

Inter-organisational relationships with large enterprises as a source of competitive advantage for small and medium enterprises

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Abstract

SMEs are recognised to have potential to be the engine for job creation and economic growth of nation. However, the prevailing intense competitive business environment driven by globalisation and rapid technological developments poses challenges and therefore realisation of their potential. Enterprises require technological know-how, financial resources, human resources and leadership capabilities to build their competitive advantage, thus being able to compete effectively. However SMEs have limitations with regard to resources and capabilities that are required to achieve a competitive advantage, a prerequisite to survive and be successful in the globalised economy.

This study examined how the resources and capabilities that SMEs access through inter-organisational relationships with large enterprises influence their competitiveness. A sample of 309 SMEs that have supply relationships with large mining enterprises in South Africa was used to collect primary data.

This study found that SMEs can access the resources and capabilities required for competitive advantage through supply relationships with large enterprises and these resources and capabilities are significant for their competitive advantage. Finance was however found not to be significant for competitive advantage.

Key phrases

competitive advantage; inter-organisational relationships; small and medium enterprises; supply relationships

1. INTRODUCTION

The importance of small and medium enterprises in contributing to national economies through job creation, economic growth and innovation is widely recognised (Kumar & Sardar 2011:129; Mathee & Heymans 2013:392). However the globalisation process and the rapid technological developments have led to intense competition in the business landscape, presenting challenges for SMEs to perform successfully (Ocloo, Akaba & Worwui-Brown 2014:289). SMEs are generally recognised to have limitations with regard to resources and capabilities required to be successful (Mathee & Heymans 2013:393; Nieto & Santamaria

2010:45). The globalisation process exacerbates these challenges for SMEs. Enterprises need to develop and maintain a competitive advantage to be successful in the prevailing intense competitive business landscape and competitive advantage emanates from resources and capabilities the enterprise possesses (Hoskisson, Hitt, Ireland & Harrison 2013:2). The resource constraints experienced by SMEs limit their potential to achieve competitive advantage to effectively compete in the globalised market. This in turn limits their growth and success, and therefore realising the potential they hold to contribute to job creation and economic growth.

Competitive advantage enables SMEs to develop competencies for efficiency, innovation, production of quality products and/or services and responding to customer requirements (De Bruyn & Kruger 2010:109-110; Hill & Jones 2013:113). However, the globalisation process and the rapid technological developments make it almost impossible for any enterprise to always possess all the resources and capabilities required for competitive advantage (Daft, Murphy & Willmott 2010:181; Uddin & Akhter 2011:44). As enterprises acquire and/or develop resources and capabilities that position them for competitiveness, changes in the business environment occur and the resources and capabilities required to respond to these changes may be different from those recently acquired and/or developed. Some of the resources and capabilities required to achieve and maintain competitive advantage exist beyond the boundaries of one enterprise, and this is why De Wit and Meyer (2010:376) believe that enterprises have become more dependent on one another for competitive advantage and success. In particular SMEs, as they are recognised to have resource limitations, depend on sources beyond their boundaries to close their resource gaps. In line with this view enterprises form inter-organisational relationships with those that have the resources and capabilities required for their competitive advantage (Daft et al. 2010:190). This is why inter-organisational relationships are considered as a source of sustainable competitive advantage (Harrison 2003:66; Uddin & Akhter 2011:45).

Daft et al. (2010:183) define inter-organisational relationships as resource transactions, flows and linkages that occur among two or more organisations. There are many types of inter-organisational relationships such as joint ventures, networks, consortia, trade associations and supply relationships (Harrison 2003:64). Supply relationships with large enterprises, where SMEs supply large enterprises with goods or services, have been identified as important for SMEs to access resources and capabilities (Kelly 2007:602). Through these relationships SMEs can access required resources and capabilities without

having to buy them, an option that would itself be a challenge as these enterprises also have financial resource limitations (Beck & Demirgüç-Kunt 2006:2941; Okpara 2011:158).

Significant research has been undertaken on how enterprises achieve and maintain competitive advantage (He 2012; Sakchutchawan, Hong, Callaway & Kunnathur 2011). However most of this research is focused on large enterprises and there is limited research that focuses on how SMEs achieve competitive advantage (Diugwu 2011:102). In a study in Kenya, Diugwu (2011) explored how SMEs build competitive advantage. However this study was theoretical and relied on review of existing literature. There is a gap in literature of empirical examination on how SMEs can build their competitive advantage. This empirical study contributes to this gap.

2. RESEARCH PROBLEM, RESEARCH QUESTION AND RESEARCH OBJECTIVE

This study is premised on the recognition that SMEs have the potential to significantly contribute to national economies through job creation and economic growth. However they have limitations with regard to resources and capabilities that are required to achieve competitive advantage, a prerequisite to survive and be successful in the globalised economy that is epitomised by intense competition.

In addition, SMEs can only realise their potential to contribute to economic growth and job creation when they can compete successfully. The objective of this study is to examine how inter-organisational relationships with large enterprises influence the competitive advantage of SMEs. The study seeks to answer two research questions:

RQ1: Whether SMEs do access resources and capabilities through the inter-organisational relationships they have with large enterprises.

RQ2: How the resources and capabilities accessed through the inter-organisational relationships with large enterprises influence the competitive advantage of SMEs.

3. LITERATURE REVIEW AND HYPOTHESES

Literature reviewed reveals that enterprises must develop and gain a competitive advantage over their competitors to survive and be profitable in the current rapidly changing business environment (Ahuja 2011:63; Ocloo *et al.* 2014:289). Porter (1985:3) explains that competitive advantage grows fundamentally out of the value an enterprise is able to create for its buyers that exceeds the cost of creating it. Creating value for customers is the main

means enterprises develop and sustain a competitive advantage (De Bruyn & Kruger 2010:41). When enterprises achieve a competitive advantage over their competitors they are expected to perform better.

3.1 Competitive advantage and performance

Studies have confirmed the existence of a direct correlation between competitive advantage and performance (Majeed 2011; Rose, Haslinda & Ismad 2010). There are, however, a few authors who argue that competitive advantage does not always lead to performance (Coff 1999:129; Coyne 1986:60).

Coff (1999:131) states that the performance measures capture only returns not appropriated by the most powerful stakeholders and when these costs are taken into consideration competitive advantage may not lead to performance. Despite this argument there is sufficient empirical evidence indicating that there is a positive correlation between competitive advantage and performance. This study therefore assumes this positive correlation between the two constructs. According to Hill and Jones (2013:113) as well as Torok and Cordon (2002:22) the four factors that build and sustain competitive advantage are superior efficiency, quality, innovation and customer responsiveness. This is regardless of the size or industry of operation of the enterprise and therefore applicable also to SMEs (Iskanius, Niinikoski, Jokela & Muhos 2014:96).

Each of these four factors is a product of the core competencies of the enterprise and these emanate from the resources and capabilities the enterprise possesses (Hitt, Ireland & Hoskisson 2011:75). When the resources of the enterprise are combined with its unique capabilities, the enterprise will have core competencies that enable it to achieve a competitive advantage. De Bruyn and Kruger (2010:40), however, argue that not all resources are strategic for the building of competitive advantage.

3.2 Identifying strategic resources and capabilities

Enterprises require a range of resources and capabilities to achieve their business objectives (Harrison 2003:74). There are however specific strategic resources and capabilities required to develop core competencies used to achieve competitive advantage (De Bruyn & Kruger 2010:40). These would be resources and capabilities that are valuable, rare, costly to imitate and non-substitutable (Hoskisson, Hitt, Ireland & Harrison 2013:119-120). In a study of antecedents of competitive advantage and performance in Slovenia, Cărter and Cărter (2009:200) established that physical resources do not influence the

competitive advantage of enterprises but it is the intangible resources that have this influence because they are difficult to imitate and substitute. The exception to this rule however is financial resources. Although financial resources may not qualify as rare or difficult to imitate, they can be used for multi-purposes such as invest in unique, valuable and difficult-to-imitate resources and capabilities (Harrison 2003:80). Empirical studies have found that there is a correlation between financial resources and competitive advantage of SMEs (Cärter & Cärter 2009:200; Papulova & Papulova 2006:8). Financial resources therefore qualify as a strategic resource for competitive advantage.

The dynamic business environment requires enterprises to continuously innovate in order to respond to changing customer demands (Ahuja 2011:63; AL-Mubarak & Aruna 2013:157). According to Cobbenhagen (2000:123), technology and innovation are closely interrelated since many innovations are driven by technological possibilities. However, SMEs have challenges with regard to information about changes in technology and new technologies and this limits their ability to innovate (Kamalian, Rashki & Arbabi 2011:83; Ocloo et al. 2014:290). The ability of an enterprise to innovate is determined by its technological knowledge base (Al-Mubarak & Aruna 2013:157); hence technological know-how is considered as the basis for innovation and therefore a strategic resource for competitive advantage.

With regard to capabilities, human resources, including leadership are considered as sources of competitive advantage (Harrison 2003:96). Grant and Jordan (2012:119) define human resources as the expertise, efforts, skills, knowledge and insights that employees contribute to the success of the enterprise. According to Mathis and Jackson (2008:5) human resources may explain as much as 43% of the difference in higher market value between one enterprise and another, an indication of the importance of human resources for competitive advantage. Human resources therefore qualify as a strategic capability for competitive advantage. Yet, as established by Kishore, Majumdar and Kiran in India (2012:51), SMEs have limitation with regard to quality human resources as they are constrained by costs associated with highly trained human resources.

Harrison (2003:85) argues that in the increasingly fast-moving and competitive business environment, it is leadership that is required to make enterprises competitive and therefore successful. Without leadership enterprises will not be able to survive under the prevailing competitive environment (Mann 2013:23). Leadership therefore qualifies as a strategic capability.

Whilst the importance of technology know-how, finance, human resources and leadership to achieve competitive advantage is recognised, it is impossible for any enterprise to always possess all these and therefore remain competitive (Papulova & Papulova 2006:3; Uddin & Akhter 2011:44). Enterprises form inter-organisational relationships in order to access or acquire the resources and capabilities they require for competitive advantage but do not possess (Daft *et al.* 2010:181; De Wit & Meyer 2010:368). In particular SMEs are recognised to have resource constraints and limitations (Nieto & Santamaria 2010:45; Papulova & Papulova 2006:3) and therefore inter-organisational relationships are important for their competitive advantage.

Supply relationships are a form of inter-organisational relationships that is considered effective for accessing resources and capabilities required for competitive advantage (Baxter 2013:58), yet very few studies have focused on these relationships in relation to SMEs (Rothkegel, Erakovic & Shepherd 2006:51). There is also empirical evidence that in supply relationships with large enterprises SMEs access resources and capabilities that enable them to improve their performance (Ahwireng-Obeng & Egunjobi 2001; Ivarsson & Alvstam 2004; Rothkegel *et al.* 2006). This however does not discount the value that SMEs add to large enterprises through these relationships.

3.3 Accessing of resources and capabilities

When SMEs have supply relationships with large enterprises they are able, through the continuous interaction, to access resources and capabilities that contribute to their competitive advantage (Nieto & Santamaria 2010:62; Rothkegel *et al.* 2006:51). Chatain (2011:79) identifies three ways in which value is created in supply relationships and these are when the supplier has a general capability to deliver value to the customer; when the supplier has the capability to customise products and/or services to the buyer's specific needs; and when the supplier has client-specific knowledge that enables buyer-specific solutions. Information on the client needs and client future plans are important as a basis for the supplier to respond to these three ways of adding value.

Whilst there may be publicly available information on the client, it is direct and continuous interaction with the buyer and sharing information that may not be in the public domain that enables the supplier to respond to the needs of the buyer (López-Navarro, Moliner & Rodríguez 2011:10787). In a study conducted by Hsu, Kannan, Tan & Leong (2008:305) in which data from the United States of America, New Zealand and Europe was analysed, it was found that supply relationships represent a medium through which information is shared

to improve performance. The frequency of the interaction and communication is important to ensure the quality of information being shared and its contribution to competitive advantage (Mohanty & Gahan 2012:325). SMEs therefore would have to access the resources and capabilities frequently for these to impact their competitive advantage.

Calabrese (2001:72) considers supply relationships as a means for suppliers to scan the technological knowledge base and keep progress with technological developments. In their study in Germany, Walter, Ritter and Gemünden (2001:372) found that through supply relationships with large enterprises, SMEs were able to access technological know-how and this leads to innovation and improved competitive advantage. Similar findings were confirmed by Ivarsson and Alvstam (2004:258) in a study conducted in India. Based on these findings, it is therefore hypothesised that –

H1: SMEs do access technological know-how through inter-organisational relationships with large enterprises

The challenges of access to finance by SMEs have been researched extensively. Many of these studies and empirical evidence show that lack of access to finance is one of the key obstacles to the competitiveness and growth of SMEs (Beck & Demirgüç-Kunt 2006; Onakoya, Fasanya & Abdulrahman 2013). Supply relationships with large enterprises are also recognised to facilitate access to finance (Ahwireng-Obeng & Egunjobi 2001; Kumar & Bala Subrahmanya 2009). When SMEs have supply relationships with large enterprises, they are able to access finance in the form of flexible payment terms and on-time payments (Ahwireng-Obeng & Egunjobi 2001:49).

In addition, the confidence of banks in SMEs increases and banks are willing to provide finance to them on the strength of the supply contracts or relationships with large enterprises. Kumar and Bala Subrahmanya (2009:7) found that when SMEs have supply relationships with large enterprises they experience increased profits due to the stable orders and better payment conditions. As a consequence of the relationships the creditworthiness of SMEs improves and they can access financial resources from other sources. Based on these findings it is therefore hypothesised that

H2: SMEs do access financial resources through inter-organisational relationships with large enterprises

SMEs can also access human resources, including leadership capabilities, through supply relationships with large enterprises (Ivarsson & Alvstam 2004:257; Kumar & Bala

Subrahmanya 2009). In a study of human resources and supply relationships in the United States of America, Koulikoff-Souviron & Harrison (2007:21) found that partners in supply relationships tend to learn and adjust their internal human resources to accommodate the objective of the relationship. In the process partners can learn effective ways to manage their human resources. It is therefore hypothesised that

H3: SMEs do access human resources through inter-organisational relationships with large enterprises

H4: SMEs do access leadership capabilities through inter-organisational relationships with large enterprises

3.4 Building enterprise competitive advantage

Porter (1985:11) identifies two types of strategies, referred to as generic strategies that enable enterprises to achieve competitive advantage. These are the cost leadership and differentiation. Cost leadership is achieved through implementing strategies that result in lower production costs than those of the competitor, enabling the enterprise to charge lower prices and therefore appeal to a broader market. When more products or services are sold and the revenue of the enterprise increases with lower production costs, the performance or profitability is better than that of the competitor and therefore competitive advantage is achieved through cost advantage.

Alternatively, the enterprise can implement strategies that result in the production of different and/or better products or services than those of the competitor, enabling the enterprise to demand a higher price than the competitor. If the customer derives better value from the product or service, there will be willingness to pay the higher price instead of the competitor's lower price.

However, the premium price paid by the customer must be more than the cost of differentiating the product or service if profitability is to be realised (Ireland, Hoskisson & Hitt 2011:117). This should result in higher revenues than the competitor and therefore competitive advantage is achieved through differentiation advantage. In Germany Eldring (2009) confirmed that there is a positive relationship between Porter's generic strategies and enterprise performance, confirming findings in Japan by Kulatunga (2008). Enterprises in that study that implemented at least one of the generic strategies performed better than those that did not implement any of the generic strategies. These cost and differentiation advantages, however, require SMEs to

possess or have access to strategic resources and capabilities that enable them to build and achieve competitive advantage as discussed earlier. It is therefore hypothesised that

- H5:** Technological know-how accessed through inter-organisational relationships with large enterprises enable SMEs to reduce costs.
- H6:** Technological know-how accessed through the inter-organisational relationships with large enterprises enable SMEs to differentiate their products and/or services.
- H7:** Financial resources accessed through inter-organisational relationships with large enterprises enable SMEs to reduce costs.
- H8:** Financial resources accessed through inter-organisational relationships with large enterprises enable SMEs to differentiate their products and/or services.
- H9:** Human resources accessed through inter-organisational relationships with large enterprises enable SMEs to reduce costs.
- H10:** Human resources accessed through inter-organisational relationships with large enterprises enable SMEs to differentiate their products and/or services.
- H11:** Leadership capabilities accessed through inter-organisational relationships with large enterprises enable SMEs to reduce costs.
- H12:** Leadership capabilities accessed through inter-organisational relationships with large enterprises enable SMEs to differentiate their products and/or services.

Figure 1 depicts a conceptual framework reflecting hypothesised relationships between the constructs.

4. RESEARCH DESIGN

The unit of analysis of this research was South African SMEs that have inter-organisational relationships, specifically supply relationships, with South African large mining enterprises. In line with the mining operations in South Africa, the majority of the small and medium enterprises interviewed were located in the North West, Mpumalanga and Limpopo provinces. A few of these enterprises are based in Johannesburg. The size of the enterprise and existing supply relationships with large mining enterprise were set as qualifying criteria for the sample. In South Africa small enterprises are defined as those that have between 5 and 50 employees and medium enterprises have between 51 and 200 employees.

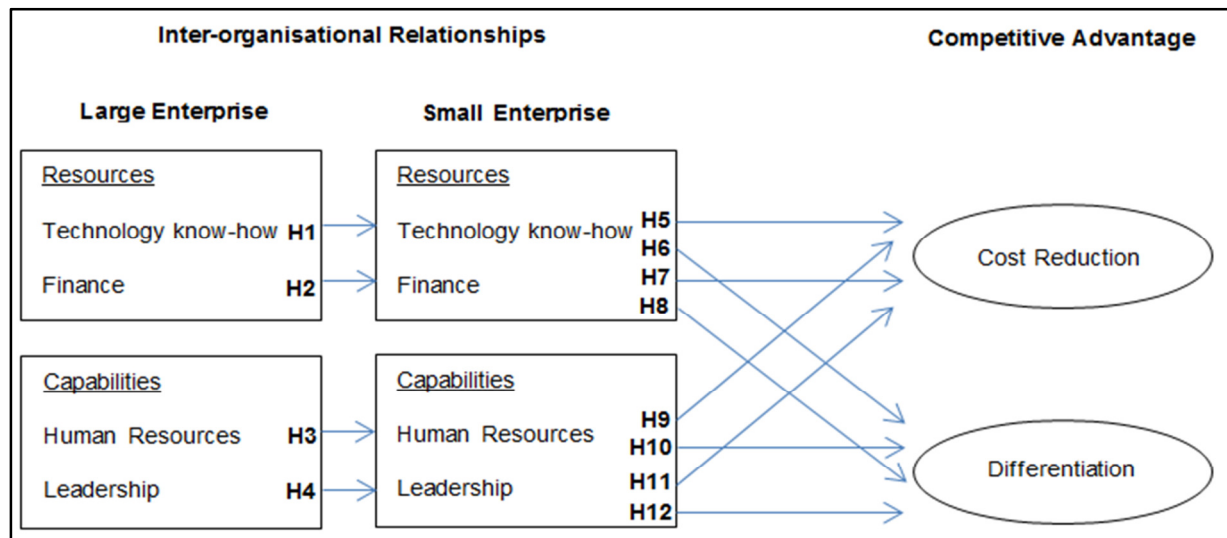


FIGURE 1: Conceptual model of resources and capabilities accessed through inter-organisational relationships and influence on competitive advantage of small and medium enterprises

Source: Framework based on hypotheses

Large mining enterprises were approached to provide lists of their SME suppliers. A confidentiality agreement was signed with these large enterprises and SMEs were also assured of confidentiality of information during interviews.

A structured questionnaire, based on findings of literature review, was developed and tested with 10 SMEs through face-to-face interviews before the full-scale survey was undertaken. The total sample comprised of 309 small and medium enterprises. Fifty of these interviews were conducted telephonically and the remainder were face-to-face interviews with owner-managers at the premises of the enterprise. Most of the items were measured on a five-point Likert scale, although the results are presented on a 3-point Likert scale. Questions 1 to 2 were not in scale form as these were designed to ensure that the respondent fell within the scope of the research.

The independent variables for this study are technological know-how, financial resources, human resources and leadership accessed through inter-organisational relationships with large enterprises. These variables were measured as follows –

- Technological know-how was measured in terms of access to information that enabled improvement of quality of goods and/or services, use or improvement of technologies for product, service and process innovations.

- Finance was measured in terms of early payments, flexible payment terms, on-time payments, discounts from providers of inputs and loans from banks on the strength of the contract and/or relationship with the large enterprise.
- Human resources were measured in terms of information, ideas or access to talented technical staff, ways to retain talented staff, performance management systems, effective staff training programmes, strategies to create an environment conducive to innovation and to create an organisational culture that emphasises quality.
- Leadership was measured in terms of ideas or learning negotiation skills, staff motivation, encouraging innovation among staff, mobilising staff behind the vision of the enterprise, building flexible enterprises and trends in the business and industry environment.

Competitive advantage is the dependent variable and was measured in terms of cost reduction (which enables cost advantage) and improved and/or unique products and/or services (which enables differentiation advantage).

5. DATA ANALYSIS AND RESULTS

Data was analysed using EQS 6 for Windows.

Descriptive statistics was used to provide information about the sample. Measures such as mean, mode, median, standard deviation, range and skewness were determined to provide information on the distribution of the data.

5.1 Sample

Of the 309 SMEs in the sample, 86.4% were small and 13.6% medium enterprises. The majority of these, 72.5%, are registered as close corporations, 24.6% as Pty Ltd and 2.9% as sole proprietor. The average of years in operation was 10.08 years with an average of 7.64 years supplying large enterprises.

5.2 Reliability and validity

Reliability was assessed using Cronbach's alpha and the results are presented in Table 1.

The closer Cronbach's alpha is to 1, the higher the internal consistency reliability and .7 is considered good with .6 questionable (Hair, Black, Babin & Anderson 2010:125). Although the Cronbach's alpha for financial resources is below .7 it is above .6 and is therefore acceptable.

The validity of the constructs was assessed by means of confirmatory factor analysis since there is sufficient literature review and theory that enabled identification of the factors and the development of hypothesized correlations. An initial assessment of the model fit was done considering the overall χ^2 values, its degree of freedom and the probability value.

TABLE 1: Internal consistency measured with Cronbach alpha

	Frequency accessed	Influence on cost reduction	Influence on differentiation of product/service
Technological know-how	.89	.89	.91
Financial resources	.64*	.66**	.69***
Human resources	.88	.86	.88
Leadership	.90	.89	.90

*when question 5.1 omitted; **when question 5.5 omitted; ***when question 5.5 omitted

Source: Calculated from survey results

Given findings of some poor-fitting constructs initially, additional analyses were done. Possible misspecifications, as suggested by the modification indices, were considered in order to fit revised re-specified constructs. The guidelines for acceptable fit results are $\chi^2 - p = .05$; MARDIAS – less than 0.08; NFI $\geq .95$; NNFI $\geq .95$; CFI $\geq .95$ and RMSEA = .08. Table 2 presents the results of the goodness-of-fit statistics and a confidence interval of 90% of RMSEA was considered plausible for this study.

TABLE 2: The goodness-of-fit statistics of the hypothesised variables

	Mardia's coefficient	χ^2	df	χ^2/df	CFI	NFI	NNFI	RMSEA (90% confidence interval)
Frequency (model 1)	36.8	1020.5	371	2.75	0.872	0.814	0.860	0.075 (0.070 – 0.081)
Frequency (model 2)	38.6	565.7	246	2.99	0.929	0.882	0.921	0.065 (0.058 – 0.072)
Influence: cost reduction (model 1)	46.9	899.3	371	2.42	0.897	0.837	0.887	0.068 (0.062 – 0.074)
Influence: cost reduction (model 2)	48.3	539.3	269	2.00	0.943	0.894	0.937	0.057 (0.050 – 0.064)
Influence: differentiation of product (model 1)	62.9	820.3	371	2.21	0.923	0.868	0.916	0.063 (0.057 – 0.068)
Influence: differentiation of product (model 2)	62.9	570.5	293	1.95	0.951	0.905	0.946	0.055 (0.049 – 0.062)

Source: Calculated from survey results

For Table 2 the following should be noted.

- In model 1 each of the four domains, namely technological know-how, financial resources, human resources and leadership, are included as factors.
- For FREQUENCY, model 2 excludes items 3.1.2, 3.3 5.1, 5.2 and 7.3 in the questionnaire as these items had low r-squared statistic in standardized solution, indicating a weak contribution to the model.
- For COST REDUCTION, model 2 excludes items 3.1.2, 5.3, 5.5 and 7.3 in the questionnaire as these items had low r-squared statistic in standardized solution, indicating weak contribution to the model.
- For DIFFERENTIATION, model 2 excludes items 3.1.2, 5.3, and 5.5 in the questionnaire as these items had low r-squared statistic in standardized solution, indicating weak contribution to the model.

5.3 Patterns

SMEs were required to indicate whether they access the identified resources and capabilities in their interaction with large enterprises. If they do, how frequently and whether these influence their cost reduction or improvement and/or production of unique goods and/or services.

Tables 3 to 7 present these results.

5.3.1 Access to identified resources and capabilities

The findings of the study indicate that there is a high number of SMEs in South Africa that are able to access the identified resources and capabilities through the supply relationships with large enterprises.

However, as reflected in Table 3 there is also a significant number of these enterprises that do not access the identified resources and capabilities through these relationships. It is evident from the above findings, based on the empirical data in the study, that hypothesis 1, can be supported.

TABLE 3: Pattern of enterprises that access identified resources and capabilities

	N	Count Yes	% Yes
1. Technological know-how			
1.1 Technologies that assist in developing better products/services	304	172	56.6
1.2 Technological developments in our industry	305	155	50.8
1.3 Technologies that assist in improving quality standards	303	153	50.5
1.4 Advice on quality standards	298	150	50.3
1.5 Industry developments	294	147	50.0
1.6 Technologies that assist in developing new products/services	306	148	48.4
1.7 Technologies that assist in improving our production processes	304	144	47.4
1.8 Staff provided with training	304	138	45.4
1.9 Best sources of quality raw materials	298	124	41.6
1.10 Advice on workshop layout	304	116	38.2
1.11 Industry research	299	97	32.4
2. Financial resources			
2.1 Settle our accounts within time agreed	308	269	87.1
2.2 Introduce us to suppliers for better prices	308	136	44.2
2.3 Introduce us to supplier for favourable payment terms	309	131	42.5
2.4 Banks lend us money on strength of contracts	309	126	40.8
2.5 Settle our accounts within 10 days	309	123	39.8
3. Human resources			
3.1 Identify and recruit talented staff	307	160	52.1
3.2 Training staff provided	307	150	48.9
3.3 Effective ways to retain staff	307	144	46.9
3.4 Create organisational culture for quality	305	132	43.3
3.5 Performance management	302	119	39.4
3.6 Effective staff training programmes	304	117	38.5
3.7 Create conducive environment for innovation	302	107	35.4
4. Leadership			
4.1 Get information on changes in business environment	307	165	53.7
4.2 Negotiate with stakeholders	307	158	51.5

	N	Count Yes	% Yes
4.3 Motivate staff	308	152	49.4
4.4 Build flexible enterprise	307	146	47.6
4.5 Encourage innovation among staff	298	129	43.3
4.6 Mobilise staff behind vision	306	131	42.8

Source: Calculated from survey results

5.3.2 Influence on cost reduction and differentiation

SMEs were asked to indicate the extent to which the resources and capabilities accessed through the supply relationships influence their cost reduction and providing unique and/or improved product and/or service. Table 4 to 7 presents the patterns and indicate that SMEs perceive these to positively influence achievement of cost and differentiation advantage and therefore competitive advantage.

TABLE 4: Influence of technology know-how

	Influence on cost reduction				Influence on provision of improved/unique products and/or services			
	N	No influence	Slightly/ Somewhat influential	Very/ Extremely influential	N	No influence	Slightly/ Somewhat influential	Very/ Extremely influential
1.1	152	5.9%	29.6%	64.5%	154	6.5%	22.0%	71.4%
1.2	95	9.5%	31.6%	58.9%	95	3.2%	35.8%	61.0%
1.3	143	8.4%	36.4%	55.3%	142	2.8%	36.0%	61.3%
1.4	171	5.8%	22.2%	71.9%	170	3.5%	20.0%	76.5%
1.5	142	7.0%	28.9%	64.1%	144	4.2%	20.1%	49.3%
1.6	141	5.0%	18.5%	76.6%	141	3.5%	16.6%	80.2%
1.7	149	4.7%	21.4%	73.8%	147	2.7%	15.0%	82.3%
1.8	121	3.3%	24.0%	72.7%	121	1.7%	23.2%	75.2%
1.9	113	0.9%	33.6%	65.4%	111	4.5%	20.7%	74.7%
1.10	145	4.8%	24.2%	71.0%	144	3.5%	13.2%	83.3%
1.11	134	4.5%	37.3%	58.2%	135	3%	37.1%	60.0%

Source: Calculated from survey results

TABLE 5: Influence of financial resources

	Influence on cost reduction				Influence on provision of improved/unique products/services			
	N	No influence	Slightly/Somewhat influential	Very/Extremely influential	N	No influence	Slightly/Somewhat influential	Very/Extremely influential
2.1	123	3.3%	13.8%	82.9%	122	3.3%	12.3%	84.4%
2.2	265	8.7%	18.9%	72.5%	265	9.8%	20.8%	69.5%
2.3	129	2.3%	48.1%	49.6%	129	1.6%	56.6%	41.9%
2.4	135	0.7%	42.2%	57.1%	135	1.5%	44.4%	54.1%
2.5	125	9.6%	44.0%	46.4%	124	8.9%	45.1%	45.9%

Source: Calculated from survey results

TABLE 6: Influence of human resources

	Influence on cost reduction				Influence on provision of improved/unique products/services				
	N	No influence	Slightly/Somewhat influential	Very/Extremely influential	N	No influence	Slightly influential	Slightly / Somewhat influential	Very/Extremely influential
3.1	160	4.4%	28.2%	67.5%	159	3.1%	6.9%	23.3%	73.6%
3.2	142	6.3%	19.7%	74.0%	142	2.1%	10.6%	22.6%	75.4%
3.3	113	3.5%	22.2%	74.3%	113	2.7%	3.5%	20.3%	77%
3.4	115	0.9%	14.7%	84.3%	115	1.7%	6.1%	13.1%	85.2%
3.5	103	3.9%	22.3%	73.8%	102	1.0%	2.9%	15.6%	83.4%
3.6	132	3.8%	18.2%	78.0%	130	4.6%	5.4%	12.3%	83.1%
3.7	146	3.4%	28.7%	66.9%	148	2.0%	17.6%	39.9%	58.1%

Source: Calculated from survey results

TABLE 7: Influence of leadership

	Influence on cost reduction				Influence on provision of improved/unique products/services			
	N	No influence	Slightly/ Somewhat influential	Very/ Extremely influential	N	No influence	Slightly/ Somewhat influential	Very/ Extremely influential
4.1	156	6.4%	34%	59.9%	156	3.8%	30.1%	66%
4.2	149	1.3%	19.5%	79.2%	149	1.3%	16.1%	82.6%
4.3	126	5.6%	20.6%	73.8%	126	3.2%	12.7%	84.2%
4.4	130	3.1%	20.8%	76.1%	128	3.9%	8.6%	87.5%
4.5	144	4.2%	23.6%	72.3%	143	1.4%	18.9%	79.8%
4.6	161	1.2%	34.2%	64.6%	161	2.5%	30.5%	67.1%

Source: Calculated from survey results

5.3.3 Correlations

Correlations among independent variables were analysed using Pearson's correlation coefficient. The results are presented in Table 8.

TABLE 8: Pearson's correlation among independent variables

		Technological know-how	Financial resources	Human resources	Leadership
Technological know-how	Pearson's correlation Sig. (2-tailed) N	1	.500 .000 309	.768 .000 309	.741 .000 309
Financial resources	Pearson's correlation Sig. (2-tailed) N		1	.556 .000 309	.513 .000 309
Human resources	Pearson's correlation Sig. (2-tailed) N			1	.834 .000 309
Leadership	Pearson's correlation Sig. (2-tailed) N				1

Correlation is significant at the .05 level

Source: Calculated from survey results

There is a correlation among the identified resources and capabilities.

There is a moderate significant relationship between technological know-how and financial resources:

- a significant and high relationship between technological know-how and human resources;
- a significant and high relationship between technological know-how and leadership;
- a significant moderate relationship between financial resources and human resources;
- a significant moderate relationship between financial resources and leadership and
- a significant high relationship between human resources and leadership.

Correlations between the independent variables and dependent variable were analysed using Pearson's correlation coefficient. The results are presented in Table 9. The results of the correlation analysis show a high and significant relationship between technological know-how and cost reduction ($r = .892$, $p = .000$, $n = 309$); a high and significant relationship between technological know-how and differentiation ($r = .866$, $p = .000$, $n = 309$).

Small and medium enterprises that access technological know-how in supply relationships with large enterprises are able to reduce their costs. They are also able to utilise their technological know-how to differentiate their products and/or services. Technological know-how therefore has influence on both cost and differentiation advantage of small and medium enterprises.

TABLE 9: Correlation between independent variables and dependent variable

		Technological know-how	Financial resources	Human resources	Leadership
Influence on cost reduction	Pearson's correlation	.892	.621	.906	.882
	Sig. (2-tailed)	.000	.000	.000	.000
	N	303	303	303	303
Influence on unique improved and/or products/services	Pearson's correlation	.886	.591	.896	.893
	Sig. (2-tailed)	.000	.000	.000	.000
	N	307	307	307	307

Correlation is significant at the .001 level.

Source: Calculated from survey results

There is a significant but moderate relationship between financial resources and cost reduction ($r = .621$, $p = .000$, $n = 309$); a similar relationship between financial resources and differentiation ($r = .591$, $p = .000$, $n = 309$). Small and medium enterprises that access

financial resources through supply relationships with large enterprises are able to use these to moderately but positively impact their cost and differentiation advantage.

There is a significant and very strong relationship between human resources and cost reduction ($r = .906$, $p = .000$, $n = 309$); significant and high relationship between human resources and differentiation ($r = .896$, $p = .000$, $n = 309$).

SMEs that access human resources through supply relationships with large enterprises are able to use these to positively impact their cost and differentiation advantage.

There is a significant and high relationship between leadership and cost reduction ($r = .882$, $p = .000$, $n = 309$); significant and high relationship between leadership and differentiation ($r = .893$, $p = .000$, $n = 309$). SMEs that access leadership capabilities through supply relationships with large enterprises are able to use these to positively impact their cost and differentiation advantage.

5.3.4 Multiple regression analysis results

A multiple regression analysis was performed to determine the impact of the independent variables on dependent variable. The results of the multiple regression analysis for the influence of the independent variables on dependent variables are presented in Tables 10 and 11. Table 10 indicates that a significant percentage variation in the cost reduction is explained by the resources and capabilities accessed frequently in relationships with large enterprises.

TABLE 10: Multiple regression results – impact of the independent variables on the dependent variable – cost reduction

Model	Non-standardised coefficients		Standardised coefficients	t-value	Significance p-level
	Beta	Standard error	Beta		
(Constant)	0.123	0.042		2.929	.004
Technology know-how	0.399	0.022	0.410	17.788	.000
Financial resources	0.031	0.015	0.031	1.979	.049
Human resources	0.271	0.025	0.309	10.825	.000
Leadership	0.266	0.023	0.320	11.723	.000

$R^2 = 0.938$; $F = 1132.1$; $p = 0.000$

Source: Calculated from survey results

The multiple regression analysis indicates significant positive relationships between independent variables, i.e. technological know-how ($p < .004$), human resources ($p < .000$) and leadership ($p < .000$). Based on the results of Table 10, hypotheses 5, 9 and 11 can be supported. Financial resources were however found not to be significant ($p=0.049$) and therefore hypothesis 7 cannot be supported.

Table 11 indicates that a significant percentage variation in the differentiation is explained by the resources and capabilities accessed frequently in relationships with large enterprises. The multiple regression analysis indicates significant positive relationships between independent variables, i.e. technological know-how ($p < .004$), human resources ($p < .000$) and leadership ($p < .000$).

Based on these results hypotheses 6, 10 and 12 can be supported. Financial resources were however found not to be significant ($p=0.875$) and therefore hypothesis 8 cannot be supported.

TABLE 11: Multiple regression results – impact of the independent variable on the dependent variable – differentiation

Model	Non-standardised coefficients		Standardised coefficients	t-value	Significance p-level
	Beta	Standard error	Beta		
(Constant)	0.111	0.045		2.488	0.013
Technology know-how	0.424	0.024	0.419	17.775	0.000
Financial resources	0.003	0.016	0.003	0.158	0.875*
Human resources	0.251	0.027	0.274	9.425	0.000
Leadership	0.309	0.024	0.356	12.716	0.000

$R^2=0.936$; $F=1092.8$, $p=0.000$

Source: Calculated from survey results

6. CONCLUSION AND IMPLICATIONS

6.1 Conclusion

The study confirms that SMEs that have supply relationships with large enterprises are able to access resources and capabilities through these relationships. This reinforces the studies

by Ivarsson and Alvstam (2004) in India and Ahwireng-Obeng & Egunjobi 2001 in South Africa.

Whilst the SMEs considered the resources accessed through these relationships to have influence on their competitive advantage, this study empirically established that financial resources are not significant for both cost and differentiation advantage, differing with findings by Cärter and Cärter (2009) in Slovenia. Technological know-how, human resources and leadership were found to be significant for both cost and differentiation advantages.

This study confirms through empirical research that supply relationships with large enterprises are an important source for SMEs to access the resources and capabilities required for competitive advantage. There was, however, a significant number of SMEs that did not access these resources and capabilities through these relationships.

6.2 Implications

Owner-managers of SMEs should consider supply relationships with large enterprises for accessing technological know-how, financial resources, human resources and leadership. These relationships must be managed to ensure that they are frequent and therefore add to the competitive advantage of SMEs.

The policies designed to make SMEs competitive must focus on technological know-how, human resources and leadership capabilities. Currently government efforts in developing these enterprises largely focus on financial resources and general non-financial services such as general business skills.

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