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MARKETING | RESEARCH ARTICLE

Is e-marketing a source of sustainable business performance? Predicting the role of top management support with various interaction factors

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Abstract: The evolution of the sustainable business performance in relation to the technology integration reveals a significant revolution but regrettably is given little global attention, thus compelling the firms to reexamine the approach for their business growth. Considerably, e-marketing has been recognized as an emerging practice and plays a vital strategic tool to bring sellers and buyers on a digital platform. Besides, this study analyzes the moderating effects of trading partners (TPs) and competitive pressure (CP) in the relationship between top management support (TMS) and use of e-marketing (UEM). Moreover, the interactive role of

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PUBLIC INTEREST STATEMENT

e-Marketing is still a relatively new area of research where the theory is still in its infancy stage and affected badly by the unclear way of dealing with the concept and definition of e-marketing. e-Marketing brings both buyer and seller on virtual platform and allow them to communicate in a more appropriate way. However, e-marketing with the help of top management support, government support, trading partners and competitive pressure can lead to enhanced performance for sustainable competitive advantage. The significance of this prevailing issue has motivated to follow an empirical approach to integrate the understanding of e-marketing and sustainable business performance. Moreover, data were collected from 293 general manager marketing working in textile sector of Pakistan. This study contributes by encouraging the managers to adopt e-marketing in their business processes by giving importance to triple bottom line which are environmental, societal and economic factors for sustain business performance.

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government support (GS) and technological opportunism (TOP) was also analyzed between the UEM and sustainable firm performance (SFP). The study also discussed the mediating role of e-marketing usage between TMS and SFP. The data (n = 293) were collected from the marketing managers employed in the textile firms of Pakistan. Additionally, the findings revealed that TMS had a significant direct relationship with the UEM and the SFP. Moreover, UEM mediated the relationship between TMS and SFP. Finally, TP's pressure moderated the relationship between TMS and UEM, and TOP moderate the relationship between UEM and SFP, whereas CP and GS were unable to moderate the relationship particularly in current study context. However, this study has contributed empirically to several recognized relationships among the variables and extends the existing knowledge of literature. The study has contributed empirically to several recognized relationships among the variables and extends the existing knowledge of literature by leaving certain aspects of research for future studies.

Subjects: Management of Technology & Innovation; Marketing; Internet/Digital Marketing/ e-Marketing

Keywords: e-Marketing; sustainability; business performance; top management support; technological opportunism

1. Introduction

The sustainable performance of the firms relies on giving the ongoing value to its stakeholders while keeping up with the environmental requirements (Labuschagne & Brent, 2005). In order to make the processes of the business more efficient, sustainability should be considered. One of the essential parts of the sustainability transition process is developing innovative and constructive corporate culture (Chen, Okudan, & Riley, 2010). These healthy cultures would be able to create better organizational performance and make optimum use of existing assets to give good outcomes in terms of economic development, environmental significance and society at large (Dunphy, 2011). Therefore, such outcomes of the businesses having economic, environmental and social sustainability ensure satisfaction among the shareholders, top management, supplier, customer, employee and society.

The significance of sustainable development practices has been acknowledged widely and became a crucial and emerging issue for the global businesses. The concept of sustainability is based on three important pillars which are environment, economic and social. These three pillars of sustainability are also known as a triple bottom line (Fauzi, Svensson, & Rahman, 2010; Porritt, 2013). However, the concept of sustainability is recognized by numerous fields such as environmental sciences, engineering and specifically in management sciences (Fernald et al., 2012; Lassen, 1998; Lovell, 2010; Najam, Inam, Awan, & Abbas, 2018; Yigitcanlar & Dur, 2010). Therefore, the concept of the triple bottom line in textile firms has been considered from all aspects like socially how companies are responding to their customers and how the societal forces are concerned with the sustainable performance; parallel to this, they also focus on the economic performance. Alongside, economically, the textile firms are contributing in the GDP and by giving employment to several people. According to past literature, the textile sector of Pakistan is giving employment to more than 15 million out of 49 million of the workforce and also contributes 9.5% in the GDP of Pakistan (Ataullah, Sajid, & Khan, 2014). However, considering environmental aspect, most of the textile firms are certified with ISO 14001 certification; on the other side, few firms are still not confirming such environmental standards. But the questions remained unanswered that how e-marketing, government, trading partners (TPs), competitors and particularly top management is helping to achieve sustainable business performance by keeping in view the triple bottom line which persists questionable by past studies. Therefore, the current study examines the direct

and indirect effects empirically to understand the significance of this sustainability issue particularly in the business industry of Pakistan.

Next, each country is facing diverse issues and specifically manufacturing industries are significantly responsible for triple bottom line issues. The sustainability in businesses has become one of the main concerns as they are responsible for the high emissions of carbon dioxide (CO_2) by utilizing a huge amount of resources with a lot of waste generation (Khasreen, Banfill, & Menzies, 2009). The employment in the manufacturing industry is getting worse with the passage of time as hundreds of companies got shut down in previous years by leaving thousands of families with unemployment in Pakistan. Comparatively, the competitors of Pakistan have contributed toward the growth of triple bottom aspects. Moreover, the government, TPs and top management of regional competitors have played a vital role in uplifting their industries (Adnan, 2014; Fernald et al., 2012).

Mącik, Jóźwik and Nalewajek (2012) validated that firms are changing their structure to become globalized. According to the World Trade Organization report issued in 2016 regarding the growing trend of manufacturing businesses, Pakistan has faced stagnation and even downfall in the overall growth, whereas China, India and Bangladesh have maintained their positions, with India and China in the top three rankings. Moreover, the fast spread of innovation and information technologies has developed new electronic channels for marketing; hence, most companies have found that online presence is essential to satisfy customers through all possible means (Abrar, Tian, Usman, & Ali, 2008; Do Hyung & Dedahanov, 2014; Eid & El-Gohary, 2013). Therefore, most problems are linked with the changing aspects of this new interactive media. For example, previous studies have focused on most of the western countries in which SMEs utilize e-marketing tools given the availability of organizational and technological their business (Gilmore, Gallagher, & Henry, 2007; Grzywaczewski, Iqbal, Shah resources to achieve sustainability in, & James, 2010; Tsekouropoulos et al., 2011). Unfortunately, businesses in developing countries have gained less attention by researchers and therefore, a notable gap developed in this industry particularly in countries such as Pakistan with limited knowledge of innovation and of the benefits related to electronic marketing uses (Mohsin, Bashir, & Latif, 2013; Shah, Walayat, Ali warraich, Usman and Kabeer, 2012; Syed, Shah, Shaikh, Ahmadani, & Shaikh, 2012).

Likewise, neighboring countries, for instance, China, India and Bangladesh, have become threats to Pakistani businesses during the last 5 years because an extreme switching of buyers has been observed in these countries (Alam & Khan, 2010). Therefore, manufacturing businesses are continuously trailing its foreign buyers due to lack of competitiveness, weak government policies, lack of top management support (TMS), weak TPs relations, lack of technological opportunism (TOP) and particularly lack of e-marketing which lead toward decreased sustainable performance (Eid & El-Gohary, 2013; Khan & Khan, 2010; Saeed, 2014a; Tandon & Reddy, 2013). Besides, in 2013, Bangladesh earned $21 billion in revenues from garment exports to western countries, whereas Pakistan earned only $2.6 billion. This figure consisted 90% of the foreign exchange earnings of Bangladesh (Saeed, 2014b). Despite Pakistan's substantially organized textile industry, Bangladesh is leading the market through technology advancements such as e-commerce. Therefore, there is a need for top management to implement new technology like e-marketing in the industry to enhance sustainable performance of the businesses (Sheikh, Shahzad, & ku Ishak, 2017; Sheikh, Shahzad, & Ishak, 2016; Sheikh, Shahzad, & Ku Ishaq, 2017) Snyder and Hilal (2015) verified that an interesting shift in business-to-business digital marketing has been observed in the last 5 years because, at present, digital marketing has become an opportunity that must be utilized by all businesses working in business-to-business environments. Nowadays, the best way to capture the attention of the buyers is by using e-marketing tools (Son & Benbasat, 2007). Therefore, to achieve a better performance, one of the main obstacles in today's world is technological advancements and adoptions by the firms. Some studies have also corroborated that a technological communication gap between the customers and the firms remains present. Some of the factors restrict the adoption of e-business such as global competition, unfavorable market trends etc. This

significantly affects the relative advantage of electronic business (Munz, 2017a; Tandon & Reddy, 2013). Around 120% increase in e-commerce trade has been reported in China (Fredriksson, 2013). Conversely, businesses in Pakistan are not considering the benefits attached with the adoption of e-marketing in their business activities (Sheikh, Shahzad, & Ishak, 2016; Sheikh, Shahzad, & Ishak, 2017). This article is organized based on the following subsequent sections: Section 2 describes the conceptual framework and the related hypothesis development. Section 3 is based on the methodology for achieving the outcome of the study. The fourth section is about the analysis of the collected data for this study. The last section is about the interpretation and discussion based on the findings of the study. Moreover, it also includes theoretical and practical implications, conclusions, limitations and prospects of this study.

2. Conceptual framework and research hypotheses development

2.1. Conceptual framework

Theoretically, technology usage and performance has been discussed by various theories, such as "technology acceptance model" (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989; Zain, Rose, Abdullah, & Masrom, 2005), "theory of planned behavior" (Ajzen, 1985, 1991), "unified theory of acceptance and use of technology" (Venkatesh, Davis, & Davis, 2003) and other individual behavior-related theories. Few numbers of studies have seen its effect on the firm level; however, in this study, sustainable firm performance (SFP) has been addressed based on Resource Based View (RBV) theory. It is also recommended by Berney in 1991 that sustain competitive advantage can only be achieved by bringing innovation in the firm and by using firm resources that should be valuable, rare, inimitable and non-substitutable; it should also be consistent with diffusion of innovation theory, also known as DOI theory, that has contributed in the current study by linking to RBV theory to enhance the scope of the current study, particularly in the emerging countries like Pakistan, where technology adoption is still at its infancy stage and empirical contributions on sustainable business performance are demanded by the organizations and policymakers.

The explicit contribution of this study is the theoretical explanation of the antecedents of the sustainable business performance which is e-marketing and TMS. Besides, the exclusive role of e-marketing uses as an intervening construct in association between TMS and SFP that have been established by introducing several unique and innovative interaction variables which are TOP, TPs, competitive pressure (CP) and government support (GS) based on resource-based view theory and DOI theory which articulates that how, why and at what frequency the innovative ideas and technology is diffusing in the firms, though past literature ignored the combination of these variables and these theories. Considering the fact, none of the studies explained the theoretical relationship of these variables in the perspective of moderated-mediation and mediated-moderation analysis by using SmartPLS SEM technique. However, the current study has extended the knowledge of existing literature and to include innovation as a mediating variable by considering RBV theory consistent with technology theory to analyze SFP (Laumer & Eckhardt, 2012). This reflected the recommendations and contributed to enhancing the sustained performance of Pakistani businesses.

2.2. TMS, use of e-marketing and sustainable business performance

Top management plays a significant role in bringing innovative technology in the firms (Bantel & Jackson, 1989; Roa & Weintraub, 2013). Although sustainable business performance is based on several factors which are internal as well as external to the firms (Teece, 2007), few factors are very important in maintaining the core competency of the firms. Nowadays, firms are focusing more in making the smarter decisions, because it is a fact that product life cycles are reducing with increasing technology, therefore, the firm needs to be more aware and competitive to sense the market in a digital way rather doing a business in a traditional manner. In recent years, firms have realized the importance of digital marketing and its implementation to make smarter decisions for sustainable business performance (Dodson, 2016).

Arguably, top management always performs a leading role in the acceptance and diffusion of any new technology also explained by DOI theory (Rogers, 2010). Several studies highlighted that for the effective application of new technology, significant TMS has been required that will provide idealistic leadership to articulate the need for the innovation such as e-marketing (Henderson & Venkatraman, 1993; Powell & Dent-Micallef, 1997; Srinivasan, Lilien, & Rangaswamy, 2002; Wu, Mahajan, & Balasubramanian, 2003). Further explained by Haugh and Robson (2005), firms having more top management commitment toward technology adoption process are probable to use the technology more rapidly. Therefore, it can be concluded that management support motivates in bringing the technology like e-marketing to reduce communication gap between customers and TPs to sustain the business performance for a longer period (Ščeulovs, 2011).

However, considering the fact that top management in textile sector of Pakistan, normally, hires the professionals to deal with information system and top management is normally afraid of adopting such technologies due to lack of awareness and knowledge, that is why a textile sector of Pakistan is lacking behind in the global competition and is unable to address the major sustainable issues like social integration, environment and economic contribution (PACRA, 2011). Hence, in the current study, TMS toward management information system and on the implementation of MIS (particularly e-marketing adoption and usage) problem needs to be addressed in detail to resolve the issues like sustainable business performance. Thus, TMS is significant in the adoption of technology like e-marketing to achieve market share, growth, information about competitors, new product development, cost efficiency and especially to retain the customers on a long-term basis (Tiago & Veríssimo, 2014). Therefore, based on above-discussed literature, the below hypotheses have been formulated.

Hypothesis 1: Top management support has a positive relationship with the use of e-marketing.

Hypothesis 2: top management support has a positive relationship with the sustainable business performance.

2.3. The use of e-marketing and SFP

The use of information and communication technology linked with marketing activities plays a vital role in making the firms to operate globally and become a source in developing the firms to achieve a sustainable competitive advantage as compared to other firms who are less specialized in Information and Communication Technology (ICT) or e-marketing usage. Additionally, the Internet has enabled the marketing department of the firms to communicate with their potential customers by minimizing the tangible and intangible costs of communication, starting from “one to one” up to “many to many”. However, in the knowledge-based economies, attainment of high-profit margins has become difficult due to high competition and number of product offerings in the market. Whereas sales cycles and decision-making time have started squeezing (Van Ryssen, 2004), therefore, it needed to rapidly align with the modern business and implement integrated Internet-driven marketing techniques and make them the part of mainstream business practices.

Next, past studies have stated mixed findings on the direct effects of e-marketing usage on sustainable performance of the firms. However, some evidence supports the positive influence of e-marketing on the sustained business performance, for instance “firm growth” (Premalatha, 2014; Raymond, Bergeron, & Blili, 2005), “financial gain” (Johnston, Wade, & McClean, 2007) and “competitive advantage” (Teo, 2007; Teo & Pian, 2003). The benefits achieved were inconsistent in diverse sectors given the sizes and regions (Johnston & Wright, 2004). However, in a similar view, the comprehended benefits are positively linked with e-marketing uses (Raymond et al., 2005; Sam & Leng, 2006). Despite all the arguments, it is still significant to understand that the use of e-marketing (UEM) in the business leads toward sustainable business performance.

Moreover, studies that identified the relationship between these two latent constructs are limited. Past literature has commonly included innovation or e-commerce adoption as a mediating variable to predict businesses performance. However, e-marketing as a mediator of SFP is still neglected by previous studies. Moreover, scholars have traditionally focused on western organizations whereas e-marketing practices to support sustained performance are necessary for the Pakistani organizations, particularly in the textile sector (Lucia-Palacios, Bordonaba-Juste, Polo-Redondo, & Grünhagen, 2014; Voola, Casimir, Carlson, & Anushree Agnihotri, 2012). Furthermore, Iddris and Ibrahim (2015) recommended that establishing an association among e-marketing uses and sustainable business performance is necessary. Therefore, the current study examines the influence of e-marketing uses on sustainable performance of the textile sector in Pakistan. However, based on above-discussed literature, following hypothesis has been proposed for current study.

Hypothesis 3: Use of e-marketing has a positive relationship with sustainable firm performance.

2.4. Moderating role of pressure from TPs between TMS and UEM

Nowadays, the main concern of any business is the growth of sales, high profits, maximum global reach or market shares to achieve sustainable competitive advantage (Ahmad, Abu Bakar, Faziharudean, & Mohamad Zaki, 2015). Henceforth, most of the time organizations receive a lot of pressure from its TPs (Nijssen, Douglas, Calis, & Douglas, 2017). Few companies have a selection procedure of TPs for sharing of information and particularly the firms that are involved in imports or exports of the products are more concerned about their TPs and depend on informal and personal contacts for information. However, it needs to address how TPs can motivate the top management to adopt or diffuse the UEM in the firms. Usually, TPs are the people, companies, vendors, suppliers or traders who are always in contact with their trading companies and these are the companies that can bound the firms to implement triple bottom lines strategies in the business. Therefore, the medium of communication between them must be very friendly to create a sustainable business environment.

Additionally, in the textile value chain of Pakistan, each firm is connected with another firm, such as spinning is a supplier of the weaving division and finishing and dyeing unit is the buyers of weaving fabric (Munz, 2017a; Organization, 2014; PACRA, 2011). Thus, the question of why the electronic means to communicate with TPs and with customers is lacking in the Pakistan textile sector is yet to be answered. Accordingly, minimal attention has been devoted to addressing this issue of e-marketing communication through TP's pressure on top management executives. The top management has overlooked the importance of the UEM and uniqueness of this combination should be realized through TPs to achieve sustained competitive advantage (Abrar et al., 2008; Iddris & Ibrahim, 2015; Ke & Wei, 2007; Lee, Lin, & Pai, 2005; Lucia-Palacios et al., 2014; Nijssen et al., 2017; Oliveira, and Martins, 2004; Porterfield, 2008; Rahayu & Day, 2015). Therefore, the current study will examine the moderating effect of TP's pressure between TMS and UEM. Thus, following hypothesis is based on the arguments discussed above.

Hypothesis 4: Pressure from TP moderates the relationship between top management support and use of e-marketing.

2.5. Moderating role of CP between TMS and UEM

CP has been recognized as an essential external variable for the company's motivation to invest in their businesses. Today, most of the companies are bringing new technology in terms of process and machinery to cater the maximum market share both at local and international level. Several studies have highlighted that CP motivates the top management to assess their competitor's strength and weakness to bring valuable, rare, inimitable and non-substitutable innovation in

their firms for the sake of sustained competitive advantage (Abu Bakar & Ahmed, 2015; Ahmad et al., 2015; Fredriksson, 2013; Kuan & Chau, 2001).

However, past literature is more related to competitive advantage and competitive strategy to seek business performance (Ma, 2000; Newbert, 2008; Ortega, 2010; Saeidi, Sofian, Saeidi, Saeidi, & Saaeidi, 2015) and those studies reveal that they are limited in their scope and findings; therefore, this study empirically investigates the moderating effect of CP to contribute to the existing literature and theories, although CP is the major source of business growth and also pushes the firms to be more sustainable in terms of economic contribution, social in terms of employees and societal benefits also motivate the firms to be more environment friendly. Therefore, sustainable performance, use of technology and top management decisions to gain ethical business profits are directly affected by the CP.

Abu Bakar and Ahmed (2015) indicated various reasons to bring technology in the firms and one of the significant and prevalent reasons is a CP which reveals that companies major goal are to achieve sustainable competitive advantage in terms of efficiency as well as effectiveness. A study by Chengalur-Smith and Duchessi (1999) indicated that passion for holding client-server technology in the business commonly focuses more on efficiency, competitors and the operations to perform a particular task, all these parameters have been understood as business-driven indicators rather technical in nature. However, based on the above-discussed literature, below hypothesis is formulated.

Hypothesis 5: Competitive pressure moderates the relationship between top management support and use of e-marketing.

2.6. Moderating role of GS between UEM and SFP

Government is reflected as the main factor in the uses of any innovative technology. Government pushes the firm to use the B2B electronic marketplace to operate their marketing activities, and even though governmental intervention in Asian countries has motivated the firms to implement B2B E-business, it was considered an important portion of the business environment. According to Hu, Wu and Wang (2004), a country's willingness toward business growth is based on electronic media that fundamentally depends on the government backing: promotional activities, governmental grants and also the regulatory values for establishing the digital trading environment. So, it can be established that UEM or any innovative technology is not helpful until the government could support to provide the electronic platforms for various business activities as well as the cybercrime security to avoid any mishandling of information or transaction among suppliers and buyers. However, to see the government encouragement for e-marketing usage to seek sustainable business performance, an empirical study has been done in current research.

To meet the challenges of triple bottom line by the developing countries, the companies should focus to bring the technology, marketing and sustainability at one platform. The company cannot achieve the social attributes until the technology process in terms of intranet and extranet is not supportive of the organization. In terms of economics, economies like China use e-commerce as a tool for getting monetary value (Hu et al., 2004). The government is responsible to provide the businesses with an expectable and reliable environment for doing e-business to achieve a sustainable environment. Many countries like the USA, Australia, Canada, Singapore and other EU members are encouraging the e-commerce by doing some amendments in their legal policies (Seyal, Awais, Shamail, & Abbas, 2004). Currently, more literature support is needed in terms of textile firms and the governmental policies to promote e-business (Srivastava, 2010).

Apart from this side, most of the studies have used GS as a predictor in the context of the SMEs and service sector of western countries (Duan, Deng, & Corbitt, 2012; Lucia-Palacios et al.,

2014) and several studies have also used this variable as a predictor in the context of developing countries like China, India, Thailand, Taiwan, Saudia Arabia etc. (Al-Hudhaif & Alkubeyyer, 2011; Thatcher, Foster, & Zhu, 2006; Ueasangkomsate, 2015). But none of the studies have observed GS as a moderating variable among the UEM and sustainable business performance. In spite of this, the effect of e-marketing has been overlooked by the researchers; so, to clarify the importance of GS toward e-marketing uses and sustainable performance, there is a need for a further empirical investigation (Abrar et al., 2008). Therefore, based on the above discussion and literature, the following hypothesis has been derived.

Hypothesis 6: Government support moderates the relationship among use of e-marketing and sustainable firm performance.

2.7. Moderating role of TOP between UEM and SFP

Sustainable performance can only be achieved by the utilization and integration of TOP to enhance e-marketing usage in the firms (Lucia-Palacios et al., 2014). This was also studied by taking it as an antecedent of business-to-business organizations (Klinger, 2004; Mishra & Agarwal, 2010). Although Lopperi, Puumalaine and Kappi (2006) emphasize more on wireless e-business, organizations which are more technological opportunistic comparatively to other firms are more probable to accept and improve ICT and use them in an extensive manner so it could implement properly in all business processes and departments. However, previous literature has come up with one common conclusion that the level of TOP is clearly linked with adoption and usage of new technologies.

The competitors and industry always value these firms which positively sense and react to technological changes (Chandy & Tellis, 2000). Firms which emphasize and prove themselves as a technologically opportunistic may have more strength in collaborating with other stakeholders. Lastly, such technological strategies enhance the customer values, improve the cash flows level as well as sustainability of the firms for a longer period of time (Chen & Lien, 2013; Sarkees, 2011; Voola et al., 2012). Thus, based on the literature, it has been found that technological opportunistic firms bring innovation in the firms to achieve superior sustainable performance. Therefore, the following hypothesis has been proposed for current study.

Hypothesis 7: Technological opportunism moderates the relationship between use of e-marketing and sustainable firm performance.

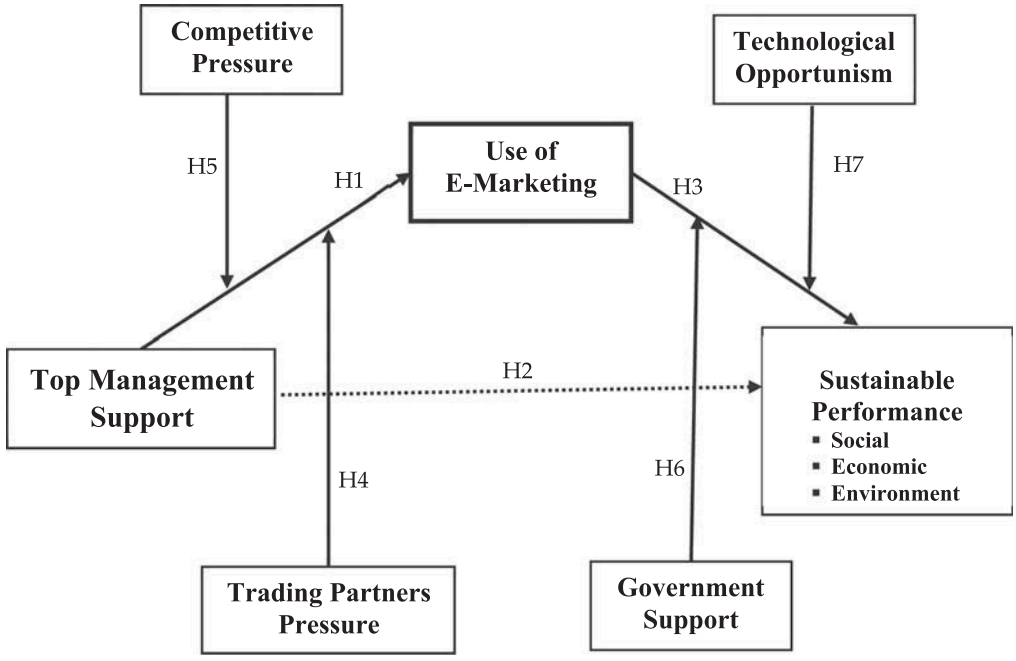
Based on the above-discussed literature and theory, Figure 1 portraits the related hypotheses. There are four moderators to address the concern issues which are CP, GS, TP's pressure and TOP. Additionally, e-marketing usage was taken as a mediator in the relationship between TMS and SFP based on resource-based view theory and DOI theory.

3. Methodology

3.1. Population, sample size and sampling technique

The respondents selected for this research were marketing managers employed in the different textile companies, mainly situated in Punjab and Sindh provinces of Pakistan. According to "All Pakistan Textile Mills Association" and "All Pakistan Bedsheets and Upholstery Manufacturers Association" (2015–2016) report, there were 970 textile companies nationwide. However, 293 textile companies were selected from Punjab and Sindh provinces based on sample size table by Morgan (2012) to satisfy the need of current research and by employing the "cluster proportionate sampling technique" which helped the researcher to eliminate the two provinces which are NWFP and Balochistan because most of the textile firms are in Punjab and Sindh provinces due to availability of raw material and seaport.

Figure 1. Research framework.



3.2. Measurements

To measure TMS, 4-item scale was adopted from Premkumar, Ramamurthy and Nilakanta (1994). A 2-item scale was adopted to measure pressure from TPs as proposed by Iacovou, Benbasat and Dexter (1995). To measure CP, 6-item scale was adapted from Jaworski and Kohli (1993). To measure TOP, 8-item scale was used as given by Srinivasan et al. (2002). To measure the governmental support, 4-item scale by Molla and Licker (2005) was adapted. Additionally, 8-item scale to measure the UEM was adapted from Srinivasan et al. (2002). Lastly, a unidimensional scale comprising 7 items which describe the social, economic and environmental aspects of SFP was adapted from Brent & Labuschagne (2004).

The constructs and measures of the current study were adapted from the past literature after checking the reliability based on 35 filled questionnaires in the pilot test which afterward were excluded from the main analysis of this study. Further, the questionnaire was distributed into two divisions. Initially, in the first division, the 7-point Likert scale item was incorporated after the pretest and then in the second division, it contains the demographic information of the target respondents. Additionally, the reason for incorporating a 7-point Likert scale for the current study is to offer more options for respondents and also to help the researcher in better understanding of the behavior and attitude of respondents (Hinkin, 1995).

4. Data analysis

SEM-PLS 3.0 was used in this study to evaluate the outer model (measurement model) and the inner model (structural model). SEM-PLS was used to analyze the direct, mediating and moderating results of this study.

4.1. Measurement model assessment

Validity and reliability are the two key criteria used in the analysis of PLS-SEM to assess the outer model (Hair, Ringle, & Sarstedt, 2013; Hulland, 1999). The assumption about the nature of the

association between variables (inner model) based on the validity and reliability of the instruments. The appropriateness of the outer model can be evaluated by observing (1) individual item reliability, i.e., internal consistency reliability and indicator reliability using composite reliability; (2) convergent validity of the instrument linked with individual variable by using average variance extracted (AVE) and (3) discriminant validity using Fornel–Larcker criterion and the indicator's outer loadings (Henseler, Ringle, & Sarstedt, 2014).

AVE value of 0.50 indicates adequate convergent validity. In this study, convergent validity was assessed by examining AVE values. Results in Table 1 show that the AVE value of all the constructs exceeds the threshold value of 0.50 (Hair, Ringle, & Sarstedt, 2012). The result reveals AVE values ranging from 0.52 to 0.77; so, it can be concluded that convergent validity has been established.

Discriminant validity was calculated to confirm the external consistency of the model as shown in Table 2. However, the comparison among the latent constructs as explained in Table 1 summarizes the square root of AVE of the constructs: CP = 0.748; FP = 0.763; GS = 0.874; TMS = 0.731; TOP = 0.718; pressure from TP = 0.877 and UEM = 0.806.

4.2. Structural model assessment

To meet the research questions and the objectives of the study, PLS-SEM (called path analysis) has been employed to identify multiple relationship effects such as direct effect and an indirect effect by including mediation (resampling bootstrapping technique) and moderation (product indicator approach) as demonstrated in Figures 2–5.

After meeting the criteria of measurement model assessment, the structural model (regression) has been executed by using SmartPLS 3.2.7. The structural model deals with the dependence of the relationship in the hypothesized model of the study. In PLS, structural equation modeling, it gives an inner modeling, analysis of the direct relationship between the variables of the study also their *t*-values and path coefficients. As highlighted by Henseler, Ringle and Sarstedt (2014), the standardized beta and path coefficient are similar in meaning when we talk about regression analysis. Moreover, resulted *t*-values help to identify the significance of the relationships. Based on the rule of thumb as recommended by Hair Jr, Sarstedt, Hopkins and Kuppelwieser (2014), the value of *t*-stats must be greater than 1.64 to show the significance of relationship which ultimately helps to make the decisions based on derived hypothesis.

4.3. Direct effect and hypothesis testing

To assess the beta values, *t*-values and coefficient of the regressions of the 293 responses, 5,000 iterations were done (Hair Jr *et al*., 2014). This study contains three hypotheses based on the direct relationships. Hypotheses were found significant after the analysis. Moreover, Figure 3 validates the direct impact of each variable on the UEM and SFP.

Additionally, Figure 3 illustrates Table 3 and identifies the influence of all constructs on the SFP. However, the *R* square value found from the output result of SmartPLS (SEM) clarifies that driving all the variables together have the tendency of affecting the change in mediation and dependent variable by 27% and 32%, respectively. On the other hand, the predictive relevance or Q2 was found more than 0, which are 0.165 and 0.155, respectively, which revealed that the model is predictive in nature. Lastly, all the values of *F*-square are also found more than 0, which illustrate that every predictor is taking some portion in the dependent variable, but the values fall in the category of small effect size.

4.4. Mediation model

SmartPLS (SEM) 3.0 boot-strapping procedure for analysis of mediation is found appropriate for quantitative research as it is also appropriate for small samples. The technique of mediation analysis was done as explained by Preacher and Hayes (2004, 2008) and performed the bootstrapping of distributed samples by checking indirect effects that are workable for the samples and

Table 1. Findings of measurement model and reliability analysis

Construct	CFA loading
Top management support (Cronbach alpha = 0.76, composite reliability = 0.82, average variance extracted = 0.53)	
1. "The owner of our company enthusiastically supports the adoption of new technologies"	0.722
2. "The owner or manager has allocated adequate resources to the adoption of these new technologies"	0.710
3. "Top management is aware of the benefits of these new technologies"	0.705
4. "Top management actively encourages employees to use the new technologies in their daily tasks"	0.785
Government Support (Cronbach alpha = 0.84, composite reliability = 0.91, average variance extracted = 0.76)	
1. "Our organization believe that there are effective laws to protect consumer privacy"	0.945
2. "Our organization believe that there are effective laws to combat cyber-crime"	0.718
3. "Our organization believe that the legal environment is conducive to conduct business on the Internet"	*
4. "The government demonstrates strong commitment to promote E-marketing"	0.939
Pressure from trading partners (Cronbach alpha = 0.70, composite reliability = 0.87, average variance extracted = 0.77)	
1. "Our organization suppliers strongly urge us to adopt E-marketing"	0.848
2. "Our organization customers strongly insist that we implement E-marketing"	0.906
Competitive pressure (Cronbach alpha = 0.80, composite reliability = 0.86, average variance extracted = 0.56)	
1. "Competition in our industry is cutthroat"	0.874
2. "There are many 'promotion wars' in our industry"	0.660
3. "Anything that one competitor can offer, others can match readily"	0.897
4. "Price competition is a hallmark of our industry"	0.670
5. "One hears of a new competitive move almost every day"	0.588
6. "Our company competitors are relatively weak"	*
Use of e-marketing (Cronbach alpha = 0.89, composite reliability = 0.92, average variance extracted = 0.65)	
1. "Our organization use E-marketing resources (such as website and E-mail) to communicate with customers"	0.807
2. "Our organization use E-marketing resources to support firm's traditional commercial activities (e.g. pricing information, customer service)"	0.610
3. "Our organization use E-marketing resources to conduct commercial transactions (e.g. selling products and accepting payment via the website)"	0.827
4. "Our organization have a computerized customer database that use to perform marketing activities (e.g. inform customers about new products)"	0.887

(*Continued*)

Table 1. (*Continued*)

Construct	CFA loading
5. "Our organization have implemented E-marketing in all business processes"	0.869
6. "Our organization E-business plans are integrated into the overall business plan"	*
7. "Our organization has freed up the necessary funds for our E-business initiatives"	*
8. "Our organization possess the adequate technological infrastructure and competencies to implement E-business as well"	0.804
Technological opportunism (Cronbach alpha = 0.81, composite reliability = 0.86, average variance extracted = 0.52)	
1. "Our organization is often one of the first in our industry to detect technological developments that may potentially affect our business"	0.683
2. "Our organization actively seek intelligence on technological changes in the environment that are likely to affect business"	0.868
3. "Our organization generally respond very quickly to technological changes in the environment"	0.748
4. "Our organization periodically review the likely effect of changes in technology on our business"	0.594
5. "Our organization is often slow to detect changes in technologies that might affect our business"	0.835
6. "This business lags behind the industry in responding to new technologies"	*
7. "For one reason or another, our organization is slow to respond to new technologies"	*
8. "Our organization tend to resist new technologies that cause current investments to lose value"	0.835
Sustainable performance (Cronbach alpha = 0.82, composite reliability = 0.87, average variance extracted = 0.58)	
1. "Technology will help to decrease in cost for materials purchasing"	0.860
2. "Technology helps to decrease in cost for energy consumption"	0.667
3. "Reduction in wastes caused by manufacturing activities can be decreased by bringing new technology in the firm"	0.729
4. "Improvement in the firm environmental situation can be enhanced by introducing innovative technology process"	0.816
5. "Incentives and engagement policies for employees can be improved through intranet technology"	*
6. "New technology will help in the development of economic activities"	*
7. "Reduction of the negative impact of products and processes on the community can be monitored with the help of technology intelligence"	0.726

* Items deleted in Confirmatory Factor Analysis.

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Table 2. The discriminant validity of the variables

	CP	FP	GS	TMS	TOP	TP	UEM
CP	0.748						
FP	0.002	0.763					
GS	0.079	0.201	0.874				
TMS	0.169	0.508	0.088	0.731			
TOP	0.089	0.300	0.080	0.405	0.718		
TP	0.119	0.265	0.006	0.178	0.087	0.877	
UEM	0.305	0.361	0.129	0.415	0.057	0.279	0.806

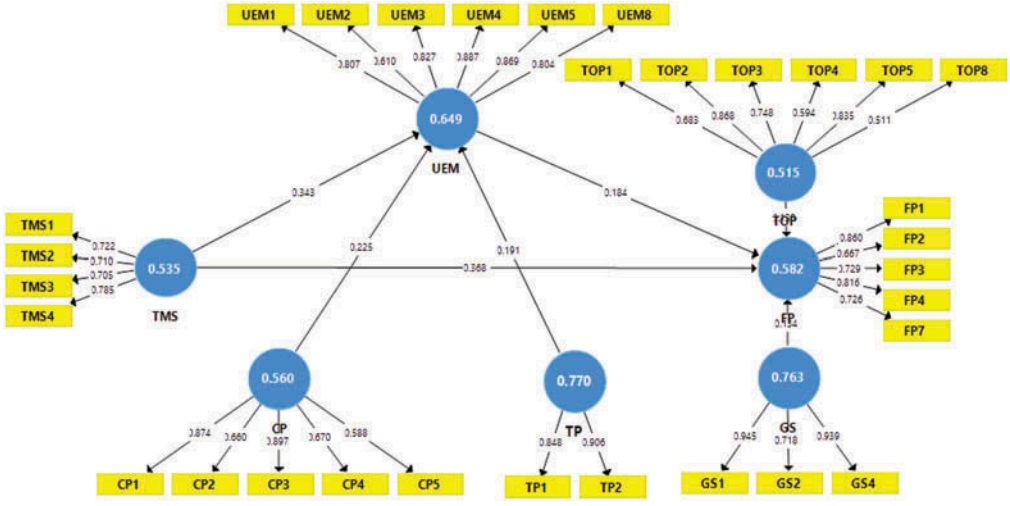

Figure 2. Measurement model —factor loadings and coefficients values.

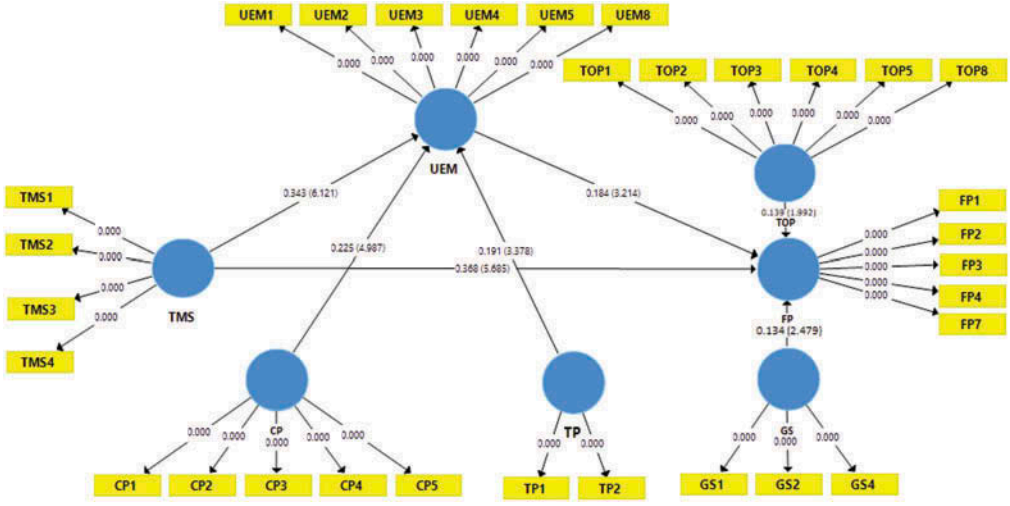

Figure 3. Measurement model —significance values and *T*-statistics.

for multiple models as well. Therefore, this research has scrutinized the effect e-marketing uses as an intervening variable by applying the boot-strapping procedure and performing resampling of 5,000 cases to examine the *t*-values.

Figure 4. Indirect effect.

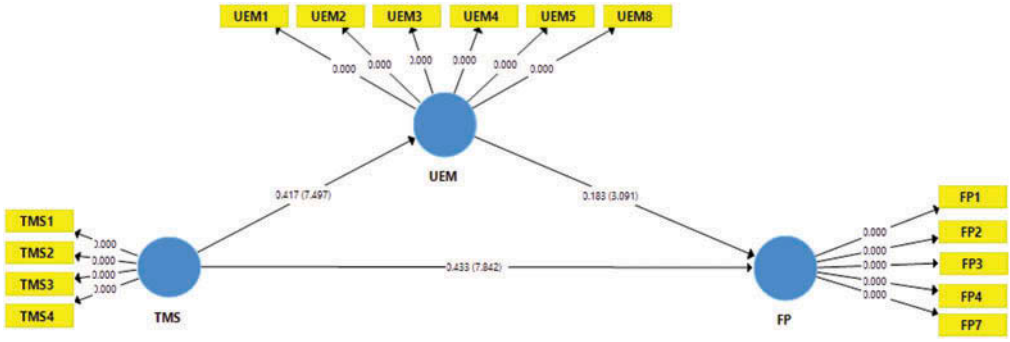

Figure 5. Structural model.

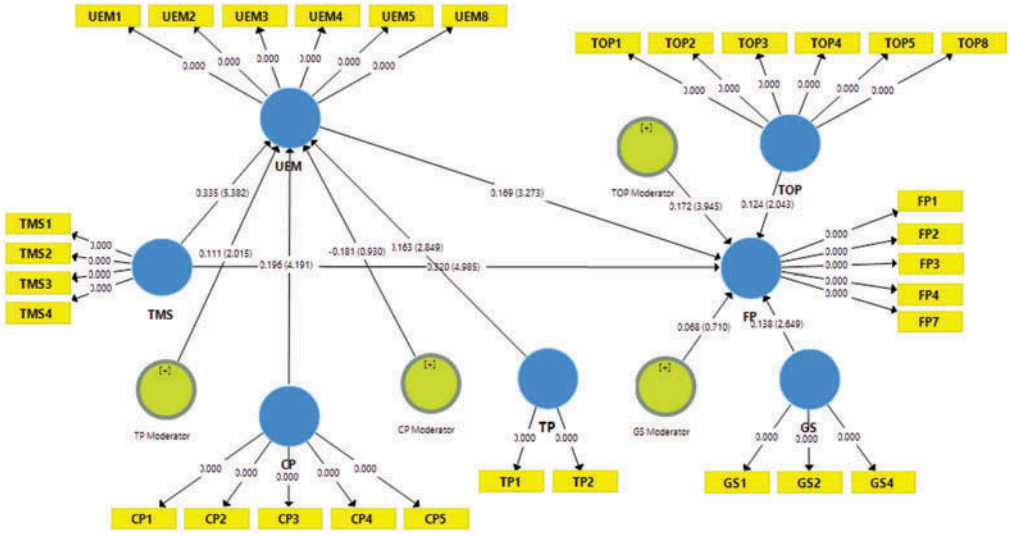

Table 3. Direct hypothesis summary

Paths	Beta value (s)	SD	*t* Stat (s)	*P* value	Decision	*F*-Square	*Q*-Square	*R*-Square
CP → UEM	0.2248	0.0451	4.9868	0.00	Supported	0.07	0.165	0.32
GS → FP	0.1343	0.0542	2.4794	0.01	Supported	0.03	0.155	0.27
TMS → FP	0.3676	0.0647	5.6847	0.00	Supported	0.14		
TMS → UEM	0.3433	0.0561	6.1209	0.00	Supported	0.15		
TOP → FP	0.1302	0.0654	1.9920	0.02	Supported	0.02		
TP → UEM	0.1911	0.0566	3.3777	0.00	Supported	0.05		
UEM → FP	0.1836	0.0571	3.2141	0.00	Supported	0.04		

The structural model assessment represents all three predictors including TMS, UEM and SFP. Moreover, Table 4 shows the results of the mediation effects between the latent constructs and a dependent variable.

Finally, Table 4 clarifies that this mediation hypothesis has found support, for instance, TMS -> UEM -> SFP found the *t*-value of 2.40 and resulted in partial mediation as the direct hypothesis has been found significant.

Table 4. Mediation results

Indirect and direct paths	Beta-value	SD	*t*-Stats	*P*-values	5.00%	95.00%	Findings
TMS -> UEM -> SFP	0.08	0.03	2.40	0.01	0.03	0.14	Partial mediation
TMS -> SFP	0.51	0.04	12.27	0.00	0.45	0.58	Significant
TMS -> UEM	0.42	0.06	7.50	0.00	0.33	0.51	Significant
UEM -> SFP	0.18	0.06	3.09	0.00	0.09	0.28	Significant

4.5. Moderator model analysis

To analyze the moderating effect, the researcher run PLS algorithm to get the beta coefficient values which was 0.17 for the TOP, 0.07 for GS among UEM and SFP. Furthermore, −0.18 for CP, 0.11 for pressure from TPs.

To get the *t*-values result, bootstrapping procedure has been followed. Table 5 revealed the moderating influence of CP, pressure from TPs in predicting the UEM and TOP, GS in the prediction of SFP. The results found that technology opportunism and pressure from TPs significantly moderate the relationship whereas CP and GS do not show any moderation.

5. Discussions

Today, the significant concern for every business in developed countries is to achieve sustainable business growth in terms of triple bottom line practices. The businesses in developing countries are still struggling for the business growth and lacking behind in terms of sustainability and e-marketing implementation. Therefore, this study aimed to investigates the interactive role of pressure from TPs, CP, GS and TOP among TMS, UEM and SFP. This study also intended to examine the mediating role of the UEM between TMS and sustainable business performance. The current study laid down the theoretical framework by incorporating and connecting RBV theory and DOI theory with study variables and contributed to extending the existing literature.

The study findings revealed that pressure from TPs has moderated the relationship between TMS and UEM; additionally, TOP moderated the relationship between UEM and sustainable performance. Even though the study also established the significant positive relationship among TMS, UEM and SFP, UEM partially mediated the relationship between TMS and sustainable performance.

It implies that pressure from TP is strongly related to technology adoption since TPs indicate a key role in sharing of information among the businesses with the help of technological support from top management (Porterfield, 2008). The result highlighted that pressure from TP significantly moderates the relationship among TMS and UEM. Therefore, this result substantiates the empirical linkage between pressure from TP, TMS and use of technology leading to sustainable business performance. In accordance with the result of this study, previous studies have demonstrated that TP influences on e-marketing usage (Ahmad et al., 2015; Ke & Wei, 2007; Nijssen et al., 2017; Porterfield, 2008). This finding further supports the notion of the RBV that sustainable performance and competitive advantage are derived when firms start moving and derived their strategies in accepting the change to their internal process by the pressure received from the external environment.

Next, the other finding of current research confirmed that TOP capabilities help the firms to increase the assimilation of different business processes by creating a strong relationship between technology adoption and sustainable business performance. Several studies have also examined this construct as an antecedent of business-to-business market firms (Chen & Lien, 2013; Sarkees, 2011). Remarkably, the current study empirically found that TOP plays a

Table 5. Moderator analysis

Sr.	Hypothesized path	Beta	STDEV	*t*-Statistics	*P*-values	Decision
1	TOP moderator -> FP	0.17	0.04	3.94	0.00	Supported
2	CP moderator -> UEM	−0.18	0.19	0.93	0.18	Not supported
3	TP moderator -> UEM	0.11	0.06	2.02	0.02	Supported
4	GS moderator -> FP	0.07	0.10	0.71	0.24	Not supported

significant role as a moderator in the relationship between the UEM and textile sector's sustainable performance in Pakistan. The study results concurred with the previous literature (Chen & Lien, 2013; Lucia-Palacios et al., 2014; Srinivasan et al., 2002; Voola et al., 2012) and implies that TOP is an instigator of sustainable performance, which is constant with the notion that abilities create competencies to discourse changing environment, though the results revealed that firms that scientifically examine the market are seeking for latest opportunities and answering to those opportunities achieve better. Hence, findings should reassure managers to invest the resources in being technologically opportunistic. Other than that, unfortunately, the findings of current research of CP and GS didn't moderate the relationship between TMS and UEM and between the UEM and sustainable business performance.

Besides, TMS is positively related to sustainable performance that was tested. Based on the literature, the extent to which CEOs impact the firm's sustainable performance is considerably important to the scholarly understanding of how organizations operate; until now, this relation is poorly implicit. Previous empirical studies to examine the relationship among CEOs and firm performance used adjustments, though challenging, however, suffer from methodological problems, which systematically reduces the relative influence of CEOs on the performance of the firm as a contrast to industry and firm effects. However, the findings have supported the respective hypothesis that TMS and SFP are positively related to each other. Therefore, TMS has been observed as an important mechanism that directly influences the sustainable performance of textile firms. Therefore, it is evident that it is the responsibility of the top management to manage the external and internal relationships which are economics, social and environmental issues which lead toward the increase or decrease of sustainable performance (Carpenter, Geletkancz, & Sanders, 2004; Munz, 2017b).

Moreover, to achieve the stated objective, TMS, and SFP are mediated using e-marketing. However, the empirical findings illustrate that TMS and sustainable performance of the textile sector in Pakistan were strongly mediated using e-marketing. Both the direct and indirect effects of the mediation are the predictor of SFP in the textile firms and show congruence with the previous studies (Ahmad et al., 2015; Arifin & Frmanzah, 2015; Li, 2008). Therefore, it can be portrayed that e-marketing can strengthen the sustainability of the business with the positive support top management, who are solely responsible for making the final decisions for the better future of their firms.

5.1. Implications

This study has contributed empirically to several recognized relationships particularly in sustainability literature and identified the variables, which has been tested both directly and indirectly to accomplish the related research objectives. Application of the suggested model may enlarge the understanding of marketing managers and owners by enhancing the sustainable organization performance by using e-marketing in the business process. Besides, this research identified that the value of the e-marketing process is enhanced when technological aspects are attached to it.

The major practical and managerial implication of this study is to inculcate the knowledge of the combination of five important elements which lead the firm to sustainable business performance are top management, customers, TPs, government and technology integration. The decision makers ought to build up a complete environmental plan, which requires the usage of environmental activities and collaboration from the customers and the suppliers. The producers need to work directly with the two parties to accomplish wanted outcomes—an enhanced sustainable performance. Moreover, the textile firms should take consideration of the governmental policies, technology and competitors in adopting the e-marketing strategies for the firm. The failure to recognize the roles and significance of external efforts in building environmental, societal and economic collaboration with the supply chain partners would affect the firms' overall goals taking to sustainable performance (Rao & Holt, 2005; Vachon & Klassen, 2006, 2008).

Textile businesses of Pakistan have been well recognized and a huge contributor to poverty alleviation, employment and economic growth alleviation which are also known as the triple bottom issues of the business world. Government and policymakers should ponder upon their decisions relating to textile firms which have a direct impact on social and environmental activities. It is necessary to reveal that what actions can be taken from the side of government and policymakers to improve the performance and sustainability. Literature enlightens us about the less usage of e-marketing in the process of the textile firms.

Practically, findings of this study motivate the marketing department, government, policy makers, top management, shareholders and practitioners to strengthen their businesses in terms of long-term sustainability, market growth, customer relationship, customer retention, new product development, communication and digital marketing at both local and international level.

5.2. Limitation and future recommendations

The current research used cross-sectional method for the survey which restricts the analysis in efficiently proving the causal relationships (Sekaran & Bougie, 1993). Longitudinal research is required to characterize and include the long-term cause and effect of the study variables. Some of the variables were tested as unidimensional variables. It is recommended that future studies may focus on all the dimensions separately to strengthen the relationship between variables.

Whilst this research targeted only the performance of textile firms in Pakistan, but there is a need to examine the performance of different types of SMEs (service and manufacturing), such as agriculture, mining, fishing, building and construction, wholesale and retail, hotel and restaurants, transportation, real estate, education and so on. Hence, the study is limited by neglecting the fact that enterprise characteristics can be different according to business type or sector. Future studies should consider investigating firm performance and e-marketing technology in other parts of the country and subsector activities, which may provide more in-depth results.

Moreover, new moderating variables can be introduced in the framework of organizational or environmental issues or even TMS, firm resources, technology orientation, relative advantage, market turbulence, organizational support and market orientation can be taken as moderators in future studies. The study also recommends adding a second dependent variable like customer value co-creation to identify the supplier and buyer relationship in business-to-business marketing context and predict the relationship with the help of e-marketing by using above mentioned interaction variables.

5.3. Conclusion

This study is unique in terms of academic area in the field of e-marketing in general and its influence on the sustainable performance of the organizations. This study provided empirical evidence for the theoretical relationships hypothesized in the research framework. Specifically, it highlights the mediating role of the UEM and the moderating role of TPs and CP in the relationship

between TMS and UEM; on another side, it also checked the moderating role of TOP and GS on the relationship between UEM and SFP. However, the implication of this research is not only limited to just explaining and implementing the DOI and RBV theory but also to increase the ability of the firms to use technology for achieving sustainable performance. The future studies may extend the model by focusing more on the TMS and UEM effect on the sustainable performance; however, further studies could extend the model by using technological–organizational–environmental framework and its effect on UEM or another mediating variable like e-commerce or e-business or innovation by extend to sustainable performance with the help of theories other than RBV and DOI theory.

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