THE ROLE OF MANAGEMENT STRUCTURE ON PROMOTION OF INTRAPRENEURSHIP IN THE SMALL AND MEDIUM MANUFACTURING ENTERPRISES IN KENYA

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Abstract
The manufacturing sector in Kenya is of great importance to the growth of the economy as it significantly contributes to the gross domestic product of the economy. The sector has over the years experienced a lag in its growth as statistics show thus necessitating a need to improve its performance. The small and medium manufacturing enterprises which form part of the small and medium enterprises sector are the majority in the manufacturing sector. In general, the small and medium enterprises sector is an important part of the country’s economy as it generates over 60% of employment in an economy, but faces a myriad of challenges. Practicing intrapreneurship has been known to improve growth and profitability not only in the large enterprises but also in the small and medium enterprises as well. Putting in place appropriate management structures has been known to support and enhance intrapreneurship. Management structures that promote a firm’s intrapreneurship are part of entrepreneurial management which as opposed to administrative management is necessary for any firm because it is pro-active, risk-taking and opportunity driven. The objective of the study was to find out the role of management structure on promotion of intrapreneurship in small and medium manufacturing enterprises in Kenya. The list of the firms registered with the Kenya Association of Manufacturers was used as the sampling frame and data collected using the random sampling method. Descriptive and correlational research designs were used for the study. Correlation analysis, scatter plot and multiple linear regression analysis were used to establish the relationship between the independent variables and dependent variable.

Key Words: Intrapreneurship, Small and Medium Manufacturing Enterprises, Management Structure, Entrepreneurial Management
Introduction

Manufacturing is a key sector in not only the local but also the global economy. Its importance is not limited to adding value but also creates jobs and drives innovation for long-term sustainable economic growth. This is both for emerging and developing economies in the world (Kennedy, 2013). According to UNIDO (2015), the world manufacturing sector has continued to struggle in its growth as a result of the global financial crisis of the year 2009, and this has resulted in the developing countries being the main engine in the growth of the global manufacturing. The pace of the growth is entirely not encouraging as it has over the past few years decelerated. The sector is also in transition in many countries and faces several challenges that are significant to its continued performance as pointed out by the Chartered Institute of Management Accountants (2010). It is for these reasons that measures should be undertaken to reduce the challenges defacing the sector. Most of the world's manufacturing is undertaken by the SME sector as affirmed by the Edinburg Group (2012) that SMEs constitute about 95% of all the enterprise across the world, but according to Katua (2014) have unique challenges which hinder their growth and innovativeness.

Small and medium scale manufacturing is an important segment in the SME sector. Small scale production is characterized by high labour involvement thus helping to reduce the high levels of unemployment. Most of these enterprises do not require intensive capital investment, thus easier to set up and operate than the large manufacturing enterprises (Tarus & Nganga, 2013). According to the Kenya Association of Manufacturers (KAM) (2012) Kenya’s industrial sector is comprised of manufacturing, mining and quarrying and construction activities. This sector contributes 14% to the Gross Domestic Product (GDP). The greatest share of industrial production is accounted for by manufacturing activities at 9.4% that is approximately 70% of the total industrial sector contribution to the GDP. The manufacturing sectors overall goal is to increase its GDP contribution to at least 10% per annum. The contribution of the manufacturing sector to the total formal employment in Kenya is 13%, while the informal manufacturing accounts for 20% of the informal employment (KAM, 2012). One way to enhance an organization’s performance is through intrapreneurship, which has been linked to a firm’s performance of increased profits, with those firm’s that practice it turning in better results (Kolokavic, Sisek, & Milovanovic, n.d). Intrapreneurship has been variously defined by various scholars and researchers. Labels used include corporate entrepreneurship, entrepreneurial orientation, corporate venturing (Jackal, 2010; Nath, 2005; Maes, 2003). Literature shows that the most commonly used label is corporate entrepreneurship. Covin and Slevin (1991) saw it as the extension of the firm’s domain of competence and the corresponding opportunity that is set through new resource combinations generated internally. It can also be seen as the transformation of organizations as a result of strategic renewal, that is, the creation of new wealth through the combination of resources (Dess, Lumpkin & McGee, 1999). According to Shoghi and Safiepoor (2013), one way to promote entrepreneurial orientation of a firm is to come up with the appropriate management structures. Management structure is one of the dimensions of entrepreneurial management Kuhn, Sassmannshausen and Zollin (2010).

Statement of the Problem
SMEs in the manufacturing sector in Kenya are faced with a number of challenges which, as pointed out by Gathogo (2013), include lack of innovative capacity, not being quick to embrace new technology, constraints in accessing capital and inadequate management capacity. This is despite the fact that they are an important factor in the attainment of Kenya’s Vision 2030. SMMEs form 70% of the manufacturing sector in Kenya (KIPPRA, 2013), and in general, the sector grew by 3.4% in 2014 as compared to 5.6% in 2013 (ROK, 2015), while its growth of 3.1% lags behind the overall economic growth of 5% (KAM, 2015).

These challenges facing the sector can partly be addressed by intrapreneurship which is for all firms of all sizes, and increases a firm’s performance (Mokaya, 2013). Sejde, Veenker and during (2013) recommended that studies be undertaken on the role of management or the entrepreneur owner on intrapreneurship enhancement in SMEs. However, attention by management and scholars on the factors that affect a firm’s ability to undertake intrapreneurship has been greatly focused on large firms, which do not face as many challenges as the SMEs (Fini, Grinmaldi, Marzocchi, Sobrero, 2012; Naldi, Achtenhagen and Davidsson 2015). For example Mokua and Ngugi (2013) undertook a case study on the determinants of corporate entrepreneurship in the banking industry in Kenya studying Equity Bank. Sakhdari, Burgers and Davidsson (2014) conducted an attention-based study of the moderating role of entrepreneurial management in the relationship between absorptive capacity and corporate entrepreneurship in Iran and Australia, but did not specify the size of the firms studied, therefore cannot be generalized on SMMEs. The research sought to address these gaps by undertaking an empirical study on the role played by management structure on promotion of intrapreneurship in SMMEs in Kenya.

**Objective of the Study**

The objective of the study was to establish the role of management structure on promotion of intrapreneurship in SMMEs in Kenya.

**Research Hypothesis**

The following hypothesis was formulated in light of the above objective:

\[ H_0 \] Management structure does not have a role on promotion of intrapreneurship in SMMEs in Kenya

**Theoretical Review**

The study was anchored on structural contingency theory which helped in explaining the viewpoint of management structure as a construct of entrepreneurial management in promoting intrapreneurship in SMMEs in Kenya.

**Structural Contingency Theory**

Lawrence and Lorsch in the 1960’s came up with the structural contingency theory which states that there is no best way or single structure to organize an organization. Instead the structure is dependent on the situation or circumstances at hand (Donaldison, 2013). It is an organizational behaviour study approach which claims that individual organizations adapt to their environments (Soylu, 2008). According to this theory, no single type of management structure can be applied to all organizations. Therefore the organization’s effectiveness will be dependent on matching these contingent factors like the technology type, the volatility of the environment, the organization size, organizational structure features as well as its information system (Islam
Organizational contingency assumes that the interaction between structural dimensions of work design and contingency factors influences how an organization adapts and performs within its environment. The organization’s internal functioning should therefore be linked and correlated to the demands and changes of the external environment (Soylu, 2008; Leweling, 2007).

SMMEs exist in an environment that is fast changing in terms of competition and technology, and this calls for a management structure that is flexible enough to make decisions that are contingent to the changes of the moment. Long (2016) posits that contingency plans should be a part and parcel of small businesses to enable efficient continuation of operations when faced with difficulties and challenges. It is important then that SMMEs’ managers be guided by their perception of the environment to select contingency factors like culture, strategy, task uncertainty, size and technology, which in turn influence the organization structure that leads to superior performance. The contingency variables and structure should fit to avoid lower performance. Any change in the contingency variables means that the structure is out of fit, necessitating the organization to undergo structural change so that the fit between the contingency variables and structure can be regained. Managers have to consistently select the appropriate contingency factors to fit the organization’s current environment (Soylu, 2008).

According to Donaldson (2005), it is the assumption of the structural contingency theory that low uncertainty tasks are performed better by a centralized hierarchy as it is simple, quick and cheaply allows close coordination. When innovation and other factors increase task uncertainty, then there is need to loosen control and introduce participatory and communicative structures. The result of this is reduction in structural simplicity and raised costs but the benefits of innovation are enjoyed as a reward (Donaldson, 2005).

Management Structure

Kuhn, Sassmannshausen & Zollin (2010) have the opinion that management structure is one of the dimensions of entrepreneurial management, and go ahead to differentiate between administrative management structure and entrepreneurial management structure. This difference is brought about mostly by how they use and control their resources. The administrative management structure leans towards formal and complex hierarchy with highly routinized work under clear roles and responsibilities. On the other hand, entrepreneurial management structure tends to be organic with multiple informal networks. These informal networks are flexible intended to encourage and create enabling conditions for employees to seek and create opportunity, thus focused on rapidly detecting and acting rapidly on environmental changes. Burns (2011) further posits that the need for tight management control decreases as firms that are entrepreneurial move away from centralized hierarchical forms to flatter structures that facilitate horizontal communication. There is introduction of autonomy and for better entrepreneurial performance, but where a firm has decreased entrepreneurial activity, the need for controls increases. Successful firms in intrapreneurship should establish a favourable organizational system with a supportive management structure, job design, supportive job rotation and freedom and flexibility given to employees to manage their own work and solve problems.
(Srivastava & Agrawal, 2010). It is necessary for management style to fit the structure of the organization and vice versa (Burns, 2011). It is for this reason that for entrepreneurship to continue within a firm, flatter organic structures are necessary for effective entrepreneurial management style. Shoghi and Safieepoor (2013) undertook a study on the effects of organizational structure on entrepreneurial orientation of employees in the metal industries of Kaveh Industrial City of Iran. Through their study they point out that organizational structure is one of the most important and effective factors that help in facilitation of entrepreneurship in organization through establishment of different dimensions of entrepreneurial orientation. In Turkey Alpkan, Bulut, Gunday, Ulusoy, and Kilic (2010) undertook a study to investigate innovative performance of companies as a result of both the direct and interactive effects of organizational support and human capital. One of the organizational support variables was management support for generation and development of new ideas, allocation of free time, work discretion, performance based reward systems and tolerance for risk taking. Organizational support was found to have a positive impact on innovative performance of the firms. This was especially so for the management support and tolerance for risk taking, which were found to be the drivers that strongly influenced innovativeness.

Methodology
The study used both correlational and descriptive research survey design. Descriptive research is useful when determining the degree of the relatedness of the variables. The research instrument was a questionnaire that was structured to include both open and close ended questions that were clear and easy to understand. A pilot study was carried out to ascertain the validity and the reliability of the research instrument before going to the field.

Sampling Technique and Sample Size
The study was focussed on SMMEs in Kenya. The year 2015 list of the 752 manufacturing firms registered with the Kenya Association of Manufacturers formed the sampling frame. However, the 752 firms on the list comprised of both the SME and the large scale firms. This necessitated a preliminary study to identify the SMMEs from a sample of 254 firms derived using Krejcie and Morgan (1970) table. Using random sampling, 145 firms responded and out of these 133 were found to be SMMEs. The final data for the study was collected from 114 SMMEs managers or owner managers who successfully participated.

Data Analysis and Presentation
This study involved both qualitative and quantitative data. As Kothari (2004) points out, it was necessary that after the questionnaires were received back, to edit the raw data for any errors or omissions and correction made where possible. This was done to ensure the data’s accuracy and consistency with other gathered facts. Coding and classification was done for efficient analysis of the data. Both descriptive and inferential statistics were used in the analysis. Descriptive statistics describe and summarize the data in a meaningful way using tables and bar charts. Linear regression analysis was used to determine the relationship and the significance of the independent variable to the dependent variable. The hypothesis was tested.
at 5% significance level. Predictions and inferences based on the results of the analysis were made and the results generalized on the population of study given that the test sample was part of the population.

**Findings**

**Descriptive Statistics**

On levels of management present in SMMEs, those which had three levels were $3(2.6\%)$, followed by those at four levels at $60(51.3\%)$. According to Burns (2011) entrepreneurial firms tend to move away from centralized hierarchical forms to flatter structures, which facilitate horizontal communication. Tight management controls also decrease as firms become more entrepreneurial and move away from centralized hierarchical forms to flatter structures. Shoghi and Safiepoor (2013) in their study on metal industries in Iran found that the complexity of the levels affected the entrepreneurial orientation of employees. The preference was flatter, organic and non-complex structures which increase innovativeness in an organization. Reading from the results of the study it can be implied that management in SMMEs is neutral as concerns levels of management as the structure is neither flat nor is it high. The majority however indicated lower levels than five and above. Further the sought to determine how management communicates with the employees. Finch, Hansen and Alexander (2010) point out that when employees are consulted regularly, listened to and action taken upon their suggestions, they feel appreciated and are more effective as they perform to a higher standard. On the other hand, horizontal communication is important for firms to remain entrepreneurial as posited by Burns (2010). The study reinforces these views as the table below shows that employees are often consulted as 72(61.5%) often get direct information from their employees, 38(32.5%) very often got direct information from their employees, while only 7(6%) indicated that they rarely got direct information from their employees. This meant that through appreciation employees within SMMEs were more effective thus promoting intrapreneurship. The study sought to know how flexibility in management plays a role in intrapreneurship in SMMEs. Entrepreneurial firms put in place structures that are supportive and flexible to enable employees manage their own work and solve problems (Srivastava & Agrawal, 2010). One way to determine flexibility in management is by giving employees some leeway to make decisions without depending on management. The response to the question whether employees were expected to await management’s directive before taking any action were that 15(12.8%) were neutral, 74(63.2%) agreed while 28(23.9%) strongly agreed. On whether employees were expected to always abide by the laid down regulations 2(1.7%) strongly disagreed, 1(0.9%) disagreed, 7(6.0%) were neutral, 77(65.8%) agreed and 30(25.6%) strongly agreed. Those who expected employees to abide by the rules were the majority, still confirming the inflexibility in the management structures. Further prodding on the flexibility accorded to employees by management revealed that 49.1% of the respondents rarely reassigned duties to employees, while 41.4% often reassigned duties to employees and 8.6% very rarely reassigned duties to employees. Only 0.9% indicated that management very often
reassigned duties to employees. These results show that management in the SMMEs does not accommodate flexibility and this scenario does not promote intrapreneurship. Management in SMMEs is therefore advised to put in place flexible structures if intrapreneurship is to be promoted. Engaging employees in decision making is indicative of the type of management structure, whether it is rigid or not. Entrepreneurial firms are non rigid in their management structure and incorporate employees as part of decision makers. According to Irawanto (2015) in a study of Indonesian state owned enterprises found that employees who were engaged in decision making, were indirectly motivated and gave their best performance possible in their work. On whether employees were included in key production and marketing decisions, the response was that those who very rarely included employees in decision making were 6(5.1%), 35(29.9%) rarely included employees in decision making, 75(64.1%) often included employees, while only 1(0.9%) very often included employees. These results show a favourable inclusion of employees to decision making thus being supportive of intrapreneurship.

**Regression Analysis**

In testing the relationship between the independent variable management structure on the dependent variable intrapreneurship, a scatter plot was fitted whose results as depicted in figure 1 show indicate that there is a positive linear relationship between the independent variable and the dependent variable. It was concluded that management structure has a significant contribution to intrapreneurship in SMMEs in Kenya. Given the highly significant contribution to intrapreneurship, SMMEs in Kenya need supportive management structures. The study supports that by Shoghi and Safiepoor (2013) in their study on Iranian industrial firms, which concluded that management structures were an important ingredient to a firm’s entrepreneurial orientation.

![Figure 1: Scatter plot on management structure and intrapreneurship](image-url)
Table 1 Regression Analysis Model for Management Structure and Intrapreneurship.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adj.R²</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.543a</td>
<td>.295</td>
<td>.289</td>
<td>.315</td>
</tr>
</tbody>
</table>

ANOVA b

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>4.657</td>
<td>1</td>
<td>4.657</td>
<td>45.9</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>11.119</td>
<td>112</td>
<td>.099</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15.776</td>
<td>113</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Coefficients a

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstand. Coefficients</th>
<th>Stand. Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1.319</td>
<td>.225</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>.524</td>
<td>.077</td>
<td>.543</td>
<td>5.849</td>
</tr>
<tr>
<td>Structure</td>
<td></td>
<td></td>
<td>6.849</td>
<td>.000</td>
</tr>
</tbody>
</table>

a) Predictors(c) Management Structure

b) Dependent variable – Intrapreneurship

The results of the regression model in table 1 show a positive linear relationship between management structure and intrapreneurship at R=0.543, making their association to be significant. With R²=0.295, statistically the implication is that an addition of an extra unit of management structure would cause a variation of about 29.5% in intrapreneurship. This means that 70.5% variation in intrapreneurship is caused by other factors apart from management structure. Management in SMMEs would therefore be advised to look for these other factors other than appropriate management structures.

The results of the F test (F (1,113) = 45.9, p = 0.000<0.05) from the ANOVA were significant with a p value =0.000 which is less than the standard p value of 0.05 further reinforcing the significance of the model. The study concluded that the contribution of management structure to intrapreneurship in SMMEs in Kenya is
significant, therefore SMMEs need to adopt proper management structures for intrapreneurship to thrive.

The coefficient of management structure was also significant ($\beta = 0.524$, $t = 6.849$, $p < 0.000$) indicating that an increase in management structure has a significant positive increase in intrapreneurship in SMMEs. The magnitude and direction of the effect of management structure on intrapreneurship in SMMEs in Kenya was tested fitting the model $Y = \beta_0 + \beta_1X_1 + \epsilon$, under the following objective and hypothesis.

**Objective:** To establish if management structure has a role on promotion of intrapreneurship in SMMEs in Kenya.

**H$_0$:** Management structure does not have a significant role on promotion of intrapreneurship in SMMEs in Kenya.

The results show that $p$-value $= 0.000 < 0.05$, thus the null hypothesis that management structure does not have a role on promotion of intrapreneurship in SMMEs was rejected, and concluded that there was a statistically significant relationship between management structure and intrapreneurship in SMMEs in Kenya. On other hand the alternative hypothesis that management structure has a role on intrapreneurship in SMMEs in Kenya was accepted. This implies that SMME firms should implement management structures that are favourable in order to be effective in higher levels of intrapreneurship. Further implication is that the more the SMMEs efficiently implement management structures the higher levels of intrapreneurship. The model $Y = \beta_0 + \beta_1X_1 + \epsilon$ as fitted holds.

**Summary of the Findings**

The study sought to find out the role of management structure on promotion of intrapreneurship in SMMEs in Kenya. Specifically the aim was to establish whether management within SMMEs had flat management structures, open communication channels, flexible structures and included employees in to key decision making process. Review of the literature showed that SMMEs belong to the SME sector which contributes immensely to the economic growth of a country and especially the developing countries like Kenya. But in spite of their importance to the economy, they are faced with a number of challenges which include lack of innovativeness in the SMMEs for example. Intrapreneurship which has been known to improve firm’s performance comprises innovativeness and this could be promoted through putting in place the appropriate management structures.

After subjecting each of the four constructs of management structure to descriptive data analysis, it was established that management in SMMEs was neutral in setting up flat structures. This is despite the fact that the preference should be flat structures for entrepreneurial firms. Clear flat structures should therefore be incorporated for intrapreneurship to be enhanced in these firms in line with Burns (2011) recommendation. Flexibility in the management structures was also found to be lacking which should as well be introduced to support employees in managing their own work and solve problems. As pointed out by...
Srivastava and Agrawal (2010), this enhances intrapreneurship. Open communication channels and employees inclusion to key decision making were found to exist thus strongly promoting intrapreneurship in SMMEs.

Through linear regression analysis, the fitted scatter plot returned a positive linear relationship between indicating that management structure contributed to intrapreneurship. With \( R^2 = 0.295 \) implying 29.5% variation in intrapreneurship in SMMEs was as a result of management structure. The null hypothesis that management structure does not have a significant role on promotion of intrapreneurship in SMMEs in Kenya was rejected since \( p \) value=0.000<0.05. The relationship between management structure and intrapreneurship is statistically significant implying that management structure positively influences intrapreneurship in SMMEs in Kenya. The statistical results led the researcher to conclude that if management in SMMEs put in place favourable management structures, intrapreneurship in SMMEs would be enhanced.

These results on management structure support those by Shoghi and Safiepoor (2013) in the study on Iranian industrial firms. Their conclusion was that supportive management structures influenced intrapreneurship in the firms. They further established that the entrepreneurial orientation of employees was affected by how complex the levels of management were. Supportive management structures as brought out by Shoghi and Safiepoor (2013) and Burns (2013) should be flatter, organic and non complex, as tight management controls decrease the firm’s intrapreneurship. Irawanto (2015) brought out the importance of management structures that encourage inclusion of employees to decision making as key to motivated employees who gave their best possible performance thus being entrepreneurial.

**Conclusion**

The objective was to establish the role of management structure on promotion of intrapreneurship in SMMEs in Kenya. Statistically, the study concluded that management structure significantly influenced intrapreneurship in SMMEs in Kenya. The areas looked at are levels of management, communication channels, flexibility and decision making. Descriptive statics however showed that levels of management and flexibility were not strong promoters of intrapreneurship in SMMEs. Open communication channels and employees inclusion to decision making on the other hand were found to be strong promoters of intrapreneurship in SMMEs. The conclusion was that SMMEs in Kenya should put in place favourable management structures especially in the areas of management levels, communication channels and decision making that support intrapreneurship, and at the same time strive to be flexible enough to allow employees initiatives, which support intrapreneurship. This is in line with Shoghi and Safiepoor (2013) study.

**Recommendation**

As concluded from the findings, supportive management structure is crucial in enhancing intrapreneurship in SMMEs. The way management constitutes its structure is an important factor in promoting intrapreneurship
in SMMEs. A management structure that is flat, organic, not complex and controls that are not too tight are good promoters of intrapreneurship as they enable inclusion of employees in decision making and give them flexibility to explore new ideas. Managers or entrepreneur manager owners should therefore engage this type of management structure so as to experience intrapreneurship in their firms.

SMMEs are important to the economy of Kenya as they affect the economic growth through the gross domestic product. Their value addition is a crucial factor in marketing of their products both locally and internationally, which helps in maximization of their earnings. They are also part of the larger SME sector which is deemed to be the engine of economic growth especially in developing countries, and for provision of employment. Training provided by government departments to this sector should include as part of the curricula processes of ensuring effective management structures that support intrapreneurship.

**Recommendation for Further Research**

There is need for further research on other factors that may promote intrapreneurship in SMMEs this study focussed on management structure. Management structure can be applied to other sectors within the SME sector as literature reviewed showed that the sector in general is ailing. Flexible management structures despite their importance to promotion of intrapreneurship were found not to be popular with management in SMMEs. Studies could be undertaken to further prod why this is the case.
REFERENCES


