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The relationship formation paths of international entrepreneurs

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Thor Sigfusson · Simon Harris

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Abstract The study of entrepreneurs' relationships and their influence of firm development has been dominated by static analysis that typically discriminates dichotomously between 'weak' and 'strong'. Little is known about other qualities of international entrepreneurs' (IEs') relationships and the paths that are followed in their formation. We employ a Multi-grounded Theorizing theory-building approach with ten IE cases in Iceland and Scotland to develop a descriptive framework that includes many types of relationship paths of relationship formation. This multi-dimensional relationship model usefully develops from conceptual foundations from entrepreneurship to an international setting. The richer picture of IEs' relationships provided highlights the importance of weak relationships with embeddedness and commitment characteristics, and the path of development from low trust to high.

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Keywords International entrepreneurship · Relationships · Internationalization · Networks · Embeddedness · Trust

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Introduction

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Relationships within networks have been acknowledged as very valuable resources in the process of internationalization of firms and of entrepreneurs (Johanson and Vahlne 2003; Harris and Wheeler 2005; Chetty and Campbell-Hunt 2003; Coviello 2006; Ojala 2009; Dimitratos and Jones 2005). Research into the relationship networks of entrepreneurs has mainly focused on entrepreneurs within particular national or regional context, but international entrepreneurship research has also studied the

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Q2

relationships that have been found to be essential for the international expansion of small high-tech firms (Ojala 2009; Laanti et al. 2007; Komulainen et al. 2006; Coviello 2006; Harris and Wheeler 2005; Sharma and Blomstermo 2003).

Little, however, is known about these relationships, especially at the initial stages of internationalization, where they are often described dichotomously as weak or strong (Sharma and Blomstermo 2003; Ozcan and Eisenhardt 2007: p. 271) or as business or social (Coviello 2006). These categorizations reflect studies in domestic entrepreneurship which have focused on the static notion of relationship strength rather than the dynamic notion of relationship development, and have only seen strong relationships to be important in the development of entrepreneurial firms. Research suggests, however, that international entrepreneurs' (IEs') initial business relationships may usually involve large numbers of weak ties, which questions the validity of assumptions based on the analysis of domestic entrepreneurs (Oviatt and McDougall 2005; Sharma and Blomstermo 2003; Sigfusson and Chetty 2012).

A more complex picture of multidimensional, heterogeneous relationships and dynamic paths of relationship development within domestic enterprises has been presented by Hite (2003, 2005), whose conceptual advances we borrow to offer new perspectives on how IEs develop relationships in initial internationalization. Focusing on the initial stages of startup and internationalization (Coviello 2006), we observe the relationships used for internationalization by software IEs in Iceland and Scotland to find out the relationship paths IEs develop and use at the early stages of their internationalization. Working inductively from the case findings, in which we identify some distinctive patterns in the network development of IEs, we build on Hite's work with a descriptive "TEC" (trust, embeddedness, commitment) model of the relationship development of IEs, based on the embeddedness in relationships notion from network theory (Granovetter 1985) and the perspectives on commitment and trust offered in relationship marketing research (Morgan and Hunt 1994).

By integrating social network perspectives into international entrepreneurship process research, this paper responds to calls for more studies that examine the role of social networks and relational ties in the internationalization process (McDougall and Oviatt 1996, 2005). By using a multi-grounded theorizing (MGT) approach to theory building (Goldkuhl and Cronholm 2010) which has not before been used in IE research, we contribute a more nuanced, multidimensional and dynamic framework for understanding IEs' relationships that escape the dichotomy between 'weak' and 'strong' that has for too long paralyzed this field of research.

Embeddedness in networks

Since Oviatt and McDougall (2005: p. 540) defined international entrepreneurship as the "discovery, enactment, evaluation, and exploitation of opportunities across national borders to create future goods and services", research has examined how social networks enable IEs to acquire and mobilize resources for internationalization. Network relationships are interconnected relationships between different agents (Chetty and Agndal 2007), and entrepreneurs' network relationships are the dyadic, often social relationships they have with others. It is because entrepreneurs can work better as a cooperative network than as a collection of competitive individualists

(Casson 1997) that network relationships, and entrepreneur's relationship-creation skills are important in the internationalization of small high-tech firms (Coviello 2006; Harris and Wheeler 2005). The extent to which entrepreneurs can obtain local knowledge, opportunities and linkages that are essential in the internationalization process, and also to acquire resources (Batjargal 2003), is thought to be linked to how much they are "embedded" in networks (Granovetter 1985), and the strength of their relationships within them (Fletcher and Harris 2012). Despite increasing interest in international entrepreneurship, however, the relationship between new venture internationalization speed, the types of social networks involved and the relationships within them remains poorly investigated (Kiss and Danis 2008).

Since Bott (1955) first presented the idea of close or loose-knit networks, the notion of embeddedness has been at the core of social network research (Granovetter 1985, 1992). Uzzi (1997) sees strongly embedded relationships to give "economies of time" in protecting against opportunism that can occur with "arm's length" relationships, and this enables rapid capitalization of market opportunities. Here, we diverge from the network perspective of embeddedness in order to see embeddedness as a quality that an IE might seek in someone that they may include in their relationship portfolio, in order to help their internationalization.

People who will help an IE's internationalization will have relationships in foreign territories that will be able potentially to help the IE, and that embeddedness there will help by offering opportunities, and give know-how and assistance. The potential value of a relationship with an internationally embedded party does not, therefore, depend on their physical location. Rather, it depends on the extent that they are embedded in one or more of these ways to help the IE to internationalize, reflecting any aspect of the linkages that can offer informed opportunity, how-to advice and assistance. Their value will also depend on the particular territories, networks and social or professional circles involved; some will be more valuable than others, depending on the specific products or services, customers and markets (Yli-Renko et al. 2002).

Zukin and DiMaggio (1990) characterize four elements of such embeddedness to describe the social arrangements underlying economic action: cognitive, cultural, structural and political. Their cognitive embeddedness yields understanding of the people's shared mental models and ways of thinking, and their cultural embeddedness would convey their shared beliefs and values (Hite 2003; Zukin and DiMaggio 1990). Their structural embeddedness reflects how much their social relations are interconnected in the territory (Granovetter 1985), and is key to their ability to provide useful knowledge, opportunities and linkages to help internationalization. Political embeddedness will inform what is possible and what is not, and how power and influence can be leveraged in a society, and is an essential element in many markets.

Relationships in networks

There have been calls for greater attention to the international dimension of relationship networks (Kiss and Danis 2008), and for focus on weak ties and their importance (McDougall and Oviatt 2005; Sharma and Blomstermo 2003; Sigfusson and Chetty

2012; Komulainen et al. 2006). There is little evidence, however, as to how the embeddedness of IEs in networks and the strength of relationships in them influence internationalization, and much of that evidence is contradictory. Internationalization process research links internationalization success to existing networks (Johanson and Vahlne 2003), which influences the search for opportunities abroad (Ellis 2011). Welch and Luostarinen (1993) suggest that strong relationships can offer IEs links to networks which they are a part of in other countries, and personal relationships of young entrepreneurs have been found to open the doors for new foreign market opportunities and build further market knowledge (Harris and Wheeler 2005).

On the other hand, Oviatt and McDougall (2005) argue that many relationships can be involved in internationalization, and that weak ties are also very important. Weak relationships have been defined broadly and differently. Weak ties are “friendly and business like” relationships (McDougall and Oviatt 2005, p. 544) or a “source of referral” (Sharma and Blomstermo 2003). For two parties to co-operate, there has to be at least a minimal level of trust between them for cooperation to occur (Harris and Dibben 1999). There may, however, be latent relationships; connections initiated in the past, such as at conferences, that are “technically possible but not yet activated socially”, which without developing as relationships, enable connections to others later (Haythornthwaite 2005, p. 137). These can be encouraged with the use of new communication technology (Sigfusson and Chetty 2012). The online social networks widely used among software entrepreneurs (Ellison et al. 2007) may encourage users to activate latent relationships, developing them into weak relationships and later, possibly, into actual business opportunities (Sharma and Blomstermo 2003).

Most IE’s relationships will be weak, but we do not know much about their role. We also do not know about IE’s investment in relationships, weak or strong, investment that can enhance credibility at the beginning of the relationship, improve trust and reduce uncertainty and the risk of opportunism (Wuyts and Geyskens 2005). In this study, we explore IE’s relationships and how they develop, by combining the embeddedness concept from network theory with the trust and commitment notion from relationship marketing research.

Paths of relationship development

The dynamic aspects of relationship portfolio evolution are critical for young international firms (Oviatt and McDougall 2005; Coviello 2006; Komulainen et al. 2006; Sharma and Blomstermo 2003). 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 entrepreneurs shift from relying on family friends, or previous contacts, to using relationships based more on mutual business interests, such that their number of economic ties increases and overlaps with their social relationships. Developing from this, Hite and Hesterly (2001) argue that an entrepreneur’s personal networks evolve from being dominated by strong ties to being intentionally managed networks with many weak ties. Supporting this view, Jenssen and Koenig (2002) present the entrepreneur’s personal friendships to be crucial for initial venture creation, so strong relationships are more

important in the start-up and early growth stage than in later stages (Starr and MacMillan 1990). So, we have a dynamic picture of emerging enterprises initially relying on strong relationships that will provide resources, later expanding their networks to include weaker relationships that will help to give information on new business leads.

Presenting an entirely different view of the dynamics of network development, Greve and Salaff (2003) and Steier and Greenwood (2000) observe more weak relationships in the emergence phase, seeing these to be the source of new information that entrepreneurs need when developing their business plans. Elfring and Hulsink (2007) suggest some reconciliation of these conflicting ideas by suggesting that different patterns of relationship portfolio evolution 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, which is the context for this enquiry. While the research evidence remains far from conclusive (Kiss and Danis 2008), an overall pattern is emerging, presented in Fig. 1. The framework proposes that when entrepreneurs initially develop their ventures, their relationship networks can comprise mainly a few strong relationships as found in the studies noted towards the left hand side of Fig. 1, or a large number of weak relationships, as found in the studies noted towards the right hand side. This suggests two evolutionary paths for relationships within entrepreneurs' portfolios of relationships (Zolkiewski and Turnbull 2002; Sigfusson and Harris 2012), one in domestic contexts (D) and one in international (I) contexts. It is evident that most domestic-focused entrepreneurship studies emphasize the role of strong relationships at early stages, while studies of international new ventures emphasize a greater role for weak relationships.

We have now reached a stage in international entrepreneurship research, however, when we should abandon the notion of just 'strong' or 'weak' in network relationships (Jones et al. 2011). Strength can be seen in very different ways because different relationships do different things, combined and singly (Morse et al. 2007). Having concluded that we should not regard relationships as simply strong or weak, Ozcan and Eisenhardt (2009) argue that we should regard relationships and alliances to be developed in 'portfolios' that firms develop strategically according to their firms'

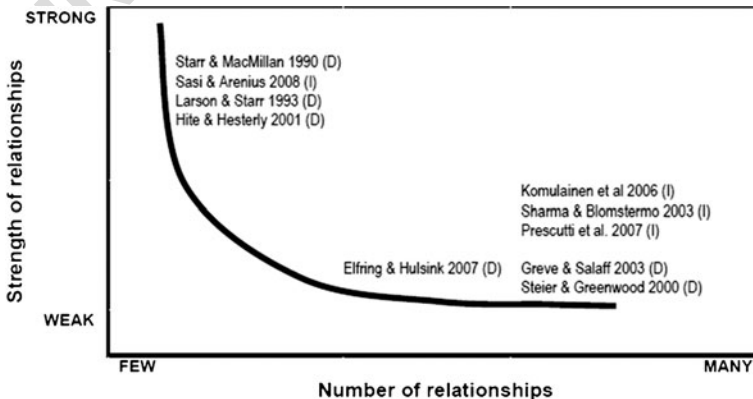


Fig. 1 Studies on relationship strength for entrepreneurial firm foundation in domestic (D) and international (I) firms

needs. In this study, we will also escape the weak–strong dichotomy and will seek a more more nuanced interpretation of the qualities that IEs might seek for relationships in their portfolios. We now turn to international marketing, network and international entrepreneurship research that has identified some of those qualities.

Trust and commitment in relationships

The global scale of international entrepreneurs demands that they search wider and harder for trusted and committed relationships in networks from whom to elicit cooperative behaviour. All international business requires cooperation between people at one stage or another, trust between parties is fundamental for the necessary agreement between people to be developed (Buckley and Casson 1985; Williamson 1985). Trust, when “one party has confidence in an exchange partner’s reliability and integrity” (Morgan and Hunt 1994: p. 23), has therefore long been recognized as an essential element of international business linkages that enable the search for opportunities abroad (Ellis 2011). These linkages can be through joint ventures, alliances, contracts, informal understandings or network arrangements (Axelsson and Easton 1992; Blankenburg and Johanson 1992; Child et al. 1997; Johanson and Mattsson 1992). Trust lies at the heart of relationships that are fundamental for entrepreneurial internationalization by offering the necessary linkages to networks in other countries (Johanson and Vahlne 2003; Welch and Luostarinen 1993).

Influential marketing and international marketing research has identified trust as one of two components of relationship strength in business exchange relationships, commitment being the other (Morgan and Hunt 1994). Partnership research sees trust to depend on the previous history in partnership of negotiating, making commitments and executing those commitments so does not discriminate between trust and commitment (e.g. Larson 1992; Ring and Van de Ven 1994). Within alliances, trust and commitment are usually seen to be closely related, sometimes dynamically interdependent; investment in a relationship through commitment enhances parties’ credibility at the beginning of the relationship and by improving trust, reduces uncertainty and the risk of opportunism (Wuyts and Geyskens 2005).

Commitment, the belief that a “relationship is worth working on to ensure that it continues indefinitely” (Morgan and Hunt 1994: p. 23), is influenced by trust. Even though commitment can develop without trust, trust can promote commitment to a relationship. Similarly, entrepreneurs need to invest commitment in relationships to enhance their credibility at the beginning of the relationship, to improve the other’s trust in them and to reduce the uncertainty and the risk of opportunism for both parties (Harris and Dibben 1999; Wuyts and Geyskens 2005). When “both commitment and trust—not just one or the other—are present, they produce outcomes that promote efficiency, productivity, and effectiveness” (Morgan and Hunt 1994: p. 22). In short, commitment and trust lead directly to cooperative behaviours that are conducive to relationship marketing success. 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 provides a context of trust between known partners or people who can be endorsed by known others; this

helps people to co-operate with one another, and the commitment then expressed 239
builds individual trust (Uzzi 1996). 240

How trust develops in relationships and the extent to which it needs to do so (for 241
the necessary cooperation to take place) depend on the context; we can expect 242
different levels of trust within different contexts (Grossetti 2005). Internationalization 243
increases entrepreneur's distance from markets and relationships, and requires a 244
broader focus towards other and new networks (Fletcher 2001). Early international 245
relationships may be valued for knowledge and market access rather than for permanent 246
commitment (Hadjikhani and Sharma 1999; Hite 2003). 247

This review shows how, notwithstanding that relationships play an important role 248
in international entrepreneurship, the simple "weak" and "strong" dichotomy that has 249
characterized much research into IE's relationships and their paths of development 250
may be vague and incomplete. Further, we do not know what relationships IEs use at 251
the early stages of their internationalization, how these relationships develop and are 252
managed by the IEs and how they influence the internationalization process. We call 253
this dynamic process of relationship development the relationship path; this study 254
seeks to shed light on relationship paths of IEs at the early stages of their interna- 255
tionalization. To examine the early relationship formations of IEs, we use a MGT 256
approach, to which we now turn. 257

Research approach 258

Our research questions are in an avenue of enquiry which extant theory does not yet 259
address well, in the relatively new field of international entrepreneurship research that is 260
not yet on stable theoretical ground (Kiss and Danis 2008). It also faces a liability of 261
newness for an emerging theoretical field that can lead to the use of insufficiently 262
sophisticated research methods, with analysis and theorizing from poorly processed 263
mixtures of qualitative and quantitative data that ignores or excludes "*disconfirming* 264
evidence" (Eisenhardt 1989: p. 540). This provides opportunities for theory develop- 265
ment, but it requires a clear research methodology for doing so. The research also 266
needs a clear view of the unit of analysis (Jack et al. 2010) and needs to consider "the 267
key and distinguishing qualities of entrepreneurial phenomena" (Zahra 2007, p. 444). 268

Grounded theory approaches seek inductively to develop theory from empirical data, 269
stressing open-mindedness towards the empirical data in data collection so that it is not 270
corrupted by preexisting theory (Creswell 2007; Harris 2000). Avoiding established 271
theoretical categories in analysis, however, weakens the opportunity for theoretical 272
triangulation and for developing a more coherent body of theory (Goldkuhl and 273Q9
Cronholm 2007). The constant comparative element of a grounded approach is 274
therefore often employed (Anderson et al. 2007), but "full blown grounded theoriz- 275
ing" is rarely used (Jack et al. 2010). 276

Faced with these challenges, international business case research often employs an 277
abductive approach (Pierce 1867) to generate theoretical propositions to explain 278Q10
behaviour, to explore the relevance and usefulness of conceptual frameworks and 279
to explore and understand possible relationships between concepts, contexts and 280
management processes. In an abductive process, first one and then multiple cases 281
are explored in the light of theoretical frameworks, and then theory is inductively 282

built from case data where the theoretical frameworks yield contradictory, inadequate 283
 or no explanations (Powell 2001, 2003). Abductive research approaches have become 284
 more common in entrepreneurship and international business research (Jack et al. 285
 2010; Sinkovics et al. 2011), which also respond to calls to combine qualitative and 286
 quantitative data (Coviello 2006; Hambrick 2007; Harris 2000). 287

This process, however, by prioritizing theory, presents the danger of “theory 288
 fetish” which “prevents the reporting of rich detail about interesting phenomena for 289
 which no theory yet exists” (Hambrick 2007: p. 1346). To avoid this, whilst also 290
 recognizing useful prior theory, we prioritize the grounded data by employing 291
 Goldkuhl and Cronholm’s (2010) modification of MGT approach. This approach 292
 first explores the data without a priori specifications of the constructs, and only later 293
 allows the researcher to recognise useful existing theoretical contributions and empirical 294
 work in the field. As such, MGT is a formalized research and analytical 295
 approach for mixing methods in a way that can help theory generation for an 296
 emerging field such as international entrepreneurship (Hohenthal 2006). 297

We apply the MGT approach within a multiple case study, which is well suited to our 298
 research enquiry. First, the multiple case study method is especially appropriate when 299
 researchers want to cover contextual or complex multivariate conditions and not isolated 300
 variables (Eisenhardt 1989; Eisenhardt and Graebner 2007; Yin 2009). Second, our 301
 questions are specifically focused on a thorough analysis of individual network 302
 relationships, in which we are asking “why” and “how” questions. The qualitative 303
 multiple case study method enables selectivity to focus on this topic, and is also 304
 especially suitable for exploring the reasons and the processes behind management 305
 phenomena (Yin 2009), a reason that underpins Hoang and Antoncic’s (2003) plea for 306
 more qualitative research in research in entrepreneurs’ networks. Recent studies of 307
 the networks of entrepreneurs or ventures have therefore employed qualitative case 308
 study methods (Jack et al. 2010; Sasi and Arenius 2008; Elfring and Hulsink 2007; 309
 Laanti et al. 2007; Harris and Wheeler 2005; Halinen and Tornroos 1998). 310

This study is seeking deeper and richer understanding of IE’s relationships, and 311
 Creswell (2007) suggests that qualitative research is “as an intricate fabric composed 312
 of minute threads, many colors, different textures, and various blends of material. 313
 This fabric is not explained easily or simply” (p. 35). To appreciate these “different 314
 colors”, international entrepreneurship studies often employ Eisenhardt’s (1989) 315
 approach in their case study research, and mix different forms of qualitative and 316
 quantitative data (Harris 2000) “given that qualitative case data can be analysed and 317
 interpreted with a bifocal lens, that is, both qualitatively and quantitatively oriented” 318
 (Coviello 2006: p. 717). 319

Research method: Operationalizing the MGT approach in a multiple case study 320

The MGT approach for theory development involves inductive coding, conceptual 321
 refinement, pattern coding and theory condensation in three stages: (1) theory generation 322
 with a grounded approach to data gathering, (2) explicit grounding through inductive 323
 coding to achieve conceptual refinement and pattern identification and (3) reflection and 324
 revision for empirical and theoretical matching and validation. These stages are now 325
 described in turn. 326

Theory generation stage: Data gathering

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The relationship formation of ten international software development entrepreneurs, five in each of two countries, Iceland and Scotland, was studied in order to widen the scope of the sampling and to strengthen the generalizability of the research results. The number of cases was guided by the objective of reaching a thorough understanding of the relationships of the entrepreneurs in their venturing.

The sampling procedure was therefore purposive. We studied networks of software entrepreneurs to enable comparison with other studies in this field (e.g. Ojala 2009; Laanti et al. 2007; Sasi and Arenius 2008; Elfring and Hulsink 2007; Coviello 2006; Ellis 2000; Bell 1995). We followed theoretical sampling logic (Eisenhardt 1989) to gather case entrepreneurs within different relationship categories from lists of software ventures provided by national industry associations in the two countries. At the time of data collection, the entrepreneurs were all operating relatively small independent business to business ventures, and all met the size, age and export criteria for international new ventures used by McDougall et al. (2003) and by Oviatt and McDougall (2005). Descriptive data are shown in Table 1.

The research used multiple sources of information including open-ended face-to-face semi-structured interviews, social media data and secondary public and private data which yielded detailed information on the initiation of relationships and their context. The same researcher interviewed the entrepreneurs in both countries, face to face, in fall 2010, to a point of data saturation when it was believed that further interviews would not add significant new information. Interviewees were questioned about the relationships and the events during the early development and internationalization of their firms. Concerning the relationships, interviewees were asked how they were initiated, how the participants would describe them and about the effects of the relationships on their firms.

t1.1 **Table 1** Characteristics of case entrepreneurs

t1.2	Entrepreneur	Year founded	Business	Turnover (2010)	Years from foundation to first internationalization	Years previous experience
t1.3	A1	2000	Mobile meeting platform software	<\$2 m	2	10+ in IT
t1.4	A2	1998	Information security	\$5 m	2	13 in IT
t1.5	A3	2005	Web solutions for the music industry	\$1–2 m	1	5 in IT
t1.6	A4	2003	Mobile games	\$6	<1	Founded straight from University
t1.7	A5	2004	Ticketing software	\$12 m	2	Many in internet and investments
t1.8	A6	2009	Mobile software	\$2 m	<1	2 in IT
t1.9	A7	2001	Mobile games	\$8 m	1	3 in IT
t1.10	A8	1999	Broadcasting technology	\$20	<1	10 in IT, pioneer of sector.
t1.11	A9	2002	Web game service		2	4 in mgt.
t1.12	A10	2007	Data software		2	8 in IT

In line with similar studies in the field, the interviews were constructed as openly as possible, but were focused on gaining information about the IE's relationships (Coviello 2006). To refine the interview process, in late winter 2009, preliminary open interviews were carried out with four software IEs who were subsequently included in the study. These revealed complex and somewhat chaotic networks of relationships, which provoked interest in further study and led the main body of interviews to focus on understanding the IE's relationships.

Each interview continued until the IE had thoroughly described his or her relationships and the path of development of each. Asking specifically about individual relationships yielded data about when the relationship was initiated and who provided introductions, the depth and content of the relationship and the frequency of contact and how the IE valued and viewed the relationship. The answers and discussion that followed gave deep information from the initiation of the relationship and its role at the stage of venture development concerned, to the personal emotional intensity, intimacy and commitment of the relationship.

Inductive coding stage for conceptual refinement and pattern identification 370

Inductive coding in the MGT approach emphasizes analysis of the data as free as possible from preconceptions to let the data speak. It also allows focus to the research topic; the objective is not to accumulate all the data possible, but to identify and reveal the essences with enough context data to allow the research subjects' situation to be understood (Wolcott 1990). Our preliminary phenomenological analysis began, as Eisenhardt (1989) recommends, with sifting through all the data to discard irrelevant information and combining the most important information. In initial coding, interview and secondary text was broken into "meaningful chunks or segments" (MacQueen et al. 1998: p. 33), and significant statements, sentences or quotes that "provide an understanding of how the participants experienced the phenomenon" were highlighted (Creswell 2007: p. 61). Conceptual refinement involved progressively organizing the concepts that emerged from the open inductive coding into emergent themes that could be related these to the central overall phenomenon of relationships. Three main concepts emerged: trust, embeddedness and commitment.

This judgmental process was difficult as it involved massive reduction from the plethora of variables and concepts that emerged from the open interviews, and it was necessary to guard against the risk of bias from preconceptions. MGT emphasizes the importance of addressing the influence of the researcher's prior perceptions as researchers cannot isolate themselves from their mental models which Greene (2007) describes as "a set of assumptions, understandings, predispositions, and values and beliefs with which all social inquirers approach their work" (p. 12). Here, some models are present even before the researcher formalizes extant theories into the analysis, mental models that "subsume philosophical paradigms, as well as substantive theories, disciplinary perspectives, and a whole host of more personalized experiences, values and ways of knowing" (p. 13).

Reflection and revision stage for empirical and theoretical matching and validation 398

In the MGT approach, data are examined and explored for detail relating to the themes which either had emerged in the open interviews or were under consideration in the IE literature *before* it is validated and confronted with prior theories and extant research. As other entrepreneurial relationship and network studies have found (Anderson et al. 2007; Jack et al. 2008), the MGT approach provides a way to undertake empirical research “which is informed by prior theoretical understanding, but which is not so determined or constrained by this understanding that the potential for making novel insights is foregone” (Finch 2002: p. 57).

The pattern coding in the MGT approach implies “an interest toward conceptualizing action patterns” (Goldkuhl and Cronholm 2007: p. 196), with categories being combined into theories or theoretical patterns, models and other possible conceptual frames. Importantly, the three categories of trust, embeddedness and commitment that emerged were the most frequently mentioned themes in the interviews. Other concepts were of interest, and through analysis, we were partly able to relate their context to the three main categories, which strengthened that emergent categorisation and deepened its grounding in the data. A great number of themes emerged in the data, such as resource acquisitions, and the influence of changes in external business environment on the IE’s internationalization, but our focus here is their relationships, where the initial constructs were largely related to their dynamism, multiplicity and variety. In order to relate the study to the others presented in Fig. 1, so the relationships were defined as weak or strong in a separate exercise, this based on four criteria: the frequency of contact, the emotional intensity of the relationship, the degree of intimacy and reciprocal commitments between the actors involved (Granovetter 1995).

Initial inductive findings from the case studies 423

The preliminary interviews indicated that the participants had not thought of their relationships as something which needed to be structured and managed, but all the IEs emphasized the importance of building good relationships for their internationalization. The IEs did not view themselves as partners in informal or formal networks. ‘Formal relationships’, for them, meant structured industrial or strategic networks among businesses, or individual contracts between a supplier and a producer, and their relationships did not fit this idea; the IEs had no clear idea of what a network was. The IE’s previous ventures, their years of business and social activities, and the personal networks which resulted were central. It was therefore essential to take the IE as a person into consideration if we are to understand the IE’s emerging venture network.

A holistic view of the IE’s networks was enabled by looking at the relationships within the IEs’ networks, and the interactions between them, but a picture of rapidly changing, dynamically driven and evolving relationship portfolios was formed by looking at the particular individuals and the bundle of changing relationships that represented their networks. Our analysis was limited by the underlying static data gathering process, but we were able to identify a picture of these relationships at different stages.

Important background support for many of the IE's initial venture's startup, for example, came from family and close friends. The IE's personal social relationships, of various sorts, typically represented long-standing support with "He has been a solid partner and we go back since University" or "He is a friend who has had great influence on me ever since we worked together at X." These relationships had been initiated at home and abroad, some of the entrepreneurs had studied or worked abroad, attended various trade shows, worked with other software specialists and have been members at various associations.

Relationship expansion was important, and this could be coincidental, or it could be managed in a strategic way, where relationship strength could be built through frequency of contact. It was important to build a good reputation through good relationships with other software firms, in order to build trust within the industry. Relationships with people who could connect the IE with others were frequently mentioned as being important for internationalization, these people being brokers, people at trade shows and go-betweeners (Uzzi 1997). In all cases, however, the network of relationships that were critical to the IE's international expansion were regarded as being, to a large extent, under the influence of the IE and subject to the IE's strategic and operational decisions. The IEs, and the relationship strategies they chose, drove their networks.

All of the participants had large relationship networks on LinkedIn, the online social networking site with 120 million users worldwide, where they actively developed latent relationships. For example, one relationship, coded as 'latent' was described as "I met him in San Fransisco in 1999–2000 and we hooked up on LinkedIn. Then 6 years later we started talking which later led to some activities", and another as "We had been in the same online network for some time". One IE cited a recent e-mail from an individual who had been connected with him for some years on LinkedIn, but without a single meeting between them:

Hi ... Good to connect again via LinkedIn. It has been a long time! Hope you're well. I actually moved back to (city) last year to begin life as a Canadian again. Good fun. I'm working on a new tech idea and if you had a minute I would be keen to hear your thoughts... [LinkedIn communication to software entrepreneur]

Latent ties, initiated, for example, through one-time sharing of business cards at a trade show, often developed into inactive online relationships. The online network could then nourish the possible relationship between the parties by revealing for both the list of other people to which each is connected. This partly guarded both parties from opportunism, as one participant noted: "He knew that in my network (online relationships) were a lot of important people in the industry. He wouldn't risk going behind our backs." We observed a pattern in which the IEs managed large relationship networks through the online social network, which they used to develop relationships, for references and to guard against opportunism.

Three emergent themes: Trust, embeddedness and commitment 483

Very few of the relationships used by the entrepreneurs in their international venturing had the high frequency of contact, emotional intensity and reciprocal commitments that

would mark them as strong relationships under Granovetter's (1985) definition. Supporting the studies towards the right hand side of Fig. 1, as well as Oviatt and McDougall (2005) and Sigfusson and Chetty (2012), nearly all the important relationships for early internationalization were weak. One reason that may explain this variance from, for example, Ellis (2000) and Harris and Wheeler (2006), is that the study did not explicitly constrain its data gathering towards the relationships that would be the most trustful or important.

Three themes emerged from the coding process: trust, embeddedness and commitment (TEC). Trust is the individual, personal trust between the IE and the relationship, reflecting a calculation of the trustworthiness, knowledge of the party involved and affection between the parties. Embeddedness of the relationship refers to that relationship's embeddedness within foreign markets and in networks in overseas territories that would help the IE's internationalization. Commitment is the expression of business commitment to a joint project, implying action. These are now described in turn, with examination both of the categories themselves and also of how they interact with one another.

Trust

The IEs rarely used the word "trust", but the level of trust which the relationships were built on was an important thread that ran through the interviews. Trust is specific in its nature and can differ in what it means because people can be trusted for one thing or activity and not for another. We saw many types of trust, and it was coded in a variety of ways. Examples included "this is a guy I have worked with for a long time and we have had great cooperation", "you will not find a more solid partner", "he contacts me weekly and gives great advice" and "my father has been a great inspiration to me and he is also in software". Trust always, however, included aspects of knowledge of the other party, such as honesty, value and reliance, or affective qualities, such as closeness and family ties.

Trust was always important in some form in the relationships that were involved in actual activity, though it could be operating at different levels as well as in different ways. It was clear, for example, that internationalization rarely used relationships that involved a lot of trust, and rather tended to use weaker relationships that did not use so much (Oviatt and McDougall 2005; Duque et al. 2009). The trust in internationalization relationships could arise quickly, and not only be linked to friends or family ties. Many of the IE's relationships that were most associated with internationalization were virtual 'online' relationships, where the LinkedIn social networking site decreased the time it took to build a minimal level of trust (Morse et al. 2007). These descriptions included "I met him at the trade show and we exchanged emails. We connected on LinkedIn and after 3 years of silence he contacted me and we realised we could do business together." and "We realised after being connected on LinkedIn for some time but never met, that we both had same contacts in New York, hooked up and did a project with these guys". It was the creativity that was possible with the relationships that seemed to matter, and the potential for accessing opportunities through them.

Embeddedness 531

The extent to which relationships were enmeshed in a social network was a very strong underlying theme in nearly all the descriptions of relationships. These young ventures lacked resources, and they were actively seeking intangible and tangible resources from personal relationships, many of which might be local (Sharma and Blomstermo 2003; Harris and Wheeler 2005; Komulainen et al. 2006). But for internationalization, if an individual is not embedded by having a position in a network, an IE's relationship with that individual will be of no value for international venturing. The embeddedness sought here was to find or to activate opportunities. The embeddedness was being, for example, in the same industry in a particular territory, in virtual communities on the web, in associations of software specialists, in governmental programs, trade shows, or financial institutions, or being buyers and sellers and brokers abroad.

These networks were valued differently by the different IEs. Many of the opportunities were current "I always attend this conference as it open many doors", "I am a member of Small World (online network) which has been useful for establishing relationships with investors", while others were seen as being for the future "I think our new high tech association can help to establish the industry", "the international success of CCP (large gaming company in Iceland) can open doors for all of us", "the University's effort to build an IT research community in Dundee (Scotland) is important".

The most important role played by go-betweeners arose from their embeddedness in useful networks: these individuals could transfer expectations and opportunities of existing relationships into new relationships (Uzzi 1997). These were often leaders in a field, brokers or important media or marketing people, and they were especially valuable when there was a tight industry cluster that needed to be accessed.

Commitment 557

The final underlying theme which emerged from the data was commitment, and this was important if actual activity was being planned, or was being realised. In the large portfolio of relationships that the IEs held, we identified a number of different indicators of commitment and of the value the IEs gave to commitment in relationships.

One consequence of these being young firms in the initial paths of international development, the IE's descriptions were mainly of perceived future commitment, not then having had much personal experience of actual cooperation. Without perceiving commitment, however, any investment in the relationship might not be worthwhile.

Commitment implies some form of intrinsic agreement between the parties concerning what they want to achieve with one another, but the commitment is only of value if it carries knowledge, skills or abilities that the IE has seen to be helpful for the business, which we can collectively call "competence". Actual or perceived commitment was therefore expressed through expressions of the relationships' competence such as in terms of the relationships "getting things done", "ability to lead", "extremely skillful" or being "actively involved". Even though there can be commitment without

trust (Uzzi 1996), when commitment and trust go hand in hand, they promote effectiveness (Morgan and Hunt 1994). 575
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Beyond strength: An emergent model of relationships 577

The major themes of TEC emerged from the inductive stages of the MGT approach, and when this was examined at the later stages of the process against prior theory and extant research, a model for relationships was suggested. It was also evident that these three categorizations had strong theoretical associations with three primary constructs (social capital, personal relationship and dyadic economic interaction) discovered inductively in Hite's (2003) inductive analysis of domestically focused entrepreneurs. Hite's (2003) substantial contribution to understanding relationships in entrepreneurship shows the complexity of social relationships in emerging firms, challenges the view of relationships that sees them only as 'strong' or 'weak' with a multidimensional perspective. Hite (2005) subsequently presents a process of evolution toward full embeddedness that both adds a dynamic perspective of the relationships and strengthens the theoretical and empirical grounding of the work. 578
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Hite's (2003) work, however, was based on an inductive analysis of emerging SMEs in a purely domestic environment, and her attention is to locate and analyse only strong relationships. From the three characteristics of relationships she discovered, she characterized seven categories of relationships, with different properties and values. We now adapt that categorization for the relationships of international entrepreneurs at the initial stages of international development, based on all the kinds of relationships that they use into the TEC model, shown in Fig. 2. The different types of relationships are now outlined, and are presented in Table 2. 590
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Personal relationships 598

Personal relationships were valued by the entrepreneurs, but these relationships lacked embeddedness and commitment, and provided moral more than practical support to the strategy of exploration in the internationalization process. One IE, for example, noted "My father has been important to my venturing ever since I started. He has always been there for me as a backbencher" and another declared 599
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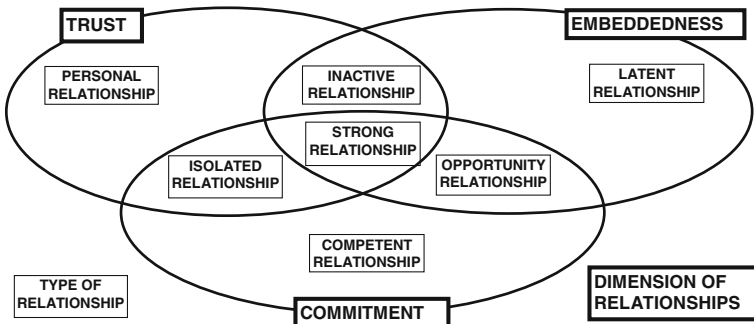


Fig. 2 The types of relationships within the TEC model

t2.1 t2.2	Table 2 The seven IE relationship types	Types of relationship	Description
t2.3		Personal	Relationships based on trust, on a personal basis, and this trust may or may not transfer to a business activity, and may not be trust regarding business activity
t2.4		Latent	Relationships with people located in a place (such as an industry or a foreign market) that is of interest to the IE. These have not (yet) developed into either business activity (requiring commitment) or personal relationships (requiring trust), but they may open doors to new networks or resources
t2.5		Competent	The IE perceives the agent to be committed to work with the IE, and have value in that commitment by being competent, by having knowledge (e.g. technical, managerial or financial) or skills that are or which could be of value to the IE. But the relationship is not usefully located, and the person is not (yet) trusted
t2.6		Opportunity	Relationships that combine embeddedness and commitment; a competent business partner embedded in a network or a social sphere that presents opportunity to do new things such as opening of venture possibilities, new markets and new activities
t2.7		Isolated	Relationships with personal trust and commitment, but the absence of embeddedness within any internal or external relationship network means that the scope for offering new opportunities is limited
t2.8		Inactive	Trusted relationships embedded in a social network, with potential for doing something useful but without commitment, so actual plans or activity are limited
t2.9		Strong	This is a fully functioning business relationship, with the scope and potential and strength to enable the pursuit of new business activities based on trust, embeddedness and commitment. Some of the most important, such as go-betweeners, may show some but low levels of personal trust

“Family members have been shareholders but their role has been more a mental support than anything else.” Lacking network embeddedness or the competence that we would expect with committment, these relationships tend not to provide the opportunities that the IEs need (Ruef 2002), and especially not in international markets.

It is here that we find the clearest explanation for the difference between domestically focused entrepreneurs, where many studies have found these personal relationships to be very important, and international entrepreneurs, where the research evidence tends to downplay their inportance. Rather than being based on highly trusted ‘strong’ relationships, with family and friends playing a pivotal role (Larson

and Starr 1993), IEs usually rely more on weaker relationships without this personal trust (Oviatt and McDougall 2005). 614
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Latent relationships 616

In line with other studies in this field (Laanti et al. 2007; Sharma and Blomstermo 2003), the IEs' initial internationalization were based on a strategy of exploration. 617
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The IEs actively sought relationships in a way that appeared to be without strategy, 619
but this reflected that they did not know, at such an early stage of their firm's 620
development, where the best opportunities would lie. Such a strategy of exploration 621
is best pursued by a large number of relationships (Oviatt and McDougall 2005; 622
Sharma and Blomstermo 2003). 623

As a result, a large poroportion of the IE's relationship portfolios were represented 624
by latent relationships, often formed at trade shows and industry events. To become 625
operationally useful, however, these latent relationships needed to be developed, and 626
most of the IEs did this actively and enthusiastically, often nurturing them through the 627
web and using online methods. The task here was to develop personal trust and 628
commitment, so that they could become strong business relationships. 629

Competent relationships 630

The IEs rarely mentioned their competent relationships, even though these individ- 631
uals were important for the internal development and operations of their firms and 632
had value for having knowledge, skills and abilities that were essential for the firm. 633
But these relationships lacked location attributes or network embeddedness that 634
would have helped the firm in its international venturing, and lacked personal trust 635
that would have made them personally valuable. These relationships do not therefore 636
transpire as being central to the firm's international growth. 637

Opportunity relationships 638

Opportunity relationships played an important role in the development of the venture. 639
Here, we have individuals with particular capabilities such as technical knowledge or 640
managerial skills which can be of use for the entrepreneur. These individuals had 641
often been involved in similar technological areas or in other entrepreneurial ventures. 642
These individuals were technically competent or knowledgable in specific 643
business areas, and are also located in or have network relationships in areas of 644
interest. 645

The IEs spent a lot of time creating new latent relationships as their experience had 646
indicated that many of these relationships could be developed, by gaining some 647
commitment from them, so that they would present new opportunities. These oppor- 648
tunity relationships helped the IEs to address structural holes in networks and create 649
competitive advantage by spanning these holes (Burt 1992). 650

On the other hand, some opportunity relationships showed strong signs of insuf- 651
ficient trust, which resulted in opportunism. As one participant noted: "The leaders 652
[of the other business concerned] have left the city with the profits and have shown 653
limited interest in investing in us," and another, "This American giant showed huge 654

interest in us, we became overenthusiastic and they plainly took our ideas, started their own venture and left us in the cold.” 655
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There were many examples of opportunity relationships, and all of the firms had at least one. A good example is of an IE who moved from Iceland to London in 1999. Without friends, family or work history there, he sought to establish relationships with people with similar interest to build his venture. He became a member of the London Business School’s online network of entrepreneurs and through that network established connections with three individuals who were competent in a relevant technology and were interested in the specific technology he was presenting. He then built his international business with the opportunities presented by these individuals. 657
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Isolated relationships 665

Personal relationships (with only trust attributes) and competent relationships (with only commitment attributes) did not feature in the initial stages of internationalization of these IEs, nor did isolated relationships, which were strong, trusted competent relationships but without embeddedness characteristics. While this is fully in line with the propositions of Oviatt and McDougall (2005), Laanti et al. (2007) and Sharma and Blomstermo (2003), this contradicts entrepreneurship literature which emphasizes the value of strong ties at the initial stage of the entrepreneurship (Larson and Starr 1993; Starr and MacMillan 1990; Hite and Hesterly 2001), and also studies that have emphasized the role of close, trusted relationships for the initial stages of firms’ internationalization (Bell et al. 2003; Ellis 2000; Gemser et al. 2004; Harris and Wheeler 2005; Komulainen et al. 2006; Zain and Ng 2006). 666
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Inactive relationships 677

The IEs often cited inactive relationships, which were based on trust with people embedded in valuable networks, but where there was little commitment or where any commitment had ended. Often, these were “sleeping” relationships with people where there had been frequent relationships in the past, such as with old classmates, former colleagues and business partners, or trusted relationships with family and friends. 678
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These relationships were often seen as representing potential for doing something in the future, but these individuals were not considered as having significant influence on the business development at the time of the study. As one participant noted, “He was important when we started the business as he knew all about public funding of startups.” As new forms of online networks are being formed, the IEs indicated that the numbers of inactive relationships were increasing, these relationships holding more formalised positions within their online networks. 684
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Strong relationships 691

Like the opportunity relationships, strong relationships with people with whom there was also some personal trust were extremely important. The level of trust may well be limited, but is sufficient that the person involved is motivated to commit to the IE and is trusted by the IE to represent the entrepreneur in some way. 692
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The most common way for these relationships to act usefully for internationalization was as go-betweeners, being competent partners who are more likely to fill the holes in the networks by helping the development of first relationships abroad. Relationships with go-betweeners developed as highly valuable opportunity presenting partnerships, for example in the ways described by Chetty and Campbell-Hunt (2003), who show that internationalization can be speeded up through the firm's distributors who have alliances with other top international companies.

Four IEs in the study used relationships with a business partner or acquaintance that was embedded within a network to start their foreign transactions. We found, as did Harris and Wheeler (2006), that in most of the cases, these go-betweeners were domestic but with a large internationally embedded relationship network, had a strong network identity and filled certain holes in the network. In some cases, these relationships became strong over time, and in these cases, the relationships could have a powerful and long-standing influence on the international development of the firms.

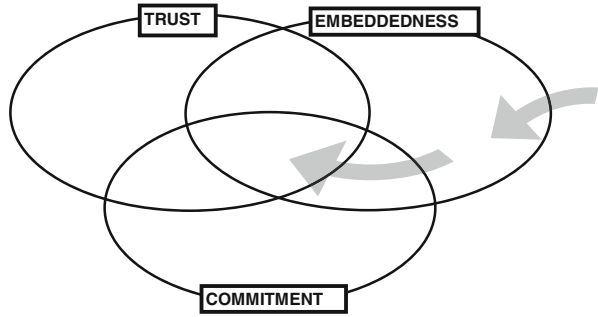
Relationship path activity

We found the IEs saw that large numbers of weak relationships suited their exploration strategies, and we found that these were latent relationships that initially only had the quality of being well embedded in useful networks (McDougall and Oviatt 2005). The IEs actively sought to establish relationships with people with the potential to help their internationalization. Personal links with people in, for example, software development or wireless technology were often sought after trade shows and industry conferences, mainly by using internet-based networks. The aim was to build up a portfolio of contacts who could act as go-betweeners possibly at that time, but more likely, sometime in the future.

Many were not active, therefore, but did not have to be active and to be fulfilling transactions to be valued by the IEs, either internationally (Hadjikhani and Sharma 1999) or domestically (Hite 2003). Their value was to present the IE with a valuable resource: knowledge about the the go-betweeners in their industry, the key marketeers and leaders in large organisations, and those that are best embedded in the most important relationship networks. Many of the IEs developed their firms internationally from latent relationships such as this. Many had initially began as online relationships, but had functioned as market openers themselves, had been go-betweeners or had connected the IEs with go-betweeners. One IE said: "We were introduced through mutual mail by the CEO of [sector leader in the country]", and another mentioned how one go-betweener had invited him to dinner with an important executive in the TV network business, who later became a client.

Notwithstanding how these relationships were developed, they were always maintained on-line. The IE's online social networks have dramatically increased the size of their relationship portfolios in recent years. On average, the IEs had over 500 online relationship connections on LinkedIn, where they undertook, as one expressed it, "connections book keeping". While the IEs indicated that they knew their online relationships, they regarded them as relationships they would use when needed, so they were mainly "sleeping" or "inactive". New web tools helped the IEs to manage these

Fig. 3 Relationship development paths pursued by the IEs in the study



large portfolios by “keeping my relations open”, being a “good reminder”, with it being “good to know who knows whom”. 740
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There were, however, expressions of concern regarding this online development. 742
 First, serving a large portfolio of latent relationships could be time-consuming, and 743
 several IEs believed that they did not have the best business network. Second, there is 744
 a growing problem of people who waste the IE’s time by sending excessive requests; 745
 network research indicates that personal network size does not necessarily correlate 746
 to business success. The rapid growth of arm’s length relationships through “viral 747
 marketing” can cause problems of control, of prioritizing effort and in leveraging the 748
 key relationships Coviello (2006). 749

There were benefits for all parties when IEs actively developed their relationship 750
 portfolios since entrepreneurs in heterogeneous networks are viewed as being more 751
 innovative than entrepreneurs in more homogeneous networks. As trust developed 752
 with go-betweeners over time, the IEs would develop some into becoming key strong 753
 relationships for internationalization, in the pattern of development shown in Fig. 3. 754
 This process costs resources, but the growth in trust and commitment presented 755
 opportunities to improve efficiencies through cooperation, to reduce operational costs 756
 through cooperation and to build strong relationships that would be resources for the 757
 future (Jarillo 1989). 758

Conclusions 759

Though international entrepreneurship research recognizes the importance of relation- 760
 ships in the internationalization process, it has not paid much attention to the different 761
 qualities of IE’s relationships nor how they develop over time. Using a multigrounded 762
 theory-building (MGT) approach with ten IE case studies, we have contributed a 763
 multidimensional picture of international entrepreneurial relationships that help us to 764
 escape simplistic notions of strength and help us to understand the dynamic paths of IE’s 765
 development of their relationship portfolios. 766

Using concepts of trust and commitment from relationship marketing theory and 767
 embeddedness from social networking theory, we have built a trust–embeddedness– 768
 commitment (TEC) framework that develops on earlier ‘domestic’ entrepreneurial 769
 network research of Hite (2003, 2006), to describe the qualities of the relationships 770
 that the IEs look for in the relationships that they are recruiting to their relationship 771

portfolio. The study contributes analysis of the paths of development of relationships 772
and the activities of the IEs in that process, and plots this activity in the initial stages 773
of internationalization. These better explain the relationships of IEs and demonstrate 774
some especially international dimensions to entrepreneurial relationship portfolio 775
development that were not included in Hite's (2003) work. These are now considered 776
in turn. 777

The model describes different qualities in IE's relationships 778

The initial stages of internationalization were characterized by intense networking 779
and use of network relationships, as previous studies have found (Bell 1995; Coviello 780
2006; Coviello and Martin 1999; Coviello and Munro 1995; Zain and Ng 2006). 781Q14
Building relationships is essential in the development of the IEs venture. But the 782
model departs from the dichotomous perspective of relationships as "weak" or 783
"strong" that has characterized much previous research, and introduces a more 784
nuanced perspective of relationship formation in our descriptive model. This includes 785
three relationship qualities, trust, embeddedness and commitment, that give the name 786
to our model. If all three are present, strong business relationships are formed. If one 787
of the three is missing, there is a weakness in the relationship, either lack of trust, 788
commitment or embeddedness. 789

But it is unlikely that IEs, in the initial stages of their internationalization, will be able 790
to form sufficient numbers of relationships with all three qualities. Previous studies have 791
found that many IEs may make great use of highly trusted personal relationships (Sasi 792
and Arenius 2008; Harris and Wheeler 2005; Ellis 2000; Komulainen et al. 2004; 793Q15
Gemser et al. 2004). The problem here is that these may rarely help in the interna- 794
tionalization process because they are insufficiently embedded in foreign markets 795
(Sigfusson and Harris 2012). The IEs in this study, by contrast, mainly used relation- 796
ships that were well embedded in international territories and networks, with whom 797
the IE began without trust or commitment. They worked with these 'latent' relation- 798
ships to build trust and commitment, and many became 'go-betweeners' to provide 799
new linkages, and others became valuable for internationalization in their own right. 800

The model helps present the dynamic process of relationship development 801

In this study, we saw the initial steps in internationalization were based on collecting 802
mainly latent relationships (with only embeddedness as a quality) which they hoped 803
would develop further, and opportunity relationships (with only embeddedness and 804
commitment). They engaged in a relationship development process in which they 805
worked with the most promising of these well-embedded relationships, to strengthen 806
them with trust and commitment characteristics. The TEC model can be used to examine 807
other possible approaches that might be pursued by IEs in different circumstances. 808

The model helps us to understand and interpret the IE's use of online networks by 809
entrepreneurs. The entrepreneurs have large online relationship networks. These 810
helped the entrepreneurs to expand their relationship portfolios faster than traditional 811
methods would allow. The web helped them to recruit latent (embedded only) 812
relationships and establish contact with people who are also connected to other 813
members of their relationship networks. The use of the web leads to less 814

“opportunism” (Uzzi 1996), allows more rapid buildup of trust (Morse et al. 2007), facilitates more rapid development of relationships into opportunity and strong relationships and enables more rapid use of and importance of go-betweeners in the process of internationalization.

Limitations and directions for future research

This paper has a number of limitations. First, we have looked at only IEs in the software industry in two European countries, Scotland and Iceland, but to the extent that conditions are similar to those in other countries, these results may prove to be valuable in other contexts as well. This study did not find any major differences in the relationships between the entrepreneurs interviewed in the two countries, which gives us some confidence in the theoretical generalizability of the research to other countries. The qualitative nature of this study limits the empirical generalizability beyond these entrepreneurs, and more extensive studies in other types of industries are required to test the extent to which our findings can be applied more generally, not only in software.

Second, social relationships are not fixed; they are activated according to need and can change frequently (Granovetter 1985), so relationship observations (for example through participant observation) would be more informative. As this is not possible in this research area, our best but inevitably impoverished alternative was thoroughly to discuss the paths of the relationships with the IEs studied.

For the future, with the importance we found of latent relationships in the internationalization process of entrepreneurs, it would be valuable to explore further how these are used by IEs in other sectors and contexts. The involvement of entrepreneurs in social networking has been presented as an import issue for future research in SME internationalization (Loane 2006; Gabriellsson and Gabriellsson 2011). Here, the use of online social networks by international entrepreneurs offers great opportunities for IE researchers to explore the large relationship network of these entrepreneurs. Networking and relationship development strategies are essential within the internationalization process, and the TEC model can also help us understand more about it.

This will help inform IEs as well. From this study, we can see the limitations of IEs relying on strong domestic relationships that are not well embedded in foreign territories. We can also see the potential value for IEs of active networking activities, (including through web-based social networking sites) to recruit, and then work with individuals who *are* well embedded but are not yet trusted or committed.

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