Dis-Aggregated Effect of Market Orientation on Firms’ Performance: A Study on Indian Small and Medium-Scale (SMEs) Manufacturers

Seemant Kumar Yadav, GLA University, India
https://orcid.org/0000-0001-7295-1866
Vikas Tripathi, GLA University, India
Geetika Goel, MNNIT, Allahabad, India

ABSTRACT

Due to ambiguity in the market orientation and performance relationship, the basic aim of the study to investigate the nature of relationship exists between market orientation and performance of the manufacturing SMEs in India. Data for this study were collected from the 388 managers/owners of SMEs indulged in the manufacturing sector through well-established scales. The utilized scale’s reliability and validity were assessed through CFA, and various hypotheses related to the environmental moderators and innovation mediation were tested. This study is relevant for owners/managers and policymakers responsible for improving the performance of small and medium enterprises, working in the manufacturing sector. The study necessitates the significance of catering express needs of customers to boost up the effect of market orientation on performance. The study tested the relationship between the market orientation and performance relationship at the disaggregated level. The important insight about the direct, indirect, and the moderated relationship was reported in the study.

KEYWORDS

Confirmatory Factor Analysis, Developing Country, Environmental Moderator, Firm’s Performance, Incremental Innovation, SMEs

INTRODUCTION

The scholarly focus on market orientation research picked pace after the evolution of the contributions made by Narver & Slater (1990) and Kohli & Jaworski (1990). Initially a great deal of research tested the validity of market orientation and firm’s performance relationship, focusing on developed countries large scale firms (Kirca et al., 2005, Oyedijo, A. 2012). However, the contemplation of these studies attributed to the existence of a mixed outcome such as, Deng & Dart, (1994); Slater & Narver, (1998) posit a positive relationship, Grewal & Tansuhaj (2001) found a negative relationship and Baker & Sinkula (1999) found no relationship between market orientation and firm’s performance.

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The possible reasons for such ambiguous relationship may be attributed to the factors like, the effect of environmental factors, cultural and sectorial diversities and innovation on market orientation and firm performance relationship (Gaur et al., 2011). In addition to the relational ambiguity the focus of available researches on developed countries large scale firms, makes it infeasible to develop a comprehension about the relationship.

Contrary, however small businesses have always been considered as the growth engine of developing economies, very little attention is given on market orientation research in this aspect (Becherer et al., 2001; Cano et al., 2004; Ramesh & Ramesh 2014). The contribution of small-scale firms in the world’s economy is increasing day by day and more specifically in a country like India, where the study is situated, small-scale firms have acquired a dominant position in the development of the country. According to an estimate the SMEs sector contributes approximately 29% in India’s GDP, with export contribution around 50% and employment generation around 11 crore people (Dewan, 2019). Although the marketing principles are equally applicable to the large and small firms, alike sophisticated marketing practices always been questionable in smaller firms (Cromie, 1991). The scale of operation and contextual differences between large and small scale firms makes it difficult to generalize the research findings across different contexts (Gaur et al., 2011). Hence the purpose of this study is to empirically investigate the market orientation and performance relationship in developing country like India, giving due importance to the small and medium scale firms. The study has its own significance in a transient business environment like India where these fluctuations bring more volatility in terms of technological advancements and customers’ preferences. In lieu of this the basic affirmation of this study is to empirically test the relationship of market orientation and performance, taking into account internal and external environment factors in Indian context.

The objectives of the papers can be conceptualized as:

1. The direct effect of market orientation on the firm’s performance;
2. The role of environment moderator on market orientation and firm performance.

The souvenir of this paper is organized as follows. The first section mentions the previous research contributions concerned with the market orientation, environment factors and performance constructs to provide a basis for this study. Further, the theoretical framework and research hypotheses are explained, which is followed by research methodology, including sampling considerations, scales and measures. In the fourth section, we have mentioned the data analysis which is further followed by outcomes, discussion, managerial implications and directions for future research.

LITERATURE REVIEW

Market Orientation

The historical perspective identifies two basic approaches to market orientation (MO) - behavioural and cultural approaches (Mahmoud, et al., 2016). The behavioural approach propounded by Kohli & Jaworski (1990) defined market orientation as “the organization-wide generation of market intelligence pertaining to current and future needs of customers, the dissemination of intelligence within the organization, and responsiveness to it. Key features of this integrated view are (1) an expanded focus on the market rather than customer intelligence, (2) an emphasis on a specific form of interfunctional coordination with respect to market intelligence and (3) a focus on activities related to intelligence processing rather than the effect of these activities”. Parallel, Narver & Slater (1990) introduced cultural perspective of market orientation as “the culture that (1) places the highest priority on the profitable creation and maintenance of superior customer value while considering the interest of other
key stakeholders; and (2) provides norms for behavior regarding the organizational development and responsiveness to the market information”. They conceptualize market orientation as the composition of customer orientation, competitor’s orientation and inter-functional coordination dimensions. The behavioural perspective focuses on the actions necessary to create required behaviours and cultural perspective focuses on norms and value system within the organization. Subsequently, a number of researchers have made their contribution to enriching MO literature. Table 1, presents a partial list of such studies.

The vast majority of MO researches revolve around the two seminal contributions by utilizing either MKTORS (Narver & Slater 1990) or MARKORS (Kohli & Jaworki 1990) scales. As the culture encompasses the behaviour responsible for MO, we rely on the MKTORS rather MARKORS scale. Many researchers viz., Atuahene-Gima & Ko, (2001); Kirca, Jayachandran, & Bearden, (2005); Paladino, (2007) advocated MKTORS scale as the most cited valid and reliable scale; which provides a strong basis to rely on this scale to measure market orientation. The scale dimensions- customer orientation reflects firms’ orientation to obtain the information about customer taste and preferences, competitor’s orientation reflects firms’ orientation to obtain information related to the competitors, and inter-functional coordination is related to the firms’ orientation to create and deliver superior customer value, in order to boost up profitability.

Manufacturing Performance

Academic contribution in the development of performance measures is still at the juvenile stage. The traditional financial measures are being knocked down by the new approaches to performance measurement, which focuses on non-financial measures (Gosselin, M. 2005). The momentous limitation while accessing financial measures is the difficulty in the extraction of information from the SMEs, owner/managers, which operates in unorganized sector hence it is becoming more efficacious to use subjective indicators rather objective financial indicators of the performance. We explored possible subjective indicators from literature (Mamun et al., 2018; Sawang, & Unsworth 2011; Vij & Bedi 2016) and after discourse obtained from the experts’ we came up with the following set of indicators representing SMEs performance suitable for the concerned context, which includes profit goals, sales goals, customer retention, flexibility, employee turnover, quality, reputation against competitors, launching of new products. In the following section, we elaborate how market orientation is related to the firm’s performance.

Table 1. Market Orientation conceptualizations

| Scale development | Kamboj and Rahman (2017); Kohli, Jaworski, and Kumar, (1993) |
| Antecedent of MO | Iyer et al.,(2019). |
| Consequences of MO in terms performance | Buçakçıoğlu and Ipek(2020), Gupta et al.,(2019) |
| The study is reflecting moderating effect on MO and performance relationship | Jabeen et al., (2016), Tajeddini & Ratten (2020); Cacciolatti & Lee (2016); Becherer and Maurer, (1997); Han, Kim, and Srivastava, (1998); Jaworski and Kohli, (1993); Pelham and Wilson, (1996) |
| Application MO in not for profit firms context | Voss and Voss, (2000), Bhattacharai et al.,2019 |

Source: Becherer et al., (2001)
Market Orientation and SMEs Manufacturing Performance

Initial investigation identifies the positive effect of MO on the firm’s profitability was reported by Narver & Slater (1990). To increase its generalizability, they replicated the study with a larger set of respondents and reconfirm the existence of the positive relation. A similar outcome was also mentioned by Simona et al., (2015) Takata, H. (2016) they posit that these two constructs are highly correlated with each other, and a higher degree of MO leads to better performance. As the initial research was focused towards the large-scale enterprises of developed economies, the validation of this investigation in developing countries is still in its early phase. Present research is situated in India which characterizes as the world’s fastest growing country. Such pace of growth which makes the Indian business environment very turbulent affects all types of businesses, specifically small and medium scale enterprises (SMEs). According to an estimate the micro, small and medium enterprises contribute approximately 33% in total industrial production and also provides employment to more than 500 lakhs individuals (MSME annual report,2017-18). It indicates the potential which SMEs possess and which can be utilized to boost up the country’s growth and inclusive development. But immature information about market orientation and its effect on SMEs performance makes it difficult for managers and policy makers to device appropriate strategies for them. We believe that the set of the environmental factor under which SMEs operate quite differently from the set of the environment in which large-scale firms operates. Hence is plausible that SMEs behaves differently across different contexts. Using market orientation as an aggregate-level construct might lead a biased outcome because such a construct may not exhibit a strong effect of one of its components if the effect of other constituent components are weak. For instance, a SMEs good at customer orientation front, but weak at competitor orientation and interfunctional coordination may exhibit low levels of MO, if it is taken as aggregated construct. Hence, it raises the need of evaluation of the effect of market orientation on SMEs performance at the disaggregate level (Han et al., 1998; Grewal et al., 2013).

At disaggregated level, firms with better customer orientation, possess the set of behaviors and beliefs which places customer interest at the top, and ultimately reflected as an improved performance endorsing the positive relationship between customer orientation and performance. (Deshpande et al., 1993; Maurya et al.,2015; Smirnova et al., 2018) As companies with customer orientation can better understand the consumer’s need and collect market information on how market trends and market conditions change, the customer orientation is the prime factor for better performance and profitability (Lee et al., 2019). Therefore, we hypothesize:

**H1a:** Customer orientation positively affects the firm’s performance.

Competitor orientation as the part of market orientation is seen as an organizational strategy to improve on the products they deliver to customers (Bamfo & Kraa 2019). In order to define the possibilities and create viable strategic enterprises, SMEs pursuing optimum corporate efficiency should pay careful attention to direct and indirect competitors (O’Dwyer & Gilmore,2019). A competitor-oriented firm with the tendency to reassessment its strengths and weaknesses against competitors will tend to improve its performance (Zhou et al., 2007).

Recognition of potential threats arises due competitor, firms may find better ways to fulfil customer’s needs so as to improve its performance (Musa et al.,2018). Therefore it can be hypothesized that:

**H1b:** Competitors orientation positively affects the firm’s performance.

These inputs on customer expectations and strategies of competitors are necessary to provide superior customer value that can be ensured by careful collaboration across multiple functional areas. Interfunctional cooperation enables the seamless and rapid flow of business intelligence, ensuring
enhanced organizational performance. Tyler and Gnyawali, (2002) and Rafiq & Ahmed, (2000) conceptualize interfunctional coordination as the part of internal marketing and viewed employees as internal customers, they posit that a satisfied internal customer would generate a favourable outcome in the interest of the organization. It implies that, it is not only important to possess high level of customer orientation but on the same time it is also important to have adequate competitors’ orientation, so that firms can have better understanding about, changing customers’ needs and competitors move, along with high level of inter-functional coordination to effectively execute firm’s actions to deliver superior customer value (Kohli & Jaworski, 1990).

In summary, based on the previous discussion we postulate that a firm having a greater level of customer orientation, competitor’s orientation and interfunctional coordination, will perform better and it leads to the generation of the following hypothesis:

H1c: Inter-functional coordination positively affects the firm’s performance.

Role of Moderator Variables

The genesis of the moderation effect of environmental factors on the market orientation(MO)-performance relationship is long been mentioned by the strategic researchers. They signify the importance of environment-related issues on firms performance and argued that firms should bring alignment between environment and their strategies (Gaur et al., 2011). The present business scenario does not allow one size fit for all concept, even firms should be to able to understand the dynamics of different environmental factors on business activities and act accordingly. This walk-through highlights the momentous role of environmental moderator variables on MO-performance linkage. Duncan (1972), posit environment as physical and social factors outside the boundary of the firm, having the capability to put constraints and affect the firm’s decision-making process. These constraints affect the extent of benefit which firms might avail from these action/decision alternative (Dess & Beard, 1984). To get a desired outcome from these actions, a responsive behaviour against the dynamism of the external environment is obvious (Subramaniam & Gopalakrishna, 2001). In previous studies (Jaworski and Kohli, 1993; Slater and Narver, 1994), the moderating effects of environmental factors like, market turbulence, technological turbulence and competitive intensity in the MO-performance relationship were examined, but researchers were not able to arrive at any mutually agreed conclusion. In the following part of the paper, we have elaborated the role of this three moderator variable on MO-performance linkage in order to develop a hypothesized relationship among them.

Competitive Intensity

It reflects the situation of fierce competition with limited growth opportunities (Auh & Menguc, 2005). The varying degrees of competitive intensity determines the orientation of firm’s actions and reactions (Chen and Miller, 1994). In fact, in most of firms the orientation of competition provides a sound based on goal determination. When the business environment gets more competitive firms are compelled to monitor competitor’s act closely to get more relevant information and make owns strategy. In the intensely competitive business environment, small-scale manufacturers lag behind against their large-scale counterparts who are capable enough of accessing cheap and skilled labour, technology and efficient production process. Other than this in market like India due to “Make in India” and “Skill India” campaigns (Indian Govt. initiatives) increasing numbers of startups are changing the equilibrium of local markets (which is the main segment for SMEs) and it is making it hard for SMEs, in general, to increase its revenue and improve performance. In low competitive intensity, if an SME does not pay enough attention to the rival’s actions greater possibility that it may not be adversely affected its performance and profitability front conversely a high level of competitive intensity tend to lower the firm performance (Sørensen et al.2009). As a result in low competitive intensity environment, SMEs can afford a lesser market orientated behaviour because it affects performance.
at the fringy level, while in the highly competitive intense environment a market-oriented behaviour becomes as a prerequisite for better performance.

Taken all together, we are hypothesizing that:

**H2a:** Competitive intensity moderates the relationship between customer orientation and firm performance.

**H2b:** Competitive intensity moderates the relationship between competitor orientation and firm performance.

**H2c:** Competitive intensity moderates the relationship between interfunctional coordination and firm performance.

### Market Turbulence

Market turbulence is the reflection of volatility in the external environment, which poses pressure on firms to alter their actions accordingly (Golden et al., 1985). The economic reforms in Indian economy which were initiated in the 1990s, increases competition between and within foreign and domestic brands, it also increases the *alternatives* part from the side of buyers which necessitated an organization to keep close watch on its competitors and buyers changing preferences unlike to the less turbulent environment where due to fewer options buyers had very limited means to fulfill their requirements. For SMEs every customer’s matter because getting a new customer is cumbersome job due to resource and other constraints, therefore keeping pace with the varying customer taste and preferences *which affect their purchase intention*, become prequisite of performance, and which can be ensured through the SMEs market orientated practices like providing tailor-made solution to the customers and superior customer services. Greater MO is most likely to have a very marginal effect on performance in a relatively stable market because under these situations little adjustment is required to fulfil the customer’s needs. But in the relatively turbulent environment, a high level of MO is needed so that firms can sense varying customer’s needs and respond accordingly.

Consistent with this discussion we are hypothesizing that:

**H3a:** Market turbulence moderates the relationship between customer orientation and firm performance.

**H3b:** Market turbulence moderates the relationship between competitor orientation and firm performance.

**H3c:** Market turbulence moderates the relationship between interfunctional coordination and firm performance.

### Technological Turbulence

Technological turbulence is the rate of change of product and process technologies used to transform inputs into outputs (Kohli and Jaworski, 1990; Jaworski and Kohli, 1993; Gaur et al., 2011). Moorman & Miner (1997) defined technological turbulence specifically as a change in the technology concerned with the development of new product. Such technological turbulence lead to the change in prevailing standards and makes it difficult to generate more accurate forecast(Wu et al., 2005), and demands a sound organizational culture, needed to process the required information, important to deal with the uncertain environment (Galbraith, 1973; Tushman & Nadler, 1978). Additionally, a technological turbulent environment increases causal ambiguity, which increases firms competitiveness by reducing strategy and resource imitation (Eisenhardt and Martin, 2000; Noda and Collis, 2001). Many researchers have analyzed the effect of turbulence on MO –performance linkage, but no uniform conclusion was able to be drawn to date. As researchers like Kirca et al., (2005), Qu & Ennew, (2003), Rose & Shoham, (2002), and Subramanian et al., (2009) advocated a significant moderation effect of technological turbulence on this relationship, another group of researchers like, Aziz & Yassin, (2010);
Kohli & Jaworski, (1993); Narver & Slater, (1994); Greenley, (1995), had reported an insignificant moderation effect. However, the theoretical foundation insists the existence of a significant moderation effect, and its failure could be attributed to the lack of proper integration between technological knowledge and customers’ expectations (Gaur et al., 2011). As the basic conceptualization of MO focuses on the firms’ orientation towards its customers, competitors, inter-functional coordination and the business environment (Kohli and Jaworski, 1990; Narver and Slater, 1990), it can regulate the degree of such interaction in favour of the firms’ betterment (Gaur et al., 2011). Accordingly, we propose following hypothesis:

H4a: Technology turbulence moderates the relationship between customer orientation and firm performance.
H4b: Technology turbulence moderates the relationship between competitor orientation and firm performance.
H4c: Technology turbulence moderates the relationship between inter-functional coordination and firm performance.

Role of Innovation as Mediator Variables

Firm’s ability to mobilize its resources and capabilities in accordance to the changing business environment has been recognized as one of the vital conditions for its survival and innovative performance (Liao, et al., 2009; Bakar & Ahmad, 2010; Laosirihongthong, et al., 2013). Firms with a greater level of innovation tended to have better business performance than those, which are not having such innovation capabilities (Putri, et al., 2016). The availability of resources and firms capabilities to utilize all such resources in order to make more innovative can be ensured by the effective implementation of Market orientation. Researchers like Theoharakis & Hooley (2008), Johnson, et al., (2009), Olavarrieta & Friedmann (2008), and Carbonell & Escudero, (2010) supports the mediating effect of innovation in MO-performance linkage. As MO implies firm’s response against the market conditions and can be perceived as innovative behaviour, therefore a market-oriented firm would enhance it innovation capability to enjoy better performance (Mahmoud et al., 2016). Despite the fact that MO and innovation both influence performance, much of explanation of performance variance is attributed to the mediating characteristics of innovation between MO-performance linkage (Agarwal et al., 2003). However, there is a divergent opinion about the effect of MO on two specific types of innovation: radical and incremental innovation, despite the fact that these both affect the firms’ performance (Chang et al., 2014). When a market-oriented firm tends to identify expressed needs of the customers, it leads towards incremental innovation (Hayes and Wheelwright 1984; Atuahene-Gima 1995; Slater and Narver 1995). Alternatively, a market-oriented firm may also tend to be radically innovated, so that it could address customers latent needs (Day 1994; Jaworski and Kohli 1993; Stringer, 2000). We are superseding incremental innovation over radical innovation due to the two basic reasons; firstly, radical innovation demands huge investment to acquire new knowledge and skills, hence it becomes implausible for SMEs to think about such type of innovation especially in the contexts like India, secondly, the continuous quality improvement necessitates the existence of incremental innovation over radical innovation (Bhattacharya, D.K., 2014). Therefore giving due weight-age to the incremental innovation in SMEs context we are hypothesizing:

H5a: Incremental innovation mediates the relationship between customer orientation and firm performance.
H5b: Incremental innovation mediates the relationship between competitor orientation and firm performance.
H5c: Incremental innovation mediates the relationship between interfunctional coordination and firm performance.
METHODS

Study Sample and Data Collection

The study focuses on small and medium scaled firms operating in Uttar Pradesh, a northern state of India. We identified few SMEs clusters of the manufacturing sector. These clusters include Aligarh, Agra, Firozabad, and Gautam Budh Nagar cities of the northern part of India. All these cities are well known for their products not only in India even across the globe. Agra is well-known destination for leather and related items; Aligarh is an international hub for brass metal products like door locks and water tabs and Firozabad is internationally renowned name for glass bangles and other glass-based items; Gautam Budh Nagar cluster is located nearby to the national capital Delhi and an important constituent of National Capital Region (NCR). We identify 698 SMEs in these clusters. To ensure adequate sample representation, we launched our survey in many folds between the year of 2016 and mid of 2017. We were able to get responses from 423 respondents with a response rate of approximately 60%. After the initial screening 388 completed responses were found eligible for the further stages of data analysis. To deal with common method bias Harman’s single factor test was applied (Gaur et al., 2011). The resultant single factor obtained by fixing the number of factors to be extracted as 1 and without any rotation, was able to explain 37.234% of variances, which falls below the minimum threshold value of 50%, and we concluded in favour of insignificant common method variance in the concerned study.

Measurement of the Constructs and Scale Validation

Customer orientation, competitor orientation and inter-functional coordination were measured by MKTOR scale of Narver & Slater (1990) and moderator variables were measured using a scale of Jaworski & Kohli (1990). To measure incremental innovation, the method suggested by Koberg et al., (2003) was followed. At the beginning of the survey, basic information about incremental innovation was provided to the respondents and for effective persuasion and information sharing, business school students with relevant business sense were hired for the survey. The incremental innovation was represented by four categories (Koberg et al., 2003) viz, Procedural innovation (Innovation in policies, procedure and work schedules), Personal innovation (innovation related to human resource practices), Process innovation (newness/modification in method/process/technology, used to produce products), and Structural innovation (innovative redesigning of department/divisions, modification in machinery and facilities).

The owner/managers of SMEs were informed to record their responses in terms of frequency of occurrence of each innovation category, during the past business events. The given response categories were, 1= never, 2= rarely (1 or 2 times), 3=sometimes (3 to 5 times), 4= frequently (6 to 10 times), and 5= very frequently (more than 10 times) (Koberget al., 2003). Finally, the SMEs performance was measured with the help of indicators attainment of profit goals, sales goal, customer retention, employee turnover, flexibility, quality, reputation against competitors, and launching of new products. The respondents were given 1= strongly disagree, 2= disagree, 3= neither agree nor disagree 4= agree, and 5= strongly agree on response categories.

The constructs reliability and validity were assessed by confirmatory factor analysis (CFA) using AMOS-24. Due to CFA’s sensitivity with sample size, we constructed two different models, so as to fulfil the sample size requirement in accordance to the number of the constructs in the model (Bollen, 1989). Amongst, one model comprised of customer orientation, competitor orientation, inter-functional coordination, firm performance and incremental innovation, and another model comprised market turbulence, technological turbulence and competitive intensity constructs. The values of different fit indices of both the models are given in Table 2.

Standardized Root Mean Square Residual (SRMR), root mean square error of approximation(RMSEA), Goodness of Fit (GFI), Adjusted Goodness of Fit Index (AGFI), Normed Fit Index(NFI), comparative fit index (CFI).
From the table, it is evident that indices values in both the models are within the acceptable range (Bentler, 1992), which supports the statistically significant level of reliability and validity of the concerned constructs at the initial stage of data analysis. Further, we calculated the Cronbach’s alpha coefficient, composite reliability (CR), and average variance extracted (AVE), for each construct (see Table 3).

The reliability values above 0.76 for all constructs and the AVE values slightly equal to the minimum acceptable values of 0.5 (Hair et al., 2003) for all the constructs, indicates the existence of convergent validity (Hair et al., 2003). To test discriminant validity of the scales, we conducted nested model comparison (Sharma, 2000) with the help of series of Chi-square difference test. Here, we compared the fit of the unconstrained main model with the fit of nested models, where the covariance between any two constructs was constrained to 1 (like if it is CO-COMPO, the covariance between the customer and competitor orientation was fixed as 1). As exhibited in Table 4, the Chi-square value of each nested model was higher than the Chi-square of the unconstrained model. It shows the fitness of unconstrained model in comparison to the constrained models, and providing support for the discriminant validity (Sharma, 2000; Gaur et al., 2011).

RESULTS

All the constructs were transformed as a summated scale by taking an average of each item. The VIF for all independent variables was less than 10, indicating no problem with multicollinearity (Marquardt, 1970). However, the interaction term of moderating variables with independent variables was showing a significant level of multicollinearity. To deal with the issue, all the variables were

<table>
<thead>
<tr>
<th>Construct</th>
<th>Composite reliability</th>
<th>Cronbach’s alpha</th>
<th>Average variance extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Orientation (CO)</td>
<td>0.83</td>
<td>0.83</td>
<td>0.44</td>
</tr>
<tr>
<td>Competitor Orientation (COMPO)</td>
<td>0.78</td>
<td>0.78</td>
<td>0.48</td>
</tr>
<tr>
<td>Inter-functional coordination (IC)</td>
<td>0.76</td>
<td>0.80</td>
<td>0.45</td>
</tr>
<tr>
<td>Market Turbulence (MT)</td>
<td>0.87</td>
<td>0.87</td>
<td>0.57</td>
</tr>
<tr>
<td>Technological Turbulence (TT)</td>
<td>0.83</td>
<td>0.83</td>
<td>0.56</td>
</tr>
<tr>
<td>Competitive Intensity (CI)</td>
<td>0.89</td>
<td>0.87</td>
<td>0.57</td>
</tr>
<tr>
<td>Incremental Innovation (INV)</td>
<td>0.84</td>
<td>0.84</td>
<td>0.57</td>
</tr>
<tr>
<td>Performance (PFMNCE)</td>
<td>0.81</td>
<td>0.83</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Table 2. Fit indices of constructed models

<table>
<thead>
<tr>
<th>Model</th>
<th>Chi-SQ.</th>
<th>d.f.</th>
<th>RMR</th>
<th>RMSEA</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>TLI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement model 1</td>
<td>600.20</td>
<td>314</td>
<td>0.09</td>
<td>0.05</td>
<td>0.91</td>
<td>0.89</td>
<td>0.88</td>
<td>0.93</td>
<td>0.94</td>
</tr>
<tr>
<td>Measurement model 2</td>
<td>132.49</td>
<td>87</td>
<td>0.02</td>
<td>0.04</td>
<td>0.96</td>
<td>0.94</td>
<td>0.97</td>
<td>0.99</td>
<td>0.99</td>
</tr>
</tbody>
</table>

Table 2. CR, AVE and Cronbach’s alpha
centred on their mean value by subtracting individual variable values and its mean value (Gaur et al., 2011). By following hierarchical regression methodology, in the first regression model we entered three dimensions of market orientation; in the second model, we entered competitive intensity, market turbulence and technological turbulence variables. Further, the interaction term of each moderator with a different dimension of market orientation was entered in subsequent models, and the result so obtained is exhibited in Table 5. In the first model it was only the inter-functional coordination ($\beta=0.24$, $p<0.05$), showing a significant positive relationship with the SMEs performance. The relationship of performance with customer orientation was found positive but not significant. The competitor

<table>
<thead>
<tr>
<th>Models</th>
<th>Chi-Sq.</th>
<th>Df</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconstrained Model</td>
<td>1267.05</td>
<td>791</td>
<td>0.95</td>
</tr>
<tr>
<td>CO-COMPO</td>
<td>1276.27</td>
<td>792</td>
<td></td>
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<tr>
<td>CO-IC</td>
<td>1272.09</td>
<td>792</td>
<td>0.95</td>
</tr>
<tr>
<td>CO-MT</td>
<td>1684.28</td>
<td>792</td>
<td>0.90</td>
</tr>
<tr>
<td>CO-TT</td>
<td>1671.95</td>
<td>792</td>
<td>0.90</td>
</tr>
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<td>CO-CI</td>
<td>1694.13</td>
<td>792</td>
<td>0.90</td>
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<td>CO-INV</td>
<td>1658.49</td>
<td>792</td>
<td>0.91</td>
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<tr>
<td>CO-PFMNCE</td>
<td>1349.91</td>
<td>792</td>
<td>0.94</td>
</tr>
<tr>
<td>COMPO-IC</td>
<td>1274.48</td>
<td>792</td>
<td>0.95</td>
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<td>1626.15</td>
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<td>COMPO-TT</td>
<td>1624.86</td>
<td>792</td>
<td>0.91</td>
</tr>
<tr>
<td>COMPO-CI</td>
<td>1631.40</td>
<td>792</td>
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<tr>
<td>COMPO-INV</td>
<td>1617.27</td>
<td>792</td>
<td>0.91</td>
</tr>
<tr>
<td>COMPO-PFMNCE</td>
<td>1366.49</td>
<td>792</td>
<td>0.94</td>
</tr>
<tr>
<td>IC-MT</td>
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<td>MT-CI</td>
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</tr>
<tr>
<td>MT-INV</td>
<td>1299.92</td>
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<td>1595.97</td>
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<tr>
<td>TT-CI</td>
<td>1293.53</td>
<td>792</td>
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</tr>
<tr>
<td>TT-INV</td>
<td>1295.63</td>
<td>792</td>
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<tr>
<td>TT-PFMNCE</td>
<td>1583.14</td>
<td>792</td>
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<tr>
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<td>792</td>
<td>0.95</td>
</tr>
<tr>
<td>CI-PFMNCE</td>
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<td>792</td>
<td>0.92</td>
</tr>
<tr>
<td>INV-PFMNCE</td>
<td>1568.34</td>
<td>792</td>
<td>0.92</td>
</tr>
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</table>
orientation was showing an insignificant negative relationship with the performance variable. Thus our H1a and H1b are not supported and H1c is supported.

The regression models 3 shows that competitive intensity negatively affects the relationship between customer orientation and performance ($\beta=-0.17; p<0.05$), giving support to H2a, but its moderation effect with competitor orientation and interfunctional coordination was insignificant.

The examination of model 4 and 5 provides no evidence about the moderating effect of market turbulence and technology turbulence in between the relationships of different market orientation dimensions and SMEs performance; hence there was no support for H3 and H4.

Finally, the mediating role of innovation between different components of market orientation and performance was tested using bootstrapping procedure. The mediation effect of innovation between customer orientation and performance showed significant indirect effect ($\beta=0.22; P<0.05$), indicating the presence of mediating effect. The calculated VAF=0.59 denotes the mediation as partial mediation in this situation and it supports, H5a. Next, the mediation effect of innovation between competitor orientation and performance was tested and result showed that the indirect effect ($\beta=0.20; P<0.05$) was significant, indicating the presence of mediating effect. The calculated VAF=0.66 denotes the mediation as partial mediation in this situation and it supports, H5b. Lastly, the mediation effect of innovation between inter-functional coordination and performance was tested and the result showed that

Table 5. Regression output

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>t</td>
<td>p-value</td>
<td>B</td>
<td>t</td>
</tr>
<tr>
<td>CO (centered value)</td>
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<td>1.22</td>
<td>.22</td>
<td>.08</td>
<td>.92</td>
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<td>.00</td>
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<td>.18</td>
<td>.11</td>
<td>.93</td>
</tr>
<tr>
<td>MT (centered value)</td>
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<td>-.13</td>
<td>-1.15</td>
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<td>-.15</td>
<td>-1.34</td>
</tr>
<tr>
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<td>-2.16</td>
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<td></td>
<td></td>
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<tr>
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<td>.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CI*IC</td>
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<tr>
<td>MT*CO</td>
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<td>.03</td>
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<tr>
<td>MT*COMPO</td>
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<td>-1.68</td>
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<tr>
<td>MT*IC</td>
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<td>1.18</td>
<td>.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TT*CO</td>
<td>.15</td>
<td>.85</td>
<td>.40</td>
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<td>-1.71</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>TT*IC</td>
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<td>-1.21</td>
<td>.23</td>
<td></td>
<td></td>
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<tr>
<td>R-Sq.</td>
<td>0.06</td>
<td>0.07</td>
<td>0.10</td>
<td>0.10</td>
<td>0.11</td>
</tr>
<tr>
<td>R-Sq. change</td>
<td>0.01 (p-value=0.14)</td>
<td>0.02 (p-value=0.03)</td>
<td>0.00 (p-value=0.32)</td>
<td>0.01 (p-value=0.20)</td>
<td></td>
</tr>
</tbody>
</table>
the indirect effect (β=0.22; P<0.05) was significant, indicating the presence of mediating effect. The calculated VAF=0.57 denotes the mediation as partial mediation in this situation and it supports, H5c.

DISCUSSION

As proposed by Narver & Slater (1990), we broken down market orientation into its constituent elements, such as consumer orientation, competitor orientation and inter-functional coordination, with the basic concept of studying the relation between market orientation and SME performance. The performance variable was assessed by eight indicators developed with literature review and expert review. In addition, as the moderator, the influence of external environmental variables such as competitive intensity, market turbulence and technological turbulence (Kohli, & Jaworski, 1990) was also evaluated. Moreover, the mediating impact of incremental innovation also has been tested. We hypothesized a positive relationship between different components of market orientation and performance. We also hypothesized a significant moderation effect of different environmental factors on the relationship exist between performance and different MO dimensions. In addition, a significant mediation effect was also hypothesized between performance and different MO dimensions. We found a significant positive effect of interfunctional coordination on performance. However, the effect of customer orientation and competitor orientation on SMEs performance was found insignificant. These three dimensions of market orientation accounted for 5.8% of the variance in the SMEs performance. The value indicates around 6% explanation of SMEs performance made by market orientation. Such lower value of $R^2$ 0.06 is not an anomaly, especially in studies carried out in contexts outside the United States. (Pitt et al., 1996), and could be attributed to the presence of the other predictor variables of the performance. The development of market orientation is the result of the long-term investment, and financial constraints makes it difficult for the SMEs. It may be reflected as week relationship between market orientation and performance (Ngai, & Ellis, 1988). The poor link between market orientation and performance may also be proof of a chance to do well without being a strong marketer (Hooley et, al. 1990).

The outcome finds the marginal influence of competitor orientation on the performance of SMEs. One of the potential explanations for this could be attributed to the focus of SMEs on local consumer needs and thus facing less external competition from large-scale manufacturers. (Singh and Gaur, 2009). A less complicated organisational framework of SMEs often makes it easier for them to develop and sustain a strong relationship with their customers, as the amount of competition faced by these organisations has a negligible effect on their results. The insignificant effect of customer orientation on performance could be attributed to the “tyranny of the served market” (Hamel and Prahalad, 1994). This poses the situation where managers only see the world from the eyes of existing customers and are hesitant to take chances to capture new prospects and draw new customers, it is also reflected as low market share, and majority of SMEs operations and strategies revolves around the fulfillment of specific customers specific needs only. Such stagnation in the local market leads to low performance and is a big problem facing SMEs today in developing countries like India. (Christensen and Bower, 1996; Eggers et al., 2013).

The positive and significant effect of inter-functional coordination on performance signifies the critical role of internal coordination while catering customer needs effectively. This is because a well-coordinated company will be able to leverage the intelligence of the company efficiently when meeting the need of the customer. (Alvarez & Busenitz, 2001). Such cooperation has a positive effect on the company’s results as it provides effective strategic influence and cooperative agreements through the various SME functional areas. As SMEs have a small level of operations and hence they require a less complex organizational structure which assists in the quick and smooth flow of information within the organization and it leads to better coordination and performance.

The only moderation of competitive intensity with customer orientation was found significant. Gaur et al., (2011) Similar findings have also been reported within a similar Indian SME environment,
but with a contradiction. Although our results indicated a negative moderation trend, they reported a positive moderation of competitive intensity with customer orientation. While the independent performance impacts of both variables were found to be positive but negligible, the interaction impact of both variables was found significant but negative. The environment of the analysis is a rapidly changing economy characterised by high uncertainty, in which a consumer-oriented business can lead to bad results due to the “tyranny of the served sector” point of view (Hamel and Prahalad, 1994). The growing competitive intensity therefore contributes to the development of a more dynamic market when it interacts with customer focus, especially in contexts such as India (table V). In case SMEs confined their customer orientation only within the confined domain of niche market and due to which they face less competition from the large-scale manufacturer, their long-term performance may be adversely affected. Our findings are consistent to the findings of Subramanian and Gopalakrishna, (2001), Harris, (2001), and Bhuian, (1998) which provides a limited support for the environmental moderator variables effect on firm’s performance.

Incremental innovation partially mediates the relationships between different dimensions of market orientation and performance and is consistent with the findings of Mahmoud et al., (2016) and Olivares, & Lado, (2003). Innovative practises have the ability to exploit markets in order to offer superior customer satisfaction, so SMEs can address the needs of multiple consumers through creativity and thereby improve their productivity. Partial mediation also implies that the conceptualization of being business-oriented should be drawn up in such a way in a volatile market such as India that it contributes to competition to attain superior company results. More specifically, SME managers should concentrate on addressing the articulated needs of current customers through creativity. At one extreme customer orientation was found insignificant predictor of performance in situations like India (high volatile market), but its significant indirect effect with mediating variable innovation on performance suggests a situation where being customer oriented SMEs mean to have such practices which are capable enough to fulfil customers request in an innovative way. Similarly, significant mediation of innovation between competitor orientation; inter-functional coordination and SMEs performance, indicates the paramount aspect of innovation practices. This finding reveals that SMEs are required developing market-oriented innovation practices. Instead of confining into a rigid domain, developing new products, process etc. by considering customer need and probable actions of rivals, will definitely lead to a better firm performance.

**IMPLICATIONS**

For policymakers, this report has few significant implications. Although the impact of MO on performance has long been studied by various researchers, it is still a tedious activity to draw a definitive conclusion. Two viewpoints taken from the analysis are recommended: Firstly, don’t blindly pursue the glorification of being market-oriented to achieve superior performance. Second, SMEs should work on their interfunctional coordination and also focus on new activities at the same time. Innovative practices in combination with supportive inter-functional collaboration may enhance SMEs’ performance. In addition, most SMEs prefer to confine themselves within the niche market, so the risk of being impacted by competition is comparatively low compared to large-scale suppliers, so instead of concentrating more on rivals, they can concentrate mainly on the need for fulfilment of the niche market. And they should plan and build new activities of aligned interfunctional mechanisms in order to do so.

**LIMITATIONS AND DIRECTION FOR FUTURE RESEARCH**

As our study is a survey-based analysis of a particular context, to provide a more sophisticated understanding of the relationship, there is a need for more field-specific research. The context-specific nature of the constructs restricts the generalizability of the result, leading to further research across
different domains. The time limitation does not enable one to cover the larger survey units that can be taken into account in future research where it is possible to take a better view of the industry-specific study.

While the analysis included commonly discussed environmental moderator variables, potential studies may also be achieved by taking other contingency variables such as business size, ethnic discrepancies between owners/managers, legal inequalities, features of the target group, etc. It is also possible to assess the validity of other market orientation scales, such as the MARKOR scale (Kohli & Jaworski, 1990), in various contexts. Finally, the latest study is for manufacturing small and medium-sized businesses, where further studies will be carried out for small and medium-sized enterprises dealing with the service field.
REFERENCES


