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## MARKETING | RESEARCH ARTICLE

# Market orientation and performance of small and medium enterprises in Ghana: The mediating role of innovation

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**Abstract:** The study assessed the impact of market orientation on performance of small and medium enterprises (SMEs); the mediating role of innovation. The study was conducted on a total of 500 SMEs out of which 391 responses were received representing 78.2% response rate. Purposive and convenience sampling techniques were adopted in selecting the SMEs and questionnaires used to collect data. Explanatory research design was used. The study used Structural Equation Model (SEM) for data analysis and explored various relationships as presented in the hypothesis. The findings indicated that, market orientation variable of customer orientation positively and significantly predict performance; while competitor orientation positively predicts performance; however, not significant. Inter-functional orientation inversely and non-significantly impacts on performance of SMEs in Ghana. Innovation partially mediates between customer orientation and performance. Innovation fully mediates between inter-functional orientations and performance whereas innovation has no mediation between competitor orientation and performance. Businesses, particularly SMEs are encouraged to adopt and embark on market orientation practices and implement innovative practices so as to maximise performance.



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### PUBLIC INTEREST STATEMENT

The development of nations, particularly those of the developing world, hinges on the effective and efficient performance of small and medium enterprises (SMEs) and/or entrepreneurship. Entrepreneurship development is also linked to innovation. Every innovative idea must be acceptable to buyers for it to be sustainable. Thus, this study sought to find out the relationship between the performance of SMEs and market orientation through innovative practices. The study revolved around SMEs and the outcome was that SMEs that are customer focused and innovative perform very well. The study thus encourages SMEs to adopt and/or embark on market orientation practices and implement innovative activities so as to maximise performance.

**Subjects: Strategic Management; Entrepreneurship and Small Business Management; Marketing; Marketing Research;**

**Keywords: Market orientation; innovation; performance; small and medium enterprises; Ghana**

## 1. Introduction

Market orientation has been seen as the degree to which businesses are inclined to carry out the marketing concept (Jaworski & Kohli, 1993). Homburg and Pflesser (2000) in their submission on market orientation gave cultural and behavioural meanings to the concept. With respect to behavioural approach, market orientation is viewed as a set of processes with respect to philosophy of a firm in areas of wide generation of intelligence from the market, spreading information across functional areas, and as well as a firm's broad responsiveness to intelligence acquired (Kohli & Jaworski, 1990). Explaining cultural dimension of market orientation, the firm is viewed as most efficient and effective in creating the relevant behaviour for developing superior value for clients hence resulting in superior performance. The cultural viewpoint with respect to market orientation looks at orientation from customers, orientation from competitors, as well as inter-functional orientation as strategic means of identifying the needs and wants of clients and satisfying them more than competitors (Narver & Slater, 1990). Firms are being urged to have information about customers' needs and wants, and to critically examine exogenous features that persuade customers' needs and preferences by way of coordinating and reacting appropriately to clients' preference based on the intelligence gathered. A study by Kumar, Jones, Venkatesan, and Leone (2011) found that, firms with positive market orientation record higher business performance than businesses with lower level of market orientation. Thus to state that businesses that embrace market orientation concepts develop customer loyalty satisfaction with the organization's products and create superior customer value which results in superior organizational performance (Dadfar, Brege, & Semnani, 2013). There is therefore the need for SMEs and in particular those in developing countries to welcome the concept of market orientation and its applicability in their lines of operations if they want to be competitive.

Market orientation and its effects on performance have been widely studied with researchers coming into consensus of the positive outcome. Mention should be made of previous studies placing emphasis on market orientation in large companies to the neglect of small businesses. Of late, researchers have begun studying application of market orientation in SMEs (Blankson, Motwani, & Levenburg, 2006; Keskin, 2006). Inadequate resources have become a militating factor to effective implementation of marketing strategies by SMEs. These challenges discussed above call for the adoption of market orientation and implementation in the area of SMEs operation in Ghana (Gilmore, Carson, & Grant, 2001). The current study is crucially important as it addresses the gap of mediating market orientation and performance of small businesses with innovation. This is explained by the fact that the studies mentioned earlier have no mediating factor, particularly innovation.

Bringing innovation into a firm's operations may in one way or the other be seen as taking a new form; be it a product, an administrative system, technology or programme with the aim of increasing performance. An innovative product in the market has a greater potential in terms of increasing productivity gains (Mohnen & Hall, 2013). It is believed that process innovation is a priori expected to have more prominent positive effect on productivity they have direct relationship in cost reduction (Mohnen & Hall, 2013). Tuan, Nhan, Giang, and Ngoc (2016) found changes in organizational process and marketing innovation, respectively, have the significantly positive impact on firm's performances. It is therefore important to state that, whatever motivates businesses to innovate, the rational is to guarantee adaptive behaviour, improving performance in the long run or serve current and potential customers better (Damanpour, Walker, & Avellaneda,

2009). Brown and Guzman (2014) concluded that firms that have more propensity to innovate are the largest, with high technological intensity and market share as performance indicators.

## 2. Literature review

### 2.1. Market orientation

The development of the concept of market orientation has led many researchers and scholars to contribute to various facets of business as to how it can be applied. Researchers have suggested market orientation as key to a firm's success and hence enhance performance (Jogarathnam, 2017; Najafi-Tavani, Sharifi, & Najafi-Tavani, 2016). Market orientation contributes significantly to various areas of business activities (Narver & Slater, 1990). For decades, the study of market orientation and interrelationship effect on performance among small businesses has been studied (Ladipo, Rahim, Oguntoyibo, & Okikiola, 2016). Researchers viewed market orientation as a business philosophy that focus on gathering information from customers and competitors and leveraging on synergy of shared efforts in generating value for customers and the business as a whole (Julian, Mohamad, Ahmed, & Sefnedi, 2014). The dynamic nature of the business environment has called for degree of market orientation toward the customer, competitors, and the extent of synergy across its business units (Ladan et al., 2014). It is therefore important to note that an organization is not likely to survive once it does not uphold a market-oriented culture in their business activities (Attia, 2013).

The concept of market orientation has been viewed as the culture that mainly effectively and efficiently create superior value for customers through customer orientation, competitor orientation as well as inter-functional coordination (Narver and Slater (1990). Customer orientation places customer's interest first and requires a thorough understanding of client needs so as to fashion products or services of superior value; competitor orientation gathered information about competitors help the firm to reposition its offering so as to prepare for the future survival of the entity and inter functional means that, all the department in the business must coordinate well with each other in all aspect of the business operations (Narver & Slater, 1990). Again, others see market orientation as part and parcel of firms' culture and process as it may be facilitated by factors that are internal to the organization (Harris, 2000; Harris & Ogbonna, 2001). Market orientation is very important to businesses as a result of intense global competition and fluctuations in consumer needs, companies must organize their activities with a strong focus on their markets, in order to survive (Kurtinaitienė, 2005; Mahmoud, Kastner, & Yeboah, 2010). Looking critically at explanations given by authors with respect to market orientation, one theme that runs through the meaning is that, businesses need to gather some sort of information from the business landscape and implement decisions based on such information in order to create value for stakeholders. One can therefore define market orientation as the effort of knowing what customers want by means of acquiring some level of ideas and then implementing such ideas so as to create value for clients and remain competitive. This definition is not far from the works of Narver and Slater (1990) submission on the concept of market orientation. The execution of a suitable marketing activity therefore promotes superiority of a firm's activities and strengthens the competitiveness and market share of the firm (Ghouri, Khan, Ur, & Malik, 2011). It therefore becomes damaging for businesses to ignore market oriented activities in their business setup (Theodosiou, Kehagias, & Katsikea, 2012).

### 2.2. Innovation

Innovation consists of any kind of product, process, or organizational practices that adds something towards sustainable development (Doran & Ryan, 2014). Abdi and Ali (2013) argue that, innovation strategies serve as a means that promotes the implementation and development of new services and products. Anning-Dorson (2017) perceived innovation as a process and/or outcome of undertaking changes in an organizational conduct by pursuing new activities, routines and processes in service to enhance the delivery of significant benefits to customer, the release of capabilities within the service firm and the competitive posture of the firm. One may not be wrong to say that, innovation is usually used to find out those innovations that play their part to a sustainable atmosphere through the development of ecological improvements (Becker & Egger, 2013). Innovation plays an important role

in how well a business entity improve its performance and customer satisfaction efforts. Introducing innovation into the firm is aimed at improving performance and competitiveness of such business (Agarwal, Krishna Erramilli, & Dev, 2003; Calantone, Cavusgil, & Zhao, 2002; Keskin, 2006). Research studies conducted in developing economies shows that, innovation investments have been found to be positively related with performance (Likar, Kopač, & Fatur, 2014).

An innovation can take the nature of coming out with new product, new production technology or a new strategy regarding employees that the businesses does not practice formerly (Damanpour et al., 2009). Stokes (2014) posit that, involvement of customers in organizational innovation teams is rapidly becoming more prevalent. Understanding consumer needs and knowing their purchase behaviour is a critical insight for managers involved in innovations. Gungor and Gozlu (2012) also viewed customer expectation and demand as factors that influence market innovation, as consumers are the judges of all innovation. It is therefore important to state that, gaining knowledge on customers is positively associated with innovation and innovation performance (Chuang, Morgan, & Robson, 2015). Consumers are the best judges of the innovation; and therefore have influence on the extent to which innovation strategy will influence on firm performance (Saemundsson & Candi, 2014). Others also see innovation as managerial and organizational engagement that suggest new ways of promoting corporate responsibility by way of rebuilding the relationship between organization and the customers it serves. Firms tend to innovate due to pressure from the external environment which may take the form of competition, deregulation in the industry, scarcity of limited resources, and higher customer demands. It could also be as a result of internal organizational alternatives which may include gaining unique competencies, attaining a higher level of ambition, and improving the extent of quality service delivery (Damanpour et al., 2009).

Over the years, research on innovation has been dominated by the manufacturing and technology leaving service behind (McDermott & Prajogo, 2012). The demands of customers have been suggested as is a great determinant of innovation (Chen & Tsou, 2012; Pantano & Viassone, 2014). Organizational performance contains the definite output or outcomes of an organization as measured against its anticipated outputs or goals and objectives (Hooshmand & Dehafarin, 2012). Extant literature has severally confirmed the positive relationship exist between innovation and firm performance (Omri, 2015). Entrepreneurship development has also been based on innovative ideas and use of innovative technologies to enhance firms' performance (Tuan et al., 2016). Whatever motivates businesses to innovate, the purpose is to facilitate adaptive behaviour, and changing trends in the firm as a way of improving and enhancing the level of performance (Agarwal et al., 2003; Calantone et al., 2002). Innovation have its own determinants, attribute plus contribution to business performance, it is not too successful to implement innovations without a holistic view. One critical issue with respect to market orientation is the ability of the business to inculcate responsive market orientation in their approach thereby bringing something new on board. Firms that tend to adopt responsive market orientation will concentrate on appreciating the expressed needs of clients in their served segments or markets, continue to upgrade in their activities in a way that is new in the business operations (Li, Zhao, Tan, & Liu, 2008). The contribution of innovation on firm performance continues to remain ambiguous (Kyrgidou & Spyropoulou, 2013; Story, Boso, & Cadogan, 2014).

### **2.3. Performance of business**

Business performance is a company's ability to adapt to the business environment and develop a good strategy that complement management's ability to create harmony between the environment and internal company (Zainudin & Sugiono, 2016). Organization performance has also been explained as the capability of firm to accomplish its goals and objectives with the help of talented administration, good governance and have a constant rededication to accomplish business objectives. As far as business performance is concerned, it can be perceived from two perspective: judgmental performance and objective performance (Agarwal et al., 2003). Tuan et al. (2016) argued that, enterprise performance can be identified as a multidimensional concept that can be measured by three indicators: production,

finance and marketing. Brown and Guzman (2014) concluded that firms that have more propensity to innovate are the largest, with high technological intensity and market share. Researchers have indicated that judgmental measures of performance are significant to profitability whereas objective measures of performance throw more light on profitability in most service organizations (Agarwal et al., 2003). One of the most effective strategic options available to the firm in dealing with environmental issues that affect business performance is innovation (Ordanini, Parasuraman, & Rubera, 2014).

Performance is seen as the desire to evaluate the extent of success a firm has achieved, be it a large or a small firm (Akande, 2011). Businesses can be evaluated on the basis of their size, number of employees, working capital as well as profitability. Lately, researcher has paid increasing attention to how a firm improves performance in a dynamic environment (Bayer, Tuli, & Skiera, 2017; Cacciolatti & Lee, 2016). However, Researchers thought vary in terms of defining organization performance most of the researchers used the term performance to state the collection of measurement of input and output efficiency and transactional efficiency. There are measures used to evaluate the performance of a business. Some used objective performance measures of return on equity (ROE), sales growth and return on asset. Minai and Lucky (2011) gave business performance measures of financial and non-financial dimensions of measuring performance. Financial include market share, level of debtors and return on asset. One can therefore say that; the performance of firms is crucial in business activities. Trkman and McCormack (2009) posit that when organizations evaluate their level of performance, it will help them to know if they are progressing or not.

#### **2.4. Market orientation and performance**

Market orientation is very significantly important in aiding organizations to have clear understanding of the market place and develop suitable and proper products and service strategies to meet customer needs and requirements (Liu, 2009). A market orientation guarantees a customer focused strategy for market knowledge base generation which is monitored by coordinated, inter-functional marketing efforts to achieve long-term firm success. A number of researchers have reported positive relationship between market orientation and firm performance. Julian et al. (2014) believed that, market orientation represents a major marketing strategy that can be adopted by business organization to improve its performance. The contradictory results reported by previous studies suggest that the relationship between market orientation and performance may be more complex and the impact cannot be viewed in a simple manner (Yusif, 2012).

Customer orientation as an aspect of market orientation has to do with the culture of placing customers' interest first and requires a thorough understanding of client needs so as to fashion products or services of superior value (Narver & Slater, 1990). Customer orientation is commonly seen as an aspect of firm's strategic means of delivering desires value to clients (Zhou, Yim, & Tse, 2005). The main aim of customer orientation is to lay a solid foundation of gaining information concerning current and future clients for strategic actions based on sufficient information provided by customer, hence resulting in creating improved superior value to the customer base (Narver & Slater, 1990). Businesses continuously evaluate these alternatives to understand how the greatest effect can create sustainable better value for current and potential customers. Therefore, to achieve the highest level of performance and to maintain firms long term capacity and creates a mutually beneficial relationship with the customer, market orientation should be at the heart of organization.

For businesses to be competitive, it is required of them to know the weaknesses and strengths as well as capabilities and activities of competitors. Information that is gathered about competitors helps the firm to reposition its offering so as to prepare for the future survival of the entity (Narver & Slater, 1990). Competitor orientation as part of market orientation is seen as an organizational strategy to improve on the products they deliver to customers. When there exists a coordinated maximization of the firm's resources that aims at performing better in the eyes of the customer, it is seen as the organization practicing inter-functional orientation (Narver & Slater, 1990).

The positive impact market orientation has on performance has been supported by many researchers. Narver and Slater (1990) established a positive relationship between market orientation and business performance for that matter profitability where a market orientation is predominantly concerned with learning from various forms of contact with customers and competitors in the market (Slater & Narver, 2000). The authors further extended their original study by taking into account the influence of entrepreneurial orientation on profitability. An entrepreneurial orientation entails such behaviours as innovativeness, risk taking and competitiveness which may improve the prospects for developing a breakthrough product or identifying an un-served market segment (Slater & Narver, 2000). Thus, the study hypothesized the following:

### **2.5. Mediating role of innovation**

A variable is viewed as a mediator with respect to the fact that, it accounts for the relation that exists between the predictor variable and the criterion (Baron & Kenny, 1986). MacKinnon, Krull, and Lockwood (2000) have explained that mediation, suppression, as well as confounding effects are mathematically equivalent, and as such they are examined by searching for various patterns of relationship that exist among variables. Whiles studies that adopt market and its effect on performance shows positive effect, other studies too have not found significant relationships hence a need to introduce a mediating factor. Baron and Kenny (1986) believed that, an immediate variable serves as a mediator when it is introduced within a direct relationship resulting in diminishing the directed relationship (thus complete mediation) or at least significantly reduce (Partial mediation effect). Johnson, Scholes, and Whittington (2008) believed that, a market that is focused strategically and flexible could serve as a possible mediator between market orientation and performance relationship. Researchers have established that, in the case where a predictor significantly affect a mediator, and result in the mediator significantly affecting the outcome, though there is a primary relationship between the predictor and the outcome which may not be significant, such instance called an inconsistency in mediation (MacKinnon et al., 2000).

Innovation is seen among scholars and practitioners as a critical feature in the today's business landscape. Businesses are concentrating their energies on bringing innovation to make them competitive and sustained them in the long run when the industry activities change as it doubles as a strategic tool to invention and building new markets. There has also been enviable increasing trade interest and industry and as it serves as the catalyst for increase performance, businesses will be competitive (Kim, 2003). Innovation must therefore be introduced between market orientation and performance so as to facilitate performance of businesses. A business been innovative is considered as competitive in nature as it tend to adopt new working procedures, creating of solutions to problems that confront clients as well as creating value by means of delivering unique products (Kocher, Kaudela-Baum, & Wolf, 2011; Miettinen, Samra-Fredericks, & Yanow, 2009). There is therefore a need for businesses that adopt market orientation approach in their line of operation to look at considering innovation in their activities. Shehu and Mahmood (2014) conducted a study among 640 SMEs in Nigeria to establish if organizational culture mediates between market orientation and performance. Even though the mediation test was not supported; the correlation result shows a good relationship between market orientations and performance. Thus, it is hypothesized that innovation would mediate the relationship between market orientation and performance.

**H<sub>2a</sub>.** *Innovation mediates the relationship between customer orientation and business performance in SMEs*

**H<sub>2b</sub>.** *Innovation mediates the relationship between competitor orientation and business performance in SMEs*

**H<sub>2c</sub>.** *Innovation mediates the relationship between inter-functional orientation and business performance in SMEs*

### 3. Methodology and measurement of constructs

The study adopted explanatory research design approach. The study population consisted of SMEs owner managers in the areas of manufacturing and services with 500 SMEs sampled. Convenience and purposive sampling techniques were used in selecting respondents. Questionnaires on a 7-point Likert scale ranging from very strongly disagree (1) to very strongly agree (7) to the statements was used to collect data from owner managers. The study made use of Statistical Package for Social Science (SPSS) and Stata (version 13) in conducting the analysis. Confirmatory Factor Analysis (CFA) was done after which problematic indicators that loaded poorly were taken out. Structural Equation Model (SEM) was the main tool used to estimate the analysis. The study used market orientation scale measurement from Narver and Slater (1990) construct to measure market orientation. MKTOR by Narver and Slater (1990) measured market orientation through customer orientation, competitor's orientation and inter-functional orientation. Performance of SMEs was measured by objective performance. Objective performance variables include net profit, market share, revenue growth and accounts receivables. These measures were also used by Agarwal et al. (2003) in their study. Innovativeness of the business was measured by how actively SMEs seeks ways of doing things new, constantly making changes to lines of business operations among others were used in the studies of (Calantone et al., 2002).

### 4. Results and discussion

#### 4.1. Reliability and validity

The study made use of CFA to test reliability and validity of data. After the purification, construct validity (0.8 and above) was achieved, factor loading (0.4 above) was good, and Cronbach alpha coefficient above 0.7 were achieved. Correlation analysis and Variance Inflation Factor (VIF) was conducted and found that, constructs are valid and the problem of multicollinearity is not a threat to this analysis. CFA was done to confirm appropriate variables and SEM was used with path diagram in the analysis. The study used SEM for the analysis because it produces benefits not possible with first-generation statistical methods (Regression and correlation). The CFA was programme to find out any problematic indicators that the construct might seek to measure. After purification, numerous items were removed from the models because they loaded poorly on the factor. The criterion used was 0.4 as advised by Bagozzi and Yi (2012). Final indicators were displayed in the list of items, respective standardized factor loadings and t-values as well as results of reliability and validity tests. The positive and significant loadings confirm convergent validity of measures used in the study. The result shows that, alpha reliability, discriminant validity and composite reliability are acceptable; thus the indices exceed the minimum cut-off criteria of .70, .50 and .60, respectively (Bagozzi & Yi, 2012). The Average Variances Extracted (AVE) was greater compared to shared variances between constructs, meaning satisfactory discriminant validity (Fornell & Larcker, 1981). The coefficient of determination for the thesis model is 0.625 thus 62.5% of innovation and performance could be explained by market orientation. Other fit indexes to test for a good and acceptable construct also confirmed how good the model is. It is generally required that RMSEA should be less than 0.08, CFI must record 0.95, TLI must be 0.95 and above or more, and SRMR must be less than 0.03. How good the constructs are can also be ascertained by calculating if the chi-square divided by the degree of freedom is less than 5. Literature recommends that, using the chi-square divided by the degrees of freedom in testing for fitness is hard to get in situations where the sample is above 200 and that as such should be matched with other fit indices. The effect of market orientation on performance records chi-square 0.000; degree of freedom 0.000; P-values 0.000; CFI 1.0; RMSEA 0.000; TLI 1.000. As such basing on other criteria, it can be concluded that the market orientation constructs, innovation and performance are all valid and strong because all the fit indices fall within the acceptable or recommended points. Table 1 below shows factor loadings, Cronbach alpha, construct validity (CR), Variance Inflation Factor (VIF), Average AVE, and Highest correlation (HC). Table 1 below shows validity and reliability test from CFA

For a good construct, the general requirement is that: root mean squared error of approximation (RMSEA) should be less than 0.08; comparative fit index (CFI) or Tucker-Lewis index (TLI) should be 0.95 or better; whereas standardized root mean squared residual (SRMR) must be less than 0.08; Variance Inflation Factor (VIF) should be less than 10; Average Variances Extracted (AVE) should be higher than the highest correlation. The alternative is to calculate if the chi-square divided by the Degrees of Freedom (df) is less than 5. However, because the chi-square and degrees of freedom quotient of 5 or a non-significant chi-square (indicative of a good fit) is always difficult to obtain when the sample size is much over 200; it is recommended that, it is used in addition to the other fit indices, (Hu & Bentler, 1999; Newsom, 2012). All the indices showed were all satisfactory meaning the model is fit. Table 2 below shows goodness of fit indices from the CFA result conducted.

#### **4.2. Correlation matrix**

To check whether the strength of relationship between the variables will affect further statistical analysis, a multicollinearity test was performed using the variance inflator factor (VIF) and the correlation statistics. For robustness, it is recommended that the VIF should be below the value 10 whereas the correlation statistics should not exceed 0.7. All the variables fall within range as suggested in literature. Therefore, it can be concluded that constructs are valid and the problem of multicollinearity is not a serious threat in this analysis. The correlation matrix is shown in Table 3 below

#### **4.3. Demographic information of respondents**

The study involved a sample of 391 respondents. A descriptive summary of the respondents shows that most of them are female (217) representing 55.5% and 174 representing 45.5% are males. This confirms the general notion that females are found to engage in SMEs to their male counterpart. Focusing on the age characteristics of the respondents, it is observed that, majority of the respondents 285 (representing 72.9%) fall within 21–40 age bracket. This is followed by respondents whose ages are between 41 and 50 years (61) representing 15.6%. A total 32 respondents representing 8.2% fell within the ages of 51 years above. Again, a total of 13 out of 391 respondents were found to belong to the age class of below 20 years; representing 2.3%. The results indicate that the SMEs sector is dominated by young and energetic working class who are fighting hard to end living and establish their own business. Majority of SMEs are into services. In other words, while 366 representing 93.6 per cent of the sample is in the services sector, only 25 representing 6.4 per cent are in the manufacturing sector. This confirms the dominance of the service sector as far as SMEs in Ghana are concerned. Majority of SMEs are sole proprietorship business. In other words, while 257 representing 65.7% of the sample is owned by one man, 73 representing 18.9 per cent are family business, and 61 representing 15.6% are partnership business. This confirms the dominance sole proprietorship form of ownership as far as SMEs in Ghana are concerned. Demographic information is presented in Table 4 below:

#### **4.4. Impact of market orientation on firm's performance**

The study assessed the effect of market orientation on SMEs performance. The variables used to measure market orientation are customer orientation, competitor orientation, and inter-functional orientation. The result shows that, the coefficient value for customer orientation is .2985,932 showing a positive impact on SMEs performance. *Cet par*, when competitor orientation and inter-functional orientation are held constant, if the index of customer orientation goes up, performance will go up. Customer orientation is statistically significant and the variable is making contribution to the prediction of SMEs performance with a P-value of .000 recording a Z statistic of 5.71. This finding confirms study in Malaysia SMEs that found positive association of customer orientation and competitor orientation on performance. Hypothesis-H<sub>1a</sub> is therefore supported. This implies that, for SMEs in Ghana to achieve superior performance outcome in business, SMEs' practitioners must operate on customer orientation approach so as to compete favourably in their business practice. The result shows that, the coefficient value for competitor orientation is .07958 showing a positive effect on SMEs performance. *Cet par*, when the other independent variables (customer orientation and inter-functional orientation) are held constant, if the index of competitor



**Table 1. Validity and reliability test using CFA**

<b>Variables</b>	<b>Factor loading</b>	<b>T-values</b>
<b>Customer Orientation: CR = .806; AVE = .680; VIF = 1.76; HC = .5797 Alpha = .7531;</b>		
<i>We have a strong commitment to our customers</i>	.5,791,864	14.26
<i>We encourage customer comments and complaints</i>	.7,987,958	24.09
<i>We assess customer satisfaction on a regular basis</i>	.775,867	22.92
<i>After-sales service is an important part of our business strategy</i>	.5,275,405	12.17
<b>Competitor orientation: CR = .831; AVE = .70; VIF = 2.04; HC = .6648 Alpha = .7746</b>		
<i>We regularly monitor our competitors' marketing efforts</i>	.6,281,676	16.92
<i>We frequently collect information on our competitors</i>	.8,033,111	28.10
<i>We often discuss competitors' actions</i>	.8,243,356	29.35
<i>We are aware competitors will want to take our customers</i>	.490,982	11.15
<b>Inter-Functional Orientation: CR = .906 AVE = .807; VIF = 2.95 HC = .6227 Alpha = .9028;</b>		
<i>Market information is shared inside our organization</i>	.7,500,275	29.70
<i>There is involvement of all employees in preparing in planning</i>	.8,071,639	38.32
<i>We do a good job integrating the activities inside our organization</i>	.8,421,567	45.38
<i>We regularly have meetings to discuss market trends and developments</i>	.8,308,742	42.88
<i>All the department function well to promote growth of the business</i>	.8,035,769	37.66
<b>Innovation: CR = .856; AVE = .756; Alpha = .856; VIF = 2.21; HC = .6227</b>		
<i>We actively seeks ways of doing things new</i>	.6,021,249	16.27
<i>We constantly make changes to our business operations</i>	.7,595,689	27.64
<i>Because of competition, we always do new things for our customers</i>	.8,177,787	33.31
<i>We always make changes and bring new things to our products</i>	.8,156,817	33.25
<b>Performance: CR = .883 AVE = .762 Alpha = .8241; HC = .5968</b>		
<i>Our net profit has increase business (Net profit)</i>	.8,123,301	35.16
<i>There has been revenue growth in our business (Revenue Growth)</i>	.8,871,578	45.65

(Continued)

**Table 1. (Continued)**

Variables	Factor loading	T-values
<i>We have increase our customer base (Market Share)</i>	.7,784,973	31.48
<i>Our debtors pay us regularly (Accounts Receivables)</i>	.5,185,247	12.77

Cronbach alpha: alpha, Construct validity (CR), Variance Inflation Factor (VIF), Highest Correlation (HC). Average Variances Extracted (AVE); CUSTO: Customer Orientation; COMPO: Competitor Orientation; INTERO: Inter-functional Orientation PERF: Performance INNOV: Innovation.

**Table 2. Goodness of fit indices from CFA results**

	chi-square	d.f	$\chi^2/d.f$	p-value	RMSEA	CFI	SRMR	TLI
CUSTO	4.438	2	2.219	.109	.056	.994	.017	.982
COMPO	6.682	2	3.341	.035	.077	.990	.021	.969
INTERO	2.654	5	.5308	.753	.000	1.000	.007	1.004
INNOV	1.245	2	.6225	.537	.000	1.000	.007	1.004
PERF	1.734	2	.867	.420	.000	1.000	.008	1.001

$\chi^2$  = Chi-square d.f. = Degree of freedom;  $\chi^2/d.f$  = normed Chi-square; RMSEA = root mean standard error of approximation; CFI = comparative fit index; SRMR = standardized mean square residual; CUSTO: customer orientation; COMPO: competitor orientation; INTERO: inter-functional orientation PERF: Performance INNOV: innovation

**Table 3. Correlation matrix**

	Mean	S.D	PERF	INNOV	CUSTO	COMPO	INTERO
CUSTO	5.3184	.86,655	1				
COMPO	4.8702	1.02279	.5968**	1			
INTERO	4.9606	1.09609	.5576**	.5236**	1		
INNOV	5.0850	.95,707	.4675**	.5183 **	.5125**	1	
PERF	4.8811	.92,590	.4777**	.6227**	.5797**	.6648**	1

Correlation is significant at the 0.01 level (2-tailed).

CUSTO: customer orientation; COMPO: competitor orientation; INTERO: inter-functional orientation PERF: performance INNOV: innovation

orientation goes up, the index of performance will go up.  $H_{1b}$  is supported. However, competitor orientation is not statistically significant and the variable is not making any unique contribution to the prediction of SMEs performance with a P-value of 0.095 recording a Z statistic of 1.67. This supports the work of other authors that saw positive impact of competitor and customer orientation on SMEs performance (Agarwal et al., 2003). Again for SMEs in Ghana to achieve superior performance outcome in business, SMEs' practitioners must operate on competitor orientation approach so as to increase their strength in their line of business. The results show an inverse relationship between inter-functional orientation and performance with a coefficient value of  $-0.0977913$ . An increase in inter-functional coordination activities among SMEs will lead to a fall in their performance all things being equal if the other independent variables (customer orientation and competitor orientation) are held constant.  $H_{1c}$  is not supported. Inter-functional orientation is not statistically significant and the variable is not making any unique contribution to the prediction of SMEs performance recording a P-value of 0.068 recording a Z statistic of  $-1.83$ . This implies that, SMEs by their nature in Ghana do not engage in inter-functional orientation activities

**Table 4. Demographic variables**

Variables	Frequency	Percentage (%)
Gender		
Male	174	44.5
Female	217	55.5
Age		
Under 20 years	13	2.3
21–30 years	147	37.6
31–40 years	138	35.3
41–50 years	61	15.6
51 years and above	32	8.2
Line of Business		
Manufacturing	25	6.4
Services Sector	366	93.6
Number of employees		
Less than 5	164	41.9
6–29	185	47.3
30–99	42	10.7
Form of Business		
Sole proprietor	257	65.7
Partnership	61	15.6
Family business	73	18.7

by relating well with networks that could enhance their performance rather tend to operate individually. The results are presented in Table 5 below

#### **4.5. Mediating effect: direct, indirect, and total effect**

Mediation seeks to identify and explicate the mechanism that underlies an observed relationship between an independent variable and a dependent variable via the inclusion of a third explanatory variable, known as the mediator. Rather than hypothesizing a direct causal relationship between the independent variable and the dependent variable, a mediation model hypothesizes that the independent variable causes the mediator variable, which in turn causes the dependent variable. Several methods have been proposed for testing hypotheses with respect establishing mediation (MacKinnon et al., 2000). One of the commonly used methods is the causal steps strategy, propounded by Baron and Kenny (1986), that which the investigator estimates the paths of the model, using ordinary least square (OLS) regression or SEM, which evaluate the degree to which several criteria are met. Baron and Kenny (1986) suggested three important but not sufficient conditions that should be met so as to claim that mediation is happening. For mediation conditions: X (Independent variable) is significantly related to M (Mediator); M is significantly related to Y (Dependent variable). The relationship of X to Y diminishes when M is in the model. It implies that, each of the three constructs should show proof of a nonzero monotonic association with each other, and the relationship of X to Y must decrease substantially upon adding M as a predictor of Y (Kenny, Kashy, & Bolger, 1998).

##### **4.5.1. H2a: partial mediation**

The total effect for customer orientation, .3,294,347, is the effect we would find if there was no mediator in the model. It is significant with a z of 5.58. The direct effect for customer orientation is .2,985,932 which while still significant (z = 5.71). The indirect effect of customer orientation, that passes through innovation is .0308415 and is also statistically significant (z = 1.97). Proportion of total effect mediated =  $.0308415 / .3,294,347 = .10$ . Ratio of indirect

**Table 5. Effect of market orientation on performance**

Independent Variables	Coef.	OIM Std. Err	Z	P> z	[95% Conf. Interval]	
CUSTO	.2,985,932	.052297	5.71	0.000	.196,093	.4,010,934
COMPO	.07958	.0477127	1.67	0.095	-.0139352	.1,730,951
INTERO	-.0977913	.0535602	-1.83	0.068	-.2,027,673	.0071847
Dependent variable	<b>Performance</b>					

effect to direct effect =  $.0308415 / .2,985,932 = .10$ . Ratio of total effect to direct effect =  $.3,294,347 / .2,985,932 = 1.10$ . It can be seen that, the proportion of total effect that is mediated is almost .10 and is as equal as the ratio of indirect effect to the direct effect that is mediated .10. The total effect is about 1.10 times the direct effect. The total effect of customer orientation on performance is insignificantly reduced after controlling for innovation. Base on the assumption by Baron and Kenny (1986) there is partial mediation. The implication is that, the presence of customer orientation on its own will impact positively on performance. There is also another way that performance can be enhanced and thus through innovation. SMEs in Ghana must therefore take innovation activities seriously as it plays an important role in how well their performance will increase when it comes to customer orientation.

#### 4.5.2. H2b: no mediation

The study expects innovation to mediate between competitor orientation and performance. Examining the standard estimates of the mediation model, it is observed that the direct paths from competitor orientation to performance is positive but not significant ( $\beta = 0.078$ ;  $p > 0.095$ ). The indirect path of competitor orientation through innovation to performance is also positive, however, not significant ( $\beta = 0.009$ ;  $p > 0.508$ ). The total effect for competitor orientation is 0.896 (positive) but not significant with a z-value of 1.79. Based on the assumption by Baron and Kenny (1986), there is no mediation. The implication is that, as far as competitor orientation is concerned; innovation has no role to play. SMEs in Ghana by their nature can achieve success in performance of their businesses even if they decide not to employ any innovativeness in their business when it comes to competitor orientation. Competition among SMEs in Ghana is not so intense and therefore do not need any unique information about their competitors or do something competitors are not doing to be able to boost performance.

#### 4.5.3. H2c: full mediation

The researcher did expect innovation to mediate between inter-functional orientation and performance. The findings suggested an inversely non-significant direct path ( $\beta = -0.098$ ;  $p > 0.068$ ). The indirect path when INNOV was introduced shows a positive and significant relationship ( $\beta = 0.042$ ;  $p < 0.012$ ). The total effect is therefore not significant and inversely related ( $\beta = -0.056$ ;  $p > 0.313$ ). H<sub>2c</sub> can therefore conclude based on the assumption of Baron and Kenny (1986), that, INNOV fully mediates INTERO and PERF. The implication for SMEs is that, the presence of inter-functional orientation will not necessarily boost performance unless SMEs implement innovative practices into their business. SMEs in Ghana must therefore develop strong innovative practices as their generation of information effort may yield increase performance if they implement innovative actions. Direct, indirect and total effect is shown in Table 6

#### 4.6. Managerial implications

The business environment is dynamic and has called for pragmatic effort on the part of managers to adopt appropriate strategies so as to be competitive. The use of technology in business has also become necessary in order to meet the needs of customers. The study found market orientation

**Table 6. Mediation analysis (direct, indirect effect, and total effect)**

H	Path	Direct Effect (D)	Indirect Effect (I)	Total Effect (D + I)	Form of Mediation
H <sub>2a</sub>	→→CUSTO INNOV PERF	.299(.05)**	.104x.296 = .031 (0.02)*	.329(0.05)**	Partial
H <sub>2b</sub>	→COMPO INNOV PERF	.078(0.05)	.030x.296 = .009 (0.01)	.089(0.05)	No Mediation
H <sub>2c</sub>	→→INTERO INNOV PERF	-.098(0.05)	.143x.296 = .042 (0.02)*	-.056(0.06)	Full Mediation

and innovation as critical determinants in enhancing performance of SMEs. Managers must therefore endeavour to find new ways of doing things in their lines of operations. This has called for strategic allocation of resources, continues finding out the needs and wants of customers, monitoring competitor’s activities as well as integrating all the functional areas of the business for coordinated efforts. Much resources should be invested in research and development in order to improve on business performance. Appropriate technology applications must be introduced as it serves as catalyst for performance of firms. Managers of businesses must avail themselves to training, attending seminars and workshops in order to sharpen their managerial skills.

#### 4.7. Conclusion and policy implication

In spite of non-agreement on the appropriateness of the market orientation construct developed and tested principally on studies of large firms to SMEs, this study demonstrates that when market orientation is applied by an SMEs in Ghana, market orientation will positively influence their level of performance in their business activities. It is also worth mentioning that, innovation plays a critical role and impact positively on performance of SMEs in general for that matter Ghanaian SMEs. In formulating policies to govern the activities of SMEs in Ghana, stakeholders such as government, National Board for Small Scale Industry, Association Ghana Industries (AGI) and other enterprise support organizations must inculcate in their programme market orientation training packages to SMEs. The government of Ghana should not only provide financial support for the growth of the SMEs sector but also provide training for these businesses in a form of workshops and seminars. Future research should evaluate relationships between market orientation, innovation, and performance in other emerging or developing economies to deepen understanding of the interactive effects of market orientation and innovative capabilities on performance for SMES and help in providing rich insights into how its applicability will impact on business performance. Other studies using market orientation should also be done in health care delivery sector in Ghana to help improve effective health care delivery.

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