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RESEARCH ARTICLE



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SME Owners' Perception and Innovation Practices in a Developing Nation Context: A Descriptive Study

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Abstract

Given that scholars in the subject area of innovation have not concentrated much on understanding how innovation is perceived and practiced among small and medium scale owner managers, this study seeks to offer insight to the SME owner- managers' perception and practices of innovation. One hundred (100) SME owners were used as the unit of analysis. Quantitative explorative and non-experimental methods were used in this study (survey). The quantitative tool for the study was a questionnaire, which was used to elicit information from the research participants. In respect of SME owners' perception of innovation, majority perceived changes in the current product as an innovation practice. Consequently, a bulk majority of them had practiced such innovations in the past three years. Here, knowledge/perception and innovation practice of the SMEs were adequately matched. In practice, very few SMEs had made changes to their manufacturing processes, yet a good majority of them perceive such activities as innovations, and could be as a result of the lack of access to credit. The current study recommends innovation education among SMEs to introduce to them to the various kinds of innovation they can adopt. Special emphasizes should be given to management innovation, as such innovation can adequately adopted by firms with limited financial resources.

Keywords: innovation practices, innovation perceptions, small and medium scale enterprises, developing nation, descriptive study.

Introduction

Discussions on the constituents as well as the definitive description of the term innovation has been a matter of contention in the academic sphere since the twentieth century (Piatier, 1984). According to Piatier, this ambiguity accounted for the little innovation among European countries in the twentieth century. Debate on this subject has revived in the recent times (Damanpour, & Schneider, 2006). These authors explain that, in spite of previous efforts by some scholars to clarify the meaning of the term, the definitive parameters of the term are still too broad and not precipitous. Some scholars have gone on to argue that, definition and perception that is held of the

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term in many ways influence the practice of innovation (Piatier, 1984). Extant literature on the subject matter, have shown product innovation as the most dominant and popular category of innovation, because it is most popular perception held of innovation (Madrid-Guijarro, Garcia, & Van Auken, 2009).

This, inadvertently erupts a need for an assessment of the perception of innovation among SMEs, relative to their practice, if innovation practices are going to be promoted in these firms in developing economies. Even though scholars suggest a massive increase in the number of small and medium scale enterprises (SMEs) erupting in the last, SMEs have been identified as the least innovative firms in both developed and developing economies (Abor, 2011; World Bank Latin American Report, 2013). Abor (2011) illustrate this paradoxical relationship between SME proliferation and innovation among developing economies in Africa, whereas Siegel, Wessner, Binks and Lockett (2003) illustrate this phenomenon among developed economies.

In attempt to understand the low level of innovation among SMEs, several scholars have investigated a plethora of related issues. These include some assessments of the barriers that constrain innovation in these regions (Blanchard, Huiban, Musolesiz, & Sevestre, 2012), technology adoption (Quaye, 2014) and impact of access to credit (Abor, & Quartey, 2010) among many others issues. Again, Piatier (1984) also indicates SMEs perception of innovation as one of the issues hindering innovation. Though we know SMEs perception of innovation is important, very little attempt has been made to understand the perception and practice of innovation among SMEs, to comprehend how their perceptions relates with their practices.

Additionally, some scholars perceive innovation as one of the key elements necessary for stimulating small and medium scale enterprise development and success. Nonetheless, very little efforts have been made by both governmental and non-governmental institutions to ensure we understand SME owner-managers' perception and practice of innovation, especially among developing economies in Africa and Asia. The emphasis in these economies, has been on the development and establishment of enterprises (SMEs), which has rather led to the awful replication of businesses (World Bank Latin America Report, 2013), rather than the establishment of businesses to take advantage of novel opportunities.

Evidently, some scholars affirm this phenomenon by demonstrating that most of the innovation practiced among SMEs in developing economies were incremental (Mahemba, & De Bruijn, 2003; Robson, Haugh, & Obeng, 2009), which according to Hadjimanolis (1999), suggests that these innovations were copied and could also be easily copied. Again, extant literature have widely demonstrated that SMEs resort to certain types of innovation more than others (Oke, Burke, & Myer, 2007; Terziovski, 2010). For example, Oke et al. (2007) note that product and product innovation are more popular among SMEs compared to management innovations (changes in sales and purchasing strategies).

Placing the current study within the context developing economies and using Ghana as an example, several evidence in extant literature demonstrate that most of the innovation undertaken within these economies, and Ghana for that matter, are often incremental and product innovations (Adeboye, 1997; Oyelaran-Oyeyinka et al., 1996; Robson et al., 2009). For example, Robson et al. (2009) notes that most scholars, in assessing innovation among SMEs have only focused on product innovation and neglected other forms of innovation because it was the most common category of innovation for most Ghanaian firms. In this respect, the current author argues that a probable reason for the focus on product innovation and incremental could be because that is all they perceive innovation to be. Hence, SME innovative efforts have been skewed to such forms of innovation to the neglect of the others.

Some studies have been carried to investigate the types of innovation and how they impact SME performance (Oke et al., 2007; Varis & Littunen, 2010; Gunday, Ulusoy, Kilic, & Alpan, 2011). Again, some scholars have also investigated the innovation practices of SMEs, in relation to the types of innovations (Terziovski, 2010). Nonetheless, most of these studies are in relation to developed economies and may not be necessary to the situation of SMEs in a developing economy context. More so, studies assessing the practices and perception of SME perception and practice in developing nation in a single study is scarce.

Some researchers have argued that the definitive parameters of the subject of innovation is still broad and vaguely defined (Damanpour, & Schneider, 2006). This challenge with the subject matter (innovation) was identified and emphasized by Piatiers (1984). Piatier indicates the need for

a more precise and comprehensive definition of the constituents of the term; and further explains that this is core to the understanding and practice of innovation. Some earlier scholars of innovation specify that it consists of novel products or services, a new production process, technology, a new structure or administrative system, and new plan or programme with respect to organisational members (Zaltman, Duncan, & Holbek, 1973). In addition, the authors also suggest innovation engulfs the adoption of new technology, generated within or without the organization. In spite of these authors' acknowledgment of the fact that innovation can be borne within a firm; the above definition lucidly emphasizes the fact that innovation can be adopted from the outside of an organization; further emphasizing how innovation can be affected by some external factors. These views seem to affirm the market based view of innovation, which suggest that innovation is identified by a proper scanning of the market environment of a firm (Porter, 1985).

Drucker (1985) opines that innovation is a means of entrepreneurship and provides resources that aids in building a capacity that allows the organization to reach welfare. Drucker's definition establishes a nexus between the concept of wealth creation and innovation. In addition, it draws attention to the fact that innovation is a function of entrepreneurship. Drucker's assertion seems to place the entrepreneur in the center of the innovation process and sets innovation as the prime theme that defines entrepreneurship. This definition instigates discussions about the individualistic theory of innovation (Trott, 2008). This theory explains that instead of market environment, innovation emanates from individual with certain peculiar characteristics.

Furthermore, Porter (1990) attempts to draw a nexus between innovation and competitive advantage. In this respect, Porter suggests that innovation provides competitive advantage and comprises both new technologies and new methods. Porter's definition, affirmed the notion held by some scholars that innovation does not solely refer to the channelling out of new products, instead it also includes the adoption of new methods of marketing and markets. Focusing on the adoption and usage of novel technology, some scholars define innovation as an idea, a practice (application) or an object that is perceived as something new (Rogers, 1995).

Damanpour (1996) explains innovation as a complete or partial modification put forward in the outputs, structure or processes of an organization that enables its integration with the environment. From this definition, Damanpour seems to be circuitously postulating three resultant effects from the innovation process, which is either a change to the final output, structure or process. In addition, the author emphasizes that innovation must be integrative: suggesting that for a thing to qualify as an innovation; regardless of its source, it must be well integrated into the environment, as this has the propensity to affect its adoption and usage. In addition, innovation must have positive impact on the environment, thereby introducing a social dimension of the innovation process.

Whereas majority of the definitions discussed above emphasize a snapshot change, a more recent definition by Elçi (2006) accentuates innovation as a continuous process and in view of this, defines innovation as the continuous changes and differentiations in the products, services and working methods. Similar to the view of Damanpour (1996), Elçi (2006) affirms that innovation must have social and economic value, as it is the aggregation of both social and technical processes.

An assessment of the evolution of innovation from the 1960s reveals how the term was initially associated with the creation of new things. This definition evolved to include the adoption of technology, as technological discoveries revealed new ways of doing things. As a result of the rising need for entrepreneurship to foster economic growth and wealth creation, Drucker (1985) suggests innovation as the catalyst for this advancement and thereby draws an important nexus between entrepreneurship, wealth creation and innovation. A much related position is also posited by Porter (1990) who revealed a connection between innovation and competitive advantage (Necadova, & Scholleova, 2011). Another definition posited by Rogers (1995) also introduced and emphasized the usage and application of ideas considered to be novel in some way to the entity. As a result of the rising concerns for social and environmental contribution and protections, Damanpour (1996) introduces a social and environmental component to innovation and argues that innovation must be environmentally conscious (able to be integrated into the environment). This view is accentuated in a more recent definition posited by Elçi, who argues that innovation must have social and technical value.

The direction of argument with regard to the definition of innovation has limpidly skewed from just the introduction and application of a novel technology and has further shifted from just

changes in structures, processes and outputs to the adoption, modification and introduction of ideas, methods and technologies that can be integrated into the environment as well as has social and technical value. In this respect, the current author considers innovation as the continuous and instantaneous changes and introduction of new ideas, methods as well as technologies, which result in the modification of the output, process or structure of an organization and contributes to the social and economic environment of a firm. The above posited definition presents a comprehensive and holistic view of innovation and attempts to capture the various evolving facets of innovation.

Given that scholars in the subject area of innovation have not concentrated much on understanding how innovation is perceived among small and medium scale owner managers, there is the need for a study that would offer insight to the SME owner- managers' perception of innovation. This may account for their concentration on product innovation in past years, much to the neglect of the other forms of innovation. It is in this respect that the current study seeks to assess the perception of innovation among SME owner managers in a developing country context.

Methodology

One hundred (100) SME owners were used as the unit of analysis. Quantitative explorative and non-experimental methods were used in this study (survey). The study is described as a quantitative exploratory research (Botma, Greeff, Mulaudzi, & Wright, 2010) because the study was undertaken to investigate the perception of innovation among SMEs. The quantitative tool for the study was a questionnaire, which was used to elicit information from the research participants.

The study Population included the 10, 000 registered firm listed in the NBSSI database. Because the study adopted Quaye and Acheampong's (2013) contextual definition of SME in developing economies, a sample frame of firm with more than 5 employees with stated capital not more than \$5000 were considered for the study. Consequently, 100 respondents were conveniently selected as sample for the study.

Results and Discussion

In an attempt to offer a limpid description of the participants of the study, the study collected some demographic information on the SME-owners. This was done to have an understanding of the background of the respondents, in order to understand the impact some of these characteristics may have on the overall findings of the study. The information gathered include sector, educational background of the owners, firm size, control of activities and tenure of business.

Majority of the respondents (51%) had attained formal education up to the tertiary level, whereas 18% and 19% had attained high school education and professional skills respectively. 11% and 1% of the respondents also had up to a primary and junior high education respectively. There is a significant improvement in the educational level of SME owner in recent times, and this may have a favorable impact on innovation adoption.

The study considered three main sectors agribusiness, manufacturing and services. 56% of the firms were in the service industry, whereas 44% were in the manufacturing sector. None of the firms included in the study identified with the agri-business sector. This affirms the dominance of the service sector in Ghana (Ghana Banking Survey, 2013).

With regard to firm size, 61% had employees between the ranging from 5 and 10. Whereas 15% and 10% of the firms had employees within the ranges of 11-20 and 21-30 respectively. Again, only 11% and 3% of the respondents' employees were within the 31-40 and 41 and above respectively.

The current research also found that 70% of the respondents had existed for only 1 to 5 years. Only 27% had existed for a period between 6 to 10 years. 3% had existed for a period between 11 and 15 years. None of the respondents had existed pass 16 years. This could either suggest that SMEs lack a well-structured succession plan, and therefore do not survive pass this age limit.

Finally, 67% of the respondents specified that their businesses were managed by outsiders (persons who were not family members). Whereas, 33% of the respondents revealed that their businesses were managed by persons from their family.

Table 1. Innovation practice among SMEs in the last three years

Question	Yes		No	
	Frequency	%	Frequency	%
Have you practiced any of these activities in the past three years?				
• Change in current product	64	64	36	36
• Market new product	63	63	37	37
• Changes in manufacturing processes	34	34	66	66
• Acquisition of new equipment	55	55	45	45
• Changes in management issues	56	56	44	44
• Changes in purchasing procedures	57	57	43	43
• Changes in sales strategy	64	64	36	36

In this respect of [Table 1](#) above, the study sought to investigate the practice of innovation among SME-owners. This was to assess what they practiced as innovation. In this respect, they were to indicate “yes” or “no” responses to the question “have you practiced any of these activities in the past three years”. Here, the study found that majority of the respondents (64%) had changed their current product and sales strategy in the past three years. The dominance of this practice (changes in current product) is well acknowledged in extant literature ([Madrid-Guijarro et al., 2009](#)), as it was also noticed in their study that this practice was the second most popular among Spanish SME-owners. Nonetheless, their study specified that sales strategy changes were among the least practiced innovation. These differences in the finding however, may be attributed to contextual differences between the two studies. A significant number of respondents specified they had made entry into new markets (63% of the respondents). Next, 57% of the total respondents also agree that they had made changes in the purchasing procedures of their firms.

Less than half (one-third) of the respondents agree that they had made changes to their manufacturing processes constitutes. In connection to this finding, acquisition of new equipment was also identified among the least practiced innovations. Only 55% of the respondents indicated that they practiced such an activity. This may actually explain why SMEs in developing nations are noted to have a low adoption of technology ([Quaye, 2014](#)) (new equipment) and are often laggards in this regard. Likewise, Okpara (2011) has also noted that SME growth have been constrained in developing economies because of the lack of ability to adopt new technology. Again, this may also be explained by the lack of finance, which is also fueled by the lack of access to credit ([Abor, & Quartey, 2010](#); [Fraser, Bhaumik & Wright, 2015](#)). This hinders the ability of SMEs to acquire these new equipment and adopt new manufacturing procedures.

Table 2. Perception of innovation

Question	Yes		No	
	Frequency	%	Frequency	%
<i>Does this comprise innovation to you?</i>				
• Change in current product	84	84	16	16
• Market new product	75	75	25	25
• Changes in manufacturing processes	90	90	10	10
• Acquisition of new equipment	65	65	35	35
• Changes in management issues	24	24	76	76
• Changes in purchasing procedures	20	20	80	80
• Changes in sales strategy	40	40	60	60

In terms of the respondents’ perception of innovation, the study enquired as to reveal their thought with regard to the listed statements. As shown in [Table 2](#), the study found that changes in the manufacturing processes and changes to current product held the highest views, with 90% and 84% of the respondents indicating that they perceived such practices to be innovation ([Terziovski, 2010](#)). Comparing this finding to the findings in table, notably, though SME owner perceive changing the manufacturing process as an innovation, it is still the least practiced innovation among these SMEs.

This goes to affirm the need for financial inclusion, to ensure credit is made available to SMEs to pursue such innovations (adopt new technologies and manufacturing processes). On the

flip side, even though very firm perceive changes in sales strategy as innovation, was identified as one of most pursued practice among SMEs. This could be because few resource commitments are required to effect such change in firms in developing economies relative to changing the manufacturing process. This could probable be the case for changes in purchasing procedures, which also had a few of respondents indicating it as an innovation, yet having more half of the respondents practicing it. Extant literature to a large extent supports these findings. For instance, scholars have noted that management innovation such as changes in purchasing and sales strategies are the least practiced innovation among SMEs in a developed nation context (Madrid-Guijarro et al., 2009). This is probable because studies have also established that management innovation is quite new to SMEs, and have also noted that very few SME owners have a good knowledge of such innovation as management innovations (Oke et al., 2007).

Conclusion

This study was hinged on the subject matter of innovation and small and medium scale enterprise (SME) sector in Ghana. It focused on assessing the perception of SME owner-managers on the innovation and their innovative practices. Consequently, the study focused on 100 responses from SMEs from mainly two sectors, namely, manufacturing and service. The ratio of service firms to manufacturing firms was approximately 3:2, which affirms the dominance of the service sector in Ghana. The firms conveniently and purposively selected for the study firm size ranging from 5-41 and above. With majority having a firm size of 5 to 10 employees, and very few having more than 41 employees.

In terms of practiced innovation in the past three years, the study found that majority of the respondents had changed their current product and sales strategy within this period. Extant literature lucidly affirms the popularity of changes in current product as innovation most adopted by SMEs (Madrid-Guijarro et al., 2009). Also in respect to perception, SME owners perceived changes in the current product as an innovation practice. Here, the knowledge and innovation action of the SMEs were adequately matched. In practice very few SMEs had made changes to their manufacturing processes, yet a good majority of them perceive such activities as innovations. These discrepancies between the perception and practice of SMEs could well be explained by the lack of access to credit from financial institutions, hence they lack finance to change their manufacturing processes. The lack of access to credit may also explain why SMEs fail to purchase new equipment for their operations.

In this regard, the current study recommends that the government must liaise with financial institutions (both commercial and microfinance financial institutions) to enact policies that will foster the operations of financial institutions that will design credit products specifically for SMEs. Additionally, though very firm perceive changes in sales strategy as innovation, this was identified as a dominant innovation practice among SMEs. In addition to other probable, this could be as a result of the increasing competition among SMEs and the influx of both foreign and local competition. This causing SMEs to constantly vary their marketing and sales strategies. Changes in sales strategies are fostered by the fact that, little resources are required to effect such changes. Extant literature affirms a general lack of knowledge of management innovations among SMEs. In this respect, the current study recommends innovation education among SMEs to introduce to them to the various kinds of innovation they can adopt. Special emphasizes should be given to management innovation, as such innovation are very helpful in situation where the firm is faced with limited resources. Management innovations are relatively cheaper than product innovations and process innovations.

In respect of future studies, the current investigation adopted a quantitative approach to assess the perception and practice, and acknowledges that such an approach may well limit the findings. Consequently, the study recommends future studies to adopt a more qualitative approach to explore the subject matter.

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