

The impact of market orientation on innovativeness: evidence from Yemeni SMEs

Impact of
market
orientation on
innovativeness

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Abstract

Purpose – This study aims to investigate the impact of market orientation on small and medium-sized enterprises (SMEs) innovativeness in Yemen.

Design/methodology/approach – The study uses empirical data collected from 206 managers, owners and operators of SME in Sana'a. By using exploratory and quantitative methods, the collected data was examined using descriptive, correlation and regression analyses.

Findings – The results indicated that market orientation, as a whole, has a significant impact on SME innovativeness. Specifically, while the two dimensions – customer orientation and supplier orientation – have a significant impact on SME innovativeness, the other two dimensions – competitor and inter-functional coordination – do not have a significant impact on SME innovativeness.

Research limitations/implications – The study focuses only on four factors that have an influence over SME innovativeness based on the perspective of managers.

Practical implications – SMEs represent the largest portion of businesses in Yemen's private sector. It is anticipated that the findings of this study will help SMEs' owners and managers to better understand market orientation and the significant impact it has on SME innovativeness.

Originality/value – The value of this research work is evident from the fact that the market orientation models have neglected the part of suppliers (upstream supply chain) in generating superior value for customers, even though they have concentrated on the role of customers (downstream supply chain) and competitors.

Keywords Competitor orientation, Market orientation, Innovativeness, Customer orientation, supplier orientation, Inter-functional coordination

Paper type Research paper

Introduction

The important role that small and medium-sized enterprises (SMEs) have played in the improvement of a nation's economic advancement has been recognized (Donkor *et al.*, 2018). SMEs are very important for the stability of national economies and also play a key role in the development of innovation productivity and employment (Wu *et al.*, 2017).



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The firms have a challenge of developing the innovation competence for defining their competitive landscape. The challenge is more for the firms in developing countries where the scope for incubating the innovations by the firms is under intense pressure of competitive performance. The managers and policymakers have to consistently identify the sources and means for nurturing innovation competence (Srivastava *et al.*, 2017).

Despite the differences in SMEs definitions, the recurring item among them is that they are small in contrast to large-scale and international companies. Furthermore, a distinguishing feature of SMEs is that they are most often operated by their owners. However, there are some instances where owners use the services of skilled managers to manage the company. Among Arab countries, Yemen has one of the largest populations in the area, estimated at 26.8 million people by the World Bank (2017). This large population makes it a major country in the area. Owing to its large population, there is a need to concentrate on SMEs in Yemen since these businesses are generally considered as important contributors to creating employment and economic growth (OECD, 2017; World Bank, 2015; Nasr and Rostom, 2013).

There is a lack of studies that have been undertaken in developing nations particularly in terms of SMEs. SMEs are required to develop and implement market orientation concept into their firms to deal with the problems of changing business environment. This study is conducted in the context of Yemeni SMEs. Yemeni SMEs have been facing many challenges relating to marketing, investors and obtaining various funding resources, marketing their products and services at the local and external level that has led to weak competitive position in the local market and especially in-front of the competing imported products.

Up to now, there are few studies about the role of market orientation elements in reinforcing the basic driving forces to organization innovation, particularly in SMEs (Didonet *et al.*, 2016). Laforet (2009) stated that authors have neglected innovation in SMEs while investigating innovation with regard to big companies. There is a lot of obscurity about the recipe for successful SME innovation.

For over two decades, scholars have examined the links between market orientation, innovation and performance. Nevertheless, the market orientation framework that is inclusive of customer-orientation, competitor-orientation and cross-functional coordination is outdated. It deliberates how vertically integrated organizations innovate. In today's globalized business environment, only a handful of firms are vertically integrated. Many companies concentrate on their core capabilities and outsource to suppliers all other non-core capabilities. Sadly, traditional market orientation models overlook this change (Jafari *et al.*, 2015). Previous studies have investigated the individual relationship of supplier orientation with innovativeness and performance (He *et al.*, 2017; Kibbeling, 2010).

Therefore, there is a lack of studies that examines the link between market orientation (including supplier orientation), as an integrated model, and SME innovativeness. In Yemen, while the strategic orientations and innovative capability concept is being experienced by some big companies, its acknowledgment and application by SMEs in Yemen to improve development are quite minimal. In particular, no studies have considered the impact of market orientation on SME innovativeness in Yemen. Hence, this study aims to investigate the impact of market orientation on SME innovativeness in Yemen. Specifically, the purpose of the paper is to examine if customer orientation, competitor orientation, inter-functional coordination and supplier orientation have a significant impact on SME innovativeness.

Literature review and hypothesis development

Market orientation and innovativeness

In their study of SMEs, Verhees and Meulenber (2004) revealed that in highly innovative firms, market orientation constraints product innovation. However, in less innovative firms, it leads to innovation. Although the findings seem conflicting, no effort was undertaken to classify the innovation type the company was pursuing. In another study of SMEs in the Swiss watch industry, Switzerland, Tajeddini *et al.* (2006) investigated the impact of market orientation on innovativeness and performance, and their findings revealed that customer orientation positively influences performance and innovativeness of firms.

A study by Suliyanto and Rahab (2012) examined how market orientation and learning orientation enhance SME innovativeness and performance. The authors concluded that the correlation between market orientation and innovativeness is mediated by learning orientation, the impact of innovativeness on performance, the empowerment of SME learning orientation and innovativeness by market orientation, market intelligence generated from customers and competitors assisting companies to monitor the market. The findings also suggested that the implementation of market orientation leads to a higher competitive advantage and performance.

Based on this discussion, hypothesis one is articulated as the following:

H1. Market orientation has a significant impact on SME innovativeness.

Customer orientation and innovativeness

A study by Kiani *et al.* (2019) revealed that enhancing the capabilities of organization to innovate in terms of better understandings of customer needs and the available technological options of the competitive market dynamics would be helpful for the practitioners to attain the overall success of services in short- and long-term perspectives.

Previous studies indicated that a concentration on customer orientation results in various performance outcomes. At the same time, the relationship between customer orientation and innovativeness is obvious because the firm has the capacity to meet preferences of customer, and its response may positively influence innovativeness, the generation of a novel product and the operation of the firm (Brockman *et al.*, 2012). Innovativeness gives rise to the increasing capability to be oriented toward the customer (Hansen and Nybakk, 2016). In the service industry, Tajeddini (2010) concluded that the relationship between customer orientation and innovativeness is non-existent and proposed additional investigation in this complex relationship. In small firms, customer orientation is revealed to have a positive impact on innovativeness (Brockman *et al.*, 2012). However, further research revealed that the findings are equivocal (Matsuo, 2006; Tajeddini *et al.*, 2006). Briefly, previous studies tended to characterize the relationship as complex, and scholars advocated carrying out additional studies to unveil the mechanisms across different contexts. Based on this discussion, hypothesis two is articulated as the following:

H2. Customer orientation has a significant impact on SME innovativeness.

Competitor orientation and innovativeness

The discussion of competitor orientation and its impact on innovation is unsettled (Lukas and Ferrell, 2000). Several research studies indicated that companies that are oriented toward the competitor constantly benchmark their improvement in relation to competitors and exploit opportunities by developing unique products, marketing plans as compared to

rivals and taking a successful “second-but-better” course (Im and Workman, 2004; Frambach *et al.*, 2003). Nonetheless, several authors maintained that competitor orientation is a fundamental cause for duplicating product, which leads to adverse effects on innovation consequences (Lukas and Ferrell, 2000).

As stated by Jimenez-Zarco *et al.* (2011), customer orientation has the greatest significant impact on innovations, while competitor orientation is not that significant. Nonetheless, it substantially influences innovations. Competitor orientation enables the firm to gather market intelligence and identify where improvement is needed. Pesämaa *et al.* (2013) also observed that the continuous observation of rivals enhances the result of innovativeness, particularly in the delivery of services.

Balas *et al.* (2012) suggested that competitor orientation is positively related to the risk-taking tendency of exporting companies. The indirect effect of competitor orientation as a consequence of risk-taking implies that the more an export company is oriented toward the competitor, the more it could innovative. Based on this discussion, hypothesis three is articulated as the following:

H3. Competitor orientation has a significant impact on SME innovativeness.

Inter-functional co-ordination and innovativeness

Inter-functional coordination shows the degree of coordination and collaboration in the company (Im and Workman, 2004). Inter-functional coordination is argued to positively influence innovation since it enhances the sharing of new market information and leads to resolving problems (Gatignon and Xuereb, 2006). Shin (2017) pointed out the challenges facing Korean SMEs in global market entry such as lack of information to sense and judge the market situation, the lack of diverse information, which hinders decision-making and makes it difficult for them to accommodate market needs, and the lack of capability to find a suitable business model.

Balas *et al.* (2012) suggested that the association between inter-functional coordination and innovativeness is not significant in exporting firms. This outcome contradicts earlier results espousing the constructive impact of inter-functional coordination on the organization’s innovativeness. Based on this discussion, hypothesis four is articulated as the following:

H4. Inter-functional coordination has a significant impact on SME innovativeness.

Supplier orientation and innovativeness

Cooperation with other companies is viewed by entrepreneurs as extremely crucial in their search for innovation (Massa and Testa, 2008). Specifically, Kaminski *et al.* (2008) revealed that innovativeness in SMEs can be realized by cooperating with suppliers. According to Lipparini and Sobrero (1994), firm–supplier cooperation can also lead to the removal of size limitation of firms. However, cooperation with suppliers and customers is sometimes undertaken to co-design.

He *et al.* (2017) found that supplier orientation is not positively related to performance. Their findings suggested that to achieve superior performance, managers should combine customer, competitor and supplier orientation:

H5. Supplier orientation has a significant impact on SME innovativeness.

The hypothesized conceptual framework of this research work is shown in Figure 1.

The majority of the participants (57.3 per cent) employed between 10 and 50 employees, whereas the rest of the participants (42.7 per cent) employed only from 4 to 9. While 37.9 per cent of the respondents are owner-managers of SMEs, 34 per cent of them were General Managers, who ranked second. Head of operations were in the third rank with 28.2 per cent of total respondents.

Instrument validity and reliability analysis

The Cronbach's alpha method was used to measure the instrument reliability. For all variables, the Cronbach's coefficient alpha values are accepted and ranged between 0.804 and 0.916. Moreover, several drafts were evaluated to increase the content validity of the research instrument. Alterations and amendments were made to ensure the appropriate alignment was made. The questionnaire' pretesting assisted the researchers to validate the process, which reflected that the instrument would possibly measure what it was planned to measure.

Descriptive analysis

Descriptive analysis is a more in-depth statistical analysis that offers a summary of the data description. The respondents recognized customer orientation as having the highest average rating with a mean of 4.06 and a standard deviation (SD) of 0.902. Then, supplier orientation ranked second with a mean of 3.96 and an SD of 0.946. Competitor orientation ranked third (mean = 3.43, SD = 0.805). Finally, inter-functional co-ordination ranked fourth with an average mean of 3.38 and an SD of 0.803. Based on that, it seems that the owners, managers and operators of SME (respondents) believed that their organizations are more often customer-oriented than a competitor inter-functional coordination or supplier-oriented.

Hypothesis testing

Inter-correlations analysis indicates the nature, direction and significance of the relationship between the variables used in the study. The results indicate that there is a significant, strong and positive relationship between market orientation and SME innovativeness ($r = 0.670, p=0.000$). In addition, correlation analysis examines the relationship between the four dimensions of the independent variable (customer orientation, competitor orientation, inter-functional orientation and supplier orientation) and the dependent variable (innovativeness).

The results indicate that there is a significant, strong and positive relationship between customer orientation and SME innovativeness ($r = 0.737, p = 0.000$). The correlation between competitor orientation and SME innovativeness shows a weak correlation ($r = 0.244, p = 0.000$). The relationship between inter-functional coordination and SME innovativeness is moderate ($r = 0.415, p = 0.000$). Finally, there is a significant and strong relationship between supplier orientation and SME innovativeness ($r = 0.712, p = 0.000$).

For examining *H1*, which assumes that market orientation as a whole has a significant impact on SME innovativeness, a simple regression was performed. The results in [Table I](#) reveal that the R^2 is 0.626, which indicates that market orientation can explain 63 per cent of

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	0.791 ^a	0.626	0.618	2.76054

Table I.
Model summary

Note: ^aPredictors: (Constant) Market orientation

the variation in the SME innovativeness. The results reveal that the F proportion is 84.046, and the level of significance of the whole model is <0.05 ($p = 0.000$), indicating that market orientation has a significant impact on SME innovativeness.

The results in Table II show that the significant value for customer orientation is 0.000, which indicates that customer orientation has a significant impact on SME innovativeness. This supports $H2$. In addition, the significant value for supplier orientation is 0.000. This indicates that supplier orientation has a significant impact on SME innovativeness, which supports $H5$. The significant value for competitor orientation is 0.556 and inter-functional coordination is 0.794, which show that both dimensions have no impact on SME innovativeness that contradicts $H3$ and $H4$.

The result of the analysis shows that supplier orientation has the prevalent of β coefficient ($\beta=0.631$), which means that supplier orientation is the strongest variable that has an exclusive contribution to the elucidation of SME innovativeness. Customer orientation with $\beta = 0.396$ was the next, whereas inter-functional coordination with $\beta = -0.013$ was the third. Finally, last was the competitor orientation with $\beta = -0.026$.

Discussion

In this study, market orientation significantly influences innovation, which implies that an increase in market orientation results in the enhancements of innovativeness in SMEs. The outcome of this study is consistent with the findings of previous studies, which indicate that an increase in the market orientation of the firm enhances the innovation of products, processes and markets. In the same way, an increased level of competition improves innovation (Ramirez *et al.*, 2014). The results of this study also support the findings that state market orientation in SMEs can stimulate innovation (Remli *et al.*, 2013; Sulyanto and Rahab, 2012). Market orientation can drive the achievement of innovation performance (Kaya and Patton, 2011).

This finding is consistent with previous studies, which indicated that for an organization to be creative, they need to depend on methods of gaining and exploiting of external knowledge –knowledge from customers, competitors, suppliers and so on– along with the company's internal knowledge (Jiménez-Jimenez *et al.*, 2008). Therefore, being market-oriented results in being innovative, as firms are able to create more new ideas/products/services, provided that they learn more from their business environment.

Model	Unstandardized coefficients ^(b)		Standardized coefficient ^(b)		Sig.
	β	Std. Error	Beta	t	
<i>I</i>					
Constant ^(a)	2.542	1.109		2.292	0.023
Customers Orientation	0.396	0.051	0.479	7.701	0.000
Competitors Orientation	-0.026	0.044	-0.028	-0.589	0.556
Inter-Functional coordination	-0.013	0.049	-0.014	-0.262	0.794
Suppliers Orientation	0.631	0.095	0.401	6.642	0.000

Notes: ^aPredictors: (Constant) Market orientation; ^bDependentvariable: Innovativeness

Table II.
Coefficients of
multiple regression

The result of the regression analysis reveals that the dimension of customer orientation has a significant impact on SME. This result is consistent with the study of [Matsuo \(2006\)](#), who concluded that customer orientation strongly affects innovation through the enhancement of positive conflict while at the same time resolving negative conflict. Organizations that are oriented toward the customer continually scan and assess the disposition of customer preferences, and therefore innovate in their products/services to fulfill customers' desires ([Micheels and Gow, 2014](#)). Moreover, several researchers concluded that a strong association exists between customer orientation and innovation. These include [Laforet's \(2009\)](#) research on product innovation, [Grawe et al. \(2009\)](#) work on service innovation, and [Fredberg and Piller's \(2011\)](#) conclusions regarding the relation of customer orientation with radical innovation. The results of the study by [Newman et al. \(2016\)](#) indicated that orientation toward the customer enhances both exploratory and exploitative innovation.

According to the results of the regression analysis, competitor orientation has no significant impact on SME innovativeness. These results are consistent with some studies, which indicated that competitor orientation is insignificantly related to innovation ([Gatignon and Xuereb, 2006](#); [Johnson et al., 2009](#); [Lukas and Ferrell, 2000](#)). [Frambach et al. \(2003\)](#) concluded that organizations that are oriented toward competitors usually need minimum involvement in activities that lead to the development of a novel product in case they emulate their rivals' product/services. However, the finding is inconsistent with the results of the studies by [Johnson et al. \(2009\)](#); [Maatoofi and Tajeddini \(2011\)](#) and [Jimenez-Zarco et al. \(2011\)](#). A recent research by [Lewrick et al. \(2011\)](#) noted that competitor orientation is ineffective for radical innovation and has no relationship with increment in firms that are mature. Moreover, competitor orientation could negatively affect innovation in such cases as when demand is unpredictable ([Gatignon and Xuereb, 2006](#)). [Foreman et al. \(2014\)](#) concluded that competitor orientation is negatively correlated with financial performance.

The obtained result could be attributed to competitor-oriented SMEs emulating competitors' activities and presenting me-too imitations, as opposed to producing line extensions or new-to-world products/service. According to [Lukas and Ferrell \(2000\)](#), competitor orientation enhances the chances of initiating imitated products and restricts the introduction of line extensions. This, in return, creates a significant obstacle to the development of a firm. Products of this kind are usually emulations of the products manufactured by the rival firms, and in the long term, will not provide the firm with a leadership position in the competitive market, merely its survival.

Another reason for the inconsistency may be that with increasing competition in the SME sector, these SMEs give less consideration to their competitor's activities. Thus, to surpass these competitors, they must assess their activities and outperform them. According to [Wong and Tong \(2012\)](#), firms are currently undergoing a new phase of fierce rivalry, which has caused a lot of companies to be eliminated. Therefore, contemporary managers should continuously assess their competitiveness in their industry in an effort to retain their current market share and obtain a larger portion than their rivals. This allows managers to constantly contemplate the external surrounding and adjust the internal environment of their firms with customer's desires, which could bring forth innovation and ultimately the success of the organization. [Ramirez et al. \(2014\)](#) pointed out that some activities of a firm's market orientation need to be concentrated on the competitor's strategies and activities. Firms must continually generate and share new intelligence about the performance of their rivals with the aim to outperform competitors and be innovative. Understanding competitor's goals, plans and marketing approaches can offer SMEs beneficial information and thus lead to creative thinking and the outperformance of rival's offerings. Innovative

firms are continuously acquiring knowledge, and part of this learning is achieved by appraising the competitor activities. Therefore, while complying with ethical issues, innovative companies must manage to regularly upgrade their capabilities to outperform competitors.

The result of the regression analysis showed that inter-functional coordination has no significant impact on SME innovativeness. This finding supports the results obtained by [Ejdys \(2015\)](#), which affirmed the lack of a positive effect of the inter-functional coordination on innovativeness. The rationale behind the obtained results may be because many SMEs are not well organized in Yemen. Some of them lack a marketing function, as non-marketing professionals supervise marketing activities, which leads to poor market performance. The current results may be so because small firms are owned and managed by one person. Because of their size constraints, these small businesses lack large departments and depend very much on the owner/managers to partake decision and coordinate with the firm employees in person. In conformity with [Verhees and Meulenberg \(2004\)](#), small businesses are hardly capable or have resources to employ professional employees, let alone a whole department. Thereby, the marketing function is farfetched to be institutionalized or the sole responsibility of one person in the business, except for maybe the owner. The absence of marketing specialization in a small business may imply that gathering customer and competitor intelligence is everyone's duty.

The results of the regression analysis revealed that supplier orientation has an impact on SME innovativeness. This result is not consistent with [Kibbeling \(2010\)](#), who noted that supplier orientation has no impact on firm's innovativeness, but he found that supplier orientation and current financial performance have a strong association. This finding may offer a broader understanding of the results of [Nieto and Santamaria \(2010\)](#), in which they concluded that vertically collaborating SMEs (i.e. SMEs that collaborate with suppliers or customers) are substantially more apt to introduce product and process innovations. The outcome of this study indicates that suppliers provide part of the essential resources to complete the innovation project, thereby increasing the chances that an SME has initiated innovation in the market.

Conclusion

The outcomes of this study confirm that an increase in market orientation brings forth an enhanced SME innovativeness. Therefore, it is crucial for the government and policymakers to devise policy and programs that might be tailored to assist these firms to incorporate market orientation strategies in their management practices.

SMEs should support innovative behavior, generate new offerings and engage in proactive marketing. This will empower them to surpass and be competitive in addition to superior company performance. SMEs should promote creativity and experimentation. SMEs should invest in new technology and constantly pursue continuous improvement of their processes and products. They should also establish a competitive posture by scanning the market to know the competitor's strategies and activities, use price adjustment and introduce new or better offerings. Through pro-activeness, these SMEs will be able to monitor the market constantly to detect potential needs and be first movers in such markets. Information sharing in these firms can be enhanced by SMEs investigating market trends and customers' needs/interests and satisfaction. Moreover, the company needs to disseminate information/documents such as newsletters that offer information about their customers and their products/services to all employees. Managers, in addition, need to institute training programs for employees. This training program should be designed to eliminate weakness and upgrade the SME ability to exploit opportunities.

Moreover, the outcomes reveal that women are underrepresented in the SMEs sector and policymakers should create incentives in an effort to attract women to this sector. It is also crucial to determine whether there exists a glass ceiling in these SMEs at this day and age when the equal opportunity for men and women is outlined.

A company has to better understand how its strategic orientations can ultimately affect its performance outcomes. It is very important not only to have a shared understanding of the firm's strategic orientations but also to possess the innovativeness culture leading to the "real" capacity to innovate (Shin and Lee, 2016).

This study can be useful for future researchers that want to investigate further the relationship between market orientation and SME innovativeness in Yemen. Future researchers may choose a research design that incorporates the use of mixed research approaches (qualitative and quantitative). Future research could relate market orientation component-wise approach to the different stages of the innovation process in different industries in Yemen. This means the decision to innovate, the decision of how much to spend on innovative activities, the relationship between expenditure on innovation and innovation input and the relationship between innovation output and performance. This could allow the identification of which stage of innovation market orientation is the most relevant to the Yemeni context. Finally, the study shows how an organization's age, type of industry, size of the firm, market and technology dynamism, managerial behavior and/or entrepreneurial style moderate the relations among the market, innovation and firm performance can be investigated in the Yemeni context.

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