An Assessment of Customers' Perceptions of E-Commerce

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Abstract: Rapid technological developments taking place in the recent IT area has led to blossoming of E- commerce. The customers feel that E-commerce provides them with wide variety of products that match with the trend at a very reasonable cost. The adolescent and young customers are the major catalytic force behind the E-commerce revolution and also a main stakeholder in the online shopping ethnicity. In the above backdrop it is important to study the implications of E-commerce on the customer perception and satisfaction. An attempt has been made to study the customer perception of E-commerce on varied insight. Online survey method has been used for collection of data. The various statistical tools such as percentage analysis, Factor analysis and cluster analysis were used.

Keywords: E-commerce, Customer perception customer satisfaction and adaptation.

INTRODUCTION

E-commerce, also known as electronic commerce or internet commerce, refers to the buying and selling of goods or services using the internet, and the transfer of money and data to execute these transactions. Ecommerce is often used to refer to the sale of physical products online, but it can also describe any kind of commercial transaction that is facilitated through the internet. Whereas e-business refers to all aspects of operating an online business, e-commerce refers specifically to the transaction of goods and services.

HITORY OF E-COMMERCE

The history of ecommerce begins with the first ever online sale: on August 11, 1994 when a man sold a CD by the band Sting to his friend through his website Net Market, an American retail platform. This is the first example of a consumer purchasing a product from a business through the World Wide Web—or "ecommerce" as we commonly know it today. Since then, ecommerce has evolved to make products easier to discover and purchase through online retailers and marketplaces. Independent freelancers, small businesses, and large corporations have all benefited from ecommerce, which enables them to sell their goods and services at a scale that was not possible with traditional offline retail.

E-Commerce is the buying and selling of goods and services, or transmitting of funds or data, over an electronic network, primarily the Internet. E-Commerce is conducted using a variety of applications, such as Email, Fax, Online catalogues and Shopping carts, Electronic Data Interchange (EDI), File Transfer Protocol and Web services. E-Commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform and redefine relationships for value creation between or among organisations and between organisations and individuals.

TYPES OF E-COMMERCE MODELS

- **1. Business to Consumer (B2C):** When a business sells a good or service to an individual consumer (e.g. Customer buy a pair of shoes from an online retailer).
- **2. Business to Business (B2B):** When a business sells a good or service to another business (e.g. A business sells software-as-a-service for other businesses to use).
- **3. Consumer to Consumer (C2C):** When a consumer sells a good or service to another consumer (e.g. Customer sell your old furniture on eBay to another consumer).

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4. Consumer to Business (C2B): When a consumer sells their own products or services to a business or organization (e.g. an influencer offers exposure to their online audience in exchange for a fee, or a photographer licenses their photo for a business to use).

GROWTH AND PROSPECTS OF E-COMMERCE

Increasing internet and mobile penetration, growing acceptability of online payments and favourable demographics has provided the unique opportunity for the E-Commerce companies to connect with their customers. It is noted that the buying trends during 2016 had witnessed a significant upward movement due to aggressive online discounts, rising fuel price, wider and abundant choice. It is observed that mobile commerce (m-commerce) is growing rapidly as a stable and secure supplement to the e-commerce industry. Shopping Online through smart phones is proving to be a game changer and industry leaders believe that m-commerce contribute up to 70% of their total revenues.

ONLINE SHOPPING

This era of business is marked with a high degree of dynamism. Due to technological advancement, the concept of competitive advantage is eluding day by day shopping at the click of a mouse is gaining popularity. Online shopping has given all types of consumers the ability of being able to buy anything, anywhere and any product, regardless of where its location is in any part of the world. Online shopping has opened the doors of globalisation as it facilitates all the information about the product from anywhere around the world and it can be accessed 24/7. In the present scenario, consumers and organisations are carrying out extensive and rapidly increasing volume of business on the Internet. The online / E-shopping is a method of electronic commerce for conducting business, as it shifted from real market to digital market.

E-commerce is a term for any type of business, or commercial transactions that involves transfer of information across the internet. It is currently one of the most important aspects of the internet to emerge, whereas online shopping refers to the purchasing of goods or services using E-commerce as pedestal. The E-commerce and online shopping are used interchangeably by the general public.

LITERATURE REVIEW

Kotler and Armstrong (2000) described in their study that the consumers' buying behaviour is largely influenced by four key psychological factors, namely, motivation, perception, learning and belief oriented attitude.

Wambui (2010) tried to find out the features of online shopping adopters among university students and went further to unearth the reasons behind non-adoption and adoption of online shopping. The study revealed that there was a high level of awareness of online shopping but very low use of the same. It was also highlighted in the study that the online shoppers were mostly male, were aged 30 years and below and most earned higher incomes.

Rajesh and Purushothaman (2013) applied chi-square test and correlation analysis to examine the perception of consumers towards online shopping in kanchipuram by taking a sample size of 160 respondents. It was depicted in the study that consumers buys goods from the online shopping websites on the basis of factors like offers and discounts, variety of products, free home delivery, website user friendliness etc.

Nishad Nawaz and Wifa Yaqoob Ali Alajmi (2014) examined 150 respondents from Bahraini to find out the factors that were influencing them towards e-shopping. The study concluded that factors such as shopping site, services, purchasing frequency, category of products, payment mode, quality products, replacement policy, payback, spending amount, personal information security greatly influence the Bahraini consumers preference for e-shopping.

OBJECTIVES

- To map the demographic profile such as age group, gender, education occupation and income of the customers.
- To study their perception about E- commerce.

RESEARCH METHODOLOGY

The study was based on the survey conducted through online through the website https://getfoureyes.com.The questionnaire was sent through What'sApp group. About 106 filled questionnaires and got back. The questionnaire was formulated to identify the factors that impel the keenness for buying and repurchasing through E-commerce. The questionnaire was divided into two

parts, the first comprising of personal details and the second part with perceptions of E-commerce comprising of four statements on convenience, four on Value, three on fashion and three on adaptation and repurchase decision. IBM - SPSS 22 was used for data analysis. By applying factor analysis and cluster analysis for the data obtained from 106 customers surveyed through online.

Data Analysis

Table 1: Demographic Description of respondents

Age Group	Frequency	Valid Percentage	
18-24 years	52	49.4	
25 - 34 years	22	20.6	
35 -44 years	22	20.6	
45-55 years	5	4.7	
Above 55 years	5	4.7	
Gender			
Male	14	13.1	
Female	92	86.9	
Education			
School	5	4.7	
Under Graduate	47	43.9	
Post graduate	32	29.9	
Professional	22	21.5	
Occupation			
Business	2	1.9	
Employed	44	41.1	
Student	50	46.7	
Home maker	3	2.8	
Others	7	7.5	
	Annual Income		
Less than 2 lakhs	46	43	
2 – 5 lakhs	26	24.3	
5 – 10 lakhs	22	21.5	
Above 10 lakhs	12	11.2	

Source: Computed Data

From the above it is evident that people from all walks of life were covered in the study. People in all age groups, all genders, with varied education, occupation and income level were covered in the survey.

FACTOR ANALYSIS

The new information based technology has changed the meaning of shopping, customer expectation and satisfaction levels. In recent trend irrespective of age, education and occupation people are fond of Eshopping. In this section, an attempt is made to derive the major dimensions of customer perceptions on E-commerce handling. In this context, factor analysis by Principal Component Analysis is applied and the following results are obtained.

Table 2: Number of factor Customers' perception of E-commerce

Initial Eigenvalues			Extraction Sums of Squared Loadings				
Serial No.	Components	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	Convenience 1	5.630	40.212	40.212	5.630	40.212	40.212
2	Convenience 1	1.580	11.288	51.500	1.580	11.288	51.500
3	Convenience 1	1.213	8.661	60.161	1.213	8.661	60.161
4	Convenience 1	1.090	7.785	67.945	1.090	7.785	67.945
5	Value 1	.808	5.773	73.719			
6	Value 1	.673	4.806	78.525			
7	I Value 1	.535	3.821	82.346			
8	Value 1	.470	3.359	85.705			
9	Fashion 1	.440	3.142	88.847			
10	Fashion 1	.415	2.962	91.809			
11	Fashion	.347	2.481	94.290			
12	Adapt 1	.312	2.225	96.515			
13	Adapt 1	.266	1.902	98.417			
14	Adapt 1	.222	1.583	100.000			

Extraction Method: Principal Component Analysis

Source: Computed Data

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From the above total variance table, it is found that 14 variables of Customers' perceptions about E-commerce usage are reduced to 4 major factors with total variance of 67.945%. The four major factors were identified with the help of Eigen Values 5.630, 1.580, 1.213 and 1.090.. These Eigen Values are strictly greater than 1 and this implies the existence of 4 major factors. The variable loadings of each factor are ascertained in the following table.

Table 3: Variable Loadings of factors of Customer perception

Factors	Factor 1	Factor 2	Factor 3	Fctor 4
		ractor 2	ractor 5	rctor 4
Easy to find the Product	.663			
Booking process is easy	.702			
Easy to modify the booking list			.574	
Saves time and labour	.590			
Goods are at Fair price				.658
True value is got	.628			
Huge discount available	.540			
Attractive offers given		.586		
Latest designs available	.623			
All brands are available	.579			
Quality goods are got	.613			
Satisfied with E-commerce	.800			
Continue with E-commerce	.782			
Advise to friends to go with E-commerce	.715			

Extraction Method: Principal Component Analysis

Source: Computed Data

The details of the factor loading have been explained with the proper naming of factors. The first factor is named as **astute factor** consists of 11 variables namely product, booking process, time saving, value, discount, designs, brands, quality, satisfaction, continuity and counsel.(or recommend). The second factor is named as **proffer factor** consists of 1 variable namely attractive offer. The third factor is named as **metamorphose factor** consists of 1 variable namely modify list. The fourth factor is named as **flaxen factor** consists of 1 variable namely fair price.

CLUSTER ANALYSIS

Cluster analysis is another statistical contrivance that groups the similar objects together. It is a method to classify the variable to groups. Cluster analysis is a multivariate tool which identifies homogeneous groups in the samples which are heterogeneous among them. The customers are requested to express their views on various aspects of E-commerce. It is found that they differ in their opinions and they perceive differently the various aspects of using E-commerce. So it is essential to classify the blocks of customers with specific approaches towards E-commerce usage. In this context K-mean cluster analysis is applied to classify them with respect to their difference of opinions.

Final cluster centres for perceptions of E- banking

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Conv1	3(2)	4(1)		
Conv 2	3(2)	4(1)		
Conv 3	3(2)	4(1)		
Conv 4	3(2)	4(1)		
Value 1	3(2)	4(1)		
Value 2	2(2)	3(1)		
Value 3	3(2)	4(1)		
Value 4	3(2)	4(1)		
fash 1	4(1)	4(1)		
fash 2	3(2)	4(1)		
fash 3	2(2)	4(1)		
adapt 1	3(2)	4(1)		
adapt 2	3(2)	4(1)		
adapt 3	3(2)	4(1)		

Source: Computed Data

Bracket values denote Ranks. (1) Strong. (2) Moderate.

Number of Cases in each Cluster

Cluster	1	31.000
	2	76.000
Valid		107.000
Missing		.000

Source: Computed Data

From the above it is found that out of the two clusters, cluster I with 33% is named as fusionist customers who have a very strong attitude for latest designs and moderate towards other perceptions. Cluster II named as preset customers with 67% have a very strong state of mind towards all the attributes except the value aspect.

CONCLUSION

It was found by the researchers that the customers' perception towards E-Commerce depends on almost all the factors which were taken for the study. All the factors have been taken into consideration and were given importance by the customers on their perception towards E-Commerce.

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