E-commerce in India: a survey highlighting problems faced and solutions proposed by e-commerce customers

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Abstract- *The electronic commerce (e-commerce) supply chain management (SCM) or ECSCM is a new and rapidly developing area of study in India and abroad. At the same time there are several challenges faced by e-commerce. According to industry experts, these issues are mostly pertaining to inefficient SCM. A survey has been launched fetching replies from 401 Indian e-commerce consumers. The survey provides a clear understanding of demands, problems faced and solutions proposed by consumers themselves. Mostly, the consumers reported the issue of an inferior quality product been sent to them as compared to what was advertised or promised by website. And most of the consumers proposed the concerned website should refund their entire money as a corrective action for the issues faced by consumers.*

Keywords: e-commerce, consumer behavior, problems faced, solutions proposed.

I. INTRODUCTION

Today all businesses are making their mark on internet to reach maximum number of customers, expanding business and generating larger revenues. But, with growth comes several challenges and issues. These obstacles if not handled properly, make the respective company loose customer loyalty and hence business. But, if these obstacles are well addressed, not only the business prospects and customer loyalty are maintained but it further attracts a larger number of new customers as well. These obstacles could be easily known by taking feedback from the customers. Considering the Indian e-commerce industry in this case, and after analyzing various research papers, the attention is focused on the supply chain management (SCM) related issues pertaining in this industry. After extensive literature review and consultation with the industry experts, a survey has to be launched asking questions to the customers which depict their view points. The survey highlights problems faced and solutions proposed by the consumers while shopping with e-commerce websites.

II. LITERATURE REVIEW

2.1 E-commerce and Supply Chain Management
E-commerce has also been an important part to support and reinforce the above mentioned efforts of supply chain by helping in lowering / diminishing transaction costs and improving information sharing amongst the partners [Johnson and Whang, 2002]. Patil and Brig. Divekar [2014] state the role of SCM and inventory management in e-commerce in various ways. They state that risk, loss of customers, low customer satisfaction and other challenges associated with e-commerce like reverse logistics, demand variations, seasonal fluctuations etc are all related to SCM.

2.2 E-commerce in India
Kabir and Hasin [2010]discussed that the shift of conventional commercial activities to e-commerce in the recent times and further shifting and inclination of the markets towards mobile commerce or m-commerce. This study evaluates success factors and its effects and gives an evaluation model to determine drawbacks & opportunities. Reddy and Brig. Divekar [2014] discuss how efficient delivery, careful shipment and COD are vital for e-commerce and also the challenges that they are facing the most these days. They discuss how important it is for even a world e-commerce giant like Amazon.com to understand customer expectations and cater to it before expecting profits in the market. It was after almost 7 years of its launch and a loss of ~ $1billion that Amazon.com started having profits out of its operations in India.

2.3 Consumer behavior
Consumer behavior is the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy their needs and wants. It is also concerned with the social and economic impacts that purchasing and consumption behavior has on both the consumer and wider society [Kuester and Sabine, 2012].

The study of consumer behavior is concerned with all aspects of purchasing and consumption behavior as well as all persons involved in purchasing decisions and consumption activities. Research has shown that consumer behavior is difficult to predict, even for experts in the field [Armstrong, 1991].

III. SAMPLING PLAN

3.1. Sampling plan

Sampling is a process of obtaining the information about the entire population by examining a part of it. The effectiveness of a research depends on the sample size selected for the survey.

- Sample site: It is the place where the research is conducted. In this study, the survey was conducted for the e-commerce consumers in the states of Rajasthan, New Delhi, Punjab, Madhya Pradesh and Gujrat.
- Sampling unit: The sampling unit describes 'who is to be surveyed?' in the study, here the sampling unit are the e-commerce consumers.
- Sample size: For the purpose of a proper survey, there needs to be a proper calculation of the number or respondents to be considered to get as accurate as possible results. In this study the sample size is taken to be 401 respondents. The figure of 401 respondents is concluded based on calculations of the following statistical formula.

3.2. Calculations for the sample size

Many researchers have worked on the sample size of respondents and arrived at a generalized formula for the computation of the sample size for the survey data. For a 95% confidence level and maximum variability with 0.05 level of precision, the sample size is calculated from the following formula, using the suggested value:-

$$N = p * q \, (z/e)^2$$

N=sample size

where:

p=0.5(maximum variability)
q=0.5(1-p)
z=1.96[the z(95%) score associated

with the degree of confidence]
e=0.05 (level of precision)

Based on above data we get the sample size n=385(approx.) Therefore, we will have a minimum of the sample size n=385 (minimum). Though in this study, the sample size is taken to be 401, in order to be certain to have as accurate results as possible.

Concluding this chapter of research methodology, we now move on to the next chapter to discuss the data collection in the coming chapter.

IV. DATA COLLECTION

4.1. Introduction

The next step after knowing the sample size is determination of the questions to be asked to the respondents. It is very essential to carefully select these questions because only correct questions will lead to correct data and ultimately correct knowledge generation. Therefore, for devising the questionnaire, experts from different spheres were contacted and their replies were recorded regarding the topic. The experts considered were from the following backgrounds:-

1) Academics
2) Handicraft business
3) E-commerce company
4) Website development
5) SCM expert

And after considering their replies, a general questionnaire was formed. The questionnaire is as given in the appendix at the end of this paper.

As is evident from the given questionnaire that the questions asked from the intended respondents are very simple in language and understandable by them. This is very important so as to get most accurate responses, as the respondent only has to focus on his replies rather than getting confused in the complicated language of the survey questions. It has also been kept in mind that a very limited number of questions are asked to the respondents so that there is a least chance of unreal responses due to boredom of respondent while filling up the survey.

The pilot study of this questionnaire was conducted on the same panel of experts who contributed to the formulation of this survey and their responses were recorded. Henceforth the survey was launched to the general respondents via online links and hard copy forms.

4.2 Questionnaire administration

The survey was launched to the respondents via online and by-hand medium, around 150 results were obtained through online and around 250 responses were obtained through survey being filed by hand. It is important to be noted that the original objective was to collect all the data only through online medium so as not waste a large amount paper hence contributing out part to the betterment of environment, but it was seen that respondents were apprehensive to use online medium and requested for the survey to get filled through hardcopies. After getting 401 responses the survey was stopped and responses were saved for further actions.

V. RESULTS

The results obtained through the survey are summarized by google forms and presented in graphical format as follows:-

5.1 Problems faced

What problems do you face / have faced while online shopping that make you apprehensive to use online shopping in future.

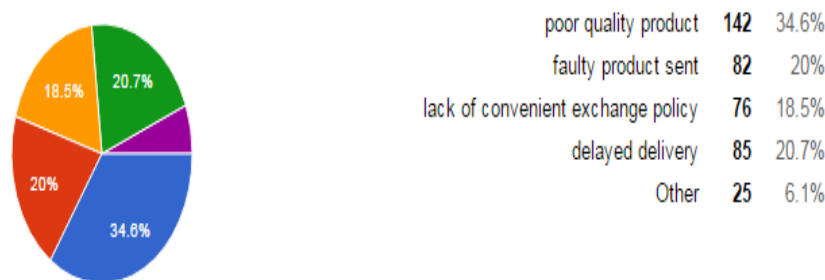|		
poor quality product	142	34.6%
faulty product sent	82	20%
lack of convenient exchange policy	76	18.5%
delayed delivery	85	20.7%
Other	25	6.1%

Figure 1 Problems faced by consumers

It is evident from Figure 1 that most of the consumers (34.4%) faced the problem of poor quality product being sent to them as compared to the one they were shown or promised through website. Second to it comes the problem of faulty products being sent (19.9%). This is followed by lack of convenient exchange policy and delayed delivery scoring 20.7% and 18.9% respectively.

Inference- Sub-quality products being circulated by these websites. This seems to create a sense of distrust amongst the customers for further shopping with these websites. Preaching a cheap quality product is adversely affecting their customers' trust in them and can ultimately lead to loss of loyal customers to other companies.

5.2 Solutions proposed

what amongst the following will re-establish your trust in online shopping

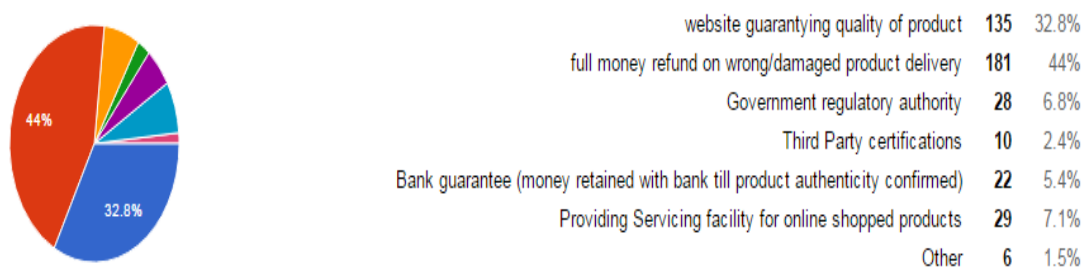|		
website guarantying quality of product	135	32.8%
full money refund on wrong/damaged product delivery	181	44%
Government regulatory authority	28	6.8%
Third Party certifications	10	2.4%
Bank guarantee (money retained with bank till product authenticity confirmed)	22	5.4%
Providing Servicing facility for online shopped products	29	7.1%
Other	6	1.5%

Figure 2 Solutions proposed by consumers

It is evident from Figure 2 that most of the most of the consumers (44.2%) proposed that the website should refund full money on sending wrong/ damaged products to the consumers. Second to it comes website guarantee (32.9%) as a solution

proposed by consumers to re-establish their trust in online shopping. These are followed by providing service facility (7.1%) and government regulatory authority (6.8%).

Inference- Simple and straight requirement of full money refund voted by majority of customers as the best solution to be adopted by e-commerce companies in case the customers are not satisfied by the company's services.

VI. CONCLUSION

As a result of this survey, the problems faced by consumers while online shopping and the corresponding solutions proposed by consumers to eradicate these problems are highlighted. This knowledge is beneficial for both companies and consumers as it can help consumers get better services from e-commerce companies and maintain consumer loyalty for websites.

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