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# **Cyber space: A paradigm shift for international entrepreneurs relationships?**

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# Cyber space: A paradigm shift for international entrepreneurs relationships?

# Thor Sigfusson and Simon Harris

Ever since Bott (1955) first presented the concept of social networks as a systematic way of understanding relationships in London families, social network researchers have observed and developed the idea of close-knit and loose-knit networks of relationships. This dichotomy has since become a well developed line of enquiry in both entrepreneurship and international entrepreneurship research. Network relationships between firms and individuals have powerful influence on the internationalisation of small high tech firms (Coviello, 2006; Moen, Gavlen, & Endresen, 2004; Oviatt and McDougall, 2005). Entrepreneurs' social or interpersonal relationships makes them aware of foreign market opportunities (Loane & Bell, 2006).

Studies of the history of commercialization and industrialization suggest that when entrepreneurs in related lines of activity work well together the speed of 'take off' is higher (Grassby, 1995), so entrepreneurs work better as a cooperative network than as a collection of competitive individualists (Casson, 1997). As the internationalization of small firms can be both sudden and destabilizing, internationalization through business networks is the only feasible way (Chetty and Campbell-Hunt, 2003), which makes relationship-creating skills key resources for international entrepreneurial growth (Ellis, 2000; Harris & Wheeler, 2005). The qualities of international entrepreneurs relationships have therefore attracted research interest (Coviello, 2006; Komulainen, Mainela, & Tahtinen, 2006; Oviatt & McDougall, 2005; Sharma & Blomstermo, 2003).

These studies, however, have given conflicting indications regarding the value of strong or weak relationships for embryonic international firms. We have indications, however, that the context within which these relationships form can make a difference. The strength of relationships in internationalization might be affected by national cultural aspects (Zhou, Wu & Luo, 2007), with the structiure of the industry concerned (Fernhaber, McDougall & Oviatt, 2007), and the extent of both social and non-social linkages (Coviello 2006; Ellis, 2011).

One dramatic context shift in recent years has been the explosion in the role of electronic communication through computer networks, in which online communication takes place, that we will here call 'cyberspace' or 'cyber'. As technology changes, and the potential of new cyber technology affecting business relationships develops, cyber space becomes of greater potential importance for international business ventures. Researchers have long recognized

the potential role for cyberspace to stimulate bridging social capital (Lin, 1999), and it has, after a short stall at the beginning of this century, begun to enable new collaborative forms of organization (Loane, 2006).

Cyberspace now plays a vital part in bridging emotionally and geographically distant people (Kavanaugh *et al.* 2005; Wellman, 2001), especially in the internationalization of small firms (Loane, 2006). As cyberspace is 'intrinsically international' (Kobrin, 2001:688), Pitt, van der Merve, and Berthon (2006) note that it:

'has become a pervasive mechanism for conducting international trade, and this is particularly true in industrial markets" (p.607).

As it is becoming such an important mechanism for the formation of relationships, it is likely to be having some influence on the types of relationships that international entrepreneurs develop and use for the development of their relationships. Indeed, since cyberspace changes the way in which people communicate with one another, it has the potential to generate a fundamental shift in the way that business relationships and networks develop, and how those relationships can influence the development of the international firm. This field, however, remains under-researched (Lewis, Kaufman, Gonzalez, Wimmer & Christakis, 2008).

This chapter presents some key questions that international business researchers can address in the area, and combines social network theory with previous international entrepreneurship research to help develop some useful research propositions in relation to the role of cyberspace for international entrepreneurial embeddedness. These propositions together suggest that cyberspace may lead to a paradigm shift in relationship formation of international entrepreneurs. and the use of weak and strong relationships by entrepreneurs. It is hoped that chapter may form a practical basis for future empirical studies in the field of relationship formation of international entrepreneurs, and the chapter concludes with some suggestions for future research avenues in the relationships of international entrepreneurs.

#### The role of trust in international business

Trust between parties is a fundamental to the development of the agreement between people that is needed in all international business, because all international busines requires cooperation between people at one stage or another (Buckley & Casson, 1985; Williamson, 1985). It lies at the heart of the relationships that are fundamental for entrepreneurial internationalization (Johanson & Vahlne, 2003), by offering the necessary linkages to networks in other countries (Welch and Luostarinen, 1993).

The development of trusting co-operative relationships between businesses has long been recognized as an essential element of international business, whether this is through joint ventures, alliances, contracts, informal understandings, or networks arrangements (Axelsson and Easton, 1992; Blankenburg and Johanson, 1992; Child et al., 1997; Johanson and Mattsson, 1992). It is these linkages that provide the foundation for the search for opportunities abroad (Ellis, 2011).

Investment in a relationship through commitment enhances parties' credibility at the beginning of the relationship, improves trust, and reduces uncertainty and the risk of opportunism (Wuyts & Geyskens, 2005). For two parties to co-operate, however, *both* must be prepared to co-operate, and *both* must sufficiently trust the other party (Harris and Dibben, 1999). Being embedded in a network of relationships therefore helps people to co-operate with one another because there can be a context of trust between known partners or people who can be endorsed by known others (Uzzi, 1997). Then, in turn, trust promotes commitment to a relationship, and this commitment, when expressed in co-operation, builds trust in turn (Uzzi, 1997).

How trust develops in relationships and the extent to which it needs to do so for the necessary cooperation to take place is subject, however, to the context; we can expect different levels of trust within different contexts (Grossetti, 2005). Internationalization increases the distance from markets and relationships and requires a broader focus towards other and new networks (Fletcher, 2001). New international entrepreneurs' relationships need not be permanent alliances but need to provide market knowledge and opportunities, which may require less commitment between the parties involved. These relationships may therefore be valued for knowledge and market access rather than for permanent commitment (Hadjikhani & Sharma, 1999; Hite, 2003).

# The benefits of strong relationships

Relationships can be strong or weak, and strength has therefore been seen in terms of trust and commitment; indeed, the primary conceptualization of the relationship marketing model sees relationships in these terms (Morgan and Hunt, 1994). Granovetter (1973) presents the strength of a relationship to be a:

combination of the amount of time, the emotional intensity, the intimacy and the reciprocal services that characterize the tie" (p.1361).

Strong relationships have high levels of social relationship or personal interaction with high frequency (Granovetter, 1982), which motivates the individuals involved to protect and assist

one another when required (Hite & Hesterly, 2001). Weak relationships are not as heavily based on personal interaction but may nevertheless provide access to, for example, resources or markets (Granovetter, 1973).

Most entrepreneurship studies have focused on the role of strong relationships. The trust inherent to strong relationships can be very important for young firms. Domestic advice networks also provide strong mechanisms which include criticism or disapproval which can lower transaction costs (Mesquita & Lazzarini, 2008). This advice-giving between entrepreneurs depends on trust between entrepreneurs, often based on shared past experiences and repeated interactions (McGrath, Vance & Gray, 2003). The idea that the relational trust that smaller firms can develop helps them also with their globalization and by building useful long-term international relationships has been supported by Svejenova (2006) and by Sasi and Arenius (2008). The internationalization of the venture relies heavily on intangible assets such as relationship networks of the entrepreneur (Keupp & Gassmann, 2009; McDougall, Shane, & Oviatt, 1994). Indeed, Harris and Wheeler (2005) present strong domestic relationships to be the most important assets that young internationalizing firms can have: they can open the doors for new foreign market opportunities and build further market knowledge.

# The importance of weak relationships for international entrepreneurs

Ellis (2011) proposes that when looking at the relationships of international entrepreneurs seeking opportunities in the global market, 'the sum total of the entrepreneur's relationships with others' need to be examined (Ellis, 2011:102). This sum total includes not only a few strong relationships, but a possibly large number of weak relationships as well. For new ventures accessing a global market, most relationships are relatively new (Morse et al, 2007), and because trust may not have had time to develop, so they will be weak. McDougall and Oviatt (2005) therefore suggest that when entrepreneurial ventures have an international aspect, weak relationships are very important. Oviatt and McDougall (2005) note:

Because of their small number and the investment required, we believe strong ties are not the most important type for internationalization. Weak ties are. They are relationships with customers, suppliers, and others that are friendly and business-like. Weak ties are far more numerous than strong ties because they require less investment. Their number can grow relatively quickly, and they are important because they are often vital sources of information and know-how (Oviatt and McDougall, 2005 p. 545)

International entrepreneurship focuses on the 'discovery, enactment, evaluation, and exploitation of opportunities' (Oviatt & McDougall, 2007, p.7) and recognizes how

opportunities are recognized by individuals (Aldrich & Zimmer, 1986). For all new ventures, scarcity of resources requires relatively more use of relationship than other resources in comparison with more established firms (Harris & Wheeler, 2005). International entrepreneurs' relationships are very important (Keupp & Gassmann, 2009; McDougall, Shane, & Oviatt, 1994), but their differing context places different demands. The geographical or location demands involved in opportunity seeking, are considerably greater for international than for domestic entrepreneurs; the ties tend to be long, connecting socially distant locations (Centola & Macy, 2007). Weak ties, that research often overlooks, plays an important role in the ventures of the international entrepreneur in the INV as they provide opportunities and bridge these gaps (Komulainen et al, 2006; Sharma and Blomstermo, 2003).

Oviatt & McDougall (2005) therefore have argued that the international aspect of the venture may involve a completely different set of relationships, where the weak relationships are very important, and a growing body of research has been linking the early internationalization of the firm to the use of weak relationships (Duque, Shrum, Barriga, & Henriquez, 2009; Komulainen et al., 2006; Presutti, Boan & Fratocchi, 2007; Sharma & Blomstermo, 2003). We still do not have, however, a clear picture of the role of weak relationships in the internationalization of small ventures.

# From a strong/weak dichotomy to evolving relationship portfolios

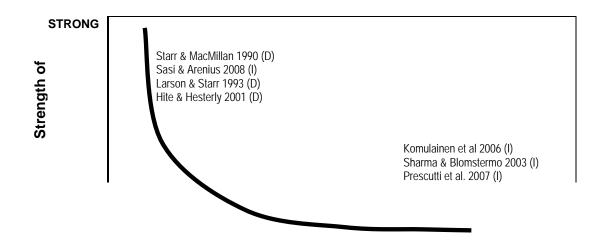
Jones, Coviello and Tang (2011) suggest that network research in international entrepreneurship is becoming more sophisticated than we should abandon the notion of just 'strong' or 'weak' in relationships. Relationships do different things, combined and singly. Introducing the notion of 'virtual embeddedness', Morse, Fowler and Lawrence (2007) present the isdea that strength can be seen in very different ways. Separately, Ozcan and Eisenhardt (2009) have proposed that rather than regarding relationships 'as simply strong or weak' (p.246), we should be regarding relationships and alliances in 'portfolios'. These portfolios develop and evolve according to the different resource and strategic needs of the firms concerned, and can be managed in a strategic way.

In their classic model of network development, Larson and Starr (1993) suggest that, over time, network relationships are transformed from simple dyadic exchanges to a dense set of multidimensional and multilayered organizational relationships. They propose that, in the emerging stage, the ties shift from reliance on dyadic ties with family and friends or previous

contacts to a stage which clarifies more mutual business interests, causes social and economic relationships to overlap and the number of economic ties to increase. Developing from this, Hite and Hesterly (2001) argue that an entrepreneur's personal network evolves from strong ties, towards an intentionally managed one rich in weak ties. Jenssen and Koenig (2002) have supported this view, arguing that the entrepreneur's personal friendships are crucial for the initial venture creation, making strong relationships more important in the start-up and early growth stage than in later stages (Starr & MacMillan 1990). So we have a dynamic picture of emerging enterprises relying strong relationships who will provide resources, later expand their networks to include weaker relationships that will help to give information on new business leads.

Greve and Salaff (2003) and Steier and Greenwood (2000) argue that the mix of strong and weak relationships develops very differently. They observed more weak relationships in the emergence phase, seeing this to enhances the search for new information that helps the development of an entrepreneur's business plan. Elfring and Hulsink (2007) suggest some reconciliation of these conflicting ideas by suggesting that different patterns of relationship portfolio evolution will result from different initial founding conditions and different post-founding entrepreneurial processes. This debate about the value of relationships at the emerging stage of entrepreneurship has not, however, included an international dimension.

The dynamic aspects of relationship portfolio evolution are critical for young internnational firms. and have been subject to much research (Oviatt and McDougall, 2005; Coviello, 2006; Komulainen, Mainela, and Tahtinen, 2006; Sharma and Blomstermo, 2003), but remains far from conclusive (Kiss & Danis, 2008). Notwithstanding the conflicting research evidence, from that which we have a pattern can be drawn, as is suggested in Figure 1, which helps us to induct a conceptual framework. With this framework we can consider the evolution of relationship portfolios of entrepreneurs in domestic (D) and international (I) contexts.



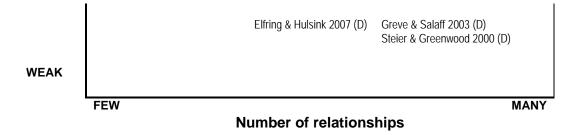


Figure 1: Studies on relationship strength for entrepreneurial firm foundation in domestic (D) and international (I) firms

The framework proposes that relationship networks of entrepreneurs will be a mix of weak and strong relationships at the initial development of the venture. We can see that most domestic entrepreneurship studies have emphasized the role of strong relationships at the early stages, while more studies in international new ventures are emphasizing a greater role for weak relationships. We can now use this conceptual model to examine how the developing use of cyberspace might affect these initial relationship portfolios.

# Cyberspace can make it easier to form and manage international relationships

Cyberspace provides new tools for relationship building that opens further the opportunity for individuals to have relationships, strong and particularly weak ties, with large group of people. Researchers have also recognized how cyber space plays a vital part in bridging emotionally distant and geographically diverse actors (Kavanaugh *et al.* 2005; Wellman, 2001). The formation of networks on Facebook, LinkedIn, and Twitter, for example, has transformed the 'community' within which people develop their social capital and made it less dependent on physical space (Wellman, 2001). We see these networking tools easily extending across borders. It is already evident that many international entrepreneurs are actively using cyberspace for their relationship building in international ventures (Sigfusson & Chetty, 2011). These entrepreneurs have large social networks in cyberspace, and these networks seem to be particularly affecting the formation and development of international new ventures; it appears to be leading to new trends in the relationship formation of international entrepreneurs.

First, we see that international entrepreneurs using cyberspace 'know' many more people, albeit, not deeply. But these people are useful. By finding new relationships within cyberspace, many international entrepreneurs establish contact with people who are also connected to other members of their relationship networks. The international entrepreneurs

seek opportunities through the large number of weak relationships that they hold in cyberspace, in the anticipation that a few of these will lead them to competent relationship partners.

Second, there is a profound change in the way that these portfolios, the social capital of the firms, are managed. There have always been methods of organizing relationships, from the exchange and stacking of business cards to e-mails. Cyber space has opened new ways of managing and organizing a large set of weak relationships. Cyber-based networking services allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system (Boyd & Ellison, 2007). This allows the cyberspace using international entrepreneur to manage large number of relationships in an active way, as is illustrated in Figure 2.

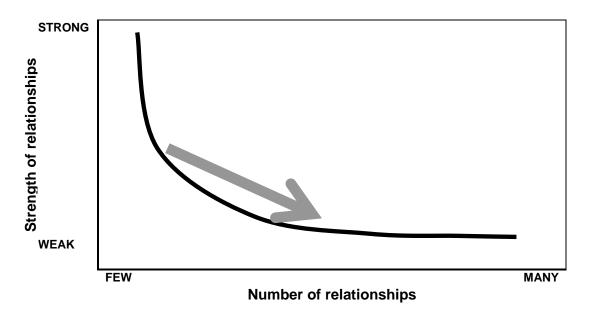


Figure 2: Cyberspace may result in more relationships

As the relationship networks of international entrepreneurs in the cyberspace becomes larger and more complexed, there is more urgency to organize these networks. Entrepreneurs with the largest numbers of weak relationships appear to perceive them and manage them as portfolios within Linkedin or Facebook, which share some have geographical or professional characteristics. (Sigfusson and Chetty, 2011). Relations are therefore kept in different portfolios such as a portfolio of relations in a particular country which will be activated if the

firm decides to expand to that territory and a portfolio of expertise which is activated if the firm's agenda becomes more within that specific field of specialisation.

The networking tools allow the international entrepreneurs to archive several hundreds of often 'sleeping ties' within useful categories, which can be drawn on or reapproached as need be. These tools help them to visualize their portfolios in the context of an entire network, not as a series of single relationships, in the way that Ozcan and Eisenhardt (2009) found practiced by executives in firms with high-performing network portfolios. Cyberspace tools help relationships to be formed 'in the context of building portfolios (p.246). This leads us to our first proposition:

**Proposition 1:** International Entrepreneurs who actively use cyberspace will have more relationships in managed relationship portfolios

### Cyberspace makes it easier to form the trust necessary for opportunity seeking

Relational exchange theory emphasizes trust to be critical for to fostering and maintaining value-enhancing relational exchanges. (Lewicki and Bunker, 1996; Uzzi, 1997). Barney and Hansen (1994) distinguish weak trust, when partners have no significant vulnerabilities to exploit, semi-strong trust, when partners have contractual safeguards to protect them from opportunistic behaviour and strong trust, when formal safeguards are unnecessary because the parties are confident that their vulnerabilities will not be exploited (Currall and Inkpen, 2002; Dyer and Chuh, 2000). So relationships based only on a calculation of value are of a lower quality than those that have a social aspect within which trust is developed (Hite and Hesterley, 2001). Trust 'alleviates the fear of opportunistic behaviour and enhances the stability of the relationship' (Steensma, Marino & Weaver et al., 2000, p.593).

Research is suggesting, however, that the nature of trust in business is changing. Trust, historically has been identified to be based on incremental investments, associated with the development of knowledge of each partner, and commitment on each side (Barney & Hanson, 1994; Kewicki & Bunker, 1996; Morgan & Hunt, 1994). Now, especially with high tech firms in information technology, we are seeing swift or fast trust, where actors have neither shared history nor a shadow of the future (Jarvenpaa, 1998; Blomqvist, 2005). There are two powerful roots to this trend of cyberspace enhancing the speed with which trusted relations are formed.

First, cyberspace tools present an effective virtual system that lowers co-ordination costs and helps timely responses to take place, itself developing an effective instrumental social system of exchange (Lee, 2009). This enables international entrepreneurs trust people they contact up with in cyber space, people who are, in every other respect, strangers. In a study of computer networks, Constant, Sproull and Kiesler (1996) use the term 'kindness of strangers' to show how individuals access mainly technical advice from strangers through a global computer manufacturer's computer network. They collected survey and observational data from a group of employees that they split into information seekers and information providers. They found that although information seekers were strangers to the information providers they gave useful advice to solve technical problems.

Using Granovetter's (1973) 'strength of weak ties' concept Constant et al. (1996) argue that the information seekers are obtaining information that is unavailable through their friends and colleagues, as it is easier to provide information to strangers through cyber space than through face to face interaction. The motivation to contribute can be personal benefit such as emotions, values and self identities (Bandura, 1986; Schlenker, 1985). But cyber networks also provide large numbers of people to observe the others contributing information to requests, which encourages norms of contribution within a computer network community. There is a community sanction against inappropriate or malicious information.

Second, we have the powerful force of virtual embeddedness. Fowler, Lawrence, and Morse (2004) introduce the emergence of virtually embedded ties which are 'interorganizational linkages that are initiated and maintained through electronic technologies and that provide distinctive solutions to the same problems with exchange relationships that are addressed by socially embedded ties' (p. 648). Cyberspace opens the opporunity for virtually embedded relationships to develop within a cyber community, and this, in turn, allows a form of fast trust to be developed very quickly. As Constant et al. (1996) conclude, it is not the number of weak ties that is useful but the ability of these weak ties to bridge relationships - as Granovetter (1982) had originally proposed.

Being developed through cyberspace, the international entrepreneur's new relationships are also connected to other members of their relationship networks, within a virtual community. Though new relationships, they are strong enough to do the job of bridging people across countries with sufficient trust to protect the entrepreneurs from opportunism (Uzzi, 1997). This allows them to expand a 'sufficiently trusted' portfolio of relationships

network much faster than traditional methods would allow (Morse et al., 2007), in the way represented in Figure 3.

We see here the role of the virtual community within which these entrepreneurs and their relationship are embedded not generating strong trust, based on confidence in the other party that comes from a history of personal experience with the other party (Barney and Hansen, 1994). Nor even is it Barney and Hansen's semistron trust base on contractual agreements.

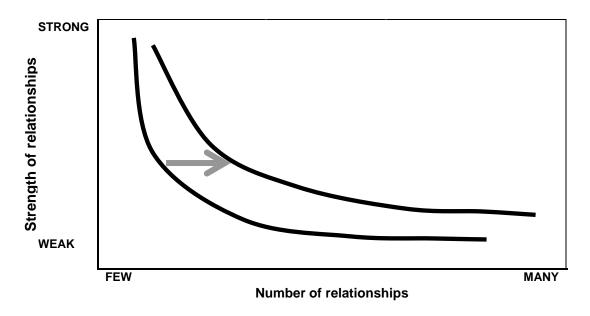


Figure 3: Cyberspace may result in more trusted relationships

Rather, this virtual embeddedness considerably reduces the level of opportunism often associated with new ventures (Uzzi, 1997), and by decreasing the liability of newness associated with the new ventures lack of strong trust relationships. We have a semi-strong form of trust developed fast within the virtually embedded community, that is entirely sufficient for the cooperative behavior that the entrepreneurs seek, but which is based on an 'important alternative form of interorganizational connection' (Uzzi, 1997, p.140). This leads us to our second proposition:

**Proposition 2:** International Entrepreneurs who actively use cyberspace will have more semi-strong relationships in their relationship portfolios

# Cyberspace offers new approaches to relationship portfolios

The advent of cyberspace is not a direct force for change; rather, it is a facility that may or may not be adopted by international entrepreneurs. For those who do adopt it, they may well adopt it in different ways.

Notwithstanding the shifts noted earlier, many international entrepreneurs using cyberspace may have relatively few relationships These entrepreneurs may well be implicity adopting the pattern advocated by Larson and Starr (1993), and use the new network now made available in a similar way to the way that they used their old networks. The network may well be much larger, but little of it will actually comprise relationships to be used in the way considered in this chapter.

Instead, cyberspace is used for screening opportunities and as a way of identifying and contacting the 'right contacts' with the 'right resources' (Larson & Starr, 1993). At different stages of firm evolution and growth, these resources will change. In Shirky's (2008) observation of writers on weblogs, a 'power-law distribution' is noted, whereby most writers have few readers, and they can all pay similar attention to one another, forming tight conversational clusters. This mirrors behavior outside cyberspace, so that cyberspace is used to enact behavior previously seen outside it, and cyberspace is just used to make it easier. We might especially expect this pattern amongs international entrepreneurs whose relationship behavior developed before the use of cyberspace became more established. In short, the older international entrepreneurs may well have have relatively smaller relationship networks.

If the establishment of the firms and the creation of ideas has mainly been based on relationships in cyber space, however, the pattern may well be very different. Many of the younger high tech entrepreneurs have been living and thriving in cyber space for a larger part of their lives. The world in which they have developed their ventures, from the initial startup, to the development of ideas and to the formation of groups is increasingly shaped by their experience of using cyberspace, and is very different from more traditional methods of conducting business ventures (Sigfusson and Chetty, 2011). The international entrepreneurs with the largest relationship networks seem to begin with a large number of contacts, in effect, a large crowd. They may broadcasting their ideas to crowds in cyberspace and only later begin to create concrete links, depending on the reactions they receive.

This use of crowds in cyberspace to come up with the best, most clever solutions, this letting cyberspace vote on your ideas, and this gaining of trust through cyberspace by

promoting your ideas among crowds to whom you have displayed network strength is a completely different approach. It is problematic to see this new pattern in the same way as we have understook network relationships hitherto. Fot example, it is difficult to define these crowds either as as portfolios of relatiosnhips (Ozcan & Eisenhardt, 2009), as weak ties (Hite & Hesterly, 2001) or as 'social or business ties' (Coviello, 2006).

Perhaps we can better see these crowds as a wide global community of international entrepreneurs (Roberts, 2010), as a 'sea of informal ties' (Powell et al. 1996) woithin which ideas can be broadcast and within which there is a certain basic level of virtual embeddedness, that will come into play only when a response is provoked. The new international entrepreneurs in cyberspace seem to rely on these anonymous crowd communities in cyber space (Roberts 2010), but use them as large portfolios of weak relationships (Ozcan & Eisenhardt, 2009) to obtain ideas and create business plans in their ventures. In sa similar way to that observed by Shirky (2008), some have thousands 'readers' from whom responce may be elicited.

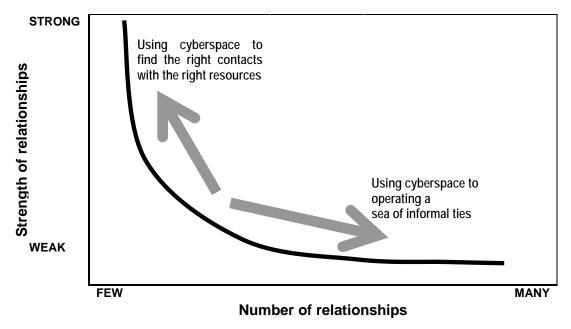


Figure 4: Cyberspace leading to greater diversity in relationship portfolios

Figure 4 shows these two extremes on our conceptual framework. We can expect international entrepreneurs in new ventures working at each ends of this spectrum; those with a relatively small relationship network on the cyber and those with a large network. while a small portion of the population has a large relationship network. At the same time, as these patterns become more evident, we may also find international entrepreneurial firms working

at both ends of the spectrum. One 35 year old international entrepreneur based in Edinburgh, Scotland, having followed the Larson and Starr approach very successfully, has recently recriuited a 22 year old as a marketing manager to pursue the next stage of his internationalization through crowdsourcing. This evolving diversity of patterns of relationships strategy leads us to our third proposition:

**Proposition 3:** International Entrepreneurs who actively use cyberspace will show much greater diversity in their use of weak and strong relationships for their internationalization

#### Conclusion

This chapter has presented three propositions that all argue, in a concrete way, that the advent and use of cyberspace in international; entrepreneurship may be leading to paradigm shifts concerning the role of relationships in the internationalization of the firm, an issue that lies at the heart of much international entrepreneurship research. Just as new communication methods are changing society so will they change the conduct of businesses and trustbuilding. As existing international entrepreneurs become increasingly involved in social networking in cyberspace, and as new international entrepreneurs increasingly com from a generation where cyberspace social networking is the norm, this issue will become more important.

Much of the work reviewed here presents weak relationships to be more quickly developed into fuller business relationships than previously suggested (Morse et al, 2007). But the world of relationships in cyberspace means that we will need a new language to examine the relationships involved; 'weak' and 'strong' will do no longer (Jones et al, 2011). Work being done in social networks may well point the way: Opsahl, Agneessens, & Skvoretz (2010) value relationships according to, for example, their length, position and significance.

The use of cyberspace networks of international entrepreneurs offers new questions concerning the relationship network of international entrepreneurs, how they are changing over time and whether the new kinds of relationships are leading to different organization forms and patterns of internationalization. Observing new young international entrepreneurs might give us some pointers. This presents a challenging arena for future research, but one in which the cyberspace networking systems themselves carry with them tools that could help our research. For example, research has been conducted on Facebook, using the Facebook programs, into individual's social capital (Ellison, Steinfield & Lampe, 2007) and taste

sharing (Lewis, Kaufman, Gonzalez, Wimmer, & Christakis, 2008). If international entrepreneurship researchers can gain access to entrepreneur contact lists on, for example, Facebook, Linkedin, or Twitter, we could gain more complete pictures of their larger networks than by examining ontly those that we find in the transcripts of our interviews, which will inevitably only describe their most used or memorable, and not neccessarily their most useful relationships.

#### REFERENCES

- Aldrich, H & Zimmer, C. (1986). Entrepreneurship through social networks. In: Sexton, D.L. & Smilor R.W. (Eds.) *The Art and Science of Entrepreneurship*. P. 3-23.
- Axelsson, B. and Easton, G. (1992) *Industrial Networks: A New View of Reality* London: Routledge.
- Bandura, A. (1986). *Social Foundations of thought and Action: a Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barney, J. B. and Hansen, M. H. (1994) Trustworthiness: Can it be a source of competitive advantage? *Strategic Management Journal*, 15(S2): 175-203.
- Blankenburg D. and J. Johanson. 'Managing network connections in international business'. *Scandinavial International Business Review* 1.1 (1992) pp 5-19
- Blomqvist K. (2005). Trust in a Dynamic Environment Fast Trust as a Threshold Condition for Asymmetric Technology Partnership Formation in the ICT Sector. In: KleinWoolthuis, R., Bijlsma-Frankema, K (Eds.). *Trust under Pressure, Investigations of Trust and Trust Building in Uncertain Circumstances*, Edward Elgar Publishing, Inc. Cheltenham (pp. 127-147).
- Bott, E. (1955) Urban families: conjugal roles and social networks. *Human Relations*, Viii: 345-385.
- Boyd, D. M., & Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, *13*(1): 210-230.
- Bratkovic, T., Antoncic, B., and Ruzzier, M. (2009). The Personal Network of the Owner-Manager of a Small Family Firm: The Crucial Role of the Spouse, *Managing Global Transitions*, 7(2), 171-190.
- Buckley, P. J. and Casson, M (1985) *The Economic Theory of the Multinational Enterprise* London: Macmillan.
- Casson, M. (1997) Entrepreneurial networks in international business, *Business and Economic History*, 26(2):811-823.
- Centola, D. & Macy, M.(2007). Complex contagion and the weakness of long ties. *American Journal of Sociology*, 113: 702-734.
- Chetty, S. and Campbell-Hunt, C. (2003) Explosive International Growth and Problems of Success amongst Small to Medium-Sized Firms, *International Small Business Journal* 21(5), 5-27

- Constant, D, Sproull, L., & Kiesler, s. (1996). The kindness of strangers: The usefulness of electronic weak ties for technical advice. *Organization Science*, 7 (2): 119-135.
- Coviello, N. E. (2006). The network dynamics of international new ventures, *Journal of International Business Studies*, 37, 713-731.
- Currall, S.C and Inkpen, A.C (2002) A multilevel approach to trust in joint ventures. *Journal of International Business Studies*, 33(3): 479-495.
- Dimitratos P, Jones M (2005). Future Directions for International Entrepreneurship Research. International Business Review, 14(2): 119-128.
- Duque, R.R., Shrum, W.M., Barriga, O. JR., & Henriquez, G. (2009). Internet practice and professional networks in Chilean science: Dependency or progress? *Scientometrics*, 81(1): 239-263.
- Dyer, J.H. and Chuh, W. (2000) The determinants of trust in supplier-auto-maker relationships in the US, Japan, and Korea. *Journal of International Business Studies*, 31(2): 259-285.
- Elfring. T and Hulsink, W. (2007) Networking by Entrepreneurs: Patterns of Tie-Formation in Emerging Organizations, *Organisation Studies*, 28(12): 1849-1872.
- Ellis, P. (2000). Social ties and foreign market entry. *Journal of International Business Studies*, 31(3): 443-469.
- Ellis, P. (2011). Social ties and international entrepreneurship: Opportunities and constraints affecting firm internationalization. *Journal of International Business Studies*, 42 (1): 99-127.
- Ellison, N.B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4): 1143–1168.
- Fernhaber, S.A., McDougall, P.P. & Oviatt, B.M. (2007). Exploring the role of industry structure in new venture internationalization. *Entrepreneurship, Theory and Practice*, 31(4): 517-542.
- Fowler, S.F., Lawrence, T.B., & Morse, E.A. (2004). Virtually embedded ties. *Journal of Management*, 30:647–666.
- Granovetter, M. (1973). The Strength of Weak Ties. *American Journal of Sociology*, 78 (6): 1360–1380.
- Granovetter, M. (1982). The strength of weak ties: A network theory revisited. In P. V. Marsden & N. Lin (Eds.), *Social structure and network analysis* (pp. 105-130). Beverly Hills, CA: Sage.
- Granovetter, M. (1985). Economic actions and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3): 481–510.
- Grassby, R. (1995). *The business community of seventeenth-century England*. Cambridge: Cambridge University Press.
- Greve, A. & Salaff, J.W. (2003). Social networks and entrepreneurship. *Entrepreneurship Theory and Practice*, 28(1): 1-22.
- Grossetti, M. (2005) Where do social relations come from? A study of personal networks in the Toulouse area of France *Social Networks* 27/4, 289-300

- Harris, S. & Dibben, M. (1999) Trust and Co-operation in Business Relationship Development: Exploring the Influence of National Values. *Journal of Marketing Management* 15(4): 463-83
- Harris, S. and Sigfusson (2011). Developing relationship portfolios for initial internationalization: a resource-based perspective. Paper presented at the EIBA Conference in Porto, Portugal, December 2010.
- Harris, S. and Wheeler, C. (2005) Export market development activity: Entrepreneur relationships as exchange opportunities, *International Business Review*, 14/3,187-207
- Hite, J. M. (2003) Patterns of multidimensionality among embedded network ties: A typology of relational embeddedness in emerging entrepreneurial firms, *Strategic Organization* 1(1): 9–49
- Hite, J.M. and Hesterly, W.S. (2001) The evolution of firm networks: from emergence to early growth of the firm. *Strategic Management Journal*, 22(3): 275-286.
- Hite, J.M., and Hesterly, W.S., (2001) The Evolution of Firm Networks: From Emergence to Early Growth of the Firm, *Strategic Management Journal*, 22(3), 275-286
- Jarvenpaa, S.L., Knoll, K. and Leidner, D.E. (1998). Is Anybody Out There? Antecedents of Trust in Global Virtual Teams. *Journal of Management Information Systems*, 14 (4): 29-64.
- Johanson, J. and Mattson, L-G. (1997) Internationalisation in Industrial Systems A Network Approach. In Ford, D. (Ed.) *Understanding Business Markets* London: Dryden pp.194-213
- Johanson, J., & Vahlne, J. E. (1977) ,The internationalization process of the firm A model of knowledge development and increasing market commitments', *Journal of International Business Studies*, 8(1): 23–32.
- Jones, M.V., Coviello, N. and Tang, Y.K. (2011) International entrepreneurship research (1989–2009): a domain ontology and thematic analysis. Journal of Business Venturing (2011), doi:10.1016/j.jbusvent.2011.04.001
- Kavanaugh, A.L., Reese, D.D., Carroll, J.M., & Rosson, M.B. (2005). Weak ties in networked communities. *Information Society*, 21(2): 119–131.
- Keupp, M.M., & Gassmann, O. (2009). The Past and Future of International Entrepreneurship: A Review and Suggestions for developing the Field. *Journal of Management*, 35 (3): 600-633.
- Kiss, A.N. and Danis, W.M., (2008) Country institutional context, social networks, and new venture internationalization speed, *European Management Journal*, 26(6): 388-399
- Kobrin, S.J., 2001, Territoriality and the Governance of Cyberspace, *Journal of International Business Studies* 32 (4): 687–704.
- Komulainen, H., Mainela, T., & Tahtinen, J. (2006). Social networks in the initiation of a high-tech firm's internationalization. *International Journal of Entrepreneurship and Innovation Management*, 6(6): 526-541
- Krackhardt, D. (1992). The strength of strong ties: The importance of philos in organizations. In *Networks and organizations: Structure, form, and action*, (Eds) N. Nitin and R. G. Eccles. Boston, MA.: Harvard Business School Press

- Kraus, S (2011). State-of-the-art current research in international entrepreneurship: A citation analysis. African Journal of Business Managament. 5(3): 1020-1038.
- Larson A. (1992) Network dyads in entrepreneurial settings: a study of the governance of exchange relationships, *Administrative Science Quarterly*, 37: 76–104
- Larson, A. and Starr, J.A. (1993) A network model of organization formation, Entrepreneurship Theory and Practice, 17(2): 5-15.
- Lee, R. (2009). Social capital and business and management: Setting a research agenda. *International Journal of Management Reviews*, 11 (3):247–273.
- Lewicki R. J., McAllister D. J., and Bies, R. J. (1998) Trust and distrust: new relationships and realities. *Academy of Management Review*, 23(5): 438–458.
- Lewicki, R.J. and Bunker, B.B. (1996) Developing and maintaining trust in working relationships. In R.M. Kramer and T.R. Tyler (eds) *Trust in Organizations: Frontiers of Theory and Research*, Thousand Oaks, CA: Sage: 114-139.
- Lewis, K., Kaufman, J., Gonzalez, M., Wimmer, A., & Christakis, N. (2008). Tastes, ties, and time: A new social network dataset using Facebook. *Social Networks*, 30(4):330-342.
- Lin, N. (1999). Building a network theory of social capital. *Connections*, 22(1): 28–51.
- Loane, S. (2006). The role of the Internet in the internationalisation of small and medium sized companies. *Journal of International Entrepreneurship*, 3: 263–277.
- Loane, S. and Bell, J. (2006). Rapid Internationalisation Among Entrepreneurial Firms in Australia, Canada, Ireland and New Zealand: An Extension to the Network Approach. *International Marketing Review*, 25(5): 467-485.
- McDougall, P. P., Shane, S., and Oviatt, B. M. (1994). Explaining the formation of international new ventures: The limits of theories from international business research. *Journal of Business Venturing*, 9: 469-487.
- McGrath, C.A., Vance, C.M., and Gray, E.R. (2003) With a little help from their friends: Exploring the advice networks of software entrepreneurs *Creativity and Innovation Management*, 12(1):1-10.
- Mesquita, L. F., & Lazzarini, S. G. (2008). Horizontal and vertical relationships in developing economies: Implications for SMEs' access to global markets. *Academy of Management Journal*, 51(2): 359–380.
- Moen, O., Gavlen, M., & Endresen, I. (2004). Internationalization of Small, Computer Software Firms: Entry Forms and Market Selection. *European Journal of Marketing*, 38 (9–10):1236–51.
- Morgan, R. M and Hunt, S. D. (1994) The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3): 20–38.
- Morgan, R. M and Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3):20–38
- Morse, E.A., Fowler, S.A., & Lawrence, T.B. (2007). The Impact of Virtual Embeddedness on New Venture Survival: Overcoming the Liabilities of Newness. *Entrepreneurship Theory and Practice*, 31(2): 139-159
- Opsahl, T., Agneessens, F. & Skvoretz J. (2010). Node centrality in weighted networks: Generalizing degree and shortest paths. *Social Networks*, 32(3): 245-251

- Oviatt, B.M. & McDougall, P.P. (2005) Defining International Entrepreneurship and Modeling the Speed of Internationalization, *Entrepreneurship: Theory and Practice*, 29(3): 537-554.
- Ozcan, P. and Eisenhardt, K. M. (2009). Origin of alliance portfolios: entrepreneurs, network strategies, and firm performance. *Academy of Management Journal*, 52(2): 246–279.
- Pitt, L., van der Merve, R., & Berthon, P.A. (2006). Global alliance networks: A comparison of biotech SMEs in Sweden and Australia. *Industrial Marketing Management*, 35: 600–610.
- Powell, T.C.(2003) Research notes and commentaries. Strategy without ontology. *Strategic Management Journal*, 24:285-191.
- Presutti, M., Boan, C., Fratocchi, L., 2007. Knowledge acquisition and the foreign development of high-tech start-ups: a social capital approach. *International Business Review*, 16 (1), 23–46.
- Ring P. S. and van de Ven, A. H. (1994) Developmental processes of co-operative interorganizational relationships. *Academy of Management Review* 19: 90-118
- Roberts, J. (2010). Community and international business futures: insights from software production. *Futures*, 42(9): 926-936.
- Sasi, V and Arenius, P (2008). International new ventures and social networks: advantage or liability?' *European Management Journal*, 26(6):400-412.
- Schlenker, B.R. (1985). Identity and self-identification. In B.R. Schlenker (Ed.), *The Self and Social Life*, New York: McGraw-Hill.
- Sharma, D.D. & Blomstermo, A. (2003). The internationalization process of born globals: a network view. *International Business Review*, 12(6): 739–753.
- Shirky, C. (2008). *Here comes everybody. How change happens when people come together*. London: Penguin Books.
- Sigfusson, T. and Chetty, S. (2011). Building international entrepreneurial virtual networks in cyberspace. Paper presented at the AIB annual Conference in Japan, June 2011.
- Starr, J.S., and MacMillan, I.C. (1990). Resource cooptation via social contracting: Resource acquisition strategies for new resources. *Strategic Management Journal* 11(1)1: 79–92.
- Steensma, H.K., Marino, L., and Weaver, K.N. (2000) Attitudes towards cooperative strategies: A cross-cultural analysis of entrepreneurs. *Journal of International Business Studies*, 31(4): 591-609.
- Steier, L. & Greenwood, R. (2000). Entrepreneurship and the Evolution of Angel Financial Networks. Organization Studies, 21(1):163-192.
- Svejenova, S. (2006). How much does trust really matter? Some reflections on the significance and implications of Madhoc's trust based approach. *Journal of International Business Studies*, 37: 12–20.
- Uzzi B. (1997) Social structure and competition in interfirm networks: the paradox of embeddedness. *Administrative Science Quarterly*, 42(1): 35–67.
- Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42: 35-67.

- Welch, L., and Luostarinen, R. (1993). Inward–outward connections in internationalization, *Journal of International Marketing*, 1(1): 44–57.
- Wellman, B. (2001). Physical place and cyber place: The rise of personalized networking. *International Journal of Urban and Regional Research*, 25: 227-252.
- Williamson, O. E. (1985) The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting New York, NY: The Free Press.
- Wuyts, S. and Geyskens, I. (2005). The formation of buyer–supplier relationships: detailed contract drafting and close partner selection. *Journal of Marketing* 69 (4): 103–117.
- Zhou, L., Wu, W-P. and Luo, X. (2007). Internationalization and the Performance of born-global SMEs: The Mediating Role of Social Networks. *Journal of International Business Studies*, 38(4):673-690.