



# E-Commerce Effect on Organization Performance with the Moderating Role of Social Media

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**Abstract:** *Today in the time of globalization are functioning and operating in a dynamic and competitive environment. Human resource is deliberated as an important asset in all organization but the online system replaces human resources with internet tools for the execution of organization' goals and objectives. Therefore, it is very important to identify predictors that affect organization performance for achieving organizational goals and objectives. The main purpose of this study is to illuminate to what extent e-commerce affects organization performance with the moderating role of social media in Pakistan. To achieve the research objectives, quantitative research conducted with the deductive approach. In this current study, a questionnaire was self-designed and primary data were collected. In this study use Smart PLS for measurement model and structural model.*

**Keywords:** *E-Commerce, Social Media, Organization Performance.*

## INTRODUCTION

In globalization number of factors contribute to organization performance but internet e-commerce becomes irreplaceable and critical. Performance of any organization depends on background structure, in the modern era very difficult for one organization to compete with other organizations due to the internet and globalization. Social media consider as an important tool and commonly using nationally and internationally to gain a competitive edge. Social media is interactive in nature and due to this nature usually organizations building public page, ads to develop social networks and enhance online relationships and enhance interest (Bhatti, 2018b; Bhatti & Maraim, 2017; Velez & Vasquez, 2011). Research shows that world's advertising on social media increasing day by day and consider 20% of all internet advertising in 2019 but unfortunately in developing countries especially in Pakistan this side is not given priority and Pakistan very low in this case. in Pakistan around 91% people active on Facebook, 0.4% on YouTube, 01.50 % on Twitter, 01.17% Pinterest, 00.18% Instagram and only 00.12% on google (AlphaPro, 2018). In Pakistan need to enhance education and awareness in people because only 1% people use social media for constructive use and all other wasting their time on chatting or calls, mostly educated and uneducated both wasting their time on social media. By focusing on e-commerce and social media we can enhance organization performance because social media provides a great opportunity for organizations to generate strong network (Nisar, Shaheen, & Bhatti, 2017). According to previous researcher organizations investing on social media to improve organization

performance but it is very difficult to prove the effectiveness of these investments have a positive effect on organization performance (Carmichael, Palacios-Marques, & Gil-Pechuan, 2011).

## **Literature Review and Hypothesis Development**

### **Organization performance**

Organization performance considers as an output of the organization's goals and objectives that necessary for organization survival. Organization performance consists of financial performance, non-financial performance, and market performance. Furthermore, according to Azeem, Marsap, and Jilani (2015) organization performance focus on organization outcomes from three areas like Product services quality, product market performance, customer satisfaction. In addition, organization performance can be measured by efficiency and effectiveness. Meanwhile, in organization performance, financial performance indicate sales trends, growth, price etc., non-financial performance includes customer satisfaction, new product adoption and market share (Paniagua & Sapena, 2014). Market performance means the association of selling price to costs, the efficacy of production and the size of the output. Organization performance affected by many factors like social media and e-commerce. If we focus on these two variables we can enhance organization performance.

### **E-commerce and organization performance**

Nowadays, the internet introduces new means to assist people, convert our life and become irreplaceable. The internet has introduced various and easy ways for the consumer to shop online and internet usage growing day by day for diverse purposes such as searching information, comparing prices and products, products selection, and payments online via using credit cards (Bhatti, Saad, & Gbadebo, 2018b).

E-commerce is the process of buying and selling through the internet directly from a seller without any intermediary party. It is internet technology that provides an opportunity to buy and sell online with one click. Meanwhile, it is also considered as a virtual store or e-tailing. The internet is very important and playing a key role in an organization at all level. E-commerce increasingly every day that encourages researchers to conduct research on how e-commerce influence organization performance. Ghaznavi (2013) In Pakistan e-commerce is still at the introductory stage but excited and expected growth in the future. Furthermore, e-commerce also provides a new way to business and change all functions from advertising to payments clearance (Afshar & Kh, 2010). In addition, e-commerce reduces business cost and disappear cultural boundaries in business and enhance organizational performance. Organizations working hard to invite and attract consumers to offline as well as online stores but in Pakistan very less research on this area (Bhatti, Saad, & Gbadebo, 2018a; Shafique-Ur-Rehman, 2018). Moreover, customers moving towards to purchase goods by internet due to advance technology or globalization (Bhatti, 2018a).

Organization competing with other organizations and attract customers and try to retain and loyal by their performance (Jahanshahi, Rezaei, Nawaser, Ranjbar, & Pitamber, 2012). But in Pakistan situation quite different according to Nielsen (2010) Pakistan is the second lowest country in e-commerce. Prior studies show that there is a significant positive relationship between e-commerce and organization performance (Azeem et al., 2015; Qtaishat, 2015). Some studies show mixed results between e-commerce and organization performance (Jahanshahi et al., 2012). So according to (Baron & Kenny, 1986) when we have mixed results can introduce the third variable as a moderator and in current study social media as a moderator to strengthen the relationship between e-commerce and organization performance.

### **Social media and organization performance**

Social media change the way of doing business and it enables open communication and helps the organization to understand customer needs and wants on the other hand help customers to find a valuable and reputable organization and they can give their opinion about products (Matuszak, 2007). Social media play an important role in our life (Bhatti, 2018c; Bhatti, arif, mehar, & Younas, 2017). Social media enable two-way

communication between organizations and customers. Social media importance in organizations widely increasing in developed countries as well as developing countries (Malaysia, China, Dubai, Singapore) but unfortunately in Pakistan, no such record exist yet. In Pakistan 198.8 million population in which 35.1 million are internet users and 31 million people using social media but unfortunately only 1% of that ratio involved in constructive activity all other involve in useless and immoral activities (AURORA., 2017, September 7). In Pakistan need strong social media networks and social strategy for organization performance because social media significantly affect organization performance because it leads to open communication and helps to attain, retain and attract new customers. Social media share online information, knowledge and their opinion. According to Hsu (2012) Furthermore, it also considers as a warehouse and big pool in which organizations store customers information and it put together in one place organization and customers. According to Parveen, Jaafar, and Ainin (2016) worldwide marketing spending on social media increasing and investing \$4.3 billion. Social media influence significantly positive effect on organization performance (Dodokh, 2017; Parveen et al., 2016).

### Research hypothesis

H1: E-commerce significant influence on organization performance

H2: Social media significant influence on organization performance

H3: Social media moderate the relationship between e-commerce and organization performance

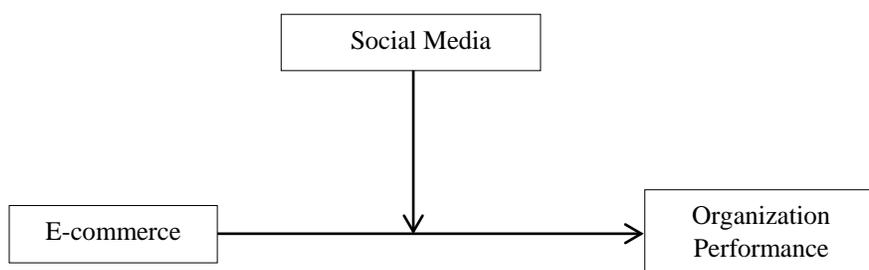


Figure 1: Framework

### Proposed model

Previous studies indicate that there are many factors and different types of e-commerce (online shopping, online marketing, and online payments) that effect on organization performance but in current study we took e-commerce generally and it covers all above mention factors, on the other hand, took organization performance as overall performance of the organization which includes financial performance, nonfinancial performance, and marketing performance. Current study framework base on previous literature and practical problem in Pakistan. Internet penetration rate is less in developing countries than in developed countries

### Research Methodology

In this study, our framework consists of three variables one independent variable e-commerce and one dependent variable organizational performance and one moderating variable social media. These constructs measured by various items by using five Likert scales and this study is descriptive and quantitative in nature. Organization performance consists of 8 items, e-commerce consists of three items and social media consists of six items.

### Data collection

In this study, data were collected from students of universities in Pakistan by using convenience sampling. 187 questionnaire distributed between students who buy online in this sample 167 female and 20 male.

**Demographic profile**

As mention in table 1 that total respondents’ 187 in which 167 male (89.3%) and 20 female (10.7%). In which 13.7% below 18 age, 36.3% were 19- 25 age, 32.1% 26- 30 age, 6.3% 31-40 age, and 10.0% more than 40 age.

**Table 1:** Demographic profile

Construct	Category	Number of cases	Percentage
Gender	Male	167	89.3
	Female	20	10.7
Age	Less than 18	26	13.7
	19 to 25 years	69	36.3
	26 to 30 years	61	32.1
	31 to 40 years	12	6.3
	More than 40	19	10.0
Qualification	Intermediate	8	4.2
	Bachelor Degree	27	14.2
	Master Degree	131	68.9
	M.Phil.	3	1.6
	Ph.D.	18	9.5

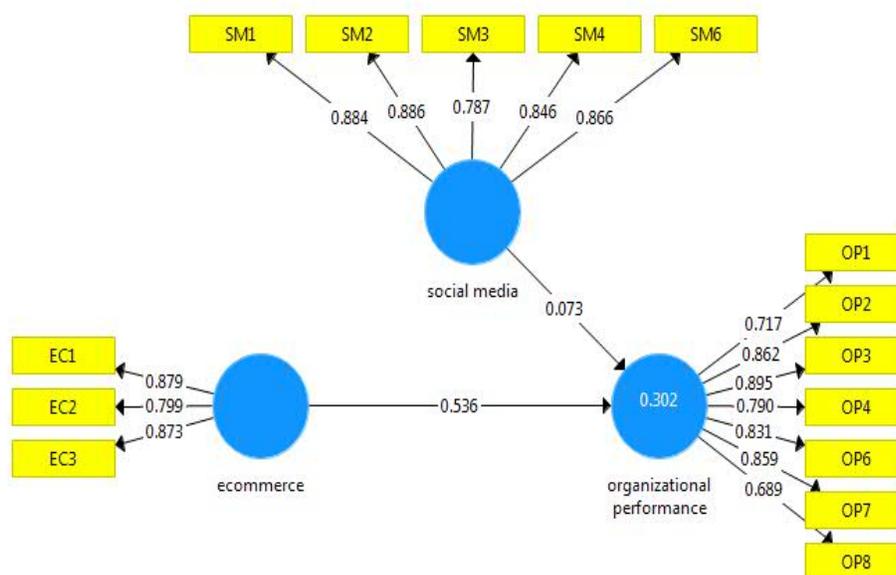
**Statistical analysis results**

In this study our theoretical model use (PLS-SEM) Partial Least Square technique. It is considered as best for all types of models. It is also considered good technique than others like covariance- based technique (Bamgbade, Kamaruddeen, & Nawi, 2015; Hair Jr, Hult, Ringle, & Sarstedt, 2014). Moreover, this study uses PLS-SEM technique for measurement and structural model.

**Measurement Model**

In measurement model calculate three major validity analysis like content, discriminant, and convergent (Hair, Ringle, & Sarstedt, 2013). In this study, the measurement model meets these three conditions and meet the required criteria. As we can see in Fig 2 and Table 2.

**Measurement Model**



**Figure 2:** Measurement Model

**Table 2:** Factor Loadings, Average Variance Extracted (AVE), and Composite Reliability (CR)

Variables	Items	Factor Loading	AVE	CR	Cronbach Alpha	R <sup>2</sup>	Rho_A
E-commerce	EC1	0.879	0.725	0.887	0.815		0.864
	EC2	0.799					
	EC3	0.873					
Social Media	SM1	0.884	0.655	0.930	0.911		0.917
	SM2	0.886					
	SM3	0.787					
	SM4	0.847					
	SM6	0.866					
Organizational Performance	OP1	0.717	0.730	0.931	0.909	0.302	0.953
	OP2	0.862					
	OP3	0.895					
	OP4	0.790					
	OP6	0.831					
	OP7	0.859					
	OP8	0.689					

Table 2 determines that the for CR and AVE meet required criteria that were CR values must be higher than 0.60, and AVE values greater than 0.50 as recommended (Hair et al., 2013). According to Nunnally (1978), the value of Cronbach’s alpha must be 0.70 or greater than 0.70.

**Table 3:** Discriminant validity (Fornell-Larcker)

Variable	EC	OP	SM
EC	0.851		
OP	0.544	0.809	
SM	0.117	0.136	0.855

Table 3 determines that the standard of discriminant validity fulfills as suggested (Fornell & Larcker, 1981).

**Table 4:** Heterotrait-Monotrait Ratio (HTMT)

Variable	EC	OP	SM
EC			
OP	0.595		
SM	0.144	0.144	

Table 4 demonstrate that Heterotrait-Monotrait Ratio (HTMT) meet the threshold value as proposed (Hair et al., 2013).

**Table 5:** Cross Loadings

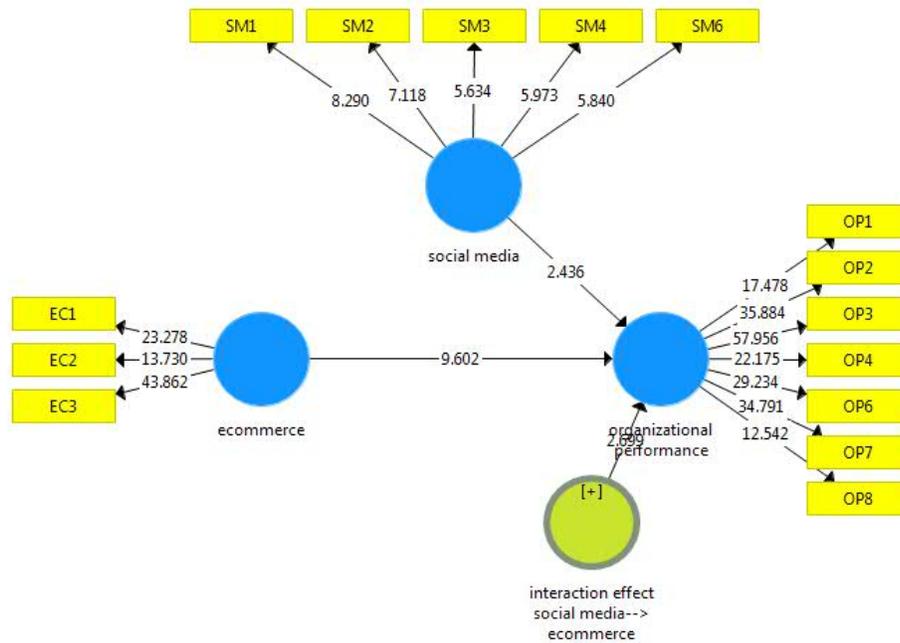
Items	EC	OP	SM
EC1	<b>0.879</b>	0.366	0.119
EC2	<b>0.799</b>	0.390	0.129
EC3	<b>0.873</b>	0.577	0.068
OP1	0.308	<b>0.717</b>	0.156
OP2	0.490	<b>0.862</b>	0.118
OP3	0.489	<b>0.895</b>	0.090
OP4	0.414	<b>0.790</b>	0.055
OP6	0.429	<b>0.831</b>	0.094
OP7	0.419	<b>0.859</b>	0.160
OP8	0.484	<b>0.689</b>	0.109
SM1	0.074	0.134	<b>0.884</b>
SM2	0.159	0.150	<b>0.886</b>
SM3	0.160	0.068	<b>0.787</b>
SM4	0.054	0.109	<b>0.847</b>
SM6	0.052	0.082	<b>0.866</b>

Table 5 indicate that factor loading of particular construct must be greater than other variables in the same row and column as suggested (Hair et al., 2013).

**Assessment of Structural Model**

In this paragraph, we test direct hypothesis between e-commerce (independent variable) and organization performance (direct variable) and indirect hypothesis social moderating between e-commerce and organization performance. Values of loadings and path-coefficient proposed that execute bootstrap with 5000 subsamples (Hair Jr, Hult, Ringle, & Sarstedt, 2016). Table 6 shows the findings of the structural model.

**Assessment of Structural Model**



**Figure 3:** Structural Model

**Table 6:** Direct relationships

Hypotheses	Paths	Path coefficient	Sample mean	Standard deviation	T-values	P-values	Results
H <sub>1</sub>	EC --> OP	0.590	0.586	0.061	9.602	0.000	Supported
H <sub>2</sub>	EC*SM--> OP	0.157	0.149	0.058	2.699	0.007	Supported
H <sub>3</sub>	SM--> OP	0.142	0.156	0.058	2.436	0.015	Supported

Table 6 demonstrate that EC indicator of OP ( $\beta = 0.590$ , t-value = 9.602, p-value = (0.000), simple mean = (0.586), Standard deviation (0.061) thereby hypothesis H<sub>1</sub> supported. EC\*SM--> OP ( $\beta = 0.157$ , t-value = 2.699, p-value = 0.007) simple mean = (0.149), Standard deviation (0.058) and hypothesis H<sub>2</sub> supported. Moreover, SM ( $\beta = 0.142$ , t-value = 2.436, p-value = 0.015) simple mean = (0.156), Standard deviation (0.058) and hypothesis H<sub>3</sub> supported.

**Conclusion**

The main purpose of this study to determine the impact of e-commerce on organization performance with the moderating role of social media in Pakistan. The current study will help managers and new researcher to understand how e-commerce effect organization performance and social media moderate between them. In this study e-commerce significantly affect organization performance H1 supported. Social media moderated

between e-commerce and organization performance H2 supported. Moreover, social media significantly affect organization performance H3 also supported.

### Limitations and Recommendations

Most research has done in developed countries and less attention paid in developing countries on e-commerce and organization performance so, in this study focus on these two factors. Due to budget and time constraints cannot add more factors so recommended that in the future need to study more factors like culture, social norms online network other than e-commerce that effect on organization performance. In the current study, no theory apply to this study but in future should apply the theory of planned behavior, RBV theory.

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