

IDENTIFYING THE DETERMINANTS OF ONLINE RETAIL PERCENTAGE PREVIEWS AND RATING PERSPECTIVE

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ABSTRACT

Indian e-commerce industry has witnessed tremendous growth in recent years, which has resulted in the emergence of a big online retail segment. Due to the enabling environment, government policies, and the rapid infrastructural and technological development, there has been an increase in the number of online retailers both established brands and starts-ups. However, this has led to a high competition in the market, where the e-tailers jostle for market share, visibility and brand awareness. For a new entrant into the industry to be successful, it has to pay attention to the factors that contributes to the success of online stores. Such determinant factors must be known to the online retailers to position then in this rapidly changing marketplace. This paper seeks to identify the most important determinants to the success of online retail in India and how these can be taken up by the retailer. Along with that, it also outlines the factors, which can lead to the downfall on an e-tailer. Technology, government policy and marketing channels are the most important perspectives covered in this work.

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Keywords: e-commerce,... online retail segment, brand awareness

1. INTRODUCTION

1.1 Introduction to E-retailing

Electronic commerce (ecommerce) is a business model type that allows a firm in conducting business over electronic network i.e. Internet. It operates in all the four market segments: business to business, business to consumer, consumer to consumer and consumer to business. It can be thought of as a more advanced form of mail-order purchasing through a record. Ecommerce offers many products and services, from books to music, from clothing to furniture, from financial services to online services.

Internet and e-commerce

Internet has made a drastic difference in our lives. The change has bought amajor transformational power over many enterprises, businesses and economies. Millions of internet users access internet for various purposes. The usage of internet is done for surfing, browsing, socializing, communication, information gathering, publishing copying, printing, tracking locations, trading and selling etc. The list of activities of usage is going on expanding.

This gives rise to a great opportunity for the business to expand their segments towards internet as there are billions of users who look for various products and services online.

Technology has helped build a platform that has enabled the businesses to cash in on the huge population and market that is now accessible over the internet and sell to them. Take the case of Online Banking, Mobile Banking, Debit| Credit Cards, ATMs as well as online trading and other business transactions, all these have grown and happened as a result of technological advancement in terms of communication, software as well as hardware technologies. From the time that one connected to Internet using a desktop, model and a telephone line to the Wi-Fi technology of today, we have graduated very fast making it possible to buy and sell at the click of a button.

Today no business can ignore the huge 'Online Market' that exists on the internet. E Commerce was inevitable. Physical markets have literally been replaced with 'Virtual Markets'. E Commerce has had far reaching impact on business organisations for it has redefined 'Market'. E Commerce has made it possible for sellers to reach out to wide markets and consumers, thus changing the way business is conducted. For every prospective Management Professional, the in depth understanding of 'Online Marketing' and 'E Commerce' have become very important. Online marketing which is drastically and totally different from the traditional marketing, selling, distribution and advertising strategies. Understanding all about Internet, E Commerce mechanisms, technologies, learning how to market online, understanding E Customer and learning to identify, build and nurture a relationship with the E Customer become the building blocks of one's new learning.

2. REVIEW OF LITERATURE

1. Markus Weinmann, Jan vomBrocke, Christoph Schneider in the article 'Combating the Influence of the Heuristic Thinking in Online Star Ratings: Preliminary Evidence' (2016) : have studied the reviewer's heuristic evaluations and its effect on online star rating that can lead to suboptimal purchase decisions. Experiment was conducted in context of restaurants ratings. Regression analysis was used to analyse the data. It was found that presenting an attribute rating before providing rating had a significant positive effect on the overall ratings.
2. Guina Maria Almeida Valle D in the article 'IMPACT OF ONLINE CONSUMER RATINGS ON MOBILE APP DEMAND' (2016) has studied about the impact of online consumer ratings on demand by determining the effects of valence and volume of mobile apps ratings on sales at two online stores. 360 surveys were collected to assess numerically the apps perceived hedonistic. Sources for Ratings and other data were Google Play and Amazon App store. The statistical tool used to analyse the data was Bivariate Pearson correlation. The result shows the rating volume is important for sales performance for apps. The more hedonic the app, fewer will be the impact of average rating volume on sales.
3. Georgios Askalidis, Edward C. Malthouse in the article 'Understanding and Overcoming Biases in Customer Reviews' (2016) found that the verified customers submit up to 0.5 star higher ratings than self-motivated web reviewers. It also explains how the combined findings can help ways to ease various preferences that direct online review submissions and help practitioners provide more reliable, descriptive and higher ratings to their customers. Econometric model is used for the descriptive results. Online retailers must also make decisions about how they display the reviews to their users. The retailer should provide accurate and reliable representation of the true quality of the reviewed product.
4. YueGuo, Stuart J. Barnes, Khuong Le Nguyen, QiongJia in the article 'A THEORETICAL APPROACH TO ONLINE REVIEW SYSTEMS: AN INFLUENCE OF REVIEW COMPONENTS MODEL' (2016) have studied about the design of consumer review systems and its impact on consumers beliefs about online reviews and subsequent purchase decisions. Quasi-experimental design was applied and two pilot tests are carried out. This study is expected to provide several results. First, by a wide review of the existing literature and 200 e-commerce websites, a broad typology of review components will be developed and its relative importance will be examined.
5. Abdulaziz Elwalda, Kevin Lu, Maged Ali in the article 'Perceived derived attributes of online customer reviews' (2016) have studied about the influence of online customer review on customer's purchase intention. A survey was conducted in focus group to understand the effects of derived factors on customer belief and purpose. Both qualitative and quantitative techniques were used to analyse. A research model was introduced called Perceived Derived Attributes (PDA) that says about the issues of perceived derived attributes of online reviews. The perceived usefulness of online customer rating has a significant direct influence on consumer purchase intention.

OBJECTIVES:

- To know the customer perception of product assortments based on reviews and ratings for Amazon.com retailer
- To study the customer perception of product quality based on review and ratings for Amazon.com retailer
- To understand the customer perception of price transparency based on review and ratings for Amazon.com retailer
- To know the customer perception of website convenience based on review and rating for Amazon.com retailer
- To know the customer perception of security concern and policy on review and rating for Amazon.com retailer

HYPOTHESIS OF THE STUDY:

H1: Online customer's perceptions of product assortment will be significantly associated with perception of reviews and ratings

H2: Online customer's perceptions of product quality will be significantly associated with perception of reviews and ratings

H3: Online customer's perceptions of price transparency will be significantly associated with perception of reviews and ratings

H4: Online customer's perceptions of website convenience will be significantly associated with perception of reviews and ratings

H5: Online customer's perceptions on reviews and ratings will be significantly associated with online retail patronage.

H6: Customers security concerns will weaken the relationship between reviews and ratings and online retail patronage.

H7: Customers return policy will weaken the relationship between reviews and ratings and online retail patronage.

3. RESEARCH METHODOLOGY

Need For the Study

It is well known fact that online retailing would influence the decrease of brick and mortar retail store. The buyer's decision-making process has changed intensely in recent years. Buyers are conducting extensive research online before ever speaking to a sales person. Buyers are also making more direct purchases online and via their smartphone, never stepping foot into traditional brick-and-mortar location. Buyers are more than happy to stay home and research and complete their purchase online.

The retailing industry is undergoing a revolutionary change. Merchants are no longer the driving force for retailers. Now this merchant must also be a technocrat. Accepting the influence of technology is critical for the retail industry to remain vibrant. Technology will make shopping easier. Advancements will include robotics, personal recognition, digital wallet, artificial intelligence, consumer analytics and other tech driven initiatives designed to make shopping exciting both in stores and on the Internet.

Scope Of the Study:

This study was carried out by conducting survey for Amazon customers only. The study limits its research to the customers who have done online shopping from Amazon as only the Amazon customers can become an online retail patronage. The main aim of this study is to know the variables that influence the customer to become an online retail patronage for Amazon.

Data collection method:

Table.1

Methodology Elements	Methodology Description
Research name	Descriptive study
Location	Hyderabad
Total Population	5000
Sample size determination	Glenn sample size table (1992)
Sample size	150 students
Source of data	Primary sources & Secondary sources
Sample selection technique	Convenient sample (Non-probabilistic)
Data collection technique	Structured questionnaire
Measuring scale	Likert 5-point rating scale
Data analysis technique	Descriptive statistics, Reliability tests, Cronbach's Alpha, Regression, Correlation, Factor Analysis, ANOVA (SPSS V 22)

4. DATA ANALYSIS & INTERPRETATION

Construct reliability statistics

Table.2 : Construct reliability statistics

Constructs	Construct reliability
Criteria	≥ 0.7
product assortment	0.840
product quality	0.887

price transparency	0.851
website convenience	0.833
reviews and ratings	0.912
security concerns	0.862
return policy	0.954
online retail patronage	0.933

Average Variance Extracted

Average variance extracted was computed by this researcher using a formula suggested by (Fornell and Larcker, 1981; Hair et al., 2006), as follows.

Formula 2 for computing average variance extracted

$$VE = \frac{\sum_{i=1}^n \lambda_i^2}{n}$$

Note: In the formula mentioned above λ represents factor loadings (standardized regression weights) and i represents total number of items

Validity

Construct's validity can be examined by assessing convergent validity & discriminant validity.

Convergent Validity

Factor loadings of construct, average variance extracted (AVE), and construct reliability (CR) estimation were used by this researcher to assess the convergent validity of each of the constructs. Formula 1 was used to compute CR and formula 2 was used to compute AVE as mentioned earlier. A minimum cut off criteria for standardized regression loadings >0.7, AVE >0.5 and reliability >0.7) were used to assess the convergent validity. Results are presented in Table 3.2.

Convergent validity

Table 3 : Convergent validity

Constructs	CR	AVE
product assortment	0.887	0.612
product quality	0.917	0.688
price transparency	0.892	0.624
website convenience	0.875	0.539
reviews and ratings	0.934	0.740
security concerns	0.900	0.644
return policy	0.964	0.844
online retail patronage	0.949	0.789

Table.4

Rule of Thumb : CR > 0.7

CR > AVE

AVE > 0.5

Discriminate validity

The discriminate validity was assessed by the Average Variance Extracted for each construct compared with the corresponding Squared Inter-Construct Correlation (SIC), and the AVE estimate larger than SIC estimates below table presents results of the discriminate validity for each construct used in this study.

Table 5 : Discriminate validity

Constructs	AVE	MSV	ASV
Product Assortment	0.612	0.523	0.427
Product Quality	0.688	0.429	0.536
Price Transparency	0.624	0.562	0.482
Website Convenience	0.539	0.473	0.479
Reviews and Ratings	0.740	0.651	0.628
Security Concerns	0.644	0.589	0.591
Return Policy	0.844	0.734	0.728
Online Retail Patronage	0.789	0.583	0.617

Rule of Thumb : $MSV < AVE$

$ASV < AVE$

Table 6: Constructs and AVE values

	Constructs	AVE	CR	Alpha	1	2	3	4	5	6	7	8
1	product assortment	0.612	0.887	0.840	0.782304							
2	product quality	0.688	0.917	0.887	0.571	0.829458						
3	price transparency	0.624	0.892	0.851	0.450	0.620	0.789937					
4	website convenience	0.539	0.875	0.833	0.429	0.572	0.648	0.734166				
5	reviews and ratings	0.740	0.934	0.912	0.421	0.579	0.498	0.470	0.860233			
6	security concerns	0.644	0.900	0.862	0.313	0.502	0.440	0.685	0.467	0.802496		
7	return policy	0.844	0.964	0.954	0.371	0.709	0.376	0.543	0.507	0.373	0.918695	
8	online retail patronage	0.789	0.949	0.933	0.475	0.789	0.488	0.546	0.566	0.491	0.789	0.888257

Note: Diagonal values are AVE and Off diagonal are inter-construct squared correlations.

Path Coefficients

Table 7: P value – path coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Price Transparency -> Reviews & Ratings	0.167	0.173	0.106	1.573	0.116
Product Assortment -> Reviews & Ratings	0.092	0.105	0.105	0.880	0.379
Product Quality -> Reviews & Ratings	0.328	0.316	0.113	2.888	0.004
Return Policy ->	0.606	0.599	0.082	7.381	0.000

Online Retail Patronage					
Reviews & Ratings -> Online Retail Patronage	0.133	0.141	0.096	1.387	0.166
Security Concern -> Online Retail Patronage	0.189	0.188	0.075	2.511	0.012
Website Convenience -> Reviews & Ratings	0.141	0.159	0.102	1.385	0.166

H1: Online customer's perceptions of product assortment will be significantly associated with perception of reviews and ratings.

The reviews and ratings related to products provided by customers in Amazon shopping website doesn't affect the customers perception towards the product assortment of Amazon

The reviews and ratings that describe about the product assortment of Amazon are not helpful for the customer in their buying decision. This shows a relationship between the perception of customers towards product assortment and reviews and ratings.

The P value for Product Assortment towards reviews and ratings is 0.379 which is greater than 0.05. Hence, hypothesis H1 is rejected. Online customer's perceptions of Product assortment will be insignificantly associated with perception of reviews and ratings.

H2: Online customer's perceptions of product quality will be significantly associated with perception of reviews and ratings

Hypothesis H2 is accepted as the P-value for the Product Quality with respect to Reviews and Ratings is less than 0.05 i.e. 0.004. This shows that the Online Customer's perceptions of product quality will be significantly associated with perception of reviews and ratings. Reviews and ratings provided by the customers related to the product quality will impact the customer's perception for the product.

3: Online customer's perceptions of price transparency will be significantly associated with perception of reviews and ratings

The price transparency will not impact the customer's perception as the results of survey showed the hypothesis H3 will be rejected as the P value is above 0.05 which is at 0.116.

H4: Online customer's perceptions of website convenience will be significantly associated with perception of reviews and ratings

The Amazon website convenience will not support in building positive perception of customer by the reviews and ratings. The P value for website convenience related to reviews and ratings is at 0.166, which is greater than 0.05. Hence hypothesis H4 is rejected. Online customer's perception of website convenience will be insignificantly associated with the perception of reviews and ratings.

H5: Online customer's perceptions on reviews and ratings will be significantly associated with online retail patronage.

As the P value for the online retail patronage is 0.166, the hypothesis H5 is rejected. Online customer's perception on reviews and ratings will be insignificantly associated with online retail patronage.

Online retail patronage will not be influenced by the reviews and ratings provided by the customers for the online shopping application of Amazon.

H6: Customers security concerns will weaken the relationship between reviews and ratings and online retail patronage.

The security concerns of customers and the reviews and ratings related to security issues and concerns posted by the customer on the Amazon website will affect the online retail patronage. The P value for the security concerns related to the online retail patronage is less than 0.05 which is at 0.012. Hence, hypothesis H6 is accepted. Customer's security concern will weaken the relationship between reviews and ratings and online retail patronage.

H7: Customers return policy will weaken the relationship between reviews and ratings and online retail patronage

The results shows that the Return policy of Amazon and the customer's perception of reviews and ratings related to return policy will impact the online retail patronage. The P value for the return policy related to the online retail

patronage is less than 0.05 which is at 0.00. Hence, hypothesis H7 is accepted. Customer's security concern will weaken the relationship between reviews and ratings and online retail patronage.

Table 8: Results of path coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Results
Product Assortment -> Reviews & Ratings	0.092	0.105	0.105	0.880	0.379	Hypothesis H1 rejected
Product Quality -> Reviews & Ratings	0.328	0.316	0.113	2.888	0.004	Hypothesis H2 accepted
Price Transparency -> Reviews & Ratings	0.167	0.173	0.106	1.573	0.116	Hypothesis H3 rejected
Website Convenience -> Reviews & Ratings	0.141	0.159	0.102	1.385	0.166	Hypothesis H4 rejected
Reviews & Ratings -> Online Retail Patronage	0.133	0.141	0.096	1.387	0.166	Hypothesis H5 rejected
Security Concern -> Online Retail Patronage	0.189	0.188	0.075	2.511	0.012	Hypothesis H6 accepted
Return Policy -> Online Retail Patronage	0.606	0.599	0.082	7.381	0.000	Hypothesis H7 accepted

5. CONCLUSION OF THE STUDY

Reviews and ratings is a key variable in customer buying decisions from online shopping app Amazon. Since the consumer's attitude, beliefs and perceptions may change the mind-set of the customer to either become a patronage or become a non-customer. As the e-retailing is booming in the market and many e-commerce are coming up, it is very crucial for Amazon to be the number one shopping websites by continuing providing variety of products and services to its customers.

The changes in technology, lifestyle, and social factor can change the way people use the internet to do things easier and faster. This gives rise to the evolution and changes in e-retailing. The demand for e-commerce is growing and it will never come down. There are untapped market segments for e-commerce including village areas, uneducated people, teenagers, senior citizens, housewives, etc. where Amazon can look for new opportunities. The sustainability of e-retailer Amazon will depend on customer satisfaction and this will help them to become online retail patronage for Amazon.

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