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IMPACT OF MARKET & TECHNOLOGY ORIENTATION ON PRODUCT INNOVATION PERFORMANCE OF PAKISTANI MANUFACTURING SMEs: MEDIATION ROLE OF INNOVATION CAPABILITY

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Abstract: The goal of this research is to look into the association between market and technology orientation and product innovation performance in small and medium-sized manufacturing enterprises (SMEs) in Pakistan, as well as the mediator effect of innovation capability on the association between market and technology orientation and product innovation performance. A research model and related hypotheses have been established in this context. A field study was conducted utilizing the survey technique with 298 owners and managers from 186 manufacturing businesses in order to evaluate the assumptions in the research model. PLS-SEM was used to evaluate data obtained from business owners and managers by using two step approach, measurement and structural model assessment. This research revealed that innovation capability has a partial mediator influence on market and technology orientation dimensions, as well as product innovation performance. These empirical findings demonstrate that strengthening a market and technology-driven innovation capabilities can help manufacturing SMEs gain a competitive edge.

Keywords: SMEs, Manufacturing, Innovation performance, Innovation capability, Market Orientation, Technology Orientation

INTRODUCTION

Small and medium businesses (SMEs) are a broad and diverse economic sector. It has also been discovered that the performance of SMEs may be utilized for the sustainable development of underdeveloped countries, since they account for around 70% of global employment and act as a source of job creation

(Mahmood & Hanafi, 2013; Raza et al., 2018).In developing countries, the importance of SMEs is increased and expanded since their economies are not only reliant on huge multinational corporations. For the uplift and expansion of their economies, developing countries rely on the performance of SMEs.

Similarly, the performance of SMEs is critical to Pakistan's economy (Hussain et al., 2010). Furthermore, SMEs are regarded as the backbone of the Pakistani economy since they contribute to the establishment of higher living standards by providing 80 percent of job possibilities, reducing poverty, and producing 80 percent of employment chances (Haroon et al., 2012).

Khawaja (2006) stated that while SMEs drive Pakistan's economy, they are suffering slow development and are fighting for survival. In actuality, 20% of SMEs have been in business for less than four years, and fewer than 5% have been in company for more than 25 years. Market orientation refers to a company's capacity to develop company-wide market understanding of current and future customer wants (Kohli & Jaworski, 1990).

Furthermore, Market orientation is a valuable source of data for product innovation, with most studies reporting a positive effect on product innovation (Hult & Hurley, 1998); however, for a long time, innovation has been seen as a critical component of economic growth and progress, as well as a key to a firm's success (Gómez et al., 2017; Silva et al., 2018).Enterprises will be able to obtain a competitive edge, adapt rapidly to changes in their environment, and create skills that will offer high performance in their operations as a result of market orientation and innovation ideas (Hurley & Hult, 1998). Furthermore, market orientation is a strategy that focuses on understanding consumers' wants and desires and leads to product innovation (Atuahene et al., 2001). In order to succeed in the market, it is necessary to recognize and comprehend the elements that influence the requirements and desires of potential consumers (Frambach & Schillewaert, 2002).

A technology-oriented corporation, according to the idea of technology orientation, is fundamentally proactive in research and development, acquiring new technologies, and incorporating cutting-edge technology into its new brands (see examples.Gatignon& Xuereb, 1997; Voss & Voss, 2000;Zhou et al., 2005). However, Hakala and Kohtamki (2011) found that the position of technological alignment as one of the most essential aspects of strategic alignments is still rather fragmented. In addition, individual (Salavou, 2005; Hakala & Kohtamki, 2011), and corporate (Zhou et al., 2005; Zhou & Li, 2007; Yarahmadi et al., 2015) views on technology orientation have been explored. Since the research focuses primarily on large organizations (Salavou, 2005; Hakala & Kohtamki, 2011), the function and contribution of technology orientation in SMEs is still under-theorized. According to Gatignon and Xuereb (1997), technology and marketorientation is among the most crucial types of strategic orientations, and a firm's long-term success is determined by the technology positioning that directs its efforts to develop new technical breakthroughs, products, and facilities. According to Aragón-Sánchez and Sanchez Marin (2005), technological progress and innovation levels govern a firm's ability to acquire benefits in the marketplace by establishing a set of basic success criteria.

II. RESOURCE BASED VIEW AS THEORETICAL FOUNDATION

According to RBV, organizations can perform better and obtain a competitive advantage if they have greater resources and the ability to employ these resources efficiently to seize business opportunities ahead of competitors (Voola et al., 2012). Any company has both tangible and intangible assets, which include skills, organizational processes, particular traits, and information. These resources allow a company to conceptualize, plan, and establish plans, which it may then put into action in order to improve its overall performance (Barney,1991). Internal capabilities allow a corporation to adapt to its external environment. (Farrell, 2000; Verhees & Meulenberg, 2004). In order to achieve a long-term competitive advantage, resources and organizational competencies must be combined (Cadogan, 2012). If a company is successful in creating these qualities and resources distinctive, unusual, and un-substitutable, it will have a long-term competitive advantage and a higher return (Barney, 1991; Eisenhardt & Martin, 2000). This study asserts that SMEs obtain a competitive edge and superior performance if they effectively employ their unique talents and resources, such as MO and EO, based on the RBV concept. We use the RBV, which states that a company has a unique and diverse set of resources and capabilities (Barney & Clark, 2007). A firm can attain learning capacity (Acedo, Barroso, Casillas, & Galan, 2006; Lockett, O'Shea, & Wright, 2008) that gives it a lasting competitive advantage by combining unique and novel resources (Peteraf, 1993). Internal factors are highlighted as a source of competitive advantage in the RBV. Internal variables can be physical, such as ITS, or intangible, such as knowledge, as demonstrated by this approach. They are important sources of competitive advantage because of their scarcity and high value, as well as their imperfect imitability, irreplaceability, and rent-seeking appropriation (Barney & Clark, 2007).The links between Exogenous, Endogenous and Mediating variable are described in the research theoretical framework in fig.1.

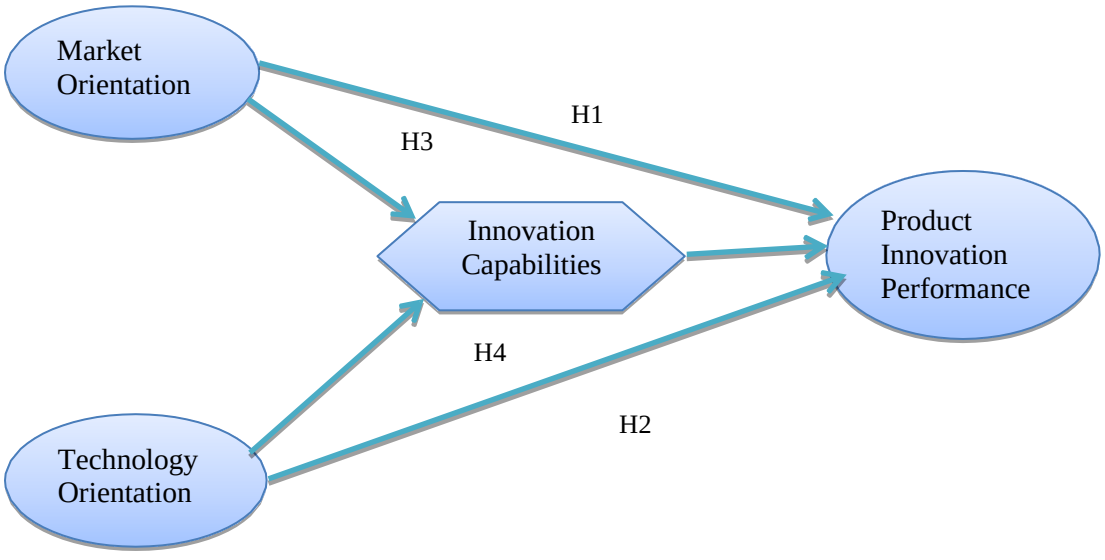

Fig 1. Theoretical Framework

Market Orientation and Product Innovation Performance in SMEs

Market orientation believed that a company's competitive advantage stemmed from its capacity to provide higher value to customers, and that market orientations would result in increased performance (Li et al., 2010). Furthermore, the market orientation is favorable to the development of dynamic enterprise skills and will also help in a fast-changing market rivalry environment. Market orientation has no substantial effect on product innovation in the export company context, according to (Zhang & Zhu, 2016). The ability of newly introduced products and services to meet consumers' expectations and/or needs is critical to a company's success (Damanpour, 1991; Griffin & Page, 1996). As a result of the evolving competitive environment, innovation is quickly becoming a critical factor in firm performance and survival (Wheelwright & Clark, 1992; Bueno & Ordon, 2004). Furthermore, firms devote resources such as people, time, and money to product innovation in order to acquire a competitive advantage in the market through the products they create as a result of a difficult process (Cooper, 1990; Evanschitzky et al., 2012). However, innovation is often seen as a critical element of competitiveness that is ingrained in a company's organizational structure, manufacturing process, released products, and marketing strategy (Alpkan et al., 2010). The primary guideline for determining the activity of innovation at a firm level, according to the researcher, is separated into four forms of innovation: product, process, marketing, and organizational innovation. The influence of all types of innovation on a company's performance is favorable. According to Eshlaghy and Maatofi (2011), innovation has an essential influence in a company's performance, and another study stated that market orientation is classified into two types: responsive and proactive (Slater & Narver, 1994). Furthermore, the researcher stated that more research is needed into market orientation, which is separated into two types: responsive and proactive. Additionally, results of one study demonstrated that market orientation has a beneficial influence on corporate performance (Aris & Tulus, 2017). The organization role in adapting to the changing setting necessitates innovation, which is inextricably linked to achieving comparative excellence and highest level of performance. Although many academics have looked at the impact of innovation on organization performance in the past, it appears that innovation's purpose now is to support the company's performance.

H1: Market Orientation (MO) positively influence on product innovation performance in SMEs.

Innovation Capability and Product Innovation Performance

Innovation is a key approach for enhancing the company's success (Salavou & Avlonitis, 2008; Hoonsopon & Ruenrom, 2009; Najib & Kiminami, 2011; Abou Moghli et al., 2012; Hsu, 2012). Innovation is a critical component of a company's competitiveness in terms of increasing performance, as well as a component of growth plans to enter new markets and expand market share (Kumar, 2012). As companies strive to improve their competitiveness globally, they start to formulate an innovation strategy. This strategy helps them prepare for the inevitable changes brought about by rapid technological change and intense competition (Meroo-Cerdán et al., 2008; Laforet, 2009; Ngugi et al., 2010).

The definition of innovation is a little more debatable, especially among academics (Birkinshaw et al., 2008). According to Evan (1966), innovation includes new ideas for recruiting people, allocating resources, and structuring tasks, authority, and rewards. Besides, changes in organizational structures, changes in

people's behaviors and beliefs (Knight, 1967), and new rules, roles, and procedures are all examples of organizational innovation (Damanpour & Evan, 1984). The idea of innovation capacity has dominated academic debate of this issue (Lawson & Samson, 2001; Calantone et al., 2002; Romijn & Albaladejo, 2002; Lin, 2007). The ability to develop innovative and useful goods or information may be defined as innovation capability (Zheng et al., 2010). Furthermore, Lawson and Samson (2001) describe innovation capability as the ability to continuously turn information and ideas into new products, procedures, and systems for the betterment of the business and its stakeholders. As a result, small firms must be able to innovate in order to compete with their larger, more resource-rich competitors. The drivers of innovation capability and the effects of innovation capability have been studied separately in empirical data on innovation capability in small firms. As an outcome, small business innovation has been viewed as either a process or a result.

Market Orientation (MO) and Innovation Capability

Customer orientation encourages businesses to identify both explicit and latent customer demands, which boosts innovation (Narver et al.,2004). As a consequence of these efforts, customer knowledge is included early in the Research and development process, which must promote the creation of new ideas and improvements (De Luca et al., 2010). Several research studies (Gatignon & Xuereb, 1997; Appiah-Adu & Singh, 1998; Grinstein, 2008), shown that consumer orientation and innovation capability are linked. In stable corporate contexts, where ensuring customer happiness is a critical component of increasing innovative capacity and business success (Han et al., 1998), this link is especially strong. The most of component-level study on MO think that a competitor-oriented culture increases innovative capacities (Han et al., 1998; Im & Workman, 2004; Grinstein, 2008), because it stimulates capturing a market-leading position (Bozic, 2006). The argument is that a competitor orientation encourages firms to create offerings that stand out from their competitors' existing products, resulting in more innovative product creation and cross-functional collobration (Atuahene-Gima, 1996; Griffin & Hauser, 1996; Im & Workman, 2004; Grinstein, 2008). Organizations that have common aims and demonstrate better integration degrees, particularly between marketing and research and development, are more effective at developing new ideas (Atuahene-Gima, 1996; Im & Workman, 2004). Inter-functional collaboration in the innovation process aids the identification of complementarities between marketing and R&D (Luca et al., 2010).

Many businesses accept the concept of improving their competitive position by embracing innovation as a critical component in their survival and success (Baumol, 2002). Many studies have emphasized on the strategic relevance of innovation in establishing and maintaining competitive advantage and value creation throughout the years (Franko, 1989; Ciabuschi, Dellestrand, & Martn, 2011). Previous research looked at how businesses create, transmit innovation, and deal with it in order to acquire a competitive edge and market share (Ciabuschi et al., 2011). Bigliardi (2013) emphasized the development of innovative processes in order to fulfil the demands of consumers and distinguish from rivals, resulting in improved financial performance. Firm performance is influenced by their capacity to innovate. Innovation, information sharing, and business success are all interconnected topics that require more investigation to fully comprehend their dynamics and ramifications.

Technology Orientation and Innovation Performance

Innovative companies are also heavily invested in research and development, are aggressive in obtaining new technologies, and employ advanced technology in the development of new goods (Cooper 1984, 1994; Kanter 1988). As a result, a technology-oriented company may be characterized as one that has the capacity and desire to get a significant high-tech foundation and apply it to the creation of innovative goods. Technology orientation implies that the firm may apply its technical expertise to develop a new technological solution that responds to and meets new user demands. There isn't a single definition of technology orientation that everyone agrees on. When it comes to establishing new processes, goods, and services, the firm's technical expertise is critical (Henard, 2001& Zhou 2005). Attitudes toward technology and innovation can influence a company's ability to gain a competitive edge (Hitt, 1990). Firms that proactively acquire new and sophisticated technologies are more likely to be innovative because they focus on using these technologies to build new processes, goods, and services to fulfil consumer requirements (Cooper, 1994). The degree to which a company is technologically oriented has a major impact on its ability to innovate and is seen as a competitive edge source (Humphreys, 2005), which may lead to improved business results (Voss, 2000). SMEs with limited resources may pursue innovation along the value chain. Such improvements need less technology acceptance and/or development investment (Salavou, 2004). Technology orientation, as defined by Gatignon and Xuereb (1997), reflects a company's attitude toward using and developing new technologies or products in order to interact with the market by actively developing and implementing new technology into its offerings. As a result, the firm's endeavor to acquire a technical competence superior to that of its rivals is guided by technology orientation (Hakala & Kohtamki, 2011).

Technology-oriented firms promote new ideas in order to produce new goods and services, and technological progress and innovation levels guide the business to gain a competitive edge. (Hurley & Hult, 1998; Aragón-Sánchez & Sanchez Marin, 2005). Furthermore, a technology-oriented company adopted creativity and innovation as guiding principles for its operations and initiatives (Li, 2005; Zhou et al., 2005). Previous research has suggested that technological capability plays an essential role in new product creation, and that a company may achieve a competitive edge by leading in technology and delivering distinctive goods, both of which boost firm performance (Cooper, 1994; Hamel & Prahalad, 1994; Song & Parry, 1997). Furthermore, studies have shown that a high level of technology focus causes a company to be more inventive and produce technologically superior goods than rivals, as well as to increased performance (Gatignon & Xuereb, 1997; Voss & Voss, 2000). Furthermore, companies must devote greater resources to technology development in order to compete with rivals and manage uncertainty using innovations, and enterprises must update their technical foundation in order to deal with rapidly changing issues (Srinivasan et al., 2002).

H2: Technology Orientation (TO) positively influence on product innovation performance in SMEs.

Mediating Role of Innovative Capability

In terms of development, velocity of technical change, interactions and access to knowledge, organizational structures, and institutional considerations, innovation processes vary substantially from sector to sector. Rapid change and radical innovations describe some industries, while smaller, incremental changes

characterize others (OECD/Eurostat, 1997). This study focuses on product innovation within the context of innovation. Innovation is defined as the successful application of new information, both external and internal to the organization (Myers & Marquis, 1969; Amabile et al., 1996). According to Alegre and Chiva (2008), has two characteristics: originality and application. According to Tuan et al. (2016), the term "innovative performance" refers to a set of metrics that includes new products, patents, and organizational structures. Product innovation, according to Alegre et al. (2006), is a two-dimensional structure with two dimensions: effectiveness and efficiency. The efficacy of an innovation reflects the degree of success. Product diversity, market share, new market expansion, and perceptions of innovation success are all examples of effectiveness (Alegre & Chiva, 2013; Uurlu & Kurt, 2016). The efficiency of an innovation, on the other hand, refers to the amount of work required to attain a specific degree of success (Wheelwright & Clark, 1992; Barczak, 1995; Griffin, 1997; OECD, 1997; Valle & Avella, 1998).

H3: Innovation capability (IC) mediates the association between MO and product innovation performance.

H4: IC mediates the association between TO and product innovation performance.

III. RESEARCH METHODS

Sampling and Data Collection

This research was carried out in the setting of Pakistani exporting manufacturing SMEs. The population of this study is composed of the registered members of the Sialkot chamber of commerce and industry. The members are mainly involved in the manufacturing of various products such as leather, surgical equipment, and sports goods. Approximately 8000 members of manufacturers and exporters are registered with Sialkot chamber of commerce. (Khattak and Stringer 2017). We looked at companies that matched basic criteria such fulfilling the definition of a small business and having manufacturing and export activities in our study.Ibeh (2004) and Okpara and Kabongo (2009) applied the criterion in different nations. We found 186 exporters in the manufacturing business using the recommended criteria. The Krejcie and Morgan (1970) table was used to compute the sample size. Two hundred and ninety-eight (298) SMEs were chosen as a sample size for the study using the Krejcie and Morgan (1970) sample size table. Furthermore, according to Sekaran and Bougie (2016), researchers should make reminder phone calls and send reminder e-mails to get the best response rate, and both techniques were employed in the current study to get a decent response rate. In addition, convenient and purposeful sampling strategy was adopted in this investigation. The answer of business owners and export managers was used as a unit of study in a number of studies (Cavusgil & Zou, 1994; Calantone et al., 2004). Only 186 manufacturing SMEs responded to the study, which had 600 questionnaires issued to them. The response rate was 31.32 percent which is consistent with the response rate in Pakistan. This reaction was satisfactory and consistent with earlier research as well (Khalique et al., 2015; Hussain et al., 2015; Beh & Shafique, 2016; Hassan et al., 2017).

Measures

To measure and achieve the objectives of this study, valid and reliable instruments have been adopted which have been used extensively in the literature. This study measured market orientation (MO) by employing three sub-factors: customer orientation, competitor orientation, and inter-functional coordination, by using a five-point Likert scale (1=strongly disagree, 5=strongly agree). For technology orientation (TO), we followed Gatgnon and Xuereb (1997), scale by employing a five-Likert scale (1=strongly disagree, 5=strongly agree). Furthermore, in the research framework, innovation capability acts as a mediating variable. However, a few empirical studies on innovation capability have been conducted, and three constructs have been used to measure innovation capability by combining product, process, and management innovation aspects (Tasi et al., 2001; Liao et al., 2007). These constructs were measured by 18 items and a five-point Likert scale (1=Strongly Disagree, 5=Strongly Agree) was used to measure product innovation performance (PIP). In addition, studies employing a 7-point Likert scale, which was proposed by (Alegre et al., 2006; Carta et al., 2018) were used to measure product innovation performance.

IV. ANALYSIS AND RESULTS

The constructs' reliability and validity were assessed using a measurement methodology (Hair et al., 2010). The model is Reflective-Reflective, with lower-order structures. Cronbach Alpha and composite reliability (CR) were used to assess indicator reliability, while convergent validity (AVE) and discriminant validity were used to assess validity. As shown in Table 1, the composite-reliability (CR) values for innovation capability, innovation performance, technology orientation, and product innovation performance are 0.753 (innovation capability), 0.734 (Innovation Performance), 0.930 (Technology Orientation), and 0.734 (Product Innovation Performance). Table 1 shows the Cronbach Alpha values for innovation capability, innovation performance, technology orientation, and product innovation performance: 0.719 (innovation capability), 0.794 (innovation performance),0.909 (technology orientation), and 0.794 (product innovation performance).

Table 1 shows the average variance explained (AVE)values for convergent validity: 0.513 (Innovation Capability), 0.596 (Innovation Performance), 0.688 (Technology Orientation), and 0.596 (Product Innovation Performance). It shows that the AVE for all of the study's variables is larger than the cutoff value of 0.50. Similarly, it displays the loading of each variable's item. For all variables, item loading varies from 0.504 to 0.945. Furthermore, VIF for all indicators fall within the allowed range of 3-5 as shown in Table 1(Knock &Lynn, 2012). In addition, discriminant Validity was assessed by Fornerll-Larcker criterion whom suggested the square root of AVE is greater than inter construct correlation as shown in Table 2(Hair et al., 2010). Table. 3 denotes HTMT values of all reflective constructions are less than the cutoff value of 0.85 (Ringle et al., 2015).

Table 1
Constructs Loadings, Reliability, Composite Reliability & AVE

Construct	Items	Loadings	Cronbach's Alpha	Rho A	Composite Reliability (CR)	Average Variance Extracted (AVE)	VIF
Market orientation	CCO	0.945	0.940	0.941	0.961	0.892	4.287

	CPO	0.942				3.947
	IFCO	0.947				1.719
	IEcy	0.899				1.719
	IEny	0.916	0.786	0.790	0.903	0.823	1.463
Innovative Capabilities	PRDINN	0.780					1.710
	PRSINN	0.854					1.710
	ADMNINN	0.839	0.766	0.773	0.865	0.681	1.574
Technology orientation	SOTO1	0.836					2.472
	SOTO2	0.834					2.415
	SOTO4	0.829	0.909	0.910	0.930	0.688	2.362
	SOTO5	0.824					2.288
	SOTO6	0.851					2.652

Note: SOTO3 deleted due to lower loadings

Table 2
Discriminant Validity (Fornerll- Larcker criterion)

	1	2	3	4
1. Innovative Capabilities	0.825			
2. Market orientation	0.215	0.944		
3. Product Innovation Performance	0.466	0.194	0.907	
4. Technology orientation	0.412	0.158	0.708	0.829

Table 3
Discriminant Validity (HTMT)

Heterotrait-Monotrait Ratio (HTMT)				
	Innovative Capability	Market Orientation	Product Performance	Technology Orientation
Innovative Capability				
Market Orientation	0.251			
Product Performance	0.595	0.222		
Technology Orientation	0.493	0.171	0.837	

Table 4
Hypothetical path relationships direct effect

Hypothesis	Relationships	Beta	SE	T Value	P Values	Decision
H1	Market orientation -> Product Innovation Performance	0.092	0.034	3.498	0.000	Supported
H2	Technology orientation -> Product Innovation Performance	0.635	0.040	13.697	0.000	Supported

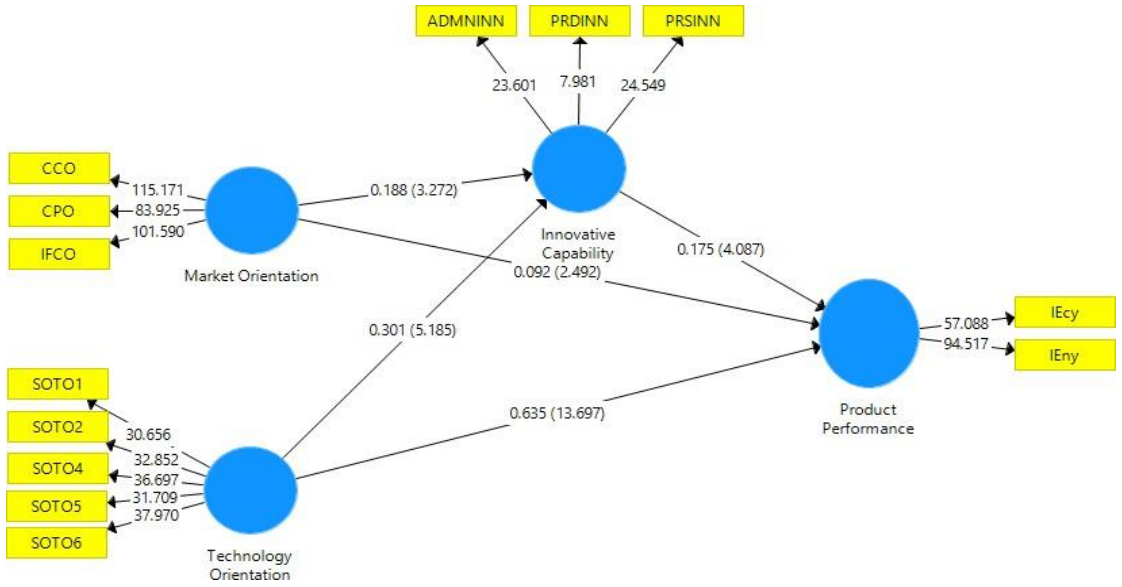

Figure 1. Path coefficient and T values

Table 5
Hypothetical path relationships indirect effect

Hypothesis	Relationships	Beta	SE	T Value	P Values	Decision
H3	Market orientation -> Innovative Capabilities -> Product Innovation Performance	0.033	0.013	2.546	0.011	Supported
H4	Technology orientation -> Innovative Capabilities -> Innovation Performance	0.053	0.017	3.053	0.002	Supported

A conventional bootstrapping technique was used on 5000 bootstraps of 298 instances to determine the relevance of route coefficient (Hair et al., 2014, 2017). Table 4 demonstrates a substantial positive connection between market orientation and innovation performance (B=0.092, t=3.498, p=0.000). As a result, hypothesis H1 is confirmed. Technology orientation shows a substantial positive connection with Innovation performance (B=0.635, t=13.697, p=0.000), as does the study's second hypothesis H2. H3 shows that innovation capability mediates substantially between market orientation and innovation performance (B=0.033, t=2.546, p=0.011), just as H4 shows that it mediates significantly between technology orientation and innovation performance (B=0.053, t=3.053, p=0.002), (Table 5). As a result, all of the study's hypotheses are supported.

Table 6
Values of R2, effect size f2 and Q2

Endogenous Variable	f^2	Effect Size	R^2	Predict Q^2	SRMR
Innovative capability	0.210	Small	0.193	0.121	0.050
Product Innovation Performance	0.691	Large	0.541	0.441	

R square is a critical component in structural model evaluation, with values of 0.10 (small), 0.30 (mid), 0.50 (big) respectively (Cohen, 1997). The MO and TO independent variables in our study attributed 0.193 in innovative capabilities (small) and 0.541 in product innovation performance (large) to SMEs in Pakistan's manufacturing sector (Table 7). Furthermore, the influence of size has been interpreted as the contribution of the independent variable to the R square values of the dependent variable. The f square values are classified as tiny (0.02), medium (0.15), and large (0.35), (Table 6), (Cohen et al., 2013). The influence size of exogenous variables on innovative capability is (0.210) medium, and on product innovation performance is (0.691) high, according to the current study (Table 6). Furthermore, Q-square values greater than zero suggested that your data was properly reconstructed and that the model endogenous variable was predictive (Henseler, 2009). Table 6 shows that the innovative capability (0.121) and Product innovation performance (0.541) values are both greater than zero, indicating that the model is predictively relevant and well- constructed.

V. DISCUSSION AND CONCLUSION

Discussion

The study investigated the relationship between product innovation performance and market orientation. The findings indicated that there is a significant relationship between the two variables (B=0.092, t= 3.498, p=0.000). The second hypothesis of this study was to find a positive relationship between product innovation and technology orientation (B =0.635, t = 13.697, p=0.000). The results of the study revealed that the rapid development of technology has a significant impact on global competition and business environment.

The H3 hypothesis proposed that a relationship between product innovation and market orientation is influenced by the innovation capability of a company. This indirect relationship was tested by performing a PLS-SEM analysis. The indirect relationship analysis results are significant (B = 0.033, t = 2.546, p= 0.011). The result revealed that the production innovation performance relationship between an organization and its customers is influenced by the variable innovative capability of the organization. This means that the market orientation of the organization is determined by the capability of its competitors.

The H4 hypothesis proposed that product innovation performance plays a significant role in mediating the relationship between technology orientation and product innovation performance. The findings of the indirect connection analysis are statistically significant (B=0.053, t = 3.053, p=0.002). The study revealed that adopting a market orientation increases the profitability and develops a strategy to manage the customer's needs. It also helps the organization to effectively utilize the product and enhance its value.

This study analyzed the product innovation performance of various industries in Pakistan. It was focused on the market orientation and product innovation performance of different products. The findings of the investigation validate the assumptions made in the study. The importance of the market and technology orientation for product innovation performance is also highlighted. The importance of having innovative capabilities in order to improve market performance is explained in terms of how they can help a company overcome various challenges and achieve goals. This capability can be used to improve a company's competitive advantage and enable it to take advantage of the latest technological advancements.

Theoretical contribution

From a theoretical standpoint, the current study's findings are consistent with the RBV, which states that a firm's performance is increased by its resources and capabilities. Furthermore, it fills a vacuum in the literature by experimentally exploring the mediating role of innovative capability between market and technology orientation and product innovation performance, particularly in the manufacturing sector of Pakistan, where there have been less empirical investigations. As a result, this study informs not only academics but also decision-makers that resources (market& technology orientation) and Innovative capability are both equally crucial for product innovation performance.

Practical Contribution

The study aims to provide a comprehensive understanding of market orientation (MO) through a step-by-step approach, which will enable decision-makers to recognize the various benefits of MO and TO adoption in SME, s. The advantages of implementing (MO) and (TO) include lower costs, better efficiency, and to get competitive edge. Also, it enables firms to reach out to a wider customer base and improve their product efficiency. This study investigates the effects of EO adoption in developing countries. It can help scholars understand the various facets of innovation capability adoption and how they can be utilized. This study aims to help them understand the various aspects of (MO, TO) innovation capability and (PIP) adoption and its outcomes.

Limitation and Future Research Recommendation

The present study is focused on small and medium-sized manufacturers in developing countries. It should have been carried out in low-income countries to increase the generalizability of its findings. And future work should also be carried out by considering firm dynamic capability view by taking into account the external and internal resources to attain a competitive edge. The study aims to examine the impact of market orientation (MO) on SMEs' product innovation performance through mediation effect of innovation capability. It also suggests that other factors such as environment factors like learning and entrepreneurial orientation support could also be considered to help SMEs navigate through this challenging environment.

Conclusion

The findings of this study reveal that an increase in the market orientation of SMEs can help them become more innovative and productive. This suggests that policymakers should develop programs and policies that will help these firms to promote innovation and develop new offerings to enhance their competitive advantage. They should also encourage continuous improvement and innovation. They should also be aware of the various strategies and activities of their competitors to create a competitive advantage. Through pro-activeness, SMEs can monitor the market and be first in line when it comes to acquiring new products and services. They can also improve their knowledge sharing with their customers by studying the various factors that affect their decisions. Information disseminated to all employees is very important for businesses. This is also used to improve the company's ability to exploit opportunities. Having a good understanding of the firm's strategic orientations can help a company improve its performance. It is also important that the company has the right culture and innovativeness to be able to achieve its goals (Shin and Lee, 2016). This study can be used by future researchers who want to investigate the relationship between the market orientation and the level of innovation in Pakistan.

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