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Value of Knowledge Management as a Strategic Resource: Evaluating the Non-Financial Performance of MSMEs in Migori County, Kenya

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Abstract:

Knowledge management is premised on the notion that a firm's most prized asset is the knowledge of its workforce. The implication, therefore, is that all jobs undertaken by organizations will in one way or another involve knowledge work of sorts. Inevitably therefore, jobs are therefore slowly turning into knowledge work than manual performance of tasks. Yet, despite the tremendous attention knowledge management has gained in firms in the last decade, its strategic effect on family owned Micro Small and Medium Enterprises' non-financial performance has been largely ignored. The purpose of this study was to establish the effect of strategic knowledge management practices on non-financial performance. Strategic knowledge management practices were characterized by knowledge sharing culture, management of intellectual capital and knowledge creation. Survey research design was used with a target population of 167 registered family owned MSMEs in Migori County and sample size of 118 respondents was arrived at. Simple and stratified random sampling techniques were adopted. Primary data was collected through self-administered questionnaires. Both descriptive and inferential statistics were employed in data analysis. SPSS version 22 was employed for data analysis. Findings revealed that strategic knowledge management practices had a positive and statistically significant effect on non-financial performance of family owned Micro, Small and Medium Enterprises in Migori County, Kenya. The study recommends that the family owned firm management should aspire to create an environment where strategic knowledge management practices are cultivated to enable improved non-financial performance. Policy makers should create a model strategic knowledge management practices framework aimed at improving non-financial performance.

Keywords: Knowledge management, non-financial performance, family owned firms, micro, small and medium enterprises

1. Introduction

Over the last two decades, the need to strategically manage knowledge has become ever critical for organizations that want to keep pace with competition. This realization is not far-fetched given that approximately four decades back, fifty percent of employees in industrialized nations were engaged in designing products (Drucker, 1994; Barth 2000). However, by the year 2000, a turnaround occurred as only a fifth of the employees were engaged in occupations that were industry based — the surplus, therefore, were without doubt involved in occupations that were typically knowledge based (Drucker, 1994; Barth 2000). The full-blown shift from 'mechanical' work to knowledge-based work was due to a realization that a firm only gains sustainable advantage from her knowledge and how she uses that knowledge (Davenport & Prusak 1998). Knowledge management is premised on the notion that the firm's most valued asset is the knowledge of its members (De Brun, 2005).

A firm in the knowledge age, therefore, establishes a knowledge sharing culture within their enterprises (Halloway, 2016; Janus, 2016; Garfield, 2017), manages their intellectual assets (Gogan, Borca, Rennung & Sirbu, 2015; Conley, 2018), and works fast towards creating new knowledge (Idris & Karimi, 2011; Frost, 2014). It follows therefore, that for organizations to be more productive in this knowledge era, they have an obligation to establish a knowledge sharing culture, manage intangibles and work ever more at creating knowledge to spur their processes, methods and procedures. And, as Groff and Jones (2003) observes, companies will differentiate themselves on the basis of what they know. From a purely strategic perspective, an organization should see knowledge management as helping in furthering the corporate aspirations of the firm but also aiding in it building up core issue which is to manage the knowledge in the organization (Bornemann, 2003).

In Kenya, it is estimated that nearly 70 to 80% of businesses are family owned, this study envisaged that if this sector's knowledge management is not investigated with respect to performance, then the relationship might remain a

mirage and inevitably impact Kenya's vision 2030 negatively. Furthermore, family business ownership in Kenya contributes to about 60% of labor force (Okello, 2017).

Omotayo (2015) through literature reviews demonstrated that management of knowledge should not only be seen by organizations as an impetus of invigorated performance, but should, in addition to being one of the sources for longevity in survival of a number of firms and improved profitability. The study concluded that by creating, managing, sharing and utilizing knowledge effectively, an organization can benefit greatly from the value generated by possession of certain knowledge in an industry. The implication is that knowledge management must be hinged on three key components of people, processes and technology. However, an empirical study needs to be conducted on non-financial performance which has been largely ignored by researchers. Studies are increasingly pointing to knowledge management as a source of improved organizational performance (Ferraris, Santoro & Dezi (2017); Giampaoli, Ciambotti & Bontis (2017) & Shujahat, Hussain, Javed, Malik, Thurasamy & Ali, 2017)

Strategic knowledge management envisages a well-organized way of maximizing how to unearth knowledge, ways of sharing it, and how to optimally use knowledge for the sake of propping learning outcomes, adaptability and, ultimately the performance of an organizations (Janus, 2015). Strategic knowledge management can, in addition be visualized as involving the strategic formulations and related processes crafted by the organization to identification, structuring, giving value to and sharing an entity's bases of intellectual value with a view to enhancing her competitiveness (The Business Dictionary, n.d). With respect to this study, knowledge management practices will be described as deliberate attempts and step by step coordination of firm's members, their technology, related processes and structure with a view to adding value by way of sharing, management of intellectual assets and creation of knowledge.

It was operationalized through knowledge sharing culture, management of intellectual capital, and, knowledge creation. Knowledge sharing culture will be evident in processes to facilitate knowledge sharing (Mac Alister, 2016; Garfield, 2017), openness, trust and freedom (Ni, Cui, Sang, Wang, & Huang, 2016), reward and recognition (Alhousary & Underwood, 2016; Hallway, 2016; Garfield, 2017). Others are recognizing employee's work (Arriagada & Alarcón, 2014; Garfield, 2017). And technology (Hallway, 2016; Garfield, 2017). Management of intellectual capital will be operationalized in the form of intellectual capital development, securing intellectual capital and intellectual asset management.

Ferraris, Santoro, Dezi (2017) empirically explored the effect of practices aimed at management of knowledge and their relationship to external research and development innovative performance using a sample of 117 Multinational subsidiaries. Ordinary Least Square regression analysis helped to bringing to the fore the accompanying moderator effect of knowledge management on the relationship between external research and development and innovative performance. Knowledge management was found to moderate the relationship which therefore implied that organizations exhibiting superior knowledge management capabilities should register more effectiveness at external research and development, which helps with jump starting their external knowledge sources and, consequently, improving their innovative performance.

Shujahat, Hussain, Javed, Malik, Thurasamy and Ali (2017) by a systematic literature review approach, modelled strategic management by focusing on management of knowledge and competitive intelligence from the year 2000 to 2016. It was revealed that the various stages of its management results in varied implications for knowledge management and competitive intelligence and vice versa. The study also revealed that separate use of knowledge and intelligence would yield effective decision-making, and in turn yielding competitive advantage.

1.1. Theoretical Foundation of Knowledge Management Practices

Several theories have been used to explain strategic knowledge management in organizations (Barney, 1991 & Conner, 1991). Strategic knowledge management practices will be supported by knowledge-based view theory (Penrose, 1959; Wernerfelt, 1984; Barney, 1991 & Conner, 1991). The resource-based view underpins the existence of knowledge sharing culture, management of intellectual capital and strategic capabilities in organizations. According to the resource-based theory, a firm's performance will to a larger extent depend on those unique valuable, rare, inimitable and non-substitutable resources that are in their possession (Wernerfelt, 1984; Barney, 1986 & Conner, 1991). Knowledge creation will be underpinned by the socialization, externalization, combination and internalization (SECI) model (Nonaka, 1990). The SECI model explains the process of conversion of tacit to explicit knowledge in the process of knowledge creation (Takeuchi, 1995).

1.2. Data and Methodology

The study employed a multiple linear regression model in analyzing the connection between strategic knowledge management practices and non-financial performance. The analysis was guided by the following model:

$$NFP = \beta_0 + \beta_1 KSC + \beta_2 MIC + \beta_3 KC + \epsilon$$

Where, β_0 is the constant term; KSC is knowledge sharing culture, MIC is management of intellectual capital, KC is Knowledge creation. β_1 , β_2 & β_3 = Regression coefficients associated with KSC, MIC & KC respectively in direct effect. The researcher tested the assumption of normality by using Shapiro-Wilk test, whereby if p-value ≥ 0.05 then the data was assumed to be normal (Jackson, 2010). But if p-value ≤ 0.05 then the data was treated as not normal ($\alpha = 0.05$). Linearity was tested by Pearson's correlation coefficient (Kothari, 2011). On the other hand, multi-collinearity was tested by checking tolerance levels and variance inflation factor (VIF).

Content validity of the study were ensured through review of theoretical and empirical literature to identify strategic knowledge management practices. In addition, the items and questions employed by the researcher had to cover

the full range of issues or attitudes being measured (Kumar, 2011). Concurrent validity was ascertained if the scale discriminates participants were known to be different, they are expected to score in a manner not similar on the instruments employed. Knowledge sharing culture had a Cronbach's Alpha score of 0.917 with 17 items, in addition to a mean of 69.29 and a standard deviation of 11.54.

Reliability of scores was achieved by ensuring that the measures used to ascertain the attributes of a variable adhere to authoritative beliefs from previous studies and usage. The measures used cohered with known theoretical concepts, and not reflecting other phenomena not intended for the study. Internal consistency reliability was determined by Cronbach's alpha (Bhattacharjee, 2012). If the coefficients are high, the better will be the measuring instrument. There are different reports about the acceptable values of alpha for different studies; however, values ranging from 0.70 to 0.95 were considered acceptable (Nunally, 1994, Bland, 1997, De Vellis, 2003) for purposes of this study.

Survey research design was used for the study since facilitates rapid capturing of data by capturing the specifics of a large population coming out of a small group of individuals (Creswell, 2014). The target population were the 167-family owned MSMEs in Migori County. The researcher settled on family owned MSMEs that had been in business for over 10 years since they could easily avail pertinent information due to their longevity in service and understanding required by the proposed study. The sum of family owned MSMEs was 167 who comprised owner and employed managers. A sample estimation relationship was adopted for use as put forward by Yamane (1967). At 95% confidence level, 118 respondents were targeted which represented 70.66 percent of the initially targeted population. The sample will be arrived at as follows.

Statistical data was analyzed using descriptive and inferential statistical techniques. Descriptive statistics were employed to generate summaries for the survey data (Sang, 2015) and included generation of means and standard deviations of knowledge sharing culture. The effect of knowledge sharing culture on non-financial performance of Micro, Small and Medium Enterprises in Migori County was determined using inferential statistics. Multiple linear regression analysis was used in the analysis for inference purpose. To achieve this objective, the null hypothesis was stated as $H_0: \beta_i = 0$. The null hypothesis H_0 was rejected if p -value ≤ 0.05 , otherwise it was not rejected at 5% significance level.

Knowledge sharing culture had a mean of 4.0761 with a standard deviation of .67906. The mean meant that overall the respondents agreed that knowledge sharing culture were well rooted in the respondent's organizations by means of processes in the organizations, technology, rewards, collaborations and openness. Furthermore, management of intellectual capital had a mean of 3.9345 with a standard deviation of .70759. The mean meant that overall the respondents agreed that management of intellectual capital were well rooted in the respondent's organizations by means of intellectual capital development, securing intellectual capital and intellectual capital management. As for knowledge creation, the mean was 4.1467 and a standard deviation of .65659. The mean meant that overall the respondents agreed that knowledge creation was well rooted in the respondent's organizations by means of socialization, externalization, combination and internalization. Lastly, non-financial performance had a mean of 4.1533 and a standard deviation of .71595, implying therefore that respondents generally agreed that there were impressive levels of non-financial performance in their performance.

The value of Pearson correlation coefficient 'r' ranges from negative one to positive one (Cohen, Manion & Morrison, 2007). In case $r = +1$, then it follows that the correlation between the two variables is perfect and positive. On the other hand, if $r = -1$, then it follows that the correlation between the two variables is perfect and negative. Finally, if $r = 0$, then there is no correlation between the variables. Knowledge sharing culture and non-financial performance had $r = 0.877$ ($p < 0.01$), it follows therefore that the association was positive. On the other hand, management of intellectual capital had $r = 0.842$ ($p < 0.01$), it follows therefore that the association was positive. Likewise, knowledge creation and non-financial performance had $r = 0.842$ ($p < 0.01$), it follows therefore that the association was very strong and positive.

2. Results and Discussion

A multiple regression was run to predict non-financial performance of family owned Micro, Small and Medium Enterprises in Migori County from strategic management of knowledge. Strategic knowledge management practices added statistically significantly to the prediction of non-financial performance, $R^2 = 0.854$, $F(3,71) = 138.237$, $p < 0.05$. It followed therefore that a unit change in strategic knowledge management practices explained 85.4 percent of the variances in non-financial Performance.

The results of this study were largely supportive of earlier cited works which were of the position that for there to be improved non-financial performance a strategic perspective should be adopted for knowledge management. For instance, Omotayo (2015) demonstrated that knowledge management is a key driver of organizational performance and a critical tool for firm survival, competitiveness and profitability. Another study was by Ferraris, Santoro, Dezi (2017) who discovered that knowledge management practices improved innovative performance. Thirdly, Giampaoli, Ciambotti and Bontis (2017) proved that knowledge management practices improved both problem-solving processes and organizational performance.

3. Conclusions

The results indicated a positive and statistically significant association between strategic knowledge management practices and non-financial performance of family owned Micro, Small and Medium Enterprises in Migori County, Kenya. Evidently therefore, the cultivation of strategic management of knowledge in family owned Micro, Small and Medium Enterprise largely should result in significant improvement in their non-financial performance. The study therefore

recommended that family owned Micro, Small and Medium Enterprise leadership leverage strategic knowledge management practices to achieve enhanced non-financial performance levels.

4. References

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