Towards a Testable Model of the Impact of Specific Entrepreneurial Networks on the Success of Businesses in the Pietermaritzburg Region

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Abstract

Entrepreneurial networking has been a relatively under-researched area in the field of entrepreneurship. The apparent avoidance of this topic by researchers could be attributed to a multitude of speculative reasons, such as the multi-disciplinary nature of the topic; uncertainty with regard to the nature and operation of entrepreneurial networking; disagreement among scholars on critical success factors of businesses and the difficulty in obtaining reliable quantifiable data from businesses to enable researchers to determine their level of success. A testable model to determine the impact of specific networks on the success of businesses could contribute substantially to the base of knowledge in the field of entrepreneurial networking research. In this paper, a literature review of entrepreneurial networking and critical success factors of businesses was initially conducted in order to establish a conceptual base for the exploratory research that followed. The exploratory empirical study was based on a non-probability sample of small businesses in the Pietermaritzburg region. The objective of this paper is to establish

criteria towards the development of a testable model of specific entrepreneurial networks on the success of businesses. In this regard the issues, challenges, limitations of this approach and suggestions for further research are clearly identified in the paper.

Key Concepts

Business success, competitive advantage, critical success factors, entrepreneur, entrepreneurial firm, entrepreneurial networking, networking, small business, testable model.

Introduction

All businesses, even the large and/or successful ones do not always avail themselves of such the abundance of resources available to operate optimally. Many operate in isolation from their environment. In this regard effective and efficient networking could assist all businesses to strengthen the areas where they need external assistance. The need for external assistance to strengthen an often weak base of resources is even more crucial in the case of the small business sector that often cannot survive or grow without the networks that facilitate such external assistance. Networking without purpose and direction is bound to fail in similar fashion to most organisational activities without clear objectives. As there is still much uncertainty on the requirements of effective and efficient networking, this paper explores the nature and characteristics of networking as well as the factors that determine business success. Based on the literature review of networking and the conceptual model of Neergaard et al. (2005) on the one hand and the exploratory empirical study on the other, triangulation was used to address the objective of the paper, namely to determine the criteria needed to develop a testable model of evaluating entrepreneurial networks and its impact on the success of businesses. In order to conduct this exploratory a judgemental non-probability empirical research. sample non-entrepreneurial entrepreneurial the and businesses Pietermaritzburg region was undertaken. In conclusion, the findings, challenges, limitations and suggestions for further research are dealt with.

Literature Review

Networks can be defined as reciprocal patterns of communication and change (Powell, 1990:295). Networks refer to 'the coming together' of a group of enterprises or people to use their combined talents and resources in order to achieve results which would not have been possible if they operated individually (Dean, Holmes & Smith, 1997:78). Premaratne (2002:2) defined networks as personal relationships between an entrepreneur and his/her external actors. These external actors (or outsiders) can be individuals or organisations and are not directly employed by the entrepreneur. Networks have the potential to facilitate collective action for mutual benefit (Taylor, Jones & Boles, 2004: 226). A network can be regarded as a series of reciprocal relationships that have the potential to generate customer value and build sustainable competitive advantage for the entrepreneur. Competitive advantage can be seen as an advantage gained over competitors that enables the business to offer greater value to customers at lower prices or by providing more benefits that justify higher prices (Kotler, Armstrong, Saunders & Wong. 2002: 820f). A network is a structure where a number of nodes (entities) are related to each other by specific threads (links). Both threads and nodes are loaded with regard to resources, knowledge and understanding as a result of complex interactions, adaptations and investments within and among firms over time. Networking is then a social construction that exists only as a result of the individual's understanding and use of the network (Goudis & Skuras, 2000: 14). Networking is important to develop entrepreneurship as it enables entrepreneurs to develop relationships with the outside world. These relationships in turn help the entrepreneurs to achieve their goals and may provide special assistance to entrepreneurs in small businesses despite the fact that they usually have limited resources relative to larger businesses (Premaratne, 2002:1).

Although a universally accepted definition of entrepreneurship does not exist (Republic of South Africa, National Strategy for Fostering Entrepreneurship Study, 2001:10), the following definition of an entrepreneur will be used as a guideline for this article:

an entrepreneur is a person who generates change through inno-

vation, finds new combinations of resources, takes calculated risks, reorganises and improves existing operations and leads economic activity in times of uncertainty in order to realise a profit.

Based on the definitions of networking and entrepreneurship, entrepreneurial networking refers to the connection or relationship with other entrepreneurs or parties such as organisations or individuals which would result in a reciprocal pattern of communication with the underlying objective of improving the position of both the entrepreneur and the party with whom he/she is networking. In a business context entrepreneurial networks can be seen as social organisations that potentially offer different types of resources to start, improve or sustain entrepreneurial projects (Anon, Wikipedia, 2007: 1). The goal of most entrepreneurial networks is to combine a broad selection of professionals and resources in order to compliment each other's endeavours (Anon, Wikipedia, 2007; 1). Implicit in this goal of entrepreneurial networks is the notion that entrepreneurial networking takes place for a reason. This would further imply that entrepreneurial networking is characterised by a specific goal. The absence of a specific goal would result in aimless networking and consequently disqualify the networking in question from being entrepreneurial networking.

Although prescriptive parameters with regard to the optimum level are provided in the literature, entrepreneurial networking could be characterised by:

- the network size (depth and width)
- extent of network activity (for example frequency of contacts)
- network diversity
- success/ failure of the networking with regard to achieving its preconceived goals to add value to the enterprise (Edmonds, 2005: 63).

According to Jenssen and Greve (2002:255) a large body of literature has shown a positive association between networking and entrepreneurship or small business performance. The effects of networking may, however, not always be positive and will depend on the size, type and developmental stage of the firm as well as its competitive strategy (Ostgaard & Birley, 1994: 281). According to Sandberg and

Logan (1997:1) research which examined the composition and size of entrepreneurs' networks found that neither could be conclusively linked to performance. As entrepreneurs are likely to implement multiple networks (Sandberg & Logan, 1997: 2), research should go beyond examining the composition and size of an entrepreneur's networks and pay ample attention to differentiating among the uses, purposes and the value of the resources they provide in order to underscore the importance of focused networking. The researcher should rather interpret the entrepreneur's networking as 'the consequences of strategic decisions' concerning targeted markets and the resources needed to compete in them (Sandberg & Logan, 1997: 3). Shane and Venkataraman (2000: 16) suggested in this regard that the important question for the researcher is: 'why, when and how some people and not others discover and exploit opportunities?'

Baron and Markman (2003: 44) focussed on the 'why are some entrepreneurs more successful ... aspect' and in the process distinguished between social capital (the sum of the actual and potential resources that individuals obtain from their relationships with others) and social competence (entrepreneurs' overall effectiveness in interacting with others). Burt (2002:205) argued that a well-structured network will obtain higher rates of return for the entrepreneur than badly structured networks. In this regard the 'structural hole argument' holds that the structural hole is an opportunity to facilitate the flow of information between people and control the form of projects that connect people from the opposite sides of the hole (Burt, 1998:5). Structural holes are gaps between non-redundant contacts. Unless the hole is spanned, it will act as a buffer in similar fashion than an insulator in an electric circuit. The entrepreneur who identifies and spans the hole, creates a bridge between otherwise disconnected networks and determines whose interests are served by the bridge. It is the tertius gaudens, literally 'the third who benefits' from brokering the connection between others (Edmonds, 2005: 49). As broker between two otherwise disconnected contacts, the entrepreneur in the literal sense of the word, becomes the person who adds value by standing between others. In the position of the tertius, the entrepreneur has the opportunity to negotiate favourable terms (Edmonds, 2005: 50). Structural holes are the setting for tertius strategies, and information is the substance (Burt, 1998: 6). The structural hole argument, strangely enough reminds us of the classical definition of the entrepreneur by Cantillon as 'a trader who purchases an article at a certain price in order to resell it later at an uncertain price' – in both instances risk is involved in spanning the gap between different parties as the mediator has to take the risk of overcoming the gap between two parties with regard to value transfer and information transfer. Tsai and Ghoshal (1998: 473) found that the presence of structural holes is positively associated with the extent of resource exchange with other parties which in turn is positively associated with the focal actor's innovative ability.

Networks rich in the entrepreneurial opportunities offered by structural holes, could be regarded as entrepreneurial networks as they present the opportunity for entrepreneurs who are skilled in building interpersonal bridges to span structural holes (Burt, 1998:7). In this regard Aldrich (1999:87) asserted that successful entrepreneurs are not necessarily those who create structural holes but rather those who know how to use the structural holes they find. A variant of the structural hole argument attributes advantage to the occupation of a bridging position within a network. In this regard Mc Evily and Zaheer (1999: 1152) surveyed 227 job shop manufacturers in Midwest USA and found that lower density networks were associated with greater acquisition and deployment of capabilities necessary for competitiveness in the metalworking segment of the automotive industry. The benefits of the structural hole argument were also supported by the research findings of Baum, Calabrese and Silverman (2000: 287) in Canada during the six year period (1991-1996) when comparing 142 start-up biotechnology firms with 471 firms founded prior to 1991. The research showed that alliance partner heterogeneity had a positive effect on subsequent financial performance and innovative capability. Singh, Hills and Lumpkin (199:7) surveyed 256 consulting entrepreneurs in the information technology industry and found that in the early stage of the entrepreneurial process, entrepreneurs appear to benefit from diverse information flows. This could most probably be attributed to the diverse needs during the start-up process. Davidsson and Honig (2003:324) conducted a study among nascent entrepreneurs (n=380) and a control group (n=608) in Sweden and followed the development process for 18 months. The study found that being a member of a business network had a statistically significant positive effect on the business in general. Human and Provan (1997: 368) in a comparative qualitative study of two networks of small and medium sized manufacturing enterprises in the USA's wood product industry found that network exchanges appeared to add more value with regard to learning about your own organizational capabilities than about market exchanges. It further enhanced knowledge with regard to awareness of who their real competitors were (Human & Provan, 1997:397).

The research of Hoang and Antocic (2003:165) with regard to previous publications on entrepreneurship, sociology and the role of networks in the entrepreneurial context, suggested that current research work seeking to explain entrepreneurial success is limited by considerable conceptual vagueness with regard to both the resources required for success and how we measure the networks that help to promote those measures. Mapping networks of general information flows may be too far removed from resource flows and more closely linked to an outcome such as business performance (Hoang & Antocic, 2003:177). Network data derived from detailed lists of relevant business resources may have more predictive power especially if more attention is paid to how network data is elicited in order to verify the reliability of the source. The uniqueness of the industry researched should, however, be borne in mind and generalizing of findings done with caution (Shaw et al, 1994: Entrepreneurial successes and failures are an contingency that may shape network activity and structure (Hoang & Antoncic, 2003:177). Network research can assist practitioners to meet organizational objectives and help to proactively change networks to improve the performance and effectiveness of their organizations (Nobria & Eccles, 1992:15).

Research by Akizawa and Kijiima (1997:5) found that among the 246 Community (an internet-based entrepreneurial network (n=120) to evolve the Japanese industrial structure) members benefited from:

- higher survival rates of start-ups
- easy access to success models
- timely assistance from other entrepreneurs and specialists
- higher business awareness levels among matured firms
- inter-firm collective learning and
- positive interdependency as a feature of personal networking for exchange and creation of knowledge

These findings were supported by the research of Kristiansen (2004: 22) who found that the qualities of social networks have a clear impact on the ability to raise entrepreneurial resources and thereby on the propensity to succeed within a given business environment.

In order to link the potential effect of entrepreneurial networking to business success and the eventual development of a testable model to measure business success, some perspectives on both business success and critical success factors as found in the literature, are consequently considered. Business success can be defined as a clear indication that the business has progressed with regard to a sustained level of growth, continued increase in net profit, continued increase in its asset base while additional factors such as increase in market share, increase in number of employees and age of the business may also be used as indicators of success. The perspective taken by the person determining critical success factors in a business will determine the nature of the critical success factors themselves as each person may have his/her own perception of success and each business will have its own unique critical success factors. These could be some of the major reasons why there is no agreement with regard to a universally accepted list of critical success factors in a business. A generic approach would link critical success factors to issues such as:

- the ability to select the correct target market
- the superior ability to select a target market that has long term growth potential (Davidsson & Honig, 2003:305)
- the sustainability of the business
- appropriate planning for start-up requirements regarding the factors of production (capital, labour, natural resources and entrepreneurship)
- a healthy balance between owners' equity and loan capital
- a clear and realistic vision and mission
- a sustainable competitive advantage (Scarborough & Zimmerer, 2003: 28)
- a market-orientated approach
- a feasible business idea
- a realistic strategic or business plan based on solid market research

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- core competencies such as superior quality, service, flexibility, innovation and responsiveness (Scarborough & Zimmerer, 2003:39)
- growth potential
- alertness to ensure a continuous flow of new innovations in the market (Nieman et al, 2003: 86)
- ample environmental scanning techniques with regard to competition and relevant stakeholders and
- unique knowledge in the field of operation (Hitt et al, 2001: 5).

Apart from the above-mentioned generic critical success factors, the business owner needs to continuously ensure that the unique critical success factors pertinent to his/her specific business are identified and responded to in order to survive and grow. In this regard, effective networking could be most beneficial, especially in areas where the small business, in particular, does not avail of the same resources as large (Starr MacMillan. 1990: 90: Ramachandran & Ramanarayan, 1993:515). Brown and Butler (1995:57)emphasised the point by arguing that smaller firms involved in networks that result in gaining superior information would improve their ability to identify opportunities on which to focus their limited resources. This in turn could lead to the establishment of a competitive advantage.

Summary of Literature Review and Some Theoretical and Conceptual Implications

It is apparent from the literature review that entrepreneurial networks are established for a specific reason. The implication is that entrepreneurial networking is characterised by a specific goal without which aimless networking would take place. The specific goal question would differ from business to business; from industry to industry; from business environment to business environment and from country to country. Generalization of entrepreneurial networking per se would therefore be very difficult. The vast networking opportunities that present itself to the entrepreneur within the context of his/her unique circumstances in a diverse and dynamic business environment, complicates the establishment of an appropriate theoretical base or model for research on entrepreneurial networking. Given this challenging

context, a more realistic approach towards research on entrepreneurial networking would be to establish a conceptual framework within which to research entrepreneurial networking patterns. Such a conceptual framework could form the basis towards the development of a testable model to determine the impact of specific entrepreneurial networks on the success of businesses which also happens to be the title of this paper.

The approach taken to develop a successful conceptual framework based on the literature review was:

- to review the critical success factors needed to succeed in business
- to clarify the meaning and characteristics of entrepreneurial networks
- review previous research on entrepreneurial networking and
- within the context of the above, develop a conceptual framework within which to empirically test an experimental model in a pilot study conducted in the Pietermaritzburg region.

The experimental model and research methodology applied will be discussed in the next section.

Research Methodology

Research Problem

To establish criteria towards a testable model to determine the impact of specific entrepreneurial networks on the success of businesses in the Pietermaritzburg region.

Research Objectives

Given the complexities of no generally accepted theoretical base (other than perhaps the not so appropriate Theory of the Firm), against which to measure the impact of entrepreneurial networking on the success of the business, the following research objectives have been formulated:

• to develop a conceptual framework based on the literature review and the conceptual framework of Neergaard, Denmark, Shaw and Carter (2005: 347) to serve as basis for determining the success of entrepreneurial networking

- to develop a testable model based on both the conceptual framework and the pilot study that was empirically conducted
- to determine the challenges and limitations with regard to the testable model suggested

Nature of the Empirical Research

The empirical research undertaken by Edmonds (2005) in the Pietermaritzburg region was of a qualitative nature based on a judgemental convenience sample in order to gain insight into the entrepreneurial networking process. The conceptual framework or context will be combined with the empirical findings in order to develop the testable model. This approach is similar to the one used by Kristiansen (2004:4) who adopted a holistic approach and theoretical triangulation when he empirically tried to integrate the entrepreneurial process and its context. The aim of such an approach according to Zafirovski (1999:588) is to find 'a combination of theoretically creative and empirically grounded analysis' closer to 'storytelling' than the mathematical line of economic sociology. Kristiansen (2004:4) used a qualitative methodology to expand theory rather than proving the existing theory by statistics. A slight difference in the approach followed by this research is that although the conceptual framework (context) used as guideline for the testable model was based on the literature review and compared to the conceptual model of Neergaard et al., no central theory was used.

Questionnaire Design

A structured questionnaire was used as a basis for a survey approach in order to obtain biographical particulars, typical behaviour, opinions, beliefs, convictions and attitudes from participants. The questionnaire was designed in order to serve as a basis for personal interviews and was based on the literature review. The questionnaire used classification, open-ended and attitudinal questions. The questions in the questionnaire were grouped into three sections, namely:

• **Section 1:** Profiles of the businesses and personal characteristics of entrepreneur/non entrepreneur groups. The questions were primarily of a classification nature and aimed at providing

background of the entrepreneur and determine his/her entrepreneurial background.

- Section 2: Structure and content of the entrepreneur network . Four sub-sections dealt with entrepreneurial and non entrepreneurial groups: network size, network activity, network density and network diversity.
- **Section 3:** Benefits, successes and negative effects derived from the network.

Entrepreneurial and non-entrepreneurial groups' perceptions of positive and negative aspects of networks.

Sampling

A judgemental convenience sample of 8 entrepreneurial firms and 8 nonentrepreneurial firms was taken. The 'judge', who happened to be an experienced and successful entrepreneur, was at the time of the survey Chairman of the Pietermaritzburg Chamber of Commerce and Industry. He was asked to select the sample from the member list of the Chamber after having been given a definition of what could be regarded as an entrepreneurial firm. An 'entrepreneurial firm' was for the purposes of the selection defined as: 'firms whose primary objectives were to earn profits and to grow and who could be distinguished from nonentrepreneurial firms by: innovation, potential for growth and strategic objectives'. The distinction by Nieman, Hough and Nieuwenhuizen (2003:10-12) between entrepreneurial and non-entrepreneurial or small businesses is that entrepreneurial businesses create their own markets, highly competitive are proactive and entrepreneurial or small businesses do not dominantly display these characteristics. The researchers are aware of the potential bias that could have resulted from the use of this method and would consequently handle the findings with caution.

Pilot Study

A pilot study was conducted among three businesses in order to ensure face and content validity. Minor changes had to be done. The three respondents were excluded from the final survey in order to avoid the 'practice effect' where respondents, on the second attempt, try to correct as they think they should instead of sincerely telling the truth (Obiri, 2002:52).

Findings of Empirical Survey

The discussion of the findings of the pilot study is divided into three sections. Section 1 delineates the profiles of the businesses and personal characteristics of entrepreneur and non entrepreneur groups. Section 2 describes the network structure and contents of the two groups and Section 3 deals with entrepreneurial and non-entrepreneurial groups' perceptions of positive and negative aspects of networks.

Section 1: Profiles of the Businesses and Personal Characteristics of the Entrepreneurial and Nonentrepreneurial Groups

00 0	Entrepreneurial	Non-Entrepreneurial
	Firms (n=8)	Firms (n=8)
Sector:		
<u>Service</u>	50. 00%	25.00%
Rental	12.50%	12.50%
Manufacturing		12.50%
Construction	37.50%	12.50%
Other (>1 sector)	37.30%	37.50%
No. of permanent employees (Excl.		
owner)		
<u>1-5</u>	12.50%	25.00%
6-10	12.50%	25.00%
<u>11-50</u>	50.00%	50.00%
<u>51-100</u>	25.00%	
	Entrepreneurial	Non-Entrepreneurial
	<u>Firms</u>	<u>Firms</u>
Business Age		
	5 years25.00%	6 years25.00%
	8 years12.50%	
	9 years12.50%	9 years12.50%
	10 years25.00%	13 years12.50%
	18 years12.50%	15 years12.50%

... Impact of ... Entrepreneurial Networks on the Success of Businesses ...

	30 years12.50%	22 years25.00%
		103 years-12.50%
Parents owned own business		
	50.00%	62.50%
Involved in clubs and societies at		
school level		
	62.50%	50.00%
Current active involvement in clubs		
and societies		
	37.50%	62.50%
Age of Respondent		
<u>25-36 years</u>		12.50%
<u>37-45 years</u>	50.00%	12.50%
<u>46-55 years</u>	37.50%	50.00%
<u>56-65 Years</u>	12.50%	12.50%
<u>66+</u>		12.50%
Gender		
Male	62.50%	75.00%
<u>Female</u>	37.50%	25.00%
Post Matric Qualific. (All had Matric)	(<u>n=8</u>)	(<u>n=5</u>)
Nursing Diploma	12.50%	
BSc Engineering	37.50%	
BA	12.50%	20.00%
Teaching Diploma	12.50%	
B.Com	12.50%	40.00%
Dress Making and Design Diploma		20.00%
Marketing Diploma		20.00%
Agriculture Diploma	12.50%	

Table 1: Profile of respondents

Summary of Profile

Entrepreneurial firms tended to operate more in the service sector than non-entrepreneurial firms. This is in line with the international trend of growth in the service sector. It appeared as though entrepreneurial firms provided more employment than non-entrepreneurial firms. Business age did not appear to be different for the two groups. Fewer entrepreneurial firms have previously been exposed to entrepreneurial role models

non-entrepreneurial than firms. The pressure entrepreneurial firms not to fail because there was not a safety net of family support, could have been the reason for their success or they might not have been as limited by pressures to keep up traditional family business and traditions and could consequently act more innovatively. Entrepreneurial firms have been more involved in clubs and societies at school level than non-entrepreneurial firms. The opposite applied to current activities. This phenomenon supports the notion that entrepreneurial firms network for a reason with selected people and did not waste time by trying to become everybody's friend. Entrepreneurial respondents tended to be slightly younger than non-entrepreneurial respondents. In both groups, males were the majority in line with the national profile of business ownership. All respondents had matric with entrepreneurial firms possessing higher post matric qualifications than non-entrepreneurial firms.

Section 2. Structure and Content of Entrepreneurial and Non-entrepreneurial Networks

Network Contacts

Fifty percent of the entrepreneurial firms and 25% of the non-entrepreneurial firms interacted with 10 people on a regular basis to secure business information. The mean for the entrepreneurial group of 7.75 people was close to the 7.2 found by Birley, Cromie and Myers (1990:17) but higher than the 6.75 of non-entrepreneurial firms.

Reason for Interaction

The entrepreneurial firms were more focused and goal orientated in their networking activity than the non-entrepreneurial firms. They indicated that they were actively looking for information and were more focused on specific areas like accounting, supplier contact and banking than general business. This was in line with the findings of De Heer (2001:1).

Hours per Week Spent to Develop New Contacts

Hours spent on developing new contacts were surprisingly lower for entrepreneurial firms (5.5 hours per week) than for non-entrepreneurial firms (7.33 hours per week). Both groups spent less hours per week than recorded by Birley et al. (1990:19). The tendency among entrepreneurial firms to focus their networking has the danger of leading to a situation where too little time is spent on finding new contacts.

Hours spent on Maintaining Existing Contacts (other than Customers)

Entrepreneurial firms spent an average of 8.25 hours per week as against 9.13 hours per week for non-entrepreneurs on maintaining existing contacts. As no quality versus quantity measurement was employed, it is not possible to make any conclusions with regard to this finding.

Personal Contact Group

The participants were asked to list the initials of the five people with whom they particularly liked to talk about business matters. Recollection of initials as well as the name of a person in a given network is regarded as giving an indication of the depth of the relationship. The majority (62.5%) of the entrepreneurial group listed five people with initials while only 50% of the non-entrepreneurial group could list five in this detail suggesting that the former group have deeper knowledge of individuals belonging to their network. This could be attributed to the previously stated point that the entrepreneurial group is more focused and goal orientated in their networking activity. The two groups spent almost the same time (11-12 hours per month) being in contact with their personal contact group. Contrary to expectations the non-entrepreneurial group spent 30 minutes longer. The entrepreneurial group knew their personal contact group longer (16.63 years) than the non-entrepreneurial group (13.50 years). Should this higher duration of the entrepreneurial group's networks be considered, Birley et al.'s (1990:20) finding that networks tend to become more useful with age as relationships develop and individuals learn how to get the best out of them may especially apply to the entrepreneurial group.

Extended Networks

This question tried to determine how many people belong to the networks of the five people in the personal contact group. The entrepreneurial firms had a larger group in their extended network of 26 people as against the non-entrepreneurial group with 23 people.

Density of The Network

The entrepreneurial firm's networks were less dense (density refers to members of the personal contact group knowing each other) than those of non-entrepreneurial firms. This was measured by identifying the number of weak ties where the members of the personal contact group did not know each other. The implication is that entrepreneurial firms tend to add more 'new' or diverse sources of information than become trapped with a group that tend to think alike.

Occupation of Personal Contacts

The majority (52.78%) of the personal contact group of entrepreneurial firms are self-employed while only 28.57% of the non-entrepreneurial group's personal contact groups are self-employed. This is a further indication that the entrepreneurial firms are focused and goal orientated in their networking as they ensure that their network contacts can offer business information based on hands-on experience.

Section 3: Benefits, Successes and Negative Effects Derived from the Network

- The majority of both groups acknowledged the positive role of networks in their current business success
- Both groups indicated that they were more profitable and experienced higher growth than their competition as a result of their networking activities
- Both groups were of the opinion that their networking activities helped their business to become successful
- Non-entrepreneurial firms have as a result of networking produced more new products than entrepreneurial firms. They could, however, not have been more successful than

entrepreneurial firms in general as the latter experienced higher growth rates and created more jobs. This raises the question of how profitable and market-orientated the new innovations really were.

• The majority of both groups believed that networking contributed to the establishment of a competitive advantage.

A Proposed Conceptual Framework for the Model

Based on the literature review and the empirical research conducted, the following elements have to be combined into a conceptual framework:

- A. An entrepreneur who has the ability to identify the resources needed to succeed.
- B. The ability to identify the 'structural holes' that are present in the resources identified in (A)
- C. The identification of potential networking contacts to bridge the structural holes in (B)
- D. The establishment of a Networking Group that will help to bridge the structural holes. In establishing a network group, the entrepreneur should consider the three dimensions of networking structure, interaction, and content as referred to by Neergaard et al., (2005:347) and addressed in E, F, and G below as well as in the model that follows.
- E. Establishing a networking structure based on:
- **Anchorage** which is based on a goal-oriented network the focus of the network inquiry.
- Density which is a measure of the extent of connectedness between network partners essentially favouring a greater diversity across contacts.
- **Range** which concerns the social heterogeneity of the network actors the more heterogeneous the contacts, the better.
- **Reachability** which refers to the ease with which network partners can contact one another the length of time personal contacts are known could help to increase reachability.
- F. Addressing network interactions based on:
- **Intensity** which concerns the honouring of obligations by members of the network

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- **Frequency** which involves members of a network maintaining regular contact between themselves.
- **Durability** which measures the length of time that a relationship lasted for the longer the personal contact group is known the better.
- **Direction** which refers to the orientation of the group, which needs to be goal-oriented.
- G. The entrepreneur addresses network content for support in the following areas:
- **Emotional** which helps enhance self-esteem through sharing of life experiences.
- **Tangible** (or material) which involves obtaining physical resources such as financial and material.
- Companionship which helps in distracting people from their problems and helping to facilitate affective moods (Wan et al., 1996 cited in Neergaard et al. 2005:344)
- **Informational support** which involves the provision knowledge through information provision thus assisting in increasing efficiency in operating the network and generating solutions.
- H. Continuous monitoring of the success and appropriateness of the current networking base as networking needs are dynamic over time.

Schematically the conceptual model is indicated in Figure 1:

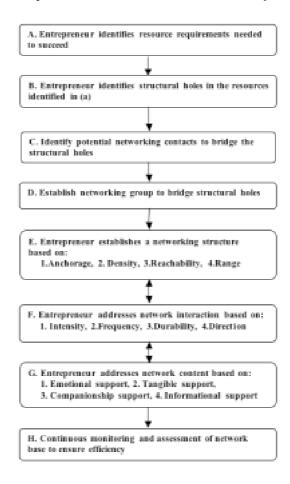


Figure 1: A conceptual framework for the model

A testable model can be defined as an instrument that will enable the researcher to measure a specific phenomenon, trend or variable. The testable model based on the conceptual framework should contain the following aspects as shown in Figure 2:

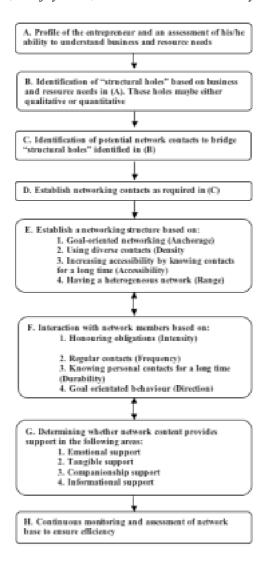


Figure 2: A Testable Model of the Impact of Entrepreneurial Networks

Summary, Recommendations, Caveats and Suggestions for Further Research

Networking is done for a reason. The specific reasons why networking is done will be relative to the specific business, its needs and challenges and the business environment it operates in. Successful businesses tend to be more focused and goal orientated in their networking activities. One of the premises of the testable model developed in this paper was that in order to succeed with networking, an entrepreneur has to have the ability to understand his/her business within a given business environment and be able to identify the areas where he/she lacks resources or information (called structural holes). Once these structural holes have been identified, the entrepreneur could identify potential networking contacts to assist with bridging these structural holes. The next step would be to establish and maintain such networking contacts as required for the specific business in question. In the final instance the entrepreneur will need to introduce some kind of mechanism to ensure continuous monitoring of the success of the networking system and adapt the networks to the requirements of the dynamic business environment. The characteristics, structure and requirements for successful networking have been dealt with in the literature review and should be incorporated in the relevant subsections of the tentative testable model developed in this paper in order to facilitate comparisons with previous and future research.

The tentative testable model developed in this paper has been based on a conceptual model designed by the authors who linked it to the literature review and an exploratory empirical study. Specific caveats that have to be borne in mind are that the theoretical base lacked a generally accepted theory as a point of departure and that the empirical study made use of a judgemental convenience sample in a specific region of one South African city only. The bottom line is that the findings cannot be generalised and that the model will need to be validated in future research. The most important contribution of this paper centres, however, in its attempt to improve understanding in a field that seriously lacks clarity.

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