

KNOWLEDGE MANAGEMENT AND ENTREPRENEURIAL SUCCESS IN THE NIGERIAN SMALL AND MEDIUM ENTERPRISES

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Abstract

The research seeks to empirically access the relationship between knowledge management and perceived entrepreneurial success in the Nigerian small and medium enterprises - an area that has, to date, received very little attention in the literature. The term "Knowledge Management" is a new concept in management and defined in term of a set of measurable key elements such as information technology, organisational culture and knowledge. 50 entrepreneurs from Katsina metropolis, Nigeria were surveyed. The participants were drawn from the comprehensive list of SMEs compiled by the Katsina State Ministry of Commerce and Industry. This study employed stratified random sampling to collect data from the entrepreneurs using interviews and questionnaires. The questionnaire was a seven point Likert Scale to enable the respondents specify their level of agreement to statements. Three hypotheses were tested using statistical techniques viz. t-test, Chi-square and Pearson Correlation. All statistical tests were carried out at 95 per cent significant level. Finding revealed that information technology had no significant relationship with entrepreneurial success. It was also shown that organizational culture is positively related to entrepreneurial success. Finally, the findings showed that Knowledge

acquired through skill, experience and formal education had a positive relationship with entrepreneurial success. Therefore, the research concludes that entrepreneurial success is guaranteed when enterprises embrace the concept of knowledge management.

Keywords: Knowledge management, Entrepreneurial success, Organisational culture, Information Technology, Small and medium enterprises (SMEs)

INTRODUCTION

Most economists today agree that entrepreneurship is a necessary ingredient for stimulating economic growth and employment opportunities in all societies. Entrepreneurs create new business, generating jobs for themselves and those they employ. In many cases, entrepreneurship activity increases competition and, with technological or operational changes, it can increase productivity as well. According to the 2006 Summary Results of the Global Entrepreneurship Monitor (GEM) project, “Regardless of the level of development and firm size, entrepreneurial behaviour remains a crucial engine of innovation and growth for the economy and for individual companies since, by definition, it implies attention and willingness to take advantage of unexploited opportunities.” Successful small and medium business is the primary engine of job creation, income growth, and poverty reduction. In the United State, for example, small businesses provide approximately 75 percent of the net new jobs added to the American economy each year and represent over 99 percent of all U.S. employers. The small businesses in the United State are often one created by self –employed entrepreneurs (US Department of State Bureau International Information, 2006). In Nigeria SMEs provide 70 percent of industrial employment and 60 percent of agricultural employment (Odubajo, 2001; Lawal, 2010). The International Labour Organization (ILO) (1985) shows that informal sectors, replete with SMEs employ between 40-60 percent of the urban labour force and contributes a quarters to third of income. In fact SMEs serve as a catalyst for technology development through innovation and indigenous technology (Ojo, 2006; Lawal, 2011).

In Kenya, small and micro enterprises contributed over 50 percent of new jobs created in the year 2005 (Michael et al., 2009). In Thailand small enterprises comprises 76.0 percent while medium companies account for 17.8 percent - a total of 93.8 percent SMEs of all establishments in the manufacturing sectors (Chuthamas et al., 2011). Small enterprises are part of larger category of small enterprises and medium enterprises. They all together form 98.8 percent of all companies in European Union (Zuzana et al., 2007). They are considered to be the engine for society development. According to Robert et al (2003) as cited by Chong (2012),

In New Zealand, SMEs represents 86 percent of its 259,000 businesses and these firms account for approximately 27 percent of the total employment. Conclusively, in Japan, SMEs count for more than 98 percent of all business establishments and employ over 69 percent of the total workforce (Jasra et al., 2011).

A large portion of the entrepreneurship literature has been reviewed by many researchers. The review shows that success of a business is due to many factors. Prominent among these factors include managerial skills and training of the business owner, external environment, psychological and personality traits of entrepreneur, financial factors, customer perspective, human capital issues, strategic issues and demographic factors (Linda et al., 2004; Ester et al., 2009; Michael et al., 2009; Owoseni et al., 2011;; Chuthames et al., 2011 Chong, 2012). Yet, the dictates of the global economy demands that for any successful SMEs to attain “a World Class” that is to gain competitive advantages over competitors, expand market, create economies of scale and operate efficiently in today world business, the entrepreneurs must embrace knowledge economy- knowledge management. Entrepreneurs must transform enterprises asset from tangible assets into intangible assets. This fundamental transformation is the development and astute deployment and utilization of intangible assets, of which knowledge, competence and intellectual property are the most significant (Teece, 2000; Grant, 1996). Dess and Lumpkin (1996) affirmed that 50 percent of the gross domestic product (GDP) in developed economics is knowledge-based, which means that the GDP is based on intangible people skills and intellectual assets.

Knowledge management is the achievement of the organization’s good by making the factor knowledge productive. This is done primarily by facilitating and motivation people to tap into and develop their capacities (their core competencies) and to stimulate their attitude to intrapreneurship. Besides this, knowledge management includes the entirety of systems with which the information within an organization can be managed and opened up (Beijerse, 2000). It is a sine que non for entrepreneurship success in today global economy for example, the more intangible resources a company offers, the more possibility there is for creating competitive advantage (Seeley et al., 2000; Lev 2002; Francisco et al., 2014) and that is why a focus on knowledge management consider people skills as the most important assets in enterprises. This view was also corroborated by Kaplan and Norton (1996). So, intangible assets could be classified into three measurable key elements of knowledge management which are knowledge, information technology and organization (Jelena etal; 2012).

Knowledge is the foundation of knowledge management and can primary be described as something that makes both data and information manageable. It is characterized by information, a capacity and an attitude. Nonaka and Takeuchi (1995) classified knowledge as

explicit (able to be transmitted through words Mathematics formulas or symbols) or tacit (produced by experience, difficult to be communicated and shared with others). Knowledge, especially the tacit one, is considered a source of competitive advantage because it is unique difficult to be imitated and impossible to be substituted. Similarly, information technology and organizational culture has a great contribution to knowledge management to achieve a competitive edge by integrating into business process (Jelena etal; 2012)

Research objectives

This research study seeks to empirically assess the relationship between knowledge management and perceived entrepreneurship success in the Nigerian SMEs. More specifically, the research objectives addressed by this study are as follows:

- To evaluate the relationship between information technology and entrepreneurial success in the SMEs.
- To investigate the relationship between organizational culture and entrepreneurial success
- To establish the relationship between knowledge and entrepreneurial success in the SMEs.

LITERATURE REVIEW

There exist few studies on knowledge management and perceived entrepreneurial success because it is a recent phenomenon in the literature. A number of researches focus on the critical success factor for knowledge management and examine factors affecting business success of small and medium enterprises.

Kuan and Elaine (2005) presented an empirical study of the important factors for knowledge management adoption in the U.K SMEs. They employed a postal survey to determine the critical success factors for knowledge management adoption in the SME sector. The result showed improved performance and competitiveness. Benefits such as better decision making, faster response time, increased profit and improved productivity have reported for firms that have adopted knowledge management (KPMG, 1998). Therefore, the result of the study concluded that there would be a merit foundation for SMEs to better understand knowledge management discipline to facilitate its adoption and to priorities its practices. In a similar vein, study on knowledge management in a small and medium – sized company for entrepreneurs revealed that knowledge management appears in SMEs to get its form especially at an operational level (Beijerse, 2000).

Francisco et al. (2014) conducted a research on knowledge management, entrepreneurial competencies and organizational development in micro and small enterprises in rural regions in the state of Yucatan, Mexico. The researchers used questionnaires as research instrument and factors analysis to establish those factors with most explained variance. The findings revealed that there is relation between knowledge management and organizational performance, so the companies which better manager knowledge are the ones with more probabilities for adapting to their environment, survive and grow, creating competitive advantages and taking the market. So knowledge management is fundamental for the successful performance of micro and small business companies for the development of the state of Yucatan. Besides this, there is also a strong relation among entrepreneurial competencies and performance, especially for those competencies related to family, the will for having a business and to ethically serve a market. However, they need technical experience and be more tolerant to risk, reinforce their entrepreneurship qualities, prevent risks and work with others. Aligned with these findings, Jelena et al. (2012) aimed to show that through creating, accumulating, organizing and utilizing knowledge, organizations can enhance organizational performance. The impact of knowledge management practice on performance was empirically tested through structural equation modelling. The sample included 329 companies both in Slovenia and Croatia with more than 50 employees. The results show that knowledge both in Slovenia and Croatia with more than 50 employees. The results shows that knowledge management practices measured through information technology, organization and knowledge positively affect organization performance. Zuzana et al. (2007) added that problems with existence and development of small enterprise could be solved with closer attention to vital managerial skills and management knowledge for the small entrepreneurs. Support and provision of further education in these areas could help small entrepreneurs overcome initial development difficulties.

The subject of critical success factors for small and medium enterprises has captivated many scholars undertaking a study in entrepreneurship. Chong (2012) concluded that the perceived success factors across ethnic groups and gender among entrepreneurs in urban Malaysia were reputation of honesty, good customer service and hard work. He added that the factors are more important than the environmental factors (such as government support and political involvement). In another study, Chuthamas (2011) also found that the most significant factors affecting business success of SMEs in Thailand were SMEs characteristic, customer and market, the way of doing business, resources and finance, and external environment.

Some Scholars have argued that strategic issue, demographics, and owner determine the success of small business (Linda et al., 2004) however, there appears to be no one set of

reliable variables that will always consistently promote success, because of the difference that exist within each individual small firm, including owner/manager differences.

Consequently, the still unanswered question is to find out empirically what relationship exists between knowledge management and entrepreneurial success in small and medium enterprises. This is the basis of this study and the gap the research intends to fill. To validate this objective the following hypotheses are proposed.

- 1) There is significant relationship between information techniques and entrepreneurial success in SMEs.
- 2) There is relationship between organizational culture and entrepreneurial success in SMEs
- 3) There is relationship between knowledge and entrepreneurship success in SMEs.

METHODOLOGY

Research Design

This study relied on primary data collected by the use of descriptive survey design. The independent variables is knowledge management (information technology organization culture and knowledge) and the dependent variable is entrepreneurial success (competitive advantage, create economic of scale, market expansion, survival and growth and adapt to external environment).

The Sample

The participants in this study were fifty entrepreneurs located within Katsina metropolis, Katsina State, Nigeria. Contacts were made with officials of Katsina State Ministry of Commerce and Industries to obtain a comprehensive list of SMEs. The research employed stratified random sampling. The population was segregated into several mutually exclusive subpopulation herein referred to as business categories. Thereafter respondents were randomly selected from each business category viz. agricultural, service, commercial, computer and internet, food and drink and tourism and accommodation enterprises.

Research Instrument

A self-designed questionnaire was used consisting of five sections – all with a seven point Likert types scoring format ranging from completely disagree to completely agree. Section A measure the demographics; section B is a 5- item scale which measures information technology with split –half reliability coefficient of 0.85; section C is a 5 – item scale which measures organizational culture with split – half reliability coefficient of 0.74; selection D is a 5 item scale

which measures knowledge with split half reliability coefficient of 0.87; section E contains 6 items which measure entrepreneurial success with split half reliability coefficient of 0.64. All split half reliability coefficient are satisfactory as being higher than 0.60.

Data Analysis Approach

Independent t-test was employed to analysis hypothesis 1; hypothesis 2 was analysed using Chi- Square method; while hypothesis 3 was analysed with Pearson Correlation.

EMPIRICAL RESULTS

Table 1: Analysis of Demographic Characteristics of Respondent

| Variables | FREQUENCY | PERCENTAGE |
|-----------------------------|-----------|------------|
| AGE | | |
| 20 – 29 Year | 7 | 14 |
| 30 – 39 Year | 13 | 26 |
| 40 – 49 Year | 16 | 32 |
| 50 – 59 Year | 8 | 11 |
| 60 above | 6 | 12 |
| Sex | | |
| Male | 41 | 82 |
| Female | 9 | 18 |
| Marital Status: | | |
| Single | 6 | 12 |
| Married | 44 | 88 |
| Educational level | | |
| Primary school | 5 | 10 |
| Secondary school | 10 | 20 |
| Diploma | 13 | 26 |
| Bachelor Degree | 15 | 30 |
| Post Graduate Degree | 17 | 14 |
| Types of Enterprise: | | |
| Small | 35 | 70 |
| Medium | 15 | 30 |
| Business Categories: | | |
| Agricultural | 13 | 26 |
| Service | 9 | 18 |
| Commerce | 16 | 32 |
| Computer and Internet | 5 | 10 |
| Food and Beverages | 4 | 8 |
| Tourism and accommodation | 3 | 6 |

Description analysis shows that out of 50 respondents. There were 41 (82%) male and 9 (18%) females; 44 (88%) were married and 6 (12%) were single. The majority of respondents, a total of 16 (32%) were aged between 40-49 years old, 13 (26%) were aged between 30-39, 8 (16%) were aged between 50-59, 7 (14%) were aged between 20-29, and 6 (12%) were aged between 60 and above. There are 5 (10%) respondents from primary school, 10 (20%) were from secondary school, 13 (26%) had Diploma/Certificate, 15 (30%) had Bachelor's Degree, and 7 (14%) respondents had Master's Degree. In addition, there are 35 (70%) respondents from small enterprises and 15 (30%) respondents from medium enterprises; 13 (26%) were from agricultural sector, 9 (18%) were from service, 16 (32%) were from commerce, 5 (10%) were from computers and internet, 4 (8%) were from food and beverages, and 3 (6%) respondents were from tourism and accommodations.

Hypothesis 1

Hypothesis one states that there is significant relationship between information technology and entrepreneurial success in the SMEs.

Table 2: Summary of t-test showing the result of hypothesis 1

| Variables | N | X | SD | Cal t-test | Critical t-test | significant level (2 tailed) |
|----------------------------|----|------|-------|------------|-----------------|---------------------------------|
| Info. Tech | 50 | 35.7 | 17.07 | -4.01 | 2.18 | 0.05 |
| Entrepreneurial Success | 50 | 42.8 | 5.17 | | | |

The above table showed that there is no significant relationship between information technology and entrepreneurial success in the SMEs as t-test calculated value is less than critical value t-test, therefore, the null hypothesis is accepted.

H2: There is a significant relationship between organization culture and the entrepreneurial success. The chi – square (χ^2 - test) was employed to evaluate the existence of a significant relationship between organizational culture and entrepreneurial success.

Table 3: Summary of chi- square test showing the result of hypothesis 2

| Variables | | Organizational culture | Entrepreneurial Success |
|----------------------------|-----------------------|------------------------|-------------------------|
| Organizational culture | χ^2 – test | | 12.80 |
| | Sig (2-t) tailed 0.05 | | 12.59 |
| | N | 50 | 50 |
| Entrepreneurial Success | χ^2 – test | 12.80 | 1 |
| | Sig (2-t) tailed 0.05 | 12.59 | |
| | N | 50 | 50 |

It could be deduced from table 3 of the hypothesis that there is a significant relationship between organizational culture and entrepreneurial success in the SMEs. At significant level (2 tailed) of 0.05, χ^2 calculated value (12.80) is higher than the χ^2 tabulated value (12.59), therefore, null hypothesis is rejected and the study concluded that there is a significant relationship between organizational culture and entrepreneurship success.

Hypothesis 3: There is a significant relationship between knowledge and entrepreneurial success in the SMEs. The Pearson's Correlation Coefficient was employed to assess the existence of a significant, linear relationship between knowledge and entrepreneurship success.

Table 4: Correlation between knowledge and entrepreneurial success in the SMEs

| Correlation | | | |
|-------------------------|--------------------------|-----------|-------------------------|
| Variables | | Knowledge | Entrepreneurial Success |
| | Correlation co-efficient | | 0.90 |
| Knowledge | Pearson Correlation test | | 11.2 |
| | Sig (2-t) tailed 0.05 | | 2.57 |
| | N | 50 | 50 |
| | Correlation co-efficient | | 0.90 |
| Entrepreneurial Success | Pearson Correlation test | 11.2 | 1 |
| | Sig (2-t) tailed 0.05 | 2.57 | 2.57 |
| | N | 50 | 50 |

The above table showed that there is a significant relationship between knowledge and entrepreneurial success in the SMEs

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

In this paper, empirical assessment of the relationship between knowledge management and entrepreneurship success was conducted to accomplish the objectives of the study and contribute significant to the scanty area in the literature. In an attempt to carry out the study, three hypotheses were formulated and various statistical tools were incorporated to establish the validity of the proposed statements for the study. A number of entrepreneurial success factors have been documented by many researchers in entrepreneurship study but only few meet the dictates of the global economy because knowledge management is a business strategy in the global business arena. So, entrepreneurial success as a function of knowledge management must be evaluated in the light if global business advantages. Therefore attempt was made to investigate relationship between information technology and entrepreneurial success in the first hypothesis. The hypothesis was analysed statistically with t-test to measure differences of mean between the two variables. The finding showed that there is no significant

relationship between information technology and entrepreneurship success in the SMEs. In addition, the relationship between organization culture and entrepreneurial success was assessed in the second hypothesis. The study employed chi-square methods (χ^2 - test) for statistical analysis. The result showed that organizational culture is positively related with entrepreneurial success. This result confirmed the results of previous studies carried out in this area. Jelena et al., (2012) found that knowledge management practises measured through information technology, organizational factors and knowledge positively affect organizational performance. Organization cultural factors such as better brand, good reputation, strong stakeholder relationship had a positive relationship with entrepreneurial to gain competitive advantages, create economies of scale, expand local market share and extend to international market. Chong (2012) added that culture of honesty, good customer service and handwork were critical success factors for small and medium enterprises.

However, efforts were also directed to investigate the relationship between knowledge and entrepreneurial success using Pearson's Correlation method. It was found that knowledge had a strong positive relationship with entrepreneurship success. The result also confirmed the results of previous studies. Francisco et al. (2014) affirmed that there is a relationship between knowledge and organization performance, so the companies which better manage knowledge are the ones with more probability for adapting to their environment, survive and grow, creating competitive advantage and taking the opportunities for developing and lasting in the market. So knowledge is fundamental for the successful performance of small business companies. Zuzana et al (2007) corroborated this view that problems with existence and development of small enterprises could be solved with closer attention to vital managerial skills and management knowledge for the small entrepreneur. This study agrees with their conclusion that provision of further education could help small entrepreneurs overcome initial development difficulties. Furthermore, entrepreneurial success factors such as gaining competitive advantages, expand market, survival and growth, efficiency and positive respond to external environment in the global economy should be achieved by the entrepreneurs completely embracing knowledge management strategies.

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