Factors associated with SMEs Success and The Triple Helix of Entrepreneurship, Innovation and Research

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Abstract. Entrepreneurship typically involves the running of one’s own business. Research have shown that several nations have encouraged and supported the programme for the reasons of its attributes. The bedrock of innovation lies on research, just as research drives innovation, and innovation drives entrepreneurship. Therefore, the three concepts should form a tripartite helix structure. The three concepts are so vital to the economy of any nation such that in the absence of one, others will not function optimally. Consequently, the three concepts go hand-in-glove. The study aims to examine the key roles of some selected factors associated with SMEs success in Nigeria and to identify which of these factors affect the SMEs success the most. A sample size of 383 respondents were drawn from a population of 72,838 SMEs in Nigeria. Questionnaire method of data gathering was used, where 139 usable raw data were collected. The quantitative survey data were analysed using the Statistical Product and Service Solutions (SPSS) software; employing multiple regression technique to validate the survey findings. Entrepreneurship Theory of Innovation was employed as the overarching theory; the study confirms the three factors associated with SMEs success: innovation, government policy and financial management. The study justified the needs for suitable financial management practices and more importantly an affirmative role of innovation and effective and friendly government policies to guarantee the attainment of SMEs in Nigeria. The result showed an adjusted R-squared value of 57% of the variability in SME Success as explained by these explanatory variables; where innovation showed to be the dominant factor in explaining the model. The study has provided a strong indication as to which of the factors small business owners should focus on. Limitations and future research are discussed.

Keywords: Innovation, Entrepreneurship, SMEs , Research, Government Policy

1 Introduction

Policy-related deliberations progressively consider entrepreneurship as engine of economic development and industrialisation. Whenever the concept of entrepreneurship is mentioned, it spurs different kinds of interests depending who the listener is, and which divide the listener belongs. Cases in point are the ruling government who sees this phenomenon as a corrective measure to modern-day economic and social problems, and then individual professionals who see it as a substitute for salary-based employment as well as applying effort into accretion of their employer's wealth. However, the researcher sees it from a different perspective. From the researchers’ point of view, they see entrepreneurship as doing things in a different way from the ordinary. They see entrepreneurship as being driven by innovation. This is in line with several works of research (e.g. Galvão, Mascarenhas, Rodrigues, Marques and Leal, 2017) which assert that “entrepreneurship is actions derived from innovation” while innovation is driven by research. Therefore, the role of research in entrepreneurship development cannot be overemphasized, just as the importance of entrepreneurship in any economy cannot be overstressed. Philip (2010) buttresses this assertion by highlighting that the mainstream of firms globally are SMEs, and they play a central role in the economy.

Entrepreneurship is about people who make openings where others do not, and who attempt to make good use of those opportunities through different methods of organising, without considering the resources presently controlled (Stevenson and Jarillo, 1990). To be specific, business enterprise can be seen in its core as people or groups, making works, for example, items and services, for different people in a market (Mitchell, 2002, pp. 179, 182). Entrepreneurship is an exciting programme that will give you the mind-set, tools and techniques to turn one’s ideas into a successful business. Entrepreneurs see opportunities all around them, and who want to achieve their dreams of creating a business that can harness those opportunities. Entrepreneurs and businesses began with a need. They saw the need within the community and among themselves that they have come up with a solution. They seize the opportunity to innovate to make lives more comfortable. And these keys kept developing to make it improve, and more valuable.

Scholars generally assess a business’s capability on the basis of its performance (Rosli & Sidek, 2013) or growth (Dobb & Hamilton, 2006) or success (Chittithaworn, Islam, Keawchana and Yusuf 2011).

Business success is typically the result of the way of doing business and co-operation (Chittithaworn, Islam, Keawchana and Yusuf 2011). They assert that inter-firm co-operation, consultation, performance measurement and flexibility may play an important role in business success

Contextually, in Nigeria, the government of several administrations have undergone several policies and programmes designed at evolving entrepreneurship through the development of small and medium scale enterprises (SMEs). Osuagwu, (2006) listed the several credit guidelines set up by various government administrations for loans and advances National Directorate of Employment (NDE); Industrial Development Centers (IDC); National Economic Reconstruction (NERFUND); Nigeria Export Promotion Council (NEPC); Nigeria Agricultural Cooperative and
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Rural Development Bank (NACRDB), formed in the year 2000 from the merging of People’s Bank of Nigeria (PBN), Family Economic Advancement Program (FEAP), and the Nigeria Agricultural Cooperative Bank (NACB); The National Poverty Eradication Program (NAPEP); and Research Institutes, among others,

In the Malaysian context, the importance of SMEs growth has been highlighted (e.g. Ismail, Omar, Soehod, Senin & Akhtar 2013). However, the authors argued that even with government attention on SMEs, the function of innovation in sustaining the advancement of the economy of Malaysia as well as the entire performance of the SMEs is still questionable. Also, Raduan, Naresh & Lim (2006) in highlighting the importance of SMEs stated that SMEs ought to be the key emphasis for developing countries. Furthermore, Ng and Kee (2012) stated that SMEs are regarded as the building blocks of nation’s economic growth. In the recent past, SMEs were considered an essential component of the economy as SMEs reported GDP growth of 5.4 percent in the second quarter of 2012 (Ng & Kee 2012). In the viewpoint of government vis-à-vis the importance of SMEs, Malaysian government has encouraged SMEs through setting up of National SME Development Council as well as SME Corp Malaysia.

In the context of Turkey, the importance of SMEs is underscored by several works of research (e.g. Nurrachmi, Abd Samad & Foughali, 2012) who described SMEs as the most important instruments for economic development, as well as great contributor to gross domestic product (GDP) and labour force in Turkish economy

2 Literature Review and Hypotheses Development

New business success usually requires a sporadic combination of innovation, financial management, management skills, marketing strategy, and government policy. We lay emphasis on these to increase the chances of success for new product or service-based businesses.

2.1 Theoretical framework

Drawing on the literature on innovation, entrepreneurship, research and other factors associated with SMEs success, this study adopts a comprehensive integrated framework (see Figure 1) to examine the drivers of SMEs success in Nigeria. Therefore, following the entrepreneurship Theory of Innovation (Schumpeter, 1952), identifies entrepreneurs as a key driver of economic development through the introduction of innovation (Schumpeter, 1952). Thus, entrepreneurs develop new innovations by introducing new products or production methods, opening up new markets or sources of new material, and creating new organisational structures in industry. In doing so, they break the status quo, create change in the market, and develop a competitive advantage (Hebert & Link, 2006). This shows that entrepreneurship theory will offer better insight to appreciate the fine thread that links innovation and SME success.

Consequently, the extant study adopts Schumpeter entrepreneurship theory as the overarching theory as depicted in Figure 1. The framework shows a relationship amongst the critical factors that influence SMEs Success in Nigeria. The model is developed to test the SMEs success from the associated factors.

2.2 Innovation and SMEs success

The primacy of innovation in entrepreneurship is depicted by coming up with new way to bring forth a product or a solution. In all businesses, it is imperative to be diligent, innovative and ingenious. The significance of innovation in entrepreneurship is another crucial value for the perpetuity of a business. Drucker (1985) described how the work of entrepreneurs is to innovate. He went ahead to delineate innovation as the precise tool of entrepreneurship. It is the act that bequeaths resources with a new dimension to generate wealth.

Entrepreneurship creates financial benefit and preserves the economy afloat, which gives rise to the significance of innovation in entrepreneurship. Entrepreneurs are innovators of the economy just as the scientist who invents and come up with the answers to technological matters. Akande & Oladejo (2013) highlight how the major economies of the world as well as emerging countries are being driven by technology and innovation, however, Juma & Agwara (2006) noted that the participation of evolving countries in creating new technologies and innovations is virtually insignificant. Entrepreneurs must keep themselves up-to-date with the contemporary tendencies and demands. Other factors that raise the importance of innovation in entrepreneurship is competition. It stimulates any entrepreneur to come up with something much better than their competition in a lower price, and still be profitable and better-quality.

Hebert & Link, (2006) describe how innovation plays a dominant function in entrepreneurship and defined it as ‘the process of bringing any new problem-solving idea into use, while (Kanter,1983, p. 20) defined it as the generation, acceptance, and implementation of new ideas, processes, products, or services’.

Mathew Philip (2010) identified innovative product as one of the key strategic dimension in business success. He highlighted how innovative product gives additional value to the customer.

The importance of innovation vis-à-vis entrepreneurship development cannot be overemphasized. Akande and Oladejo have highlighted how innovations have proven to be key factor for the development of entrepreneurship of modern economies. Amue, Igwe & Abiye describe innovation as a catalytic agent for the growth and success of business to grow in a marketplace. The outcome of the study conducted by Oyewale, Adeyemo & Ogunlewe who examined the impact of innovation, technology on the entrepreneurial development activities in Nigeria showed that there is significant relationship between technological innovation and entrepreneurship development.

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H1: Innovation has significant influence towards SME Success

2.3 Financial management and SMEs success

The role of finance in any business has been discussed severally (e.g. Arshad, Zain, Arshad & Kamil 2017; Abanis, Sunday, Burani & Eliabu 2013). Therefore, the sources and use of funds by SMEs are key issues that sector should not ignore. Cases in point are in Turkey where it has been discussed on the financial challenges associated with SMEs financing. For instance, (Öndeş & Güngör, 2013; Şahin, 2011; Çetin, Akyüz & Genç, 2011; Güler, 2010; Koyuncugil & Özgülbş, 2008) discussed how lack of capital as well as poor access to finance are regarded as the key achilles' heel for small and medium sized companies in Turkey. Karadag (2015) discussed how SMEs in Turkey face some financial management challenges and how those problems affect SMEs performance. Those SMEs who adopt financial management practice usually succeed. Therefore, the SMEs practices of financial management are closely linked to SME performance (Karadag 2015).

Abanis et al (2013) discussed the importance and role of business success. They viewed good financial management practices as key to SMEs success. Their study found that inept financial management possibly will cause business efficiency and will incessantly affect the growth of SMEs and vice versa.

H2: Financial Management has significant influence on SMEs Success

2.4 Management skills and SMEs success

Robert Katz (1991) classifies three types of skills that are indispensable for an effective management process: The three different types of managerial skills, include technical skills, human skills, and conceptual skills. Technical skills are the specific skill set used to perform a particular job, such as writing a computer programme, developing a budget, or analysing sales trends. These skills are desirable to essentially get the work done; It involves the techniques, practices, tools, and processes required by front-line personnel in the manager's functional area. Conceptual skills allow a manager to visualise the whole firm and work with ideas and the links within abstract concepts. Human skills, also called human relation skills, necessitate communication and attention to links with others.

H3: Management Skills has significant influence on SMEs Success

2.5 Government policy

The role of government policy in relation to entrepreneurship development has been discussed severally (e.g. Tende 2014; Obaji and Olugu 2014; Bhat and Khan 2014; Sathe 2006). Tende (2014) highlighted how government policies affect entrepreneurship development both directly and indirectly. Sathe 2006 discussed how government regulations and their bureaucratic processes possibly will hamper as well as empower private enterprise process. Bhat and Khan (2014) discussed how laws, regulations, investments, and other government policies make a significant impact on where entrepreneurs chose to set up innovative business. Furthermore, Obaji and Olugu (2014) who developed a conceptual model that assesses government policy role on entrepreneurship and economic development highlighted the importance of government policy on private enterprise. Generally, Oyelakin and Kandi (2017) proclaim that in specific term, government policies can enhance business growth or otherwise. The role of government in the development of entrepreneurship cannot be overemphasized. To buttress this fact, it is the duty of government to roll out policies that have human face to entrepreneurship as well as making the business environment conducive to such activities. In most cases, it is not funding that is key to business success but favourable government policies as well as their full implementations. In the past, the bane of our economic growth has largely been on the lack of policy implementation as well as inconsistent government policy.

Collectively, this section hypothesized that:

H4: Government Policy has significant influence on SMEs Success
3 Research Methodology

To get a sample that is representative of the entire population of SMEs in Nigeria, this study used the minimum sample size requirements for the planned statistical analysis to calculate the number of small businesses required for the sampling frame.

The present research concentrates on entrepreneurs situated within the six geopolitical zones of Nigeria. Similarly, the entrepreneurs within these six zones will be considered as participants. The population of this study refers to the population of SMEs in Nigeria which stood at 72,838 as at 2013 survey study by National Bureau of Statistics (NBS) and Small and Medium Enterprises Development Agency of Nigeria (SMEDAN). In order to obtain the sample size from the population the Raosoft sample size calculator was used to arrive at 383.

Primary source of data was employed in this study to assess the impact of the factors that influence SMEs success. Self-administered questionnaires to business owners that constitute the SMEs in Nigeria. Simple random sampling was used to collect the data. As for the variable, the measurement for each of them was adapted from various scholars. The reliability of the instrument measure using the Cronbach Alpha and the study’s reliability was found to be 0.67. According to Sekaran & Bougie, (2010) and Cronbach & Meehl, (1955), reliabilities less than 0.60 are considered to be poor, those in the 0.70 range, acceptable, and those within 0.80 and above are considered good. Based on the justification, 0.67 is considered to be good for the analysis. The response rate was 36 percent. Sekaran (2003) recommends 30 percent response rate as acceptable for surveys.

The analytical tool employed for the data analysis was the multiple regression analysis using the Statistical Product and Service Solutions (SPSS).
4 Results and Discussion

From the normal probability plot, the data is seen to be normally distributed as majority of the variables fall within the accepted region which is one of the prerequisites for regression that the variable must be normally distributed.

Figure 2. Normality Histogram

Figure 3. Linearity P-P Plot
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From the above graph, we see that data is linear meeting the linearity condition of multiple regression. The data points are clustered along the regression line.

### Table 1. Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.765*</td>
<td>.584</td>
<td>.572</td>
<td>2.287</td>
<td>2.198</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), MGTSKILLS, INNOVATION, FINMGT, GOVTPOL

b. Dependent Variable: SMESUCC

Durbin Watson (DW) is used to test for multicollinearity between the predictor variables. Ideally, DW value that lies between 1.5 and 2.5 suggests absence of multicollinearity issue. Table 1 shows dw value of 2.198 which is an indication that there is no multicollinearity which is another condition of the regression analysis. The normalised or adjusted R-squared showed that 57% of the variability in SME Success is explained by these explanatory variables according to this study.

### Table 2. ANOVA

<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</td>
<td>Regression</td>
<td>4</td>
<td>246.521</td>
<td>47.120</td>
<td>.000b</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>134</td>
<td>5.232</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>138</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMESUCC

b. Predictors: (Constant), MGTSKILLS, INNOVATION, FINMGT, GOVTPOL

The ANOVA analysis showed that indeed the explanatory variables (INNOVATION, FINMGT, GOVTPOL) are statistically significant in predicting SME Successes with p 0.000 < 0.05.

### Table 3. Coefficients

<table>
<thead>
<tr>
<th>Model</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>1 (Constant)</td>
<td>8.922</td>
<td>1.646</td>
<td>5.422</td>
<td>.000</td>
</tr>
<tr>
<td>INNOVATION</td>
<td>.487</td>
<td>.050</td>
<td>.627</td>
<td>9.825</td>
</tr>
<tr>
<td>GOVTPOL</td>
<td>.218</td>
<td>.058</td>
<td>.235</td>
<td>3.721</td>
</tr>
<tr>
<td>FINMGT</td>
<td>-.132</td>
<td>.066</td>
<td>-.116</td>
<td>-1.982</td>
</tr>
<tr>
<td>MGTSKILLS</td>
<td>.054</td>
<td>.050</td>
<td>.064</td>
<td>1.092</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMESUCC

On further investigation, it was discovered that Innovation, Government Policies and Financial management are very significant, thus, very crucial to SME Successes with p <= 0.05. Furthermore, Innovation and Government policies seem to be greatest determining factors to SME Successes with Beta values of .62, and .24 respectively. From the coefficient table (Table 3), management skills contribute less to SME Successes as long as the entrepreneur has good innovation and good financial management skill, and the government policies are favourable and friendly. The negative coefficient of the financial management skill is indicative that bad or negative financial management skill (discipline) will be inimical to SME Successes.

Model Specification:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \]

Where:

Y is SMEs Success variable
\( \beta_0 \) is the constant  
\( \beta_{1-4} \) are Coefficients of Explanatory variables  
X1 is Innovation  
X2 is Government policy  
X3 is Financial Mgt  
X4 is Management Skills  
\( \varepsilon \) is the error term

SMEs Success = 8.922 + .487lnnv + .218GovtPol - .132FinMgt

5 Conclusion and Recommendation

The outcome of this research has shown that three of the predictor variables (innovation, government policy and Financial Management have both direct impact and significant relationship with the criterion variable. This validates the several prior studies (e.g. Hebert & Link, 2006; Akande & Oladejo 2013 for innovation; Bhat and Khan 2014; Obaji and Olugu 2014; Oyelakin and Kandi 2017 for Government policy). Furthermore, the extant study reveals that among the three significant explanatory variables, innovation is the most important factor that impacts on SMEs Success. This shows that for entrepreneurship to be sustainable, SMEs need to involve themselves in disrupting the status quo by doing things differently and doing it better. Also, they should not ignore the importance of research since innovation is being driven by research. In addition, this study has substantiate the place of government policy in entrepreneurship space and therefore, government should look towards the SMEs by continuously enacting user friendly SMEs policies as entrepreneurship development assists the ruling government who sees this phenomenon as a corrective measure to modern-day economic and social problems.

Our study undeniably has some limitations. First, the study did not stratify the six geopolitical zones of Nigeria for data collection purpose. Secondly, the SMEs research participants were not segmented into sectors, rather every respondent was just generalised as SME. Thirdly, the study was able to explain 57 percent of the total variance in SMEs Success, therefore, the remaining 43 percent of the variance for SMEs Success could be explained by other factors.

Future research should look into the stratification of SMEs into different geo-political zone of Nigeria for data gathering intent. Also, the SME respondents should be categorised according to various sectors in which they operate. Furthermore, since 43 percent of the variance in SME Success is unexplained, therefore, future research is required to consider other likely factors that may perhaps raise SMEs success in Nigeria.

References


M. Philip 2010 *Factors affecting business success of small & medium enterprises (SMEs)*. APIRJ Volume 1, Issue 2


