

Relationship between managerial competencies of owners/managers of emerging technology firms and business performance: A case of internet cafés in Mangaung Province in South Africa

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Abstract—This study examines the relationship between managerial competencies of manager/owners and the performance of emerging internet firms in the Mangaung Metropolitan Municipality in the Free State region, South Africa. Despite the growing body of literature on the impact of specific entrepreneurial traits of managers/owners on the performance of small firms in developed economies, little is known about the contribution of managerial competencies of managers/owners of emerging internet firms to the success of these firms in emerging African economies. Since the Global Entrepreneurial Monitor South Africa Reports (2010, 2012, 2013) attribute the failure of most emerging businesses (i.e. in their first three years of existence) to the “managerial competency problem,” an investigation into the effects of managerial competencies on the performance of small emerging internet businesses is critical to locating the strategic levers that potentially optimise the growth and sustainability of these businesses in emerging economies. The study drew on extant literature and the researchers’ reflective experiences to develop a conceptual model on the relationship between managerial competencies of owners/managers of small internet cafés and the performance of these firms. The model suggests that an assortment of managerial competencies (innovative capabilities, market management capabilities, human capital requirements-technical knowledge, skills, abilities, as well as financial literacy, strategic planning/ forecasting and marketing mix) is critical to the improved performance and survival of small internet businesses. Understanding the appropriate constitution of managerial competencies ideally suited for emerging technology firms, innovation based and entrepreneurship-driven improvements of the organisational context of emerging technology firms including the broader business environment would positively impact small internet business performance (i.e. growth, profitability, and sustainability).

Keywords—management competencies, emerging internet businesses, firm performance, human capital abilities, organisational environment

1. Introduction

Managerial competencies (MC), which describe a set of skills, related knowledge and attributes that allow an individual such as a manager/owner of a small scale business to perform a task or an activity within a specific function or a job (Nirachon et al. 2007), are considered a critical factor that contributes to the performance and the survival of small scale

businesses. In fact, there is a growing body of literature that has proven a positive relationship between managerial competencies and performance (Mitchelmore and Rowley, 2010; Crook et al., 2011; Mahembe, 2011). For instance, competencies, which are constitutive of *knowledge* (i.e. extent to which information is developed or learned through experience, study or investigation), *skills* (which are a result of repeatedly applying knowledge or an ability) and *abilities* (i.e. innate potential to perform mental and physical actions or tasks), are considered to contribute directly to individual and organizational performance (Mahembe, 2011). A pilot study conducted by the Small Business Policy Branch Industry Canada in 2008 found that there appears to be a link between firm performance (FP) and management competencies (MC).

In spite of the growing literature on MC, most of the competencies have been studied in isolation and with little effort to recognise their mutual relationships with specific aspects of performance such as profit, growth and efficiency (Markman, 2007; Mitchelmore and Rowley, 2010). Even where the extant literature confirms a positive relationship between managerial competencies and performance, what remains unclear is whether the size of the business, nature of the business and associated industry in which the business is located mediates this relationship. More so, many of the studies on the MC-FP relationship tend to emerge from advanced economies (Dragoni et al., 2009: 731; Sánchez, 2011:169; Brancatisano, Jurriëns and Verburg, 2012) and little is known about the relationship in emerging economies. Even in advanced economies where this relationship has been examined in depth, the emphasis has been on firms in the industrial sector and knowledge based organisations (Krajcovicova, Caganova, Cambal, 2012; Königová, Urbancová and Fejfar, 2013). As such, the under-exploration of this relationship in emerging economies such as South Africa provides an impetus for its investigation to unravel the dynamics of this complex puzzle.

This study therefore, examines the influence of managerial competencies of owners/managers of small, micro and medium enterprises (SMMEs) (especially internet cafés) in the Mangaung region (South Africa) on the performance of their firms. Understanding the relationship between managerial competencies of managers/owners and the performance of their emerging technology businesses (i.e. Internet cafés) is

important to organisation success given the attribution of the failure of SMMEs in their first three years of existence to the lack of managerial competencies (i.e. lack of experience, education and training, financial literacy and managerial skills of owners/managers) (Franco and Haase, 2009). More so, possession of a particular set of human capital competencies such as education level, work experience, business start-up experience, training and skills and technical know-how (Dyke, Fischer and Rueber, 1992) contribute to the development of an appropriate entrepreneurial profile, which in turn affects the entrepreneur's decision to expand the business and succeed (Xiang, 2009).

II. Problem background

A. *Contribution of technology-based SMMEs to the knowledge economy and economic growth*

Emerging technology businesses such Internet cafés are considered the main gateway to information and the knowledge economy by most developing countries in Africa. Digitization of information, [through the Internet networks accessed via internet cafés], also promotes access to knowledge and information in a faster and cheaper way because the production and geographical challenges are limited if the appropriate infrastructure is available (Molawa, 2009). However, Sey and Fellows (2009) observes that in developing economies where acute resource constraints persist and where shared access is the dominant mode of access to information and communication technologies (ICTs), it is unsurprising that governments, non-governmental institutions and business entrepreneurs have invested significant amounts of human and financial resources in internet cafés, telecentres, public libraries, and other forms of public access. Despite this contribution of internet cafés to broadening information access and fostering digital literacy in the developing world, multiple challenges continue to hamper the viability of these internet businesses such as limited knowledge, confidence and experience with ICTs by users-thus dampening demand for internet services. Acknowledging the rural-urban divide in access to ICTs, Calandro, Gillwald, Deen-Swarray and Stork (2012) observe that in rural South Africa, micro-browsing via handheld devices has become a necessity for most internet users because there is little personal Internet access, public access points are located far from their localities, and Internet cafés are generally expensive.

By extension, the contribution of SMMEs in general to economic growth needs unraveling. Since the bulk of business enterprises in South Africa fall under SMMEs, the SMME sector (including the emerging technology sector) is considered as one of the key drivers of economic growth in South Africa. In particular, estimates of the year 2009 show that SMMEs contributed more than 35% of South Africa's Gross Domestic Product (Abor and Quartey, 2010). The following year, the contribution of small businesses (including emerging internet businesses) to the Gross Domestic Product

of South Africa was between 52-57% and SMMEs constituted approximately 91% of formal business establishments in the country (Abor and Quartey, 2010). In spite of the aforementioned overwhelming presence of SMMEs in the business establishment of the country, a majority of these businesses have remained informal due to weak managerial capacities as well as complicated processes of transitioning to the formal sector (Dzansi & Ndjike, 2014).

B. *Employment generation*

Internet cafés also present great employment opportunities for the bulk of South Africans who cannot be absorbed into mainstream employment. Langmia (2006) observes that technologies such as internet cafés contribute to the creation of new jobs by entrepreneurs that improve the economic life style of many entrepreneurs and citizens. Other literature present a mixed position that while internet cafés can create new local jobs, they can also promote migrations as the local population applies for distant jobs online (Johnson, Pejovic, Belding and van Stam, 2011). Although the ICT dilemma is often expressed in terms of fears about the elimination of jobs by replacing workers with machines and automated production process, for [internet cafés] the argument is about creating jobs by improving ICT services, productivity and stimulating overall demand for services (Benner, 2003). In terms of internet uses, Hyde-Clarke (2006) offers an interesting dynamic on internet-based social practices by reporting that users/entrepreneurs in the more affluent area of Johannesburg mainly used the Internet to expand existing business activities, while users in the poorer areas tended to use it to search for employment or to attempt to establish business contacts.

To extend the discourse on internet cafés, a broader exposé of the role of SMMEs in general is more befitting to understand the intricacies of their contribution to employment generation. Apart from promoting economic growth, SMMEs also contribute directly to employment generation as they employ close to three quarters of the employed population in South Africa (Nieman and Niewenheizeh, 2009: 207). They elaborate that SMMEs (including those in the emerging technology sector) contribute 43% of the total value of salaries and wages paid in South Africa and employ 55% of all formal private sector employees in the country (Nieman and Nieuwenhuizen, 2009:3). Year 2009 estimates show that 74% of South Africans active in the economy were employed in SMMEs (The Business Place, 2009:1). These encouraging statistics, therefore, clearly buttress Du Toit et al's (2009:50) claim that SMMEs provide jobs needed by the growing population in a precarious national economy characterised by retrenchments or shedding of employment by large corporations, which are struggling to recover from the economic recession of 2009-2010.

While the economic recession is often blamed wholesale for the shrinking of the South African job market, a possible counter explanation for the dwindling of the employment base of South Africa firms is the limited flexibility and poor application of management competencies necessary for the thriving and growth of such firms. Janjua, Naeem and Kayani

(2012) argue that notwithstanding the overwhelming support for competence based management, the question arises regarding the complex practical application of competencies in organizational practices of firms. More specifically, the paucity and poor application of managerial skills, knowledge and attributes often explicates the failure of new venture start-ups or the mortality of established firms-thus contributing to declining employment figures. Lack of managerial competencies, experience, skills and abilities, poorly thought out business plans including adverse economic conditions and resource starvation, have been found to be the main contributors to the failure new firms (Nieman and Nieuwenhuizen, 2009:31), which leads to plummeting of important job opportunities.

Despite the weak, underdeveloped managerial capacity of emerging firms, SMMEs including those in the emerging technology sector have remained the safe haven for new job creation for the majority of South African population in the face of a stagnant mainstream economy. Identifying with Du Toit et al's (2009) view, Kesper (2001:172) agrees that SMMEs are seen as a vehicle to address the problem of high unemployment in South Africa since they have a high labour absorptive capacity. Comparative studies of large and small businesses carried out in other countries conducted by Luiz (2002:16) confirm that SMMEs generally employ more labor per unit of capital, and require less capital per unit of output, than large businesses. The fundamental challenge for the advancement of the SMMEs sector lies in establishing and sustaining these businesses through the development of managerial competencies of managers/owners to ensure their survival. This is particularly critical given that educated business starters are more likely to have a high post-failure earning capacity than less educated people. This suggests that the greater the level of managerial competency, the greater the performance and the more likely the survival of SMMEs (Nieman and Nieuwenhuizen, 2009:31).

C. *Poverty alleviation*

From an economic perspective, poverty captures a disempowered state precipitated by a lack of access to and inability to afford basic human needs such as food, clothing, health, education, shelter and other life saving social amenities. Thus, poverty denotes a state of need, of not having access to necessities of life that support actual dwelling. It constitutes a state of helplessness (Adereti and Ajayi, 2004). In South Africa, a country considered to have one of the highest Gini co-efficient in the world (see Bosch, Rossouw, Claassens and du Plessis, 2010), with one of its cities (i.e. Cape Town) rated as among the most unequal cities in the world, understanding the relationship between poverty eradication and the expansion of small technology businesses is unquestionably critical.

Internet kiosks, cybercafés, or multipurpose community telecentres are conceived to promote expanded access to the internet in poor areas (Rogers and Shukla, 2001), enhance economic progress and political empowerment for disadvantaged communities through providing opportunities

for ordinary people to obtain access to information and communication (Furuholt and Kristiansen, 2007). The success of the internet café businesses in poor countries has been attributed to inter alia, "reasonably priced access to the Internet [...] the chance to socialise with fellow users and to pick up new knowledge and ideas on computer usage" (Furuholt, and Kristiansen, 2007:1). As such, internet cafés just like other SMMEs, ideally contribute to poverty eradication as they combine the resources of societies efficiently to produce goods and services for the society in which they operate (Du Toit et al., 2009:49). Yet this complex process of resource conversion necessitates a complex assortment of managerial competencies, skills, abilities and experience without which SMMEs productivity and growth will be compromised.

III. Problem statement

The problem is that SMMEs in South Africa fails to survive in their first 3 years of existence, and entrepreneurship literature (Agbobli, 2013; Global Entrepreneurship Monitor (GEM) Reports, 2009, 2011, 2013) suggests that the low survival and high failure rates of SMMEs in South Africa are attributed to the lack of managerial competencies or poor managerial competencies of the managers/owners of those SMMEs (FNB and Endeavour, 2010; Herrington, Kew, Simrie and Turton, 2011). The SMMEs in the technology sector such as internet cafés are no exception, given the often low managerial experience and low educational attainments of their managers/owners. The low managerial competencies of managers/owners of internet firms should be conceived in light of the peculiarities of the South African circumstances, which in Molawa's (2009) view, include high levels of functional illiteracy, shortages of managerial skills, high poverty and unemployment levels including low levels of infrastructure to upgrade the level of Internet connectivity.

IV. Literature Review

A. *Managerial competencies: definition and typologies*

The precise definition of managerial competencies is heavily contested. In the context of SMMEs, managerial competencies are defined as sets of knowledge, skills, behaviours and attitudes that can contribute to personal effectiveness of managers/owners of small businesses (Hellriegel, Jackson, Solcum and Staude, 2008:98). While it is undisputable that successful management of SMMEs requires managers/owners of SMMEs to possess a wide range of competencies, there is a general lack of consensus among the authors on components of managerial competencies as well as their classifications. A useful point of departure is Robotham and Jubb (1996) who provide a generic distinction between two types of competencies:

- (i) *Soft competencies*, which refer to traits such as creativity and sensitivity and comprise personal qualities that lie behind behaviors.
- (ii) *Hard competencies*, such as the ability to be well organised.

While such a distinction is useful for delineating psychological from skill-based competencies, this nomenclature fails to provide a useful heuristic on which competencies are more fundamental and those which are indispensable for organisational performance and success. Parry (1996 cited in Wickramasinghe and De Zoyza, 2009: 2550) talks about soft and hard competencies as well. He explains that personality traits are soft, while hard competencies tend to be job-specific abilities.

The aforementioned dichotomy is analogous to Boyatzis' (1982) classification, which captures two interrelated sets of managerial competencies - technical and generic. While technical managerial competencies consist of having the knowledge and skills that enable the manager to give an effective performance in specific areas of management, generic managerial competencies refer to manager's capability of self-regulation and self-control at work (Kanungo and Misra, 1992, Wickramasinghe and De Zoyza, 2009: 2550). Cockerill, Hunt and Schroder (1995 cited in Robotham and Jubb, 1996) differentiate threshold from high performance competencies - the former are units of behaviour which are used by job holders but are not considered to be associated with superior performance, while the latter competencies are behaviours that are associated with individuals who perform their duties at a superior level.

Although management competencies are considered very crucial for the growth and the survival of a business venture, Hellriegel and Wood (2003) point out that in South Africa; it is a lack of education and training that has reduced management capacity in SMMEs. Education and training foster the development of management competencies, without which emerging firms are bound to fail or cannot survive. For this reason, lack of education and training on business management issues is considered to be one of the prime reasons for the high failure rate of SMMEs (especially the new established) and low level of entrepreneurial creation (Herrington and Wood, 2003).

B. Performance

The performance of an organisation or business enterprise relates to the efficiency and effectiveness with which it carries out its tasks in the process of providing products and services (Naude, 2007:3). The performance of SMMEs is of utmost interest to all developing countries (Olutunla and Obamuyi, 2008:195) because of the critical role played by these small businesses in the economic development of these countries.

Barreira (2004:26) admit that there is no consensus on appropriate measures of SMME performance, and prior research had focused on variables for which information was easy to gather. It has also been argued that growth is a more accurate and easily accessible performance indicator than any

other accounting measures and hence superior to indicators of financial performance (Barreira, 2004:26). Yet the performance of a business can be assessed from several dimensions such as efficiency, growth and profit. For the purpose of this study, profitability means the amount or size of gross profit (before tax) while growth relates to increases in sales and employment figures of the business (Madhoushi et al., 2011). The business performance, however, is the variable or phenomenon with multiple aspects that are difficult to quantify (Sanchez and Marin, 2005). Although studies have examined performance of SMMEs in relationship to managerial competencies (Young and Dulewicz, 2004; Carmeli and Josman, 2006; Nirachon et al., 2007), what remains unknown is which managerial factors and combinations influence the performance of emerging technology businesses such as internet cafes, the focus of this study.

C. Relationship between managerial competencies and firm performance

Managerial competence is considered a key factor contributing to the performance and survival of any organisation. It has been proven that firm performance and managerial competencies are interrelated (Boyatzis, 2006). Since competencies are the building blocks of work performance (Martin and Staines, 1994), the current study postulates that there is a positive relationship between managerial competencies and firm performance. Such hypothesis dovetails with claims that managerial competencies are positively associated with performance across a variety of organisational and industry settings (Tucker and McCarthy, 2001). Notwithstanding the pervasiveness of these positive relationships across diverse industrial contexts, what remains speculative is whether such a configuration of relations obtains in the emerging technology businesses such as internet cafes, as well.

While the possession of a set of managerial competencies has been touted as a precondition for the economic growth and survival of the business (Königová, Urbancová and Fejfar 2012; Tahmasb, Niknafs and Mirvaziri, 2014), there is increasing convergence of literature on the complexity of the relationship between possession of managerial competencies and firm performance (see Xiang, 2009; Krajcovicova, Caganova and Cambal, 2012; Tahmasb, Niknafs and Mirvaziri, 2014). For instance, Krajcovicova et al., (2012) highlight that the adoption of competency approach to organisational success is not quite a simple, straightforward process but rather necessitates changes in employee skills, attitudes and behaviour, with the aim of improving performance across the organisation. In examining the competency-performance relationship, Xiang (2014) laments that researchers tend to assume that entrepreneurial competency (of which managerial competency is one of its components) differentiates entrepreneurs from non-entrepreneurs without empirically examining and testing if this assumption holds true.

The managerial competence-performance relationship has also been investigated from a Human Capital theoretical perspective. The Human Capital Theory proposed by Schultz (1961) points out that knowledge, skills and competencies are forms of capital. Schultz compares the acquisition of knowledge and skills to acquiring the means of production. His study found that a high score in the managerial capacity index is positively associated with both strategic planning practices (i.e. planning sophistication and ability to communicate business intentions) and high firm performance and growth. By extension, Lefebvre and Lefebvre (2002) report that innovative capabilities of the management team (e.g. ability to undertake research and development, knowledge intensity and unique know-how) are strongly associated with export performance and firm growth. Yet how strategic competences of a firm (e.g. managerial competencies) impact on the performance of small scale firms especially those in the technology sector remain unexplored in mainstream entrepreneurial literature.

Other critical considerations in the managerial competence-performance matrix are the educational attainments and experiences of the manager/owner of the new venture start up. Researchers show that relative profits tend to be high when an entrepreneur has more education and experience in their line of business than when they possess lower education and experience. For instance, Hormiga et al. (2011) report that managerial competencies as measured by educational levels, managerial experience, start-up experience and knowledge of the industry positively impact on the performance of SMEs. Education seems to provide the knowledge base, analytical and problem-solving skills necessary to deal more effectively with the demands of entrepreneurship. Intellectual capital, therefore, is critical to the effective execution of management processes and to the creation of sustained competitive advantage for the entrepreneurship venture through innovation.

v. Methodology

This paper adopts a theoretical stance. A research is theoretical when “it aims to increase the understanding of phenomena and the relationships among key components of phenomena and to accomplish these goals, researchers develop and test models reflecting the properties of the phenomena, the relationships among various aspects of the phenomena, and the relevant external factors” (Van Scotter and Culligan, 2003). The rationale for this paper is to unravel the complex relationship between managerial competencies and firm performance albeit other intervening organisational and environmental variables. Since the key differentiating factor in theoretical research is its preoccupation with explaining and predicting phenomenon (Mouton and Marais, 1990) the aim of this research is to explain that the realisation of a positive relationship between managerial competency-firm performance is a function of the constitution of managerial competencies themselves (e.g. innovative capabilities of managers/owners, their human capital abilities such as education, managerial experience, background training) as

much as it is a product of organisational considerations (e.g. job-related factors, organisational rule and values, firm’s competitive strategy, organisational culture) and environmental variables (e.g. the specific industry the firm is located, level of formal organisation of the sector, the level of government regulation).

A. *Observation and discussion*

An understanding of the managerial competencies (MC)-performance (P) relationship necessitates research to unpack the constitutive components of MC and how they stimulate P relationally. A competency is a set of skills, related knowledge and attributes that allow an individual to successfully perform a task or an activity within a specific function or job (UNIDO, 2002). As such, competencies underpin the cognitive domain (*knowledge*), physical domain (*skills base*) and qualitative domain (*attributes*) (UNIDO, 2002). For managers/owners of emerging technology businesses, knowledge based competencies could include their knowledge of the size of the product/service market (i.e. knowledge of sites most browsed/visited by customers, knowledge of additional services such as printing and copying), knowledge of basic accounting and fundamental financial statements/planning, market expansion strategies and other after services internet users may need. Skills needed would include great interpersonal skills to attract and retain internet users, general communication skills such as courtesy, patience and other basic technical skills (e.g. trouble shooting such as checking internet connections, document recovery, rebooting, anti-virus installations and updates, opening or cleaning corrupted flash-drives and upgrading the processing speed and capacity of desktop computers). Attributes of managers/owners of small internet businesses could include great work ethics (punctuality, patience, good temperament and urgency when treating customers), agility and ability to multi task in the face of competing tasks and work activities.

Consistent with resource-based theory (Rangone, 1999; Barney, 1991), managerial competencies could encapsulate a wide array of managers/owners traits such as innovation capabilities and market management capabilities. The ability to innovate through purchase and introduction of new software, new web technology applications, provision of other emerging technologies (Voice over IP, live video streaming and social media platforms) could gainfully increase and diversify the volume of internet services, broaden market share and improve the performance of internet cafés

In view of Human Capital theory proposed by Schultz (1961), we argue that a constellation of technical knowledge, technological skills, and competencies are critical to the success of internet-based firms. For emerging technology firm owners/managers, technical knowledge of various software (e.g. antivirus protection, basic and advanced Microsoft packages, PDF conversion, scanning and copying software, other web based software such as live video streaming) would be pre-requisite considerations. Technological skills need would be web browsing skills, document processing and

conversion, basic trouble shooting skills and basic software and hardware maintenance.

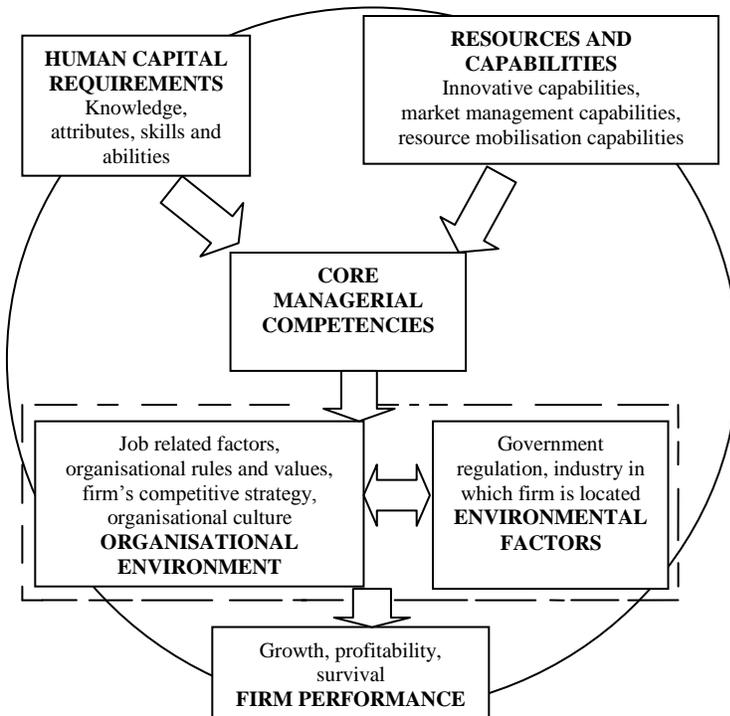
Kochadai (2012) postulate a set of managerial competencies such as information seeking, systematic planning, problem solving, goal setting and perseverance, communication, technical knowledge and social skills. For internet café owners/managers, information seeking behaviour could relate to their market research on the latest software, most trafficked websites and most used web-based applications, customer behaviour in particular social media technologies as well as trends and information on the most preferred internet services. Systematic planning can cover financial forecasting (e.g. monthly or quarterly projections), product /service forecasting, market expansion strategies (e.g. product/service mix, product differentiation) and ways of mitigating aggressive competition. Problem solving can range from addressing technical problems to resolving misunderstanding with customers on bookings and log on durations. Goal setting may relate to the establishment of a mission statement and organisational goals, strategies and the implementation of these strategies. Communication can involve the articulation and clarification of business goals by managers/owners of internet businesses to their employees, clients and sponsors, dissemination of information on their human resource strategy, product development strategy, marketing strategy to employees, clients and sponsors, among other considerations. The application of technical knowledge on various issues of software, hardware and service development will also be critical to business survival.

Although there is a general view that the influence of managerial competencies on firm performance is very critical, Laguna, Wiechetek and Talik (2012) observe that competencies have been studied in isolation and with little effort to recognise their mutual relationships. To this end, the relation between broader groups of competencies and their relations with business success is yet to be empirically tested (Markman, 2007; Mitchelmore and Rowley, 2010). As such, the specific and general competencies may need to be tested to understand their relationships as well as explain their influence on performance of internet businesses. In our model, we postulated that core competencies are a complex amalgam of human capital requirements (knowledge, attributes, skills and abilities) and resources and capabilities (innovative capabilities, market management capabilities, resource mobilisation capabilities) (see Figure 1)

Even when core competencies appear distinct and comprehensive, the MC-FP relationship is not a simple and straight forward one. For instance, King and Zeithmal (2001) caution that causal ambiguity among managers at a focal firm leads to an interesting and unresolved paradox surrounding the relationship between competencies, causal ambiguity, and sustainable competitive advantage. Mindful of this, we propose that the relationship between MC and FP is not a given as simplistically suggested by the UNIDO (2002) but is rather mediated by other organisational variables (e.g. job related factors, individual firm strategy, organisational rules, organisational culture) and environmental factors (e.g.

government regulation, sector in which the firm is located) that impact on successful task performance (see Figure 1).

Figure 1: Conceptual Framework



Relationship between managerial competencies and firm performance

B. Evaluation of contribution

To better understand the constitutive elements of MC, the paper argued that neither the UNIDO's (2002) narrative on managerial competencies, the resource based theory nor human capital theory provides a comprehensive, complete account of these components. On the contrary, a constellation of managerial competencies namely, *strategic resources and capabilities* (e.g. innovation capabilities, service provision capabilities and market oriented capabilities), *human capital requirements* (i.e. technical knowledge, managerial training and appropriate entrepreneurial education) and set of *competencies* (knowledge, skills and abilities) highlighted by UNIDO (2002) would be necessary to provide a holistic picture on MC.

The paper also argued that the MC-PE relationship does not operate in a vacuum but is rather mediated by multiple organisations factors (e.g. firm's strategic IT competencies, competitive service and marketing strategies, job performance related factors) whose interaction contingently influence organisational performance (growth, profitability, sustainability). Lastly, the paper proposed that other environmental considerations (e.g. the physical location of the firm, the industry that the firm is located, the extent of government regulation, international influences such as

position of the firm as a franchise of a larger international IT corporation) also mediate the MC-PE relationship. Succinctly put, the constitutive elements of MC, their individual interactions directly influence business performance while mediating influences of organisational and environmental factors play a moderating role in the MC-PE relationship.

VI. Conclusion

The low survival and high failure rates of small firms (SMMEs) in South Africa including those in the emerging technology sector were articulated as major millstones for both policy makers and managers/owners of SMMEs alike. The lack of managerial competencies was identified as one of the major barriers to small technology businesses' performance (i.e. profitability, growth, survival and long term sustainability). In tandem with this, the study provided multiple studies on the critical role of managerial competencies in the successful performance of small businesses. To this end, the theoretical paper first presented the multiple dimensions of managerial competencies (drawing on the human capital theory, resource based theory, UNIDO's (2002) categorization of competencies) and the different ways they are categorised in mainstream literature. Secondly, the different ways in which managerial competencies related to performance were articulated taking note of other intervening organisational variables. Thirdly, the influence of other environmental factors on successful business performance was articulated to develop a more holistic account of the MC-PE relationship. The overall argument of the paper is that the MC-PE relation is not a direct one, but is rather mediated by a constellation of organisational and environmental factors, whose contingencies have multiple implications for business growth, profitability and survival.

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