



uOttawa

L'Université canadienne  
Canada's university

**FACULTÉ DES ÉTUDES SUPÉRIEURES  
ET POSTDOCTORALES**



**FACULTY OF GRADUATE AND  
POSTDOCTORAL STUDIES**

**Christopher McCluskey**

-----  
AUTEUR DE LA THÈSE / AUTHOR OF THESIS

**M.Sc. (Management)**

-----  
GRADE / DEGREE

**Telfer School of Management**

-----  
FACULTÉ, ÉCOLE, DÉPARTEMENT / FACULTY, SCHOOL, DEPARTMENT

**Entrepreneurship in the Periphery and the Role of Social Networks: A Study of Businesses in Iqaluit,  
Nunavut**

-----  
TITRE DE LA THÈSE / TITLE OF THESIS

**Scott Enign**

-----  
DIRECTEUR (DIRECTRICE) DE LA THÈSE / THESIS SUPERVISOR

-----  
CO-DIRECTEUR (CO-DIRECTRICE) DE LA THÈSE / THESIS CO-SUPERVISOR

**Mark Freel**

**Tyler Chamberlin**

**Gary W. Slater**

-----  
Le Doyen de la Faculté des études supérieures et postdoctorales / Dean of the Faculty of Graduate and Postdoctoral Studies

Entrepreneurship in the Periphery and the Role  
of Social Networks:  
A Study of Businesses in Iqaluit, Nunavut

*Christopher J. McCluskey*

Thesis submitted to  
The Faculty of Graduate and Postdoctoral Studies  
In partial fulfillment of the requirements  
For the MSc in Management program

Telfer School of Management  
University of Ottawa

© Chris McCluskey, Ottawa, Canada 2010



Library and Archives  
Canada

Published Heritage  
Branch

395 Wellington Street  
Ottawa ON K1A 0N4  
Canada

Bibliothèque et  
Archives Canada

Direction du  
Patrimoine de l'édition

395, rue Wellington  
Ottawa ON K1A 0N4  
Canada

*Your file* *Votre référence*  
ISBN: 978-0-494-79693-1  
*Our file* *Notre référence*  
ISBN: 978-0-494-79693-1

#### NOTICE:

The author has granted a non-exclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or non-commercial purposes, in microform, paper, electronic and/or any other formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

---

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.

#### AVIS:

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque et Archives Canada de reproduire, publier, archiver, sauvegarder, conserver, transmettre au public par télécommunication ou par l'Internet, prêter, distribuer et vendre des thèses partout dans le monde, à des fins commerciales ou autres, sur support microforme, papier, électronique et/ou autres formats.

L'auteur conserve la propriété du droit d'auteur et des droits moraux qui protègent cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

---

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de cette thèse.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.

  
**Canada**

## ***Abstract***

---

The notion of Canada as a cultural mosaic is especially vivid when comparing life in Nunavut to that of the rest of the country. Not only is the predominant Inuit culture unique in many ways, but so too are the geographical characteristics that make Nunavut and the Canadian North so different from many other regions in the country. To gain a better understanding of entrepreneurship in Nunavut, the research explores how entrepreneurs build and use their social networks and the role of brokerage and closure in the entrepreneurial process. Using a qualitative approach of observation and interviews in the field to gather the data, the findings describe how networks are used in business in the North, and support the conclusion that networks are important for the coordination of resources.

## ***Table of Contents***

---

<u>INTRODUCTION</u>	<u>1</u>
<u>CONTEXT OF THE STUDY</u>	<u>2</u>
<u>REVIEW OF THE LITERATURE</u>	<u>9</u>
FIGURE 1: BROKERAGE & CLOSURE	21
<u>RESEARCH QUESTION</u>	<u>25</u>
<u>RESEARCH METHODS</u>	<u>26</u>
<u>ANALYSIS OF THEMES &amp; DISCUSSION</u>	<u>37</u>
FIGURE 2: MONTHLY CONTACT WITH NETWORK NODES	51
FIGURE 3: TENURE OF RELATIONSHIPS WITH NETWORK NODES	55
FIGURE 4: INITIAL LOSSES BY SMALL SMALL NEW VENTURE	64
<u>CONCLUSIONS &amp; RECOMMENDATIONS</u>	<u>67</u>
<u>REFERENCES</u>	<u>76</u>
<u>APPENDIX</u>	<u>81</u>
FIGURE 5: MAP OF CANADA	81
TABLE 1: REGISTERED BUSINESSES IN IQALUIT, NUNAVUT	82
TABLE 2: DESCRIPTIVE STATISTICS	83
TABLE 3: PARTICIPANT PROFILE	83
TABLE 4: KEY CONTACTS - STRONG & WEAK TIES	83
TABLE 5: FREQUENCY OF CONTACT WITH KEY NETWORK MEMBERS	83
TABLE 6: DURATION OF NETWORK TIES	84
TABLE 7: CHARACTERISTICS & QUALITIES OF KEY NETWORK CONTACTS	84
TABLE 8: NETWORK DENSITY	84
TABLE 9: INTERCONNECTEDNESS OF THE NETWORK	84
TABLE 10: THE ROLE OF BROKERS	84

## ***Introduction***

---

There is truth to the old notion that who you know might be as important as what you know. In interacting with individuals, especially those with whom you have a bond, there is a measure of intrinsic value, or social capital, which develops as a result of trust, reciprocity and shared values. For an individual, social capital is the intangible asset that may lead to future economic returns. On an accounting balance sheet, social capital might be listed as “goodwill” – the value of the company’s reputation that translates to added economic value. Previous research has shown social capital can lead to increased performance for individuals, organizations and entrepreneurs (Uzzi, 1997; Burt, 1992; Bourdieu, 1983). When a friend gives you an extra hockey ticket, when you get an inside scoop on a new development or when you get set up on a blind date, your social capital is being activated and translated to physical or economic capital.

Social capital develops in the social network, and different network structures – the arrangement of different relationships and interconnectedness and redundancy of the ties within the network – may each provide some benefit to entrepreneurs (Coleman, 1988; Ahuja, 2000). Exactly which structure provides the most benefit is not necessarily conclusive. In some instances, a tightly knit network of trusted individuals, or a structure of closure, leads to positive outcomes. In other cases, brokerage, a network characterized by unique links to otherwise disparate groups, could offer the most value. From a theoretical perspective, the purpose of this paper is to explore how social networks are built and used by entrepreneurs and how and why the different structures of brokerage and closure provide benefits to the entrepreneur.

Given that context can influence how entrepreneurs behave, the practical motivation for this paper is to develop a better understanding of entrepreneurship in a unique setting and to compare these findings to those from other regions. A particularly interesting setting is Iqaluit, Nunavut. The concentration of the indigenous population of the Inuit people, the geographic isolation and the relatively recent introduction of a modern market economy is in stark contrast to much of the rest of Canada and the Western world. Furthermore, there is little published understanding of business in Nunavut or the Canadian North, let alone Iqaluit, and, as such, further study is merited.

## ***Context of the Study***

---

Nunavut, meaning “Our Land,” is Canada’s newest, largest and most northern territory. The following section provides a brief overview of the political, economic, demographic and geographic features of Nunavut and of her inhabitants.

### *Political Climate*

Formerly part of the Northwest Territories, Nunavut was annexed in 1999 to allow the mostly homogenous population to self-govern. The legislative system in Nunavut is unique for Canada in that the indigenous population has a great deal of control over their own affairs. The Government is decidedly supportive of business, entrepreneurship, and economic expansion in its official position statements and other communications, though it is not clear whether this is congruently supported through policy or whether it reflects the will of the majority of constituents.

Arctic Sovereignty remains a key platform for the Canadian Federal Government, and many initiatives are expected in this region to secure this claim. In February 2010, the Finance Ministers of the G7 countries met in Iqaluit. This event was widely regarded as an opportunity to showcase the Canadian Arctic and reinforce the country's claim on the lands. With additional money flowing to Nunavut, additional development and entrepreneurial activity should follow.

### *Demographic Characteristics*

As of July 1, 2010, the Nunavut Bureau of Statistics (2010) estimated there were 33,220 residents of Nunavut. Iqaluit is the most populous city with 6,184 residents as of the 2006 census (Statistics Canada, 2007); assuming a similar growth rate, the 2010 population of Iqaluit would be approximately 7,000 residents. The population of the territory is primarily indigenous Inuit, with approximately 85% of the total population belonging to this group. The area has experienced tremendous population growth rates in the past 25 years, notably a 32% growth rate between 1986 and 1996 (Conference Board of Canada, 2001) and more recently a 10.2% growth rate between 2001 and 2006 (Statistics Canada, 2007). In the same 2001 to 2006 period, the Iqaluit growth rate outpaced that of the rest of the territory at 18.1%. As a result, the population of Nunavut is extremely young, with over one-third of the population being reported in 2006 as under the age of 18 (Statistics Canada, 2007).

Education remains a significant challenge in Nunavut. Of the population between the ages of 20 and 24, 86.2% of Canadians have completed high school compared with only 34.8% of those in Nunavut. In addition, almost 75% of Nunavut's workforce have significant literacy or numeracy challenges (Conference Board of Canada, 2008). Household income is also significantly lower

in Nunavut, with median family earnings in 2005 of \$49,270 versus \$63,866 in the rest of Canada (Statistics Canada, 2007). Iqaluit, by contrast, has a significantly higher household income of \$92,123. This can be at least partially explained by the concentration of high paying government jobs in Iqaluit and a far lower unemployment rate of 7.8% (Ibid).

### *Economic Climate*

Nunavut is plagued by chronically high unemployment, especially among the Inuit. The 3-month moving average ending July 2010 shows an overall unemployment rate of 18.6% for Nunavut compared to 8% for the rest of Canada, with an Inuit unemployment rate of 24.2% (Nunavut Bureau of Statistics, 2010). Although entrepreneurship is evident, the government remains the largest employer. By decree, the composition of Territorial jobs is to reflect the overall composition of the population; as a result, 85% of jobs are reserved for Inuit.

The 2003 Economic Development Strategy Conference, which comprised a wide cross-section of economic development agencies, identified several idiosyncrasies of the Nunavut economy, namely: lack of support for Inuit-owned business, demand for workers in the area but prevalent unemployment, and no clear strategy for economic development. These curiosities provide a glimpse of the very real challenges faced in the North and provide a stark contrast with that of more urban and developed areas of Canada.

The Nunavut Economic Development Forum (2004) lists financial support for entrepreneurs as one of the most significant challenges for the economic development and self-reliance of the North. The entrepreneurs in Iqaluit are fortunate in that they have two national chartered banks;

many of the entrepreneurs in other Northern communities are a plane ride away from similar institutions. Still, it is hard to imagine having only two banks in a community with a fast growing population and developing economic base being able to provide adequate financial support for new and existing business.

Geographic isolation, in conjunction with limited local infrastructure, limits opportunity in Nunavut – according to the Conference Board of Canada’s 2001 Nunavut Economic Outlook, “the state of infrastructure in Nunavut is a serious problem that is affecting both the economic and social development of the territory.” Yet these same geographic characteristics could be a catalyst for economic growth in the region. Scenically, Nunavut is a breathtaking territory with tremendous vistas and wildlife. Given the unspoiled natural beauty of the territory and the unharvested natural resources, eco-tourism and mineral extraction are both seen as key factors in the economic development of the territory (Nunavut Economic Development Forum, 2004).

A new era of development was heralded with the relatively recent introduction of the Internet. This achievement was trumpeted as a means to increase the prosperity of the region by opening up new markets to local entrepreneurs and thereby directing new money into the territory. However, the limited findings to date have shown no significant positive impact of this technology, and some anecdotal evidence even suggests that web access has funneled funds out of Nunavut as a result of online shopping.

Traditional Inuit life was a matter of survival and collective activities. While markets existed, they were not profit-based in the same way as they are today. According to Parfait, in Dana et al.

(2005, pp146) “there was no cash in early Inuit life. People traded and shared. So stature among the Inuit had nothing to do with wealth.” As explorers began to open up the Canadian Arctic, trade began to develop based on the natural resources the Inuit were adept at harvesting. This new economy operated in relative harmony with the parallel traditional lifestyle of the Inuit well into the 20<sup>th</sup> century. However, the following decades were marked by a mass transformation from traditional ways of life and limited small-scale economic activity to a more modern economy. Though hunting activities remain an integral part of the economy, the primary economic activities have evolved to include more formal and institutionalized activity, substantial government employment and an increasing reliance on natural resources extracted through mining. As the territory matured economically and technologically, the Inuit were offered a new, westernized, alternative to their nomadic lifestyle and consequently many Inuit gave up their traditional way of life. Many years later, and despite many success stories, the Inuit as a whole are often characterized by over-reliance on government and limited economic opportunity. While some have embraced the new reality, many others continue to languish.

### *Entrepreneurship*

Entrepreneurs are an important part of Canadian and global economies. In Canada, entrepreneurs are often associated with driving growth and economic prosperity. According to Acs and Audretsch (2005), “entrepreneurship has come to be perceived as an engine of economic and social development throughout the world.” As a result, the impact of success (or failure) of the entrepreneur extends beyond the individual to a large population and is therefore significant. Geographic isolation may constrain the emergence of studies of entrepreneurship in the North due to practical reasons, but this should not be taken as a signal to overall lack of entrepreneurial

activity. Instead, the limited stream of literature on this topic actually suggests a substantial number of entrepreneurs in the territory. According to the Government of Canada Report on Northern Entrepreneurship (Walker, 2009), 65% of all employment in Nunavut is provided by small, micro or medium sized business. While not a direct measure of entrepreneurship, we can infer that entrepreneurial activity does play an important role in the economy of Nunavut. Although entrepreneurship is important in our Western society and has an emerging role in the development of Nunavut, it appears the indigenous people are less interested than others. According to Dana (1995), “indigenous peoples...do not accept the assumption that humanity will benefit from the construction of a world culture of consumerism.” Of the entrepreneurs in Iqaluit, Inuit are a disproportionately small part of the picture. Of 57 businesses studied in Iqaluit, only 5% were run by an Aboriginal entrepreneur (Dana et al., 2005) - an intriguing finding considering 85% of the Nunavut population is Inuit. Yet this issue of disproportionate entrepreneurial representation is not unique to the Inuit of Iqaluit. Indigenous people throughout the world are often comparatively underrepresented in entrepreneurship. For instance, entrepreneurs represent 7.9% of the Canadian population as a whole, yet Aboriginal entrepreneurs represent just 3.9% of the total Aboriginal population (Government of Canada, 2002).

In the same study of entrepreneurs in Iqaluit, Dana also finds that Inuit entrepreneurs are best defined as reactive to the economic environment. Whereas the majority of the sample was categorized as traditional opportunity-seeking entrepreneurs who exploit the economic environment to create an advantage, all of the Inuit in the sample were considered by Dana to be reactionary entrepreneurs. This definition is essentially interchangeable with the more

commonly used ‘necessity-based entrepreneurship,’ – that the entrepreneurial activity “reflects the individual’s perception that such actions presented the best option available for employment but not necessarily the preferred option,” (Acs & Varga, 2005). Another Dana study (1995) reveals similar results in the North. Of 64 entrepreneurs studied, only 12 were Inuit, and of these 12, all but one was engaged in necessity entrepreneurship. The few Aboriginal entrepreneurs who operate in Nunavut appear to be the exception rather than the rule and, as such, the study of Inuit entrepreneurs in Nunavut has been limited to date.

### *Geographic and Physical Characteristics*

Nunavut is located past the tree line in the arctic tundra, experiences extremely cold seasonal average temperatures and has the unique characteristic of twenty-four hours of sunlight in some months. The territory accounts for almost twenty-five percent of the Canadian landmass, but less than one-tenth of one percent of the total population. Accordingly, access to Nunavut is limited – the territory is located in the remote north and is not connected to the adjoining province or territory by road. Even within the territory, few communities are interconnected by road, and where they do exist, these roads are unpaved and generally poorly maintained. As such, sea and air are the primary means of accessing the territory. The primary hub for commerce and the connecting point for travel to the rest of the territory is Iqaluit, the capital city. The Iqaluit Airport was originally established as the United States Frobisher Bay Air Force Base, and as such the runway can accommodate the largest of aircraft. While direct commercial air travel is available from such key centres as Montreal, Ottawa, and Yellowknife, the cost of such travel is significantly more expensive on a per kilometer basis than most elsewhere in Canada. Seaport access provides a more cost-effective means of shipping goods to and from the Territory but is

available for only a few months of the year when shipping routes are not frozen. As such, the majority of goods for consumers and businesses must be pre-ordered, bulk shipped, and kept on hand for use much later in the year.

From an intuitive standpoint, these characteristics define Nunavut as a peripheral region. Not only is Nunavut an outer boundary of Canada and essentially a last frontier, but from an economic standpoint, market activity is minute in comparison to the rest of Canada. From a theoretical standpoint, the core-periphery model of national development (Krugman, 1991) would also define Nunavut as the periphery. According to this model, economic activity becomes concentrated in certain areas over time – the cores – while the periphery becomes secondary to the core as a result of transportation costs, manufacturing prevalence and economies of scale. Similarly, transportation to and from Nunavut is costly, manufacturing is limited and economies of scale are not easily derived.

## ***Review of the Literature***

---

### **Entrepreneurship**

Entrepreneurship is a sequential process consisting of, and depending on, the existence of an opportunity, the discovery of the opportunity and the exploitation of this opportunity (Shane & Eckhardt, 2003). Implicit in the process are the concepts of risk and uncertainty. According to Gifford (2003), “the entrepreneur functions in the economy only if the environment is uncertain.” In other words, without uncertainty there would be no new opportunities, and without new opportunities, there would be no entrepreneurs. What, exactly, defines an entrepreneur, though, is often varied in the literature. In a meta-analysis of publications defining

entrepreneurship, Gedeon (2010) demonstrates that entrepreneurs are sometimes defined by business ownership, innovation, co-ordination of factors of production and assumption of risk, among many others, and concludes that “entrepreneurship is a multi-dimensional concept” that can include only one or many of these characteristics. Rather than a tidy and all encompassing definition of the entrepreneur, a broad continuum exists that encompasses those who follow the entrepreneurial process.

### **A Description of Social Capital**

Capital, in a broad sense, refers to “money or assets put to economic use” (*The Economist*, 2008). The most widely recognized component, and therefore most negotiable, is financial capital. This includes tangible assets such as cash, buildings or labour, or quasi-tangible assets, which can be easily converted to cash, such as stocks or bonds. The second form of capital is cultural capital, the intangible accumulation of knowledge and designations that symbolize investment in institutionalized human capital. Social capital derives from interactions between people or communities. It is the intangible asset in social exchange that represents some investment in social relations with expected returns (Lin et al., 2001). It is based on the premise of economic transactions being socially embedded and derives from the degree to which a person is able to leverage their social network for individual gain. Burt, Hogarth and Michaud (2000) liken social capital to the metaphor that “people who do better are somehow connected.”

Although the metaphor by Burt may be true and the definition by Lin may be accurate, neither are completely satisfactory in that they are only capable of equating social capital with outcomes rather than defining by characteristics. It is challenging to reach a definition other than by instrumental means simply because there are many diverse embodiments of social capital. For

instance, social capital may also be affiliation to a group or familial unit. It might be linkages to people or groups, ancestry or influence on others. The reality is that social capital is many different things to many different people. Burt et al. (2000) observe that the social capital can be derived in three distinct ways: contagion, prominence and range. In this model, contagion as a source of social capital reflects individuals taking cues from others in select settings as a result of ambiguous roles. In the network model of prominence, the status of a group relative to others signals quality of resources and as a signal to the qualities to which others should aspire. Finally, in the network model of range, two competing arguments, that of closure and brokerage (which are discussed in more detail later), suggest that the structure of the network provides competitive advantage to the individual or firm.

To understand the benefits of social capital, it is important to assess the quality of returns it may generate. The content of these returns will vary from person to person, organization to organization and community to community. "Returns" can broadly be cast as either instrumental or expressive (Lin et al., 2002). Expressive returns<sup>1</sup> are benefits that impact an individual's mental health, physical well-being and self-image. While these are all important positive outcomes of social capital, the ones this research is most concerned with relate directly to their ability to generate positive economic outcomes. In other words, how does the acquisition of social capital facilitate the accumulation of economic capital and economic returns through opportunity recognition and opportunity exploitation? There are several ways in which this is possible, and some of the more common themes in the literature are summarized. Jack and

---

<sup>1</sup> Extensive research has been conducted in a variety of disciplines on the non-economic, or expressive, value of social capital. Among the outcomes which may accrue to a person rich in social capital are: better resistance to infections (Cohen, 1997), increased self-efficacy and decreased likelihood of depression.

Anderson (2002) suggest social capital is beneficial in an economic sense for its ability to help find new opportunities, maintain existing contacts, tap into external resources and knowledge held by others and to become known. Granovetter (1984) suggests social capital and social networks will help you get a job, or, in other words, obtain scarce resources. Burt contends that social capital will lead to increased pay relative your peers and earlier promotions. These outcomes are made possible because the network facilitates the flow of information, both to the entrepreneur and away from her. This information can then be especially helpful to recognize opportunities and to more efficiently gather resources.

Durlauf and Fafchamps (2004) observe that social capital can only provide the above-mentioned benefits with Pareto efficiency (an allocation of resources where both parties are better off – a win-win) when it is used as a moderator for imperfections in the market since without imperfections, all opportunities would immediately be realized. In imperfect markets, “inefficiencies such as externalities and free-riding, incomplete information and enforcement, imperfect competition, and the like,” provide opportunities for entrepreneurs to discover and exploit. Since the absence of these factors is rare, social capital often plays a key, though not necessarily exclusive role; the value of social capital may lie in the low cost or simplicity in overcoming these obstacles. In Nunavut, market inefficiencies are extreme and so social capital may play an important role in exchange.

## **THEORETICAL ANTECEDENTS**

Classical and neo-classical economic study is interested in the actions of individual actors who always behave in their own self interest. The abstraction of this concept is homo economicus,

who will always behave in a rational, utility maximizing way. This school of thought would contend that an individual would evaluate the social dimension of exchange and proceed with an action or exchange insofar that it provides some immediate personal benefit – the consideration of others is secondary. In this scenario, a social network would only exist temporarily; as Burt et al. (2000, p. 348) put it, “the network residue from yesterday should be irrelevant to market behaviour tomorrow. The recurrence of the network would have nothing to do with the prior network as a causal factor.”

The downside to this perspective is two-fold. First, as Polanyi (1957) would suggest, it fails to account for the substantive reality – there is a clear demarcation between theoretical economics and what actually exists. Relationships between buyers and sellers in the market do persist, contrary to any economic-theory based incentive to do so. Second, it assumes that the market on its own always provides sufficient information for rational decision-making. The competing sociological perspective suggests that individuals, as social creatures, are bound by values, rules and norms and situational influences. As such, individuals do not always behave in utility maximizing ways. In this way, the behaviour may sometimes be characterized as irrational by economists. According to Coleman (1988), the value of this approach is the ability to “describe action in social context and to explain the way action is shaped, constrained and redirected by the social context.” While it recognizes that social behaviour influences a person’s actions, it fails, as Coleman also identifies, to provide a code of behaviour that would govern a person’s actions. Thus, the pure economic perspective and sociological perspectives do, as defined by Granovetter (1973), view human beings as either under or over-socialized.

Weber suggests that motivations for behaviour differ depending on the circumstances and distinguishes four ideal-typical types of orientation in social relationships: “1) Purposive rational action is directed by the successful calculation of means towards a given end; 2) Value rational action is directed towards an ideal and is carried out for its own sake; 3) Affective action is also carried out for its own sake, yet it lacks a clear ideal, and rests on an emotive state; and 4) Traditional action is carried out under the influence of a custom or habit.” This attempt recognizes different circumstances influence the behaviours of individuals but is incomplete in that it does not explain why such behaviours exist in the first place. Granovetter (1973) builds on Weber and suggests that neither the economic nor the sociological perspectives can fully explain human behaviour. The under-socialized perspective is that of classical and neoclassical economists; it contends that actors seek to maximize economic utility while ignoring any dimension of social structure or relations. On the other hand, the over-socialized perspective sees people as overly sensitive to the needs of others. Economic sociologists attempt to reconcile the disparity by incorporating the concept of socialization in the economic model of rational behaviour. According to this school of thought, economic action is socially embedded in social relations (Granovetter, 1973). When applied to business people, “embeddedness is the process by which entrepreneurs become part of local structures” (Jack & Anderson, 2002). The process is seen to create value for individuals by “gaining and acquiring local knowledge, credibility and resources.” The theoretical application of this concept is an orientation that “accepts the principle of rational or purposive action and attempts to show how that principle, in conjunction with particular social concepts, can account for the actions of individuals” (Coleman, 1988).

The creation of social capital depends on the notions of trust, reciprocity, and social obligation. If all actors sought only to maximize their economic utility in each individual transaction, then they would not create social capital. The actions of an individual are governed by norms, socialization and expectations that help to explain why the interpersonal dimension plays a factor in economic transactions. Without the social embeddedness of economic actions, all players would go to the supplier offering the best mix of quality and price. However, with the overlay of social embeddedness, this is not necessarily the case. In these instances, “search for approval, status, sociability and power cannot be separated from economic action,” and impacts the behaviour of actors (Swedberg, 1998). Instead, individuals may choose to pursue a less efficient supplier (e.g., a friend just beginning a new career) because of social arrangements that connect them to this supplier. Values indoctrinated over time, such as obligation and expectations of reciprocity, reinforce these behaviours. This concept is displayed by the anonymous diner in a restaurant far from home. Despite the fact that the diner will likely never return, and that the restaurant cannot enforce sanctions against the patron, he or she is still likely to leave a tip for the waitress (Coleman, 1988). In this circumstance, there is no economic explanation for leaving a tip, yet it is a generally observed behaviour.

## **CONTEMPORARY SOCIAL CAPITAL RESEARCH**

Previous network research has focused on a broad range of themes, including embeddedness, network structures, network uses, national differences, and how networks impact entrepreneurial and new venture performance (Jack, 2010) and is often also categorized by the unit of analysis, or more precisely, “the level at which return or profit is conceived” (Lin et al., 2002). Typically,

the individual, the organization (a firm, group or other collection of individuals) or the community are the focus of study.

Research at the individual level is primarily concerned with economic returns to the actor, and includes works by Burt (1992, 2000, etc.) which shows similar positive results of social capital between French and American managers, and Granovetter (1973) who demonstrates the value of the social network for job seekers. At the organizational level, Uzzi (1997) has looked at the social capital of fashion industry firms in New York City and determined that relations are socially embedded despite the presence of competitive market forces which would, in theory, limit the need for such arrangements. Ahuja (2000) examined innovation in chemical firms and determined that networks characterized by closed, trust-based relationships lead to increased innovation. Ahuja also suggests that different structures may lead to different outcomes depending on the industry in which the organization operates. Soda et al. (2004), looking at the quasi-firm structure of production units in Italian cinema and television, concludes that the recency of the relationship impacts the possible outcomes of the relationship. Community level work has taken many forms. This vein of research has examined the creation of norms and values, the enforcement of these values by the group, and the outcomes of community social capital. Portes and Sensenbrenner (1993) studied immigrant communities and how their social structures impact economic performance. Findings suggest that while these structures may help to establish a business or support a member in time of need, there are potential costs, such as constraints on freedom or leeching by less prosperous members of the community. Coleman (1988) examines the social capital within a tightly-knit school community and finds that the interconnectedness of the network creates positive outcomes for its members. Putnam (1995)

looks at the decline of social capital in the United States and notes erosion in social connectedness and civic engagement.

A substantial amount of research effort has been devoted to the study of social capital of immigrants and of immigrant entrepreneurs. Although these studies are important for understanding the culture and behaviour of these groups, they also offer an added bonus. In these instances “foreign-born communities represent one of the clearest examples of the bearing contextual factors can have on the individual economic action. With skills learned in the home country devalued in the receiving labour market and with a generally poor command of the receiving country’s language, immigrants’ economic destinies depend heavily on the structures in which they become incorporated, and in particular, on the character of their own communities” (Portes & Sensenbrenner, 1993). Thus, in many cases the social capital of immigrants provides an extreme example of the role of social capital and in turn allows researchers to apply findings to other populations where the impact of social capital may not be so obvious. Somewhat related to immigrant entrepreneurship is indigenous entrepreneurship in that both groups are often marginalized and entrepreneurship can be a key vehicle for overcoming these hardships. There does not appear to be universal agreement to what, exactly, qualifies individuals as indigenous, but it is often related to some of the following criteria: “attachment to ancestral territories, presence of customary social and political institutions, economic systems primarily oriented to subsistence production, and indigenous language and self-identification and identification by others as members of a distinct cultural group” (Peredo, 2004).

## **DRAWBACKS AND TRADEOFFS ASSOCIATED WITH SOCIAL CAPITAL**

Although social capital is often positively related to performance and as a result often discussed with a positive connotation, there are tradeoffs, limitations, and consequences involved. Social capital, in some instances, can “impede the value-creation process, by leading to aborted exploration processes, the exclusion of new knowledge and built in disincentives for adopting new innovations” (Edelman, 2004). In these instances, the closure of the network may cause an individual or organization to forgo a lucrative opportunity.

Portes and Sensenbrenner (1993) identify social capital as occasionally constraining individual goal seeking and even causing actors to redefine goals. The example of entrepreneurs in Bali illustrates this drawback. Business owners, who have such strong associations, and thus obligations, to their familial group provide jobs and loans where it would not generally be prudent to do so. The results is a situation where “promising enterprises [turn] into welfare hotels, checking their economic expansion” (Portes & Sensenbrenner, 1993). Additional evidence from business people in the Ecuadorian Andes shows that the most successful are often Protestant because the Catholics experience additional demands on time and money as a result of their social networks.

Additionally, controls on freedom within a group rich on social capital may limit the free choice of members. Access to the group may come at the cost of exclusion in other groups. In other cases, such as that of oppressed groups, the best and brightest within the group are often prevented from leaving, as the remainder of the group sees the loss of a promising member as a threat to the group’s prosperity – this, despite the fact the oppressed group would likely benefit

from exit by some members. So while it may not lead to an absolute loss, there are tradeoffs that occur to realize social capital.

The social capital of Dominican business people in New York is seen as a key enabler of business success. Strong financial networks based on informal institutions provide the necessary capitalization of new firms. The informal networks rely not on formal contracts for repayment, but rather on the reputation of the individual and the threat of social ostracism upon default of a loan. Similar results are found amongst Cubans in Miami, where financial loans are based on the premise of “character.” This process “allows penniless refugees who had no standing in America to gain a foothold in the local economy” (Portes & Sensenbrenner, 1993) that otherwise would not be possible if social capital were not used as equivalent to other forms of tangible capital. Portes also defines the antecedents of social capital in immigrant communities as bounded solidarity and enforceable trust.

## **SOCIAL NETWORKS**

Individuals develop ties to other individuals and to groups. These ties then, writ large, form a person’s social network. The social network is the structure of relationships between groups of individuals and through which social capital is developed in groups of individuals. The value of the network, according to Bourdieu (1983), depends on “the size of the network of connections and the volume of the capital (economic, cultural, or symbolic) possessed in his own right by each of those to whom he is connected. In effect, the social network “acts as a multiplier effect on the capital he possesses in his own right.”

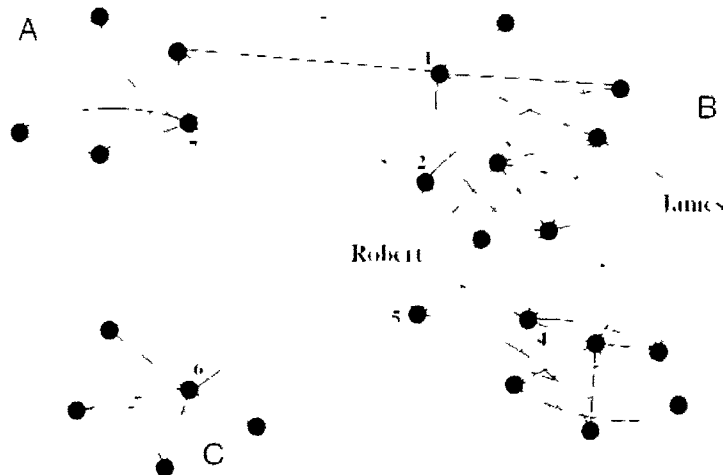
The relationships that comprise the social network vary in quality and outcomes. Granovetter (1973, p.1362) writes that the strength of an interpersonal relationship is generally thought to be “a combination of the amount of time, emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize each tie.” Strong relationships between two individuals also generally lead to an overlap in friendship circles. Chances are, if A and B are good friends, they will independently have many of the same friends. That A and B are close friends creates a fertile climate for such friendship overlap; spending more time together, trusting one another and consequently introducing existing friends is bound to happen over time. On the other hand, a weaker tie, one with less investment of time or emotion, is less likely to yield such common friendships. As a result, weak ties often exist between two individuals who would otherwise have no contact. In essence, the weak tie acts as bridge to connect to disparate individuals or groups – a function that could never be performed by a strong tie by virtue of the fact that others would have access to this group as well. So, while a weak tie is not necessary a bridge relationship, all bridge relationships are necessarily weak ties. These weak ties provide access to new networks that otherwise would not be attainable through existing contacts, thereby rendering some value to the parties involved. Thus, it is not merely the size of the network of ties that is important to creating value, but the *exclusivity* of these ties.

Strong ties between two individuals are likely to lead to foster new ties (strong or weak) between other connected individuals. When the members of a network share most or all of the same redundant ties, then the network is said to exhibit closure. This structure is “necessary for emergence and enforcement of norms and also for the trustworthiness of structure that allows the proliferation of obligations and expectations” (Coleman, 1988). The structure is well illustrated

through a concept of an elementary school where all the children know each other, and all parents are friends with each other. In this circumstance, parents can act as monitors or impose sanctions on other members of the group, regardless of which family they belong to (Coleman, 1988). It is important to note here that homogeneity of the group does not necessarily entail a closed network. Closure is represented in Figure 1 by James, who has no unique ties. Instead, his network consists of redundant ties within one system.

Closure is a result of strong ties between individuals within the group. Since each person is connected, trust is generally higher between individuals, information flows more quickly through the system, and control is exercised through group norms and values. Contravening group norms is bound to have consequences, as word travels quickly through the group and reputation can easily be eroded through the enforcement of sanctions. These sanctions, in turn, make it less risky to trust one another (Burt et al., 2000).

**Figure 1:** *Brokerage and Closure (Source: Burt et al., 2000, p.349)*



A brokerage structure shares few characteristics with that of closure, though the two are not mutually exclusive. Rather than an interconnected network of individuals, a brokerage arrangement connects a player to another group where it would otherwise not be so. Gaps exist between groups, and are symbolized in the network by what are referred to as structural holes (Burt, 1992). A person who is able to “span” these structural holes assumes a brokerage position between groups and plays a vital role by connecting to the resources of a separate network. In turn, these valuable links may lead to competitive advantages by accessing privileged information, or simply accessing it more quickly than others. An additional benefit to the brokerage position is the ability to dictate who receives what when connecting the disparate groups. In this way, the broker plays the role of gatekeeper. However, a brokerage position in a network of structural bridging is only valuable to the extent that such bridges connect to valuable resources. Brokerage is represented in Figure 1 by Robert, who spans the structural hole between groups B and C. It is important to note here that Robert also enjoys what could be considered closure in Group B and C as well. Burt et al. (2000) contend that all other things being equal, Robert enjoys greater social capital than James. Numerous empirical works by Burt (1992, 1993) and Burt et al. (2000, 2002) show evidence of brokerage roles as being advantageous. American managers were demonstrated to reach higher levels in their organizations more quickly than their confreres when their levels of structural spanning were higher (Burt, 1992). An extension of the study to French managers showed that structural spanning also played a key role in their success relative to their peers within the organization (Burt et al., 2000).

Whether or not these bridging roles to separate groups are categorically better than a closed group of interconnected players remains a contentious issue in the social capital literature. While they may seem to be competing for the same prize, the two may actually be beneficial in their own right. While Burt (1992) finds that network constraint, the measure of interconnectedness between members of the group and effectively the opposite of bridging relationships, among American managers is negatively related to performance, Ahuja (2000) shows contradictory results. Examining the relationship between innovation output, as measured by patent counts, and interfirm collaborative links in 97 chemical firms in the United States, Ahuja finds that structural holes actually reduce innovation output. Analyzing factors that may contribute to this finding, Ahuja suggests that the need for trust is paramount in the chemical industry. These trust relationships are suggested to limit opportunism and prevent other firms from stealing lucrative technologies. Investigation reveals that more direct ties are related to increased innovation, and more indirect ties are also related to increased innovation output, though the benefit of indirect ties is moderated by direct ties. Despite findings which support closure as advantageous to a firm, Ahuja is quick to suggest that these results may be context specific. He suggests that while closed networks may lead to greater innovation in the chemical industry, in other areas where quick access to new information is more important, structural holes are likely to be more beneficial. Lin et al. (2002) follow this context-based thinking by suggesting closure may be best in situations where preserving or maintaining existing resources is the desired outcome, whereas brokerage is best when searching for and obtaining new resources. However, he cautions that it is important to look at each scenario independently, as different variables would imply different strategies for attaining better outcomes.

Additional research has examined the impact of time on networks. Soda et al. (2004) finds a key difference between bridge relationships and closure relationships – that 90% of the time, bridge relationships disappear within a year while closure relationships persist. That these bridge ties are only temporary in nature suggest that the impact of these ties is time dependent as well. Because these bridge spanning roles, “derive benefits from timing, information and brokerage...the passage of time destroys such benefits” (Soda et al., 2004). In other words, ties that were used before but that are not maintained do not necessarily impact current or future outcomes. Anderson (2002) conceptualizes the time dimension by providing an interesting metaphor; “just as a [real] bridge needs maintenance and repair, a social capital bridge needs attention. Over time the bond may deteriorate unless it is attended to.”

For entrepreneurs, the social network can have a significant impact in both the opportunity recognition phase and for more efficiently organizing resources after the fact. According to Shane & Eckhardt (2003), the process of opportunity identification is a function of access to information, knowledge corridors, search activities, social ties and cognitive abilities. Social ties, and more specifically, the social network can provide access to new information and facilitate more efficient search activities. How the specific network structures of brokerage or closure inhibit or enable opportunity recognition has been shown to be context dependant. Examination of social network structures in new contexts can provide new elaborations of the concept. Once the opportunity has been discovered, the social network can remain valuable in the exploitation phase. Similar to how social networks provide value in the initial opportunity exploitation stage by providing an ongoing flow of information and the ability to impose sanctions against those who may otherwise break contracts, the social network can also provide

ongoing and novel ways to more efficiently coordinate resources. How entrepreneurs use the networks to extract value and what network structure provides the best returns is again expected to be context specific, and further study in new contexts can add meaningful insights.

## ***Research Question***

---

The general purpose of this case study was to better understand social networks of entrepreneurs within the context of Iqaluit. Given the limited academic research on entrepreneurship in the North, testing of specific hypotheses was deemed to be premature; instead, the primary focus of this project was to ask “generative questions” and to develop a broad understanding of the topic. According to Strauss in Flick (2002), this approach can “stimulate the line of investigation in profitable directions.” As such, the following broad question forms the foundation of the research project:

*What is the nature of entrepreneurship in the North and what function do social networks serve in this domain?*

More specifically, the research is interested in the characteristics of entrepreneurs’ networks, how these networks are used to provide value to the entrepreneur and whether this value comes from structures of brokerage or closure.

Entrepreneurs from a wide range of cultural backgrounds operate in Nunavut. While the overarching aim of the research is to better understand these entrepreneurs and their networks, a cultural lens will be applied where possible to evaluate the unique experiences of the Inuit,

especially their low incidence of entrepreneurship. Socio-cultural factors and cultural predisposition may limit the Inuit's motivation for entrepreneurship but so too may their social networks. These are considerations for which there seems to be little previous investigation and thus present an opportunity to add to the literature.

## ***Research Methods***

---

### **The Qualitative Paradigm**

The research question for this study involved addressing the 'how' and 'what' of social networks with respect to entrepreneurship in Iqaluit. Given this challenge, a qualitative approach provided the best means of exploring the topic. Whereas a linear model of research process (Flick, 2002) includes hypothesis generation, operationalization, sampling and collection, interpretation and validation, due to a lack of previous research on the subject and concerns about participant cooperation, the process for this particular research project was emergent in nature. Preliminary assumptions were created, and continuous collection and interpretation of data was used to evolve the project.

Creswell (2007) identifies five approaches to qualitative research. For our project, the case study approach was most suitable. Yin (2003) describes a case study as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context." The case study method allows for a holistic analysis of entrepreneurship within our bounded context of Iqaluit while still allowing for a particular emphasis on networks.

Field research was the source of data collection. While formal interviews represent the bulk of primary data, the researchers immersed themselves directly in the research environment for a one-week period. Seven days was deemed to provide enough time to gather a sufficient amount of data while respecting the high costs associated with research in Iqaluit. Through observation and informal interaction, the researchers were able to experience first hand the environment and the reality of the study participants and by doing so enriched our understanding of the topic.

### **Qualitative Methods of Data Collection**

#### *Study Population*

The study population was entrepreneurs in Iqaluit. While the ultimate goal would be to build an understanding of entrepreneurship at a Territorial level, given the logistical and economic challenges of accessing a geographical cross-section of these entrepreneurs, the study instead focused on entrepreneurs in Iqaluit to achieve a more practical level of analysis.

For the purpose of this study, a simple definition of an entrepreneur as a business owner was used in order to cast a wider net. While it could be argued that not all business owners are necessarily entrepreneurial, this definition does provide a meaningful starting point for the research as it represents very discrete criteria and is consistent with that used in previous research (Gedeon, 2010).

Because of the limited population of entrepreneurs in Iqaluit, in two instances, the definition of entrepreneurs was further relaxed to also include senior managers in large organizations. While not owning the business or necessarily having a direct financial risk in the organization, these

individuals were nevertheless included as they were the highest-ranking individuals at the Iqaluit operation and had a large degree of freedom in decision-making. According to Burt (2000), managers can be entrepreneurial, regardless of whether or not they are self-employed. Similar to classic entrepreneurs, they “monitor information more effectively than bureaucratic control [..and] move information faster, and to more people.” As such, this study of entrepreneurs was not constrained to the traditional definition of self-employed entrepreneurs, and hence extended its reach to senior managers in business. These non-standard entrepreneurs act as a proxy and add value to the research project by allowing for additional viewpoints.

As with many other problems, and common in qualitative research, it is not only the study population that can provide valuable insight to a question. Given that the business environment in Nunavut is not a closed space confined only to entrepreneurs, additional perspectives were necessary. As such, to gain a better understanding, and to help us answer the research question, a variety of stakeholders were consulted, including customers, suppliers, government officials, residents, friends, and visitors.

Language was initially expected to act as a barrier to this study and for financial reasons non-English speaking participants were intended to be excluded from the study population. However, there were no participants identified in the study who could not participate as a result of a language barrier.

### *Sampling Techniques*

An inability to locate and subsequently engage willing participants can often mar entrepreneurship research. Not only are entrepreneurs a small group, they often have significant constraints on their time and may be reluctant to speak to outsiders. Given this challenge, three sampling frames were employed to garner greater participation in the data collection process.

The first sampling technique utilized the most recent government issued business registry – the 2008 Iqaluit Business Directory – to contact potential participants. This approach provided access to all businesses registered with, and operating legally within, the City of Iqaluit. The directory represents the potential study population in its entirety as of 2008, with the exception of the grey area of artists, hunters, and trappers. Many of these individuals operate without license and below the radar of typical regulation and other enterprise. Although the perspective of more of these individuals would have been valuable for the research, no reasonable means for doing so was available at the time. Of the 622 entries in the Business Directory, 29 were categorized as either government or economic development associations and an additional 67 were categorized as non-profit organizations, publicly traded or divisions of southern-based firms. For another 32 firms, no contact information was provided. The aforementioned businesses were deemed unlikely to provide direct access to our target participants and as such were dropped. Many of the firms remaining in the list were included in multiple categories and scrubbing the list for these duplicates resulted in 380 unique entries. As some entrepreneurs owned more than one venture, the 380 businesses identified correspond to 326 entrepreneurs. These 326 entrepreneurs therefore represent the total useable sample.

While this offered a firm starting point for the research, it was limited in that much of the contact information was already out of date or missing entirely and many of the companies listed were no longer in business. Of the businesses that did provide contact information, a preliminary investigation was conducted using personal contacts and the World Wide Web. Once useful information regarding the business was gathered, a contact with the owner was attempted.

The second sampling technique used was referral. This was a convenience sample born out of necessity, given the challenges of studying a relatively small group in an isolated geographical environment. Using established personal contacts in the North, we asked these individuals to compile a list of potential participants and to make contact with the individuals for the purposes of introducing our study. After briefing our contacts on the study, a one-page overview was forwarded to them for distribution to potential participants. Although from a theoretical sampling perspective this approach is clearly weak, it was useful for this study because it used an existing bond of trust to broker the meeting, and in turn resulted in an openness of the respondent. Using this method, the researchers were viewed less as outsiders and more as insiders to the North. Given that the study was not expected to generate a large number of participants, the possibility of obtaining rich information from some participants outweighed the value of attempting a purely random sample. In most cases, the potential participants identified through this method were also listed on the Business Directory, but this approach did allow the researchers to capture participants who had recently begun business or who operated an unlicensed business and as such were not listed in the 2008 Iqaluit Business Directory.

For both preliminary sampling techniques, snowball sampling was then used to extend the reach of the study. Using this method, all participants were asked to recommend a participant who met the criteria of the study and if the researcher could tell the perspective interviewee the name of the individual who referred them. Using this method again proved fruitful, as the existing bond of trust resulted in an openness of dialogue between the interviewer and interviewee.

Given the challenges of conducting research in the North and the limitations associated with these methods, anyone who could be contacted was indeed contacted, and all those who chose to participate were selected. While a non-random sample is a limitation of a quantitative study, the purposeful non-random sample used in this study is consistent with other qualitative work.

### *In-depth Interviews*

Where a contact was made with a business owner via any one of the sampling techniques, the researcher attempted to schedule a face-to-face meeting. Face-to-face meetings were important in this study and were chosen to:

- a) Overcome defensiveness or anxiety on the part of the interviewee – coming to Iqaluit shows interest in the project – not just another call from the south;
- b) Develop relationships that could be reactivated at a later date;
- c) Develop trust with the respondent to explore more complex or private issues;
- d) Allow for the exploration of ideas as they emerged in real time. The researchers were able to read body language and facial expressions and gain further insight to responses; and,

e) Capture and hold the interviewees' attention longer and stronger.

Of the 326 entrepreneurs identified as the formal study population, 23 were met face-to-face and participated in the research in some meaningful fashion. Contact with these 23 individuals ranged from a half hour to several hours and multiple visits, depending on the time the entrepreneur was willing to devote. Where time was available, the network characteristics questionnaire was administered; fourteen of the study entrepreneurs participated in the extended formal interview. Results from 3 entrepreneurs were omitted because of partial information and as such the data collected from 11 entrepreneurs forms the foundation of the network aspect of this study.

Two researchers attended all scheduled interviews. Interviews lasted between one and three hours and all were taped. From a practical standpoint, taping was necessary for proper transcription of the data, and by doing so increased the reliability of the data. From a logistical perspective, having two researchers present allowed for one researcher to devote his full attention to the participant and the progress of the interview while the other researcher was able to contribute to the immediate richness to the data by taking field notes to capture visual cues and key messages.

The scheduled interviews were comprised of open-ended questions designed to elicit 'thick descriptions.' All interviews began with general questions in an effort to put the respondent at ease. A semi-structured interview was conducted because of "the expectation that the interviewed subjects' viewpoints are more likely to be expressed in a relatively openly designed

interview situation than in a standardized interview or questionnaire” (Flick, 2002). A list of key questions to guide the interviews was developed based on a review of the literature. This question set was then supplemented with those found in the Fieldwork Guide used by Jack (2004) in her study of strong ties in entrepreneurial networks in Northern Scotland. As the research project was emergent in nature, themes identified in one interview were used to modify and evolve the interview questions for the next.

### *Questionnaires*

Some participants involved in the scheduled semi-structured interviews also participated in a structured written survey administered by the interviewer. Adapted from Staber and Aldrich (1995), this survey has been used in a variety of contexts (North Carolina – Aldrich, 1992; Sweden – Johannisson, 1989; Northern Ireland – Birley, 1991; Atlantic Canada – Staber, 1995; Japan – Aldrich, 1995; Greece – Dodd, 2002). The questionnaire consisted of 33 questions relating to the social networks of entrepreneurs. Questions relating to demographics, previous business experience, current business operations and various questions of network contacts were first posed to the interviewee. The subsequent set of questions helped to map the primary business nodes in the respondents’ networks and the characteristics of these network ties. Questions sought to identify and measure the frequency of contacts, the value placed on certain contacts, the length of relationships, the degree to which personal matters are discussed, the level of informal socialization, and the origin of these contacts.

### *Observation & Informal Interviews*

As a qualitative case study, significant secondary data were collected through informal interaction with the study population and with members of the study population's network ties and general community over the course of one week in Iqaluit. Some of the sites for data collection were the Town Hall, the Arctic College, the homes of Iqaluit residents and especially the local restaurants and pubs. These venues allowed the researchers to speak with individuals in casual settings and gain considerable insight. Given the sheer volume of data that was acquired over a one-week period, field notes were used extensively to record observations and insights. Through both researchers keeping independent field notes and debriefing key ideas at the end of each day, we were able to add an additional degree of validity to our findings.

### *Archival Data and Documentation*

Besides academic literature, numerous sources were consulted to add meaning and understanding to the research project. Government census data, Territorial studies, regional magazines and local newspapers were among the many sources of data.

## **Ethical Considerations**

### *Informed Consent*

All participants in the in-depth interviews were first given an overview of the project, which included an introduction to the researchers, the goals of the program, and requirements to participate. If the participant agreed, the researchers then asked the individuals to sign a consent form. During less formal data gathering, such as short conversations at the Racquet Club, the

researchers always introduced themselves and the purpose of their visit in Iqaluit before proceeding.

### *Anonymity of Participants*

Given that most of the participants are generally well known in their communities and the small population of the North, omitting the surname of the participants would not have sufficiently masked their identities. As such, all names have been omitted or changed and companies are identified only by the industry in which they operate, if they are identified at all. Where evidence is given that would otherwise reveal the identity of the participant, it has been modified to protect the anonymity of the participant while still maintaining the spirit of the idea.

### *Reciprocity*

Reciprocity is a key network theme. It is also an important part of case study field research. According to Creswell (2007), “giving back to the participants for their time and efforts in our projects – reciprocity – is important, and we need to review how participants will gain from our studies.” To this end, from an extrinsic perspective, all participants were presented with a Tim Hortons travel mug for their participation in our survey. With no Tim Hortons in the Arctic, these gifts were very well received. From an intrinsic standpoint, it is hoped that the research can provide insight that in some way, however small, encourages the economic development of the North.

## **Data Analysis**

### *Inductive Analysis*

Interviews were transcribed and field notes were summarized to form a body of data ready for analysis. All passages were read and then re-read to gain an overall understanding of the data. Each passage was then coded according to themes. For some passages, only one code was identified; others passages contained multiple codes. While some key themes were discussed during the debrief of the fieldwork, a formal set of codes was not developed a priori so as to not constrain the coding process and to maintain the “emergent” nature of this research. Once all the data were coded individually, an attempt was made to categorically aggregate the codes into key themes. Some themes forcefully emerged from the participant interviews, others were less obvious at first, but became clearer when combined with observation and archival analysis. If a key theme did emerge, disconfirming examples were sought in the data. Given the relatively large boundaries of the case, disconfirming examples would be expected occasionally and these were included as well.

The results from the Aldrich questionnaire were coded and basic analysis was completed on this data. Given the small sample size, the results from the Aldrich survey must be approached with a critical lens and are not meant to be generalized to the wider population at this stage. However, “when the results from one data method are corroborated with the evidence from another, the finding is stronger and better grounded” (Eisenhardt, 1989). As such, the combination of qualitative and quantitative measures do allow for some naturalistic generalizations but the results are intended to inform future study on social networks rather than to act as a definitive test of networks in the North.

### *Validity*

Two investigators were used in the data collection phase of this project. These multiple perspectives “add to the richness of the data...and increase the likelihood of capitalizing on any novel insights which may be in the data” (Denzin, 2005). From an analysis standpoint, the presence of two researchers, or investigator triangulation, increased the validity of the data, especially with respect to the interview data.

Where a theme emerged, the researchers went back to the literature to examine if there was a link between the findings and what has already been studied. This level of analysis provides a measure of internal validity and gives confidence to the findings (Eisenhardt, 1989).

At various stages of the research project, including both data collection and analysis, the relationships with study participants were reactivated in order to validate the data.

Interpretations of data were discussed during these “member checks” in order to confirm or redirect understanding of the data. While informal in nature, this step provided a valuable measure of reliability in the study.

### ***Analysis of Themes and Discussion***

---

The research question asks how networks are used by entrepreneurs in Iqaluit, how these networks are built and how brokerage and closure are involved in the entrepreneurial process.

The following are the key themes that emerged from the research with respect to these questions.

### *Network Usage – Attracting Labour*

A significant challenge for any business is finding the right people for the job. In Iqaluit, this challenge is magnified by the small labour pool, lack of formal education or training, and the ready supply of high paying government jobs. According to the findings of the Nunavut Economic Forum (2004), governments and Inuit organizations regularly and significantly outbid private business for comparable labour despite overall wage rates already being substantially higher than elsewhere in Canada. As a result, entrepreneurs are faced with three options for staffing their organizations – paying a substantial market premium for qualified workers, looking downstream in the local labour market, or importing talent. Those unwilling or unable to compete on wages experience a substantial impact on their ability to recruit quality employees:

“The local labour pool we have to draw on are those who don’t have a lot of education... If they do have any education and have anything on the ball, they’re making mega bucks working for the government. We can’t compete with government. There, all they have to do is show up on time.”

Clearly, the availability of government jobs and the associated wage premiums limit this entrepreneur’s ability to attract his desired local candidates. The best candidates often accept government positions and, as a result, entrepreneurs may have to lower employment standards and look towards individuals it might not otherwise hire. For others who choose to seek labour outside of Nunavut rather than locally, the challenge is not limited to attracting the employees in the first place but also retaining them. This business invests considerable resources to fly

employees to Iqaluit and offers very competitive compensation packages, yet still loses staff to similar but higher paying Government jobs once they arrive:

“We tend to lose lots of our people because they can get \$30 at the Post Office cleaning or \$25 dollars at the hospital. We can’t compete with the government. We bring someone up, pay their housing and living, fly them out on vacation, that’s pretty good money, [then they leave for the government].” Whether limiting the ability to attract good candidates in the first place or to retain them in the long-run, the government’s standard of high wage rates has a significant impact on business in Iqaluit. Of course, wage rate is not the only factor that determines where someone works – among other factors, some people would choose job satisfaction over wage. But at some point, as salary increases, it begins to moderate these other factors.

If an entrepreneur is able to attract and retain staff without paying a market premium, he or she would still face significant labour challenges. While some have had success with this method, for many the turnover rate is substantial and the results marginal. This entrepreneur discovered that the local staff he employed were not motivated by the job and were voluntarily leaving:

“We fly everyone up. We would love to hire locally, and we try our very best. We do have a few locals and have had others, however they just aren’t as dedicated. They don’t stay. We have a hard time. It’s hard work working here.” In this case, the employees were not leaving for government jobs, but rather opting out of work entirely. The job was challenging and the former employees were simply not interested.

Another entrepreneur had more success attracting staff but found that local labour standards were not what he was accustomed to elsewhere. “The standards you have down South and the work ethic are different than here. If I came straight from the South from training, I would have fired about half the people I have working for me, without being disrespectful. You tolerate things in the North that you probably wouldn’t tolerate in the South. It’s probably not the right thing to do, but you have to make decisions. If people don’t show up, you can fire these people [but the next person will just do the same]. The turnover rates in the North are pretty high. Two years ago, we had 250% turnover.” For this employer, lower standards and decreased productivity rates are simply a fact of life in the North.

If the local labour market is not able to supply the resources required for the operation of the business, then those resources must be gathered elsewhere. Although importing labour is considerably more expensive than recruiting locally, it provides a more stable environment and is still more cost effective than competing with government on wage. Given the widespread use of imported labour, it would appear that many entrepreneurs have given up on the local labour pool. In many instances, the premium for importing labour can become substantial. Typical packages include travel to Iqaluit, housing, food, vacations south and vehicle allowances. In some cases, the additional benefits in the compensation package are formally defined in a legal document, for others, it can be as informal as an obligation based strictly on a handshake.

At one major employer in Iqaluit, the overall compensation package is quite staggering, especially considering most employees would earn minimum wage at a comparable job in the south. At this business, they “supply housing and food. We charge people X number of

dollars rent, then we credit them that amount, so they do pay tax on this taxable benefit, but it's cheap compared to the cost of housing in Iqaluit. We supply food, a single person probably gets somewhere in the ballpark of \$1100 of food per month. With the housing, you never see a light bill or an oil bill. You pay only your own phone and the cable is subsidized. When you walk into our housing, everything is supplied – bedding, facecloth, towel, frying pan, kettle. You just need the clothes on your back. That's our deal.” By supplying a number of substantial benefits, the employers create a very lucrative employment package and minimize any objections or challenges a potential employee may face. While this approach provides a means of staffing many businesses in Iqaluit, it still presents a considerable cost, especially considering these transient employees may eventually choose to return home.

In Iqaluit, with a significant availability of government jobs paying substantial wage premiums and a limited pool of local qualified applicants, the overall availability of labour is significantly impacted. As such, nascent entrepreneurs may be discouraged from operationalizing their business while established entrepreneurs are forced to adapt to these market conditions.

With the considerable shortage of available labour in Iqaluit, the challenge of effectively screening potential employees and the substantial cost involved in bringing transient employees to Iqaluit, entrepreneurs must use innovative means to reduce the cost of search and screening activities and by doing so maximize returns. A key tool activated by entrepreneurs to achieve this end is the social network.

The social network plays a major role in recruiting potential employees and, in some cases, the social network is the only tool used to recruit employees. “We tend to rely on personal contacts or recommendations for recruiting... For example, the Bank Manager here, her husband is a carpenter, so he gives me the names of the good carpenters.” Having names presented to this entrepreneur reduces his time and costs related to search activities, as these functions have already been deferred to another member of the network, allowing him to focus on other aspects of the business. “Up til now, the people we hire are people we have worked elsewhere with... or with people we knew... we have never done any formal advertising for jobs.” In this case, despite the highly specialized nature of the work, the entrepreneur’s network generated such a sufficient number of qualified candidates that formal recruiting was unnecessary.

In any business, hiring the right person for the job is a challenging process; the selection process can involve significant upfront costs and carries risk for the firm. Hiring the wrong individual can bring long-term implications to the business and so the margin for error is small.

Entrepreneurs in Iqaluit faced with this challenge often turn to the social network to aid in the selection process. While Granovetter (1973) shows that weak ties are good for finding a job, the ties of the entrepreneur doing the hiring are also activated to validate the job candidate. In Iqaluit, given the small size of the community, activating the network for validation of potential employees can be relatively easy. For this entrepreneur, the process was very simple, “if we don’t know someone, we will know someone that we can refer to. We could just go and say ‘can you tell us about so and so.’” Most entrepreneurs also suggested they “knew everyone” in the town. By using established ties, entrepreneurs are able to more quickly obtain reliable

information. With significant competition for good employees, the network can provide a significant advantage in employee selection.

For entrepreneurs who cannot draw from the local labour pool, there is even less margin of error. When hiring outside of Nunavut compared with hiring locally, the high cost of transportation means face-to-face contact during the screening process may be prohibitively expensive. If an employee is selected, the employee is often flown to Iqaluit at the expense of the business. Given these challenges, it is especially important to properly screen employees when hiring outside of Nunavut. With this in mind, some entrepreneurs choose to recruit from geographical areas that are rich in ties. For instance, the primary focus for this entrepreneur in choosing a market to recruit from is the ability to check references with network members during the selection process, “the one I’ve just hired came from my home town. I always start with my hometown. I’ll put an ad there because I know people there. If I need references, I pretty much know everyone so it’s worked pretty good.” Standard business practice is to provide references for former employees. But a reference from a stranger is riskier than one from a trusted network tie. While there are social pressures moderating deviant behaviour in a reference check between strangers, absent are the principles of trust and the threat of punishment if this trust is betrayed. It follows that recruiting a candidate from an area rich in network ties increases the likelihood of obtaining a valid reference check.

Furthermore, an area with many ties presents an opportunity to collect secondary data that may not otherwise be available to the entrepreneur. One entrepreneur would discuss potential employees with local police officers to gain additional insight. For a similar situation to occur,

two conditions are required. One, that the entrepreneur have a trustworthy network contact willing to share information, and two, that the contact be connected to the individual in question. As the number of network contacts in a given area decreases, so too does the likelihood of meeting both these conditions. As such, the entrepreneurs recruiting local labour benefit from an increased network and entrepreneurs hiring outside of Nunavut benefit from doing so in areas with previously-established network contacts.

### *Network Usage – Generating Business*

One of most striking features of the urban Iqaluit landscape is the signage – or rather lack thereof. Absent from many commercial and industrial buildings are the typical neon, LED, or banner-style signs found elsewhere in the country – from big cities to small towns – loudly indicating that the establishment is open for business. Instead, in Iqaluit, many businesses simply do not have any sort of signage; for those that do, often it is only a small plaque greeting visitors. For new residents or visitors to Iqaluit, the lack of signage presents a significant initial barrier to commerce. Compounding the problem of finding a specific business is that the Town of Iqaluit only recently began naming streets. Despite the fact that a system for finding businesses and residences now exists, the use of addresses has not been widely adopted by businesses or residents. Directions are often given in relation to other unmarked businesses.

Anecdotal evidence and observation suggest that marketing via traditional media such as print and radio also occurs less frequently in Iqaluit than in other jurisdictions. At this popular restaurant, “very little advertising [occurs], but we do some. For example we have a menu and lunch specials. But it is word of mouth advertising, and we have never really advertised.”

Despite a conspicuous lack of all types of traditional marketing, there is often no shortage of business. At this busy company, for instance, marketing has never been a concern for the entrepreneur. “We don’t advertise. I don’t even have my phone number listed in the phone book, and we are still turning away business. I just turned down a contract... We don’t even have a sign at the front door.” These two particular businesses are both located in relatively isolated areas and as such receive no marketing spillover or customer traffic from clustering, yet are quite busy and continue to receive many new customers. The experiences of these businesses are not unique. In the sample, the majority of business owners acknowledged they participate in significantly less advertising or formal marketing than they would if their business was located elsewhere.

Why is this the case? For many, there was no shortage of customers and all but one surveyed were profitable and so the low incidence of traditional marketing should not be interpreted as a commentary on the caliber of the entrepreneurs in Iqaluit. Rather, for those entrepreneurs who choose to decrease or opt out entirely of traditional advertising and marketing, these tools simply represented a needless expense because the business can be generated through other means. The entrepreneurs in Iqaluit have adapted their business strategy to reflect a unique environment and as such utilize other means of driving sales. The most affordable method of business generation, at least from a direct standpoint, is word-of-mouth advertising. In Iqaluit, the prominence of this method is staggering. Many others shared the sentiment of this entrepreneur. “[If we] were somewhere else, we would need more advertising if we were in a community we didn’t know. A lot of businesses here are word-of-mouth by people, but if we were somewhere else, like Ottawa, we would have to depend more on advertising and face-to-face.” Not only is word-of-mouth a

key tool in generating business, but it was perceived by numerous entrepreneurs to be activated more so than if their business was located in a southern community. As with traditional media, reach is important. A small network would not be expected to generate as many leads as a large one. Where brokerage ties exist, these ties could generate new business, but given the size of Iqaluit and Nunavut, at some point the network is maximized. Most entrepreneurs considered themselves to have expansive social networks; in other words, they “know everyone.” Building these relationships was seen as important for driving business. While there may not be a direct cost to word-of-mouth advertising, there is a considerable indirect cost in the maintenance of a network able to reach a broad audience and in sending a consistent message. There is another downside in that the message can often be difficult to manage or alter. While businesses in markets outside of Iqaluit experience this challenge as well, the almost exclusive reliance on word-of-mouth advertising means that messages are not reinforced and negative messages are often not mitigated. Bad news travels fast and reputations can be tarnished.

Word-of-mouth was not equally important for everyone. For this business, dealing primarily with government, word-of-mouth had a diminished role. “In terms of chasing work, a lot of work is public – it’s out there – that’s your initial train for finding work... because it is public work, you actually almost do not want to be in with [the government] because it must always look transparent.” In this case, the perception that the network might have played a role in the selection of the firm would cause problems in the long run and as such was important to avoid any negative perceptions involving the network. But the network and word-of-mouth advertising still did play a role for finding private sector work. “As far as the private sector is concerned, it’s lots of word-of-mouth. Somebody basically said ‘hey, you’re the only ones to deal with and

that's how we're working on the job now'... We had the relationships. Because of these good relationships, the contractors want to work with us.” The network connected the entrepreneur with potential contracts based on referral and word-of-mouth for certain jobs, but for others it was important to show that the network did not play a role in being awarded the job.

The reach of the network may not be important if the network contacts are not predisposed to promoting the business. Notwithstanding opinions towards the business itself, one factor that may influence how network contacts behave is their feelings about the entrepreneur. It follows that the reputation of the entrepreneur plays an important role. In many ways, the business is an extension of the entrepreneur. Often the brand equity exists not in the business but in the businessman or woman. Employees are also ambassadors for the business, but it is often the entrepreneur as figurehead who is associated with the business. For this entrepreneur, despite offering an in-demand service, the negative personal reputation of his business partner was well known and damaging to the business, “it's a very small town and hard to build-up a good reputation and easy to destroy it. My partner wasn't very popular [in the community] and that prevented us from branding the company. We couldn't put our company name on the company door because then we would be associated with him.” In other words, the brand is *the individual*, and in this instance, a network can have an adverse effect on the entrepreneur by communicating unflattering information. With a small community and networks with considerable reach, entrepreneurs must always “be on.” Building and maintaining contacts extended well beyond business hours and for many was a constant consideration. It was important for these entrepreneurs to always present a consistent image and take time to nurture the relationships within their business network as entrepreneurs found that these network relationships could be

activated anywhere and at anytime. “Everybody knows us. If somebody doesn’t know us, they’re probably lying. We’ve been here so long and it’s such a small town... It’s a constant thing, trying to keep track of everyone’s name... In a bigger town, there’s more anonymity. I’d like that and we would behave differently. I am always conscious that my employees are watching us and our customers are watching us.” This opinion was shared by many other entrepreneurs. For these individuals, the network is always in play.

In some cases, the network was not only used to generate business, but also to evaluate the quality of the prospective business. For this construction firm, information-gathering was a key task before accepting a job, “most of the time, [Iqaluit] is small enough that we can normally find out who people are and then decide if we want to work for them, or what the arrangement would be.” Not only is information gathered from the network quickly by this firm, but the information then influences how the client is treated. Prospective clients with a good reputation are given preferential treatment. If the client has a poor reputation or insufficient information exists to make an assessment, the job may be accepted only on the condition of a financial retainer or legal contract. Although these are reasonable alternatives, references from trusted others within the social network are a more efficient use of resources. The stronger the bond between the entrepreneur and the reference, the more weight it carries as the network could impose sanctions on the reference for acting in bad faith.

### **Network Characteristics**

The primary method of data collection in this study was qualitative in nature. However, employing quantitative measures in case study research can provide additional insight and as

such a questionnaire was also used for data collection. According to Eisenhart (1989), employing mixed-methods “provides stronger substantiation of constructs and can be highly synergistic.” As such, a survey consistent with quantitative research was administered to 14 entrepreneurs, 11 of which provided complete information. While the sample size is too small to produce meaningful multi-variate analysis or statistically significant parametric comparisons with other, similar studies, descriptive statistics are used to introduce some preliminary findings and draw inferences that could inform future research. These findings are enhanced with other data from the study to produce a more vivid and colourful context and understanding.

Following the research of Birley (1991), Staber and Aldrich (1995), Dodd (2002) and others, we sought to gain a better understanding of how entrepreneurs in Iqaluit build and activate their network connections. Participants were first asked a series of demographic questions, then about the support they received as entrepreneurs and, finally, they were asked to name up to five individuals with whom they would discuss business matters. While not every entrepreneur listed five individuals, most did and, as such, a variety of data relating to 48 network contacts was gathered.

#### *Discussing Business with Network Contacts*

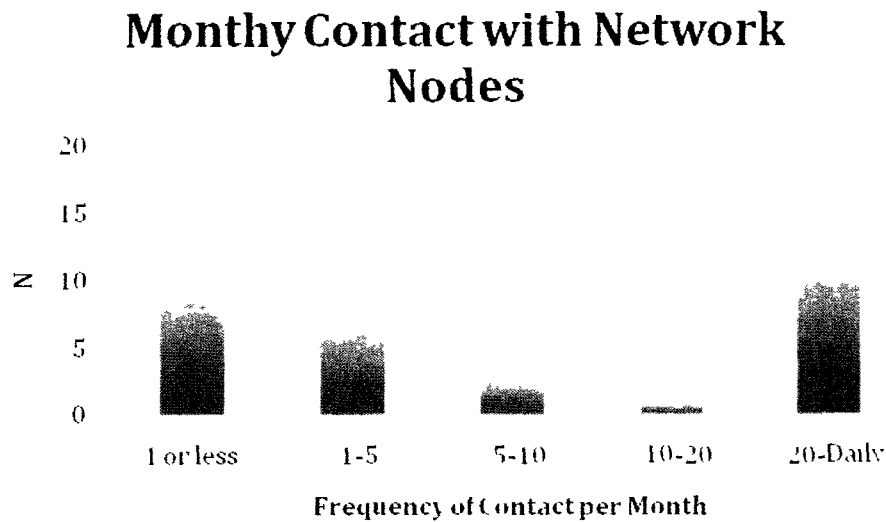
Entrepreneurs in Iqaluit had a mean of 13.3 meetings per month with key contacts where business was discussed. Contact ranged from only a few times per year to virtually every day (see Figure 2). In comparison, previous research has shown the number of meetings between businesspeople per month in other countries to vary from the low of 3.5 in Japan to 17 in Greece. Given the small size and observed interconnectedness of the Iqaluit network, contact of some

sort is bound to happen on a regular basis, even if this contact is not sought out and whether or not these interactions are used to discuss business is another matter. For those with a dense network, the amount of contact that they and others have with their nodes on a regular basis may make them hesitant to discuss business matters regularly, even with others whom they trust, for fear of dissemination through the community (Deans, 1996).

Perhaps more interesting than the mean, though, is the distribution of the frequencies. A U-shaped distribution, entrepreneurs tend to either engage their key contacts almost all of the time, or very infrequently. Quite interesting as well are the contacts with whom business is discussed on average one time or less per month; all of these contacts were located outside of Iqaluit.

These contacts were predominately professionals, such as lawyers or accountants. While these individuals were often considered friends, it would seem their support was only sought on an as-needed basis. Had these same contacts been located in Iqaluit, it would be reasonable to suspect that contact would be much more frequent. In fact, if these contacts are excluded from the analysis, the mean contacts per month jumps to 19 interactions per month, more so than any other region studied. While these contacts were identified by the entrepreneurs as key contacts, the relative infrequent maintenance of the contact and the distance from the central network are typically characteristic of weak ties.

**FIGURE 2**



#### *Strong Tie Networks*

Two measures were used to derive some understanding of the quality of the relationships in the network. First, entrepreneurs were asked whether their contact was a friend, family member, consultant, or business associate. As the entrepreneurs were not limited to one response, for many contacts, multiple responses were given. Regardless of how many responses were given, if the entrepreneur identified the contact as a friend or family member then they were considered a strong tie. Using this broad categorization, 87% were identified as such.

But the definition of a friend is rather subjective and family are sometimes so in name only; so to better target strong tie relationships, entrepreneurs were also asked if they would discuss personal matters with the identified network contacts. According to (Granovetter, 1973) the quality of the relationship can be a factor of time spent together, emotional closeness, intimacy

and reciprocity. Since business matters are often also very guarded, discussing these matters would suggest a degree of emotional closeness, intimacy and reciprocity. Using this more rigorous definition, 63% of contacts were considered strong ties.

Dodd (2002) raises the question of whether a high percentage of family and friends in the network actually provides any meaningful function beyond emotional support. While the networks of these entrepreneurs are characterized by many friendship bonds, this could simply be a product of the close-knit Northern environment. From the literature, the quality of the tie, or strength, “is a multidimensional function of the frequency of contact, degree of emotional closeness, kinds of information exchanged, and duration of the relationship (Staber & Aldrich, 1995; Marsden & Campbell, 1984). Ties of different strength may be used for different purposes, and the ideal network depends on both strong and weak ties to access unique resources (Jack, 2005). Similar to Jack, respondents appeared to rely heavily on strong ties in the network, and would often seek resources through existing strong ties before looking elsewhere to fulfill the need. In many instances, the networks of entrepreneurs were heavily based on the common bond of being located in the North, and the ties in these networks were demonstrated to be very strong. The network would extend to other business people located in the North and in many cases would include direct competitors. While competitors might typically be thought of as being included at some distant node, often in Iqaluit the network tie between competitors would exhibit some characteristics of closure, including trust and reciprocity. As this example illustrates, the strong ties of the network allow the entrepreneur to access resources that might not be available through a weak tie: “We have different establishments when it comes to different restaurants and such. If they run out of something, they can call on us and borrow.

This kind of network is very important, and we have really good relationship with the majority.” In another instance, an entrepreneur required a key piece of equipment to operate his business and was not able to source it locally: “when you’re up North and you struggle to get certain things, the community works together more than it would down south.” This entrepreneur felt comfortable asking his competitor if he could borrow the equipment; in other markets, such behaviour may be ridiculed. These findings very clearly support the notion of economic action being socially embedded (Granovetter, 1985). The only rational explanation for this behaviour would be that the favour would be paid back in the future, but even this behaviour would only be considered rational if there was some guarantee that this would occur. Similar to how Dominican lenders in New York City rely on the threat of social ostracism instead of formal contracts for loans, the social structure of the network in Iqaluit provides some measure of certainty for the entrepreneur, with the implication that future shirking by competitors would lead to consequences and that these consequences are severe enough to encourage compliance. But beyond this, it is the affiliation to a closely knit group – “being Northern” – that creates such a salient bond between individuals that social behaviour supersedes pure economic decision-making.

### *Interconnectedness of the Network*

Relative density, or interconnectedness of the network nodes, provides insight into the type of network structure used by entrepreneurs. The more dense a network, the more it exhibits closure. Interconnectedness of the network was measured by how many contacts knew each other. After each participant named their key network contacts, they were asked to sketch the matrix of relationships. These matrices then represented all of the potential cross-connections of

the network. Of all potential network connections, only 23 percent were thought to be strangers to each other. These findings were not surprising given the anecdotal evidence of a heavily connected network, but are in stark contrast to findings from other regions. With the exception of Greece, “the density was almost identical for all nations studied (40-45%)” (Dodd, 2002). The findings from Greece were attributed partially to the kinship of that society. Similarly, the Inuit culture, traditionally defined by kinship, is tight-knit and interdependent. Beyond Inuit culture, there is also the salient bond of being Northern which links individuals from all cultural groups. But perhaps the most obvious explanation for these findings is that Iqaluit is a small community and relatively isolated from the rest of the world. In any network where there are few entrances and exits, over time network members are bound to become known to each other.

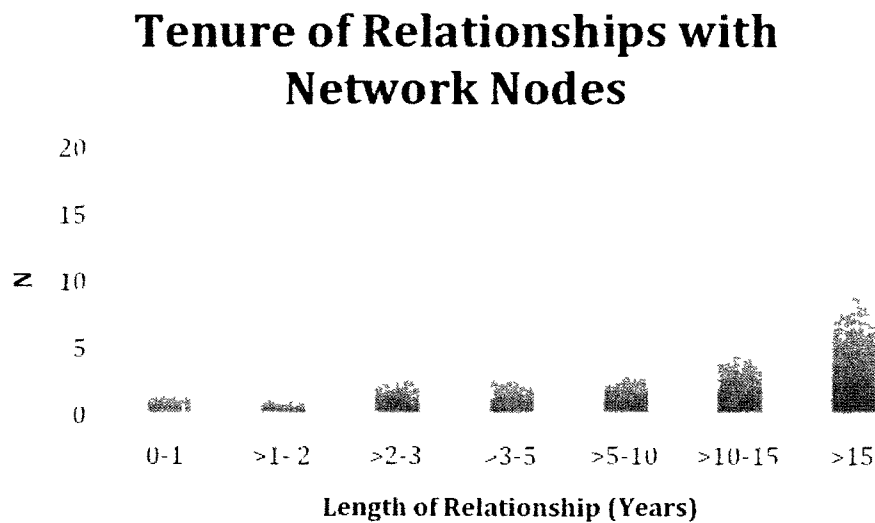
One caveat to these findings is that while observation suggests that most everyone knows most everyone else in Iqaluit, there must be some discrimination as to whether or not an individual is actually counted as part of the network. Knowing someone, and knowing of someone are indeed quite different conditions, and with a relatively small population it is quite possible to achieve the former without also achieving the latter.

### *Length of Relationship*

The neo-classical model of entrepreneurship suggests that networks are built to maximize utility, and network members are added or removed based on their individual contributions. According to this theory, the networks would be forever evolving (Granovetter, 1984; Staber & Aldrich, 1995) and some network members would not be expected to have long tenure. The findings, though, are not consistent with this theory. In the sample of entrepreneurs, the average length of

relationships was 12.9 years. These relationships were often characterized by trust and honesty (see Table 6). These findings are more consistent with the social embeddedness model of relations that suggests relationships are established and/or endure despite better alternatives. Of course, the length of these relationships may also be influenced by the age of the entrepreneur and the length of time they have been in business – according to Dodd (2002), there is an “established international trend of ties aging with the entrepreneur.” Nevertheless, the enduring nature of many relationships provides some level of support for the notion that entrepreneurs in Iqaluit place long-term value on their key network nodes.

**FIGURE 3**



#### *The Role of Brokers in Meeting Key Contacts*

Brokerage in the network has been linked to success of managers and of entrepreneurs. In Iqaluit, the networks of many entrepreneurs are composed of strong ties, and where weak ties exist, they seem to be seldom activated. There are several possible explanations for this observation. Geographic isolation limits an individual’s ability to leave or to enter Iqaluit.

Given that the population base is small to begin with, it is natural that with limited population turnover the network will evolve over time to become more closed. A population that does not turnover becomes more homogeneous, and like-minded individuals tend to associate with one another.

This has practical implications for entrepreneurs. Opportunity recognition is partially dependant on heterogeneous life experience (Shane & Eckhardt, 2003). But, as the population becomes more homogenous, it becomes increasingly hard to identify new opportunities as everyone has essentially the same information. Brokerage relationships can help gain access to new information, but if not protected, over time, these relationships will be assimilated into the larger group, thereby diminishing their value for accessing new information. While it may be advantageous to have networks with significant brokerage relationships, the relative absence of these relationships could be a matter of simple economics. In Iqaluit, with a prevailing network of closure and a homogenous population, not only is it more costly to develop brokerage relationships but these relationships will be integrated to the group more quickly, thereby requiring the entrepreneur to repeat the process to gain an advantage once again.

There is an additional explanation to this phenomenon. While the entrepreneurs in Iqaluit have many factors that shape their network, it may simply be the case that there is no economic advantage to molding the network differently and, as such, investing in new relationships would not be worthwhile. Despite significant hurdles at start-up, many ventures in Iqaluit have little competition and enjoy high margins. Given this circumstance, there would be little incremental value derived from weak ties once the business was operational. Where these ties would have value is during the recognition or start-up phase, and once the business was operational, these

ties would likely evolve to stronger ties and would not be replaced by the entrepreneur.

Alternatively, it is possible that these entrepreneurs never really had networks advantageous to opportunity recognition in the first place and that they were simply the most motivated to act on opportunities that were widely available.

### *Trust of Outsiders and Preference for Local Network Nodes*

A key theme to emerge came first through the experiences of the research team and was later supported in the data. Despite the best efforts of the researcher to schedule firm meeting times and locations, each respondent initially preferred instead for the researcher to “drop by” at no particular time once the researcher arrived in Iqaluit. While this was first interpreted as a casualness of business owners in Iqaluit, this was later deemed to be incorrect. Once the researchers confirmed they were in Iqaluit, all respondents preferred to set meeting times. Location became a key theme in the research for suppliers, customers and contacts. Although additional research is necessary before any conclusions could reasonably be reached, the reluctance to meet breeds speculation that location is a key barrier to entry in the network, and that business owners use this as a preliminary evaluation of trust – that those who are willing to travel to Iqaluit are serious, that those who simply pick up the phone may or may not ever materialize. Respondents generally preferred doing business with someone located inside Nunavut than an outsider, if such an individual was available. From a network perspective, using this strategy facilitated information gathering to determine whether or not the prospective network member was reliable or trustworthy. According to one entrepreneur, “most people I deal with I know, seldom do I not know them. The ones I don’t know, I try to find out who they are before.” While business people may be reluctant to invite regional outsiders into the network

at first, this does not necessarily indicate a reluctance to seek out new network contacts outside of the regional network when it is of some significant utility to the individual. In most instances, these key contacts provided some service that was not available within the Territory. In other words, location may be a limiting factor for access to the network if the tie is developed by an outsider, while it may be less of a factor if developed by a member of the regional in-group.

### *The Medium*

Given the size of Iqaluit and predominance of social clubs and organizations, it was not a surprise that all participants had no problem meeting other business people. Even for those who chose not to participate in social clubs, the friendliness of the community and interconnectedness of the network appeared to naturally foster new connections. The Royal Canadian Legion, The Elks and the Racquet Club all played key roles in connecting individuals if such a connection did not already exist through the dense and overlapping networks of personal, business and family connections. Indeed, it was common for individuals in Iqaluit to claim they “knew everyone” and these venues provided a medium to establish these relationships.

### **Other Findings**

Although slightly beyond the scope of the research question, a number of other important themes emerged through the research and as such have been included.

#### *Inuit Ownership – Opportunity and the “Smoke and Mirrors” of Economic Policy*

The Nunavut Land Claims Agreement Policy on Government Procurement gives preferential treatment to Inuit entrepreneurs in the bidding process for government contracts. Given that government spending in the territory is equal to approximately 60% of Nunavut’s gross domestic

product (compared with 22% for the rest of Canada), these contracts represent a significant portion of the territory's economic activity. Advantages to Nunavut Inuit firms can be in the form of government grants or preferential selection for contracts compared to non-Inuit owned firms. In some instances, firms can receive up to a 21% bid preference compared to non-Inuit firms when bidding on government contracts (Senate Standing Committee on Aboriginal Peoples, 2006).

The purpose of the Policy on Government Procurement is to foster "increased participation by Inuit firms in business opportunities in Nunavut" and to create "improved capacity of Inuit firms to compete for government contracts" (Nunavut Land Claims Agreement, 1993). This legislation presents a tremendous opportunity for would-be Inuit entrepreneurs to enter the market with an immediate advantage over non-Inuit entrepreneurs and as such is a significant factor in the business environment.

Inuit ownership is not only significant from a resource gathering perspective for organizations that deal with government, but also for firms that deal with the market at large. For all these organizations, Inuit ownership is in itself a competitive advantage from a marketing perspective. There is great pride in the Inuit culture, and with 85% of the population belonging to this group, many businesses proudly advertise their Inuit-ownership. Although business signage and advertising in Iqaluit is less prominent than in the South, where it is present in Iqaluit, it is not uncommon for a key message to be "100% Inuit Ownership." Inuit ownership is viewed favourably and many entrepreneurs are willing to use this characteristic of their business to their advantage.

While the spirit of the government policy is reasonable<sup>2</sup> for achieving the desired ends, and there may be many success stories, the application of the program is not without its faults, and negative opinions still exist amongst some entrepreneurs. There is some perception that the application process may act as a barrier to entry and the program is sometimes abused to the detriment of the individuals whom it was intended to benefit.

There is a general understanding by business owners of all backgrounds in Iqaluit that the procurement rules can be skirted through creative ownership structures, and the advantages of doing so can be significant. The process generally involves a non-Inuit entrepreneur recruiting an Inuit partner with the intent of this new partner acting strictly as a figurehead. In many cases, risk, decision-making, responsibility, and accountability are not spread evenly and profit disbursement reflects this arrangement. While this “smoke and mirrors” structure of the firm may allow it to meet the initial test of 51% Inuit ownership, closer examination may reveal that different classes of shares tell a different story. Although these practices clearly violate the spirit of the policy, numerous examples exist. There are strong opinions among business owners about playing such games.

The negative sentiment towards creative interpretations of Inuit ownership was shared by many, but for one non-Inuit entrepreneur in the process of establishing a new business with an Inuit partner, sharing ownership in order to access resources was simply a matter of profit

---

<sup>2</sup> There is a real question of whether the means do provide a net benefit at a macro level. While the process provides a tangible benefit to Inuit-owned firms, if those Inuit-owned firms are competitive in the first place, then the preferential bidding is essentially a government transfer payment to the firm. For those firms that are not competitive, the preferential bidding represents a subsidy whose burden is carried by the taxpayer.

maximization. Whereas knowledge, capital or social networks are traditionally seen as valuable commodities when establishing a business, for this entrepreneur descent was also valuable as it represented access to markets that may otherwise be closed or restricted. By employing an innovative ownership structure, this individual was acting entrepreneurially to access resources. The opinions of others were secondary to the potential gains from accessing a lucrative market.

Of the nascent entrepreneurs who legitimately meet the criteria of Inuit ownership and who could significantly benefit from the Procurement Policy, the associated red tape may act as a disincentive for establishing a business. If competitors are already established with Inuit-ownership and as such receive a substantial price advantage, then the complexities of registering a new business as Inuit-owned could discourage individuals from entering the market space. According to this entrepreneur at an Inuit-owned firm, "...it's a barrier to entry, for no reason and it is not encouraging people to start their business because it is so complicated with the paperwork and applications and you have to redo this every year. Whereas with the [other] organizations, all you have to do is once a year sign a form in front of a notary that nothing has changed. Why can't you adopt that same principal? Instead you have to give your licenses, your clearances, etc. If I can't do it with 35 years of business experience, how do you expect the new guy to do it? In my mind it's not encouraging anyone to do it." If the spirit of the policy is to genuinely foster economic development, then the process for acquiring this benefit should be easily accessible to would-be entrepreneurs.

For entrepreneurs who are not of Inuit descent or whose firm does not meet the criteria of Inuit ownership, government contracts represent a closed market. At this small company, "there are

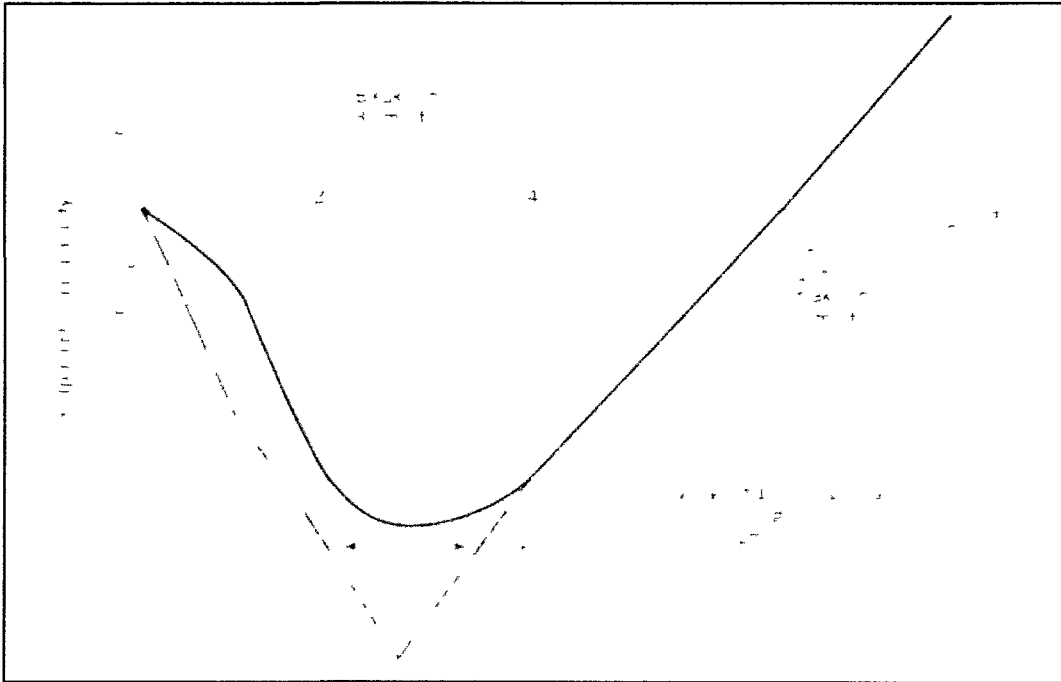
some contracts that [we] won't even try to bid on. For example, government contracts, I have to have 45% Inuit content. So 45% ownership or 45% of my employees have to be Inuit to bid on the contract, and I don't have that... I totally agree with supporting local. I'm from Newfoundland where 85% of my friends had to move away because contractors were coming in from outside [the province]. But there are definitely ways were it can be done better. I don't agree with the fact that because someone is Inuit [that they would receive preferential treatment]. It's good to support local, but I am local [too].” The barriers to entry in this industry are low and firms compete on price, so for this entrepreneur, the likelihood of being awarded government contracts is extremely low given that Inuit-owned competitors have a substantial artificial cost advantage.

With government contracts representing the majority of commerce in Nunavut, the implications for entrepreneurs are significant. Inuit owned firms may receive a significant premium for their work, while non-Inuit owned firms must tender discounted bids or adopt innovative ownership structures just to be considered on an equal playing field. Regardless of how other view these programs, their very existence begs the question of why there are disproportionately low levels of Inuit entrepreneurs. With many incentives that encourage Inuit entrepreneurship and provide distinct incentives compared to other groups, it is surprising that the Inuit are less involved in these pursuits than the non-Inuit minority. The findings of Dana (1995) suggest that indigenous entrepreneurs are subject to certain factors that inhibit not only their participation in entrepreneurship, but also the type of entrepreneurship they choose to pursue. Economic explanations for this imbalance are briefly explored below:

*Difficulty of being a successful entrepreneur in Nunavut* - A lack of entrepreneurship could be attributed to the harsh economic conditions that would serve to drive business out of the North – a small population, little access, lack of infrastructure, and an unskilled workforce. In some cases, marginal entrepreneurs are able to overcome these challenges successfully because of a lack of competition. Where competition does exist, the consumer base is generally so small that marginal businesses are forced out and only the most resilient survive. Given the logistical challenges of operating a business in the North, initial investment and cash flow management play key roles in the success of the organization. Start-up costs can be staggering, and inventory must often be stock-piled for the winter months. The graph below shows the development of small new ventures. In Iqaluit, all other things being held equal, it would be expected that breakeven would occur later in the process, given the significant upfront costs.

While this may be an intuitive explanation for why there is not more entrepreneurship in Nunavut, it does not directly address the disproportionately low percentage of Aboriginal entrepreneurs. However, if some level of information asymmetry exists – that Aboriginals have a better understanding of the hardship faced in the North than others – then perhaps they would be less likely to invest in ventures they believe will have a lower chance of success. Or conversely, if outsiders and non-Inuit are better at recognizing/seizing opportunities then Inuit are sidelined.

**Figure 4: Initial Losses By Small New Ventures (Timmons et al. 2010)**



*Availability of substitutes – Government jobs in Nunavut* - Native land claims beneficiaries are given priority for all jobs. The Nunavut government's Inuit Employment Plan includes a mandate to create a representative workforce. As such, at least 85% of positions will be allocated to these land claims beneficiaries. The availability of these government jobs, combined with significant public sector salaries and Northern bonuses creates a disincentive for entrepreneurship. These jobs are perceived very positively by the people of Iqaluit and offer substantial benefits when compared to private sector jobs.

*Socio-economic constraints* - With demand outpacing supply, housing in Iqaluit is extremely expensive, and government subsidized housing is only available to low income families. New housing starts are slow to occur given the complications of municipal land ownership, logistics of importing construction materials from the South, unreliable labour, and other weather

conditions, including permafrost, that influence how buildings are constructed. Inuit looking to raise their standard of living through entrepreneurship risk forfeiting this significant benefit. As a result, in some instances it is financially wiser for the Inuit to forgo a substantial increase in income through self-employment to remain eligible for government-subsidized housing.

Shane & Eckhardt (2003) show that opportunity exploitation is higher when “markets are larger, profit margins are higher, levels of competition are lower, and capital is cheaper” and that exploitation is lower when entrepreneurs have better alternatives, such as paid-employment. In Iqaluit, the limited population presents a relatively small market for most goods and services, and high transportation costs mean accessing outside markets are expensive. These increased transportation costs and limited local labour conspire to diminish margins, thus making opportunities less lucrative. Furthermore, with a high average wage very high in Iqaluit, the perceived benefit to opportunity exploitation must outweigh the paid-employment. In other words, the opportunity cost is a factor, and in Iqaluit these tradeoffs can be significant.

The previous economic factors may provide some understanding of the limited Aboriginal entrepreneurship in Nunavut. However, these are not sufficient alone. As such, to better understand the issue it is also important to explore socio-cultural explanations.

*Lack of interest in entrepreneurial activity* - Fundamentally, the Inuit just might not be interested in entrepreneurship. The notion of the entrepreneur is inextricably linked to the notions of risk and uncertainty, but, from a cultural perspective, the Inuit do not seem to embrace these concepts. In the past, if their lives were primarily concerned with survival in a desolate

environment, then certainty of continued existence could surely be a desired circumstance. On the other hand, these very conditions could also foster a greater risk tolerance. Certainly though, the potential for reward could overcome hesitations; a risk-averse individual of any culture may be tempted to pursue a more risky venture by an innate desire for success and material wealth. But the Inuit might not embrace these concepts either. In the long history of the Inuit, the idea of capital accumulation is a new idea. For thousands of years the culture was not concerned with the accumulation of material wealth. Rather, sharing was the most desirable behaviour and consequently an indicator of success (Dana et al., 2005). Together, low risk tolerance and a relatively new introduction to material goods as indicators of status may significantly limit entrepreneurial motivation of the Inuit.

*Socio-cultural attributes* - Even if the Inuit are interested in entrepreneurship, socio-cultural attributes and disposition may not be suitable for such pursuits. The rich history of the Inuit surely has some general impact on their behaviour in a market economy. While some characteristics may be advantageous, others may hinder their success in certain contexts. Just as Americans are more individualistic while Japanese are more collective, the Inuit may display unique characteristics. These differences may impact how a society views entrepreneurship and these views and cultural norms could inhibit or enable economic performance. While these characteristics ought to be reviewed with more rigorous analysis, it is reasonable to expect the socio-cultural attributes differ from other parts of Canada and as such a universal grouping of all Canadian entrepreneurs in the same basket would not be reasonable.

*Network performance* - While socio-cultural attributes may influence general behaviour in many ways, an area of particular interest is how these attributes impact the social network. Networks may be a source of entrepreneurial opportunity (Burt, 1992), but rarely are these networks built with such an express purpose. Instead, the network develops over time, the product of cultural values and attributes that provide signals as to how best to configure such a network. With a homogeneous population, it would be extremely difficult to develop a network rich in brokerage relationships. Since brokerage relationships and broad perspectives help identify opportunities, their absence stymies the entrepreneurial process. So, even a particularly entrepreneurial-inclined Inuit may find herself disadvantaged by a network not designed to facilitate opportunity recognition and exploitation.

## ***Conclusions & Recommendations***

---

The purpose of this research was to examine entrepreneurship in Iqaluit with respect to social networks. The research makes a practical contribution by providing insight and a broad sense of the challenges and opportunities faced by entrepreneurs in the North while focusing on the theoretical concept of network structures. Network uses were examined with respect to opportunity recognition and exploitation and the network structures employed in these uses were described and compared to those of other groups.

### ***Summary***

In Iqaluit, demand for labour outpaces supply, but it is not for a shortage of people. Rather, it is the skill of these residents, their willingness to participate in the workforce and their willingness to perform at a level that meets the expectations of the business that constrains the labour market. Given these challenges, entrepreneurs must employ creative means to efficiently and cost-

effectively recruit and select employees for their businesses. While some recruit locally, others look outside of Nunavut. Both approaches require a significant investment in resources to screen applicants but social networks can expedite this process. A key characteristic of networks of closure is that of trust. The nodes in these networks can be especially valuable for screening potential applicants because the information they provide is less risky than that from outsiders; over time, the nodes have developed a reputation for being trustworthy and any behaviours deemed to be in bad faith would come with serious repercussions from the network. However, because the labour market in Nunavut is so constrained, those entrepreneurs whose trusted networks nodes located outside of the territory have an advantage in the selection process of employees. As it is more challenging to establish robust networks outside of Nunavut if you are from Nunavut than if you are not, outsiders and settlers have a distinct advantage in this respect.

The social networks of entrepreneurs are almost universally used to some degree to generate business. In Iqaluit, the role of social networks for this purpose is magnified. With a small community and overlapping networks that promote the efficient flow of information, the network provides a satisfactory means of generating business while other paid methods often represent a needless expense. Regardless of the prominence of any certain network structure, the information is expected to eventually disseminate to a wide audience. However, brokerage type roles within the network can help to spread the information that much faster. Linking to distant nodes, although part of the same network, can speed the transmission. However, there are indirect costs associated with the network approach to generating business, most notably that the fast flow of information to the wider group can be detrimental when the information is negative. What this means is that the entrepreneur must always be mindful of the image they portray and

the messages they are sending through the network. The networks are not only used to generate business, but also to evaluate the quality of the potential business. In this respect, potential customers or partners are evaluated for their ability to pay and meet their terms of agreements. To do so, references within the network are sought and the most trustworthy references provide the most value.

The social networks of entrepreneurs in Iqaluit are used in much the same way as they are used elsewhere, but are relied upon more heavily for certain tasks as a result of the unique characteristics of the environment. While the network functions of the entrepreneurs are similar, the same cannot necessarily be said for the structures of these networks. Entrepreneurs in Iqaluit meet frequently to discuss business with key contacts. However, they discussed business matters much more frequently with those located inside Nunavut than those located outside the territory. In fact, there was very little middle ground - local contacts were consulted almost daily while no contact located outside of Nunavut was consulted more than once per month. Networks in Iqaluit were also characterized by closure, with 77% of network ties known to one another and an average relationship length of 13 years. These findings are partially the result of a small community with few new entrances and exits and partially the result of the challenges and costs associated with seeking out new contacts or being sought by others for a similar purpose. According to Dodd (2002), the results from her study of entrepreneurial networks “provide considerable support for the contextualist approach to entrepreneurial activities, and suggest that the generic universalist theories are erroneous. National differences exist. Culture matters.” While this supports the argument of contextualism over universalism in entrepreneurship, it does so only at the National level of analysis. However, culture is not necessarily universally shared

on a National level and not all cultures are created equal. Regional differences are evident, and rich traditional cultures, such as that of Arctic Inuit, and more broadly, the more inclusive Northern culture, resist assimilation. While it may not be surprising that in any given network, network members have a preference for dealing with other network members, what is surprising is that living in the North seems to be the prevailing characteristic for access to the network. While fellow Ontarians may only exhibit a slight bond, the kinship displayed amongst Northerners is quite evident. Therefore, it is important to understand and evaluate a group not only from the perspective of the prevailing national culture, but also, and perhaps more importantly, with a critical lens of the more regionally specific culture. The people of Iqaluit and the Arctic are no more or no less Canadian than the people of the South, but they are certainly different in many ways.

According to Shane & Eckhardt (2003), “the structure of social relationships determines the quantity of information, the quality of information, and how rapidly people can acquire information necessary to discover opportunities for profit.” These same structures can continue to be used in the exploitation phase for the same purposes. Determining which network structures are used and how they lead to these advantages was a key focus of this research. The research shows that brokerage and closure both can play critical roles. In some respects, outsiders, and more so settlers, have a distinct advantage. Outsiders and settlers both bring with them new viewpoints and links to other heterogeneous networks. These two factors are critical in the opportunity recognition phase, and as such they may identify opportunities where residents do not. Once the opportunity has been recognized, though, this advantage is diminished as networks of closure within the Territory provide advantage by disseminating information quickly

to others and thereby producing fruitful means of generating business, assessing employees and customers, receiving assistance from others in times of need, and for enjoying the halo-effect of being part of the in-group. It is at this point that settlers are able to create a network of absolute advantage. By settling in Iqaluit, they gain an instant measure of credibility and an entry point to the “Northern” network. This network can then be leveraged, over time, for the characteristics it embodies, such as trust and reciprocity. However, having previously resided elsewhere, these settlers have pre-established networks consisting of links to groups of outsiders and consequently new and varied information. Maintaining these relationships can provide value in the long run. Similar advantages can also be realized by locals, whether Inuit or second or third generation settlers, simply by purposely building networks rich in contacts of different perspectives. However, it is extremely difficult to accomplish this while located in the Territory. To really build the network, the individual must have a strong means of connecting and forging enduring with visitors to the territory, or otherwise must venture out of the territory to create reciprocal arrangements (some entrepreneurs accomplished this end through post-secondary education). These endeavours are costly however and tradeoffs must be made. Of course, this is all predicated on the assumption that business is being conducted only within the context of Iqaluit or Nunavut. To expand beyond this context and operate nationally or globally, relationships with outsiders would be critical. However, at this point it is cost prohibitive for all but a select few businesses to operate in this fashion.

Nunavut is unique in that an overarching network of is cast over virtually the entire territory. While everyone is essentially part of a larger “Northern” group that has the characteristics of a network of closure, namely the ability to enforce norms, trust and reciprocity, it is nevertheless

loosely organized. Within this network, while almost all members will be connected in some fashion, the links are not necessarily direct. So, while there may not necessarily be structural holes, there are certainly gaps that, when bridged, can provide for the faster flow of information and some advantage to the entrepreneur.

### *Recommendations*

The Canadian Arctic is a fascinating region that all at once is so similar and so different from the rest of Canada. As such, from a general policy perspective, it is fundamentally important that any discussion of entrepreneurship in the North, economic development and the role that Inuit people will play in these endeavours be predicated on a solid understanding of the nuances of Northern entrepreneurship and the cultural history of the Inuit. The old notion of ‘walking a mile in someone else’s shoes’ is especially critical before any evaluation, conclusion or recommendation can or should be made by outsiders. Given the political, cultural, and geographical complexities of the region, it could even be argued that any such evaluations, conclusions or recommendations would best be left to those who have lived or experienced the North. What outsiders may interpret as problems are really only problems insofar as they are perceived to be problems by the individuals who actually experience them. Roadblocks to entrepreneurship are not a problem for those uninterested in entrepreneurship and the corresponding benefits. With this in mind, it would be premature to suggest actionable recommendations for the North other than those that have already been identified – notably self-determination of the Inuit people and inferential caution by outsiders. This concept is not unique to the Inuit of Nunavut. Despite the diversity of indigenous populations of the world, Peredo *et al.* (2004), maintain that “ while we now have some generalized understanding of certain aspects

regarding the motivations and strategies of entrepreneurs and their important contribution to economic development, there remains a question whether these generalizations are, in fact, applicable to indigenous people.” As such, policy makers should exercise restraint and consult key stakeholders before taking key decisions. If the conclusion that Inuit entrepreneurship is the key to the long-term viability of the region and that this end is the desired outcome of the Inuit people, then certainly future policy must look to correcting the current imbalance. This research has identified certain roadblocks to this outcome. Most notably, there must be alignment between social programs and government entrepreneurial incentives to encourage these pursuits.

While focused measures may be necessary to increase indigenous entrepreneurship at the individual level, entrepreneurs of all backgrounds could foster economic development in Nunavut through improved access to the territory. Reducing transportation costs could be beneficial at both the opportunity recognition and the opportunity exploitation phases of the entrepreneurial process. Among other factors, search activities and access to information play a role in identification of opportunities (Shane & Eckhardt, 2003), both of which can be more costly in Nunavut. Although the concept of proximity applies to the knowledge base of the individual, the concept can be extended to the geographic distances between individuals. The farther away in the network the knowledge is located, the more expensive it becomes to acquire it. By reducing the costs of acquiring this information, entrepreneurs may be more likely to engage in these activities, and by extension be more likely to discover opportunities.

Furthermore, by reducing the cost of entry and exit to the territory, it encourages residents to visit other locations and encourages others to visit or relocate there. As new perspectives are introduced to both groups, the community becomes more heterogeneous and individuals become

more adept at opportunity recognition. The spillover affect of reduced transportation costs is more efficient coordination of resources in the opportunity exploitation phase. So, with reduced transportation costs, not only could more opportunities be recognized, but firms could also be more competitive once established.

From a practical perspective, entrepreneurs are encouraged to purposively build networks that facilitate opportunity recognition. Simply recognizing that breadth of perspective can lead to opportunity recognition is a starting point for many of the entrepreneurs in Iqaluit. Although there are costs to build and maintain these relationships, their value over time can justify the expense. As the Territory develops, the existing entrepreneurs will need to innovate to remain competitive not only with those already in Nunavut, but newcomers looking for a share of the pie. Through the acquisition of new information, entrepreneurs can see the world through different lenses and in turn translate these perspectives to value. But the new relationships that breed new information should not come at the expense of the existing network either, as the trust and reciprocity contained within these established networks is the product of an investment over time.

The argument of brokerage or closure often concludes that context matters in evaluating which network structure creates most value for the entrepreneur. A network of only closure leaves ripe opportunities on the table while a network of only brokerage ignores the important and salient bond, and the associated advantages, of being Northern. In the context of Nunavut, at least for now, both matter.

### *Future Research*

This research examined the general business environment and specifically the social networks of entrepreneurs in Iqaluit from a qualitative perspective. Future research could use the findings from this report to aid in the generation of hypotheses and guide the development of testable quantitative measures. Perhaps the best extension of this work would be via a replication of the Staber, Aldrich, Birley and Dodd entrepreneurial network studies using a larger sample size. Doing so would not only contribute by providing a better understanding of Northern Entrepreneurship, but would also add to the argument of universalism vs. contextualism in entrepreneurship by providing a meaningful comparison at both the national and regional level. Additionally, a comprehensive study of culture using Geert Hofstede's Values Survey Module would fill a gap in the literature and provide a key bridging point for research by outsiders.

### *Acknowledgements*

The researchers were touched by the hospitality of the people of Iqaluit, and the willingness of the study participants to open their businesses and their homes to us. It is our sincere hope that this research can lead to a better understanding of entrepreneurship in the North and by doing so allow future research to make a meaningful contribution to the economic future of the both the Inuit and non-Inuit of Nunavut.

## References

---

Acs, Z., & Audretsch, D. (2005). *Handbook of Entrepreneurship Research*. United States: Springer.

Acs, Z. & Varga, A. (2005). Entrepreneurship, Agglomeration and Technological Change. *Small Business Economics*. 24, 323–334

Ahuja, G. (2000). Collaboration Networks, Structural Holes, and Innovation: A Longitudinal Study. *Administrative Science Quarterly*. 45(3), 425-455.

Anderson, A.R., & Jack, S.L. (2002). The Articulation of Social Capital in Entrepreneurial Networks: A Glue or a Lubricant. *Entrepreneurship & Regional Development*. 14(3), 193-210.

Birley, S. (1985). The Role of Social Networks in the Entrepreneurial Process. *Journal of Business Venturing*. 1, 107-117.

Birley, S., Cromie, S., & Myers, A. (1991). Entrepreneurial Networks: Their Emergence in Ireland and Overseas. *International Small Business Journal*. 9(4): 56-74.

Bourdieu, P. (1983). The Forms of Capital. In M. Granovetter & R. Swedberg (Eds.), *The Sociology of Economic Life* (pp.96-111). Oxford, United Kingdom: Westview Press.

Burt, R. (1992). *Structural Holes*. Cambridge, Massachusetts: Harvard University Press.

Burt, R., Hogarth, R., & Michaud, C. (2000) The Social Capital of French and American Managers. *Organization Science*. 11(2), 123-147.

Canada Business. (2008). Iqaluit Business Directory. Canada Business: Nunavut.

Chabot, M. (2003). Economic Changes, Household Strategies, and Social Relations of Contemporary Nunavik Inuit. *Polar Record*. 39(208), 19-34.

Clinton, G., & Vail, S. (2005). *2005 Nunavut Economic Outlook: Update on Five Years of Progress*. Canada: The Conference Board of Canada & The Nunavut Economic Forum.

Clinton, G., & Vail, S. (2008). *2008 Nunavut Economic Outlook: Our Future to Choose*. Nunavut Economic Forum.

Coleman, J. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology*. 94(1), 95-120.

Creswell, J. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. Thousand Oaks, California; Sage Publications.

- Dana, L. (1995). Entrepreneurship in a Remote Sub-Arctic Community. *Entrepreneurship Theory and Practice*. 20(1), 57-72.
- Dana, L., Dana, T., & Anderson, B. (2005). A Theory-based Empirical Study of Entrepreneurship in Iqaluit, Nunavut. *Journal of Small Business and Entrepreneurship*. 18(2), 143-152.
- Deans, M., Gill, D., & Apedaile, P. (1996). The Social Networks of Rural Business Owners in East Central Alberta. *Staff Papers and Project Reports*. Department of Rural Economy, University of Alberta.
- Denzin, N.K., & Lincoln, Y.S. (2005). *Handbook of Qualitative Research*. Thousand Oaks, California: Sage Publications.
- Dodd, S., & Patra, E. (2002). National Differences in Entrepreneurial Networking. *Entrepreneurship & Regional Development*. 14(1), 117-134.
- Durlauf, S., & Fafchamps, M. (2004). Social Capital. National Bureau of Economic Research: NBER Working Paper Series.
- Edelman, L.F., Bresnen, M., Newell, S., Scarbrough, H., & Swan, J. (2004). The Benefits and Pitfalls of Social Capital: Empirical Evidence from Two Organizations in the United Kingdom. *British Journal of Management*. 15(1), 59-69.
- Edelman, L.F., Bresnen, M., Newell, S., Scarbrough, H., & Swan, J. (2002). The Darker Side of Social Capital. Accessed online at [[http://apollon1.alba.edu.gr/OKLC2002/Proceedings/pdf\\_files/ID469.pdf](http://apollon1.alba.edu.gr/OKLC2002/Proceedings/pdf_files/ID469.pdf)]
- Eisenhardt, K. (1989). Building Theories from Case Study Research. *Academy of Management Review*. 14(4), 532-550.
- Esterberg, K. (2002). *Qualitative Methods in Social Research*. Boston, Massachusetts: McGraw-Hill Higher Education.
- Flick, U. (2002). *An Introduction to Qualitative Research*. London, England: Sage Publications.
- Gedeon, S. (2010). What is Entrepreneurship? *Entrepreneurial Practice Review*. 1(3), 16-35.
- Gifford, S. (2003). "Risk and Uncertainty," in Acs, Z. & Audretsch, D. *Handbook of Entrepreneurship: An Interdisciplinary Survey and Introduction*, Springer, New York.
- Gould, R., & Fernandez, R. (1989). Structures of Mediation: A Formal Approach to Brokerage in Transaction Networks. *Sociological Methodology*. 19(1), 89-126

- Government of Canada. (1993). Nunavut Land Claims Agreement. Government of Canada. Accessed at <http://www.tunnngavik.com/documents/publications/1993-00-00-Nunavut-Land-Claims-Agreement-English.pdf>
- Government of Canada. (2002). Small and Medium Sized Enterprise (SME) Financing in Canada. Government of Canada: Ottawa.
- Granovetter, M. (1973). The Strength of Weak Ties. *American Journal of Sociology*. 78(6), 1360-1380.
- Granovetter, M. (1984). The Strength of Weak Ties: A Network Theory Revisited. *Sociology Theory*. 1:1, 201-233
- Granovetter, M. (1985). Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*. 91(3), 481-510.
- Greeve, A., & Salaff, J. (2003). Social Networks and Entrepreneurship. *Entrepreneurship Theory and Practice*. 28(1), 1-49.
- Hoang, H., & Antoncic, B. (2001). Network-based Research in Entrepreneurship: A Critical Review. *Journal of Business Venturing*. 18(1), 165.
- Hofstede, G. (2001). *Culture's Consequences: International Differences in Work Related Values*. Thousand Oaks, California: Sage Publications.
- Jack, S., & Anderson, A. (2002). The Effects of Embeddedness on the Entrepreneurial Process. *Journal of Business Venturing*. 17(1), 467-487.
- Jack, S., Dodd, S. & Anderson, A. (2004). Social Structures and Entrepreneurial Networks: The Strength of Strong Ties. *The International Journal of Entrepreneurship and Innovation*. 5(2), 107-120.
- Jack, S. (2005). The Role, Use and Activation of Strong and Weak Network Ties: A Qualitative Analysis. *Journal of Management Studies*. 42(6): 1233-1259.
- Kilduff, M. & Tsai, W. (2003). *Social Networks and Organizations*. London, England: Sage Publications.
- Krugman, P. (1991). Increasing Returns and Economic Geography. *The Journal of Political Economy*. 99(3): 483-499.
- Lin, N., Cook, N., & Burt, R. (2001). *Social Capital: Theory and Research*. Hawthorne, New York: Walter de Gruyter.
- Lin, N., Cook, N., & Burt, R. (2002). *Social Capital: A Theory of Social Structure and Action*. Cambridge, United Kingdom: Cambridge University Press.

Lindsay, N. (2005). Toward A Cultural Model of Indigenous Entrepreneurial Attitude. *Academy of Marketing Science Review*. 5.

Marsden, P. & Campbell, K. (1984). Measuring Tie Strength. *Social Forces*. 63(1), 482-501.

Nunavut Bureau of Statistics. (2010). Statistics. Retrieved from <http://www.gov.nu.ca/eia/stats/Labour/LFS/Labour%20Force%20StatsUpdate,%20July%202010.pdf>.

Nunavut Economic Forum. (2004). *Qanijjuq: Preparing for the Journey*. Nunavut Economic Forum: Nunavut.

Parliament of Canada. (2006). Proceedings of the Standing Senate Committee on Aboriginal Peoples. Issue 12, Evidence – Meeting of November 28, 2006. Parliament of Canada: Ottawa.

Pauktuutit Inuit Women of Canada. (2006). *The Inuit Way: A Guide to Inuit Culture*. Pauktuutit Inuit Women of Canada.

Peredo, A., Anderson, R., Galbraith, C., Honig, B., & Dana, L. (2004). Towards a Theory of Indigenous Entrepreneurship. *International Journal of Entrepreneurship and Small Business*. 1(1), 1-20.

Polanyi, K. (1957). The Economy as Instituted Process. In M. Granovetter & R. Swedberg (Eds.), *The Sociology of Economic Life* (pp.31-50). Oxford, United Kingdom: Westview Press.

Portes, A., & Sensenbrenner, J. (1993). Embeddedness and Immigration: Notes on the Social Determinants of Economic Action. *American Journal of Sociology*. 98(6), 1320-1350.

Putnam, R. (1995). Bowling Alone: America's Declining Social Capital. *Journal of Democracy*. 6(1), 65-78.

Shane, S. & Eckhardt, J. (2003). "The Individual-Opportunity Nexus," in Acs, Z. & Audretsch, D. *Handbook of Entrepreneurship: An Interdisciplinary Survey and Introduction*, Springer, New York.

Sivummut Economic Development Strategy Group (2003). *Nunavut Economic Development Strategy: Building a Foundation for the Future*. Sivummut Economic Development Strategy Group: Nunavut.

Soda, G., Usai, A., & Zaheer, A. (2004). Network Memory: The Influence of Past and Current Networks on Performance. *Academy of Management*. 47(6): 893-906.

Staber, U. & Aldrich, D. (1995). Cross-National Similarities in the Personal Networks of Small Business Owners: A Comparison of Two Regions in North America. *Canadian Journal of Sociology*. 20(4), 441-465.

Statistics Canada. (2007). *Iqaluit, Nunavut 2006 Community Profiles*. 2006 Census. Ottawa. Retrieved from <http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E>

Statistics Canada. (2010). Population Estimates and Projections: Nunavut. Retrieved from <http://www40.statcan.gc.ca/101/cst01/demo31a-eng.htm>

Swedberg, R. (1998). Max Weber's Vision of Economic Sociology. *Journal of Socio-Economics*. 27(4): 535-555

The Economist. (2008) Glossary of Terms. Retrieved from <http://www.economist.com/research/economics/alphabetic.cfm?letter=C>

Timmons, J.A., Spinelli, S., & Ensign, P.C. (2010). *New Venture Creation, Canadian edition*. McGraw-Hill Ryerson.

Uzzi, B. (1997). Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness. *Administrative Science Quarterly*. 42:1, 35-67.

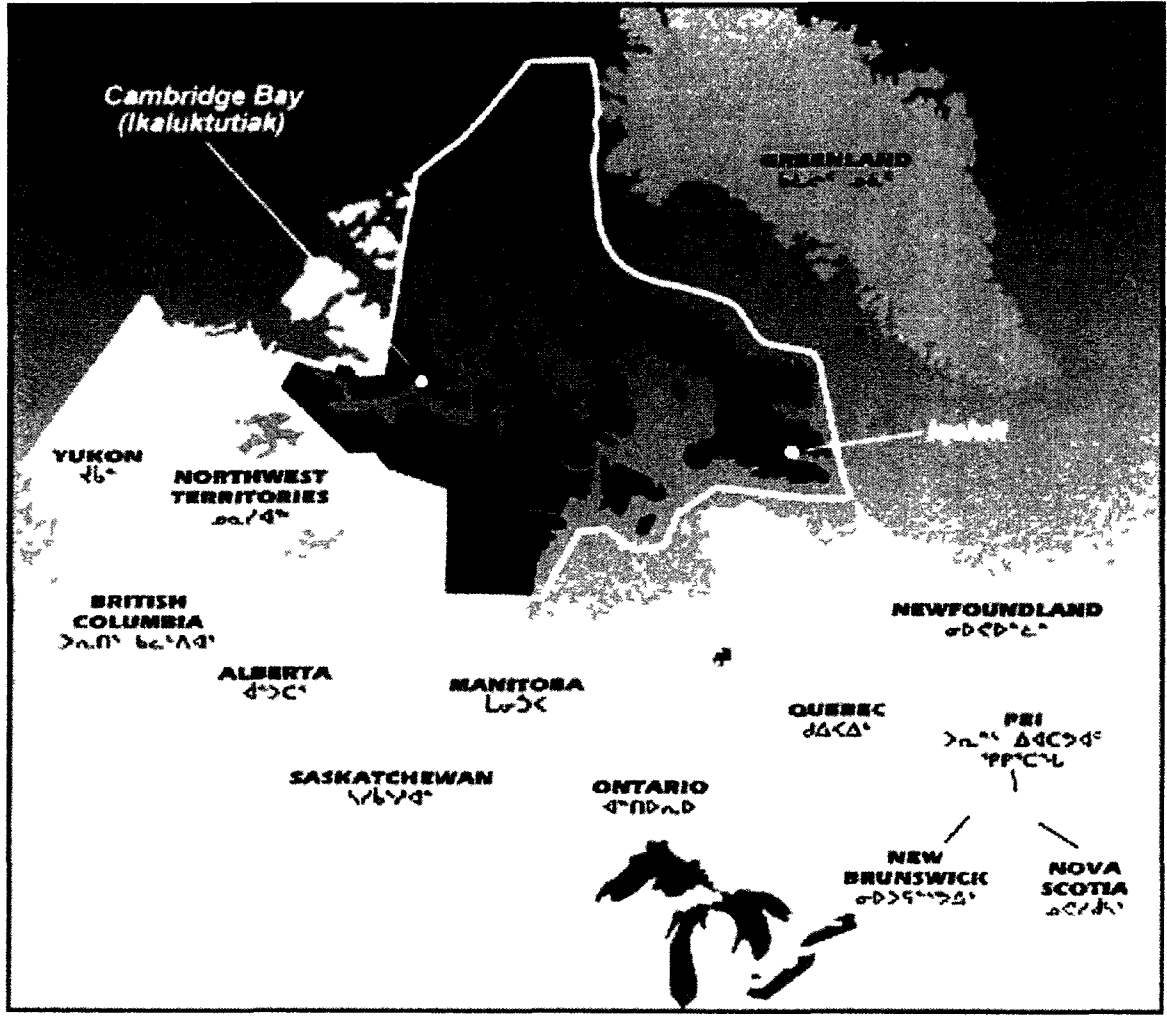
Vail, S., & Clinton, G. (2001). *2001 Nunavut Economic Outlook: Examination of the Nunavut Economy*. Canada: The Conference Board of Canada & The Nunavut Economic Forum.

Walker, K. (2009). Northern Entrepreneurship. International Institute for Sustainable Development. Retrieved from [http://www.iisd.org/pdf/2009/northern\\_entrepreneurship.pdf](http://www.iisd.org/pdf/2009/northern_entrepreneurship.pdf)

Yin, R. (2003). *Case Study Research – Design and Methods, 3<sup>rd</sup> Edition*. California: Sage Publications.

# APPENDIX

FIGURE 5: *Map of Canada*



Source: *In Depth: Aboriginal Canadians*

**TABLE 1: Registered Businesses in Iqaluit, by Industry**

Industry	N	%
Accommodation	16	2.6%
Accounting/Bookkeeping	15	2.4%
Air service	9	1.4%
Engineer/Architect/Environmenta	12	1.9%
Artists	27	4.3%
Automotive	23	3.7%
Banks	3	0.5%
Carpentry	3	0.5%
Communication	16	2.6%
Computers	18	2.9%
Consultants	36	5.8%
Daycare	10	1.6%
Education	12	1.9%
Electrical	5	0.8%
Entertainment	10	1.6%
Expediting	8	1.3%
Fisheries	7	1.1%
Food	19	3.1%
Fuel	5	0.8%
Construction	45	7.2%
Hair	8	1.3%
Janitorial	11	1.8%
Legal	6	1.0%
Medical	11	1.8%
Moving	3	0.5%
Newspaper	3	0.5%
Plumbing	8	1.3%
Promotional/Printing	8	1.3%
Property Management/Investing	39	6.3%
Rentals	9	1.4%
Retail	47	7.6%
Security	4	0.6%
Ground Shipping	7	1.1%
Taxi	71	11.4%
Tourism	17	2.7%
Traditional Clothing	5	0.8%
Translation	4	0.6%
Travel Agency	1	0.2%
Other	29	4.7%
Government/NGO	32	5.1%
<b>Total</b>	<b>622</b>	<b>100%</b>

Source: Canada Business (2008)

**TABLE 2: Descriptive Statistics**

	Iqaluit	Nunavut	Canada
Population	6,184	29,474	31,612,897
Population Growth (%)	18.1	10.2	5.4
Median Household Income	92,123	49,270	63,866
Unemployment Rate	7.8	15.6	6.6
Median Age	28.8	23.1	39.5
Average Housing Price	328,211	214,817	263,369
Aboriginal Population (%)	60	85	4

Source: Statistics Canada (2007)

**TABLE 3: Participant Profile**

Name	Industry/Sector	Employees	Profitable	Sex	Age	Highest level of education
A	Professional Services	9	Y	M	50	College
B	Environmental	8	Y	F	56	Grade 10
C	Tourism	5	Y	F	36.5	Grade 11
D	Tourism	30	Y	F	51	Master's
E	Service	6	Y	M	33	Grade 12
F	Construction	20	Y	M	57	MBA
G	Transportation	5+	Y	M	63	Grade 12
H	Tourism	30	Y	F	51	Professional Designation
I	Professional Services	3	Y	F	67	MBA
J	Education	5	N	M	56	Bachelor
K	Education	5	Y	F	35	Master's
L	Construction	1	Y	M	29	College
M	Tourism	20+	Y	M	Pass	Pass
N	Retail	40+	Y	M	45	Grade 12

**TABLE 4: Key Contacts – Strong and Weak Ties**

	Strong	Weak	Total (%)
Test 1: Friends & Family	87	13	100
Test 2: Discuss Personal Matters	63	37	100

**TABLE 5: Frequency of Contact with Key Members**

Approx Mean Contact Per Month	Japan	Canada	Ireland	United States	Italy	Sweeden	Greece	Iqaluit
	3.5	16	11	10	15	15	17	19.3

Source: Dodd(2002)

**TABLE 6: Duration of Network Ties**

	Japan	Canada	Ireland	United States	Italy	Sweeden	Greece	Iqaluit
Average Years Known	14	10	8	11	12	12	16	12.89
Average Age of Entrepreneurs	47.8	41	39.2	43	34.6	39.8	45	48.7
Average Age of Personal Contacts	49.5	42	42.3	43.4	40.4	42.5	42.7	51

Source: Dodd (2002)

**TABLE 7: Characteristics & Qualities of Key Network Contacts**

<b>Key Descriptors</b>	
<i>Characteristics</i>	Honesty
	Fairness
	Helpful
	Trust
	Enthusiasm
	Loyalty
<i>Qualities</i>	Financial Acumen
	Regional Knowledge
	Experience
	Expertise
	General Knowledge

**TABLE 8: Network Density**

Connections	All Possible Connections	%
65	84	77

**TABLE 9: Interconnectedness of the Network**

% Strangers	Japan	Canada	Ireland	United States	Italy	Sweeden	Greece	Iqaluit
	no data	42	40.6	42.6	45.4	42	24	23

**TABLE 10: The Role of Brokers**

Brokered Contacts	All Possible Contacts	%
8	47	17%

**In memory of Dorothy Marie Witt  
1917 - 2010**