

Network bricolage of international entrepreneurs for new market entry: a cross-national study of small biotech firms

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Abstract

Purpose – The authors aimed to contribute to the interface of comparative international entrepreneurship and international marketing by exploring the micro-foundations and micro-processes of network bricolage aimed at international market entry among the entrepreneurs of small biotechnology firms. The research questions of the study are (1) How do the international entrepreneurs of small firms act and use their domestic and/or international networks for new market entry? (2) How are the micro-foundations and micro-processes of networking similar or different between individuals from different countries?

Design/methodology/approach – A qualitative research design was used to investigate six cases from different countries of origin, looking at the micro-foundations and micro-processes underlying international market entry undertaken by entrepreneurs from Canada, Finland and New Zealand.

Findings – The micro-foundations for network bricolage by international entrepreneurs were taken to involve features of the country of origin, including market size and location, and the usefulness of the official language of the nation. The micro-processes were taken to involve the international entrepreneur's network bricolage actions (i.e. collaborating and generating, obtaining and applying, reaching and maintaining, and seeking and reviewing), while encompassing also the location of their networks (domestic and/or international) and the operational domains these belonged to (R&D, funding, sales channel and customer). The study categorised three types of international entrepreneurs undertaking new market entry, illustrating cross-national differences: (1) sales-channel-oriented seekers, (2) funding-oriented riders and (3) customer-oriented hunters.

Originality/value – The study contributes to research on comparative international entrepreneurship and international marketing. This findings show that national-level micro-foundations influence the actions of network bricolage, the importance of various operational domains and the location of the network ties used. This main contribution is a conceptual model based on our cross-national investigation of international entrepreneurs' networking actions. The authors reveal the micro-foundations and micro-processes relevant to international entrepreneurs' network bricolage for new market entry, and present examples of international entrepreneur types emerging from our cross-national setting.

Keywords International entrepreneurship, New market entry, Network bricolage, Qualitative research, Cross-national study

Paper type Research paper

1. Introduction

Access to global markets is key to strengthening small firms' contributions to economic development and social well-being (OECD, 2018). The field of *comparative international*



entrepreneurship (CIE) emerged as a sub-field of international entrepreneurship (IE), aiming to increase understanding of cross-national differences in entrepreneurial activity (Baker *et al.*, 2005; Coviello and Jones, 2004; Terjesen *et al.*, 2016). Despite the large cross-national variations identified, and the considerable potential for IE of such an understanding, CIE is still in its infancy (Engelen *et al.*, 2009). Theoretical insights (Baker *et al.*, 2005) remain limited, as does our understanding of 'how and why entrepreneurial activity differs across national contexts' (Baker *et al.*, 2005, p. 495). Indeed, only a few studies on these aspects can be identified, and these have tended simply to compare data across nations (Jones *et al.*, 2011).

Whereas a new market entry can be influenced by various environmental and organisational factors, the fundamental role of individual entrepreneurs in recognising, evaluating and exploiting international opportunities is widely acknowledged (Jones *et al.*, 2011; Masango and Lassalle, 2020; Oviatt and McDougall, 2005). To understand the sources of cross-national differences, CIE scholars – and also IE scholars more widely (Coviello *et al.*, 2017; Jones *et al.*, 2011; Masango and Lassalle, 2020; Oviatt and McDougall, 2005) and scholars of international marketing (Jones *et al.*, 2011; Verbeke and Ciravegna, 2018) – have pointed to the need to study 'individuals carrying out entrepreneurial actions across borders' (Andersson, 2015, p. 71) rather than firm-level strategies, the aim being to tackle in greater depth *actions by individuals* (Baker *et al.*, 2005; Terjesen *et al.*, 2016). While IE scholars have argued that the core of IE is 'individuals who found firms, who make them grow over time in international markets through processes of exploration and exploitation of opportunities' (Zucchella *et al.*, 2018, p. 3), the actions taken by these individuals have played a minor role in current CIE conceptualisations (Terjesen *et al.*, 2016) and in IE studies more widely (Coviello *et al.*, 2017; Schweizer and Vahlne, 2022; Verbeke and Ciravegna, 2018): the few existing studies have mainly included individual-level variables as antecedents in firm-level conceptualisations, rather than examining what these individuals *do*. Here, CIE scholars emphasise the need to foreground the *context* (e.g. Ciravegna *et al.*, 2014; Felzensztein *et al.*, 2019; Terjesen *et al.*, 2016), hence to encompass the influences of different national and other contexts on entrepreneurial behaviour. The potential of studies comparing individual-level entrepreneurs' behaviour across nations lies in explaining the 'conditions that help or hinder entrepreneurial activity in different countries' (Terjesen *et al.*, 2016, pp. 300–301).

We here build on arguments that network theory and analysis are fundamental to IE research (Coviello, 2006; McDougall and Oviatt, 2003; Oviatt and McDougall, 2005). We regard the network ties of international entrepreneurs as 'intangible resources salient to organisational growth' (Coviello, 2006, p. 723) and echo Coviello (2006, p. 716) in her point that 'to understand entrepreneurial networks, an appreciation of the nature of network ties is required'. To gain a more complete understanding of the network ties of international entrepreneurs, we specifically take into account the notion that both local and international networks are important for the individuals of small firms, and that these have different influences on their international expansion (Andersson *et al.*, 2013; Gil-Barragan *et al.*, 2020). One of our aim overall is to shed light on the types and nationality of network ties, via our cross-national data set. To capture the actions of international entrepreneurs in networking for new market entry, we also use the concept of *network bricolage*, which is defined as 'dependence on pre-existing contact networks as the means at hand' (Baker *et al.*, 2003, p. 269). Note here that Terjesen *et al.* (2016) have pointed to the promise of integrating multiple theories to advance the understanding of entrepreneurial behaviour in complex cross-national contexts.

Based on the above, we set out to study relevant *micro-foundations*, taking into account features of the country of origin (including the market size and location) and the usefulness of the official language of the nation. This involved examining also *micro-processes*, referring to international entrepreneurs' network bricolage actions, in relation to the location (domestic and/or international) of the networks, and the firms' operational domains that could facilitate

new market entry. We asked (1) *How do the international entrepreneurs of small firms act and use their domestic and/or international networks for new market entry?* (2) *How are the micro-foundations and micro-processes of networking similar or different between individuals from different countries?*

Applying the case study method, we conducted a cross-national study of international entrepreneurs from small biotechnology firms in Canada, Finland and New Zealand. Biotechnology refers to the application of science and technology to living organisms, as well as the parts, products and models to alter living or non-living materials to produce knowledge, goods and services (OECD, 2021). Biotechnology is largely driven by the networks between small innovative firms, government laboratories and universities (Shkolnykova and Kudic, 2022). This not only provided an interesting research setting for the study but also allowed for better homogeneity in the sample.

This study contributes to research on CIE (Baker *et al.*, 2005; Jones *et al.*, 2011; Terjesen *et al.*, 2016) and international marketing (e.g. Masango and Lassalle, 2020; Styles and Seymour, 2006) by addressing the influences of different national contexts on the actions of international entrepreneurs when they network for a new market entry. Our main contribution is a conceptual model based on our cross-national investigation of international entrepreneurs' networking actions. We reveal the micro-foundations and micro-processes entering into international entrepreneurs' networking for a new market entry, and present examples of international entrepreneur types emerging from our cross-national setting (Baker *et al.*, 2005; Ciravegna *et al.*, 2014; Coviello, 2006; Coviello *et al.*, 2017; Felzensztein *et al.*, 2019; Terjesen *et al.*, 2016).

We make two further contributions. One of these is related to understanding the behaviour of individuals in internationalisation (Coviello *et al.*, 2017; Korhonen and Leppäaho, 2019; Schweizer and Vahlne, 2022; Verbeke and Ciravegna, 2018). We reveal how, through network bricolage, individuals combine networks from both domestic and international bases and from different operational domains for new market entry. We also show how national micro-foundations work as part of these endeavours. The second contribution concerns the bricolage perspective itself (Baker *et al.*, 2003; Nelson and Lima, 2020), which we widen by conceptualising from a multitude of networks, viewed via different operational domains. In so doing, we show how bricolage can be enacted and exhibited within a firm, as illustrated by contextualised descriptions of international entrepreneurs' networking behaviour.

2. Literature review

2.1 Comparative international entrepreneurship

International entrepreneurship (IE) is 'the discovery, enactment, evaluation and exploitation of opportunities—across national borders—to create future goods and services' (Oviatt and McDougall, 2005, p. 540). Research in the comparative branch of IE, namely *comparative international entrepreneurship* (CIE), focuses on the cross-national comparison of domestic entrepreneurship and of entrepreneurial internationalisation (Baker *et al.*, 2005; Hessels, 2008). Scholars believe that comparative entrepreneurial internationalisation (as viewed in studies comparing entrepreneurial internationalisation across countries or cultures) is truly at the intersection of international business and entrepreneurship (Terjesen *et al.*, 2016); hence it lies at the crux of IE and is a particularly fertile research area (Jones *et al.*, 2011). CIE research has considerable potential within the IE field (Coviello and Jones, 2004), since it may help to identify fundamental differences in entrepreneurial activity across countries and to investigate their sources (Terjesen *et al.*, 2016).

Among current CIE studies, firm-level research composes the largest portion, with the primary focus being on entrepreneurial firms' characteristics and outcomes, and on the

relevant influencing factors (e.g. Bruton *et al.*, 2010; Gassmann and Keupp, 2007; Slevin and Terjesen, 2011). For instance, CIE research has emphasised the critical role of networks in leveraging external resources such as venture capital or angel funding (Loane *et al.*, 2007), and the ways in which firms make active efforts to build networks (Loane and Bell, 2006). Moreover, individual-level studies in the CIE field have shed light on the existence and characteristics of various types of entrepreneurial individuals, involving their gender, social capital, human capital and psychological capital (Terjesen *et al.*, 2016). Nevertheless, CIE research has paid less attention to individual entrepreneurs' behaviour in relation to their social context.

We thus believe it is crucial to examine individuals' behaviour (such as network bricolage) and to bring the social context to the foreground, given that the 'nexus' of 'enterprising individuals and entrepreneurial opportunities is strongly shaped, and sometimes dominated, by social structures and processes' (Baker *et al.*, 2005, p. 501). Such an examination would offer new insights into what happens after individual entrepreneurs have discovered a foreign-market opportunity and evaluated it as worth pursuing. We view entrepreneurial processes as being inescapably subjective and context-dependent (involving, e.g. language, location, etc.). Thus, unpacking the networking behaviour of international entrepreneurs from different countries and theorising on their network micro-foundations and micro-processes would bring new knowledge to the CIE field. Below, we shall review studies on individuals, network ties and location in IE, and then introduce the bricolage perspective.

2.2 Individuals, network ties and location in international entrepreneurship

Scholars have lamented the absence of the *individual* as a decision-maker in IE research (Coviello *et al.*, 2017). IE studies have so far been prone to approach the topic of individuals through 'functionalist lenses' and factors (Packard, 2017), such as an individual's cognitive activity (Reuber *et al.*, 2018), risk perceptions, tolerance of ambiguity (Prashantham and Floyd, 2019), scores on innovativeness, proactiveness and risk-taking behaviour (Lumpkin *et al.*, 2009), and/or alertness, intentions and effect in identifying or evaluating international opportunities (De Clercq *et al.*, 2012). Moreover, individual-level IE studies have explained entrepreneurs/entrepreneurship via causally deterministic individual-level differences, with very little attention to individuals' actual behaviour (Eckhardt and Shane, 2003). Korhonen and Leppäaho (2019) form an exception, identifying various scripts connected with becoming and being an international entrepreneur, namely those of a *pioneer*, *gambler*, *diplomat* or *native*, plus a script encompassing an *eclectic* actor.

Prior literature suggests that networking may actually explain the core of small firms' international success (Bemhom and Schwens, 2018; Liu, 2017; Torkkeli *et al.*, 2018). Thus, network theory is fundamental to IE research (Coviello, 2006; McDougall and Oviatt, 2003; Oviatt and McDougall, 2005). As argued by Gulati *et al.* (2000, p. 203), 'the conduct and performance of firms can be more fully understood by examining the network of relationships in which they are embedded.' The present study applied a *social network approach*, on the grounds that the network of an entrepreneur will begin from a base of socially embedded ties (Coviello, 2006; Hite and Hesterly, 2001; Larson and Starr, 1993).

IE scholars have found social network diversity and interaction to be central in enhancing foreign market knowledge, from individual to firm level (Musteen *et al.*, 2014). This is because entrepreneurs' network ties provide valuable knowledge, resources, advice and experiential learning to small firms (Sedziniuskiene *et al.*, 2019; Witt, 2004). In particular, scholars view the location of network ties (domestic and/or international) as critical in IE research (Andersson *et al.*, 2013; Ciravegna *et al.*, 2014; Gil-Barragan *et al.*, 2020). The importance of *international network ties* is well established in IE research, given that firms expanding rapidly abroad tend to have existing international network ties that provide them with the

knowledge and resources to expedite the process and determine how fast the firm will access international markets (Evers and O’Gorman, 2011; Musteen *et al.*, 2014; Oviatt and McDougall, 2005).

Nevertheless, IE scholars also emphasise the essential role of *domestic network ties* (Felzensztein *et al.*, 2019; Gil-Barragan *et al.*, 2020). For example, small-firm entrepreneurs can compensate for their own lack of international experience and enter new networks by collaborating with domestic entrepreneurs who have international experience (Andersson *et al.*, 2013; Milanov and Fernhaber, 2014). They may also utilise domestic intermediaries who serve as international gatekeepers for international relations (Díez-Vial and Montoro-Sánchez, 2020). Thus, small firms do not necessarily replace domestic ties with international ties; rather, they tend to maintain domestic ties for inter-industry and research collaborations (Keeble *et al.*, 1998). Moreover, domestic network ties are a source for raising finance, and their diversity influences small firms’ international expansion (Manolova *et al.*, 2014).

Taken together, both international and domestic network ties can be useful for entrepreneurs of small firms seeking new international market entry. However, there remains a need for a more nuanced understanding of how international entrepreneurs utilise their existing international and/or domestic network ties, what types of international entrepreneurs act in specific ways, and what influencing factors may exist. We use the theoretical perspective of *network bricolage* to explore the use of international entrepreneurs’ existing network ties. The theoretical background of bricolage and IE is set out below.

2.3 The bricolage perspective and international entrepreneurship

Lévi-Strauss (1966) defined bricolage as making do with current resources and creating new forms from the tools and materials at hand. The bricoleur makes do with the available resources as an alternative to seeking specific resources for a particular purpose (Duymedjian and Rüling, 2010). The fundamental assumption of bricolage is that resource environments are socially constructed, thus allowing social mechanisms to enhance the creation of ‘something from nothing’ (Baker and Nelson, 2005, p. 329). This being so, entrepreneurs may use improvisation and resourcefulness, or co-shaping, to develop enterprises – thus creating new ventures using bricolage (Baker *et al.*, 2003). Bricolage has a positive effect on the innovativeness of new firms (Senyard *et al.*, 2014). Originally used as an entrepreneurship concept, bricolage was applied to networks by Baker *et al.* (2003) to indicate a focus on pre-existing contact networks for problem-solving. Entrepreneurs in new ventures were found to use *network bricolage* – employing pre-existing contact networks to solve issues – for several purposes, notably the recruitment and selection of employees, with a heavy reliance on personal networks (Baker *et al.*, 2003).

The literature has indicated that bricolage as a concept may provide interesting insights into IE research. For instance, Desa (2012) found that bricolage is used as the mechanism of institutional transformation in international social entrepreneurship. Another study indicated that Chinese IT service suppliers use opportunistic bricolage (based on existing operation capabilities and client relationships) for internationalisation (Su, 2013). Recent work by Vadana *et al.* (2021) shows how born-digital firms combine various means, using bricolage skills involving digitalised modes of entry along with physical modes, to optimise their internationalisation strategy.

Although prior literature has recognised that IE is strongly influenced by entrepreneurs’ existing network ties, and can be framed as network bricolage (Evers and O’Gorman, 2011), there is very little knowledge of how network bricolage is operationalised by international entrepreneurs in the different functional domains of small firms, such as sales channels, R&D and financing. An influential study by Baker and Nelson (2005) took a macro-level approach to explore the processes of bricolage by analysing three environmental domains: input

(physical, labour and skills), customer/markets, and the institutional and regulatory environments. Inspired by their exploration of bricolage in different domains, the present study adopted a micro-level approach. It explored the operational domains in which network bricolage was applied by entrepreneurs for new international market entry. Moreover, we saw considerable potential in exploring the topic within a cross-national setting, with possibilities to examine the role of the geographical base in network bricolage.

To summarise, we took the view that unpacking the networking behaviour of international entrepreneurs from different countries and theorising their networking would bring new knowledge to the scholarship of CIE. Although previous literature has analysed entrepreneurs' personal networking as a means towards internationalisation, much less work has been done on the micro-foundations and micro-processes within international entrepreneurs' networking during internationalisation (see [Coviello et al., 2017](#)). While both international and domestic network ties have been shown to be important for international entrepreneurs of small firms regarding a new market entry, previous studies have not given much information on how international entrepreneurs utilise their existing international and/or domestic network ties, the types of entrepreneurs undertaking specific actions, and the influencing factors at work. Moreover, only limited empirical evidence exists from current CIE research. From a bricolage perspective, one can also claim that previous research has not shown how network bricolage takes place in relation to the operation domains within the firm. Hence, this study sought to address the relevant research gaps, applying the notion of micro-foundations and micro-processes to explain (1) how the international entrepreneurs of small firms use domestic and/or international ties for network bricolage for new market entry and (2) how the micro-foundations and the micro-processes of networking are similar or different between individuals from different countries.

3. Method

A qualitative approach was adopted, due to the need to generate rich data with a view to developing an in-depth understanding of a relatively unexplored area ([Birkinshaw et al., 2011](#)) – namely, the micro-foundations and micro-processes of network bricolage. A qualitative approach is crucial if one is to interpret and understand the individual behaviour in the research context ([Edmondson and McManus, 2007](#)) – in this case, the network bricolage of international entrepreneurs in small biotechnology firms. Moreover, qualitative analysis 'allows the researcher to also explore dynamics ... which is challenging for quantitative analysis' ([Bansal and Corley, 2011](#), p. 35). Small biotechnology firms are suitable for the study of network bricolage, insofar as the biotechnology industry is a complex, knowledge- and research-based industry that is highly relationship-dependent ([Shkolnykova and Kudic, 2022](#)). To acquire deep insights into the micro-foundations and micro-processes of international entrepreneurs' networking behaviour, a multiple-case study was applied. This seemed capable of capturing the rich descriptive contexts surrounding the entrepreneurs plus the semantic richness and particulars of individual cases, allowing one to contrast and generate results across cases ([Stake, 2006](#); [Tsoukas, 2009](#)). One could thus conduct a holistic investigation of intrafirm aspects, relevant events and interactions outside the focal enterprise, with collection of rich evidence from multiple sources and contexts ([Welch et al., 2011](#); [Yin, 2014](#)).

3.1 Selection of cases

We combined criterion and theoretical sampling in our study ([Charmaz, 2006](#); [Patton, 2015](#); [Poulis et al., 2013](#)). We purposefully selected three different countries, namely Canada, New Zealand and Finland, to generate conceptually richer findings via a cross-national

comparison, and to contribute to the (so far limited) number of CIE studies (Jones *et al.*, 2011; Terjesen *et al.*, 2016). Hence, we selected a large market (Canada: 35 million inhabitants, 10th in GDP rankings), and two small but differing markets (Finland: 5.5 million inhabitants, 42nd in GDP rankings and New Zealand: 5.5 million inhabitants, 52nd in GDP rankings). These countries represent different historical, linguistic and cultural contexts, giving possibilities for understanding the focal phenomenon, as recommended by Birley (1985). While Canada and New Zealand have English as their dominant language and are culturally diverse (Stenhouse and Wood, 2005; Webber, 1994), Finland is culturally homogeneous, with Finnish being the dominant language (Stenius, 2017). Previous research had suggested that entrepreneurs' domestic base affects their foreign sales ratios and the number of countries in which they internationalise (Zander *et al.*, 2015). Hence, the entrepreneurs' domestic base might also influence how they engaged in network bricolage.

As required for this study, these three countries have similarities in their entrepreneurial environment (including entrepreneurial education, government policies, internal market dynamics and physical infrastructure) according to Global Entrepreneurship Monitor (2005, 2016, 2019). However, Canada borders the largest market in the world (the USA), while New Zealand is a geographically isolated island economy. For its part, Finland is (in global terms) a remotely located country that has historically aimed at neutrality, having Russia as a neighbour. In countries where the domestic market size is small, internationalisation is an important growth strategy, forming part of efforts to guarantee long-term survival (Sapienza *et al.*, 2006). This makes Finland an interesting contrast to Canada, which has a larger domestic market and a geographically close, globally major market on its border. In historical terms, New Zealand was one of the most globalised economies around 1900 (Smith, 2012). At that time, Finland was still an emerging economy, but subsequently it made a highly successful economic advance (Hjerppe, 2008).

As regards our sampling criteria, the case entrepreneurs had to meet the following criteria: (1) the entrepreneur had to be from Canada, New Zealand or Finland; (2) the entrepreneur's firm must belong to the biotechnology industry; (3) the entrepreneur's firm must involve new market entry; (4) the entrepreneur's firm must have fewer than 20 employees, fulfilling the EU criteria for small firms (OECD, 2003) and (5) the entrepreneur must have established the firm after the 1990s, when the Internet and other modern networking technology gained ground. Variety was also sought in the dates of establishment of the firms, seeking to obtain a comprehensive picture of network bricolage practices among both younger and more mature entrepreneurs. Table 1 summarises the key information on the case entrepreneurs. Their firms were established between 1993 and 2011. The number of employees ranged from 1 to 14. Online Appendix A presents the firm profiles.

In our theoretical sampling, in seeking an in-depth understanding of the micro-foundations and micro-processes related to the networking of entrepreneurs for new market entry, we collected pertinent data, with the aim of elaborating and refining CIE

Table 1.
Information on the
international
entrepreneurs in
this study

Case	Base country	Industry segment	Number of employees	Year of establishment
CANBIO entrepreneur	Canada	Biogas handling	1	2011
CANDIG entrepreneur	Canada	Digital pathology	12	1994
FINRE1 entrepreneur	Finland	Regenerative medicine	12	2001
FINRE2 entrepreneur	Finland	Regenerative medicine	10	2008
NZVET entrepreneur	New Zealand	Veterinary diagnostics	14	1993
NZRE entrepreneur	New Zealand	Regenerative medicine	10	2008
Source(s): Created by authors				

conceptualisations (see [Charmaz, 2006](#)). Following Charmaz's view of theoretical sampling, we aimed to recruit a rich sample, opting for entrepreneurs and cases that would provide heterogeneous insights on foreign market entry and network bricolage, allowing meaningful micro-foundations and micro-processes – and, finally types – to emerge from the data. Given the emerging nature of theoretical sampling, we wished not only to elaborate pre-existing theory but also to generate new insights through an iterative process of data analysis ([Charmaz, 2006](#)).

3.2 Data collection

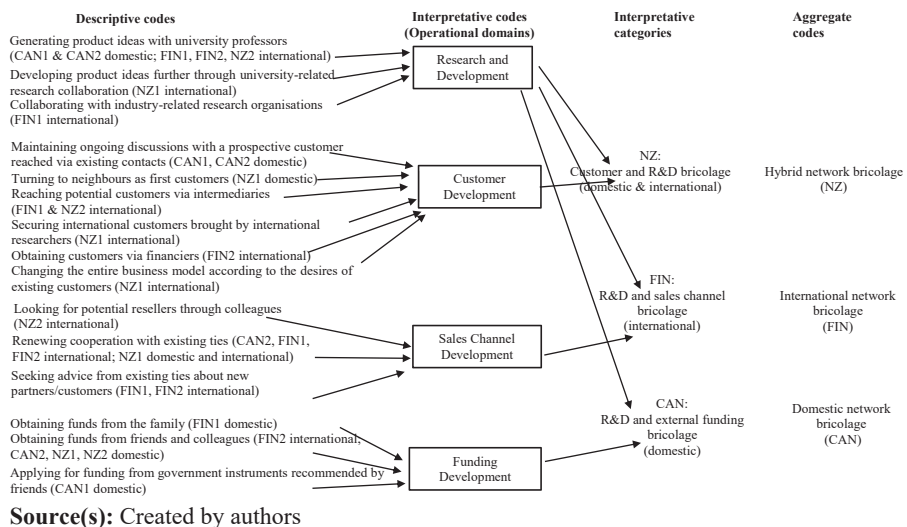
We conducted 12 in-depth interviews with the case entrepreneurs as the primary form of data collection. The interview questions were related to the emergence of the firm, the role of the informant in the firm, plus major life events before establishing the firm. They also covered the main milestones in new market entry, the core network ties for the emergence, development and internationalisation of the firm, and how matters were advanced with network partners. In the follow-up interviews, changes were noted in the entrepreneurs' networking strategies and in the international presence of the firms. Two rounds of interviews were conducted over a period of two years, with each interview lasting 45–90 min. Face-to-face interviews were conducted in the first round, except for one interview that took place via Skype. Each interview included neutral questions at the start to establish trust ([Svendsen, 2006](#)) and thereafter questions from the interview protocol ([Yin, 2014](#)); thus, core inquiries were made concerning the firms' establishment backgrounds and new market entry processes, plus their domestic and international network ties. Since the interviews focused on entrepreneurs' past experiences, the study followed the guidelines for retrospective studies by [Miller et al. \(1997\)](#). When an entrepreneur mentioned events of interest, the interviewer probed with questions such as, 'Could you elaborate on this?' 'How?' and 'Why?', seeking to obtain a balance between idiosyncratic depth and comparability among the cases ([Welch et al., 2011](#); [Yin, 2014](#)).

The second round of interviews was conducted via Skype to follow up on the evolution of networks in the enterprises. Here, more detailed questions were asked on the micro-foundations and micro-processes related to certain network ties. Both rounds of interviews were recorded digitally and transcribed using a word processor. We obtained 250 pages (86,000 words) of transcripts, sent case summaries to the entrepreneurs and corrected any inaccuracies in line with their comments. In addition, there were email exchanges with the entrepreneurs to ask for clarification on inconsistencies and to collect further information. Moreover, to achieve data triangulation ([Yin, 2014](#)), we obtained secondary archival data ([Groenland and Dana, 2019](#)), encompassing company websites, annual reports, financial records, minutes of meetings and brochures. The study utilised this secondary data to examine the history and the products of each firm, seeking to form detailed case histories and to understand the circumstances behind each critical event – especially the events involving network partners.

3.3 Data analysis

We used NVivo software to code our data. Inspired by the Gioia method ([Gioia et al., 2013](#)), data analysis (see [Figure 1](#)) was initiated via in-depth discussions with interviewees and identification of their perspectives, with the aim of creating *descriptive codes* (the terminology used by [Miles and Huberman, 1994](#)) as the first step. The study faithfully adhered to the terms the informants used, making little attempt to distil categories. It was observed that the entrepreneurs' network bricolage actions could involve 'existing ties', a 'selection of network ties', 'collaboration with central network ties', a 'search for funding by way of existing ties', an 'internationalisation strategy' and 'R&D development'. We also specified whether the

Figure 1.
Descriptive,
interpretative and
aggregate codes and
categories



network ties were domestic (i.e. located in the same country), international (i.e. located abroad) or both. In the second step, we examined which descriptive codes hinted at broader themes, and observed that the micro-level processes of network bricolage by international entrepreneurs related to four operational domains in the firm, i.e. *research and development*, *customer development*, *sales-channel development* and *funding development*. These functioned as our *interpretative codes*.

The third step involved continued iteration within the academic literature on entrepreneurs' domestic/international network ties, bricolage and IE, leading to three *interpretative categories*, namely *customer and R&D bricolage* (for the New Zealand entrepreneurs), *R&D and sales channel bricolage* (for the Finnish entrepreneurs), and *R&D, customer and funding bricolage* (for the Canadian entrepreneurs). Connections were sought between codes and categories, with efforts to identify similarities and differences. The case firms' choices were also reviewed in relation to the micro-foundations and micro-processes of network bricolage, and the geographical focus of the entrepreneurs' network ties. This process involved moving between similarity and contiguity analyses, looking for actual connections between micro-foundations and the location of networks (Maxwell and Miller, 2008). At this stage, the aim was to work with multiple levels of analysis simultaneously. The international entrepreneurs' network bricolage did indeed demonstrate heterogeneity, but the main strategic orientation emerged as somewhat similar between entrepreneurs from the same geographical base.

As a fourth step, *aggregate codes* were created to illustrate the international-versus-domestic aspect (i.e. network ties located abroad vs. in the same country) in network bricolage. We observed that from this perspective, the Finnish entrepreneurs executed *international network bricolage*, the New Zealand entrepreneurs used *hybrid network bricolage* and the Canadian entrepreneurs used an approach that we labelled *domestic network bricolage*.

Finally, we investigated the similarities and differences between the cases in relation to the micro-foundations and micro-processes in network bricolage. Based on this analysis, which embraced *operational domains of networking*, *location of networks* and *features of the country of origin* (i.e. market size and location, and usefulness of the official language), we categorised

the three types of entrepreneurs seeking new foreign market entry as (1) *sales-channel-oriented seekers*, (2) *funding-oriented riders* and (3) *customer-oriented hunters*.

4. Findings

4.1 *International entrepreneurs' network bricolage for new market entry, by operational domain*

From the analysis of micro-foundations and micro-processes in network bricolage, it appeared that the micro-foundations of networking were dependent on features of the country of origin, involving market size and location, and the usefulness of the official language of the nation. Furthermore, the micro-processes of networking suggested that when they sought new market entry the case entrepreneurs executed network bricolage within four operational domains: *research and development*, *customer development*, *sales-channel development* and *funding development*. At the same time, we studied the geographical location (domestic and/or international) of the network ties related to each operational domain. Online [Appendix B](#) summarises the micro-processes in each operational domain pertaining to network bricolage, and provides detailed data excerpts to support the findings set out below.

Research and development. The analysis revealed three R&D-related processes:

- (1) Generating product ideas with university professors (CANBIO, CANDIG, FINRE1, FINRE2, NZRE). In R&D, universities and research institutes were the basis of network bricolage, conducted via networks formed before the establishment of the Canadian and Finnish firms. After initial product development, the universities measured the product's influence on, for example, the pace of healing among patients (FINRE1 and FINRE2), or demonstrated that the product increased accuracy and speed in tissue-structure diagnoses (CANDIG). Thus, the FINRE2 entrepreneur said, 'We have ongoing projects in several European universities who test our products. This enables us to improve the qualities and usefulness of our product all the time.'
- (2) Developing product ideas further through university-related research collaboration. The NZVET entrepreneur explained how European researchers (acquaintances from an international conference) had visited him in New Zealand and enabled him to internationalise to Europe: 'Some European researchers published in the European media about our technology and asked us to join a large EU research project.' This had led to further international recognition and sales.
- (3) Collaborating with industry-related research organisations. The FINRE1 entrepreneur explained, 'The president of the European Bone and Joint Infection Society is our collaborator. He has used our products on his patients and spreads the extremely positive results around the world.'

The entrepreneurs also utilised existing networks in research institutions other than universities (FINRE1) and in EU-level research projects (NZVET) to develop clinical trust and build their brands.

Customer development. The micro-processes of network bricolage related to customer development involved the following:

- (1) Maintaining ongoing discussions with prospective customers reached by existing contacts. The CANDIG entrepreneur explained, 'We knew a prospective customer from our earlier networks. We developed the product according to his needs.'
- (2) Turning to neighbours as first customers. As a farmer himself, the NZVET entrepreneur explained, 'My first customers were the farmers in the neighbourhood ... Then some farmers further away were reached.'

- (3) Reaching potential customers via intermediaries. The FINRE1 entrepreneur explained the search for potential customers by way of intermediaries: 'I have done no direct customer search but use the distributors to look for new customers.'
- (4) Securing international customers brought by international researchers. Applying a local-customer focus, the NZVET entrepreneur said, 'Finally the European researchers I had come to know in some conference a few years back brought us the international customers.'
- (5) Obtaining customers via financiers. FINRE2's financiers had been the basis of their international customer creation. The entrepreneur from FINRE2 said, 'They [the financiers] are in Germany, and that is where we sell most of our current products while still developing the main product.'
- (6) Changing the entire business model according to existing customers' desires. Cooperation with and feedback from existing customers had led NZVET to produce something even more advanced, with a view to reaching new customers and markets. The NZVET entrepreneur said, 'Since the farmers did not want to analyse the tests themselves, we have developed a mobile conferencing hub to communicate with small groups of farmers anywhere around the world.'

Sales-channel development. The micro-processes of network bricolage related to sales channels and partners included the following:

- (1) Looking for potential resellers through colleagues. The NZRE entrepreneur was fortunate to have a knowledgeable surgeon friend from his earlier professional life: 'We have known [each other] for a long time . . . we looked for suitable international partners [in the United States] by contacting them.' In association with this person, he had approached potential resellers and potential customers.
- (2) Renewing cooperation with existing ties (CANDIG, FINRE1, FINRE2, NZVET). For instance, the CANDIG entrepreneur emphasised, 'I know so many good salespeople from my earlier jobs and have used them to build sales channels and partnerships.'
- (3) Seeking advice from existing ties about new partners or customers (FINRE1, FINRE2). As explained by the entrepreneur from FINRE1: 'We had some strong distributors I had met in my previous work . . . and they recommend some new ones, too.'

Funding development. The micro-processes of developing funding included:

- (1) Obtaining funds from the family. The FINRE1 entrepreneur had faced fewer challenges, and had less need for further finance-related network bricolage, since the firm had private ownership. 'My father offered to finance the firm.' Thus, the entrepreneur had been able to leverage his family ties as an investor and owner of the firm.
- (2) Obtaining funds from friends and colleagues (CANDIG, FINRE2, NZVET, NZRE). For example, the NZVET entrepreneur said, 'I have just invited my friends and colleagues to join as investors.' The NZRE entrepreneur explained, 'I contacted vets and farmers . . . by calling and visiting. I am a vet and know basically everyone in New Zealand.'
- (3) Applying for funds from government instruments recommended by friends. The CANBIO entrepreneur said, 'My friends and advisors and Google help me in finding out from whom to apply for government funding.' However, this was a challenging way to secure financing.

4.2 Cross-national comparison: categorising three types of international entrepreneurs for new market entry

As Figure 1 illustrates, a range of features emerged in the micro-foundations and micro-processes of the entrepreneurs' network bricolage. We discovered that the Canadian entrepreneurs practised *domestic network bricolage*, focused on three areas in particular, i.e. customers, R&D and external funding. The Finnish entrepreneurs, by contrast, practised *international network bricolage*, focusing on international R&D and sales channels. The New Zealand entrepreneurs were located between the Finnish and Canadian cases in this respect: their network ties were less international than those of the Finnish cases, but more international than those of the Canadian cases. Their *hybrid network bricolage* was centred around the customer and R&D. Despite the differences in the findings, the biotechnology industry's knowledge-intensive nature made entrepreneurs from all three countries focus on R&D in their networking behaviour, conducted through generating and developing product ideas with university and/or research institutes.

Based on the cross-national comparison, we formed types of international entrepreneurs in small firms, and sought to identify the differences in the micro-foundations and micro-processes in their network bricolage. As presented in Table 2, these types were based on how international entrepreneurs practised network bricolage in terms of the *operational domains of networking* (research and development, customer development, sales-channel development and funding development), the *location* of the network ties (domestic and/or international) and the *features of the country of origin* (including the market location and size, and the usefulness of the official language).

According to our typology, *sales-channel-oriented seekers* consist of international entrepreneurs with an uncommon official language. They operate in an isolated location. Such a type is evident in Finland – a country with a small and geographically isolated home market despite telecommunication tools. Finnish is also a language that is not spoken officially in any other country, although the Finnish entrepreneurs may use their native language to network with other Finns. These international entrepreneurs needed to start using international network bricolage immediately. In their network bricolage, they focused on R&D and sales-channel development, involving international network ties. They generated and further developed product ideas from university research and from collaboration with industry-related research organisations. It appears that to develop sales channels, entrepreneurs of this type are likely to contact existing international network ties, restarting cooperation. They also seek advice from existing sales channels for new sales channels. These entrepreneurs may well interact with the end customers only indirectly, via their sales channels. For instance, the Finnish entrepreneurs approached international customers by involving agents from their earlier networks, and no longer changed the products: 'Our long-term distributors know other distributors in other countries and have helped us to find new networks' (FINRE1).

Funding-oriented riders consist of international entrepreneurs with a widely spoken official language, based in a large market that is also close to the USA, another very large market. In their network bricolage, they focus on R&D and on funding development, using domestic network ties. For example, the entrepreneurs from Canada, close to the large US market, based their R&D on domestic universities: 'We have been collaborating with three university professors who came up with this idea intensely ever since the original innovation' (CANDIG). Like other entrepreneurs of this type, they derive product ideas from university research. In addition to R&D, which is the entrepreneurs' primary focus within small biotechnology firms, funding-oriented riders focus on obtaining government funding for their business. They also obtain funds from their domestic network ties, such as friends and colleagues. International entrepreneurs who are more dependent on government funding may find network bricolage more challenging and must then make more efforts. For instance, the Canadian entrepreneurs in this study were intensely searching for government funding, and the search required

Type	Sales-channel-oriented seekers	Funding-oriented riders	Customer-oriented hunters
Market size and location	Small and isolated market	Large market close to other markets	Small and isolated market
Usefulness of official language	Uncommon (not spoken anywhere else)	Widely spoken (lingua franca)	Widely spoken (lingua franca)
Location of networks	International (customer interaction via sales channels)	Domestic	Hybrid, international and domestic (direct customer interaction)
Operational domains of networking in the firm	Research and development, sales-channel development	Research and development, funding development	Research and development, customer development

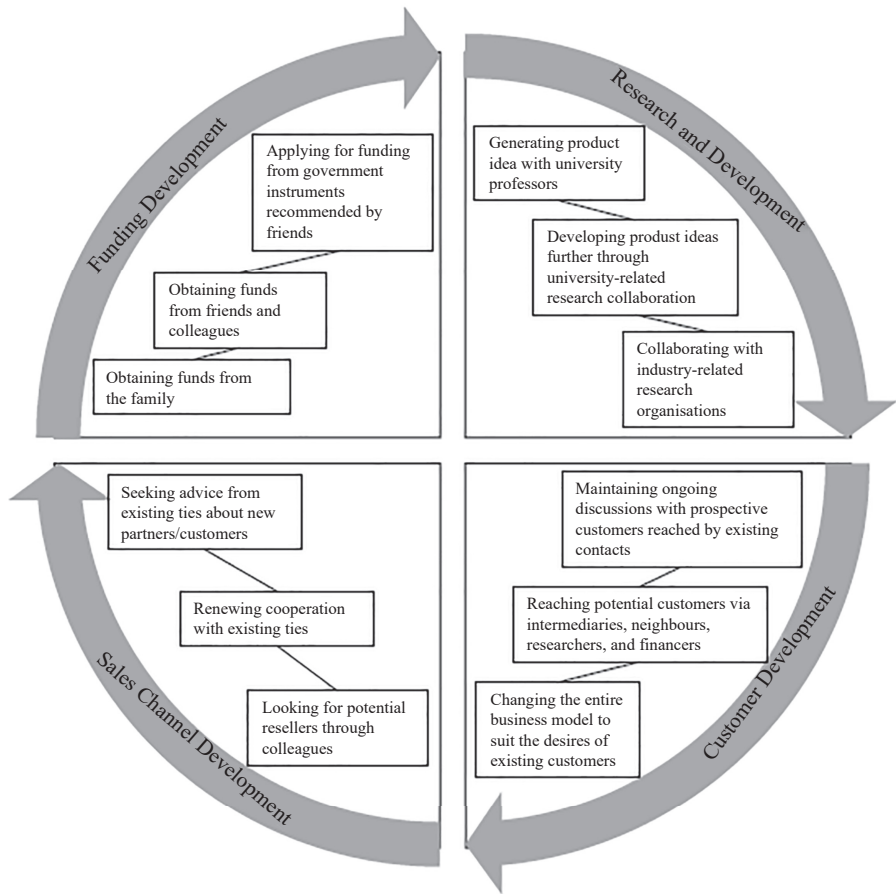


Table 2.
Types of international entrepreneurs and their network bricolage micro-foundations and micro-processes for new market entry

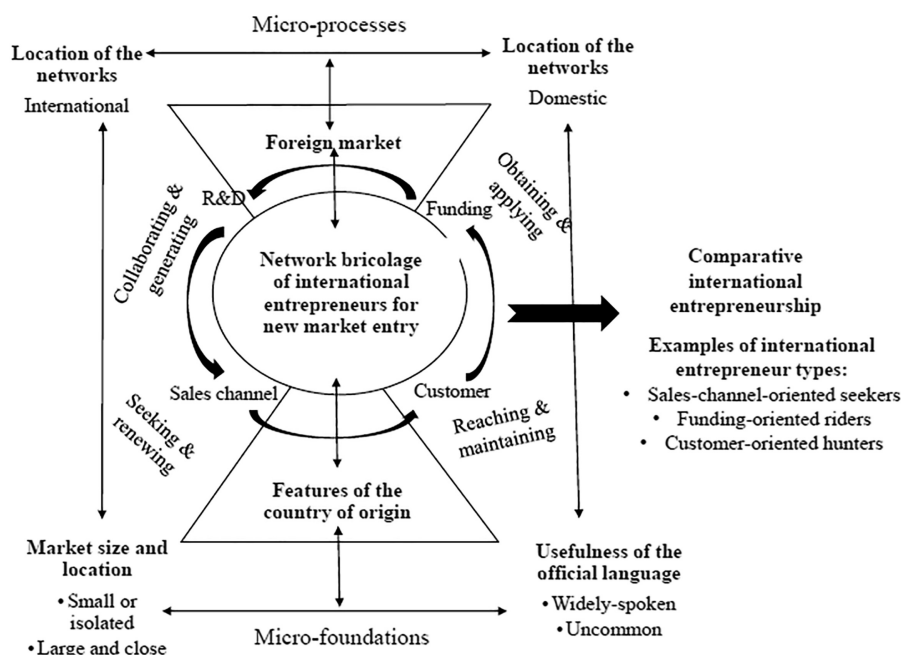
Source(s): Created by authors

considerable time and resources: ‘It takes so much time to apply for new government funds’ (CANBIO). However, they seem to focus less on network bricolage in sales-channel development. For example, the CANBIO entrepreneur had as yet no involvement with sales channels.

Customer-oriented hunters consist of international entrepreneurs with a widely spoken official language, but operating in an isolated location. In their network bricolage, they focus on R&D and on direct customer relationship-building, both domestic and international. For instance, the New Zealand entrepreneurs, though belonging to the Commonwealth and using a widely spoken language (English) as their official language, needed an international focus due to their small market size and isolated geographical location. They relied on significant international R&D collaboration to achieve innovative insights: ‘The innovation was created by myself [the CEO] and my partner surgeon in the US. We conducted a clinical study together’ (NZRE). International entrepreneurs of this type derive product ideas from universities, and further improve them with other university-based scientists. To develop their customer base, they often change their business models according to the desires of existing international customers. They also reach potential customers via their domestic and international network ties, including friends, neighbours, researchers, financiers and other intermediaries. Due to their focus on customer development, customer-oriented hunters often have direct interaction with their end customers. The New Zealand entrepreneurs in this study had customers from their earlier networks, and changed their products to suit the end customers’ needs.

5. Discussion and conclusion

Our findings led to a conceptual model of micro-foundations and micro-processes in international entrepreneurs’ network bricolage for new market entry (see Figure 2). Using a comparative international entrepreneurship (CIE) approach, the model suggests that the micro-foundations of their network bricolage are intertwined with features of the country of origin, including market size and location, and the usefulness of the official language.



Source(s): Created by authors

Figure 2.
A conceptual model of
micro-foundations and
micro-processes in
international
entrepreneurs' network
bricolage for new
market entry

The model also explains the micro-processes involved in the actions of network bricolage (i.e. collaborating and generating, obtaining and applying, reaching and maintaining, and seeking and reviewing), embracing also the location of these networks (domestic and/or international) and the operational domains in which they conduct their affairs (oriented to R&D, funding, the sales channel or the customer). In particular, an uncommon official language and a small and isolated market may lead international entrepreneurs (in this case sales-channel-oriented seekers, for whom seeking and renewing are the key actions of network bricolage) to use international network bricolage for sales-channel development when entering a new market. Conversely, a widely spoken official language and a large and nearby geographical base may encourage international entrepreneurs (in this case, funding-oriented riders, for whom obtaining and applying are the key actions of network bricolage) to utilise domestic network bricolage to fund a new market entry. Nevertheless, international entrepreneurs based in a small and isolated market but with a widely spoken official language (in this case, customer-oriented hunters, for whom reaching and maintaining form the key actions of network bricolage) may leverage hybrid network bricolage, utilising both domestic and international ties for the sake of customer development. In addition, international entrepreneurs in the biotechnology industry may well use domestic, international and hybrid network bricolage in R&D for new market entry, irrespective of their official language and geographical base. This suggests the crucial role of R&D in small biotech firms, in which collaborating and generating are the key actions of network bricolage.

Based on CIE research, this study presents examples of international entrepreneur types relatable to the micro-foundations and micro-processes of networking. Our findings show that national-level micro-foundations influence the actions of network bricolage, the importance of various operational domains and the location of the network ties used.

5.1 Theoretical contribution

This study contributes to the fields of CIE (Baker *et al.*, 2005; Jones *et al.*, 2011; Terjesen *et al.*, 2016) and international marketing research (e.g. Masango and Lassalle, 2020; Styles and Seymour, 2006). We conceptualised the micro-foundations and micro-processes in international entrepreneurs' network bricolage (see Figure 2) and categorised three types of international entrepreneurs, showing how international entrepreneurs use domestic and/or international network ties in different operational domains for new market entry (see Table 2). Hence, we provide cross-national insights into the behaviour of individuals (Coviello *et al.*, 2017; Korhonen and Leppäaho, 2019). We also shed light on networking operations among international entrepreneurs belonging to small firms from different countries. The categorisation clarifies how biotechnology entrepreneurs in small firms from different countries may differ in relation to their networking behaviour for new market entry. The study shows the important role of the micro-foundations, such as the official language, the geographical origin and the national context of the small firm (in a small, isolated location as opposed to a large, nearby location). International entrepreneurs and their firms' geographical origins appeared to influence not only the micro-processes of networking overall but also the balance between operational domains and the location of the network ties used (domestic, international or hybrid) in internationalisation. This could be due to the institutional environment, cultural differences or the traditions involved. Altogether, we advance the scholarship of CIE by foregrounding the social context (Baker *et al.*, 2005) and by relating international entrepreneurs' network bricolage from three different continents to their national contexts. Our conceptual model and culturally-based typology can be used as a starting point for the future theorising of entrepreneurs' networking micro-foundations and micro-processes, commencing from and aiming towards different geographical locations.

The study also contributes to the network approach to internationalisation (Magni *et al.*, 2021; Sedzinauskienė *et al.*, 2019; Yamin and Kurt, 2018). The findings serve as an early conceptualisation of the networking behaviour practised by entrepreneurs in internationalisation (see also Desa, 2012; Evers and O' Gorman, 2011). While current literature has shown that firms need to network with domestic and international partners (Andersson *et al.*, 2013; Díez-Vial and Montoro-Sánchez, 2020; Gil-Barragan *et al.*, 2020), the existing studies do not unpack the how and why regarding the networking behaviour practised by individual entrepreneurs. This study goes more deeply into the micro-processes of the domestic and/or international networks used by international entrepreneurs in different operational domains, and the factors that may influence the entrepreneurs' use of domestic and/or international network ties for new market entry. For instance, international entrepreneurs' domestic network ties with research institutions and financiers appear to be crucial for successful new market entry, since those ties are critical for R&D and funding development in efforts to reach international markets.

While earlier research has suggested consistency in entrepreneurs' cognitive scripts and associated venture creation decisions across countries (Mitchell *et al.*, 2002), the present findings indicate inconsistency in entrepreneurs' networking behaviour among small firms across countries. Our findings can act as a springboard to understanding how national-level micro-foundations are bound up with the actions of network bricolage, the importance of various operational domains, and the location of the network ties used. While all the international entrepreneurs we studied came from open and developed economies, they emphasised different operational domains and activities.

In particular, it appears that in Commonwealth countries and in larger markets, the domestic ties of international entrepreneurs take on more significance than they do in smaller countries that are geographically and linguistically isolated, where small firms need to reach out to international ties immediately. Such findings suggest that the national context can be critical to international entrepreneurs' network bricolage for new market entry. In this study, international entrepreneurs from Canada and New Zealand were able to utilise existing domestic connections. Because both countries have a long history in the Commonwealth and use English as an official language (The Commonwealth, 2020), and because Canada is, notably, 'a land of immigrants' (Government of Canada, 2011), Canada and New Zealand have nurtured strong domestic social network bases that nevertheless extend to foreign markets. Membership of the European Union has indeed made it easier for Finnish entrepreneurs to employ an international approach to network bricolage, for example, to other member states. Nevertheless, geographical and linguistic isolation appears to have influenced the approach of Finnish entrepreneurs, with the result that they interact with customers via intermediaries, as opposed to the direct actions of Canadian and New Zealand entrepreneurs.

Our research shows that in the biotechnology industry, the ties international entrepreneurs use to enact network bricolage have often not been family members or people from the home region; rather, they have been network ties from universities, research institutes and previous workplaces. The study also emphasises the essential role of financiers, due to the long product development time needed in the biotechnology industry. Network bricolage seems to be easier for firms with funding from private capital. In addition, when small firms directly interact with customers, international entrepreneurs use network bricolage in R&D by developing their products further through research collaborations. They emphasise network bricolage in developing the customers through ongoing discussions with prospective customers, and they change their entire business model to suit existing customers' desires. However, they seem to focus less on network bricolage in sales-channel development.

This study further deepens and widens the bricolage perspective (Baker *et al.*, 2003; Nelson and Lima, 2020) by applying it to international marketing research. It shows how bricolage is enacted and exhibited within the firm through nuanced contextualised

descriptions of international entrepreneurs' networking behaviour. Earlier research by [Baker and Nelson \(2005\)](#) identified the relevant resource and environmental domains, via a macro-level examination of resource-poor environments (involving physical inputs, labour, skills in new ventures, customers and the new venture's regulatory environment), within which bricolage is used to 'create something from nothing' (p. 329). The present study provides a new approach to bricolage, applying a network perspective at the micro level, and examining entrepreneurs' networking behaviour for new market entry in different operational domains. Accordingly, four operational functions (R&D, customers, sales channel and funding) are identified within firms, with network bricolage occurring in one or more than one of these.

In exploring the micro-foundations and micro-processes in each operational domain, this cross-national study elucidates the key factors influencing the individual-level differences. One factor is that of a country's official language. Although both New Zealand and Finland are small and isolated countries, the official language of the former is English. With a widely spoken official language such as English, entrepreneurs are better able to interact directly with international customers.

5.2 Practical implications

Entrepreneurs and managers in the biotechnology industry seeking new market entry should be critical regarding the ways in which they utilise existing contact networks. Entrepreneurs whose firms operate in a small, isolated location (as in the case of Finland) should focus more on the customer when using their network ties. They are recommended to follow the examples of the New Zealand and Canadian firms in this study by interacting more directly with customers. For instance, entrepreneurs could initiate discussions with prospective customers and adjust their business model to suit existing customers' desires; they could use network bricolage in R&D to develop their product further via collaborations. One should note also the risk that the overly large role played by network ties in sales-channel development may make entrepreneurs completely lose sight of their customers. Moreover, this study has implications for entrepreneurs who depend more on existing domestic networks, such as the Canadian entrepreneurs in this research. These entrepreneurs might benefit from network bricolage abroad. For example, they could develop or utilise international network ties in R&D for easier access to European and other market areas.

Entrepreneurs should be extremely cautious regarding the sources of their funding. Private funding from family, friends and colleagues allows international entrepreneurs to pursue their own strategies in their firms' operational domains. By contrast, government funding requires significant effort, and the funding parties may become involved in the entrepreneur's strategy.

5.3 Limitations and future research suggestions

This research has limitations. Firstly, firms from only three countries were studied. The study's multiple-case setting has exploratory and illustrative power, but generalisability is limited to the study's context ([Piekkari et al., 2009](#)). The categorisation of international entrepreneurs and the micro-foundations and micro-processes of their network bricolage for new market entry could be developed further and pattern-matched to other research contexts, as recommended by [Welch et al. \(2011\)](#). Overall, the case study sought to encourage further studies on network bricolage within international marketing and IE research. Future studies could investigate firms in other countries (notably beyond the Commonwealth area) to strengthen the theorising. In addition, we studied only small firms in the biotechnology sector. This focus allowed a better cross-national comparison, but there is no doubt that network bricolage in other types of small firms will merit study.

Secondly, this study focused on the micro-foundations and micro-processes of network bricolage applied by the international entrepreneurs of small firms, but excluded the *outcomes* of the network bricolage. Future research could extend the study to examine the impacts of network bricolage on small firm internationalisation and performance outcomes and explore the moderating factors. For instance, future research could develop hypotheses and examine whether and how entrepreneurs' domestic, international and hybrid network bricolage affects small firms' internationalisation speed and scope, and further, whether and how network bricolage in each of the four operational domains identified in this study influences small firms' international performance.

Our research investigated network bricolage as the focal behaviour undertaken by international entrepreneurs. We see a need for future international marketing and IE research to further uncover international entrepreneurs' behaviour, norms and values. In this cross-national study, we took the geographical base (and language) into consideration to explain international entrepreneurs' networking behaviour in different geographical contexts. Since contexts provide individuals with opportunities and set boundaries for their actions (Welter, 2011), we would encourage future international marketing and IE research to seek a better understanding of international entrepreneurs' new market entries within their historical, temporal, institutional, spatial and social contexts.

Finally, as regards the boundaries of our approach, social networks and network bricolage as concepts are relevant in situations where an individual or a few individuals have significant possibilities to lead the action of a more or less newly established firm through networks, and where the firm aims to operate internationally from an early phase onwards. It holds especially for knowledge-intense firms where intense R&D plays an important role, and in the context of open and developed economies. The researcher must, in any case, have access to in-depth data revealing individuals' networking actions.

References

- Andersson, S. (2015), "The international entrepreneur: from experience to action", in Fernhaber, S.A. and Prashantham, S. (Eds), *The Routledge Companion to International Entrepreneurship*, Routledge, pp. 70-83.
- Andersson, S., Evers, N. and Griot, C. (2013), "Local and international networks in small firm internationalization: cases from the Rhône-Alpes medical technology regional cluster", *Entrepreneurship and Regional Development*, Vol. 5 Nos 9-10, pp. 867-888.
- Baker, T. and Nelson, R.E. (2005), "Creating something from nothing: resource construction through entrepreneurial bricolage", *Administrative Science Quarterly*, Vol. 50 No. 3, pp. 329-366.
- Baker, T., Miner, A.S. and Eesley, D.T. (2003), "Improvising firms: bricolage, account giving and improvisational competencies in the founding process", *Research Policy*, Vol. 32 No. 2, pp. 255-276.
- Baker, T., Gedajlovic, E. and Lubatkin, M. (2005), "A framework for comparing entrepreneurship processes across nations", *Journal of International Business Studies*, Vol. 36 No. 5, pp. 492-504.
- Bansal, P. and Corley, K. (2011), "The coming of age for qualitative research: embracing the diversity of qualitative methods", *Academy of Management Journal*, Vol. 54 No. 2, pp. 233-237.
- Bembom, M. and Schwens, C. (2018), "The role of networks in early internationalizing firms: a systematic review and future research agenda", *European Management Journal*, Vol. 36 No. 6, pp. 679-694.
- Birkinshaw, J., Brannen, M.Y. and Tung, R.L. (2011), "From a distance and generalizable to up close and grounded: reclaiming a place for qualitative methods in international business research", *Journal of International Business Studies*, Vol. 42 No. 5, pp. 573-581.

- Birley, S. (1985), *The Small Firm-Set at the Start*, Cranfield School of Management, SWP, October, Vols 85/10.
- Bruton, G.D., Ahlstrom, D. and Li, H.L. (2010), "Institutional theory and entrepreneurship: where are we now and where do we need to move in the future?", *Entrepreneurship Theory and Practice*, Vol. 34 No. 3, pp. 421-440.
- Charmaz, K. (2006), *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*, Sage Pub., London.
- Ciravegna, L., Lopez, L. and Kundu, S. (2014), "Country of origin and network effects on internationalization: a comparative study of SMEs from an emerging and developed economy", *Journal of Business Research*, Vol. 67 No. 5, pp. 916-923.
- Coviello, N.E. (2006), "The network dynamics of international new ventures", *Journal of International Business Studies*, Vol. 37 No. 5, pp. 713-731.
- Coviello, N.E. and Jones, M.V. (2004), "Methodological issues in international entrepreneurship research", *Journal of Business Venturing*, Vol. 19 No. 4, pp. 485-508.
- Coviello, N., Kano, L. and Liesch, P.W. (2017), "Adapting the Uppsala model to a modern world: macro-context and microfoundations", *Journal of International Business Studies*, Vol. 48 No. 9, pp. 1151-1164.
- De Clercq, D.D., Sapienza, H.J., Yavuz, R.I. and Zhou, L. (2012), "Learning and knowledge in early internationalization research: past accomplishments and future directions", *Journal of Business Venturing*, Vol. 27 No. 1, pp. 143-165.
- Desa, G. (2012), "Resource mobilization in international social entrepreneurship: bricolage as a mechanism of institutional transformation", *Entrepreneurship Theory and Practice*, Vol. 36 No. 4, pp. 727-751.
- Díez-Vial, I. and Montoro-Sánchez, Á. (2020), "International gatekeepers: how to integrate domestic networks and international relations", *International Business Review*, Vol. 29 No. 6, 101751.
- Duymedjian, R. and Rüling, C.-C. (2010), "Towards a foundation of bricolage in organization and management theory", *Organization Studies*, Vol. 31 No. 2, pp. 133-151.
- Eckhardt, J.T. and Shane, S.A. (2003), "Opportunities and entrepreneurship", *Journal of Management*, Vol. 29 No. 3, pp. 333-349.
- Edmondson, A.C. and McManus, S.E. (2007), "Methodological fit in management field research", *Academy of Management Review*, Vol. 32 No. 4, pp. 1246-1264.
- Engelen, A., Heinemann, F. and Brettel, M. (2009), "Cross-cultural entrepreneurship research: Current status and framework for future studies", *Journal of International Entrepreneurship*, Vol. 7, pp. 163-189.
- Evers, N. and O'Gorman, C. (2011), "Improvised internationalization in new ventures: the role of prior knowledge and networks", *Entrepreneurship and Regional Development*, Vol. 23 Nos 7-8, pp. 549-574.
- Felzensztein, C., Deans, K.R. and Dana, L.-P. (2019), "Small firms in regional clusters: local networks and internationalization in the southern hemisphere", *Journal of Small Business Management*, Vol. 57 No. 2, pp. 496-516.
- Gassmann, O. and Keupp, M.M. (2007), "The competitive advantage of early and rapidly internationalizing SMEs in the biotechnology industry: a knowledge-based view", *Journal of World Business*, Vol. 42 No. 3, pp. 350-366.
- Gil-Barragan, J.M., Belso-Martínez, J.A. and Mas-Verdú, F. (2020), "When do domestic networks cause accelerated internationalization under different decision-making logic? Evidence from weak institutional environment", *European Business Review*, Vol. 32 No. 2, pp. 227-256.
- Gioia, D.A., Corley, K.G. and Hamilton, A.L. (2013), "Seeking qualitative rigor in inductive research: notes on the Gioia methodology", *Organizational Research Methods*, Vol. 16 No. 1, pp. 15-31.

- Global Enterprise Monitor (2005), "Economy profile: new Zealand", available at: <https://www.gemconsortium.org/economy-profiles/new-zealand> (accessed 24 May 2020).
- Global Enterprise Monitor (2016), "Economy profile: finland", available at: <https://www.gemconsortium.org/economy-profiles/finland> (accessed 24 May 2020).
- Global Enterprise Monitor (2019), "Economy profile: canada", available at: <https://www.gemconsortium.org/economy-profiles/canada-2> (accessed 24 May 2020).
- Government of Canada (2011), "Facts in Canada's immigration history", available at: <https://www.canada.ca/en/immigration-refugees-citizenship/news/archives/backgrounders-2011/facts-canada-immigration-history.html> (accessed 21 September 2020).
- Groenland, E. and Dana, L. (2019), "Data collection methods", *Qualitative Methodologies and Data Collection Methods toward Increased Rigour in Management Research*, World Scientific Publishing Co. Pte., pp. 163-164, Chapter 10.
- Gulati, R., Nohria, N. and Zaheer, A. (2000), "Strategic networks", *Strategic Management Journal*, Vol. 21 No. 3, pp. 203-215.
- Hessels, J. (2008), *International Entrepreneurship: Value Creation across National Borders*, Dissertation, ERIM PhD Series, Rotterdam.
- Hite, J.M. and Hesterly, W.S. (2001), "The evolution of firm networks: from emergence to early growth of the firm", *Strategic Management Journal*, Vol. 22 No. 3, pp. 275-286.
- Hjerpe, R. (2008), "An economic history of Finland", available at: <http://eh.net/encyclopedia/an-economic-history-of-finland> (accessed 6 September 2022).
- Jones, M.V., Coviello, N.E. and Tang, Y.K. (2011), "International entrepreneurship research (1989-2009): a domain ontology and thematic analysis", *Journal of Business Venturing*, Vol. 26 No. 6, pp. 632-659.
- Keeble, D., Lawson, C., Smith, H.L., Moore, B. and Wilkinson, F. (1998), "Internationalisation processes, networking and local embeddedness in technology-intensive small firms", *Small Business Economics*, Vol. 11 No. 4, pp. 327-342.
- Korhonen, S. and Leppäaho, T. (2019), "Well-trodden highways and roads less traveled: entrepreneurial-oriented behavior and identity construction in international entrepreneurship narratives", *Journal of International Entrepreneurship*, Vol. 17 No. 3, pp. 355-388.
- Larson, A. and Starr, J.A. (1993), "A network model of organization formation", *Entrepreneurship Theory and Practice*, Vol. 17 No. 2, pp. 5-15.
- Lévi-Strauss, C. (1966), *The Savage Mind*, University of Chicago Press, Chicago, IL.
- Liu, Y. (2017), "Born global firms' growth and collaborative entry mode: the role of transnational entrepreneurs", *International Marketing Review*, Vol. 34 No. 1, pp. 46-67.
- Loane, S. and Bell, J. (2006), "Rapid internationalization among entrepreneurial firms in Australia, Canada, Ireland and New Zealand: an extension to the network approach", *International Marketing Review*, Vol. 23 No. 5, pp. 467-485.
- Loane, S., Bell, J. and McNaughton, R. (2007), "A cross-national study on the impact of management teams on the rapid internationalization of small firms", *Journal of World Business*, Vol. 42 No. 4, pp. 489-504.
- Lumpkin, G.T., Cogliser, C.C. and Schneider, D.R. (2009), "Understanding and measuring autonomy: an entrepreneurial orientation perspective", *Entrepreneurship Theory and Practice*, Vol. 33 No. 1, pp. 47-69.
- Magni, D., Chierici, R., Fait, M. and Lefebvre, K. (2021), "A network model approach to enhance knowledge sharing for internationalization readiness of SMEs", *International Marketing Review*, Vol. 39 No. 3, pp. 626-652.
- Manolova, T.S., Manev, I.M. and Gyoshev, B.S. (2014), "Friends with money? Owner's financial network and new venture internationalization in a transition economy", *International Small Business Journal*, Vol. 32 No. 8, pp. 944-966.

- Masango, S.G. and Lassalle, P. (2020), "What entrepreneurs do? Entrepreneurial action guided by entrepreneurial opportunities and entrepreneurial learning in early internationalising firms", *International Marketing Review*, Vol. 37 No. 6, pp. 1083-1119.
- Maxwell, J.A. and Miller, B.A. (2008), "Categorizing and Connecting Strategies in Qualitative Data analysis", in Hesse-Biber, S.N. and Leavy, P. (Eds), *Handbook of Emergent Methods*, The Guilford Press, pp. 461-477.
- McDougall, P.P. and Oviatt, B.M. (2003), "Some fundamental issues in international entrepreneurship", *Entrepreneurship Theory and Practice*, Vol. 18 No. 27, pp. 1-27.
- Milanov, H. and Fernhaber, S.A. (2014), "When do domestic alliances help ventures abroad? Direct and moderating effects from a learning perspective", *Journal of Business Venturing*, Vol. 29 No. 3, pp. 377-391.
- Miles, M.B. and Huberman, A.M. (1994), *Qualitative Data Analysis: an Expanded Sourcebook*, Sage, Thousand Oaks, CA.
- Miller, C.C., Cardinal, L.B. and Glick, W.H. (1997), "Retrospective reports in organizational research: a reexamination of recent evidence", *Academy of Management Journal*, Vol. 40 No. 1, pp. 189-204.
- Mitchell, R., Smith, B., Morse, E., Seawright, K., Peredo, A.M. and McKenzie, B. (2002), "Are entrepreneurial cognitions universal? Assessing entrepreneurial cognitions across cultures", *Entrepreneurship Theory and Practice*, Vol. 26 No. 4, pp. 9-32.
- Musteen, M., Datta, D.K. and Butts, M.M. (2014), "Do international networks and foreign market knowledge facilitate SME internationalization? Evidence from the Czech Republic", *Entrepreneurship Theory and Practice*, Vol. 38 No. 4, pp. 749-774.
- Nelson, R. and Lima, E. (2020), "Effectuations, social bricolage and causation in the response to a natural disaster", *Small Business Economics*, Vol. 54, pp. 3721-3750.
- OECD (2003), *Officially-supported Export Credits and Small Exporters*, Organization for Economic Co-operation and Development, France.
- OECD (2018), "Fostering greater SME participation in a globally integrated economy", available at: <https://www.oecd.org/cfe/smes/ministerial/documents/2018-SME-Ministerial-Conference-Plenary-Session-3.pdf> (accessed 31 March 2022).
- OECD (2021), "Key biotechnology indicators", available at: <https://www.oecd.org/innovation/inno/keybiotechnologyindicators.htm> (accessed 31 March 2022).
- Oviatt, B.M. and McDougall, P.P. (2005), "Defining international entrepreneurship and modeling the speed of internationalization", *Entrepreneurship Theory and Practice*, Vol. 29 No. 5, pp. 537-553.
- Packard, M.D. (2017), "Where did interpretivism go in the theory of entrepreneurship?", *Journal of Business Venturing*, Vol. 32 No. 5, pp. 536-549.
- Patton, M.Q. (2015), *Qualitative Research and Evaluation Methods*, Sage, Thousand Oaks, CA.
- Piekkari, R., Welch, C. and Paavilainen, E. (2009), "The case study as disciplinary convention: evidence from international business journals", *Organizational Research Methods*, Vol. 12 No. 3, pp. 567-589.
- Poulis, K., Poulis, E. and Plakoyiannaki, E. (2013), "The role of context in case study selection: an international business perspective", *International Business Review*, Vol. 22 No. 1, pp. 304-314.
- Prashantham, S. and Floyd, S.W. (2019), "Navigating liminality in new venture internationalization", *Journal of Business Venturing*, Vol. 34 No. 3, pp. 513-527.
- Reuber, A.R., Knight, G.A., Liesch, P.W. and Zhou, L. (2018), "International entrepreneurship: the pursuit of entrepreneurial opportunities across national borders", *Journal of International Business Studies*, Vol. 49 No. 4, pp. 395-406.
- Sapienza, H.J., Autio, E., George, G. and Zahra, G.A. (2006), "A capabilities perspective on the effects of early internationalization on firm survival and growth", *Academy of Management Review*, Vol. 31 No. 4, pp. 914-933.

- Schweizer, R. and Vahlne, J.E. (2022), "Non-linear internationalization and the Uppsala model—On the importance of individuals", *Journal of Business Research*, Vol. 140, pp. 583-592.
- Sedziniauskienė, R., Sekliuckienė, J. and Zucchella, A. (2019), "Networks' impact on the entrepreneurial internationalization: a literature review and research agenda", *Management International Review*, Vol. 59 No. 5, pp. 779-823.
- Senyard, J., Baker, T., Steffens, P. and Davidsson, P. (2014), "Bricolage as a path to innovativeness for resource-constrained new firms", *Journal of Product Innovation Management*, Vol. 31 No. 2, pp. 211-230.
- Shkolnykova, M. and Kudic, M. (2022), "Who benefits from SMEs' radical innovations?—empirical evidence from German biotechnology", *Small Business Economics*, Vol. 58 No. 2, pp. 1157-1185.
- Slevin, D.P. and Terjesen, S.A. (2011), "Entrepreneurial orientation: reviewing three papers and implications for further theoretical and methodological development", *Entrepreneurship Theory and Practice*, Vol. 35 No. 5, pp. 973-987.
- Smith, P.M. (2012), *A Concise History of New Zealand*, Cambridge University Press, New York.
- Stake, R.E. (2006), *Multiple Case Study Analysis*, Guilford Press, New York.
- Stenhouse, J. and Wood, G.A. (2005), *Christianity, Modernity and Culture: New Perspectives on New Zealand History*, ATF Press, Hindmarsh.
- Stenius, H. (2017), "The language issue in Finland", Clive Archer and Joenniemi Pertti (Eds.), *The Nordic Peace*, Routledge, pp. 157-170.
- Styles, C. and Seymour, R.G. (2006), "Opportunities for marketing researchers in international entrepreneurship", *International Marketing Review*, Vol. 23 No. 2, pp. 126-145.
- Su, N. (2013), "Internationalization strategies of Chinese IT service suppliers", *MIS Quarterly*, Vol. 37 No. 1, pp. 175-200.
- Svendsen, G.L. (2006), "Studying social capital in situ: a qualitative approach", *Theory and Society*, Vol. 35 No. 1, pp. 39-70.
- Terjesen, S., Hessels, J. and Li, D. (2016), "Comparative international entrepreneurship: a review and research agenda", *Journal of Management*, Vol. 42 No. 1, pp. 299-344.
- The Commonwealth (2020), "Joining the Commonwealth", available at: <https://thecommonwealth.org/about-us/joining-the-commonwealth> (accessed 21 September 2020).
- Torkkeli, L., Kuivalainen, O., Saarenketo, S. and Puimalainen, K. (2018), "Institutional environment and network competence in successful SME internationalisation", *International Marketing Review*, Vol. 36 No. 1, pp. 31-55.
- Tsoukas, H. (2009), "Craving for generality and small-N studies: a Wittgensteinian approach towards the epistemology of the particular in organization and management studies", in Buchanan, D. and Bryman, A. (Eds), *The SAGE Handbook of Organizational Research Methods*, Sage Publications, London, pp. 285-301.
- Vadana, I.-I., Kuivalainen, O., Torkkeli, L. and Saarenketo, S. (2021), "The role of digitalization on the internationalization strategy of born-digital companies", *Sustainability*, Vol. 13 No. 24, 14002.
- Verbeke, A. and Ciravegna, L. (2018), "International entrepreneurship research versus international business research: a false dichotomy?", *Journal of International Business Studies*, Vol. 49 No. 4, pp. 387-394.
- Webber, J.H. (1994), *Reimagining Canada: Language, Culture, Community, and the Canadian Constitution*, McGill-Queen's University Press, Montreal.
- Welch, C., Piekkari, R., Plakoyiannaki, E. and Paavilainen-Mäntymäki, E. (2011), "Theorising from case studies: towards a pluralist future for international business research", *Journal of International Business Studies*, Vol. 42 No. 5, pp. 740-762.
- Welter, F. (2011), "Contextualizing entrepreneurship—conceptual challenges and ways forward", *Entrepreneurship Theory and Practice*, Vol. 35 No. 1, pp. 165-184.

- Witt, P. (2004), "Entrepreneurs' networks and the success of start-ups", *Entrepreneurship and Regional Development*, Vol. 16 No. 5, pp. 391-412.
- Yamin, M. and Kurt, Y. (2018), "Revisiting the Uppsala internationalization model: social network theory and overcoming the liability of outsidership", *International Marketing Review*, Vol. 35 No. 1, pp. 2-17.
- Yin, R.K. (2014), *Case Study Research: Design and Methods*, Sage, Thousand Oaks, CA.
- Zander, I., McDougall-Covin, P. and Rose, E.L. (2015), "Born globals and international business: evolution of a field of research", *Journal of International Business Studies*, Vol. 46 No. 1, pp. 27-35.
- Zucchella, A., Hagen, B. and Serapio, M.G. (2018), *International Entrepreneurship*, Edward Elgar Pub., Cheltenham.

Supplementary material

The supplementary material for this article can be found online.

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