

The Impact of Reviews and Ratings of Products or Services on E-Commerce Websites & Its Influence on Consumer Buying Behaviour.

Shivam Agarwal
Master's Thesis

Master of Business Administration -Batch (2018- 2020)
Amity Business School, Amity University Uttar Pradesh, India.

Dr. Rushina Singhi 1

1 Faculty of Operation Management & Decision Science
Amity Business School, Amity University Uttar Pradesh, India.

Abstract

A review is a textual feedback of a product written by consumer. While ratings are the opinion of consumers on a specific scale. In e-commerce business the feedback is usually taken in the form of reviews and ratings. Products reviews and ratings are considered to be very important factor in making buying decision. These reviews are also used as quality indicator of the products and services. The popularity of the website also increases through number of reviews and ratings. A survey among 203 online shoppers had been conducted and evaluated. The data was analysed by several statistical tools like Excel and SPSS. The study explains the importance of reviews in influencing the buying decision of consumer. Also shows the correlation between the variables taken in the research. The Study was based on five variable that were price, Quality, Contribution, Time and Buying Decision. In this paper we concluded the impact of reviews and ratings on consumer buying behaviour.

Keywords: Products reviews and ratings, E-commerce, Correlation, Buying decision.

Introduction

Nowadays, most of the e-commerce websites offer product reviews or ratings.

A product review is a textual review of a customer, who describes the characteristics (e.g. pros and cons) of a product. Besides a product rating shows the customer's opinion on a given scale. The most common rating scheme on an e-commerce is the star-rating, where more the stars indicates better will be the product's rating(Kailer, 2013). Product or Service reviews and ratings are generated by the user (the online shoppers) and published on the website of the respective e-commerce platform. As consumers look for the products or services online, they come across various sources of information to compare their product with other products available in market. They come across various reviews as a source of information to compare their products. These customer reviews work as a first-hand experience of that product. Reviews are now a days treated as an expert advice also. So, companies come up with this marketing strategies that experts are used to launch new products or start getting paid for reviewing and recommending new product. Each review given by the customer is treated as a valuable source of information by the customers. These reviews also add value to the product and to customer perspective.(Goodson, 2019)

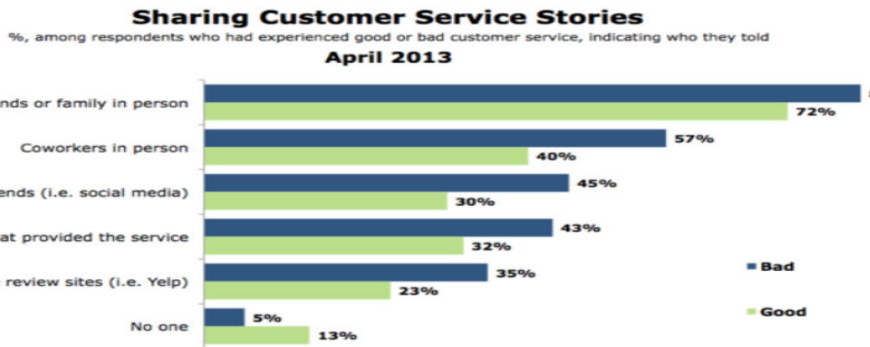


Fig. 1

The presence of customer reviews helps in changing the consumer perception about the product and also increases the presence and reliability of website over internet. Online retailers provide some benefits to the reviewers to post reviews and to increase the traffic over their website. There are various reviewing websites which are specifically made for this kind of commerce like e-Opinion and amazon review guide. Similarly, in tour and travel industry there is one site named trivago where you can search and compare different hotels and related services. These related services and comparison feature work as a marketing tool for those companies which are listed on that website. Online retailers see reviews “helpful” to promote their product through direct word of mouth of consumers. (Haije, 2017)

About reviews and ratings:

The reviews help in better decision making and provide customer satisfaction towards the e-commerce website and products. The reviews are uses as a reliable source of information for the evaluation and comparisons of products and services. Social media has become a very popular platform for the companies to promote and sell their products and services because on social media the companies are easily able to interact with the right targeted population. The brands have made their own page for promotions and to form better customer relations. These pages also use to increase the awareness about new products, services and to promote cause related campaigns in which companies try to promote their brands through causes or activities trending in the market. They try to affiliate their brand with the cause and promote through their page, it helps them building their brand equity among their existing customers as well as for new prospects. (roy, 2014)

Content marketing has also used as a branding technique. As the technique became very prominent in the industry. Although content marketing is a contemporary marketing but with the recent trends and shifts in the customers preference it became a very reliable and efficient way of marketing to capture the targeted audience specifically. However, more research is required to justify the role of content marketing in social media content communities

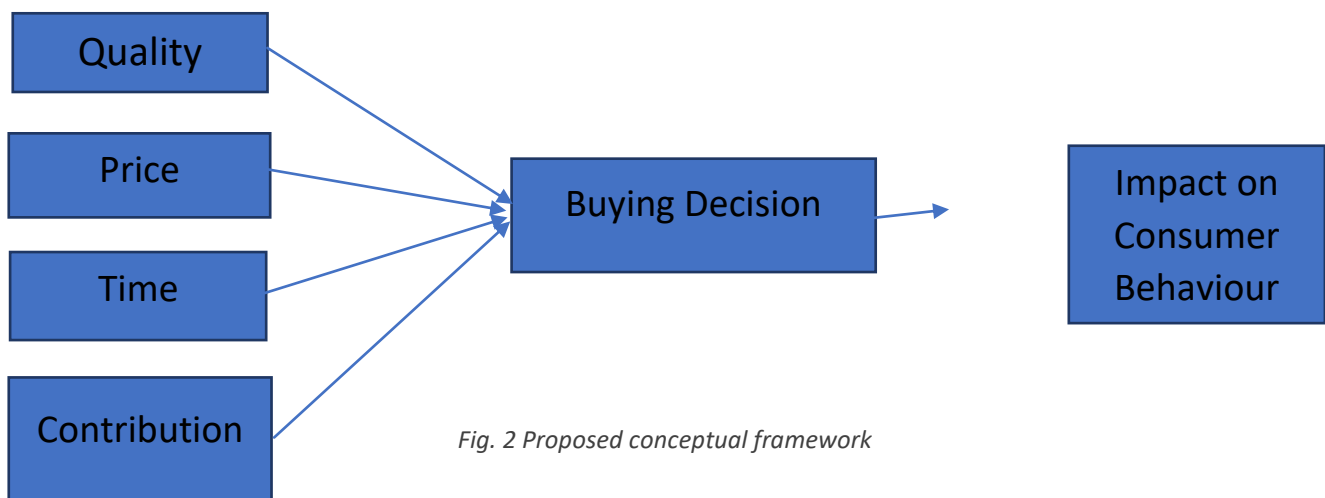


Fig. 2 Proposed conceptual framework

There are five variables has been taken for the study in which buying decision is taken as dependent variable and other four independent variables are quality of review, effect on price perception, the duration of the review and consumers contribution of that review. These variables are used to study the impact of reviews and ratings on consumer behaviour.

Examples

Let's understand how reviews and ratings looks like on e-commerce websites.

Amazone.in

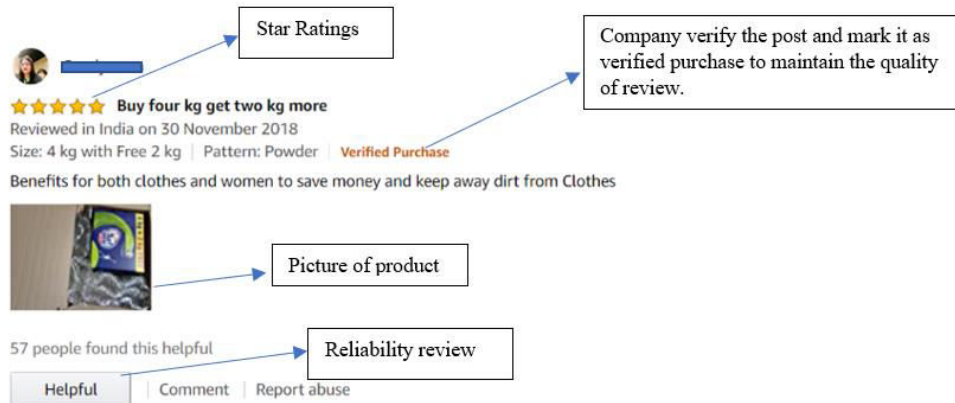


Fig. 3

This is how a review helps and influence buying decision.

Flipkart.com

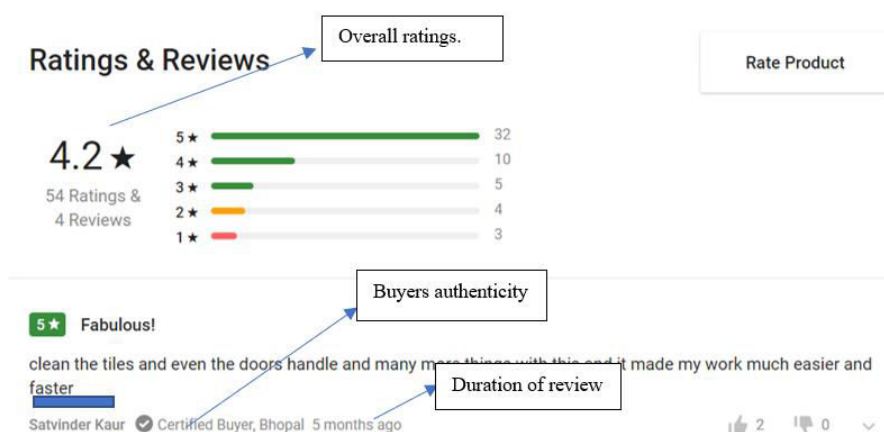


Fig. 4

The Flipkart is offering overall ratings and the distribution of consumers rating among different stars ratings. And we can see the written review by consumer which help consumers in taking buying decision.

Zomato.com

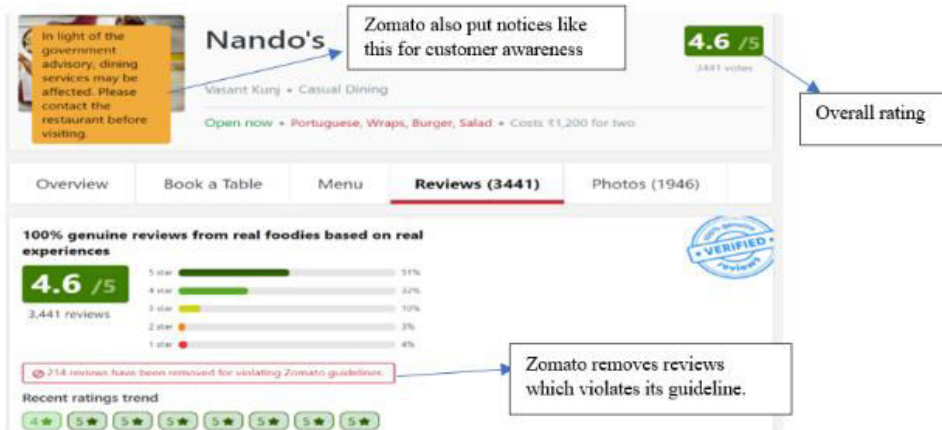


Fig. 5

People use to evaluate restaurants on the basis of ratings and reviews. the no. of reviews also become one of the deciding factors for either visiting or ordering food from that restaurant.

Trivago.in

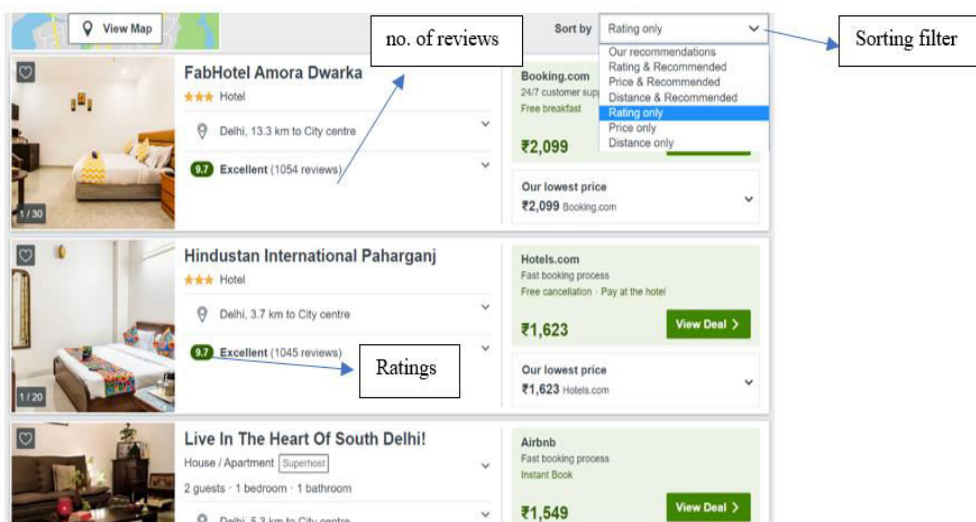


Fig. 6

As we can see in tours and travel industry companies used to offer a comparative view of hotels. In which they offer various filters to sort the search. In these filters, one filter is specially made for the

rating and other one is for recommendations. This clearly signifies importance of reviews and ratings on e-commerce. And how useful it is consumers.

Literature Review

Yubo Chen and jinhong Xie(2008), in this study the author has identified that how reviews and rating given to a product on e-commerce website can be used as marketing communication mix and act as a free sales promotion tool. They also explains about the type of information available for the product like after the reviews of products it was considered as buyer's created information and earlier it was seller's created information.(Yubo Chen, 2008)

(Ling Liu, 2008) the study deals with the effect of online reviews on the sales of the products. The study caters about the effectiveness of the online review market. When consumer sees a review they not only consider the star rating but also considers the information affiliated with the review and the credibility of the reviewer. The study found that the impact of online reviews on sales diminished over time. It was concluded in the research that company should not give much incentive to the customers for reviews the product online because after some extent of product launch the consumer stop giving value to the reviews.

(Nan Hu, 2008) Online reviews become source of information for the consumers and marketers in prospect of the quality of the product. The online reviews are measured in two ways one is qualitative and other is quantitative. Both ways had their own significance in measuring the quality of reviews. it was noted that firm don't need to provide incentive to the customers for longer period of time and when the product became popular among the consumers then the impact of reviews decreases. As consumers are aware about the product's quality and its use. Since it was found that the impact on sales of online reviews decreases over longer period of time. The reputation and authenticity of the reviewer also taken into account when any consumer refer to any review before making buying decision.

(Schuff, 2010), The study showed the benefits of customer reviews to an online retailer. It also explains how consumer reviews became helpful in the process of making a buying decision. Study also incurred one more factor that is product type which directly relates to the reviews and their effect on purchase decision. Review depth had also been considered for the product purchase. Among the two factors found in the study review depth was considered to be more prominent than product type.

(YanChun, 2012)The online consumers had a huge impact of reviews on their purchase decision. To enhance their purchase decision the reviews are consider to be very important. In the research online reviews are evaluated on an average score which was calculated through various mathematical models and empirical analysis. The average score or online reviews was not considered as a real yardstick to measure the real quality of the product. This paper also explains its implication on marketing practices in regards of product reviews.

(Georg Lackermair, 2013) the study examined the acceptance and usage of reviews and ratings in reference to e-commerce business. The study showed that reviews and ratings are the important source of information for the consumer. And help consumer in taking the buying decision easily and increases the credibility of the product. Consumers share their experience of the product and authenticate the

product. Which boost the sale of the product and establishes a trust among the buyer and seller. The quality of the feedback of reviews varies widely and very difficult to compare among the mix responses of the individuals.

(Sung Ho Ha, 2015) the study was focused on the relationship between online consumer review and product sales. There are various importing findings have been emerged from the study like different source of reviews had different impact on product sales and the bloggers review was most influential among the different kind of reviews. This paper helps in understanding the implication of the online sellers in terms of how to manage online consumer reviews, specifically the bloggers.

(Ashish Kumar, 2015) The firm generated content, in this paper the content generated by firm and customer is bifurcated and how this content helps in sales. Also, the effect of Firm generated content on consumer behaviour is been recorded. Three metrics are used to measure the customer behaviour: Spending, Cross buying and Customer profitability. From the study they found that Firm Generated Content (FGC) is more useful for experienced and technological advanced customers. In the study it was also found that there are three components of FGC: valence, Receptivity and Customer susceptibility. Whereas it was found that FGC Receptivity has the largest impact on consumer behaviour. The study also helped in knowing the benefits of social media and return from it.

(Pei-Shan Wei, 2012)the study was about the influence of celebrity endorsement and customer reviews on female shopping behaviour. It was found that the customer's reviews are preferred more over celebrity endorsement. Study also talked about the participants memory, search and behaviour towards the product experience. It was also found that mostly the beauty products were promoted through celebrity endorsement and also it creates an impact on the consumer buying behaviour. The study also considers the perception of the customers towards celebrity and the product.

(Dr. shahid Amin Bhat, 2016) the study was focused on the trends of e-commerce business and the shift of commerce from mortar and brick model to electronic commerce. The study showed that e-commerce has showed a tremendous growth around the globe and same for India. Also the paper reflected the key success factors of the success of e-commerce business model in India.

(Abdul Khan, 2016)the paper is about the benefits and challenges in an emerging economy due to E-commerce. The convenience to shop anything from anywhere and the increased use of smart mobile phones has also boost's the use of online monetary transactions. These transactions make's online shopping easier and faster. Besides the advancement in information and communication has bring a lot of ruckus in bricks and mortar retailers. And paper also showed the challenges in emerging economy like internet cost and its accessibility in developing country is not up to the mark when compared with developed countries, Lack of education, poor concept of online marketing, Internet coverage arena is limited, Lack of trustable business and enterprise, Cost of product and services is higher than the traditional market.

(Plessis, 2017) Content marketing one of the leading techniques in online marketing or digital marketing. In content marketing the seller or company try to establish a relationship between the customer and the company. The relationship is based on the feedback of customer for the products/services and the response of the company for that feedback. These feedbacks are categories as ratings and reviews. The study clearly concludes that reviews and ratings on websites and social media can directly benefit the brand and also helps in building brand loyalty.

Research Methodology

Objectives of the Research

1. To understand how reviews and ratings influence consumer buying behaviour.
2. To find the usefulness of reviews and ratings help in determining quality of products.
3. To understand the importance of no. of reviews.
4. To find the relationship between reviews/ratings and the perceived worth of product.

Research Design

In terms of research design, the researcher applied descriptive research design. The research was based on primary as well as secondary data.

Questionnaire Design

The questionnaire was designed on five points Likert scale and contains 17 questions. All questions were close ended and are objective type. Whereas the secondary data has been taken from various sources like Journals, Articles, Research papers and Websites to study and understand the various concepts of e-commerce, impact of reviews and ratings, consumer behaviour etc.

Research tool

A questionnaire was used to collect the data. And the data was organised using Excel and analysed through SPSS. The study is based on five parameter or variables on which the study was performed. Variables are: Quality, Price, Contribution, Time and Buying decision. In which buying decision was considered as dependent variable and remaining four as independent variable.

Sampling design

A sample size of 203 respondents has been taken for the study. The area of study is primarily focused in Delhi NCR. Convenience sampling is been used to collect the data for the study.

Data Analysis

Descriptive Statistics

	Mean	Std. Deviation	N
Quality	4.1330	.45885	203
Price	3.6995	.68999	203
Time	4.1823	.60084	203
Contribution	2.8358	.51316	203
Buying decision	2.4581	.36299	203

Table-1

Correlations

Pearson Correlation		Quality	Price	Time	Contribution	Buying Decision
	Quality	1	.303	.434	-.256	.376
	Price	.303	1	.262	-.166	.025
	Time	.434	.262	1	-.325	.296
	Contribution	-.256	-.166	.325	1	-.028
	Buying Decision	.376	.025	.296	-.028	1

Table-2

Correlation is significant at the 0.01 level (2-tailed).
 Correlation is significant at the 0.05 level (2-tailed).

Interpretation-

For quality- The value of pearson correlation of time is .434 which means 43.3% of the time is related to the quality. Which means quality of review is strongly correlated with time.

For price- The price is 30.3% related with the quality. It means the worth of the product/service is highly related to the quality of product.

For time- The time is 43.4% related to quality. It means the duration of the review is highly impacted by the quality of the review.

For contribution- The contribution is showing negative review with all the factors which means contribution is not related to any of the variable.

For buying decision- The buying decision is 37.6% related with the quality. It means consumer make their buying decision on the basis of the quality of review.

Regression

Variables Entered

Model	Variables Entered	Method
1	Contribution, Price, Quality, Time	Enter

Table-3

- a. Dependent Variable: BuyingDecision
- b. All requested variables entered.

Model Summary

Model	R	R square	Adjusted R square
1	.558	.328	.303

Table- 4

- a. Predictors: (Constant), Contribution, Price, Quality, Time

Interpretation-

As the value of R is .558 which proves that there is a moderately positive relationship exist between the variables.

The value of R Square is .328 which means that the independent variable is able to explain only 32.8% of the model which means that there are certain other factors or variables which are affecting the buying decision and are not considered in the study.

Adjusted R Square is .303, that means the value of adjusted R Square is nearer to value R Square this means that sample size is adequate for our study.

Coefficients

Model	Unstandardized Coefficients B
Constant	2.083
Quality	.161
Price	-.036
Time	.155
Contribution	.068

Table -5

a. Dependent Variable: BuyingDecision

Interpretation-

Regression Equation

$$Y = 2.083 + .161Q + (-0.036P) + .155T + 0.068C$$

Where

Y= Buying Decision (dependent variable)

Q, P, T & C are independent variable

Q = Quality

P = Price

T = Time

C = Contribution

Cross tabulation

Buying Decision*V18

Buying Decision	Gender	Female	Male	Not disclosed	Total
	Count	54	147	2	203
	% within contribution	26.6%	72.4%	1%	100 %

Table- 6

Interpretation- From the above crosstab it can be interpreted that 72.4% males refers reviews before making a purchase decision while only 26.6% females refers to reviews before buying a product.

Buying decision*V19

Buying Decision	Age Group	18-25	25- 35	35- 45	Below 18	Total
	Count	121	59	18	5	203
	% within	59.6%	29.1%	8.9%	2.5%	100%

	contribution					
--	--------------	--	--	--	--	--

Table - 7

Interpretation- It was found that 18- 25 years old people have a major impact of reviews on their buying decision. Then subsequently 25-35 years old got influenced. This showed that the millennial generation is more into reading and writing reviews as compared to others before making a buying decision.

Quality*Price Crosstabulation

		Price					Total
		Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	
Quality	Disagree	0	1	0	1	0	2
	Neutral	1	8	22	26	2	59
	Agree	0	5	70	56	8	139
	Strongly Agree	0	0	0	0	3	3
Total		1	14	92	83	13	203

Table 8

Interpretation- From the above analysis we found that 56 people out of 139 agreed that quality of reviews helps in determining the worth of a product. Also on the other hand 70 people thinks that quality of review is important and not able to relate that factor with price so they were neutral about this relation.

Findings

The quality of reviews and ratings has a major impact on the consumer buying behaviour through e-commerce websites.

The value of R is .558 which proves that there is a moderately positive relationship exist between the variables. The variable are Quality, Price, Contribution and Time.

The value of R Square is .328 which means that the independent variable is able to explain only 32.8% of the model which means that there are certain other factors or variables which are affecting the buying decision and are not considered in the study.

In the study 180 out 203 people read reviews before making any purchase decision. Which means that checking reviews before purchase has also became a regular habit of the consumers. And proves the usefulness of reviews.

From the crosstabulation it was found that 72% males check reviews before making a buying decision. It means males are more sensitive towards reviews as compared to females.

Around 90% people believes on the number of reviews. if the Number of reviews is more, than the product is considered to be more reliable and trusted. Also, the number of reviews signifies the sales of the product/service.

The quality and time of the review showed a strong relationship. Which means the duration of the review impacts the quality or the credibility of the review. If the review is comparatively older than consumer doesn't consider it reliable or beneficial for making buying decision.

Conclusion

The study shows that reviews and ratings are very vital for influencing the buying decision of consumers. The study also matches the literatures studied for the research that reviews are treated as first-hand information for evaluation of product/services. It was also found that mostly 18-25 years old do write online reviews.

The study helps us to understand the importance of quality of review over buying behaviour. If the review is credible then not only company stamped it as verified or authentic but consumers also consider that as valuable and reliable.

From the study it was found that 93% people hesitate to buy any product how has more negative reviews. which means irrespective the kind of the product if the reviews are negative then people will hesitate to buy that products. And will start looking for a substitute product either on same website or on another website.

From the research we also understand how reviews and ratings have been used as word of mouth marketing. This inference has been found from the literature studied from the research. There were various studies which proves that companies use reviews as content marketing for their products and influence customers buying behaviour.

Through the survey it was clear that reviews help in buying decision. And the quality of review is as crucial as number of reviews on that product/service. The quality of review determined the positive as well as negative impact on consumer buying behaviour. The number of reviews determined the product sales and its popularity among consumers. If any product has large number of reviews then it is considered that the product is popular and the sales of the product is better as compared to other similar products.

The duration of the review also has an impact on quality of the review. Through the correlation test done on the data collected it was found that 43.4% of the time is related with the quality variable. It is highest among all the variables. And the relation is very much true on analytical and hypothetical basis. Because by the meaning of time of review we meant how old the review was on the website. And from the quality we meant how credible the review is for taking any buying decision.

Thus, the study concluded that reviews and ratings have a big impact on consumer buying behaviour. Also, study helps us to understand the usefulness of reviews for buyers as well as for sellers. We studied the impact and use of reviews on e-commerce websites.

References

- Abdul Khan, G. (2016). Electronic Commerce: A Study on Benefits and Challenges in. *Global Journal of Management and Business Research*.
- Ashish Kumar, R. B. (2015). From social to sale: the effect of firm generated content in social media on consumer behaviour. *Journal of marketing and american marketing association*, 1547-7185.

- Dr. shahid Amin Bhat, k. K. (2016). A Review Paper on E-Commerce. *reseachgate.net* , 15-18.
- Georg Lackermair, D. K. (2013). Importance of Online Product Reviews from a Consumer's Perspective. *Horizon Research Publishing* , 1-5.
- Goodson, E. (2019, jan 10). The Importance of Google Reviews for Local Businesses. *New dimension marketing*
- Haije, E. G. (2017, jul 27). top 14 Ecommerce Rating and review tools: an overview. *mopinion.com*.
- Kailer, D. (2013). Importance of Online Product Reviews from a consumers perspective. *Advances in Economics and Business*, 1-5.
- Ling Liu, J. Z. (2008). Do Online Reviews Affect Product Sales? The Role of Reviewer Characteristics and Temporal effects. *Information Technology and Management*.
- Nan Hu, L. L. (2008). Do Online Reviews Affect Product Sales? The Role of Reviewer Characteristics and Temporal effects. *Information Technology and Management, Vol 9*, 50-84.
- Pei-Shan Wei, H.-P. L. (2012). An examination of the celebrity endorsements and online customer reviews influence female consumers' shopping behavior. *Computers in Human Behavior -Elsevier Ltd.*, 193-201.
- Plessis, C. d. (2017). The role of content marketing in social media content communities . *South African Journal of Information Management*, 19-23.
- roy, A. (2014, aug 04). 7 Tips to Market Your Brand Using Customer Reviews. *Jeff Bullas* .
- Schuff, S. M. (2010). WHAT MAKES A HELPFUL ONLINE REVIEW? A STUDY OF CUSTOMER REVIEWS ON AMAZON.COM. *MIS Quarterly*, 185-200.
- Sung Ho Ha, S. y. (2015). Impact of Online Consumer Reviews on Product Sales. *Applied Mathematics & Information Sciences-An International Journal*, 373-387.
- YanChun, W. Z. (2012). Can Average Score of Online Reviews Reveal Product's Real Quality? *international conference on management of e-commerce and e-government* (pp. 30-33). US: IEEE Computer Society 1730 Massachusetts Ave., NW Washington, DC United States.
- Yubo Chen, J. X. (2008). Online Consumer Review: Word-of-Mouth as a new Element of Marketing Communication Mix. *Management Science* , 477-491.

Appendix

Questionnaire

S.No	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
V1	Quality					
1	Reviews helps in determining the quality of Product.					
2	Review matches the description showed by the company.					
3	I believe that reviews help in building the consumer trust.					
4	I believe negative reviews directly related with poor quality of product.					
5	I think online reviews help in comparing two or more brands.					
V2	Price					
6	Good quality reviews and ratings leads to increase in price of services.					
7	I think reviews help in determining the worth of a product.					
V3	Time					
8	Timely delivery of services leads to better ratings.					
9	I believe that reviews and ratings save time in purchase decision.					
10	The credibility of the review depends upon the duration.					
V4	Contribution					
11	How often do you write online reviews?	Very often	Often	occasionally	Rarely	Never
12	I believe number of reviews impact purchase decision.					
13	Do you compare products positive and negative reviews?	Always	Sometimes	occasionally	Rarely	Never
V5	Buying Decision					
14	How often do you read reviews before buying a product?					
15	People hesitate to purchase products due to negative reviews					
16	I always check reviews before every purchase.					

Demographics

1. Name
2. Gender- Male Female Not to be disclosed
3. Age - below 18 18-28 28-35 35-45
4. How often do you shop online?
 - Daily
 - Weekly
 - Monthly
 - Yearly