Influence of Personal and Social Characteristics on Innovation Culture of Medium Enterprises in Nairobi Central Business District, Kenya

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Abstract

Medium enterprises (MEs) play a key role in the Kenyan economic development particularly in creation of ideas which are implemented into reality through innovations. The statistics show that a total of 2.2 million Micro Small and Medium Enterprises were closed in the last five years, where 46 percent of them died in their first year of establishment. MEs are also grappling with cut-throat competition, poor infrastructure, lack of access to markets and credit. The aim of this study was to establish the relationship between personal and social characteristics and innovation culture of MEs in Nairobi, Central Business District Kenya. A survey research design was followed, and the study targeted the owner managers of the MEs where a systematic random sampling technique was used to pick 147 respondents. Findings show that personal and social characteristics have a significant influence on innovation culture. The study recommends that the government should focus on training the young people if they are to be innovative and start enterprises. Young people should be encouraged to venture into entrepreneurial innovation given their innovative culture. The government should establish more financial institutions to facilitate innovations of entrepreneurs.

Keywords: Innovation culture, Personal and social characteristics and Medium enterprises
Introduction

Innovation is the process of bringing the viable ideas into reality. Furthermore, entrepreneurship triggers creative ideas that generate a series of innovative events (Krisha & Swathi, 2013). Innovation and creativity are the epicenter of entrepreneurship. Innovation culture therefore combines ideas and knowledge into new value that can be sustained for a good period for prosperity. It affects how firms operate in the market and enhances competitive advantages to the firm that has adopted it and helps them in meeting customer’s needs (Sarooghi, Libaers & Burkemper, 2015).

Innovation arises from organizing circles of exchange, where information is not just accumulated or stored, but created (Edwards-Schachter, García-Granero, Sánchez-Barrioluengo, Quesada-Pineda & Amara, 2015). Knowledge is generated anew from connections that were not there before. Innovation requires a fresh way of looking at things, an understanding of people, and an entrepreneurial willingness to take risks and to work hard. Innovation is important not just in entrepreneurship. As individuals, we innovate by adapting well to customers’ needs and creating own solutions. The innovation in entrepreneurship helps a country by changing with the times and producing new products and service from ones that already exist (Edwards-Schachter, et. al., 2015).

Innovation culture can emerge on technological changes, response to increased risks or to new regulation (Calik, Calisir & Centiguc, 2017). Innovation is categorized into process, product and market innovations. Process innovation refers to new production process that allow provision of new or existing financial product and services. It is usually aimed at increasing the efficiency in the production process and it is often associated with technological change. Product innovations are new product and services created to meet market needs, thus constituting a client focused kind innovation. Product innovation helps the MEs to differentiate themselves from their competitors, by providing solutions to unattended needs of the customers. Market innovation deals with the market matrix and market selection to meet a customer’s buying preference.

The social and personal characteristics of the owners and managers of the MEs can have an influence on innovation culture. Basically, the most prominent social and characteristics are age, gender, and income status, level of education, training and mentorship process. Age is an important source of firm innovation that may improve firm’s competitiveness. The relationship between age and creative performance has been found to follow a hump-shaped profile in the arts and sciences, and in great technological achievement (Frosch, 2011).

Gender diversity has been frequently found to have a positive effect on innovation (Teruel, 2013). Level of education is required to gather the knowledge and skills for creativity that can lead to innovation (Peña-López, 2016). These skills, including critical thinking, creativity and imagination, can be fostered through appropriate teaching, and practices such as entrepreneurship education. On the other hand, total sales in the industry can influence innovation culture because it determines the returns which can be invested back to innovation. Therefore, personal and social characteristics can influence innovation culture of medium enterprises (MEs) and entrepreneurship.

In Kenya, Medium Enterprises (MEs) play a key role in economic development and creation of employment. In 2014, 80% of jobs created were dominated by MEs (Adeyeye, 2016). MEs have adopted innovation in the recent past, for instance many MEs in Nairobi are using e-commerce. E-commerce has a beneficial effect to the MEs innovation culture in developing countries.
Innovation improves the firm’s ability to compete with large firms and operate on an international scale. However, a total of 2.2 million MSMEs were closed in the last five years, and a significant 46 percent of the MSMEs surveyed died in their first year of establishment (Omondi, 2016).

Small and Medium enterprises in Kenya are faced with challenges on dynamic market environment and external competition that eventually affect their performance (Gichuki, Njeru & Tirimba, 2014). MEs are also grappled with cut-throat competition from other similar businesses, lack of access to the market, infrastructure and credit. Markets are dynamic due to changing customer’s behaviors, needs, globalization and new entrants. This requires the MEs to adopt innovation cultures to enhance their performance and achieve sustainability.

According to KNBS report (2016), micro establishments in most of the sectors of the economy reported that performance of their business is above average in 3 months of the year, normal for 5 months and have 3 months of poor performance. Medium establishments largely reported 3 months of good and bad performances a piece, but the number of months in which the business was perceived normal varied significantly across economic activities. The trend depicts market environment as being both variant and dynamic, thus innovative cultures of MEs should be upbeat to counter such situations.

Despite the existence of mentorship from Regional Centre for Enterprise Development (RCED) program, MEs still experience challenges on their performance. They are not performing to the expectation with reference to their innovation cultures. The personal and social characteristics of the MEs owners and managers plays a key role on their innovation culture. Thus, the study established the influence of personal and social characteristics on innovation culture of medium enterprises (MEs) in Nairobi Central Business District, Kenya. Authors such as Kirori and Achieng (2013) stated that Africa needs more in terms of types of SMEs that develop and improve on existing innovations in the market. Karanja (2013) studied the effects of innovation on growth of SMEs in Nairobi, Kenya. These studies affirm that innovative cultures in MEs have challenges and the influence of personal and social characteristics can be explored to get insight on the matter.

**Social Exchange Theory**

This theory was developed by Homans (1958). He suggested that people choose to communicate through a context of rewards and costs, through exchange activity, tangible or intangible between at least two persons or groups of people. Homans explained the theory in three sections; success proposition stating that people tend to repeat their actions if they were rewarded in the initial encounter; stimulus proposition noting that if a particular stimulus resulted in a reward in the past, that a person is likely to respond to it; and satiation proposition that states that people do not repeat actions if previous actions gave no reward (Ko & Hur, 2014).

Social exchange theory suggests that we essentially take the benefits and subtract the costs to determine how much a relationship is worth. Positive relationships are those in which the benefits outweigh the costs while negative relationships occur when the costs are greater than the benefits. This means that when clients/customers are engaged in rewarding interactions with innovation by the MEs and have received a satisfactory customer experience, they are likely to be loyal to the same MEs. This theory is based on reciprocity, fairness and negotiated rules, which result in access to information, approval, respect, and personal satisfaction in a successful transaction (Ekeh, 1974). This means that the MEs may offer satisfying customer experience delivery through rewarding interactions with their customers/clients.
Rodger’s Theory of Diffusion of Innovation

Diffusion of innovation (DOI) theory was developed by Rogers in 1962 and is argued to be one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. The result of this diffusion is that people, as part of a social system, adopt a new idea, behavior, or product. Adoption means that a person does something differently than what they had previously (that is, purchase or use a new product, acquire and perform a new behavior, etcetera). The key to adoption is that the person must perceive the idea, behavior, or product as new or innovative. It is through this that diffusion is possible (Sahin, 2006).

Principally, DOI focuses on how potential adopters perceive innovation in terms of advantage/disadvantage hence some of the factors of DOI are innovativeness, complexity, compatibility and relative advantage. The theory is important in understanding the dynamics that play in relation to adoption and use of innovation in MEs. This is because organizations decision to adopt technology becomes intertwined with personal perceptions and attitudes of the owner-managers towards that technology. Diffusion in MEs is largely by way of interpersonal/inter-firm network.

Literature Review

Personal and Social Characteristics

Individual innovation and its antecedent factors, both at the group and individual level, are becoming a topic of increasing interest to entrepreneurs (Marsh & Evans, 2010). Individual personal and social characteristics can be perceived to influence their innovation culture which can in turn affect their entrepreneurial skills and prosperity. Individuals’ personal attributes such as age, gender, marital status and education level and training influences individual perception and attitudes to innovation culture. Social characteristics can also impact innovation cultures. For the study; age, gender, level of education and income status were reviewed and explored.

Economic inequality and innovation are both increasingly important issues in modern economies, affecting both nations’ rates of economic growth and the overall prosperity and well-being of their citizens (Hiltunen, 2017). High levels of inequality are generally seen to be detrimental for economic growth, in addition to contributing to a host of other social and political problems. Innovation, meanwhile, is recognized to be a cornerstone of the sustainable economic growth and technological advancement of a country. Rising inequality and decreasing rate of innovation. High degrees of inequality can serve to hamper a country’s rate of innovation through various means, while innovation can both lower and increase inequality, depending on the circumstances surrounding it.

Innovation Culture

Innovation is widely regarded as a key factor for creating both societal and economic progress (Petrikis, Kostis & Valsamis, 2015). On the firm level, innovation has been argued to be crucial for the firm’s competitive survival. Many studies have affirmed that firms have capabilities for innovation that can be understood as a system of several interdependent elements. Culture has been claimed to be one such element. The importance of a firm’s culture has also been emphasized in other fields of organizational research. Despite the high level of attention dedicated to both
innovation and culture, studies have tried to understand the concept of an innovation culture or how to develop such a culture (Fernández-Esquinas, Oostrom, & Pinto, 2017).

An innovation culture influences the behavior of the organization, but the behavior also influences the innovation culture (Coffman & Principal, 2011). For this reason, the study of personal and social characteristics is highly relevant to understand a firm’s innovation culture. Employees in the innovation culture cannot abdicate their responsibility or the need to share some of the risk of innovation (Fernández-Esquinas et al., 2017). They must also be supported in this effort by policies, practices and resources that acknowledge this risk and provide space for experimentation. Everyone in the innovation culture strives for success and learns from failures by documenting them and hearing about them from others (Vey, Fandel-Meyer, Zipp & Schneider, 2017).

Conceptual Framework

Figure 1 is a conceptual framework that links personal and social characteristics of MEs and its relation to innovation culture.

![Conceptual Framework Diagram]

**Independent Variables**

- Personal and Social Characteristics of MEs
  - Age
  - Gender
  - Level of Education
  - Income Status

**Dependent Variable**

- Innovation Cultures of Medium Enterprises (MEs)
  - Marketing innovation
  - Value Addition
  - Use of Technology

**Total Sales**

Amount of sales

Figure 1: Conceptual Framework

Research Methodology

The study applied descriptive research design. The method is appropriate because it explores and describes the relationship between variables in their natural setting without manipulating them. The population of interest consisted of all the mentored Medium Enterprises (MEs) by the Regional Centre for Enterprise Development (RCED) program within Nairobi County, Kenya. There are 233 MEs in Nairobi CBD (Nairobi County report, 2017). The study targeted the owners and managers of the mentored MEs. This study adopted Israel (1992) simplified formula to compute the sample size as indicated below.
\[ n = \frac{N}{1 + N(e)^2} \]

Where: \( n \) = sample size, \( N \) = population size, \( e \) = the level of precision (0.05) and 1 = Constant. This formula assumes a degree of variability (i.e. proportion) of 0.5, the level of precision of 5% and a confidence level of 95%.

\[ n = \frac{233}{1 + 233(0.05)^2} \]
\[ = 147.2 \approx 147 \text{ owners/managers} \]

Systematic random sampling was used to select the 147 owners and managers of MEs mentored by RCED in Nairobi CBD. Questionnaires were administered to the owners and managers of the 147 selected mentored MEs. The data was analyzed using descriptive statistics and inferential statistics namely correlation and regression analysis which were used to establish the relationship between personal and social characteristics and innovation culture of MEs in Nairobi, Central Business District Kenya. The regression model used is as stated below.

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon \]

Where: \( X_1 \) = Level of Education, \( X_2 \) = Income Status, \( X_3 \) = Age, \( X_4 \) = Gender, \( X_5 \) = Total Sales, \( \alpha \) = Constant, \( \beta_1...5 \) = Coefficients of the variable, and \( \varepsilon \) = Error term.

**Research Findings**

**Correlation Analysis**

Pearson Correlation was used to establish the association between social characteristics and innovation culture of MEs. The results are as presented in Table 1. Results in Table 1 indicated that level of education has a positive association with innovation culture \((r=0.499, p=0.000)\). The results similarly indicated that income status was positively associated with innovation culture \((r=0.482, p=0.000)\). Age was negatively associated with innovation culture \((r=-0.601, p=0.000)\). Gender was positively associated with innovation culture \((r=0.600, p=0.000)\). Furthermore, total sales was significantly associated with innovation culture \((r=0.342, p=0.000)\).
Table 1: Association between Personal and Social Characteristics and Innovation Culture of Medium Enterprises (MEs)

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Innovation Culture</th>
<th>Education</th>
<th>Income Status</th>
<th>Age</th>
<th>Gender</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovation Culture</strong></td>
<td>Pearson Correlation</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Pearson Correlation</td>
<td>.499**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Income Status</strong></td>
<td>Pearson Correlation</td>
<td>.482**</td>
<td>0.147</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.087</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>Pearson Correlation</td>
<td>-.601**</td>
<td>-.305**</td>
<td>-.411**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>Pearson Correlation</td>
<td>.609**</td>
<td>.445**</td>
<td>.250**</td>
<td>-.411**</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.003</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td><strong>Sales</strong></td>
<td>Pearson Correlation</td>
<td>.342**</td>
<td>.223**</td>
<td>.146</td>
<td>-.110</td>
<td>0.023</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.009</td>
<td>0.088</td>
<td>0.203</td>
<td>0.790</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).**

Source: Author (2018)

**Regression Analysis**

Regression analysis was conducted to establish the effect of personal and social characteristics variables (level of education, age, income status, gender, total sales) on innovation culture. Results are presented in Table 2. The model gave a coefficient of determination R Square of 0.658 and R is 0.811 at 0.000 significance level. The model indicates that personal and social characteristics explain 65.8% of the variation in innovation culture. This means 65.8% of the innovation culture is influenced by personal and social characteristics. Table 2 presents the Analysis of Variance (ANOVA) results. The findings confirm that the regression model of personal and social characteristics and innovation culture is significant and supported by F=50.379, p<0.000) since p-values was 0.00 which is less than 0.05.
Table 2: The Effect of Personal and Social Characteristics Variables Innovation Culture

<table>
<thead>
<tr>
<th>Model Fitness</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.811a</td>
<td>0.658</td>
<td>0.645</td>
<td>0.156</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), Sales, Income Status, Age, Education, Gender
b Dependent Variable: Innovation Culture

<table>
<thead>
<tr>
<th>Analysis of Variance</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>6.099</td>
<td>5</td>
<td>1.22</td>
<td>50.379</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>3.172</td>
<td>131</td>
<td>0.024</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9.27</td>
<td>136</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regression of Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized 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>(Constant)</td>
<td>-0.03</td>
<td>0.133</td>
<td>-0.228</td>
<td>0.820</td>
</tr>
<tr>
<td>Education</td>
<td>0.034</td>
<td>0.012</td>
<td>0.169</td>
<td>2.859</td>
</tr>
<tr>
<td>Income Status</td>
<td>0.099</td>
<td>0.026</td>
<td>0.215</td>
<td>3.792</td>
</tr>
<tr>
<td>Age</td>
<td>-0.111</td>
<td>0.023</td>
<td>-0.289</td>
<td>-4.78</td>
</tr>
<tr>
<td>Gender</td>
<td>0.243</td>
<td>0.042</td>
<td>0.355</td>
<td>5.825</td>
</tr>
<tr>
<td>Sales</td>
<td>0.118</td>
<td>0.027</td>
<td>0.233</td>
<td>4.375</td>
</tr>
</tbody>
</table>

Source: Author (2018)

The regression of coefficients results in Table 2 shows that level of education has a significant effect on innovation culture ($\beta=0.034$, $p=0.000$). This means that an individual with higher level of education is likely to be more innovative and can introduce new products, new processes and new markets for their enterprises. This finding is consistent with that of Serdyukov (2017) who conducted a review of the educational innovation field in the USA and found out that innovations in education are regarded, along with the education system, within the context of a societal super system demonstrating their interrelations and interdependencies at all levels. Raising the quality and scale of innovations in education will positively affect education itself and benefit the whole society. However, the result is inconsistent with that of Mwangi and Mwangombe (2017) that training support on innovation was insignificant. It also indicated that training support was empirically indicated by cost, frequency and size of the budget.

Income status was found to have a positive influence on innovation culture ($\beta=0.099$, $p=0.000$). This means that enterprises with higher monthly income are likely to be more innovative as they can invest in innovation and can introduce new products, new processes and new markets for their enterprises. The result is in accord with Foellmi and Zweimuller (2017) that when innovators have a large productivity advantage over traditional producers a higher extent of inequality tends to increase innovators’ prices and mark-ups. When this productivity gap is small, however, a redistribution from the rich to the poor increases market sizes and speeds up growth. The finding is also consistent with the study of Tomaszewski, and Świadek (2017) who explored the impact of the economic conditions on the innovation activity of the companies from selected Balkan states.
and confirmed that when the companies sense an improvement in economic situation, their innovation activity increases.

Similarly, age has a significant effect on innovation culture ($\beta=-0.111, p=0.000$). This means that an individual with a younger age is likely to be more creative/innovative and can introduce new products, new processes and new markets for their enterprises. The result is consistent with Huergo (2013) that firms enter the market experiencing high productivity growth and that above-average growth rates tend to last for many years, but also that productivity growth of surviving firms converges. As you enter the innovation world at a young age, chances are high that innovativeness will come your way as compared to an individual who enters the innovation world at an older age. However, the finding disagrees with Hansen (2002) who assessed the degree to which the level of innovation in manufacturing firms is influenced by firm size and firm age and found out that both firm size and firm age tend to be inversely related to innovative output.

Gender was found to have a significant effect on innovation culture ($\beta=0.243, p=0.000$). This means that men are likely to be more innovative/creative than women. The findings are consistent with Mutua (2014) that female entrepreneurs perceive success as the ability to control their own destinies, while males viewed success in terms of achieving goals and financial profitability. Men therefore work towards achievement of goals which positively affects their innovation skills while women perception on innovation can affect their working towards it. The finding also conforms with that of Tukur and Erika (2017) who investigated empirically gender influence on access to innovation resources among women and men-owned Small and Medium-sized Enterprises (SMEs) in Lagos State, Nigeria and found that access to the innovation resources and gender have significant impact on innovation performance.

Finally, total sales were positively and significantly related to innovation culture ($\beta=0.118, p=0.000$). The result implies that enterprises with higher monthly sales are likely to be more innovative as they can invest in innovation and can introduce new products, new processes and new markets for their enterprises. This finding is consistent with that of Afande (2015) who conducted a study on factors influencing growth of small and microenterprises in Nairobi central business district and found out that low level of technological support (because medium enterprises are unable to finance technological resources) they cannot get adequate amount of production and subsequently sales and profits. The finding also affirms that of Kamunge Njeru and Tirimba (2014) who found out that sales revenue play a greater role on business innovations.

Conclusion

Based on the findings, the study concludes that the level of education is positively and significantly related to innovation culture. Training on innovation, frequency of training and skills acquisition, methods of dissemination of knowledge and skills, higher academic qualification and mentorships on innovation are the necessary tools in terms of education for innovation to progress in medium enterprises. Education is important for knowledge and skills acquisition which are key elements for innovation.

By having a positive and significant relation with innovation culture, income status is informed by sources of income, amount earned, and loans acquired, current income status and profitability which in turn determines investments on innovation of medium enterprises in Nairobi CBD. This is because the amount of money available for disposal can make the MEs invest in innovation for both prosperity and sustainability. Innovation, meanwhile, is recognized to be a cornerstone of the
sustainable economic growth and technological advancement of a country. High degrees of inequality can serve to hamper a country’s rate of innovation through various means, while innovation can both lower and increase inequality, depending on the circumstances surrounding it.

The relationship between age and innovation culture is negative and significant. However, young people are venturing into entrepreneurial innovation given their creativity capability. Experience in entrepreneurship and older people may help derive productivity and growth of the medium enterprise given the exposure on competition, market dynamics and technological developments. But an aging workforce might also experience deterioration in the relevant skills if job requirements change over time or if people's skills decline. As age increase, creativity also decreases and so does innovation.

On gender, the study concluded that gender is positively and significantly related to innovation culture. Gender is a factor in terms of innovation and growth of MEs. It influences access to innovation resources, the risk-taking nature, adaptation behavior and consistency in innovation. The individual perception and attitudes towards innovation solely relies on gender. Innovation carries with it different levels of risk for men than for women. Neither women nor men can express what difference gender balance would have made for innovation.

Total sales have a positive and significant influence on innovation culture. Profitability, market share, innovative strategies, motivation to diversify and steering of the company is influenced by total sales. Total sales directly determine the profitability while the market share in turn determines the total sales. Innovative strategies could be determined by the amount of money available for disposal. Increased sales volume is likely to motivate the MEs to invest in innovation.

**Recommendations**

The study recommends that medium enterprises should focus on training on innovation and increase frequency of training and skills acquisition. They should employ effective methods of dissemination of knowledge and skills while training on innovations. It is also important to note that higher academic qualification and mentorships on innovation are the necessary requirements in terms of education for innovation to progress in medium enterprises. This is because education is important for knowledge and skills acquisition which are key elements for innovation.

Management of MEs should ensure that they have reliable sources of income which can make them invest in innovations at requisite time. They should strive to earn profits which in turn determines investments on innovation of medium enterprises. This is because the amount of money available for disposal can make the MEs invest in innovation for both prosperity and sustainability. Innovation is cornerstone of the sustainable economic growth and technological advancement of a country. MEs should strive to have prosperity and sustainability.

Young people should be encouraged to venture into entrepreneurial innovation given their creative capability. Given their experience in entrepreneurship, older people should strive to derive productivity and growth of the medium enterprise given the exposure on competition, market dynamics and technological developments. Enterprises should bear in mind that an aging workforce might also experience deterioration in the relevant skills if job requirements change over time or if people's skills decline.

Both male and female entrepreneurs should be allowed access to innovation resources. They should be encouraged to be risk takers, have adaptive behavior and consistency in innovation.
They should have positive perception and attitudes towards innovation. This is because innovation carries with it different levels of risk for men than for women. Neither women nor men can express what difference gender balance would have made for innovation. Enterprises should strive to increase their sales volumes. Total sales directly determine the profitability while the market share in turn determines the total sales. Similarly, increased sales volume is likely to motivate the MEs to invest in innovation.

References


Hiltunen, J. (2017). The Relationship between Economic Inequality and Innovation.


