The Role of E-Marketing Uses among TOE Factors and Textile Sector Performance in Pakistan: An Empirical Study

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Abstract

Nowadays, the effective use of technological revolution and innovations for instance e-marketing is arguably one of the key challenges confronted by the organizations. Hence, this study examines the effect of technological factor which is relative advantage, organizational factors which are organizational resources and top management support, environmental factor which is competitive pressure on textile sector performance in Pakistan with the mediating effect of e-marketing uses through SmartPLS (SEM) 3.0, analysis of survey data (n = 257) collected from general manager marketing working in textile companies located in Punjab and Sindh provinces. The study used cluster sampling with proportionate technique. The results revealed that out of nine hypotheses, seven have a direct and significant relationship with mediation (use of e-marketing) and the dependent variable (firm performance). Finally, in terms of use of e-marketing as mediating variable, three out of four indirect relationships resulted mediation, including technological factor (relative advantage), organizational factor (top management support) and environmental factor (competitive pressure). Besides, organizational resources indicated insignificant relationship, both directly and indirectly. The application of this suggested model may enlarge the understanding of marketing managers, owners and organization's regarding firm performance and e-marketing uses. Lastly, future research should include moderating variables and check the validity of model in different contexts and with different suitable variables.

Keywords: Textile Performance Pakistan, E-marketing, Technological, Organizational, Environmental factors, PLS (SEM)

Introduction

The use of internet minimizes the uncertainty of operating the business in foreign markets and thus accelerates the internationalization process to gain competitive advantage as well as to enhance firm performance. Previously, the main source of initiating the contact with several firms was to participate in costly trade shows in different countries. However, today, the trend is changing and firms have started contacting via social media or called as digital marketing (Samii, 2004). Similarly, internet-mediated communication brought up the easier access into the international market and motivated the firms to overcome communication barriers that allows companies, for easier access to perform certain actions (Brodie, Winklhofer, Coviello, &

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Johnston, 2007; Mosawi, Shahzad, Golamdin, Pasha, & Sheikh, 2016). Similarly, the Internet reduces the entry barriers to international markets, which in turn encourages the firm's international expansion and minimizes the importance of the local market (Nieto & Fernandez, 2006; Sheikh, Shahzad, & Ishak, 2016a).

The emergence of the internet, particularly e-marketing application brings new landscape in conducting business. A part of better efficiency, e-marketing enables the firms to diversify their business strategy to introduce newly accepted business model and to embrace globalization. However, by facilitating several business processes through e-marketing technologies have been highlighted as a critical challenge for all industries and firms. Actually, the critical question is not whether the firms can adopt e-marketing, but it's how they will deploy e-marketing in order to obtain competitive advantage or firm performance (Eid & El-Gohary, 2013; Sheikh *et al.*, 2016a). This paper applies Resource Based View theory by (Wernerfelt, 1984) as an underpinning theory for current framework and Diffusion of Innovation (DOI) theory by (Rogers, 1995) as a supporting theory to examine the complementary effects of TOE (Technology-Organization-Environment) factors by (Tornatzky & Fleischer, 1990) on a potential mediator (i.e. use of e-marketing) leading to business performance based on RBV theory.

Despite several studies on technological factors, past studies have failed to resolve and are inconclusive in explaining the relationship among technological factors with textile performance (Sheikh, Shahzad, & KuIshak, 2017). Relative advantage have been tested in recent studies as predictors of technology adoption in the SME context and service sectors of western countries (Sürer & Mutlu, 2015; Trainor, Rapp, Beitelspacher, & Schillewaert, 2011). However, there is a lack of investigation to address the relationship between technological factor which is relative advantage with textile performance in Pakistan and how this relation can be strengthened by the use of e-marketing as a mediating variable (Do Hyung & Dedahanov, 2014; Eid & El-Gohary, 2013; Haider, Chen, & Abbassi, 2015; Mohsin, Bashir, & Latif, 2013; Rahim *et al.*, 2015; Shah, Gregory, Ngo, & Karavdic, 2017).

Based on recent literature, organizational resources plays a vital role in every organization in achieving improved firm performance because many organizations claim that if the resources are valuable, rare, and imperfectly imitable, then they will lead the firm toward a competitive advantage. However, organizational resources utilizing through e-marketing for substantial firm performance has remained questionable and inadequate as claimed by past studies. Researchers failed to address the importance of this relationship and ignored such relationship with no reasonable findings. Therefore, the current study examines the effect of organizational resources on textile sector

performance through the use of e-marketing and theoretically as well as practically contributes to existing literature and theory in particular (Barney, 1991; Fredriksson, 2013; Gilmore *et al*., 2006; Lal, 2004; Overview Of The Economy, 2015; Economic Survey of Pakistan, 2015)

Nowadays, the performance of textile sector in Pakistan has become one of the main concerns for all the industrialists, policy makers, trading partners, customers, and shareholders who are directly and indirectly getting affected by the slugging performance of this particular sector. For the last few years, the growth of Pakistan textile sector has been stagnant with no much improvement. Comparatively, the regional competitors of Pakistan in the textile sector have achieved a drastic growth in terms of; expansion of the businesses by implementation of new technologies, access to global buyers, improve communication with trading partners and also the government has played a major role to uplift the industrialists to perform well in the global market (Abrar, Tian, Usman, & Ali, 2008; Adnan, 2014; Sheikh,Shahzad, & Ku Ishak, 2017; Sheikh, Shahzad, & Ishak, 2016b).

Further, to demonstrate the textile structure Ahmad and Kalim (2014) figured out that Pakistan has 1221 ginning units, 521 textile-units, 471 spinning-units, 124 large spinning-units and 425 small-units to produce textile related products. Other than that, according to the report issued by the Economic Survey Of Pakistan (2015) shows a comparison among different industrial sectors, which shows that, growth percentage of textile as compared to different sectors during July-March 2014-15 has been declined and recorded on the last number which is 0.50 percent whereas the highest growth achieved by Iron and Steel Products for instance 35.63 percent. Hence, to achieve the rapid growth in the global market, textile sector needs to adopt and implement the innovative technology in their process, for instance e-marketing technology to access the global market and to give awareness of textile sector in all over the world.

The unique role of e-marketing uses as a mediating variable in the relationship among technological, organizational, and environmental factors has been supported by Resource Based View (RBV) and Diffusion of Innovation (DOI) theories and the TOE (Technology-Organization-Environment) framework, which postulates why, how, and at what rate new ideas and technologies are spreading through cultures and operating at individual(s) and firm(s) levels. However, past studies have overlooked the unique role of e-marketing uses as a mediating variable. These variables in combination with RBV and DOI theories extend the knowledge of theories. Baker (2011) emphasized that including the technology or innovation as a mediating variable in the TOE framework with the help of RBV theory to check firm performance will extend the existing knowledge of

literature and the TOE framework in general. This study considers the suggestions and articulates the perspective of the textile industry in Pakistan. Therefore, the current study investigates the combination of these variables and theories that have been disregarded by past studies.

Theoretically, the current study is expected to contribute to the current knowledge to enhance the performance of textile sector with the help of underpinning theory, supporting theory and TOE model. In conclusion, this current study will enrich the literature by examining the relationship between use of e-marketing and firm's performance in dynamic process and also in a rapid changing environment with the help of several independent variables. Practically, the findings of the present study possibly will facilitate the policy makers, industrialists, department head, marketing managers, general managers and particularly the textile mill management to progress effectively to achieve firm performance.

Literature Review, Conceptual Model and Hypothesized Relations

Technological Factor (Relative Advantage) and Firm Performance

In the study by Ahmad *et al*. (2014) and a few other studies have highlighted that relative advantage positively affects the firm's performance, such as growth, financial gain and competitive advantage. However, the current study is focused to investigate about how the textile firms perceives those benefits such as; increase of profits & revenues, cost reduction, customer service quality, business operation stability and lastly, the development of new local and foreign market segments.

Furthermore, most of the studies have conducted a research on relative advantage in the context of the SME's and service sector of western countries and the few developing countries as well (Molla & Licker, 2005; Rahayu & Day, 2015; Rahim *et al*., 2015a). But limited studies have been done in the context of Pakistan and particularly the textile sector has been ignored by the researchers as it is a major sector of Pakistan as compare to other manufacturing sectors. So, to clarify the importance of relative advantage towards firm performance, an empirical study is needed to test the relationship in textile sector of Pakistan to evaluate the findings (WTO, 2014; Iddris & Ibrahim, 2015).

Therefore, this research proposed that relative advantage is positively associated to firm performance, that higher the relative advantage, higher will be the performance of the organization. Based on the above discussed literature the recommended proposition is;

H_1: *Relative advantage positively impact on the firm performance*

Organizational Factors (organization resources, top management support) and Firm Performance

As explained by Kraatz and Zajac (2001) that, organization resources plays a vital role in handling the external threats because resource rich firms perceives less uncertainty in the environment because more organizational resources (like financial reserves, social capital or culture, human resource, business resources and marketing capabilities) help the firms to work more efficiently for increased performance as compared to poor resource firms. Marketing Science Institute (MSI) has acknowledged the need for integration of organizational resources as associated with the firm performance by designating interdisciplinary research which leads to a better appreciative of customer-oriented organizations as an uppermost research significance. Further, it was found that, organizational culture has a significant effect on the performance of a firm ().Therefore, from the supported previous literature, it can conclude that organizational resource is positive and imperative predictor of firm performance. Thus, following relationship can be proposed as;

H_2: *Organizational resources positively impact on the firm performance*

Moreover, as revealed by Rahim *et al*. (2015), the management support is found to be the most essential factor of innovation. In contrast to highly innovative companies with less innovative companies, top management commitment plays a most significant role in terms of finance and also gives emotional support to its employees, which directly impact on the export and internal performance of the firms.

H_3: *Top management support positively impact on the firm performance*

Environmental Factor (Competitive pressure) and Firm Performance

However, there are few studies that have checked the effect of competitive pressure on firm performance. Previous studies are mostly related to competitive advantage and competitive strategy effect on firm performance, for instance; (Ortega, 2010; Saeidi *et al*., 2014). So in order to check the direct effect of competitive pressure on firm performance needs empirical testing through the help of current study. The interpretation and study will definitely add a positive contribution to the current knowledge of the study with the help of RBV, DOI theory and TOE framework as well. The study held by Amoako-Gyampah and Acquaah (2008) on competitive strategy does not impact directly on firm performance, it does so indirectly through the quality. So it needs to investigate that, how competitive pressure effect directly on the firm performance. Therefore, based on the above discussed literature the recommended proposition is;

H_4: *Competitive pressure positively impact on the firm performance*

Use of E-Marketing (Mediator) and Firm Performance

A recent study by Ahmad *et al*. (2014) revealed that the most significant expansion trends in the last decade are the large use of Internet because it is considered as a platform for steering business activities and new prospects for transactions due to the potential profits to companies, similar to this study Barwise and Farley (2005) have claimed that, there has been less empirical studies about the e-marketing, that actually influence on marketing-practice and performance. Moreover, in last few years an interesting shift has been seen from traditional marketing to digital marketing.

Besides, the importance of e-electronic way of doing business was further examined by Voola *et al*. (2012), they investigated that, accepting the actual use of technological innovations, for instance; e-marketing, is perhaps considering an important challenge fronting by organizations. The studies explained that the association between the firm capabilities and firm performance was mediated by the influence of the adopted innovation (e.g., e-marketing). Similarly, a study by Smits and Mogos (2013) found that the use of social media (one of the e-marketing Tool) enhances business capabilities and performance. Therefore, based on literature, it can be concluded that the use of e-marketing is one of the strongest and the imperative predictor of firm performance. Thus, following relationship can be proposed as;

H_5: *Use of E-Marketing positively associated with firm performance*

Use of E-Marketing relationship with relative advantage and firm performance

Based on the literature, it has been clearly acknowledged that, there is a relationship between technological factors, for instance; relative advantage with firm performance. Additionally, relative advantage has been tested in the recent studies as a predictor of technology adoption in the context of SME's and service sectors of western countries (Abrar *et al*., 2008; Sürer & Mutlu, 2015). However, current studies will address that, how the relative advantage with firm performance can be strengthened by the use of E-Marketing as a mediating variable (Hyung & Dedahanov, 2014; Eid & El-Gohary, 2013; El Gohary, 2012; Iddris & Ibrahim, 2015). Therefore, based on the above discussed literature the recommended propositions are;

H_6: *Relative advantage positively impact on the use of e-marketing*

H_7: *Use of E-Marketing mediates the relationship between relative advantage and firm performance*

Use of E-Marketing relationship with Organizational Resources and Firm Performance

IT infrastructure and resources are valuable assets of the company which is used in order to enhance internal communication, improves product design & quality, effect in reducing design cycle, also lowers down the cost of product development. Thus, the worth of an organizational resource can be increased in the existence of other

complementary resources because sometimes it is slightly difficult for the competitors to copy the complete effect (Bharadwaj, Bharadwaj, & Bendoly, 2007). Now, For instance; resource, that is e-marketing is a latest technology that needs to be addressed in the firms operating in Asian countries, particularly the textile sector in Pakistan, as very few firms have adopted this technology as compare to western countries and also few Asian countries like China and India. However to increase the foreign market reach, to reduce business costs and to make businesses more innovative and sustainable, current research will examine the impact of organizational resources on firm performance through the use of E-marketing technology and how this problem will be addressed in textile sector of Pakistan (Fredriksson, 2013; Economic Survey of Pakistan, 2015).

H_8: *Organizational resources positively impact on the use of e-marketing*

H_9: *Use of E-Marketing mediates the relation between organizational resources and firm performance*

Use of E-Marketing relationship with Top Management Support and Firm Performance

A study by Haugh and Robson (2005) found firms that adopted information technology were more likely to have committed top management towards adoption process. In the implementation of intranet systems in firms, it has been found that management support has a strong influence in the diffusion and an infusion of intranet systems in firms. Beekhuyzen, Hellens & Siedle (2005) stressed the unique role of management commitment and perceptions of ICT benefits as an influence in ICT adoption. Top management must be willing to champion the adoption of information technology. Thus, we argue that management support reinforces firm's technology motivation to adopt e-marketing technology. The previous arguments lead us to the following hypothesis:

H_{10}: *Top management support positively impact on the use of e-marketing*

H_{11}: *Use of E-Marketing mediates the relationship between top management support and firm performance*

Use of E-Marketing relationship with Competitive Pressure and Firm Performance

The study by Chwelos, Benbasat and Dexter (2001) conducted on e-commerce adoption founds that external pressures are significant determinants and also play an essential role in generating the pressure to motivate the firms to adopt the latest technology for e-marketing and to maintain the close relationship with the customers. In line with discussion, there are few studies that have checked the effect of environmental factor such as competitive pressure on firm performance (Ahmad *et al*., 2014; Rahim *et al*., 2015). So to check the indirect effect of competitive pressure on firm performance with a mediating role of E-Marketing, there is a need for further empirical investigation in the context of textile sector in Pakistan. Therefore, based on the above discussed literature the recommended propositions are;

H_{12}: *Competitive pressure positively impact on the use of e-marketing*
H_{13}: *Use of E-Marketing mediates the relationship between competitive pressure and firm performance*

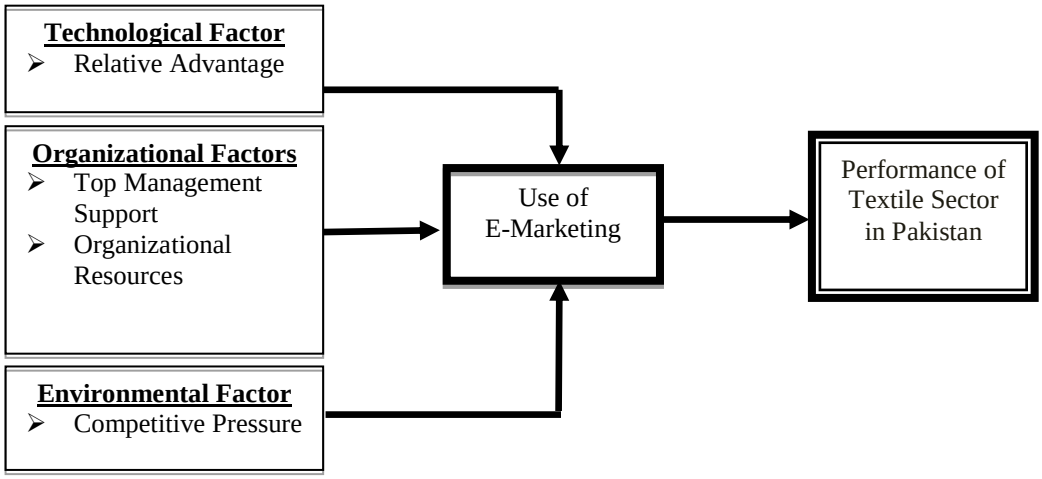

Fig 1: *Conceptual Framework*

Research Methodology

Data collection and respondents of the research

The respondents nominated for the current study are general manager marketing working in various textile related firms, largely located in Punjab and Sindh province of Pakistan. According to "All Pakistan Textile Mills Association (APTMA)" and "All Pakistan Bedsheets and Upholstery Manufacturers Association (APBUMA)" (2015-2016) report, there are 954 textile firms countrywide. However, only 257 textile firms have been selected from Punjab and Sindh province to satisfy the need of current study by using the cluster proportionate sampling technique. This sampling technique is best suitable when the population of the study is more concentrated in few geographical regions; for instance, textile firms are mostly located in Punjab and Sindh provinces of Pakistan because Punjab is the agriculture land area where cotton is easily available for textile industry, therefore, most of the textile firms are established in this province. On the other hand, Sindh province includes a largest city of Pakistan i.e. Karachi, it contains the sea port of Pakistan from where all the imports and exports of Pakistan executes to different countries, so textile firms establish their units in this region to make imports and exports in more cost effective way and also save their transportation and other risk related costs. Apart from this side, the other two provinces of Pakistan which are Balochistan and NWFP, they are naturally composed of mountainous and deserts. While, to establish a textile industry is not possible in these provinces. Therefore, researcher has included only

two provinces in this study, which are Punjab and Sindh based on cluster sampling and further make the proportionate based on the major textile industry related cities.

Table 1: *Demographics of the study*

Demography	Description	No. of Responses	%
My Enterprise is	Industrial/ Manufacturing	248	96.5
	Traders + Brokerage	9	3.5
My Enterprise Sector Operate in	Spinning	65	25.3
	Weaving	55	21.4
	Knitting	26	10.1
	Printing & Dyeing	33	12.8
	Dyeing & Finishing	57	22.18
	Garments Manufacturer	21	8.17
Textile Company Location	Lahore	61	23.7
	Karachi	101	39.3
	Multan	23	8.9
	Faisalabad	60	23.3
	Others	12	4.7
Our Enterprise is Selling	Nationally	54	21.0
	Internationally	40	15.6
	Both	163	63.4

Table 1 describes about the profile of respondents and in demographic analysis, Moreover, it was also observed that over 75.1% of the responses come from the respondent who are university graduates, another 15.2% are holder of postgraduate degree and remaining 9.7% are the holder of college certificate. Moreover, 96.5% of the companies who responded to the questionnaires are manufacturing based and only 3.5% of the companies were traders + brokerage houses. However, major response of the questionnaires that is 39.3% has been received from the Karachi, 23.7% response received from Lahore, 23.3% from Faisalabad, while 8.9% from Multan and remaining 4.7% from different cities of Pakistan.

Variables Measurement

The scales used to measure all the factors or variables of the current study have been adapted from the previous literatures with proper modifications so that to make it suitable for the sample. However, the survey questionnaires were segregated into two main sections. The first section consists of Likert-type scale items of seven, and the second section was designed to get the demographic information about the general manager marketing (the respondents) of the current study. The Likert scale was designed to observe the level of response that how strongly the respondents may agree and disagree with a particular statement or question (Sekaran, 2006). However, the purpose to

choose 7-point Likert scale was to give more options to the respondents to better capture the variability of respondent behavior and attitude (Hinkin, 1995).

Furthermore, to measure relative advantage 4-items scale by Premkumar, Ramamurthy and Nilakanta (1994) has been adapted. Likewise to measure organizational resources, 8-items scale by Molla and Licker (2005) has been adapted. Similarly, top management support was measured with 4-item scale by Premkumar, Ramamurthy and Nilakanta (1994) was adapted. Moreover, to measure competitive pressure/ intensity, 6-items scale by Jaworski and Kohli (1993) has been adapted. Further, to measure the use of e-marketing, 8-items scale by Srinivasan, Lilien, and Rangaswamy (2002) has been adapted. Lastly, firm performance was measured with 7 items by Hooley *et al*. (2005) was adapted.

Results and Data Analysis

Assessment of the measurement model

In evaluating the model, the measurement model has undertaken to insure the model reliability as well as validity. Based on PLS (SEM), the assessment of measurement model has been analyzed properly by using SmartPLS 3.0 (Ringle *et al*., 2015). To conclude the measurement model discriminant validity, reliability and convergent validity of the measurement of constructs was observed and keenly examined. The Fig 2 demonstrates the measurement model of current study and on the basis of this, the table 2 has been explained.

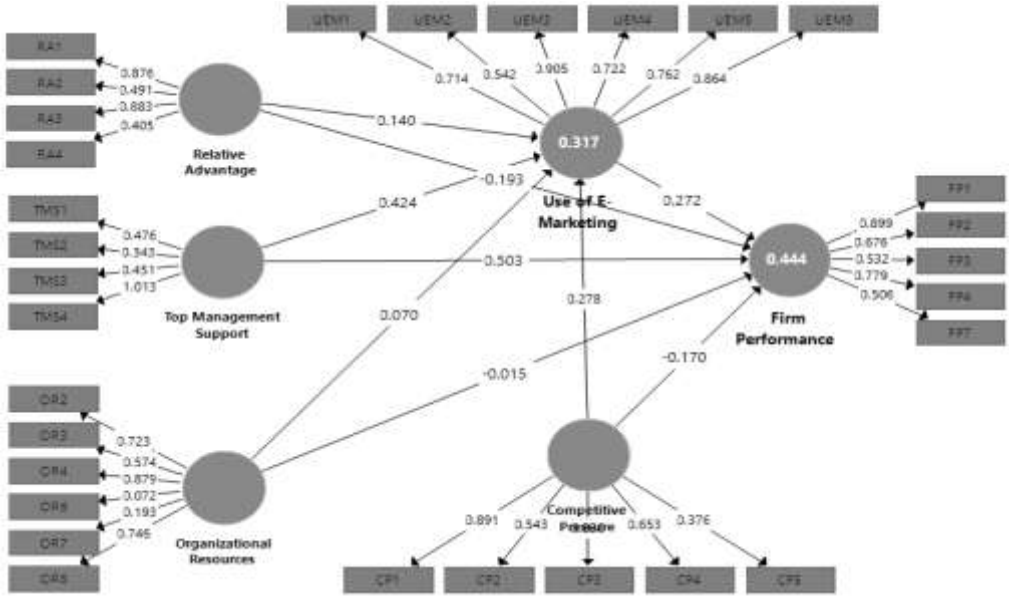

Fig 2: *Measurement Model*

Table 2: *Findings of the Measurement Model*

Construct	Item	Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Competitive Pressure (CP)	CP1	0.874	0.795	0.861	0.560
	CP2	0.661			
	CP3	0.896			
	CP4	0.671			
	CP5	0.587			
Firm Performance (FP)	FP1	0.878	0.821	0.872	0.580
	FP2	0.649			
	FP3	0.711			
	FP4	0.838			
	FP7	0.708			
Organizational Resources (OR)	OR2	0.787	0.852	0.879	0.548
	OR3	0.757			
	OR4	0.769			
	OR6	0.692			
	OR7	0.673			
	OR8	0.758			
Top Management Support (TMS)	TMS1	0.720	0.757	0.820	0.533
	TMS2	0.708			
	TMS3	0.702			
	TMS4	0.788			
Relative Advantage	RA1	0.835	0.784	0.853	0.596
	RA2	0.670			
	RA3	0.889			
	RA4	0.670			
Use of E-Marketing (UEM)	UEM1	0.807	0.890	0.917	0.649
	UEM2	0.620			
	UEM3	0.823			
	UEM4	0.882			
	UEM5	0.866			
	UEM8	0.809			

Concerning this study, loadings are above the threshold of 0.5 as mentioned by Hair *et al.,* (2010; 2014), and shown in Table 2. Moreover, Table-2 explains the composite reliability, the average variance extracted (AVE) and Cronbach's alpha values of all the study constructs.

Moreover, according to (Fornell & Larcker, 1981; Hair *et al*., 2014) the AVE should be at least 0.50 and the composite reliability must be accepted at least 0.70 and higher. However, as explained in the given Table 2, all the variables have the high reliability and the average-variance-extracted (AVE) is higher than the threshold value of 0.50 which indicates the reliability of measurement model. However, according to the

results of the current study as mentioned in Table 2 clearly highlights that all variables have "Cronbach's Alpha" value more than 0.70 which is an acceptable range. So this reveals that, all study variables have a good consistency. Finally, as explained in table 3 all the correlations among the variables are lower than square root-averages (AVEs) as which are bolded in crosswise.

Table 3: *Discriminant-validity of the Constructs*

	CP	FP	OR	RA	TMS	UEM
CP	0.748					
FP	-0.003	0.762				
OR	-0.488	-0.009	0.741			
RA	0.161	-0.136	0.041	0.772		
TMS	0.168	0.509	-0.085	0.017	0.730	
UEM	0.305	0.363	-0.109	0.179	0.417	0.806

Structural Model Assessment

After the assessment of the measurement model, the structural model was assessed by using SmartPLS 3.0. However, following tests in the structural model has taken place which includes; "hypothesis testing with path coefficient and T-value, effect size and predictive relevance of the model were examined".

Direct Effect and Hypothesis Testing

In SmartPLS, structure model gave an inner - modeling analysis of the direct association between the variables of the study including t-values and path coefficients. However, on the basis of rule of thumb revealed by Hair *et al*. (2014), which explains that the bootstrapping method was performed (with 5000 sampling iterations for 257 cases / observations) to determine the beta-values of the coefficient of the regression and also the t-values which must be greater than 1.64 in order to considered resulted value significantly. So that to use the derived results for further decision making on the proposed hypothesis.

The main objective of the current study is to weight on model evaluation by analyzing the direct relationships and also to test the proposed hypothesized relationships among the variables with the help of structural models. However, in the current study, nine (09) hypotheses having direct relationship's were analyzed, from which seven (7) out of nine (09) were resulted supported and only two (02) were resulted not supported. Moreover, Fig.1.2 demonstrates the direct effect of every predictor on the dependent variable.

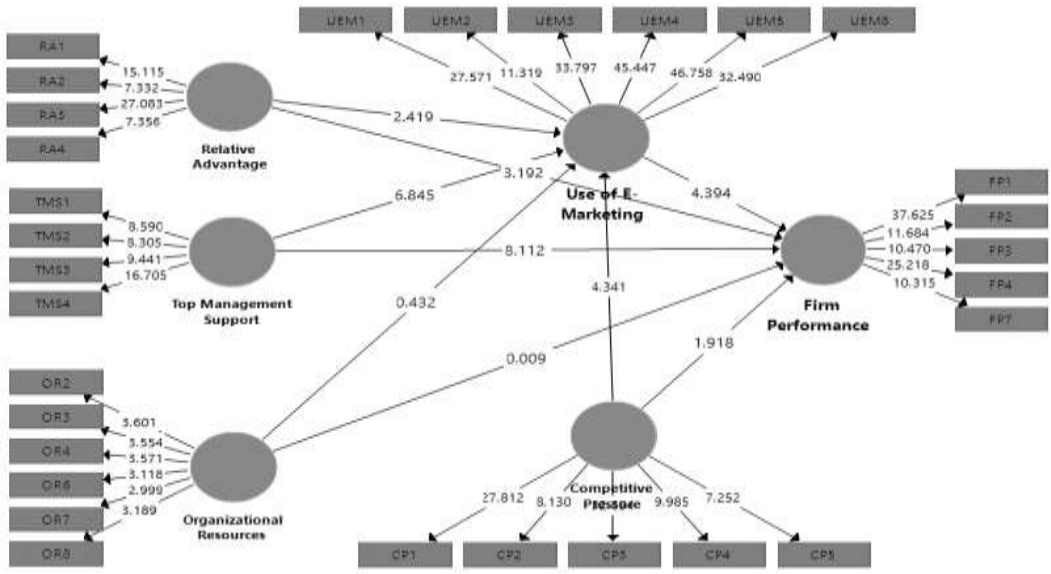

Fig 3. *The Structural Model Direct Relationships*

Table 4 shows that all hypotheses accepted in this study have t-value greater than the threshold value of 1.64 and those hypotheses whose t-value (s) are less than 1.64 has been rejected otherwise. Furthermore, Fig. 3 fully explains Table 4 and highlights the effect of all variables on the dependent variable (firm performance). The R-square value has been resulting from the output of SmartPLS explains that, by putting all the constructs together have the propensity of influencing the changes in DV by 33%.

Table 4: *Summary of Direct Hypothesis Testing*

Direct Relationships	Beta	SD	T stats	P Value	Decision	Effect Size	Q2	R^2
CP -> FP	-0.125	0.065	1.930	0.027	Significant	0.02	0.171	0.332
CP -> UEM	0.235	0.054	4.342	0.000	Significant	0.06	0.145	0.250
OR -> FP	0.001	0.082	0.009	0.496	Insignificant	0.01		
OR -> UEM	0.032	0.074	0.437	0.331	Insignificant	0.02		
RA -> FP	-0.168	0.052	3.247	0.001	Significant	0.04		
RA -> UEM	0.134	0.055	2.431	0.008	Significant	0.02		
TMS -> FP	0.427	0.053	8.007	0.000	Significant	0.22		
TMS -> UEM	0.378	0.055	6.847	0.000	Significant	0.19		
UEM -> FP	0.253	0.058	4.389	0.000	Significant	0.07		

Mediation Model

Re-sampling mediation-technique (bootstrapping) has been used in current study to examines the indirect effects of each variable. Furthermore, as recommended by Hair

et al. (2014) that, PLS (SEM) bootstrapping technique for mediation analysis is known as best suited for quantitative studies because it is appropriate for small samples as well.

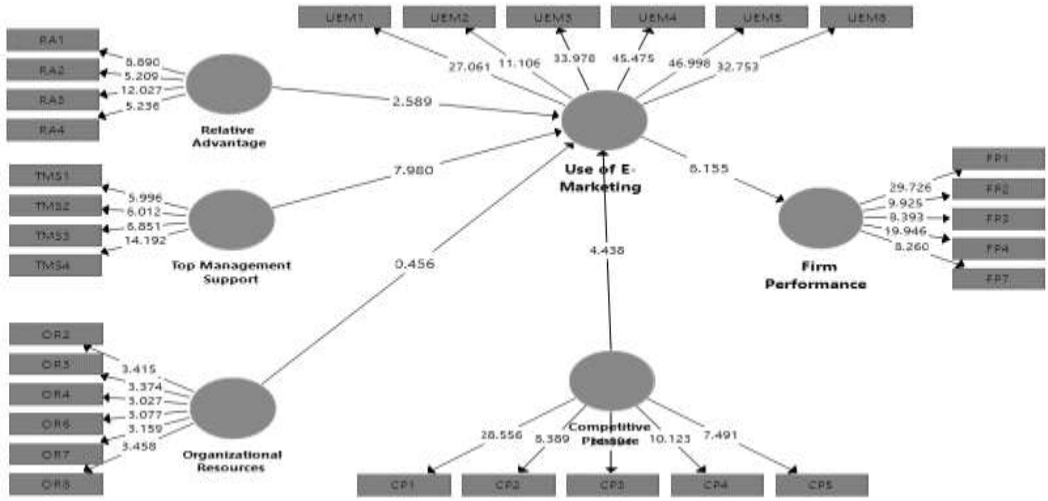

Fig 4: *The indirect Effect of Use of E-Marketing*

However, in line with the recommendation of Hair *et al*. (2014), at the time of doing analysis of mediation effects, one must follow the procedure of mediation as explained by Preacher and Hayes (2004: 2008) and bootstrap the distribution of sampling of indirect effects which works for simple as well as for multiple models. Thus, this study has examined the influence of the use of e-marketing as a mediating variable by using SmartPLS 3.0 (by Ringle *et al*., 2015) using the bootstrapping technique by doing re-sampling of 5000 to determine the t-value.

In the current study, three independent variables which are top management support, competitive pressure, and relative advantage were significantly mediated through use of e-marketing and firm performance. While, organizational resources showed insignificant results. However, Table 5 shows the results of the mediation effect of the use of e-marketing on relationships between latent variables and a dependent variable.

Table 5**:** *Mediation results*

Indirect Relationships	Beta	SD	T Stats	P Values	5.0%	95.0%
CP -> UEM -> FP	0.086	0.022	3.987	0.000	0.049	0.120
OR -> UEM -> FP	0.012	0.028	0.437	0.331	-0.037	0.056
RA -> UEM -> FP	0.050	0.018	2.737	0.003	0.025	0.085
TMS -> UEM -> FP	0.145	0.039	3.711	0.000	0.091	0.218

Lastly, Table 5 explains that, three out of four variables shows mediation which includes relative advantage with the t-value of 2.74, top management support with t-value

of 3.71 and competitive pressure with a t-value of 3.99, it shows significant partial mediation, except organization resources (OR) which become weak and insignificant after intervening of use of e-marketing as a mediator between the relationships.

Predictive Relevance of the Model

Moreover, to test the predictive relevance of the model, the current study has used blindfolding procedure as given in SmartPLS 3.0. Therefore, to assess the predictive capacity of the model blindfolding procedure was considered. The results retrieved from blindfolding output through variable-score from which cross-validated redundancy has been extracted, which analyzed the capacity of the model to predict the relevance of dependent variables and also explicates the quality of the overall model. Therefore, Table 6 describes the variable cross-validated redundancy. The Table 6 also reveals that in four (4) column, Q2 illustrates the predictive relevance of 0.171 for firm performance (FP) and 0.145 for use of e-marketing (UEM) that confirms the model predictive relevance.

Table 6: *Predictive Relevance*

Total	SSO	SSE	1-SSE/SSO
FP	1285	1065	0.171
UEM	1542	1318	0.145

Discussion

The main objective of the study was to find out whether use of e-marketing mediates the relationship between technological, organizational, environmental factors and firm performance. The central hypothesis stipulated that the use of e-marketing mediates the relationship among the main determinants and the firm performance. The results proved that use of e-marketing by firms positively affects the adoption of technology; thus, we can conclude that, higher the firm's use of e-marketing, higher the probability of increased firm performance. The findings agreed with the previous literature which revealed that use of e-marketing helps drive firm performance, which inferred that adoption and use of e-marketing signifies opportunities for the firms which are widely considered as a strong driver to achieve firm performance (Sheikh *et al.*, 2016a). The results depicted that top management support relative advantage and competitive pressure indirectly linked to firm performance, through intervening variable which is "use of e-marketing", supporting our hypothesis that use of e-marketing mediates the relationship between technological, organizational and environmental predictors except one determinant which is organization resources that resulted insignificant with firm performance in the presence of innovation (e-marketing technology) also supported by the previous study (Uzkurt, Kumar, Kimzan, & Eminoglu, 2013).

Another main objective of the study was to examine whether technological, organizational, environmental factors have a direct influence on firm performance. Therefore, with regard to direct hypotheses, study results provided evidence that, competitive pressure, top management support and relative advantage are significant positively associated with the use of e-marketing. Furthermore, top management support shows significant positive association with firm performance, but competitive pressure and relative advantage have shown a negative but significant relationship with firm performance. But unfortunately, organizational resources have revealed insignificant results both in direct hypothesis, but also in indirect hypotheses by including mediation. However, the insignificant findings of organization resources also verified by the results of similar past studies in the field of firm performance (Inmyxai & Takahashi, 2009; Uzkurt *et al.*, 2013).

Implications

Application of this suggested model may enlarge the marketing managers, owners and organization's understanding of firm performance with the use of technology in their business processes. Based on this study and past literature, top management support, competitive pressure and relative advantage have found effective determinants of firm performance. Apart from this side, this article highlights that the use of e-marketing is a useful marketing techniques that should be regarded by the marketing managers seeking to enhance the marketing and overall performance of the firm.

Secondly, the research confirms that, the use of e-marketing and textile performance has a positive impact. Therefore, practitioners can develop positive ways to get marketing performance by adopting, implementing and using e-marketing technology within their businesses. However, this does not mean that, marketing effectiveness and competitive advantage automatically achieved by the use of e-marketing. Such benefits will only be achieved if e-marketing technology can be used in a proactive way and such kind of knowledgeable use of e-marketing tools by marketing people will influence the firm's effectiveness.

Limitation, Future Recommendations and Conclusion

This study adds to the body of knowledge and the growing literature on use of e-marketing & firm performance. The limited sample which is 257 respondents (general manager marketing) used in current study highlights that carefulness is required in the interpretation of the results because these results are not applicable on other region or provinces of the country as well as on any other international textile firms. Current study has selected cross sectional data for the purpose of data collection. Further, it is recommended that, future studies can use longitudinal data. The empirical findings of current study discussed in the light of possible limitations.

Therefore, future research should look for exploring other intervening variables as well as moderating variables like technology opportunism or other predictors like pressure from trading partners, government support that also influence the performance of the firms. More future directions occurred from our findings are to investigate the use of e-marketing and firm performance with different theories and determinants by selecting other sizes of businesses for instance micro enterprises, medium size enterprises or even large companies depends on the projected factors produced in the current study.

This article tried to fill the gap in the literature of firm technology usage, where existing explanations have focused on market characteristics, firm, technology itself through the perception of use of e-marketing. However, our research has provided significant findings, particularly in the firm performance directly as well as indirectly with the inclusion of the use of e-marketing as a mediation. This study has conluded that to understand the multiplicity of e-marketing usage that enhances organizations' performance is essential in managing the technological process.

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