



E-commerce adaptability with reference to delivery of products

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Abstract- The innovative penetration and increasing usage of internet, largely attributed to telecom players like Jio,Airtel has caused an increase in time being spent on social media by the young mass. It has been observed that a large percentage of the population spend their leisure time on social networks and online shopping activities. Therefore, online businesses extended their valuable services to the customer to generate more revenues. The new generation adopted the e-commerce practices very extensively because of its impressive offerings strategies. Every year there are a few trends that shape India's e-commerce industry with the widespread growth of internet in India, E-commerce has changed the way of doing business of buying and selling of product and services. The e-commerce business is rising and it is expected to touch INR 414 billion by the end of 2022[statista.com, 6]. E-commerce offers convenient delivery options to consumers. Consumers have the liberty to select desired delivery option as per their convenience. The objective of this paper is to analyze delivery preference of consumers and challenges in delivery of product and services. It is a descriptive paper based on the analysis of survey data collected through a suitable questionnaire.

Key Words: E-commerce, Internet, m-commerce, Mobile applications, Security Issues, E-business

I. INTRODUCTION:

E-commerce means electronic commerce and the business is carried out for various products and services with the help of internet. It is buying and selling of various product and services on internet with the help of marketplace software, payment system & delivery system. E-commerce companies create their web portal and products/services are listed on the portal with product details, delivery options and price details. Different payment options are given to the consumer like internet banking, debit card, credit card, cash wallet, EMI and cash on delivery. E-commerce has turned the way people do the shopping in a very short span of time. As per data published by National report on e-commerce development in India, 2017 [8] E-commerce business in India will be 101.9 billion USD by 2020.



Fig.-1, Source- National report on e-commerce development in India, 2017 [8]

E-commerce industry in India has evolved over a period with innovations e.g. Cash on delivery (COD), payment through wallet. In India credit card penetration is low and use of COD has enhanced the e-commerce business significantly.[Raghunath, Alka&MurliDharPanga- 2013] [9].The latest payment methods are pay through wallet and UPI.

The objective of the paper is to analyze challenges faced by e-commerce customers in terms of delivery of the product by online store supplier.

II. LITERATURE REVIEW:

Loyalty of consumer is issue in the accomplishment of many business framework, customary or online. E-commerce organizations need to see how to fulfill customer because consumer loyalty is basic for getting good number of customer connections.

The main role of logistics in e-commerce is to minimize risk arising out of virtual relations.

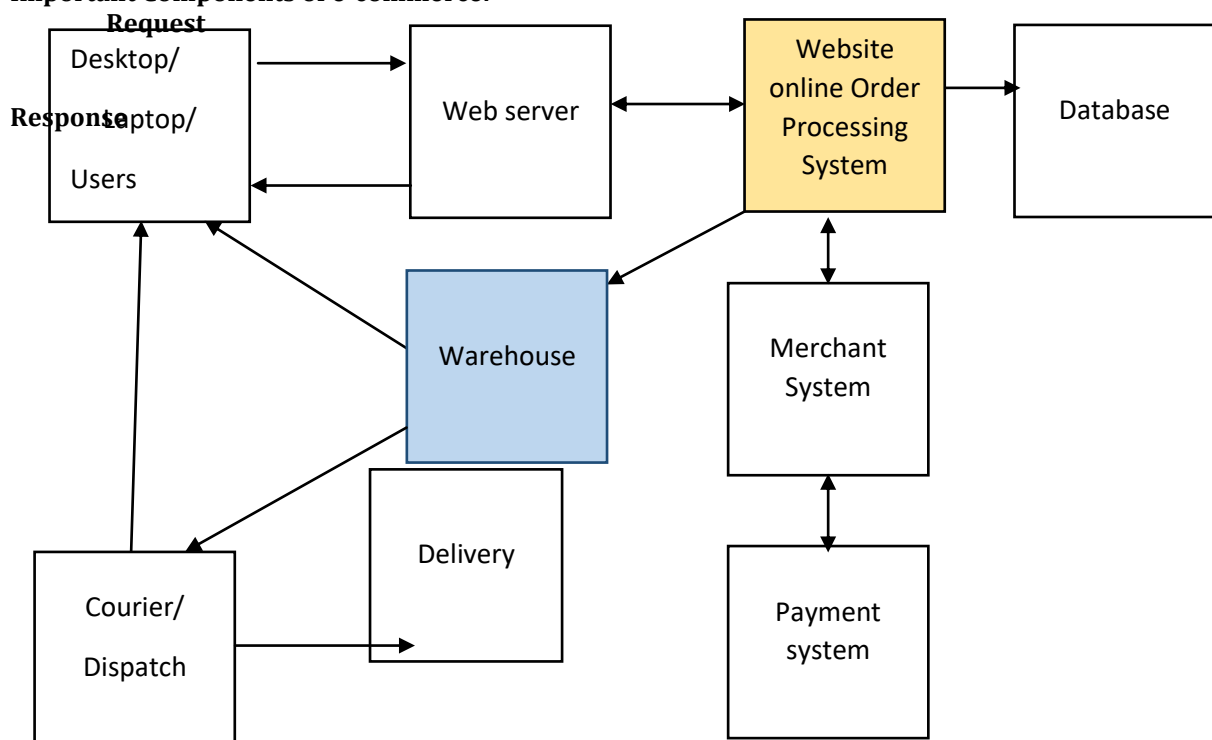
Logistics in online shopping reduces the risk in the relationship between the customer and seller by ensuring that the right product ordered by the customer is in the right place and address within specified time in global market[3].

Employees, distributors, supplier, courier service providers & customers of the e-commerce companies in India considered logistics and shipment services to be one of the biggest challenge. Increasing fuel charges in India make delivery & shipment price very difficult & it constantly impacts the bottom line of companies. Employees of the e-commerce companies consider Cash on Delivery (COD) option to be the second biggest challenge. This may be because on every product sold profit margin is thin and in order to facilitate COD services courier service provider charge fee for Cash on delivery service [4].

The competitive e-commerce sector depends heavily upon its delivery services for the product to reach a customer. A failure at any step of the intermediate delivery process leads to customer dissatisfaction & failure of customer retention [5].

E-commerce delivery services are one of the main factors that determine a consumer's decision to shop with them & a wide range of services are developed by them for products delivery e.g. flexible hours, reduced prices & quick deliveries. E-shoppers are concerned by delivery related problems and costs. Therefore delivery plays a fundamental role in enhancing e-commerce. Consumer surveys & market analysis show that delivery services offered by e-commerce business are one of the fundamental factors influencing decision of a consumer to shop with them [7].

Important Components of e-commerce:



(Fig.-2- Conceptual model for the study)

How e-commerce works:

1. Visit website page of e-commerce Company using a browser e.g. chrome, Firefox. Detailed entered by user is communicated back and forth over internet using browser of the company.
2. The webserver sends product order request to 'On line Order Processing System. This is the main application for managing e-commerce application.
3. The 'Order Processing System' application queries the database to check product stock.

4. If requested product is available then product detail along with availability is send to customer using web server and web browser. If item is not then manufacturer database is queried for the availability of the product and according reply is returned to the customer.
5. If the product is available then customer can add the product to cart for ordering, sign in to the portal and application passes control to merchant system for taking payment using credit card/debit card/internet banking/cash wallet/ other payment mechanism.
6. If payment is successful then merchant system inform 'Order Processing System' which in turns create the order details and inform customer. If payment is declined then also merchant system inform 'Order Processing System' and order request is declined. The customer is informed accordingly.
7. The 'Order Processing System' send order details to warehouse for dispatching the product to customer.
8. A vehicle from warehouse collect the order and delivers it to customer. Customer is notified when the product is shipped and delivered.

Steps in processing the orders& delivery of products:

1. Once the order is placed the customer is notified about order details via email/SMS.
2. Required items are selected from warehouse/storage
3. Goods for a single order are brought together, checked and item details are updated in records and the items are issued. A record must be maintained for each item in stock showing the quantity on hand, quantity issued and location in the warehouse
4. Orders are packed and shipped documents are prepared
5. Item is shipped through a Courier service
6. Courier details e.g. location, expected delivery date, tracking id, order id are created and updated in database
7. Customer is informed about shipping details through email/ SMS
8. Once the item is delivered customer, proof of delivery is obtained. Customer may be requested to provide feedback.

Consumer behavior and customer satisfaction in E-commerce:Customer retention for E-commerce business has attracted considerable attention in recent time because it serves as a tool for getting competitive advantage in the business. If a customer is satisfied with a particular internet store, he/she is likely to return to store frequently in future to shop there again. The concepts of customer retention and customer satisfaction have become increasingly important for online business. It is important to understand the channels that impact customer satisfaction and their choice for online portals selection for shopping [1].

Buying process for a product on online stores include searching of information & availability of product on different websites, browse product catalogue on a chosen online store, evaluate alternatives, purchase decision and post purchase customer support services. The shopping experience of customer is based on user friendliness of portal design, product information provided on the online store as customer could not physically touch the product.

Delivery related issues in E-commerce:

The issue with e-commerce is that product may be ordered in few minutes but delivery of the item takes few days. In most of the cases customers do not get option to select preferred data and time slot of delivery. The product is delivered as per convenience of the supplier.

Logistics in electronic commerce have certain challenges e.g. how long a customer is willing to wait & under what conditions customer is willing to wait longer. Could logistics be considered a critical factor of success? In order to make e-commerce attractive it is necessary to provide competitive advantages to customer in comparison to other forms of buying the same product. The competitive advantage should overcome the dissatisfaction with the physical unavailability of the product and the risk the customer takes. Logistics has potential in overcoming these disadvantages of e-commerce & in conditions of e-commerce takes on new dimensions [3].

Need for the study:

This study examines challenges faced by e-commerce customers in terms of delivery of the products by e-commerce supplier & its impact on customer satisfaction.

Objectives of the study:

- ❖ To understand the delivery related issues faced by customers and its impact on customer satisfaction

III. RESEARCH DESIGN AND METHODOLOGY:

The study has been designed to give a descriptive analysis of the issues that customers face majorly while having products delivered to them when they shop online. It has been undertaken to analyze the different factors affecting delivery problems that customers face.

The paper has been written on the basis of primary data collected from questionnaire designed for the purpose. Response collected and analyzed using SPSS tool.

The secondary data collected from journals, research papers, magazines, internet & statistical documents.

Instrument:

A questionnaire was designed to capture relevant data for this purpose. The study contained a total of 20 questions which aimed to capture the demographic data and online shopping preferences, discounts, product delivery related issues faced by customer, return/refund of products, time preferences and customer relationship management for delivery services.

Sampling method and size:

Random sampling method used for understanding of issues faced by customers from a variety of backgrounds. The population included in the study had subjects residing majorly in urban areas of the Greater Noida and NCR. The sample size taken was 144 in order to obtain statistically relevant results. The questionnaire were distributed to E-commerce users residing mainly in urban areas of NCR.

IV. FINDINGS AND DISCUSSION:

Total 144 response were collected from urban areas in India. Demographic profile of the respondents are given in table I.

It contains parameters namely Name, Age, gender, male, occupation, qualification, annual, income and residence.

Gender- The distribution of shows that 124 respondents are male representing 83.34% and 24 are female representing 16.66%.

Age: Most of the respondents are less than 30 years representing 79.16%, 16.66 respondents lie in 31-50 years bracket while 4.16% are above 50 years of age.

Annual Income: 70.83% of the respondent earned less than 400000 per year, 8.68% respondent earned between 400001 – 800000 where as 16.66% earned above 800000 per year.

Occupation: 33.33% of the respondent were employed and 66.67% respondent were unemployed.

Education level: 62.5% respondent has bachelor's degree, 20.83% respondent has post graduate degree and rest 16.66 had other qualifications.

Table I shows that for online shopping the male population contributes to 83%. It shows that male are more in numbers compared to female which may affect the results as it may be as per male way of thinking. Respondents less than 30 years age constitutes 79% which shows that many people 30 years prefer to do online shopping. People more than 50 years old contributes only 4.6% of the total which indicates that old people do not prefer online shopping as they may have reservations in using online shopping or they me not be tech savvy.

It is also observed that working people contribute to 33.33 % of the total respondents who shop online & unemployed people contribute of 66.67%. Also young age group respondents prefer online shopping more than old age group respondents.

Analysis of the data of table I shows that the majority of the respondents earn less than INR400000 per annum. This age group of young people may either be students or recently employed so they earn less.

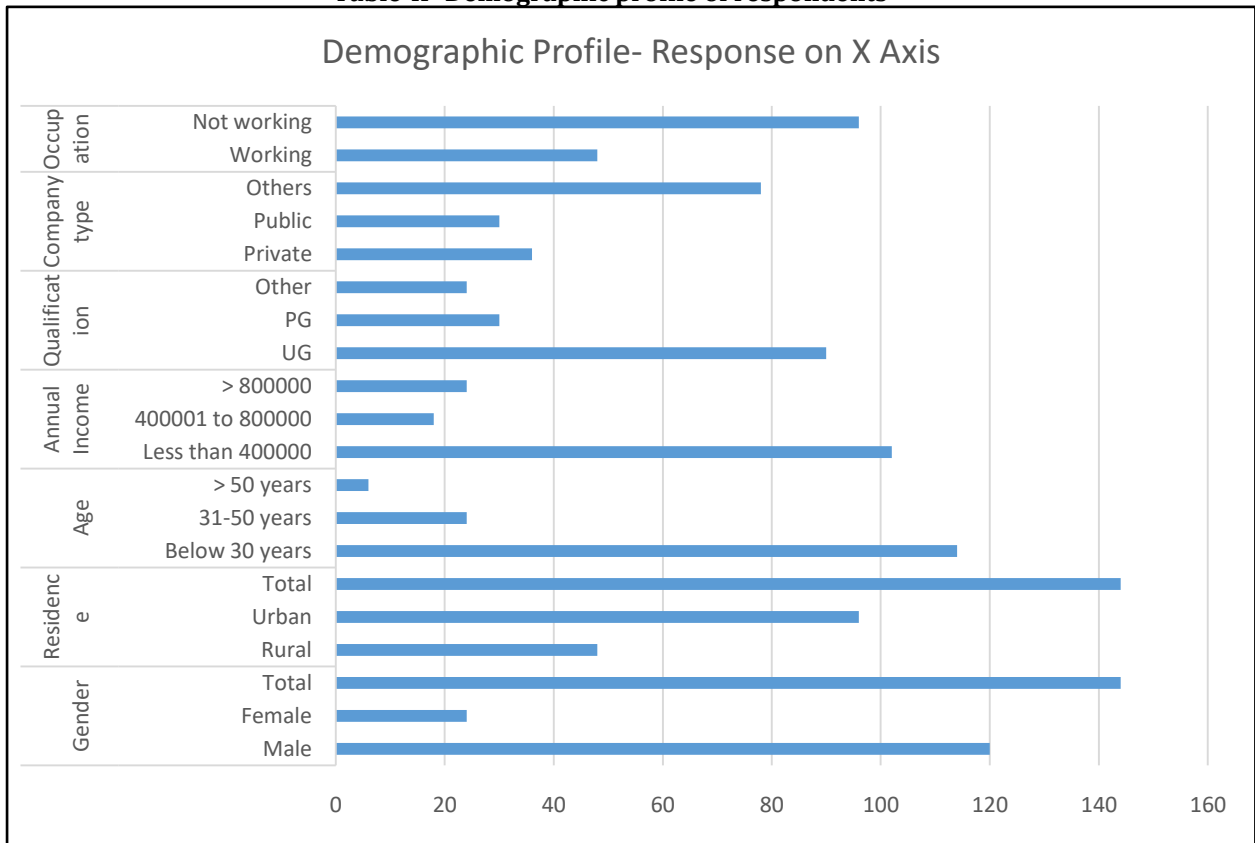
Table-I- Demographic profile of respondents

Description		Frequency	Percentage
Gender	Male	120	83.34
	Female	24	16.66
	Total	144	100

Residence	Rural	48	33.33
	Urban	96	66.67
	Total	144	100
Age	Below 30 years	114	79.16
	31-50 years	24	16.66
	> 50 years	6	4.16
Annual Income	Less than 400000	102	70.83
	400001 to 800000	18	8.68
	> 800000	24	16.66
Qualification	UG	90	62.5
	PG	30	20.83
	Other	24	16.66
Company type	Private	36	25
	Public	30	20.83
	Others	78	54.16
Occupation	Working	48	33.33
	Not working	96	66.67

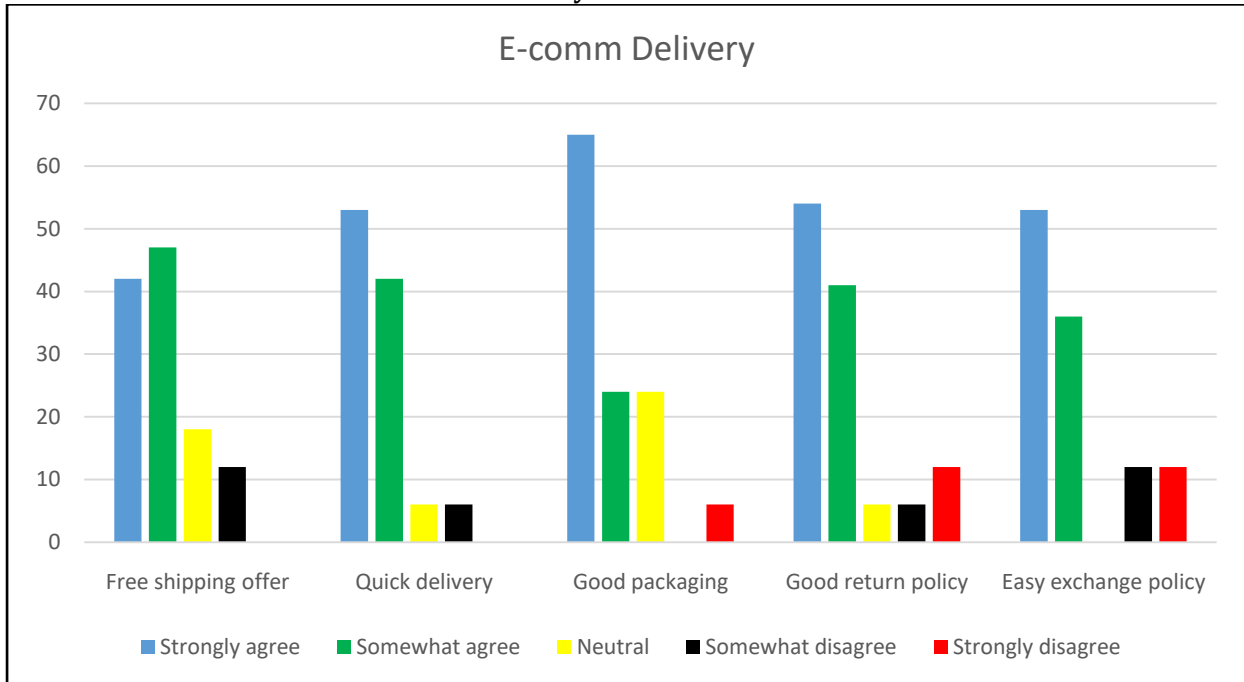
(Source- analysis report on the basis of primary data)

Table-II- Demographic profile of respondents



(Source-analysis report on the basis of primary data)

Table III: Analysis of Customer Preference



(Source- Analysis report on the basis of primary data)

Table IV: Mean and Standard deviations

	Mean	Std. Deviation
Easy exchange policy	3.82	1.459
Free shipping offer	3.82	1.102
Quick delivery	4.18	1.030
Good packaging	4.16	1.112
Good return policy	3.87	1.412

Analysis of table III data shows people like free shipping offer on the products Consumers feel happy with the free shipping offer on the products and find the offer very useful. Also people like quick delivery offer on the products. Online consumers like express delivery offer on the products.

Good packaging is important for handling fragile, electronics and costly items. Ninety five percent consumers believe that good packing is important for purchasing products from an online store who supply goods in good packing. Damaged products cause huge embarrassment to consumers and they spent their precious in in exchanging or returning the damaged products.

Consumer friendly return policy is key for the success of e-commerce business. Eighty five percent response indicates that good return policy influence consumer buying intension.

Exchange policy is important for the e-commerce business as consumer keep exchanging products due to several reasons e.g. size not proper, color variance, defective products etc. Eighty percent response indicates that good exchange policy influence consumer buying intension.

V. CONCLUSION:

E-commerce business has grown rapidly in past two decades in India. One of the major module of this business is its delivery system. Multiple studies have been done for assessing issues in the delivery process have and its effect on the consumer’s behavior. The analysis of primary data show that delivery is important part of E-commerce business model & it should be as efficient as possible. In this study the analysis of delivery related issue faced by E-commerce show that major issues are delivery speed of the products, shipping charges, and easy exchange and return policies. Efficient customer relationship department is equally important for the industry.

REFERENCES:

1. Lin Chun-Chun Lin and Yong-Fu Chang. "The critical factors impact on online customer satisfaction". *Procedia Computer Science* 3 (2011) 276-281
2. Mahmood, S M Feroj. "E-commerce, online shopping and customer satisfaction: an empirical study on e-commerce system in Dhaka ". *International Journal of Entrepreneurship and Development Studies (IJEDS)* 4(3) 2016, 323-338
3. LekovicSanja and Nikola Milicevic. "The importance and characteristics of logistics in electronic commerce". 1st Logistics International Conference, Belgrade, Serbia, 28 - 30 November 2013
4. Reddy N. Anubhav and Rajiv Divekarb. "Study Of Challenges Faced By E-Commerce Companies In India And Methods Employed To Overcome Them". *Procedia Economics and Finance* 11 (2014)
5. Gupta Prateek and VedhaBalaji. "Analysis of Delivery Issues that Customer Face Upon E-Commerce Shopping". *International Journal of Management Studies*. Vol.-VI, Special Issue 3, June 2019
6. <https://www.statista.com/statistics/824936/india-digital-media-market-value/>
7. Morganti, Eleonora and Barbara Lenz. "The Impact of E-commerce on Final Deliveries: Alternative Parcel Delivery Services in France and Germany". *Transportation Research Procedia* 4 (2014) 178 - 190
8. National report on E-Commerce development In India, UNIDO, WP 15, 2017, Page 12