AN ASSESSMENT OF THE EFFECT OF INNOVATION AS MEDIATOR TO BUSINESS NETWORKING AND PERFORMANCE RELATIONSHIP: EVIDENCE FROM ZIMBABWEAN SMES.

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Abstract
The aim of this study was to improve the understanding of the mediating role of innovation on the business networking and business performance relationship. The study adopted a quantitative approach to gather 154 usable questionnaires from SMEs in Zimbabwe. The results revealed a statistically significant relationship between business networking and performance and also the mediating role that innovation plays between the business networking and performance relationship. The study makes a contribution to the existing literature on management and SME by assessing the mediating role of innovation in the relationship between business networking and business performance in the SME sector of a Sub-Saharan African country.

Key words: SME, innovation, business networking, business performance, Zimbabwe.

JEL Classification: M13
1. INTRODUCTION

It is now a global view that Small and Medium Enterprises (SMEs) are critical to economic growth. According to the International Finance Corporation (2012), SMEs account for about 90% of businesses in developing countries and more than 50% of employment worldwide. Given the high unemployment rate in Zimbabwe, the SME sector could be a potential solution to the problem. However, the SME sector in Zimbabwe and other Sub-Saharan countries continues to shrink due to a number of challenges. For example in Zimbabwe, the failure rate of SMEs is mainly prevalent during start-up such that about 60% and 25% of SMEs fail in the first year and first three years of establishment respectively (Small Enterprises Development Corporation, 2004). Such a high failure rate necessitates the need to craft strategies that enhance SME performance. Innovation and business networking are other critical strategies that can be used to help improve SME performance (Anderson, Potocnik and Zhou, 2014; Wickham, 2004). Could innovation and business networking be an answer to improve SMEs Performance in Zimbabwe? What could be the mediating effect of innovation on the business networking and performance relationship? While a number of studies have examined the direct effect of business networking on business performance (Watson 2007; Prashantham and Dhanaraj, 2010), little is known about the mediating effect of innovation on the relationship between business networking and business performance. The scarcity of research models is a big shortcoming as it limits the crafting of strategies to enhance SME performance. In view of the identified research gap, the purpose of the current study is to obtain an insight about the effect of innovation as mediator to business networking and performance relationship in the context of a developing country, Zimbabwe. The study attempts to make the following contributions: It sought to fill the research gap on the absence of empirical evidence about the mediating effect of innovation on the business networking and performance relationship among SMEs. By so doing, the paper makes a contribution to the existing body of knowledge on SME performance enhancement strategies in the context of a developing country. The results would provide invaluable insights to SME owners and managers on how to use innovation and business networks to ensure the survival and growth of these enterprises.
The paper is structured as follows. First, describes business networks and innovation. Second, by examining the link between business networks and innovation with business performance, the paper develops research hypotheses between the variables. Thereafter, the methodology used in the study is highlighted. This will be followed by the presentation and discussion of results. The paper concludes with a discussion on recommendations in the light of the results and the avenues for future research.

2. THEORETICAL BACKGROUND

2.1 Business Networking

A business network refers to a formal or informal relationship between one entity and one or more other entities interrelating to gain business growth and success (Zhang 2005). A business network consists of positions which are occupied by network nodes as well as links or ties manifested by some relationship or lack of it between the nodes (Brass, Galaskiewicz, Greve and Tsai 2004). It involves the firm’s resources being invested in establishment, building, and sustenance of the relationships between or amongst the different network-players (Holmen, Pedersen and Torvatn 2005). Wickham (2004) argues that the establishment of these relationships should not be seen as a waste of time and cash resources but the opportunity to create and support a competitive advantage in business through strategic partnering and exchange of noble ideas. Davis (2006) posits that a network consists of nodes and ties, nodes being actors, such as persons, teams, or organisations whilst ties refer to the relationships among the nodes. It is also imperative to appreciate that networks are evolving organism and their dynamics are caused by the fact that actors, relationships, needs, problems, capabilities, and resources change over time (Ojasalo, 2008). In spite of differences in defining business networks, almost all definitions refer to common themes which are social interaction (of individuals acting on behalf of their organisations), relationships, connectedness, collaboration, collective action, trust, and cooperation (Provan, Fish and Sydow 2007).

Networking relationships allow for successful business practices and the development of mutual respect (Kay, 2004), trust and social capital, which contribute to the success of networking efforts in a business (Yeung, 2006). In order to benefit fully from networking, the resources being employed in the
network must be interdependent, managers must first acknowledge the importance of networking and establish strategic networking relationships (De Klerk and Kroon 2008).

Business networking is argued to involve relationships between different businesses and the utilisation of these relationships to create and support a competitive advantage in business (Wickham, 2004). Businesses are empowered through their relationship networks in that societies can be shaped, and the economies of countries can even be affected by these relationship connections through enhancing living standards and economic growth (Beck, 2002). Exploration or exploitation of a network entails the optimal utilisation of role-players in terms of productivity, efficiency, reducing costs, and improving existing resources such as information, technology, skill and expertise (Wickham, 2004). Hence success of networking lies in the way in which the different levels of relationships webs are managed.

2.2 Innovation
According to Organisation for Economic Co-operation and Development (2005), innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations. Innovation refers to creating something new and implementing it successfully at a market. Innovation in firms takes place when knowledge is commercialised, for example in the form of new products, services, processes, or business models (Baldwin and Gellatly, 2003).

Innovation can be broadly categorised as radical or incremental, where radical innovations are new technologies, processes or new products that fill needs perhaps not yet recognized while incremental innovations improves what already exists (Chetty and Stangl, 2010). The distinction here is about the degree of change associated with the innovation and the resulting impact on a firm’s perceived risk and existing core competencies. The OECD (2005) identifies four types of innovation as product innovation, process innovation, marketing and organisational innovation. Product innovation means introducing the new or significantly improved products or services (Polder, Leeuwen, Mohnen, Raymond, 2010). For product innovation, the product must either be a new
product or significantly improved with respect to its features, intended use, components and material. Change in design that brings significant change in the intended use or characteristics of the product is also considered as product innovation (OECD, 2005). It is also argued that the reason why firms aim product innovation is to bring efficiency in the business (Polder et al., 2010). Process innovation means improving the production and logistic methods significantly or bringing significant improvements in the supporting activities such as purchasing, accounting, maintenance and computing (Polder et al., 2010). OECD (2005) defined the process innovation as implementation of the production or delivery method that is new or significantly improved. This includes significant changes in techniques, equipment and software. Process innovations can be intended to decrease production unit costs, to increase quality, or to produce or deliver new or significantly improved products. Marketing innovation is defined as the identification of new markets and finding out how they are better served or how they may become more receptive to the available products (Shergill and Nargundkar 2005). The objective of marketing innovation being to increase the sales and market share and opening new markets, it includes activities such as implementing new marketing method that involve significant changes in the packaging, design, placement and product promotion and pricing strategy (Chou, 2009). The distinctive feature for the marketing innovation from the other types of innovation is the implementation of new marketing method that the firm has never implemented before. Organisational innovation is defined as introduction of new practices of doing business, workplace organizing methods, decision making system and new ways of managing external relations (Polder et al., 2010). OECD (2005) defined the organisational innovation as implementing new ways of organizing business practices, external relations and work place.

2.3 Business Performance
Business performance is the vital indicator for success (Man, Lau and Chan 2002). Many studies show a preference for subjective measures during the assessment of business performance due to difficulties in obtaining objective financial data. Managers often refuse to provide accurate, objective performance data to researchers. Even if objective data is made available, the data often do not fully represent firms’ actual performance, as managers may manipulate the data to avoid personal or corporate taxes. Consequently, managers are often encouraged to evaluate business performance through general subjective measures that can
reflect more-specific objective measures (Wall, Michie, Patterson, Wood, Sheehan, Clegg, and West 2004). Subjective measures of business performance are argued to enable cross comparison of business in different industries, time horizons, cultures or economic conditions hence it is an effective way of examining business performance (Song, Droge, Hanvanich and Calantone, 2005). Many managers of small and private firms consider objective performance measures to be confidential, and guard them from public scrutiny (Gruber, Heinemann, Brettel, and Hungeling, 2010). Management should constantly measure the performance of their businesses in order to monitor and control proactively, reward, drive improvement and to maximize the effectiveness of any improvement initiatives (Wall et al, 2004). In this study, customer satisfaction and firm productivity will be used as business performance indicators.

3. HYPOTHESES DEVELOPMENT
3.1 Business Networks and Innovation
Networks are conceived to increase exposure to ideas and opportunities and also reduce the transaction cost in developing and adopting innovation (Ernst, 2004). There is a significant amount of literature that supports the idea that innovation results are favoured by the presence of relationships, networks, alliances, and other different forms of interaction with external knowledge sources (Powell & Grodal 2005; Tether 2002). Previous research confirms that network ties can be a valuable tool for fostering innovation performance (Chen, Chen, & Vanhaverbeke 2011; Nieto & Santamaria 2007; Rammer, Czarnecki, and Spielkamp 2009; Rogers 2004; Zeng, Xie, & Tam 2010). Making effective use of the knowledge links would result in SMEs being able to easily access to new ideas and smooth transfer of knowledge from universities and research units to business activities. There is also a broad consensus on the importance of external collaboration for the innovation performance of firms. Tether (2002) argues innovation is progressively seen by analysts as both an interactive and distributed process. A significant number of studies (Chen, Chen, and Vanhaverbeke 2011; Love and Roper 2001; Nieto and Santamaria 2007; Rogers 2004; Zeng, Xie, and Tam 2010) supports that firms must increase their number of interactions with other market players such as customers and suppliers or research institutions. Based on the same reasoning, the following hypothesis was developed:
3.2 Innovation and Business Performance
Empirical evidence of a strong correlation between innovation and SME performance is overwhelming (Baldwin and Gellatly 2003; Mansury and Love 2008). Similarly, Rosenbusch, Brinckmann, and Bausch (2011) have identified several factors that affect the relationship between innovation and SME performance. They are of the view that new SMEs benefit more from innovation than the mature organisations mainly due to their flexibility to accept change in their environment or industry. Empirical research also indicates that the positive relationship between innovation and growth of the firms is strong if there is a constant supply of finances (Hyytinen and Toivanen, 2003). In the presence of innovation, the overall firm performance would enhance (Rosli and Sidek, 2013; Lin & Chen 2007, Van Auken, et al. 2008; Li, et al. 2010; Salim and Sulaiman, 2011). Corroborating the same view, Vermeulen (2005), Westerberg and Wincent (2008) and Verhees and Meulenberg (2004) state that SMEs that engage in innovation activities are better performers. In the light of these arguments the study proposed that:

H2: Innovation has a positive influence on business performance of SMEs.

3.3 Innovation as a mediator in the relationship between Business Networks and Business Performance
Business networking promotes profit maximisation and profitability (Zhou, Wu and Luo, 2007). The authors further argue that networks spread risk, reduce innovation time and costs thus positively impacting on long-term firm performance and outweighing the immediate cooperation costs. According to Florin, Lubatkin and Schulze (2003), business networks do not only provide access to external resources but also facilitate the creation and exploitation of social capital, which in itself is regarded as a source of competitive advantage. Indarti and Langenberg (2004) stated that characteristics of entrepreneur, characteristics of SMEs and factors such as information access, legality, government support, social network, capital access, entrepreneurial readiness, marketing and technology, would lead to business success. Network theory suggests that network relationships provide access to otherwise unavailable
resources and information and may thus have a positive effect on firm performance (Watson 2007; Prashantham and Dhanaraj, 2010). The studies on the effect of business networks on business performance did not consider the mediating role of innovation. Based on this, the following hypothesis has been proposed:

**H3:** Innovation mediates the relationship between business networks and business performance of SMEs.

4. **EMPIRICAL RESEARCH**

4.1 **Methodology and research instrument**

In order to test the proposed relationships, the study explored business networks and innovation activities in relationship with business performance. The target population for the study was Zimbabwean SME owners and managers in Harare Province. The sampling unit was the individual SME owner or manager. The researcher personally distributed 279 self-administered questionnaires, of which 154 usable questionnaires were retrieved for final data analysis, giving a response rate of 55%. The questionnaire consisted of three sections. The first section solicited the respondents’ demographic information. The second section focused on business networks and innovation statements to which respondents were supposed to indicate to what extent they agreed to each statement. The statements were structured in form of a five-point Likert-type scales anchored by 1= strongly disagree and 5= strongly agree. The third section was measuring the performance of the business as a result of business networks and innovation. The statements were also constructed on a five-point Likert-type scales where 1= strongly disagree and 5= strongly agree. The profile of the respondents is indicated in Table 1.

**Table 1: Profile of respondents**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>n</th>
<th>%</th>
<th></th>
<th>N</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>Educational level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>98</td>
<td>64</td>
<td></td>
<td>Certificate</td>
<td>44</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>56</td>
<td>36</td>
<td></td>
<td>Diploma</td>
<td>34</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Degree</td>
<td>52</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Post graduate</td>
<td>24</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>154</td>
<td></td>
<td></td>
<td><strong>Level of management</strong></td>
<td>154</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 21 years</td>
<td>3</td>
<td>2</td>
<td></td>
<td>junior managers</td>
<td>22</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>21-30 years</td>
<td>15</td>
<td>10</td>
<td></td>
<td>middle managers</td>
<td>30</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>31-40 years</td>
<td>35</td>
<td>22</td>
<td></td>
<td>senior managers</td>
<td>94</td>
<td>61</td>
<td></td>
</tr>
</tbody>
</table>
The sample consisted of 98 males (64%) and 56 females (36%); 3 were less than 21 years of age (2%); 15 between 21 and 30 years of age (10%); 35 between the ages 31 to 40 (22%); 58 were between the age category of 41-50 years (38%); and 43 over the age 50 (28%).

Having established the profile of respondents, the data analysis was processed by SPSS version 21 using various univariate and multivariate statistical techniques.

4.2 Reliability test

The Cronbach Alpha coefficient was used to establish the internal consistency of the variables. The minimum threshold for internal consistency is 0.7. As depicted in Table 2, the overall Cronbach Alpha was 0.860 and the 0.718, 0.732 and 0.853 for innovation, business networking and business performance respectively, thereby demonstrating that the overall scale and the sub-scales were all reliable.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of Items</th>
<th>Cronbach's Alpha value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation</td>
<td>7</td>
<td>0.718</td>
</tr>
<tr>
<td>Business Networking</td>
<td>9</td>
<td>0.732</td>
</tr>
<tr>
<td>Business Performance</td>
<td>2</td>
<td>0.853</td>
</tr>
<tr>
<td>Overall Cronbach's Alpha</td>
<td>18</td>
<td>0.860</td>
</tr>
</tbody>
</table>

4.3 Results and hypotheses testing

The first hypothesis that business networking positively influences innovation was analysed by regressing innovation onto business networking. Model 1 in Table 3 shows that business networking is a significant predictor to innovation ($\beta=0.7160; p<0.05$). These results support $H1$.

$H2$ sought to evaluate the influence of innovation on business performance. To test this hypothesis, business performance was regressed against innovation.
Model 2 in Table 3 depicts that innovation has a significant impact on business performance ($\beta= 0.6588; p< 0.05$), which lends support to $H2$. The third hypothesis stated that innovation mediates the relationship between business networking and business performance. The relationship was examined following a suggestion by Baron and Kenny (1986) who opined that a variable acts as a mediator if four conditions are met. The first one is that the independent variable (business networking) significantly influences the mediator variable (innovation). The second condition is that the mediator variable significantly impacts the dependent variable (business performance). Thirdly, the independent variable should significantly influence the dependent variable, and finally, when both the independent and the mediator variables are considered together, the impact of the independent variable on the dependent variable is reduced. Partial mediation is present when the independent variable is significant and when its influence is reduced if the mediator is controlled, and there is full mediation when the independent variable has no effect when the mediator is controlled.

Table 3: Regression analysis

<table>
<thead>
<tr>
<th>Model 1: Innovation = f (Business networking)</th>
<th>Beta</th>
<th>t-value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Networking</td>
<td>0.7160</td>
<td>6.659</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model 2: Business performance = f (Innovation)</th>
<th>Beta</th>
<th>t-value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation</td>
<td>0.6588</td>
<td>6.564</td>
<td>0.001*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model 3: Business performance = f (Business networking)</th>
<th>Beta</th>
<th>t-value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business networking</td>
<td>0.7032</td>
<td>6.667</td>
<td>0.000*</td>
</tr>
</tbody>
</table>
As indicated in Model 1 in Table 2, business networking (the independent variable) significantly influences innovation (the mediator) (β= 0.7160; p< 0.05), which meets the first condition for the existence of a mediating effect. Model 2 shows that innovation significantly impacts the dependent variable, business performance (β= 0.6588; p< 0.05), which satisfies the second condition. Model 3 indicates that business networking significantly affects business performance (β= 0.7032; p< 0.05), which achieves the third condition. Model 4 indicates that when both business networking and innovation are considered in the same model, the predictive power of business networking on business performance reduced to (β= 0. 2315; p< 0.05), compared to its explanatory power in Model 3 (β= 0.7032; p< 0.05). This supports the fourth condition for the existence of a mediating effect. The results demonstrate a partial mediation effect of innovation since the impact of business networking on business performance was reduced when the mediator, innovation was controlled for, as depicted in Model 4. Therefore $H_3$ is supported.

4.4 Discussion of Results
The study makes a contribution to the existing body of knowledge of SME performance literature by establishing and testing the mediating effect of innovation on the business networking and SME performance relationship in Zimbabwe. There is a plethora of studies that have examined the direct effect of business networking on business performance and also the influence of innovation on performance. However, a review of literature has revealed that very few studies have examined the mediating effect of innovation on the relationship between business networking and SME performance especially in a developing country context like Zimbabwe.

The results of the study indicate that business networking activities by SMEs which try to enhance business performance have to trigger innovative activities first. By implication, this finding indicates that business networking can have strong influence on business performance via innovative practices. Perhaps this
could be due to the fact that during the business networks SMEs owners and managers share ideas with others and then use the ideas to embark on innovative activities which will eventually enhance the performance of their enterprises. This shows that SMEs aiming to improve their performance should invest both in business networks and innovative practices. An investment in business networking alone reaps low benefits as compared to investments in both business networking and innovation.

The findings of this empirical study are expected to have to provide fruitful implications to both practitioners and academicians. On the academic side, this study makes a significant contribution to the SME performance literature by systematically exploring the mediating influence of innovation on the relationship between business networking and SME performance in Zimbabwe. Overall, the current study findings provide tentative support to the proposition that innovation and business networking should be recognized as significant antecedents for business performance in Zimbabwe.

On the practitioners’ side, the significant influence of business networking on SME performance and the mediating role of innovation in Zimbabwe are highlighted. This study therefore submits that SME managers can benefit from the implications of these findings. For instance, given the robust relationship business networking and business performance and also the mediating effect of innovation SME owners/managers need to pay attention business networks and innovation in order to improve their performance. For example, by having more business networking platforms, SME managers can access more ideas and hence become more innovative in their businesses. Eventually, they enhance the performance of their enterprises.

5.0 Limitations and Areas of Further Study

The study focused only on SMEs operating in Harare province and due to different conditions and cultures, the results might not be applicable to other provinces. The study can be strengthened by including SMEs operating in other provinces. Another weakness was that the current study was limited to Zimbabwe. Subsequent research studies perhaps could contemplate replicating this study in other developing countries. The study also could be improved by focusing on a specific sector or industry so as to get specific recommendations to the chosen
sector/industry. By and large, the findings of this study and the suggested future avenues of study can contribute in generating new knowledge to the existing body of SME literature in sub Saharan Africa - a context that is has generally been neglected by researchers.

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