products more and need of the reasons for returns in online purchase is inevitable input to Reverse Logistics system which in turn reduce land fill.

This inspired me to deal with the reasons for returns in online purchase which will be the primary input for Reverse Logistics implementation by online Retailers. The goal of this study is to identify the

reasons for returns in online purchase and to rank them. Lastly the results of the empirical analysis will be illustrated with conclusion.

PROBLEM DEFINITION

This paper presents the reasons for returns by customers in online purchase. i.e., there are many reasons for returning the products, which is most influential etc. The six important reasons specified by customer for returning the products mentioned by online retailer are listed in Table below.

Table 1
Reasons for returns in online purchase

S. no	*Reasons for returns*
R1	Product pictured in site and received are totally different
R2	Product received in damaged condition.
R3	Warranty details mentioned and products received are different.
R4	Unable to have the touch and feel of the product result in returns.
R5	Quality of the products in seeing and using is different.
R6	When trying with new brands and new companies result in returns

RESEARCH METHODOLOGY

The study was conducted among the online Retailers who are dealing with Electronics products. A structured self-administrated questionnaire was designed and floated thru online to obtain the response. The snowball sampling method was adopted to obtain the responses of the online retailers.

Table 2
Intensity given for Returns in online purchase

Intensity	*Definition*
1	Equally important
2	Equally important - Slightly more important
3	Slightly more important
4	Slightly more important - Significantly more important
5	Significantly more important
6	Significantly more important - Very Significant proven importance
7	Very Significant proven importance
8	Very Significant proven importance – Extreme Importance
9	Extreme Importance

Six reasons for returns in online purchase in Retailing Industry are mentioned as per the table above. Confirmatory factor analysis by means of structural linear equations is used to evaluate the reasons for returns in online purchase in Indian Online Retail Industry. Structural equation modelling is a methodology that enables a series of observable variables or items to be directly or indirectly related with the latent variables or factors (Hays et al., 1994; Hoyle and Smith, 1994).

Table 3
Description of six reasons for returns in online purchase mentioned above

Reasons for Returns	*Average*	*Std. Dev*	*Median*	*Mode*
R1. Product pictured in website and received are totally different	3.74	1.65	4	4
R2. Product received in damaged condition.	2.75	1.44	3	1
R3. Warranty details mentioned and products received are different.	2.81	1.48	3	1
R4. Unable to have the touch and feel of the product result in returns.	4.42	2.06	4	7
R5. Quality of the products in seeing and using is different.	3.72	1.64	4	4
R6. When trying with new brands and new companies result in returns	4.22	1.74	4	4

The analysis is carried out in successive stages (see Nonaka et al., 1994). Initially, a first-order confirmatory model is estimated with the aim of verifying the external and internal barriers relative dimensions; subsequently, a process of 'item purging' is performed; and lastly, the final model considered is proposed. The transition to improved models is based on goodness of fit and is a consequence of the sequential elimination of those items that have been identified as causing the lack of fit of the initially proposed model (e.g. see Dawes, Faulkner and Sharp, 1998; Farrell and Oczkowski, 1997; Hurley and Hult, 1998).

Confirmatory factor analysis is used to analyse the validity and veracity of the factors in our study. The adequacy of a structural model is determined by chi-squared test statistics, which evaluate differences that exist between the data matrix and the actual matrix of variances and covariances of the model. Chi-squared tests are very sensitive to the size of the sample (Bollen and Long, 1993), and several other fit indices may be considered as indicators of model fitting, such as the comparative fit index (CFI), the values of which must be greater than 0.8 and 0.9 respectively (Byrne, 1994; Chau, 1997; Hair et al., 1995).

The reasons for returns in online purchase in Indian Online Retail Industry are: Product pictured in website and received are totally different, Product received in damaged condition, Warranty details mentioned and products received are different, Unable to have the touch and feel of the product result in returns, Quality of the products in seeing and using is different and When trying with new brands and new companies result in returns. All the reasons for returns are mentioned below in the Figure1.

In view of results obtained after running the above model three items were found invalid correlation with any of the proposed barriers.

- Warranty details mentioned and products received are different. – t Value is in –ve and R2 indicates only 3.3 %
- Product received in damaged condition. – t Value is in –ve and R2 indicates only 2.9 %

So the above three items are eliminated for subsequent analysis by purging method. After eliminating the above items, the below table depicts the clear picture using factorial weight and R square.

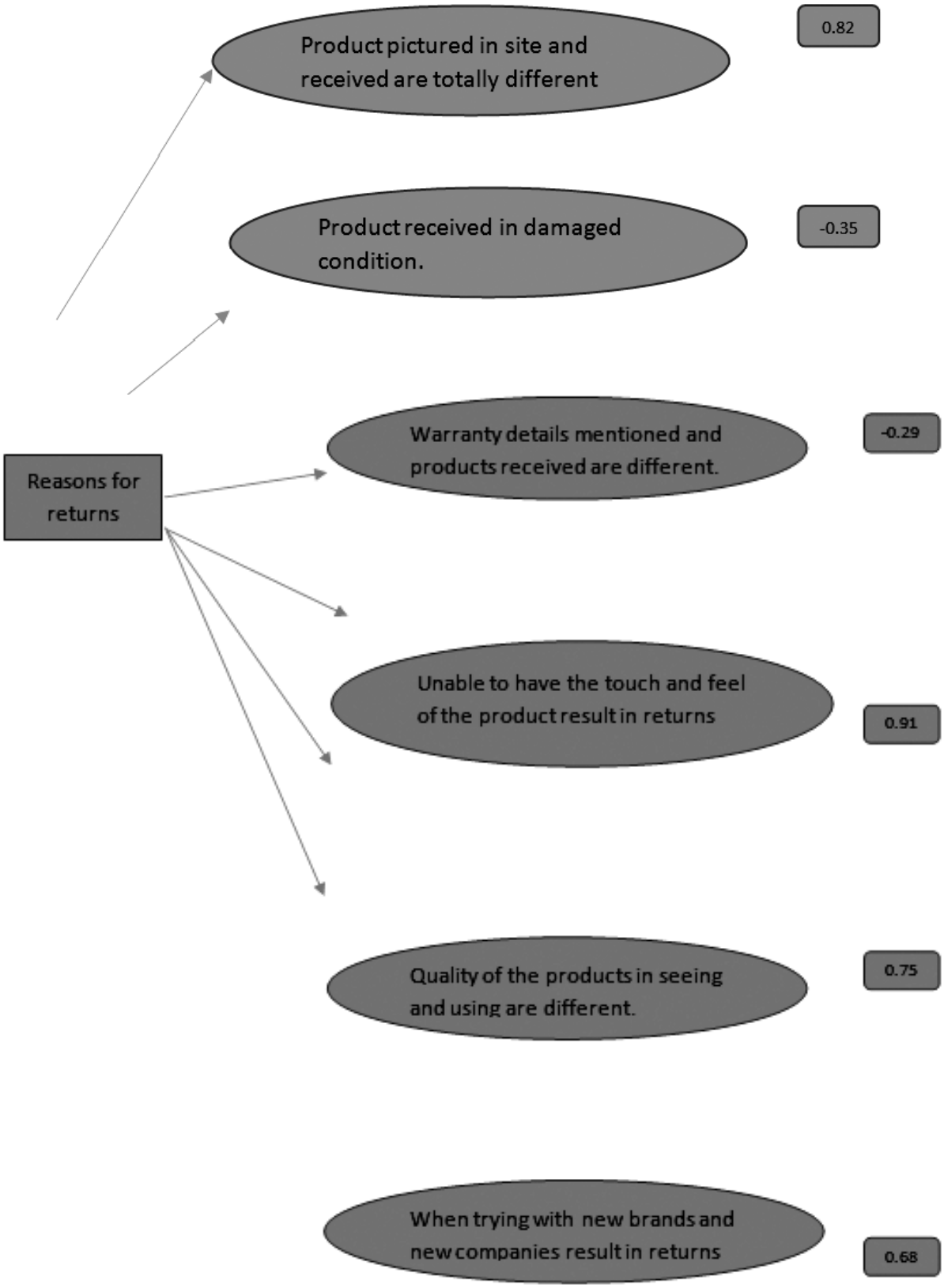

Figure 1: Model proposed to reasons for Returns

Table 4
Results of items after eliminating in figure1.

Internal barriers	*Factorial weight*	*R Square*
Product pictured in site and received are totally different	0.82	0.673
Unable to have the touch and feel of the product result in returns.	0.91	0.828
Quality of the products in seeing and using is different.	0.75	0.563
When trying with new brands and new companies result in returns	0.68	0.462

The reasons for returns include unable to have the touch and feel of the product result in returns, Product pictured in site and received are totally different, Quality of the products in seeing and using is different and when trying with new brands and new companies result in returns. Unable to have the touch and feel of the product result in returns has highest R square coefficient of 0.828 which denotes unable to have the touch and feel of the product result in returns is the key reason for returns.

RESULT ANALYSIS

Ranking of Reasons for Returns:

1. Unable to have the touch and feel of the product result in returns. – 0.828
2. Product pictured in site and received are totally different – 0.673
3. Quality of the products in seeing and using is different. – 0.563
4. When trying with new brands and new companies result in returns – 0.462

Unable to have the touch and feel of the product result in returns– with coefficient of 0.828 tops in reasons for returns. Product pictured in site and received are totally different is the reason following second, Quality of the products in seeing and using is different– as third and When trying with new brands and new companies result in returns as fourth. In online Retail Industry it will be good if you know the ranking of reasons for returns while implementing Reverse Logistics. The Organization can have an eye on those reasons for returns and enforce them effectively in Reverse Logistics implementation will help in reducing returns.

CONCLUSIONS

The aim of the study is to provide some empirical data in Online Retailing space in India. The reasons for returns in online purchase are ranked so that it will help the organizations to have an eye while implementing Reverse Logistics. For RL implementation the reasons for returns in online purchase should be concentrated by the Online Retail Industry.

In a nutshell great support is needed from the online retailers and the Government to implement RL in efficient manner. Government should give subsidies, incentives to firms whoimplement Reverse Logistics. Online Retailers should have in mind the reasons for returns in online purchase while implementing Reverse Logistics will help in reducing returns, in order to make our Mother Earth a nice place to live.

Limitation of this study is mainly analyzing in Online Retailer perspective. Also the factors may vary across industries and the model may be developed with extensive brainstorming sessions and taking into

consideration of expertise and knowledge within the organizations. A possible future research can be carried out in different sectors where the importance level of drivers may change.

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