The effects of Rate & Review on E-commerce

Mertcan Madencioglu[1], Mehtap Dursun[2] and Zeynep Sener[3]

Abstract

Marketing is important for companies to sell their product or goods to consumers with special concepts. In an organization, research & development department creates a new product for customer needs while marketing department creates a concept or idea for the new product to reach easily to customers. However, in 21. century, marketing definition is changed in order to keep consistency in trends. Digital marketing is the marketing of products or services using digital technologies, mainly on the internet, but also including mobile phones, display advertising, and any other digital medium. As digital platforms are increasingly incorporated into marketing plans and as people use digital devices instead of visiting physical shops, digital marketing campaigns are became more prevalent and efficient. Digital platforms provide lots of e-commerce website for consumer to find best price for a product. However, the important step to make a purchasing decision is based on the comment or consumer generated rating or reviews. With digital marketing, companies encourage consumers for reading/writing reviews for the product. Thus, in this study the relation between Rate & Review, which is a new word of mouth, and purchase motivation in E-commerce will be analyzed.

Keywords: Digital marketing; e-commerce; Rate & Review

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[1]   Industrial   Engineering   Department,   Galatasaray   University,   Istanbul,   Turkey. mertcanmadencioglu@gmail.com

[2] **Corresponding Author** Industrial Engineering Department, Galatasaray Juniversity, Istanbul, Turkey. mdursun@gsu.edu.tr

[3] Industrial Engineering Department, Galatasaray University, Istanbul, Turkey. zsener@gsu.edu.tr

1.   Introduction

Digital marketing's development since the 1990s and 2000s has changed the way, brands and businesses utilize technology for marketing. As digital platforms incorporated into marketing plans and as people use digital devices instead of visiting physical shops, digital marketing campaigns become more prevalent and efficient (Prusty, 2018). Digital media provides marketers or organization with lots of tools that enable them to touch customer easily and efficiently.

In the increasingly competitive FMCG (fast-moving consumer goods) industry, companies adopt strategies that focus on adjusting the products characteristics to satisfy customers' needs and preferences in digital area. Companies develop strategies to touch to consumers on e-commerce and to increase their percentage of e-commerce revenue in their total company revenue. One of those strategies is using effectively E-WOM (word of mouth) in E-commerce platform.

E-commerce grows in Turkey 2016 vs 2017 is 37% and reach 42.2 billion Turkish Lira in 2017. In order to increase e-commerce world in Turkey, companies is starting to make a huge investment in e-commerce. For example in FMCG companies, digital funnel is used for digital investments. There are 3 steps in digital funnel namely awareness, consideration and purchase as shown in Figure 1. In awareness step, the main aim is reach targeted consumer with product awareness. In consideration steps, consumers are informed about product benefit. In final step, consumers are encouraged to buy product which have communication in e-commerce. As seen in Figure 1, each step has different volume of consumer. In awareness step the volume is higher than other steps.

Figure 1: Digital Funnel
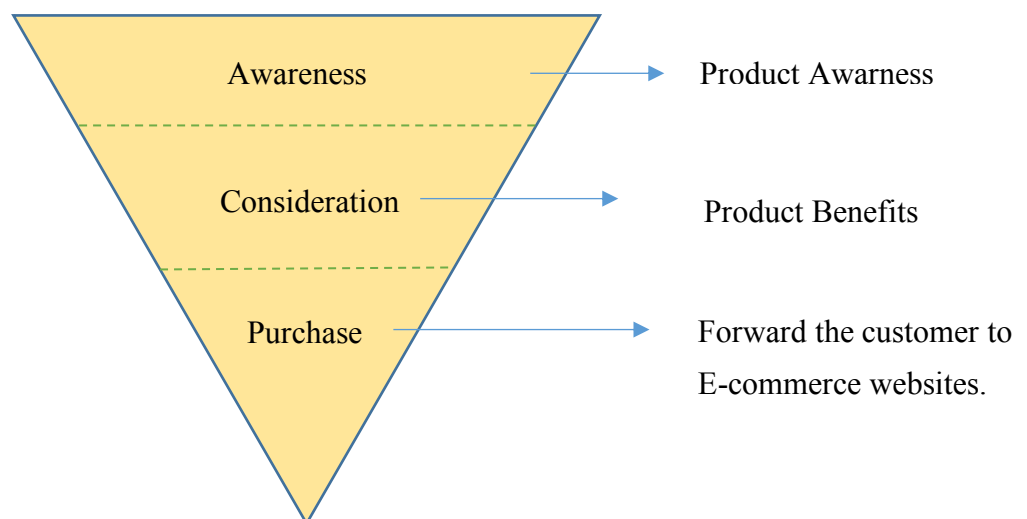
This study aims to show the correlation between Rate & Review effect, which is a new word of mouth and E-commerce sales for product. The regression model is developed considering rate of review's number for products and their monthly sales in one of beauty industry.

2.   New WOM ; Rate & Review

WOM has traditionally been studied from the perspective of face to face communication, or perceived experts in the field (Bansal & Voyer, 2000). It is important, however, to understand the salient differences between traditional WOM and e-WOM. Given that conditions associated with each are different, pertinent theoretical and practical questions are different as well (Gupta & Harris, 2010).

95% of shoppers consult rating and reviews while they are shopping. Then 86% consider reviews an essential resource when making a purchase decision. Rate & review place at second rank, just behind price, among top factors impacting purchasing decisions (The power of reviews, 2014).

Customer trust consumer opinion or review about the product. Consumer thoughts posted online consistently ranks among the top 3 sources of information. The most credible advertising comes straight from the people. 83% consumers say they completely or somewhat trust the recommendations of friends and family. 66% say they trust consumer opinions posted online. Owned (brand-managed) online channels are also among the most trusted advertising formats. In fact, branded websites are the second-most trusted format, with 70% of global respondents saying they completely or somewhat trust these sites. In addition, 56% trust emails they signed up for (The Nielsen Company, 2015).

Rate & Review tool is the new face of word of mount. Before digital transformation in marketing, consumer relied on the opinion of family and friends to guide their purchase decision. However, the weight of rate & review is also high. Shoppers are recognizing that the most authentic opinion of a product is from someone who has already used it. Due to rate & review system, shopper can reach million opinions on products.

The influence of digital WOM marketing, which is rate & review, is growing especially among younger consumer. When compared to those over the age of 60, people under 45 are 61% more likely to trust consumer reviews more than the recommendations of their friends or their family (The power of reviews, 2014).

E-WOM in social media has taken on greater role in promoting online shopping nowadays, especially with the emergence of social commerce. These days, shoppers are turning to social media to share their opinions about the quality of product or about their shopping experience. This form of social e-WOM includes consumer's post or consumer's videos on Twitter, Facebook or Instagram (Yan et al, 2016).

3.   Case Study

As stated above, the general goal of this research is to examine the relation between monthly sales unit for beauty product in E-commerce & e-WOM in Turkey. In this study, consumer purchase decision will be measured via review on e-commerce website.

Reviews for a product data were collected using hepsiburada.com, which is an e-commerce website in Turkey. Monthly sales unit on hepsiburada.com were collected from a company, which is a main player in beauty industry.

For studying direct relation, linear regression is used. In simple linear regression, the model is used to explain the relationship among a single dependent variable y and a single independent variable x in Equation (1).

a_0 and a_1 are referred as the model parameters, and is a probabilistic error term that accounts for the variability in y that cannot be explained by the linear relationship with x.

$$y = a_0 + a_1 x + k \tag{1}$$

In Equitation (1), x represents review unit for a product in month while y represents monthly sales unit for this study. In Table 1, i represents month. Data is available from January 2018 to September 2018

Table 1: Sales Unit & Review (Jan-Sept 2018, www.hepsiburada.com)

i	x_i	y_i
1	41	1673
2	59	3645
3	71	2739
4	86	3317
5	111	5099
6	140	5701
7	183	6035
8	213	4277
9	2388	236

Since the relation between sales unit and review will be analyzed hypothesis is constructed as

H_0: There is a directly relation between monthly sales unit and reviews on product page

H_1: There is not a directly relation between monthly sales unit and reviews on product page

ANOVA was used for solving regression and correlation between monthly sales unit & reviews for beauty industry in this research.

Table 2: ANOVA resolution

Regression Statistics	
Multiple R	0.3386
R Square	0.1147
Adjusted R Square	-0.01180
Standard Error	70.8361
Observations	9

Table 3: ANOVA table

	df	*SS*	*MS*	*F*	*Significance*
Regression	1	4549.7728	4549.7728	0.9067	0.3727
Residual	7	35124.2272	5017.7467		
Total	8	39674			

Whether there is a relation between monthly sales unit & consumer generated reviews unit, H_0 cannot be rejected.

4.   Conclusions

Reviews are not only variables for monthly sales unit on e-commerce. Out of stock problem and product page design will also be analyzed with consumer generated review. With all this variables, linear regression analyze is not sufficient.

Despite thinking and result in different source about relation between reviews & sales unit, this study do not show the relations without other variables such as out of stock, product page design and monthly price offer for a product. Because only reviews effect on product sales can explain with 11%.

Further study will be analyzed same data with using fuzzy regression to cover out of stock, product page design variable.

Acknowledgement

References

Bansal, H. S., & Voyer, P. A. (2000). Word of mount process within a services purchase decision context. *J Serv Res*, 3 (2), 166-77.

Gupta, P., & Harris, J. (2010). How e-WOM recommendations influence product consideration and quality of choice: A motivation to process information perspective. *Journal of Business Research*, 64 (9-10), 1041-1049.

Prusty, A. K. (2018). Digital marketing and its consequence: An empirical study of the effectiveness of e-commerce business in the metro cities (cuttack & bhubaneswar) of Odisha. International Journal of Research in Management, Economics and Commerce, 8 (5), 159-165.

The Nielsen Company (2015). Global trust in advertising report.

The power of reviews (2014). https://www.powerreviews.com/wp-content/uploads/2015/08/13185402/ThePowerofReviews-Report.pdf

Yan, Q., Wu, S., Wang, L., Wu, P., Chen, H. & Wei, G. (2016). E-WOM from e-commerce websites and social media: Which will consumers adopt?. *Electronic Commerce Research and Applications*, 17, 62-73.

Jan-Sept 2018, www.hepsiburada.com