EFFECT OF THE TYPE OF INNOVATION ON THE GROWTH OF SMALL AND MEDIUM ENTERPRISES IN KENYA: A CASE OF GARMENT ENTERPRISES IN JERICHO, NAIROBI

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ABSTRACT

In Kenya like other countries in Sub-Sahara Africa, the ability of SMEs to innovate largely depends on its technological capabilities, the information and skills availability. More emphasis has been on technological innovation at the expense of other types of innovation. Entrepreneurs have lacked information on the effect of different types of innovation on growth of their enterprises. This study therefore sought to investigate and document different types of innovations adopted by garment SMEs in Nairobi. The study also evaluated whether there is any effect between the innovations adopted and growth of the enterprise. Descriptive design was used to study the research objectives. Census was conducted on the population. Questionnaires were administered to thirty one entrepreneurs/managers of garment businesses in the study area. The questionnaire was first pilot tested on six firms at a different location from study area to ensure reliability of research instrument. Descriptive statistics and inferential statistics were used to analyze the data before reporting and making recommendations. The study found out that among the types of innovation analyzed, marketing innovation contributed most to the growth of garment SMEs in Jericho market, Nairobi. However, it was also established that all types of innovation were being practiced in the sector and that innovation is very critical for SMEs to become and remain competitive in the global market. Arising from these findings, the study recommended that promotion of information on innovative practices through networks and linkages to be enhanced.

Keywords: Innovations, enterprise growth, innovative practices.

INTRODUCTION

This study analyzed the type of the innovation practiced by Small and Medium Enterprises (SMEs) in Kenya from integrated perspective of its effect on growth of garment enterprises in Nairobi County. SMEs have been considered one of the driving forces of modern economies due to their multifacted contributions in terms of technological innovations, employment generation, and export promotion among other benefits to the economy (Becheikh, Landry & Amara, 2006). In order to integrate the MSEs sector into the national economic grid, the Sessional Paper No 2 of 2005 expanded the definition of MSEs to include all enterprises, both farm and non-farm,
employing less than 50 persons (RoK, 2005). The ability of SMEs to innovate assumes significance because innovation lends competitive edge to firms, industries and ultimately, economies (Drucker, 1998).

Background of the Study

The contribution that small businesses make towards the economies of the countries emphasizes the importance of the small business sector. Governments around the world have realized just how important this sector of the economy is for the future growth of their respective countries. McClelland (1987) and Harper (1991) both cited in Calvin, (2002) suggest that entrepreneurship has a critical role to play in the economic development of especially poorer nations of the world. This view is supported by Day (2000) who suggests that “the ability of an economy to adapt to change and to continue economic progress would seem to be weakened if there is not a continuing infusion into the total economic system, at a numerically high level, of new products, new markets and new jobs generated by small firms. In addition, a strong small firm sector provides for the widespread and rapid diffusion of technical change and innovation on which economic growth is ultimately based.” In summary, evidence (Hall, 1995) does indicate that small firms and entrepreneurship do indeed play a major role in the world economy and that they do constitute the bulk of enterprises in most economies around the globe.

Garment Industry in Kenya

The manufacturing sector in Kenya in 2004 accounted for over 20 percent of the country’s Gross Domestic Product (GDP), provided employment opportunities to about 300,000 people in the formal and 3.7 million persons in the informal sectors of the economy (McCormick, Gebre-Egeziabher & Kuzilwa, 2009). The textile sub-sector constitutes an important component of the manufacturing sector in the country. It was one of the key sub-sectors targeted under the country’s strategy for economic recovery (Republic of Kenya, 2003). The textile and clothing industry developed into a leading manufacturing activity in Kenya, both in terms of size and employment. It employed about 30 percent of the labour force in the national manufacturing sector. The industry also supported the livelihoods of over 200,000 small-scale farmers by providing markets for cotton (Republic of Kenya, 2003).

Statement of the Problem

Choosing the correct type of innovation for faster growth in a particular industry has been and is still a challenge for SMEs in Kenya. SMEs need appropriate innovative approaches that will lead them to adopt specific type of innovation if they have to gain and maintain competitive advantage (Wanjiku, 2011). More emphasis has been on technological innovation at the expense of other types of innovation. Indeed entrepreneurs have lacked information on the effect of different types of innovation on growth of their enterprises. Nevertheless, available literature suggests that some garment SMEs are still surviving despite the competitive business environment (Imo, Mugenda & Mburugu, 2012). These observations suggest that mild innovations are taking place across all firms in the industry without a clear SME innovation framework to enhance enterprise growth.
According to McCormick et al., (2009) research studies have indicated that innovative SMEs irrespective of type innovation tend to achieve either cost effective, quality improvement, improved versions of existing products or production of new products. Previous studies such as Roper (1997) and Wanjiku (2011) ascertained that the output of innovative SMEs grew significantly faster than that of non-innovators. However, these studies and other related research such as Freel & Robson (2004); Becheikh et al., (2006) on innovation effect on performance of SMEs did not establish the effects of specific types of innovation on growth of SMEs in particular sector of economy more so in a developing country. This study therefore sought to investigate and document different types of innovations adopted by garment SMEs in Nairobi. The study also evaluated whether there is any effect between the innovations adopted and growth of the enterprise.

**Objectives of the Study**

The specific aims of the study were to explore research problems as follows:

1. To establish the growth effect of technological innovation practices adopted by Garment SMEs.
2. To determine the influence of administrative innovation practices on growth of garment SMEs.
3. To determine the effect of marketing innovation practices on growth of garment SMEs.
4. To investigate the influence of strategic innovation practices on growth of garment SMEs.

**Rationale of the Study**

In today’s highly competitive global business scenario, it is generally accepted that the sustainability of a firm’s competitive advantage will depend on its innovative capacity based on knowledge acquisition, integration and application (Pyka, 2002). While the importance of innovation is well established, there is still a need to develop an integrated perspective of various types of innovation practices and its influence on growth of SMEs. The study will help entrepreneurs and business managers to understand effect of each type of innovation on growth of their enterprises. Policy makers would also like to see whether specific innovation patterns exist so that appropriate support policies could be developed to foster the emergence of desired patterns.

**LITERATURE REVIEW**

SME’s growth is often closely associated with firms overall success and survival (Passanen, 2003). Growth has been used as a simple measure of success in business and has also been suggested as the most appropriate indicator of the performance for surviving small firms (Storey, 2003). The most frequently used measure of growth has been change in the firm’s turnover (Passanen, 2003).

The study adopted the dichotomous incremental and radical innovation and named it the nature of innovation. Each nature of innovation was further categorized into technological, marketing, administrative, and strategic innovations based on the literature review. These four were named the
types of innovation by Garcia & Calantone, 2002; Cardinal, 2001 and Damanpour 1991. The rationale is that the innovation typology approach helps to portray daily innovation practices in a more clear way. More so, the ultimate goal of implementing innovation is to improve the organizational performance (Druker, 1998). Examining how companies actually practice innovation may unveil the black box of innovation and help translate it from a mere concept into action and competitiveness (Drejer, 2002).

Lehtimaki (1991) observed in context of Finish SMEs that on average, the contribution of innovated new products was more to total sales than profits. More so, Roper (1997) in a study that focused exclusively on product innovation in German, UK and Irish SMEs ascertained that the output of innovative SMEs grew significantly faster than non-innovative SMEs implying that innovative products contributed to faster growth of firms. Engel et al., (2004), similar to Roper found that sales turnover of innovative firms grew faster than those of non-innovative firms. Lumiste & Kilvits (2004) found that innovation helped Estonian SMEs to improve their performance in terms of market share and diversified range of goods and services. Bala (2001) also observed that SMEs of North England pursued radical innovation as a strategy of firm’s growth though he did not explicitly probe the relationship between innovation and growth. Studies to establish the relationship between innovation and growth of SMEs was done in Germany by Coad & Rao (2008) in a craft dominated industrial area of German and high tech sector of USA. The estimated results, based on a profit model, emphasised a positive impact of innovation on sales turnover in both studies.

There is scanty information on innovation practices in Kenyan clothing sector, particularly in the context of SMEs. However, a recent report on the same argues that mild innovation practices are taking place across all firms in the industry (Kamau & Munandi, 2009). They further found out that their new products fetched more in their respective market making them more competitive. As regards process innovation, garment producing firms in Nairobi have introduced new machinery to aid their work (McCormick et al., 2009). Similarly, marketing innovation is being adopted by taking advantage of new market from neighbouring countries (Kinyanjui & McCormick, 2009; McCormick et al., 2007). These firms have also made in-roads into lucrative Nairobi’s formal retail chain buyers who have grown tremendously (Kamau & Munandi, 2009). In addition to the above innovation types, some scholars placed special emphasis on the importance of strategic innovation, because it may change the direction of the company and even the rules of the game in an industry (Markides, 1997; Turock, 2001). Strategic innovations focused on measures to produce a sustainable competitive advantage and reinvent the rules of competition (Turock, 2001), such as strategic alliances with competitors. The above discussions brings out that no empirical study has been carried out to establish integrated relationship between type of innovation adopted and growth of SME in particular production sector in sub Saharan country.

RESEARCH METHODOLOGY

Descriptive design was used to study the research objectives. Census was conducted on the population of thirty one garment SMEs in Jericho market. Questionnaires were administered personally to the entrepreneurs/managers of garment businesses in the study area. Data were analysed using the Statistical Package for Social Sciences software (SPSS). To ensure reliability and validity, questionnaires were pre tested on five respondents involved in the garment making business not
in the study area. The alpha coefficients obtained were all greater than 0.7, indicating acceptable reliability coefficient as suggested by Kumar (2005).

Further, regression model was used to obtain an equation which described the dependent variable in terms of the independent variable. The regression equation used was given below: 

\[ G = \beta_0 + \beta_1 \text{TI} + \beta_2 \text{AI} + \beta_3 \text{MI} + \beta_3 \text{SI} + \epsilon \]

Where; \( G \) is Enterprise Growth, TI is the Technological Innovation, AI is the Administrative Innovation, MI is the Marketing Innovation, SI is the Strategic Innovation, \( \beta_0 \) is a constant which is the value of dependent variable when all the independent variables are 0, \( \beta_1, \beta_2, \beta_3 \) are the regression coefficients or change induced by TI, AI, MI and SI on \( G \). It determines how much each (TI, AI, MI and SI) contributes to \( G \), \( \epsilon \) is the error of prediction.

**FINDINGS AND DISCUSSIONS**

**Technological innovation**

The study found out that majority of the respondents had introduced new changes in their products, processes or service technology in line with other research findings (Kamau & Munandi, 2009; McCormick et al., 2007). The research also revealed that technological innovation was highly acknowledged as having direct effect to the growth of the business in terms of boosting its sales. Majority of respondents believed that technological innovation influenced sales turnover by attracting new customers. Technological innovation was positively correlated with other types of innovation practiced by garment SMEs in Jericho market, results showed that all types of innovations was affected by technological innovation including the growth of the business. This justified Roper, (1997) findings that if innovation is successful, the share of such innovated products is likely to increase sales of the firm by removing non value adding steps from the work flow hence affecting the whole business. The study also found out that as much as most respondents acknowledged technological innovation, not all introduced new product, process or design in their businesses operations.

**Administrative innovation**

It was established that majority of respondents introduced new techniques and practices for integrating various information with aim of making informed decisions. However it was also found that few enterprises introduced new organization structure with aim of increasing employee’s initiative and overcoming problem of hierarchy. Other administrative innovation techniques such as introduction of new set of practices and processes around job design and product quality were found to be widely practiced by some firms. Firms which practiced these techniques reported better sales as the correlation analysis showed a positive relationship. The findings were in line with Becheikh et al. (2006) results which disclosed that among various types of innovation, only administrative innovations showed their predicting power on sales.

It was also established that firms which acknowledged benefits of management innovation believed the practice motivated stakeholders by making them feel appreciated. Some firms believed that practice of management innovation helped them identify and meet specific customer needs and get maximum output from production processes. According to this perspective, an individual puts forward an innovative solution to address a specific problem that the organization is facing and he or she then champions its implementation and adoption as
found out by Lehtimaki (1991) in her study of managing innovation process in small companies in Finland.

### Marketing innovation

The study found out that the majority of the respondents have changed their marketing strategy in one way or another for their businesses. The study established that majority of businesses marketed their products in local market which confirmed the exporting behavior of garment SMEs (McCormick et al. 2007). It was also found out that new market for the products had been created. The entrepreneurs had also acknowledged Hurley & Hult (1998) observation that when you are faced with declining market, any market that is a going concern is a valuable asset. More so, it was evident that majority of business appreciate and practice innovative marketing techniques to increase sales and enhance loyalty. The correlation results of marketing innovation and growth showed a positive relationship indicating that indeed it’s a major contributor to the growth of garment SMEs. The findings supports Nyago’or (1994) results that showed that regardless of type of apparel being traded, the ability of trader to influence preference of a consumer contributes significantly to his or her purchase decision.

It was also evident that firms with increasing sales turnover were continuously changing the place to market their product, the way to market their product and analyzing competitors with aim of attracting new customers and enhancing loyalty. This is in agreement with Hurley & Hult (1998) study which reported that complementing the customer intimacy zones focusing on differentiating the offering on the demand side of the market and the operational excellence on the supply side, increases sales turnover of any going concern.

### Strategic innovation

Slight majority of the respondents’ had not discovered new source of supply of raw materials. At the global level there is continuous problem of US cotton subsidies that keep garment raw materials prices artificially high (Kinyanjui & McCormick, 2009). Unlike their finding the study did not establish major links to exploiting opportunities presented by the challenges of changing prices. The study also found out that majority of enterprises had strategic partners with suppliers, customers, trade and professional associations as well government agencies. More so, it was established that belonging to networks and linkages provided entrepreneurs with necessary information to provide relevant solutions to customer needs. However, when strategic innovation was correlated with sales turnover an indicator of growth there was a weak link of positive relationship.

Physical location was found to be beneficial in increasing sales by majority of respondents who observed that cluster location is ideal because it promotes complimentary sales, helps in development of infrastructure as it creates an environment that encourages stiff competition. However, stiff competition was not considered to favor business growth in contrast to Schumpeter’s view that competition drives innovation in a firm. Results of past studies have generally reported positive associations between proactive competition strategies and innovation by firms. For example, Turock (2001) reported that firms adopting proactive strategies had the highest levels of innovation and customer orientation.
Regression Analysis

<table>
<thead>
<tr>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Est.</th>
<th>P values</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.6084</td>
<td>0.5631</td>
<td>0.66593</td>
<td>0.048</td>
</tr>
</tbody>
</table>

The regression had a correlation coefficient ($R^2$) of 0.6084 and an adjusted $R^2$ of 0.56. This means that technological innovation, administrative innovation, marketing innovation and strategic innovation contributes 56 percent of the variations in growth of small and medium garment enterprises. The P-value of 0.048 indicates that growth of small and medium enterprises in the study is significant at 5 percent level of significance, P values of less than 0.05 (predetermined significance level) implies that the results are statistically significant (Kumar, 2005).

**Multiple Regression analysis**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-Statistic</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant Term</td>
<td>1.16</td>
<td>2.56</td>
<td>0.0000</td>
</tr>
<tr>
<td>Technological Innovation</td>
<td>0.52</td>
<td>2.438</td>
<td>0.0031</td>
</tr>
<tr>
<td>Administrative Innovation</td>
<td>0.40</td>
<td>2.335</td>
<td>0.0021</td>
</tr>
<tr>
<td>Marketing Innovation</td>
<td>0.71</td>
<td>2.720</td>
<td>0.0010</td>
</tr>
<tr>
<td>Strategic Innovation</td>
<td>0.123</td>
<td>2.433</td>
<td>0.0040</td>
</tr>
</tbody>
</table>

R-squared: 0.6084
Adjusted R-squared: 0.56
Durbin-Watson value: 2.09

Correlation is significant at the 0.05 level (1-tailed).

Hence the resultant regression model is:

$$G = 0.16 + 0.52TI + 0.4AI + 0.71MI + 0.123SI + e$$

The study used the Pearson’s Product Moment Method to determine the strength of the relationship. According to multiple regression equation established, taking all factors constant at zero, growth as result of innovation practices at 5 percent significance level was 1.16. Further, taking all other innovation types at zero, a unit increase in technological innovation will result to 0.52 increase in enterprise growth. A unit increase in strategic innovation will lead to 0.123 growth of enterprise; a unit increase in administrative innovation will lead to 0.4 increase in business growth while a unit increase in marketing innovation will lead to 0.71 increase in enterprise growth. This infers that marketing innovation contributed more to the enterprise growth.

**CONCLUSION**

The study confirmed earlier findings that some garment SMEs have survived and continue to thrive despite many challenges faced in the era of market liberalisation. This has been achieved by practicing all types of innovation as analysed. Therefore, innovation is very critical for SMEs to become and remain competitive in the global market.
Second, the study revealed that marketing innovation contributes most to the growth of SMEs but is less emphasized type of innovation. It was also concluded that as much as entrepreneurs acknowledged the role of innovation in enhancing business growth, not all businesses adopted innovative strategies in their processes probably because of lack of support mechanism in regard to cost implication and benefits. Innovation practices in SMEs tend to be much less formalized and based more on the inspirations and preferences of the owners and managers.

**RECOMMENDATIONS**

The study recommends a support mechanism to provide information on various types of innovation to garment SMEs so that they can adopt innovative approaches in their practices from production to distribution of finished products. SMEs need to do an evaluation of their strengths and weaknesses to establish their competitive advantage.

Garment SMEs need to engage in value addition activities as studies have shown that such activities have potential to increase their sales turnover. The study also recommends the promotion of innovative practices by garment enterprises in order to realize growth and profitability. This will contribute effectively to sustainable development; create wealth for the owner, employment opportunities and poverty alleviation. To realize these, adequate information on innovation practices should be availed to the entrepreneurs so as to have clear plan to implement preferred innovation practices.

More emphasis needs to be put on marketing innovation strategies because it has been established that it has more influence on growth of garment SMEs in Jericho Market. Therefore, the marketing activities should be designed and changed to suit the ever changing end users expectations and preferences.

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