RELATIONSHIP BETWEEN INTELLECTUAL CAPITAL AND PERFORMANCE OF MICRO FINANCE INSTITUTIONS IN KENYA

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ABSTRACT
Microfinance Institutions (MFIs) in Kenya represent a vital part of the economy, being the source of various economic contributions through the generation of income via providing new job opportunities, introducing innovations, stimulating competition, and engine for employment. Intellectual capital appears as the most important and vital component of a knowledge-based economy. Present economy is known as a knowledge-based economy where, knowledge, information and soft assets have more importance rather than the physical assets. The role and importance of MFIs in a knowledge-based economy has been highly appreciated and acknowledged. Moreover, in the present economy, MFIs are facing tremendous challenges and threats to survive in a competitive environment. In a competitive environment MFIs need to upgrade their intellectual capital including knowledge, database, technological advancement and innovation in order to stay in a competitive environment. The study examines the association between Intellectual Capital (IC) and performance of MFIs in Kenya. The study adopted descriptive research design. The finding of the study reveal that managerial skills of the owner/managers positively influence the performance of Small and Medium sized Enterprises in Kenya. The study found out that entrepreneurial skills have a great positive influence the performance of MFIs in Kenya. The findings of the study indicate that innovativeness influences the performance of MFIs in Kenya.

Key Words: Knowledge-based economy, MFIs performance, Intellectual Capital

Introduction

The world is moving quickly from a production-based economy to a knowledge-based economy (Hung et al., 2010) and knowledge storage and application are the basis of economic growth and accumulated capital (Hsu & Fang, 2010). In the globalized and knowledge-based economy,
MFIs need to develop, manage and monitor their soft assets or intellectual capital to enhance their performance and competitiveness. Notably, Japan and the USA are the most advanced in terms of the level to which MFIs adopt and use intellectual capital in the world (McCord, 2008). MFIs compared to larger banks, develop their relational capital with greater ease and use the available knowledge from their associations more readily in order to achieve higher performance (Desouza & Awazu, 2006). In the same manner, Wong & Aspinwall (2004) argue that MFIs' close proximity to their customers enables them to acquire knowledge in a more direct and faster flow compared to larger firms.

Wealth and growth in today's world economy are primarily driven by intellectual assets (Sougiannis, 1994; Lev & Sougiannis, 1996; Eberhart et al. 2004). The rise of new economy has highlighted the fact that the value created depends far less on their physical assets than on their intangible ones. These assets, often described as intellectual capital, are being recognized as the foundation of entrepreneur enterprise growth and competitiveness in the twenty-first century (Wigg, 1997; Bounfour & Edvinsson, 2005).

Intellectual capital is transformed to economic value through organizational action. Thirdly, intellectual capital is related to the existence of competitive advantage because intellectual capital enhances the environmental responsiveness of the firm. The ability to manage knowledge for improving environmental responsiveness is associated with organizational learning (Argyris & Schön, 1996 Stewart (1991) indicates that intellectual capital is everything that cannot be touched but can earn money for the firm. On the same line, Lev (2001) considers that intangible resources are those that can generate value in the future but have no physical or financial form. When reflecting on the value or benefit contributed by intellectual capital, many authors have chosen to determine it as the difference between the market value and the book value of the firm and some even use that difference to define the term (Brooking 1997; Daley 2001; Lev 2001; Nevada & López 2002; Ordóñez de Pablos 1999, 2003; Petrash 1996; Roos et al. 2001; Sveiby 2000).

Intellectual capital can be defined as intellectual resources that have been “formalized, captured and leveraged” to create assets of higher value (Prusak, 2008). IC refers to intellectual material such as knowledge, information, intellectual property and experience that can be used to create wealth. IC can be classified as human capital, organizational capital and customer capital (Roos & Roos, 2007; Stewart, 2005). Human capital, as an intellectual capital component, is one of the most important resources which companies rely on to improve their efficacy and efficiency, and hence gain a competitive advantage as argued by (Bontis, 2006).

**Microfinance Sector in Kenya**

The microfinance industry started in Kenya about 20 years ago, but it only gained the status of an industry in the past ten years, where it is generally categorized along two lines (Hospes et al., 2002, pp. 23-5). First and most common is the formal versus informal. Formal providers are registered by Kenyan law. Informal providers are subject to self-regulation or group-based rules. Second, microfinance in Kenya can be categorized as client- or member-based. In member-based organizations, members provide the resources as well as constituting the main
target group for the loans. These are cooperatives. In client-based organizations, the customers are distinct from the owners. Customers are not involved with the management of the organization.

The potential of using institutional credit and other financial services for poverty alleviation in Kenya is quite significant. About 18 million people, or 60% of the population, are poor and mostly out of the scope of formal banking services (Omino, 2005). According to the National Micro and Small Enterprise Baseline Survey of 1999, there are close to 1.3 million MSEs employing nearly 2.3 million people or 20% of the country’s total employment and contributing 18% of overall GDP and 25% of non-agricultural GDP (CBS-ICEG-K-Rep, 1999). Despite this important contribution, only 10.4% of the micro and small enterprises (MSEs) receive credit and other financial services. The formal banking sector in Kenya over the years has regarded the informal sector as risky and not commercially viable (Omino, 2005).

The Government of Kenya recognizes that greater access to, and sustainable flow of financial services, particularly credit, to the low-income households and MSEs is critical to poverty alleviation. Therefore, an appropriate policy, legal and regulatory framework to promote a viable and sustainable system of microfinance in the country was developed via the Deposit Taking Micro Finance Bill (Omino, 2005). In drafting the Bill, the Government has consulted with stakeholders to get their views on the best way to create the required enabling environment for the microfinance sub-sector. The bill was subsequently signed into Law on December 29, 2006 as Kenya’s Microfinance Act, (2006), bringing the MFIs that intend to take deposits from the public under CBK supervision and regulation. While specific prudential regulations have been developed for the MFIs that are registered with the CBK as Deposit Taking Microfinance (DTMs) Institutions, the treatment of Non-deposit taking regulation was delegated to the Minister for Finance under section 3(2) of the same Act (CBK, 2008).

**Statement of the Problem**

According to RoK (2012) MFIs contributed to twenty percent of the Kenya Gross Domestic Product. In the United States, 39.7 per cent (Heneman, Tansky, & Camp, 2000), China, 35 per cent (Cunningham & Rowley, 2008), Europe, 40 per cent (Rauch & Frese, 2000). According to World Bank (2010) the figures above show that countries with over 30% growth of GDP were contributed by high utilization of the intellectual capital by the MFIs. Intellectual capital was identified as the key resource to the performance and survival of MFIs (World Bank, 2012). Intellectual capital has been identified as having capability to innovate, has an important effect on the MFI growth, success and gives an MFI a better competitive position (Subramanian & Youndt, 2005; Wu, Chang, & Chen, 2008; Zerenler, Hasiloglu, & Mete, 2008). The information on the background of the study reveals MFIs have very low survival rate as compared to banks. Sessional Paper No. of 2005 (RoK, 2005) and Ministry of Economic planning report on MFIs (RoK, 2007) show that one out of five MFIs fail within their first ten years of operation. This result to low economic development and loss of jobs (RoK, 2012).
Would lack of utilization of intellectual capital be the contributor of this MFI mortality rate in Kenya?

Previous studies shows that intellectual capital is associated with a firm’s innovative performance (Mete, 2008). Sufficient intellectual capital enables a firm to create innovations (Hermans & Kauren, 2005). Management of a company should improve the intellectual capital in order to enhance innovation and performance (Narvekar & Jain, 2006). Khalique, Shaari, Isa and Ageel (2011) stipulated that intellectual capital is a critical source for organizations to take competitive advantages. In the same way, Sharabati, Jawad and Bontis (2011) and Collis (1996) argued that inspite of the importance of intellectual capital most of the organizations do not grasp the fact on the importance and application of intellectual capital in their organizations.

The literature available in chapter two shows that Intellectual capital is a key ingredient element of MFIs performance for production of innovation and creativity (Cabrita & Bontis, 2008). Most of the studies conducted on the role of Intellectual capital have focused on the developed and developing countries outside Africa; for instance a case on Taiwanese manufacture and non-manufacture industries in Taiwan studied influence of intellectual capital on performance of MFIs (Wu, 2008). Kenyan MFIs contribute heavily to the GDP. Yet, there is little or no empirical evidence on role of intellectual capital on this important sector of the economy. It is therefore imperative to scientifically explore this study the actual situation on how to have this important sector and this study embarks to fill this gap. Therefore, the purpose of this study is to investigate the relationship between intellectual capital and performance of MFIs in Kenya.

**Literature Review**

**Intellectual Capital**

The world is moving quickly from a production-based economy to a knowledge-based Economy (Hisrich and Drnovsek (2002)) and knowledge storage and application are the basis of economic growth and accumulated capital (Delmar (2006)). One of the essential blocks of this assets Intellectual capital is becoming a crucial factor for a firm’s long-term profit and performance that identify their core competence as invisible assets rather than visible assets (Hsu & Fang , 2010) . Traditionally, those resources were physical, such as land and machines, or financial capital. More recently the concept of intellectual capital has been identified as a key resource and driver of organizational performance and value creation (marr,needly, Schiuma,2004).

A profound change has occurred in the way corporate value is generated over the past decade (Young, Tsai & Lee, 2007). Intellectual capital issues have undergone extraordinary development since the beginning of the 1990s (Viedma Marti, 2007). So far, there isn’t a thoroughly accepted definition for intellectual capital. (Yi-cheng&Chuan-rui, 2009). The concept of intellectual capital will be used in reference to the resource-based view of the firm, as a resource that distinguishes one organization from another (Bornemann &Alwert, 2007).
Managerial Skills

Managerial skills are the source of innovation (Bontis et al., 2000; Webster, 2000) and improvement; it generates innovation by new products and services or improving business process (Stewart, 1997). MFIs should recruit and manage employees who have higher degrees of intellectual capital in exchange for better innovation (Shipton et al., 2005). According to Charles (2004) innovation, knowledge management and intellectual capital are strongly correlated.

Human capital is considered the primary element of intellectual capital and the most important source of sustainable competitive advantage (Nonaka and Takeuchi, 1995; Edvinsson and Malone 1997). Human capital refers to human capital the source of innovation and strategic renewal (Cabrita & Bontis, 2008) and the major source of economic growth (Schultz, 1961). Increased training of employees may lead to higher productivity and enhanced creativity (Bontis, 2002). Human capital must be combined with relational and structural elements in the organization, to create value (Cabrita & Bontis, 2008). Our discussion on human capital includes competence, intellectual agility, innovation and creativity, skills, values and experiences and individual’s education.

Innovativeness

Lehtimaki (1991) attributed the emergence of new ideas for product innovations in MFIs. MFIs very actively explored new product ideas and the most frequent way of achieving this included contacts with customers. Chanaron (1998) identified demand placed on business by customers/clients, close working relationships with a key customer and close analysis of competitor products are the major drivers of innovation in MFIs covered in three different countries: UK, France, and Portugal.

Vonortas and Xue (1997), while studying the process innovations of MFIs in the USA, observed that economic incentives, internal resources, and technical and organizational competencies that a firm has developed or accumulated over time and a firm’s linkage to external sources of expertise for learning about new technological development were the major forces that influenced these MFIs in adopting a process innovation. Danneels and Kleinschmidt (2001) in the context of new product development argued that it consists of bringing together two main components: markets and technology. According to them, product innovation requires the firm to have competences relating to technology (enabling the firm to make the product) and relating to customers (enabling the firm to serve certain customers).

Empirical Review

According to Roos et al, (2007) in their study on measuring company’s intellectual growth, they stated that customer capital is the relationship between firms and their customers. The study concluded that knowledge of marketing channels and customer relationships is the main theme of customer capital. Frustrated managers often do not recognize that they can tap into a wealth of knowledge from their own clients. Kohli and Jaworski (2000) indicates that
understanding what customers want in a product or a service better than anyone else is what makes someone a business leader as opposed to a follower.

In the longitudinal study of Subramaniam and Youndt (2005), they examined how aspects of intellectual capital which consists of human capital, organizational capital and social capital influenced various innovative capabilities (incremental and radical) in companies. In a longitudinal study of 93 companies in various industries, they found that human capital, organizational capital and social capital and their interrelationships selectively influence incremental and radical innovative capabilities. Organizational capital positively influenced incremental innovative capability, while human capital interacted with social capital and to positively influence radical innovative capability.

Ngah and Ibrahim (2009) used questionnaire to survey Malaysian MFIs in order to determine the relationship of intellectual capital, innovation and organizational performance. In the preliminary study, they found that human capital, contributes more to innovation and organizational performance than structural and relational capital.

Research Methodology

Both quantitative and qualitative approaches were used. The study adopted descriptive research design. The study targeted 930 employees of MFIs in Nairobi County. The sample size for the study was 93 respondents. Data collected was analyzed using descriptive statistics. Data analysis was done using SPSS and Microsoft excels to generate quantitative reports which were presented in the form of tabulations, percentages, mean and standard deviation.

Research Findings

Managerial Skills

The study sought to investigate the influence of managerial skills on performance of MFIs in Kenya. Specifically, the study focused on technical skills, interpersonal skills and the employee’s level of education.

Technical Skills

The study sought to find out whether technical Skills influence the performance of MFIs. 29.3% of the respondents indicated that technical skills influence the performance of MFIs to a very great extent, 17.3% indicated that technical skills influences the performance of MFIs to a great extent, 29.3 % indicated that technical skills influence the performance of MFIs to a moderate extent, 18.8 % indicated that technical skills influence the performance of MFIs to a low extent while 5.8 % indicated that technical skills influence the performance of MFIs to a very low extent.

The findings relate with those of Wyer and Mason (1999) who found that lack of technical skills is a much obstacle to developing a small business. Souder’s study also suggests that informal
networks and influence are an important success factor for organizational entrepreneurs. In addition to possessing technical and market knowledge, a key to entrepreneurial effectiveness is the extent to which the entrepreneur is known by many others throughout the firm and who is trusted, respected, and influential. In other words, someone who has built a degree of social capital that can be successfully used to build a network of support around the new innovation (Kanter, 1983, 1985; Nahapiet and Ghoshal, 1998).

The findings collaborate with those of Papulova and Mokros (2007) who observed that technical skills are important in businesses that relate to engineering and other technical orientations. Rue and Byers (1992) in their theory of management competencies view technical skills as very important to lower level managers. The study findings show that technical skills contribute to a moderate and to a very great extent on the performance of MFIs in Kenya.

The study sought to establish the extent Employees level of education influence the performance of MFIs. 32.5 % of the respondents indicated that Employees level of education influence the performance of MFIs to a moderate extent, 27.7% of the respondents indicated that Employees level of education influence the performance of MFIs to a very great extent, 19.4% of the respondents indicated that Employees level of education influences the performances of MFIs to a great extent. 16.8 % of the respondents indicated that Employees level of education influence the performances of MFIs to a low extent. While 3.7% of the respondents indicated that Employees level of education influence the performance of MFIs to a very low extent.

The findings collaborate with the findings of (Svendsen, 2006) who found that Entrepreneurship Education is about developing people with increased probability to succeed when creating and developing a business. Entrepreneurship education seeks to provide business owners with the knowledge, skills and motivation to encourage entrepreneurial success in a variety of settings. The success of entrepreneurial activities in a country is to an important extent related to quality

These finding are consistent with Nunes et al. (2006) who report that informal systems are developed to aid the MFIs' knowledge management activities. Desouza and Awazu (2006) also state that unlike large financial institutions, human capital in MFIs tends to behave quite differently. Employees rarely depart the organization, but even if such an event takes place, this does not result in significant knowledge loss. The findings show that the level of education is an important factor in the performance of MFIS.

**Entrepreneurial Skills**

The study sought to investigate the influences of entrepreneurial skills on performance of Micro finance institutions. Specifically, the study focused on risk –taking propensity, careful budgeting skills to ensure that financial records, human relation skills, clear goals and objective setting skills, business operating skills, skills to detect changes in the market, skills to act quickly, skills to provide attractive range of products, skills to obtain market share that suits the size and capability.
Risk – Taking Propensity

The study sought to find out whether risk taking propensity influences the performance of MFIs. As shown in Figure 4.9, 26.2% of the respondents indicated that risk propensity influences the performance of MFIs to a very great extent, 12% of the respondents indicated that risk propensity influences the performance of MFIs to a great extent, majority 27.7% of the respondents indicated that risk propensity influences the performance of MFIs to a moderate extent, 23% of the respondents indicated that risk propensity influences the performance of MFIs to a low extent, While 11% of the respondents indicated that risk propensity influences the performance of MFIs to a very low extent. Therefore, risk taking propensity is one of the factors that influence the performance of firms which should be taken into consideration by MFIs. Risk taking propensity is the willingness to undertake calculated risk with the opportunity of gaining an increased benefit (Wiklund and Shepherd, 2003). Risk taking propensity is one of the characteristics possessed by successful entrepreneurs (Hursky and Tuunanen, 2006).

These findings correspond with those by Antoncic and Hisrich (2003) that the possibility of loss may be viewed as an inherent characteristic of innovativeness, new business formation and aggressive or proactive actions of existing firms. According to Hursky and Tuunanen (2006) found that American entrepreneurs have rich entrepreneurial traditions which involve high risk-taking propensity than Finnish entrepreneurs which made them more successful. The study concludes that risk taking propensity influences the performance of MFIs in Kenya as depicted by the statistics above. Therefore such risks are important when making hard decisions regarding firm’s performance and sustainability.

Innovativeness

The study sought to investigate the influences of innovativeness on performance of Micro finance institutions in Kenya. Specifically, the study focused on entrepreneurs support on Employees’ innovation, number of patents within the MFI, level of new product sales to total sales.

Provision of Incentives for Innovative Employee

The study sought to find out the extent to which incentives for innovative employee influence the performance of MFIs in Kenya. 15.7% of the respondents indicated that incentives for innovative employee influence the performance of MFIs to a very great extent, 24.6% of the respondents indicated that incentives for innovative employee influence the performance of MFIs to a great extent, 28.3% of the respondents indicated that incentives for innovative employee influence the performance of MFIs to a moderate extent,21.5% of the respondents indicated that incentives for innovative employee influence the performance of MFIs to a low extent, while 9.4% of the respondents indicated that incentives for innovative employee influence the performance of MFIs to a very low extent.

These findings correspond with those by Hyrsky & Tuunanen (2006) who found that a creative and innovative employee who is motivated to develop new products and new markets has strong
association to the performance of MFIs. Gans and Scott (2000) observed that recognition through incentivizes to the employees is a crucial component to building a sustained and thriving innovation in the enterprise which is a prequisite for MFIs performance where compensation is pegged on employees creativity associated with emergence of new markets and new products.

The study infers that Incentives for Innovative Employee influences the performance of MFIs in Kenya as depicted by the comparison of the findings of the study and available literature. This reveals that MFI manager who provide incentives to innovative employees is likely to encourage the employees to be creative and thus lead to emergence of new products and new markets and hence influence the performance of MFIs.

Regression Analysis

The linear regression analysis models the linear relationship between the dependent variable which is performance of MFIs and independent variables which are Managerial skills, Innovativeness, Entrepreneurial Skills, and Structural Capital. The coefficient of determination R2 and correlation coefficient (r) shows the degree of association between Variables and performance of MFIS in Kenya. The results of the linear regression indicate that R2=.704 and r=.839 this is an indication that there is a strong relationship between managerial skills, entrepreneurial skills, innovativeness and structural capital and the performance of MFIs in Kenya. The findings concur with those of Marr, (2008) who postulates that performance of MFIs to be key factors for firm’s success and important levers for value creation. The core competence as invisible assets rather than visible assets. Hsu and Fang , (2010) revealed that performance of MFIs is becoming a crucial factor for a firm's long-term profit and performance that identify their core competence as invisible assets rather than visible assets.

Table 1: Model Summary

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Summary of the Findings

The finding of the study reveal that managerial skills of the owner/managers positively influence the performance of Small and Medium sized Enterprises in Kenya. Seventy eight decimal nine per centum (78.9%) of the corresponding change in performance of MFIS can be explained by a unit change in managerial skills. This further indicates that owner/manager utilization of high managerial skills as a component of performance of MFIs has a significant effect on the performance of Small and Medium sized Enterprises in Kenya.

The study found out that entrepreneurial skills have a great positive influence the performance of MFIs in Kenya. According to the findings, (56.8%) correspondence on performance of MFIS can be explained by a unit change in entrepreneurial skills. Entrepreneurship skills of the owner/manager has been revealed to be part of performance of MFIs which include knowledge
management that helps an entrepreneur in undertaking risk-taking propensity initiatives that is a crucial characteristic an entrepreneur should possess for the performance of MFIs.

The finding of the study indicate that innovativeness influences the performance of MFIs in Kenya. According to the findings, Seventy four decimal six per centum (74.6%) correspondence on performance of MFIs can be explained by a unit change in innovativeness. One can therefore deduce that the tendency of owner/manager to engage in and support new ideas, novelty, experimentation and creative processes results in new products, services or technological processes which has a great influence on the performance of MFIs.

Conclusions

The crux of this study was to explore the relationship between intellectual capital and the performance of micro finance institutions in Kenya. Based on previous studies, the components of performance of MFIs were expected to have positive relation with performance of MFIs in Kenya. The output given from the findings indicate that there is a significant positive relationship between the components of performance of MFIs namely Managerial skills (MS), Entrepreneurial skills (ES) and Innovativeness (IN) with performance of MFIs.

The findings also indicated that managerial skills have been a major contributor towards the performance of MFIs in Kenya. This is in line with Kamath (2008) who found that managerial skills appeared as the major contributor towards the performance of MFIs in Kenya. The results also revealed that the entrepreneurial skills and innovativeness have positive relationship with performance of MFIs in Kenya. The findings demonstrated that performance of MFIs can be used to mobilize, assemble, and manage all intangible resources in order to enhance performance of MFIs in Kenya and this concur with the findings of other studies (Bontiset al., 2000; Salina and Wan Fadzilah, 2008; Chen etal.,2005; Kamath, 2008;). Undoubtedly, intellectual capital has contribution towards the growth of MFIs.

The findings emphasize the importance of the components of performance of MFIs which comprise of managerial skills, entrepreneurial skills, and innovativeness on the performance of MFIs in Kenya. This is a pointer that as performance of MFIs increases, it is expected that growth of MFIs will be enhanced.

Recommendations

The study is a justification of the fact that a manager with good managerial skills, excellent entrepreneurial skills, sufficient capital and is well innovative has a deep understanding of the MFI which catapults their performance to a large extent. Specifically, the study recommends:

1) The owner/managers should realize that in the present knowledge economy, performance of MFIs forms an important element of intangible assets of the MFIs which should be reconfigured to ensure that the enterprises seize opportunities, are proactive in the market place, make new product and process innovations.
2) Entrepreneurial skills of the owner/manager are necessary to impart an entrepreneurial culture in the enterprise which drives the employees into creating new and more competitive products for increased performance of the enterprise. The owner/manager should therefore possess excellent entrepreneurial skills to coordinate employees and guide them to discovering the mission of the enterprise which is performance.

3) Better and effective communication with proper understanding is a key ingredient to creating a solid relationship between an enterprise and its customers. The owner managers should therefore seek to understand their clients’/customers’ background, discover their priorities, know their tastes and likes to ensure they serve them well thus creating a long term business relationship with them, culminating in the MFIs’ performance.

4) Owner/managers of MFIs should possess technical, interpersonal, and conceptual skills to effectively plan, lead, organize and control the enterprise effectively leading to increased performance and consequently performance.

5) Better control in production cost while maintaining competitive prices results in continued profitability of a firm and therefore performance. Owner/managers should be efficient time managers with a control on the MFIs cost of operation to help provide a working schedule and competitive prices which fit the MFIs’ client needs.

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