EFFECTS OF AN ORGANIZATIONAL STRUCTURE ON PERFORMANCE OF SMALL AND MEDIUM MANUFACTURING ENTERPRISES IN KENYA

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ABSTRACT
In the global economy of the 21st century, competition is complex, challenging and fraught with competitive opportunities and threats. Product innovation is increasingly becoming the main focus for entrepreneurs especially those in the manufacturing sector. Without effective organizational structure, the capability of a firm to achieve or sustain a competitive advantage is greatly constrained. Most SMMEs in Kenya post poor performance and majority of them do not celebrate their third birthday. Research on product innovation and its dimensions may lead to improved performance especially for the manufacturing sector that is supposed to account for 20% of the GDP by the year 2030, as visualized in the Kenya vision2030. This study examines the influence of organizational Structure (being one of the dimensions of product innovation) on the performance of Small and Medium Manufacturing Enterprises (SMMEs) in Kenya. The objective of the study was to determine how organizational structure influence firm performance. Entrepreneurial orientation moderated the relationship between product innovation and firm performance. A representative sample of 254 managers or entrepreneur owners was selected from manufacturing firms registered under Kenya Association of Manufacturers using stratified random sampling. A self-administered, semi-structured questionnaire was used to collect the data. The questionnaire was pre-tested to ensure its validity and reliability. Data was analyzed using an appropriate model developed as a function of both the dependent and the independent variables, to measure their relationship. Data was analyzed and descriptive statistics presented, from which inferences were made as well as the conclusion and recommendation. This study would benefit the industry, SMMEs owner managers, researchers and the government. The study found that organizational structure was a significant predictor of firm performance.

Key Words: Organizational structure, Firm performance
1. INTRODUCTION

1.1: Background to the Study

This study focuses on the influence of product innovation on performance of small and medium manufacturing enterprises (SMMEs) in Kenya. The manufacturing sector plays a critical role in not only improving the overall performance of the global economy, but it also drives innovation for long-term sustainable economic growth (Kennedy, 2013). A study by UNIDO (2015) revealed that the world manufacturing sector has continued to struggle in its growth as a result of the global crisis of the year 2009. The pace of growth of the manufacturing sector has over the past few years decelerated. Small and medium enterprises (SMEs) in the sector need to constantly innovate in order to ensure improved performance and success of their enterprises. Tucker (2011) posits that innovation is the best way of stimulating improved performance in a firm. The most innovative firms realize higher turnover of products and services introduced within a period of time. A study by Freeman (1982) asserts that to choose to be non-innovative is to choose death of an organization. It is for these reasons that measures should be taken to reduce the challenges defacing the sector.

The influence of product innovation on firm performance has been one of the issues of most importance in recent literature. Product innovation refers to the introduction to the market of a new product or service that is new or significantly improved with respect to its characteristics or intended uses (Moses, Sithole, Labadarios, Blankley & Nkobole, 2012). Product innovation represents the provision of solutions to market threats and opportunities thus creating the basis for the survival and success of the firm into the future (Rick, Andy and Jacob, 2015). Several scholars (Li, Su, and Liu, 2010; Dobbin, Lassen and Nelson, 2015) argue that product
innovation enables a company to gain competitive advantage, establish a leadership position in the market and gain new customers to advance market position.

Several studies (Mihaicz, 2012; Kleinschmidt, Schultz, Salomo, and, De Brentani, 2013) show that the structure of a firm is related to innovation. Mihaicz (2012) mentions eight dimensions of an organization structure: formalization, specialization, standardization, centralization, professionalism, complexity, hierarchy of authority and personal ratios that influence product innovation. A study by Kleinschmidt et al (2013) argue that an organizational structure based on formal, functional, professionalism and formal control may increase innovations in a firm. Formal and centralized structures have a positive impact on innovation (Andrews, 2012).

The National Trends and International Comparisons (NTIC) (2012) survey revealed that the worldwide innovations and Research and Development (R&D) expenditures totalled an estimated $1,276 billion in 2009. The United States was by far the largest innovative and R&D performer ($402 billion) in 2009, accounting for about 31% of the global total expenditures. However this was a decline from 38% in 1999 to 31% in 2009. Inadequate investment in product innovation has resulted to negative growth of SME’s in the manufacturing sector in many economies of the world. In the United States (U.S) only 4,098 new agreements to license innovations were registered and revenue generated from innovations amounted to only $24,452 million. This was far less below the projected revenue in 2011 (NSF/NCSES, 2011).

Although China is emerging as a powerful economy, there is still a significant wide variation across provinces regarding new product output, new product intensity and the share of new product firms. The inland provinces such as Mongolia, Guizhou, Qinghai and Ningxia have limited new product output. The inner provinces are the least innovative with growth rate ranging from Mongolia (0.5%), Tibet (0.8%) and Xinjiang (1.3%). The inner provinces have also the lowest percentage of new product firms at 1.1% to 2.9%. These findings suggest that
there are large disparities in product innovation across regions in China (Zhang 2014; Lin, Li and Yang, 2011; Martin, Mayer and Mayneris, 2011). A study on innovation indicators and performance for Danish firms revealed an insignificant Heckman’s value. The Mills ratio was also negative suggesting that there are unobserved characteristics that increase the probability of being innovative (Cater & Schwab, 2008).

The South Africa innovation survey (2012), covering the period 2005-2007 revealed that 34.6% of enterprises reported no innovation activities at all. The non-innovative enterprises accounted for 7,915 firms and only employed about 0.27 million employees. This indicates that innovation tends to create employment (Moses, Sithole, Labadarios, Blankley & Nkobole, 2012). M-Pesa has had notable success where Vodacom Tanzania has 3.6 million M-Pesa customers out of its 11.6 million mobile subscribers as at June 2012, representing a mobile money penetration rate of 31%, however, this was far much below the projected market share in 2012 (Jack, William, Suri and Tavneet, 2012; CCK, 2012; Mutiga, 2014; Saylor, 2012). In Uganda, “e.water” is a new innovation that enables water consumers to pay their bills through their phones, within four months of the “e.water” launch, in March 2011, over 20,000 of the National Water and Sewage Corporation (NWSC) account holders had switched to the mobile money option, accounting for 10% of the total customer base. (Equity bank, 2013; Hope, Foster, Krolikowski and Cohen, 2011).

Safaricom was ranked the ninth most innovative company in the world in 2013. A report entitled “Global Online Payment Methods, 2014” disclosed that, there are 25 million M-Pesa account holders, where more money than Kenya’s national budget of KES 2 trillion is transacted annually. The report adds that online and mobile payments worldwide are forecast to KES 300 trillion in the next five years (CBK, 2014; Kariuki, 2015; Mutiga, 2014; CCK, 2012; Saylor, 2012; Mugo, 2014; Jack, William, Suri and Tavneet, 2010). The M-Pesa users
increased from 41% in 2009 to 67% currently. The mobile money contributes 6.59% of the total national payments. Over two thirds of the Kenyan adult population is subscribed to mobile money transfer services and 78% of this number use M-Pesa, where Individuals can send money to others via their phone through a network of over 60,000 local agents (CBK 2014; Kariuki, 2015).

M-Kopa is ranked the world’s top ten most innovative companies of 2015 in Africa. M-Kopa solar has introduced a Safaricom-branded solar lighting system which provides clean lighting solutions to millions of homes at a cost of KES 40 daily. M-Kopa is connecting 2000 homes every week and has already connected 90,000 Kenyan homes (CBK, 2015; Mureithi, 2014). More than 500,000 resource proof farmers have benefited from tissue culture banana technology transfer that has earned the Kenyan farmer an average of KES 5.5 billion. It is expected to hit KES 20 billion by 2015. The area under banana production has increased from 43,000 hectares in 1996 to 96,000 hectares to date and has uplifted Kenyans living beyond the poverty line to earn $3 per day (CBK, 2014; Eijkman, 2013). Daktari 1525 is a 24/7 innovation product that was launched in 2011. Daktari 1525 is a 24/7 call-in service that for a small fee, connects callers one-on-one with a doctor. It has a pool of 50 doctors, and this year it is anticipating to get more customers calling and more Kenyans healthy (ANAS, 2014).

1.2 Statement of the Problem

Small and medium enterprises in Kenya are faced with many challenges. A study by Tarus and Ng’ang’a (2013) reveals that small and medium manufacturing enterprises in Kenya have been facing critical challenges of low performance, declining trend in innovative activities and a high level of attrition. This is despite the fact that they are an important factor in the attainment of the Kenya vision 2030, which stipulates that the manufacturing sector should account for 20% of the GDP (RoK, 2008). Although Small and Medium Manufacturing Enterprises
(SMMEs) account for 70% of Kenya’s manufacturing sector (KIPPRA, 2014), their growth dropped from 5.6% in 2013 to 3.4% in 2014 (RoK, 2015). Despite SMME’s significant contribution to GDP in Kenya they are still not performing as expected. This is the reason why in 2014, a number of SMMEs in Kenya: meat and meat products processing firms, leather shoes, industrial gas, t-shirts and knitted fabrics, fish processing and preserving firms and shoe polish among others all posted negative growth (RoK, 2015). If such failures are not checked, they may lead to lowering of GDP due to low productivity and consequently lower profit margins for many firms in Kenya. When the state of macro economy is less favourable the opportunities for profitable employment expansion will also be limited. Increasing negative GDP stirs worry of economic recession among economist and investors (Ndungu, 2014).

The challenges facing SMMEs may be partly be addressed by product innovation as it is suggested as one of the key drivers of economic performance and growth of small firms (Rosenbunch, Brinckman and Bauch, 2011: Chiara Daniela and Analisa, 2015). A study by Wanjiku (2011) on industrial innovation in the face of stiff competition from Chinese imports did not specifically focus on product innovation. Ndalira (2013) studied Effects of the type of innovation on the growth of SMMEs in Kenya but did not specifically study product innovation in the manufacturing sector. Khiu, Ahmad and Ramayah (2010) studied product innovation among Information and Communication Technology techno-preneurs in Malaysia but used a small sample of five software firms and hence the results cannot be generalized. Atalay (2013) studied the relationship between innovation and firm performance in Turkey but did not specify the size of the firms and hence the results cannot be generalized. This shows that limited attention has been paid on the product innovation- SMMEs performance model. This study seeks to address these gaps by undertaking an empirical study on the influence of organizational structure on the performance of SMMEs in Kenya.
1.3 Research Objective

i. To determine the effect of centralization on performance of SMMEs in Kenya.

ii. To determine the effect of formalization on performance of SMMEs in Kenya.

iii. To determine the effect of professionalism on performance of SMMEs in Kenya.

2. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Teleological change Theory

Teleological change theory proposes that in order to construct the desired state, an organization should be purposeful and adaptive by itself or in interaction with others (Van de Ven & Poole, 1995). Changes in organizational structure and the overall flexibility of the firm, is said to be one of the most vital factors in a firm’s development and success (Tuminas, 2013) are crucial to its existence, because at initial state departments’ and job responsibilities, work content and processes, rules and regulations, communication and co-ordination and distribution of power, are all in a nascent state (Xiuli & Juan, 2011). At the same time, to increase efficiency over time, the firm has to create and implement flexible organizational structures in order to improve routines within an organization, such as constrained employee behaviour, high levels of formality, tight control and decisions made only by CEO.

There has been no pre-defined vector of how the company would reach its target, but there has always been an understanding of where it is going (Tuminas, 2013). The understanding of the company’s organizational structure has emerged from the goal – to create and maintain a system that would be capable of dealing with the transition from a situation of partial definition of risk to complete control of risk related to the human factor. Together with the main purpose
of the firm, the environment of the company, filled with uncertainty and volatility, has been a
determinant of the changes in structure and attitudes of the organization. It becomes clear, that
the company’s attitude towards changes is in line with teleological school of thought, thereby
an organization might change its structures according to their main goal at the given moment
in time. Given the fact that a company might undergo certain changes in order to reach its goal,
affected by external forces, a very high level of flexibility is always maintained within the
company, which can at the same time be supplemented by more rigid structures in the situation,
where cost efficiency and focus on exploitation of existing opportunities are needed. This study
adopted teleological change theory to explain how an organizational structure influences
product innovation in SMMEs in Kenya.

2.2 Empirical Review

2.2.1 Organizational Structure

In Malaysia, Aizzat, Muhammad and Nur (2012) undertook a study to investigate country of
origin effect on organizational innovation in Malaysia: the mediating role of structure. It looked
at the country of origin as the independent variable. The organizational structure was a
mediating variable. A sample of 80 multinational corporations and 43 locally-owned joint
ventures was used. They found out that an organizational structure has an impact on
organizational innovation, specifically formalization and centralization. Another finding was
that formalization and centralization did not have any impact on technological, process as well
a product innovation. They also found out that both levels of technological and process
innovations, as well as administrative innovation were high among American multinationals.

Asieh (2015) investigated the relationship between an organizational structure and job
innovation in employees of an industrial company. The purpose of the study was to investigate
the relationship between dimensions of organizational structure with innovation. A sample of
313 employees of an industrial company in Iran was selected. The findings revealed a negative relationship between centralization and innovation. High levels of centralization caused protest and disruptive approaches and inhibited the development of new ideas. Also there was a negative correlation between complexity and innovation. He also found out that there was a negative correlation between recognition and innovation. Another finding was that organizational structures were significant predictor of innovation.

2.3 Research Gaps

The manufacturing sector’s contribution to GDP stands at 10% (ROK, 2015). Formal employment rose by 2.9% to 287,456 persons, while the total wage earnings increase by 12.4% from KES 98.3 million in 2013 to KES 110.5 million in 2014. The Kenya vision 2030 stipulates that the manufacturing sector should account for 20% of GDP (RoK, 2008). However in 2014 a number of SMMEs posted negative growth; leather shoes declined by 0.4%, industrial gas by 4.2%, T-shirts and knitted fabrics by 12.1% among others. The contribution of the manufacturing sector to GDP also stagnates at 10% despite its high potential.

A number of studies have been done on area of product innovation mostly in the United States of America, Europe and Asia. Diaya, Kohei and Hiroshi (2012) studied new-to-market product innovation and firm performance but did not indicate the sizes of the firms in the sample. In the study by Hans (2014), the effects of product innovation was not specifically covered. Palmer (2011) studied product innovation in small firms, Mariann, Isabelle and Rutger (2012) investigated product innovation processes in small firms but the study did not cover the manufacturing sector; Miguel and Elena (2009) investigated product innovation in small manufacturers but did not highlights the influence of product innovation.
Out of the many studies that have been done, only a few studies have been carried out in Kenya including Gichana, Ongwae and Romanus (2013) in their study on innovation activity and firm growth across key sectors of the Kenyan economy but did not indicate the firm sizes and the sectors involved; Mbogo and Ashika (2013) who studied the factors influencing product innovation in micro finance institutions, focused on the service sector but did not study the manufacturing SMEs. Mwangi and Namusonge (2014) who investigated the influence of innovation on small and medium enterprise (SME) growth did not study the influence of product innovation on manufacturing SMEs. These studies show that limited attention has been paid to the influence of product innovation-firm performance relationship model in Kenya. This study therefore filled on this existing knowledge gap.

3. METHODOLOGY

3.1 Research Design

A research design is a framework for data collection and analysis to answer a study’s research questions (Bryman & Bell, 2011). Orodho (2008) asserts that decisions regarding what, where, how much, by what means concerning an inquiry or research study constitutes a research design. Cooper and Schindler (2011) and Kothari (2010) suggest that a research design constitutes the blue print for collection, measurement and analysis of the data. A research design enables the researcher in allocation of limited resources by posing crucial choices in methodology (Cooper & Schindler, 2011). This study adopted mixed methods research guided by cross-sectional survey design. A cross-sectional survey design enables the researcher to capture information based on data gathered for a specific point in time (Cooper & Schindler, 2011). Onwueghbuzie and Turner (2007) and Creswell and Clark (2011) refer to the integration of qualitative and quantitative research methods as mixed-methods research.
3.2 Population of the study

Population refers to the entire collection of all subjects from where a sample is drawn (Zikmund, Babin, Carr & Griffin, 2012). The target population is a group of individual objects or items from which a sample is taken for a specific study (Kombo & Tromp, 2009). The target population for this study was SMME’s registered with the Kenya Association of Manufacturers (KAM). There were seven hundred and fifty-two (752) manufacturing firms registered with KAM as at June 2017.

3.3 Sampling Design

Stratified random sampling with a proportional allocation of each stratum was used to obtain a representative sample in this study. In random sampling, each item in the population has a probability of selection same as any other item in the population. Stratified random sampling is used for data which is heterogeneous. The population is divided into sub-groups with common characteristics and the representatives from each sub-group are to be part of the sample (Kothari, 2010). Mugenda and Mugenda (2003) posit that at least 30% of the population is adequate to form the sample size. Hill (2012) suggests that at least 10% sample size of the population is adequate for a research study, while for a small population, 20% should constitute a sample. The sample for this study was determined using the sample table developed by Krejcie and Morgan in 1970 as shown in appendix two (Research Advisors, 2006). The population for this study is between 700 and 800 and therefore the sample size at 95% confidence level was (248+260)/2=254 representing 34% of the population which is based on the following formula by Krejcie and Morgan.

\[ s = \frac{X^2NP(1-P)}{d^2(N-1)} + X^2P(1-P) \]  
\[ \text{Equation (1)} \]
3.4 Data Collection and Instrumentation

Kombo and Tromp (2009) define data collection as the gathering of information to serve or prove some facts. The researcher collects both primary and secondary data. The primary data was obtained by administering a self-administered, semi-structured questionnaire. Questionnaires consist of a series of specific, short questions that are asked verbally by the interviewer or answered by the respondents on their own (Cooper & Schindler, 2011). The secondary data was collected from published sources such as the internet, library and research done by other scholars. After data collection, the researcher used various methods of estimating non-response. There are three methods that are commonly used: comparison with known values for the population, subjective estimates and extrapolation.

3.5 Data Analysis

This study used both descriptive and inferential statistics to analyse the data. Descriptive statistics describe and summarize the data in a meaningful way using charts, tables and bars while inferential statistics draw conclusions on the analyzed data thus helping in generalization. Therefore pie-charts, bars and histograms formed part of the analysis for presentation of results. Predictions based on the results of the analysis was made and the results generalized on the population of study given that the test sample is part of the population. Statistical Package for
Social Sciences (SPSS) was used to analyze quantitative data. Multiple Regression was applied to test the effect of independent variables on firm performance.

4. FINDINGS

4.1 Response Rate

The researcher collected data from firms registered with Kenya Association of manufacturers (KAM) as at June 2015. The study had a sample of 254 firms out of the 752 registered with KAM. The target sample was 254 owner/senior managers out of which 215 responses were received accounting for 85% response rate. Sekaran (2008) argues that any response rate above 75% is classified as best and appropriate for any study. Mugenda (2012) avers that a response rate of 50% is adequate, 60% and above good and above 70% very good. The response rate of 85% found in this study is therefore quite adequate. This was in line with Orodho (2009) that a response rate above 50% contributes towards gathering of sufficient data that could be generalized to represent the opinions of respondents about the study problem in the target population.

4.2 Organizational Structure

The variables considered for centralization in this study were encouraging employees to make their own decisions, employees’ involvement in key innovation decisions, supervisors’ approval on decision made by employees and whether management get direct information from
lower levels of employees. The result indicated that majority (36%) were of the view that most decisions made by employees rarely had supervisor’s approval, 29% often, 18% very often and 16% not at all. On the opinion whether the employees were included in key innovation decisions, 34% responded rarely, 28% often, 23% very often and 14% not at all. Further on the opinion of management getting direct information from lower levels employees, 32% responded often, 31% rarely, and 25% not at all and 12% very often. The result agree with the findings of vies, veisi and Hasan’s (2012) who concluded that less centralization encourages openness and flexibility in roles which is a pre requisite for new ideas. Shaemi et al (2013) argue that firms with less centralized but managerially intensive organization structures are more responsive to innovation. A study by Powley and Nissen (2012) highlighted centralization as one of the main structural elements that may impact on innovation. The study confirms that an organizational structure has an impact on organizational innovation specifically centralization.

On formalization the study sought to investigate management assignment of duties to employees, whether written job description were formulated, whether rules and procedures occupy a central place in the organization and the time taken for management approval on decisions. The results indicated that the majority of the respondent (36%) were of the view that written job descriptions were rarely formulated at various level, 35% often 18% and 11% not at all. Regarding rules and procedures occupying a central place in the organization 34% responded often, 32% rarely, 18% not at all and 16% very often. Opinion on management reassigning duties to employees had 33% of the view often, 32% rarely, 30% not at all, 4% very often and 2% for other opinions.

The results are in agreement with Latiti and Shooshtarian (2014) who discovered that firms with organic structures that entail low formalization are more inclined to innovate. A study by
Powley and Nissen (2012) reported that flexible organization structures characterized by low levels of formalization best promote innovation within firms. Lendel and Varmus (2012) suggest that it is necessary to employ low formalization during innovation initiation phases because at this stage information gathering and processing is critical for success. A study by Lewis (2011) confirms that where the degree of formalization is low, jobs behaviors are usually not programmed and employees have greater freedom and discretion to exercise in their work, new ideas are likely to be generated.

In relation to professionalization the study sought to investigate how often the firms used professionals as a source of creativity and innovation, Professionals incorporation in firm’s activities, professional education levels and their specialization and professionals experience in different firm activities. The results indicates that 38% of professionals are often incorporated in firms activities, 30% rarely, 18% very often and 13% not at all. Regarding the use of professionals as a source of creativity and innovation 34% were of the view rarely, 28% not at all, and 5% very often. As for education levels and specialization 33% responded often 31% rarely, 20% very often and 16% not at all.

The result concur with the findings by Meitzer and Kamprath (2013) who acknowledge of the worker that the knowledge of the worker and their ability to create and share new knowledge promotes products innovation in a firm. Muzio et al (2013) point out that, the first way in which professionals restructure institutions is by opening up new spaces for their expertise such as creation of new products. Several studies (Shaemi et al 2013) argue that successful firms with less formalized and certified but more professionalized and managerially intensive organization structures is therefore a major factor of product innovation. In their study on the effects of organizational structure on organizational Trust and effectiveness Latifi and Shooshtarian (2014) also discovered that firms with organic structure that entails low
formalization are more inclined to innovate. This is also consistent with a study by Tran and Tian (2013) who found out that flexible organizational structure characterized by low levels of formalization and centralization best promoted innovation and better performance within firms.

The professionals must be seen as champions of efficiency and effectiveness and must acknowledge the challenges and their various forms, and their sources. The requirements to educate professionals and equip them with new and higher-level skills have consequently become urgent (Raymond, 2013). A skill is the ability either to perform some specific behavioral task or the ability to perform some specific cognitive process that is related to some particular task (Wanyama, 2013) However, Obanda, (2010) report that finding, hiring and retaining dedicated, energetic, and ethical employees with special skills is always hard. While we understand that professionalism is a key mechanisms for, and primary targets of institutional change, the precise role of professions and professional service firms in processes of institutional change remain under-theorized (Lisa, 2010)

4.2.1 Bivariate Analysis of Organizational Structure and Performance of SMMEs

To determine the effect of an organizational structure on performance of SMMEs in Kenya the line of best of fit was generated. Figure 4.1 presents that all the plots are in the first quadrate and the line of best of fit indicates an estimate line that is increasingly positively upwards. This implies that there is a positive linear relationship between organizational structure and performance of SMMEs, since the relationship is a possible linear with a positive slope. The study findings are in agreement with the findings by Asieh (2015) who investigated the relationship between an organizational structure and performance of SMEs and established that there was a positive correlation between organizational structure and performance of SMEs.
Table 4.1 shows that there is a positive linear relationship between organizational structure and performance. The R value of 0.280 shows the positive linear relationship between Organizational structure and performance. The $R^2$ is the coefficient of determination which indicates that the explanatory power of the independent variables is 0.079. This means that 7.9% of the variation in performance is explained by the variation of organizational structure in the model. The remaining 92.1% of the variation in the dependent variable is unexplained by this one predictor model but by other factors not included in the model. This is in line with a study by Tran and Tian (2013) who found out that flexible organizational structure characterized by low levels of formalization and centralization best promoted innovation and better performance within firms.

**Table 4.1 Model Summary of Organizational structure and Performance of SMMEs**

<table>
<thead>
<tr>
<th>Performance</th>
<th>Pearson’s $\rho$</th>
<th>2-tailed Sig.</th>
<th>$N$</th>
<th>Organizational structure</th>
<th>Pearson’s $\rho$</th>
<th>2-tailed Sig.</th>
<th>$N$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>1</td>
<td>0.000</td>
<td>214</td>
<td>0.280**</td>
<td>1</td>
<td>0.000</td>
<td>214</td>
</tr>
<tr>
<td>Organizational structure</td>
<td>0.280**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The ANOVA results on table 4.2 show that the influence of organizational structure on performance of SMMEs in Kenya is significant. The p-value of the F-statistic as shown in the ANOVA table is 0.000 which is less the 0.05 implying general significance of the one parameter model thus implying that organizational structure taking significantly influences performance of SMMEs. This is in consistent with a study by Tran and Tian (2013) who found out that flexible organizational structure characterized by low levels of formalization and centralization best promoted innovation and better performance within firms.

Table 4. 2: ANOVA Table of Organizational structure and Performance of SMMEs

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>16.816</td>
<td>1</td>
<td>16.816</td>
<td>18.165</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>197.184</td>
<td>213</td>
<td>0.926</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>214</td>
<td>214</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the Table 4.3, the regression results show that organizational structure had a significant positive influence on the performance of SMMEs in Kenya (β = 0.28, t = 4.262 and p-value = 0). From the above regression results, the p-value < 0.05 implying significance of the coefficient of organizational structure in the model. The model shows that with every unit
increase in the levels of organizational structure there is a 0.28 increase in the levels of performance of SMMEs in Kenya. A further implication is that a firm with low levels of organization structures, a firm that focuses on centralization and formalization rather than professionalism would possibly experience low performance. The equation below shows the resulting regression model that predicts the level of performance of SMMEs for a given level of Organizational structure:

\[ Y = 0.000 + 0.280X_2 \]

Where; \( X \) is the independent variable, Organizational structure, \( Y \) is the dependent variable, Performance of SMMEs

The teleological change theory proposes that changes in organizational structure and the overall flexibility of the firm is one of the most vital factors in a firm’s development and success. The contingency theory of organizational structure articulates that an organization in fit enjoys higher performance as a result of generating surplus resources which lead to growth in innovation, sales and size (Hamilton & Shergill, 2010). A study by Palmer and Wright (2012) on product innovation in small firms also found out that an organization structure was a significant predictor of innovation with less centralized and less formalized firms innovating with somewhat greater frequency than firms with more rigid structures. Flexible organizational structures facilitates effectiveness of firms through emphasizing, absorbing professionals with skills that allow the employees to better serve the company by solving problems and interacting with customers and workers as indicated by Latif (2014).

Table 4.3: Coefficients table of Organizational structure and Performance of SMMEs

<table>
<thead>
<tr>
<th>Variable</th>
<th>β coefficient</th>
<th>Std. Error</th>
<th>T</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.000</td>
<td>0.066</td>
<td>0.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>


Summary of the Study Findings

Quantitative data from factor analysis were used for statistical modelling to test the influence of Organizational Structure on firm performance. Correlation analysis between Organizational Structure and firm performance showed that there was positive relationship between Organizational Structure and firm performance. A regression analysis was carried out to determine the influence of Organizational Structure on firm performance. The regression model had a positive coefficient of determination implying that Organizational Structure explains the variation in firm performance in the model. The coefficients of the regression model was also found to be positive for Organizational Structure.

Recommendations

The study derived various recommendations from the results, findings and conclusion. First the management of SMMEs can use the findings of this study to introduce novel products or they can significantly improve the existing products with respect to their characteristics or intended uses to boost their sales and ultimately improve their performance. Secondly the managers should embrace organization structure to maximize on financial benefits of product innovation. Secondly the management of SMMEs should emphasize product innovation concepts such as centralization, formalization and professionalism through incorporating them in their Vision and Mission statements.
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