

A CROSS-CULTURAL COMPARISON OF THE NETWORK CAPABILITY DEVELOPMENT OF ENTREPRENEURIAL FIRMS

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ABSTRACT

Focusing on the micro-brewing industry in Ireland and Belgium, the purpose of this article is to report the findings of a study designed to address the cross cultural differences in the network capability development of entrepreneurial firms. A rich literature supports the idea that networks are important for small, entrepreneurial firms. This paper adds to this extant literature though profiling the factors impacting the development of network capability and in doing so, considers the cross cultural similarities and differences of such factors. The empirical research entailed semi-structured interviews with eight micro brewing entrepreneurs and small businesses in Munster, Ireland and six micro-brewing enterprises in Limburg, Belgium comprising a total of 21 hours of interview data. Findings, analysed in light of Hofstede's five dimensions, power distance, collectivism/individualism, femininity/masculinity, uncertainty avoidance and long-term/short-term orientation show that culture matters. This paper contributes to a clearer view of cross cultural network capability development and has implications for practice, academia and policy.

Keywords: Culture, Network Capability, Network inhibitors, Network enablers, Entrepreneurship, Micro-Brewery Sector

TITLE: A CROSS-CULTURAL COMPARISON OF THE NETWORK CAPABILITY ENABLERS AND INHIBITORS IN ENTREPRENEURIAL FIRMS

INTRODUCTION

The purpose of this article is to report the findings of a study designed to address whether national cultural context affects the development of network capability of entrepreneurial firms. The study of entrepreneurial networks has acutely informed our understanding of how entrepreneurs discover and develop opportunities and access resources through engagement with the socioeconomic system to which they are connected (Birely, 1985; Elfring and Hulsink, 2003; Chen and Tan, 2009). In addition, the theoretical discussion regarding the influence that a national culture has on entrepreneurship has persisted for decades (Schumpeter, 1934; McClelland, 1961) with research addressing the national differences in entrepreneurial orientation based on different national political/legal, economic, and social contexts (Casson, 1995; Lee and Peterson, 2000). However, a gap emerges whereby limited empirical studies have focused on understanding the relationship between national cultural context and entrepreneurial networks and no previous study, to our knowledge, has examined national culture in relation to the development of network capability. Hence, the core aim of this paper article is to report the findings of a study designed to address the cross cultural similarities and differences in the network capability development of entrepreneurial firms.

A rich literature supports the idea that networks are important for small, entrepreneurial firms. Network capability, defined as a firm's ability to develop and utilize inter organizational relationships to gain access to various resources held by others (Walter, Auer, Ritter, 2009), can assist entrepreneurs to overcome some of the contextual challenges that characterize them. Many of these characteristics stem from the relative size of the entrepreneurial firm and include; resource constraints due to both liabilities of newness and smallness (Baum, 1996; Stinchcombe, 1965); dependency on a small market, lack of specialist marketing expertise (Carson, 1985); a lack of finance and difficulty in accessing raw materials (Mumbula, 2002). Such constraints can be overcome through engaging with external network ties enabling the entrepreneurial firm to survive, develop and perhaps grow through bringing opportunities and resources into the firm (Hite, 2005; Lechner, Dowling and Welp, 2006). That is, the network approach posits that firms can access resources and capabilities through their interconnected networks and interfirm linkages (Gulati, 1999).

As firms must build rather than buy capabilities (Teece, Pisano, and Shuen, 1997), network capability is not inherent but rather is evolutionary in nature. This suggests that not all firms will develop network capability through the same route or at the same level or pace. Relationships and networks are shaped within a societal context; hence we posit that national culture may impact on the development of network capability development. Given the perception that relations between firms are important for entrepreneurial effectiveness coupled with the fact that entrepreneurial networks are context dependent and related to the socioeconomic system to which they are connected, it seems prudent to address the factors impacting network capability development in an international context. Focusing on the micro-brewing industry in Ireland and Belgium, this paper will address this critical research gap profiling the factors impacting network capability development placing emphasis on the cross cultural similarities and differences of such factors using the model developed by Hofstede.

The paper begins by providing the context for the paper, both the microbrewery industry and country contextual factors for Ireland and Belgium. The motivation for the entrepreneurial firm's engagement in network capability development processes is outlined and the rationale for employing network analysis. Using Hofstede's (1980) classic cultural dimensions, a

framework for analysing the factors impacting the development of entrepreneurial firm's network capability is presented. A qualitative methodology for the empirical study is employed using semi-structured interviews with eight micro brewing entrepreneurs and small businesses in Munster, Ireland and six micro-brewing enterprises in Limburg, Belgium comprising a total of 21 hours of interview data. Key findings are presented, discussed and conclusions are drawn.

INDUSTRY AND COUNTRY CONTEXT

A Micro/Craft Brewery can be largely defined as any brewery that produces less than 30,000 HL of beer annually. Due to the smaller scale of production and smaller batch sizes, the process is more labour intensive as automation of the process would 'impersonalise' the craft itself undermining the ethos of a micro brewery. This scale allows the creation of more wholesome, stylistically accurate, full-flavoured beers that aim to please the discriminating, not necessarily the average, palate. Unlike the large brewers, the focus is not on volume and efficiency, but instead is on taste, balance and quality. Micro brewing in Ireland and Belgium is not an overnight phenomenon and the industry is growing worldwide. In 1983, 43 brewing firms operated in the United States. By June 1997 that number had risen to 1,273 (Carroll and Swaminathan, 2000). Microbreweries around the world are striving to emerge in an industry where a virtual monopoly currently exists. In the American beer industry the market share held by the four largest firms is 80% with craft beer accounting for about 6% of total beer sales (Carroll and Swaminathan, 2000). The main advantage that they hold over their large-scale competitors is that the process allows for flexibility in adjusting to the marketplace, a marketplace that is becoming more demanding of their beers.

Ireland, an island to the north-west of continental Europe, has been a member of the European Union since 1973. With a population of 4.2 million, Ireland has transformed itself from a largely agricultural society into a modern, technologically advanced economy. In Ireland, within the food and drink manufacturing sector, Ireland has the natural resource base necessary to succeed and excel internationally (Bell and Shelman, 2010) and has a huge range of its own firms in this area. One of the key reasons that Ireland does not have a greater number of international food and drink manufacturing firms may be that they do not actively participate in networks. In addition the sector is growing, with 7 micro-breweries being established in the last three years (see table 2). However, the micro-brewery movement has been slow to take off in Ireland, and accounts for merely 1% of the 494 million litres produced in 2011 (Euromonitor Report, 2012). In recent years the sector has reportedly seen a resurgence of interest from consumers, customers and the media. However, growth has been slow which may be attributed to a lack of network capability as volumes remain insignificant compared with the mainstream beer brands.

Belgium, with a population of 10.7 million people, is a founding member of the European Union and hosts the EU's headquarters. Belgian beer is important in terms of the image of the country, but the economic impact cannot be overlooked. In 2011, there were more than 120 breweries offering a total of over 500 kinds of beer. 1,551 million litres was produced in 2011 and Belgian brewers exported more beer than domestic consumption mainly to France, the Netherlands, Germany the UK and the US. According to Euromonitor (2012), the return of Belgians to their roots contributes to the success of the micro-brewery abbey-style beers, local strong lagers and regional beers often associated with local authentic food. Instead of consuming high quantities of lager like two decades ago, consumers increasingly want a quality experience with beer. This was encouraged by numerous TV broadcast about the local culture of beer sponsored by the Belgian Confederation of Brewers, which is awakening the nostalgia or the curiosity of Belgians for their regional beers. From many years, authentic Belgian strong premium beers have been the fastest growing category in Belgium.

LITERATURE REVIEW

The network concept has been widely employed in entrepreneurship research (Birely, 1985; Elfring and Hulsink, 2003; Chen and Tan, 2009). As their size insinuates a particular vulnerability to resource constraints, entrepreneurial firms are becoming increasingly dependent on external resources and capabilities as they pursue their goals for survival, successful emergence and growth (Jarillo, 1989; Lechner and Dowling, 2003). A widely cited benefit of entrepreneurial networks is the ability to provide “conduits, bridges and pathways” (Hite, 2005, p. 113) or an “entrance ticket” (Lechner and Dowling, 2003: 11) to external knowledge and resources. Additionally, the sharing and pooling of resources within a network can lead to the emergence of new resource configurations assisting the firm to respond quickly to environmental changes (Gemünden, Ritter and Heydebreck 1996). However, as noted by Möller and Svahn (2003), network benefits do not come freely, rather they require the development of specific organisational capabilities, network capabilities. Network capability comprises a firm’s ability to initiate, maintain, and utilize relationships to gain access to various resources held by other actors (Walter, Auer and Ritter, 2006; Mitrega, Forkmann, Ramos and Henneberg, 2012). In an entrepreneurial context, network capability refers to the capacity of new ventures to identify, establish, coordinate and develop relationships with different players in the market (Chen and Tan, 2009). Hence, that the ability to develop the skills to engage in effective cooperation has become a core skill of successful entrepreneurs, regardless of national culture.

Culture has numerous definitions, and it has been argued that the definition selected by researchers largely depends on its intended use (Kluckhohn and Strodtbeck, 1961). For the purpose of this paper, national culture is defined as the shared values of people within a certain national environment (Hofstede, 1980). A core question addressed in this research is whether national differences exist in the development of network capability? That is, in an era characterised by increasing globalisation and standardisation of business practices does culture matter? To answer this question we will profile the factors influencing the development of network capability in an international context. The impact that culture has on networks has been discussed primarily from a social viewpoint with findings illustrating networks as residing on a continuum between the universalist and contextualist perspectives. The universalist position argues that entrepreneurs have more in common with their international counterparts than with non-entrepreneurs from their own cultures (McGrath, MacMillan and Tsai 1992; Dodd and Patra, 2002). They suggest that entrepreneurial networks have a common, universal role independent of the context in which the entrepreneur is embedded, the fundamental assumption being that entrepreneurs engage with social networks in a similar way across cultures. The other extreme emphasises context determinism, arguing that social networks differ dramatically depending on the context in which the entrepreneur is embedded (Klyver and Foley, 2012). Previous research has cautioned that there are dangers inherent in the application of the universalist position (Gibb, 1999; Thomas and Mueller, 2000) which largely ignores the impact of national culture. However, findings in the current literature have been largely fragmented. Klyver and Foley (2012) noted that diverse findings and difficulty in interpreting results may be attributed to different methodologies employed and diverse samples with some focusing on female entrepreneurs and others on urban and rural groups. Greve and Salaff (2003:17), in analysing the network activities of entrepreneurs through three phases of establishing a firm in four countries (Norway, Italy, Sweden, US) acknowledged that disparity in network practice exist, but concluded that “cultural differences do not play a major role in networking”. Similarly, Staber and Aldrich (1995: 443) noted that “At least some aspects of business networking are generic, and that owners approach some tasks in similar ways in different environments”. Given the socially-embedded nature of network activities, differences between cultures could

be anticipated. Culture affects virtually all human behaviour (Terpstra and David, 1985) including decision making and interpersonal interaction (Birely, Cromie and Myers, 1991:60), hence it makes sense to analyse the potential impact that culture may have on the development of network capability.

LINKING NETWORK CAPABILITY DEVELOPMENT WITH CULTURE

To capture the multifaceted nature of network capability and culture, the authors used network analysis to provide a framework for a comprehensive analysis of the factors impacting the development of network capability in both a Belgian and Irish context (Lincoln, 1982; Gnyawali and Madhavan, 2001; Ritter and Gemünden, 2003; Brass, Galaskiewicz, Greve and Tsai, 2004; Provan, Fish and Sydow, 2007). Emirbayer and Goodwin (1994: 1411) argue that although “network analysis is one of the most promising currents in sociological research” it neglects culture and fails to understand the processes that transform networks and shape social reality over time. In analysing entrepreneurial firms in both an Irish and Belgian context we aim to link network analysis and properties to culture to overcome this research gap. As a research tool, network analysis is valuable for uncovering the patterns of order underlying empirical observations (Knoke & Kuklinski, 1982), thus potentially beneficial in enhancing our understanding of the factors impacting the development of network capability in a cross cultural context. Network analysis provides a mechanism to bridge micro and macro level explanations of the factors impacting the development of network capability capturing the context of relations within which entrepreneurial actors participate and make decisions.

Hofstede’s cultural model was adopted as our theoretical framework in part because of its widespread recognition, in particular as a framework for international investigations of entrepreneurship (McGrath, MacMillan and Tsai 1992; Shane 1993; Tiessen, 1997; Thomas and Mueller 2000). For Hofstede, the way people in different countries perceive and interpret their world varies along five independent dimensions which characterise national culture: power distance, collectivism/individualism, femininity/masculinity, uncertainty avoidance and long-term/short-term orientation. According to Hofstede, based on cultural considerations we can use the dimensions to make predictions regarding the way that society operates (Hofstede, 1991). Hence, the bipolar dimensional approach to measurement of national culture can allow for predictions about how each society engages with networks and implications for network capability development allowing the Hofstede model to be used in a fresh manner. Although the dimensions developed by Hofstede have received significant attention in the entrepreneurship literature (Baughn and Neupert, 2003) making it the dominant culture paradigm in business research (Sivakumar and Nakata 2001), the model has not avoided criticism. Concerns have been raised in terms of the methodology employed (Triandis, 1982; McSweeney, 2002) in addition to criticism regarding the ability of national culture to explain behavioural differences between individuals living in different cultures. Moreover, the study was carried out prior to the significant leap in globalization, the free and frequent movement of people throughout the world and significant advancements in communication technologies. However, Hofstede’s study work has proved useful and valuable in that it exhibits a succinct taxonomy of meaningful cultural dimensions for explaining the behavioral preferences of people in business organisations and has been described as one of the major landmarks of cross-cultural research” (Triandis, 1982: 90).

Power Distance: Power Distance refers to the “extent to which less powerful members of organisations and institutions accept and expect that power is distributed unequally” (Hofstede and Bond, 1988: 10). As can be seen in Table 1, at 28, Ireland is a society that

believes that inequalities amongst people should be minimised whereas in Belgium (65) inequalities are accepted suggesting hierarchy as essential (Hofstede, 1980). In terms of the development of network capability we posit that power distance may impact patterns of established interconnectivity and the entrepreneur's view of network potential in terms of who it can connect to. That is, in high power distance countries an entrepreneur would be less likely to partner with larger entities or dedicate a lot of time building and nurturing such relationships. This would have implications at a macro level as it may result in national and local state agencies being less willing to engage with the entrepreneurial firms or industry.

Masculinity/Femininity: Refers to the degree to which masculine values like assertiveness, performance, success, and competition prevail making individuals more assertive and goal directed as opposed to emphasising warm and social relationships (Hofstede, 1991; Nakata and Sivakumar, 1996). In high masculinity societies individuals are task orientated, with formalisation of rules and procedures employed to facilitate the avoidance of group conflicts, confusion, redundancy and overlapping authority (Nakata and Sivakumar, 1996; Smith, Dugan and Trompenaars, 1996). Conversely, in feminine societies, people play a far more important role characterised by greater trust, communication, cooperation, team spirit, and low conflict (Steensma, Marino, Weaver and Dickson, 2000) indicative of the network approach to business. We suggest that entrepreneurs from feminine societies or interacting with such societies might have more experience in interaction at a national or international level assisting them to look differently on partnering thus facilitating the development of network capability. This is similar to findings by Kale, Dyer and Singh (2002) that alliance experience facilitates the acquisition of alliance capabilities with greater experience leading to greater success in such relationships. Due to more open communication structures, information sharing throughout the value chain and through personal contact networks (PSNs) may also be more prevalent in feminine societies facilitating network capability development as societies with a cooperative mindset would be more likely to favour 'win-win' situations through cooperation. A strong desire for growth, often viewed as an entrepreneurial fundamental (McClelland, 1965; 1987), although a masculine value, might enable network capability development as entrepreneurs strive to attain external resources for further growth and success. At 68 Ireland is a masculine society, highly success oriented and driven which may inhibit network capability. At 54, Belgium has a more moderate score on this dimension.

Individualism/ Collectivism: Members of individualistic societies desire independence from group affiliations as opposed to collectivist societies which value long-term group ties similar to that of the ties attributed to extended family (Triandis, 1993). Individualists are reluctant to give up control; hence, entrepreneurs in collectivist societies may be more receptive to building long-term embedded relationships. Both Ireland and Belgium score high on the individuality index which would suggest emphasis being placed on tight contracts with other firms and a competitive environment prevailing. In nations with a highly collectivist perspective, strong-tie networks are likely to be based extensively upon kinship and friendship ties, or, to use Hofstede's terminology, with members of their in-group. Probably, such networks also involve the spending of social time with business contacts, to bring the private and public aspects of their lives closer together. Network contacts may be difficult to terminate, given the close personal nature of relationships that develop in such a context, leading to a longer average lifespan for network relationships. A number of studies have posited a relationship between individualist cultures and entrepreneurial orientation (Lee and Peterson, 2000; Mueller and Thomas, 2000). On the other hand, it has been argued that individualism may be a liability given the importance of networks in generating collective

economic effectiveness (Franke, Hofstede and Bond, 1991). The push for the entrepreneurial firm to develop its network capability is likely to be rooted in their desire to build a sense of community and enhance their reputation among the group to gain access to new positions in the network. For the micro-brewing sector, involvement in coordinated consumers events (festivals) and the development and engagement with an industry group or association would facilitate network capability development for the interest of the common good in a collectivist society. Both Ireland and Belgium rank highly as an individualistic culture which, according to Hofstede, in the work environment translates to work being contract based with autonomy favoured, inhibiting the development of network capability.

Uncertainty avoidance: Uncertainty avoidance represents a society’s tolerance for uncertainty and ambiguity (Hofstede, 1980; 1991), and is defined as the “extent to which the members of a culture feel threatened by uncertain or unknown situations” (Hofstede, 1991: 113). In relation to technology development, Steensma, Marino, Weaver and Dickson, (2000) found that, at a national level, technology alliances enable an SME to gain access to critical resources and protect against technological uncertainty mitigating the anxiety faced by SME decision makers that are challenged with ongoing technological change. The formation of industry groups to lobby government and the use of complementary or competing firms in innovation may be favoured in countries with high levels of uncertainty avoidance. As can be seen in table 1, low uncertainty avoidance (35) would make Ireland the more creative and innovative nation as opposed to Belgium which has a high score (94). In terms of network capability development the Irish brewers may use their innovate skills by embracing new ways to approach problems which may include joint problem solving (McEvily and Marcus, 2005), indicative of network capability development whereas the Belgians may engage in joint problem solving to lower uncertainty. Additionally, it has been noted that access to finance through financial institutions is easier in countries with low uncertainty avoidance which might hinder the development of network capability.

Long-term and short-term orientations: Long-term perspectives tend to concentrate on the future and focus on long-term relationships. The relationships, based on long-term perspectives, are open-ended and indefinite in duration. Short-term perspectives concentrate on the past and the present and involve values related to social obligations and transactional based relationships. These transactional based relationships are more specific and short-term. The Western culture, including Belgium and Ireland, has been identified by Hofstede as having a short-term orientation, as opposed to the Asian culture which encompasses a long-term orientation (Hofstede, 1991). Therefore, both countries tend to be more focused on a short-term orientation whereby immediate goals may surpass willingness to make short-term sacrifices for long-term network results.

Cultural Dimension	Ireland	Belgium
Power distance	28	65
Masculinity/ Femininity	68	54
Individualism/Collectivism	70	75
Uncertainty avoidance	35	94
Long-term orientation	43	38

Table 1 Comparison of Cultural Dimensions (Hofstede, 1980)

METHOD

Research Design and Data Collection

The core aim of this paper is to report the findings of a study designed to address the cross cultural similarities and differences in the network capability development of entrepreneurial firms. Taking the view of entrepreneurial capabilities as a process (Gartner, 1985; Jack and Anderson, 2002), process research clearly fits this research question. Using Hofstede's model, the literature review identified a frame of reference to understand the factors influencing the development of network capability. Semi-structured interviews were utilised in this research both in the Irish and Belgian context with the aim of developing an understanding of the respondent's world (Easterby-Smith, Thorpe and Lowe 2002: 87), in particular their network capability development. Semi-structured interviews were conducted with 8 Irish entrepreneurs from the Munster province and 6 Belgian entrepreneurs from Limburg. Each participant was interviewed for approximately 1.5 hours with 21 hours of interview data collected in total. Each interview was conducted with the entrepreneur. This was deemed important by the authors as, due to the nature of the exercise, they were the actors who could make immediate decisions within the company and were fully responsible for the firm's network activity. Regarding the Belgian micro-brewers, each interview was conducted in Limburg at the owner's premises. Due to the distance involved, the authors made comprehensive preparations prior to the trip. They studied each brewery's website and obtained detailed company information to understand the operations of each company. A series of issues to be explored with each entrepreneur was devised prior to interviewing (Patton, 1990:280). The question structure was loose, allowing for variations to emerge on a case-by-case basis. All of the interviews were taped and transcribed immediately following the interviews. Documents attained for the purpose of this study included company and product brochures, presentation materials, business plans, newspaper articles and company information on websites. Following the interviews, this information was analysed in conjunction with the interview notes to ensure consistency with the findings. The diversity of sources facilitated the validity of the network capability development processes through triangulation (Yin, 2003).

Participant Selection

Eight micro-brewery entrepreneurs, comprising the whole network of micro breweries in the Munster province of Ireland, participated in this study. Six micro-brewery entrepreneurs from Limburg, Belgium, participated in this study. We initially contacted 8 potential micro-breweries in Limburg but one refused to participate in the study while it was not possible to interview the other due to language barriers. The researcher was aware that access could present difficulties within a Belgian context so ensured that the entrepreneurs were located within a 60 km radius of Hasselt to minimise travelling distance. This follows Yin who stated; "In general, convenience, access and geographic proximity can be the main criteria for selecting cases ... allowing for a less structured and more prolonged relationship to develop between the interviewees and the case study investigator" (2003: 79). Entrepreneurship is often defined in terms of the characteristics of the decision maker within the firm, in particular their personality traits and socio-cultural traits (McClelland, 1961; Kets de Vries, 1977; Greve and Salaff, 2003). Although seven of the Irish participant firms and three of the Belgian firms have been established for more than three years (see table 2), based on their core characteristics such as risk taking (Palmer, 1971; Timmons, 1978; Welsh and White, 1981; McClelland, 1987), being innovative and creative (Schumpeter, 1934; Harwood, 1982, Drucker, 1985; Gibb, 1987), and adaptive to change (Drucker, 1986; Naman and Slevin, 1993), the sample can be classified as entrepreneurial. An overview of each entrepreneur is outlined in Table 2. Firm A-H represents the Irish brewers, Firm 1-6 the Belgian.

Firm	Employees (E)/Partners (P)	Age	Education	Years in business	Raison D'Être	Export	Experience	Brew P/Y	Type of business	State Funding
A	2P	32/34	Accountant/Engineer	1	Hobby	No	Course in UK	3000 HL	Brewery	Yes
B	3P	55	Artist/Publican	3	Hobby	No	Course in UK	190HL	Brewery/Pub	Yes
C	2P 10 E	40	Builder	1	Suitable site	No	Course in Irl	5500 HL	Brewery	Yes
D	4P 1E	38	Multi media and quantitative surveyor	2	Hobby/Unemployed	No	On job	2800 HL	Brewery	Yes
E	1P/2 E	42	Publican	12	Chance	No	On job	6000HL	Brewery/Pub	Yes
F	2P	37	IT	2	Hobby	No	UK brewery	1,000HL	Brewery	Yes
G	1P 1E	42	Fitter	3	Hobby	No	Irl Brewery	1000HL	Brewery / Contract Brew	Yes
H	1P	58	Business diploma	1	Hobby/Differentiation	No	On job, brewery supplier	260 HL	Brew pub	Yes
1	2P 4E	45	None	19	Family	Yes	On job	2600 HL	Brew Pub	No
2	2P	48	Mechanic	1	Hobby	No	On job	160 HL	Brewery	No
3	2P 100E (part-time)	50	Economics/Marketing	1	Business	No	On job	3,500HL	Brew Pub	No
4	2P, 2E	52	None	14	Hobby	Yes	On job/other brewery	3,000HL	Brew Pub	No
5	1P	45	IT	13	Family	Yes	Brewing Course	650 HL	Brewery	No
6	3P 3 E	37	Business	1	Family	Yes	Brewing Course	3,000HL	Brewery / Contract Brew	No

Table 2 Summary Description of Participating Entrepreneurs

Data Analysis

Data for this study was collected over an eight month research period. The authors used the network approach and Hofstede's cultural dimensions to analyse the factors that may enable or inhibit entrepreneurs to build network capability. The logic of the network perspective is that the firm or entrepreneur cannot be viewed as an autonomous, self-reliant actor (Zaheer, Gözübüyük and Milanov, 2010). It posits that firms access resources and capabilities through their networks of inter firm linkages (Gulati, 1999). The network approach is valuable for gathering data that identifies the type of relationships between entities and network analysis is useful for uncovering the patterns of order underlying empirical observations (Knoke and Kuklinski, 1982). Network capability cannot be built in isolation by the entrepreneur; instead the emphasis is on identifying the evolution in orientation from an individual to more collective orientation.

As can be seen in Table 3, in examining power distance, the key indicators of network capability development include; the willingness of the entrepreneurs and state agencies to connect to each other and participation in coordinated consumer events, mainly in the form of

festivals in this sector. In relation to masculinity/ femininity experience in interaction, information sharing and a desire for growth can impact on the development of an entrepreneurs' network capability. Individualism is influenced by a desire for control and independence, an entrepreneurial characteristic often cited as the core motivation for being in business in the first instance (Birley and Westhead, 1994). The entrepreneurs' view of the competition could translate to a sense of community driven by collective goals as opposed to individual ambitions allowing for network capability development. The use of complementary or competing firms for innovation would effect network development and may lower uncertainty as would joint problem solving and the formation of lobby groups to protect against new government initiatives. Long-term orientation is primarily indicated by whether the entrepreneurs showed a preference for relational or transactional exchange (Dwyer, Schurr and Oh, 1987) and the willingness to make short-term sacrifices for long-term network results.

Cultural Dimension	Factors either inhibiting or enabling
Power distance	Engagement with state agencies Participation in coordinated consumers events
Masculinity/ Femininity	Experience in interaction Information sharing within the value chain Information sharing with PCN Desire for growth
Individualism/Collectivism	Desire for control and independence Engagement with industry groups Festival and event participation
Uncertainty avoidance	Industry lobby groups Use of complementary or competing firms in innovation Joint problem solving
Long-term orientation	Willingness to make short-term sacrifices for long-term network results. Transaction or relationship orientated

Table 3 Factors impacting entrepreneurial capability development

NVivo, a software tool, was used to facilitate the organisation and analysis of documentation and interview data. Given that process and qualitative data has been described as “messy” (Langley, 1999: 691), NVivo acted as a support system to assist in managing and analyzing the large volume of complex data and rearranging the data into smaller coded groupings to facilitate insight, comparison, and theory development (Strauss and Corbin, 1990). NVivo was used to further analyse and describe the individual entrepreneurs and facilitated a cross-country comparison of the factors impacting network capability development.

FINDINGS

Power Distance: Findings support that Ireland, as a low power distant nation engaged with national and local government more than their Belgian counterpart facilitating the development of network capability. All of the Irish entrepreneurs received funding towards

their equipment and machinery without which many of them stated they would not be operational. However, the participants noted that the grants received required a lot of paperwork which was a massive time consuming process. Funding was also allocated in order to assist them in the development of a website and for branding purposes. Conversely, within Belgium, no funding was given to the entrepreneurs by the state and each brewery was responsible for the full cost of set-up. They stated that support was available in the French speaking region of the country: *“You get 60% finance from the French speaking of Belgium which is 15 miles away. Instead of helping us at this side, they are making it more difficult with all of the controls that they are putting in place”*. Strict regulations have been put in place in Limburg by health and safety officials to ensure that tight controls are in place for the brewing process. This has led to Belgian breweries becoming computerised and fully automatic which, for two of the entrepreneurs, takes from the craft and culture of authentic Belgian beer.

In Ireland, Government sponsored events represented a solid factor assisting the entrepreneurs’ development of network capability, aiding the formation of a network of micro-brewers. Festivals operated and run by Bord Bia (The Irish Food Board) were said to *“cost nothing”* and *“are a good promotional tool”* (ENT F). The participants noted that coming together as an industry at events helped to raise awareness of the industry as a whole and assisted them *“to get our name out there”* (ENT C). The festivals also served to correct misconceptions that Irish craft beer was more expensive than the better known brands with the point being *“to encourage people to taste many types of beer, to enjoy beer, not to get really drunk”* (ENT B). The use of the brewing network as a promotional tool at festivals also acted as an enabler. The collective mass of brewers led to free publicity which in turn enhanced awareness of the industry as a whole. The following quote capture the benefits of using festivals as a key promotional tool enabling entrepreneurial participation in networks. *“If you go to a newspaper as an individual you can take an advert out but if you go to the newspaper and explain that the Irish microbrewers are having an event then you get a lot of free publicity out of it. It works very well that way as people say wow when they read that there are 17 of us. You can therefore promote yourself in a better manner at a lower cost”* (ENT G). All of the participants attended the majority of beer festivals around the Republic of Ireland which enabled network participation as positive experiences ensued. Within Belgium, the individual brewers were responsible for organising festivals and each microbrewery had their own festival. This was facilitated by more relaxed licensing laws whereby festivals could be held outdoors at markets or at the brewers’ premises regardless of having a publican licence. As was noted: *“there can be 200 festivals a year in Belgium so it is impossible to go to them all”* (ENT 5). The Belgians placed more emphasis on travelling to European festivals than the Irish which they deemed very useful for making and meeting export contacts. Again, this could be attributed to the relative ease at which they could travel to neighbouring countries with their beer due to their location within Europe.

Masculinity/Femininity: Only one of the Irish brewers had previous network experience in the industry as opposed to all of the Belgium brewers. This impacted on the network capability development in an Irish context as experience enabled the brewer to see opportunities and benefits emanating from engaging with networks. This entrepreneur was frustrated as the other brewers’ lack of experience as it prevented him from building valuable connections with them: *“I was trying to convince them to club together and look Heineken as the competitor but they failed to see that they failed to see that, they absolutely failed to see that”* (ENT G). Conversely all of the Belgian brewers had network experience in the micro-brewing sector mostly rooted in culture and family traditions: *“My grandfather started a beer business 50 years ago so I have grown up in the industry”* (ENT 6); *“brewing in some shape*

or form is in my blood” (ENT 5); *“I have come from came from four generations of brewers”* (ENT 1). Another, without family connections, had been employed in the industry for 24 years so had built up worldwide connections which greatly facilitated the successful launch of his new brewery (ENT 3). Regarding culture, the strong tradition and vibrancy of the micro beer sector facilitated the entrepreneurs in gaining positive network experience. Clear opportunities and benefits that stemmed from connections included assistance at time of set-up, family recipes and access to a large supplier and distributor network.

The findings suggest that a lack of business ambition and vision can inhibit entrepreneurial network capability development. Six of the Irish entrepreneurs presented no growth ambitions constraining their participation in networks, which is unusual given Ireland’s high masculinity score. This discrepancy could be industry driven where, for some, the business was viewed essentially as craft venture: *“For me it is more about the craft than the business”* (ENT B). This was similar to ENT 2 in Belgium who showed fidelity to the business as craft as opposed to the newer automated brewing techniques. Regarding growth he noted: *“We would need to be brewing 80,000 –100,000 litres per year to pay one person to give up their job. It would then turn into a normal, all day job and would get boring after two weeks”* (ENT 2). From an Irish perspective, lack of growth ambitions was also indicated by local market scope, for example, ENT G decided that they would not sell their beer beyond a 30km radius from their brewery. For the most part the Irish participants noted that they had a preference towards growing *“slowly and organically”* (ENT B). This was evidenced by the fact that they had no immediate desire to export and promote their craft beer internationally. As was noted *“we have no real interest in exporting, we have been approached a couple of times but it has amounted to nothing”* (ENT A) or *“we might in time, but not yet”* (ENT D). Some of the rationale for this was related to financial and physical resources such as bottling facilities but the major reason was the restricted ambition and vision for the business and the leap of faith it would require. Conversely, all of the Belgian breweries were engaged in extensive exporting within Europe and, for some, to the US and Japan. This may be attributed to more relaxed export legislation and culturally driven through their physical proximity to the rest of Europe. The micro-brewery sector is time-honoured in Belgium and recognised distributor networks for the product have been long established. Additionally, language barriers posed no problem whereby the entrepreneurs spoke multiple languages fluently. Within Ireland, information sharing was prevalent with members of the network, however, in keeping with Hofstede’s level of masculinity, the information was explicit, not complex and easy to transfer, hence did not necessitate embedded relational ties. That is, while information sharing with members of the network enabled network capability development it did not translate into more detailed knowledge sharing or joint problem solving. The Irish brewers liked to share information that they had learned through experience. For example, one brewer noted that he met a novice brewer at a festival recently who was meeting a distributor with the hope of outsourcing that side of her business. He noted that he urged the brewer not to engage with the distributor based on his past, negative experiences with them. For the brewers in business less than three years, general information was very useful for answering questions and solving minor problems, however the information could be found out in numerous alternative ways. For example: *“Other micro-brewers have helped us sort out problems in relation to cooling, yeast issues, sourcing, raw materials, dealing with suppliers, that sort of thing”* (ENT F). Financial savings were also made following information sharing, *“We have received advice on what equipment we can use and installation which has helped us to save money”* (ENT A). Information was also shared regarding suppliers with one brewer stating *“I have recommended suppliers to a lot of the new guys”* (ENT G). They seemed willing to help each other out when problems presented themselves which is evidenced in the following quotes; *“We sell our pints using a pump system. If I was having trouble hooking it*

up, I would call another brewer” (ENT D); “Sometimes a bar will get one craft beer in. If it goes well they will sell more craft beers. So we might share information about good customers. Some bars in Dublin are getting really into the craft beer scene” (ENT C); “We are often on the phone to other brewers asking for information about a customer who is slow to pay to see if they have had a similar experience with them” (ENT E). Although beneficial, no relational investment was made between the brewers. Some useful information was shared between the brewers and their equipment suppliers: “The guy we bought the brewery from came over, did two brews, gave us recipes, ideas and was at the end of the phone for the first few months giving us advice and dealing with problems” (ENT H). Therefore, a certain amount of tutoring accompanied the purchase of equipment whereby a week or two was spent with a master brewer providing an “intense education” (ENT H). However, these initial intense relationships did not develop beyond what was required at the time.

In Belgium, the brewers were more open regarding their recipes and techniques, they shared recipes and as ENT 1 noted; *“the other brewers can take some of our beer to experiment with”*. This may be due to the fact that the sector is more established in Belgium and each brewer has carved a niche in the market. Specialisation in the craft sector was evident whereby the brewers produced very different products and focused on either organic beer, herb infused beer, mainstream beer or strong ‘hoppy’ beer. In addition, due to the maturity of the sector and the strong craft beer culture in Belgium, the customers have a more fine tuned taste palate to differentiate between beer styles making the entrepreneur’s products more complementary than competitive. In Ireland, customers are less sophisticated operating in a sector that is striving to gain awareness and momentum. As ENT B noted: *“The Irish palette is bland. If you don’t sell Heineken or Carlsberg you don’t exist”*.

Individualism/ Collectivism: In keeping with Hofstede, the Irish entrepreneurs had a preference towards independence in their operations with a clear desire for control over their decision making inhibiting network capability building. For example, when asked would additional partners be taken into the business to relieve some of the resource pressures common responses were, no with the entrepreneurs stating that they favoured working alone. As was noted by ENT B: *“We are not looking for investor for expansion, we would rather do it slowly ourselves. We don’t want to grow too quick as that’s how people make mistakes and the beer quality suffers. We like to do everything in-house – we will never outsource as we like to have control over quality”*. This desire for control was indicated in many of their other operational decisions, for example, in procurement when asked would they come together with other brewers to lessen delivery charges and lower prices through bulk buying the entrepreneurs felt that the coordination involved would be difficult and control over delivery dates and quantities would be lost. Control and independence did not characterise the Belgian breweries that also ranked high on individualism. For efficiency in procurement processes some of the entrepreneurs combined the purchase of supplies and shared distribution. *“Another brewery will deliver our beer for us outside the Limburg region” (ENT 2); “I only start deliveries when my van is full. I will deliver beer for others” (ENT 5).* Five of the entrepreneurs in Belgium rely on each other to complete the beer making process, again showing a lack of independent mentality. For example, two of the brewers buy one of their beer varieties from another micro-brewery and put their own label and branding on it. A further two outsource the majority of their production and bottling. However, each business remains very distinct throughout the procurement process and enforceable contracts are in place in line with the individualistic perspective.

Within Ireland, generalised goodwill towards one another and a sense of community is evident throughout the findings with the entrepreneurs helping each other out whenever the need arises. They were friendly towards other micro-brewers and felt a common bond

against the giant multinational brewers and to nurturing a new industry: *“We are all going through the same struggles but we do help each other out”* (ENT A). They noted that they share supplies if another runs out and assist each other out in any way they can. The brewers also maintained friendly relationships with their retail customers: *“They are interested in what we are doing and like to talk about it, they like to take a sense of ownership in it, they identify with what we are doing”* (ENT A). However, none of the brewers described relationships that were close or special with other brewers with relationships generally kept at arms’ length and not developed for mutual value. The lack of interest in more embedded relationships characterised the entire sample except one brewer who operated out of altruistic motivation and had built significant network capability with other brewers and with his customers. Individualism was also evident as the brewers noted that given the early stage of industry development they were willing to help each other out to fight against larger competitors but noted that time would bring with it more intensive competition and it would be then *“the survival of the fittest”*.

Similarly a sense of community was prevalent amongst the Belgian entrepreneurs with individualism present at another level. According to ENT 3 the brewers are *“friends at one level, but fighting for hectolitres all the same”*. ENT 1 also stated *“At the top level we are one big family, really close friends as we really know each other. Our representatives compete on the ground but they are also friends who have competitions between them to see who sells the most beer. There are many family links among the brewers as well”*. They noted that they could call on each other if they ran out of raw materials; however it rarely happened due to the plurality of suppliers available due to favourable conditions towards the growth of raw materials and the lack of time it took between ordering and delivery. Multiple local outlets were also available for buying raw materials in small quantities, largely due to the widespread culture of the “hobby” brewer. Such outlets were described as *“having a wide variety of hops and malt but more expensive than their larger counterparts”* (ENT 4). The brewers also developed mutual value through the co-production of beer. For example, three brewers came together to make a particular cheery flavoured beer. ENT 1 described the reason for the collaboration: *“We were not too happy with our first cherry beer so we decided to work with another brewery to make a much better beer”*. Culturally, the Irish and Belgian brewers had a different view of their competitive space and branding which impacted on their network capability development and their willingness to work together. For instance, in terms of exports ENT E stated: *“We are all out looking for business. We know our beer is good quality and we can charge for this. If our beer was sold beside another Irish craft beer that was being sold cheaper the distributors would all push the cheaper beer. We want our product to be unique, to stand out as a distinct brand in an off-licence. We want it to be very different to everyone else’s”*. The Belgian entrepreneurs simply noted that *“Belgian beer is a great brand”* (ENT 1; 4; 5) and trusted the consumer to differentiate between their individual products.

Uncertainty avoidance: As noted, information was shared between the entrepreneurs in both contexts. However, more complex detailed knowledge and joint problem solving was evident among the micro-brewers in Belgium which would assist the brewers to lower uncertainty in their operations. One brewer noted that he was experiencing problems with the flavour of his beer. To this end another entrepreneur and his master brewer engaged with the firm until the problem was solved; *“crushing the grains more finely and adding an extra ingredient to assist the sugar in fermenting”* (ENT 2). The Belgian entrepreneurs also placed emphasis on building tight relationships with their customers, particularly in the export market, to ensure that problems that arose could be jointly solved. They invested time and energy travelling across Europe and attending international beer festivals. Co-innovation was prevalent in the

supply chain whereby some of the breweries co-produce beer with retail customers jointly sharing inputs and profits. ENT 5 engaged in a coproduction with a farmer who supplied products for his beer. *“He liked our beer and wanted to make a product with us using his herbs so we started cooperation for production. We make the beer here and at the end of the production process we put some of his herbs in”*. Another stated that *“although we do not co-invest in other breweries, we have given some of them recipes and have helped them to launch their own beer”* (ENT 6). Clearly, a stronger culture of cooperation exists amongst the Belgian brewer than their Irish counterparts which could be linked to lowering uncertainty in a country ranked so highly (94) in uncertainty avoidance.

Both the Belgian and Irish entrepreneurs engaged in complementary innovation. Innovative activity occurred between an external partner and a micro-brewer where the collaboration involved incorporating the beer into the partner's product and co-branding. For example, beer flavoured crisps, sausage meat, pies, bread and casseroles were all cited. In another case a brewer approached a spice company to co-design the right spice for a new beer. In some other cases, it is just a matter of using another company's product as an ingredient and not having any major engagement whilst still offering the partner name recognition, or just simply bundling the beer with other product, for example, in one case, in a Christmas hamper. The use of complementary firms in innovation, in particular food firms, was dyadic in nature and tended to emerge opportunistically although it does provide access to a node in another connected net. For the Belgian brewer and customer, food and craft beer are a natural combination. In fact one of the brewers described beer as *“food for the country”*. Each of the Belgian entrepreneurs produced their own cheese with local farmers highlighting that *“beer and cheese for the Belgian is like wine and cheese to the French”* (ENT 5). However, although the same farmers were engaged in the innovation process for many years, no co-investment was involved. As ENT 2 stated: *“He knows nothing about making beer and I know nothing about making cheese. We are both sticking to what we are good at”*. Other products co-produced in Belgium included bread, sausage meat, pate and chocolates. The reasons cited for complementary innovation can be linked to this dimension of the Hofstede model. The Irish enjoyed participating in *“crazy experiments”* with other firms showing creativity in their operations characteristic of a nation with low uncertainty avoidance whereas the Belgians liked to focus on their strengths and outsource areas that they are not specialists which would characterise a country with high uncertainty avoidance.

All of the Belgian entrepreneurs are members of the Belgian Brewers Association, a century old tradition, who meet once a month in Brussels. The entrepreneurs noted that the meetings are useful to: *“talk about all the new things that are happening in our world, new rules, exports”* (ENT 1). Another noted *“all the problems that were are having are put on the table and everybody discusses them, we share experiences”* (ENT 5). Membership is open and the price for joining depends on hectolitres produced so no one business is excluded. The association facilitates the development of network capability as they take responsibility for promoting the sector as a whole. For example, they produced a television series whereby each microbrewery was visited by English actors, and produce a lot of promotional materials and brochures. For the entrepreneurs this was deemed essential as they do *“not have the same budgets for marketing as InBev”* (ENT 3). The Irish brewers are at the early stage development of an industrial association. However, unlike the Belgians, the core aim of the group is not to further develop relational capability, rather; to lobby government to gain further funding, to keep their tax status, to try and change the laws on licensing, and to position their network in relation to the core health and alcohol debate. As noted by ENT A: *“If we work as a unit we have some voice”*.

Long-term and short-term orientation: For the most part, within Ireland, relationships with suppliers were weak and transactional, with few if any relational elements. For the participants, the bulk of their raw materials had to be bought outside of Ireland, generally from the UK and Germany. Although they strived to buy locally, no producer of the raw materials existed. As one participant noted *“Even with a critical mass of micro brewers forming in Ireland no real support industry exists. However, as more and more micro breweries come on board we hope that a support industry will grow around us”* (ENT A). Malt was available at one point in Ireland for the micro-brewing industry; however the company supplying them since signed an exclusive deal with a large brewery preventing them from obtaining it locally. This almost doubled the price of the raw materials for the industry as they were faced with shipping costs and, in some cases, exchange rates. Significant supply chain efficiencies could have been made in an Irish context through joint procurement, however, in many circumstances the entrepreneurs ensured that they did not use the same suppliers as others, again showing a competitive flavour and short-term orientation in line with Hofstede. For example, each micro brewery went to great lengths in sourcing their bottles and made sure that they stood out clearly from the others. According to ENT D: *“we want our bottle to be unique, to stand out in an off-licence. We want it to be very different to everyone else’s.”* This transaction based approach to business led to little added value through information sharing with suppliers: *“Suppliers in this industry could be useful but they are not”* (ENT A). Interactions for the most part were transactional and not long-term or embedded; *“If somebody offered the exact same product at a lower price we would switch”*; *“Suppliers are a different kettle of fish entirely. It is very difficult to engage with them”* (ENT F); *“We like to switch around our suppliers on a regular basis”* (ENT D). However, the participants are clearly loyal to the suppliers that could influence the flavour of their beer. *“We are loyal to the English hops suppliers as we really need them. We also buy some raw materials from America. With the specialty stuff you need to have good relationships in place as the difference could be huge with the taste of the end product if you lost one of them”* (ENT E). The participants also sought quality in their supplies and stated that they didn’t necessarily opt for the cheaper raw materials. *“The quality of ingredients is important. We buy the most expensive malt but it works as for us, quality is more important than price”* (ENT B). Only one of the brewers was loyal to their suppliers and stated *“We have a good relationship with our suppliers and would not change them”*. They enjoyed having a social relationship with their suppliers and felt that, as a result, they benefitted in terms of delivery times and price. *“A connection with suppliers is very important. If somebody asks me where I get my ingredients from I can tell them in detail – At our level it is very important”*. *“Suppliers – I have a good relationship with them. I know them, I speak to them, I have met them so can see their faces – there is a connection – I know each of my suppliers personally – I’ve been to their plants – chit chat with them – I know where my raw materials come from”* (ENT G).

The Belgian brewers engaged in long-term exchanges as opposed to relationships with the majority of their suppliers. For them, quality was more important than price and for the most part, they strived to buy as many supplies locally as they could. None of the brewers changed suppliers on a regular basis stating that they were supplied by *“the best in Belgium”* (ENT 3). However, they did not know them at a personal level or engage with them in any meaningful way. In terms of more exotic hops, purchasing from *“the USA, Australia or NZ we only use one supplier and we get to know them pretty well. We might consider switching if the price was a bit better but it involves a lot of work to find one so we haven’t changed. The search process takes time* (ENT 6). Similarly ENT 1 noted; *“We try to work with local people as much as we can but our specialised beer is made using American hop. We also work with hops from Hungary. We use the same importers all the time. We tell them what kind of hop*

and malt that we want and they source it. We do not deal directly with the suppliers themselves, they are an agent. That means we do not usually know the people who grow the materials but it is more efficient". In terms of culture, the moderate climate and the nature of the soil are particularly favourable for the growth of the barley and hops, essential ingredients for beer production. Additionally, the primary component of beer, water, is supplied by the numerous mineral sources available in Belgium and, in some parts of Belgium, the air directly provides the wild yeasts that are used to produce beers of spontaneous fermentation. Locally grown raw material suppliers facilitates relationship building as opposed to Ireland where the entrepreneurs felt that suppliers were *"too disparate and geographically spread to engage with"* (ENT C). In addition, standardised bottles and packaging has been developed in Belgium for the industry for ecological purposes and hence three of the breweries combine bottle purchases for to gain economies of scale. Clearly relationships were not deeply embedded with the brewers showing a willingness to make short-term sacrifices for long-term network results.

DISCUSSION AND CONCLUSION

Findings from the empirical study are consistent with previous works by Powell, Kuput and Smith-Doerr (1996) and Teece, Pisano and Shuen (1997) which illustrate the difficulty involved with capability development; network capability development is not routine and takes time to build. It reiterates the importance of acknowledging and addressing the factors in Table 3 to either overcome or further develop the factors influencing network capability development if micro-enterprises are going to be in a position to gain access to network resources. The authors were surprised at the lack of network capability evident within the Irish entrepreneurs. The authors expected information sharing and joint problem solving to be prevalent given their low power distance score (28, Hofstede, see table 1) allowing for flatter organisational structures. However, in keeping with the literature (McClelland 1961; 1987; Hornaday and Aboud 1971; Timmons 1978; Solomon and Winslow 1988) the entrepreneurs' independence mentality coupled with a strong desire for control posed a significant inhibitor to network capability development. Strong firm boundaries were in place and an individualistic culture, whereby relationships for information and knowledge sharing with external actors were limited by necessity and sales. Conversely, the Belgian entrepreneurs were more open with their information and knowledge sharing and were much further along in their network capability development processes, surprising given their high power distance score of 65. This may be attributed to the strong cultural focus of beer in Belgium and its long established lineage as a traditional product. The strong beer culture may also have impacted on growth ambitions in a Belgian context. According to Morrison, Green and Ali (2003) in relation to entrepreneurial growth, three key factors are important; intention, ability and opportunity to grow. With the exception of one entrepreneur (ENT 2) the Belgian brewers intended to grow and had witnessed the growth of other microbrewery brands in the past such as InBev, now the largest producer of beer in Belgium. In keeping with the literature (see for example Lechner and Dowling, 2003), growth from internal sources alone proved difficult for the Belgian participants, but it did not hinder an increase their production levels. To facilitate growth, the brewers were willing to contract out the production of their beer to another brewer on a regular basis with deep levels of interdependent trust evident. Of the six brewers interviewed, two of the firms outsourced the production of more than 95% of their produce to another brewery in the province and a further two, through a joint collaboration, co-produced one of their major brands. However, the Irish entrepreneurs were not strategically active in their network activity favouring autonomy in their daily operations in lieu of introducing network partners to their business to

facilitate growth. They seemed unable to connect and embed their own limited resources to novel resources within the network with collaboration, trust and commitment underlying the process leading to the identification and execution of coordinated solutions to organisational problems (Uzzi, 1997). Regarding growth, many of the Irish entrepreneurs assumed growth within the sector was not possible beyond a certain level whereas for others quality of life protectionism superseded growth ambitions where they viewed their enterprise from a craft or “hobbyist” perspective consistent with the findings of Morrison, Breen and Shameem (2003) and Reddy (2007). Similar to Gray (2002) we attribute this disparity to the way in which the entrepreneurs view their social and economic surroundings, including the diverse sector specific cultural characteristics evidenced throughout the findings.

In the Republic of Ireland there is a government policy of encouraging co-opetition in the food sector (Bell and Shelman, 2010) where members of a supply chain are encouraged to both compete and cooperate with each other (Bengtsson and Kock, 2000). This is at odds with current practice as findings suggest that funding for the micro-brewers was allocated on an individual, competitive basis and where training supports were evident, the support agencies purposefully selected non-competing firms. This reflects the high individual score attributed to Ireland by Hofstede (1980) and the willingness of the Irish entrepreneurs to work alone as opposed to collectively to lower uncertainty. Perhaps greater benefits could be derived from funding allocated at a network level to encourage joint problem solving and address the factors preventing the development of network capability. In Belgium, the sector takes responsibility for its own marketing (Belgian Brewers Association) and each entrepreneur was responsible for the purchasing of their own equipment. Many issues were discussed and problems solved at the Belgian Brewers Association lowering uncertainty which is in keeping with Belgium's high score (94) in Hofstede's uncertainty avoidance. This led to more than one partner being involved in each business and many investors who help to expand the network and knowledge base of the brewer.

The findings support Håkansson and Snehota (1989; 1995) who suggest that firms' development cannot take place in isolation from the environment with the lack of a network approach to their business models leading to significant inefficiencies in the supply chain. It was surprising within Ireland that value chain activity links and resource ties were not perceived as necessary despite common problems faced by the entrepreneurs. Wider environmental forces such as the virtual monopoly in existence limiting supplies and semi-controlled distribution channels favours inter-firm cooperation within the collective micro-brewery network. However, a direct and individual as opposed to network approach to purchasing and distribution mitigated their strategic choices for creating and capturing value within the network (Shafer, Smith and Linder, 2005). This was clearly not the case in Belgium whereby the entrepreneurs engaged in joint procurement with other breweries to ensure efficiencies in purchasing raw materials in a context where no supply issues existed. In addition the Belgian brewers showed a readiness and ability to jointly produced products to solve common problems that they were experiencing, indicative of emerging embedded ties (Uzzi, 1997; McEvily and Marcus, 2005). This joint problem solving assisted the entrepreneurs to realise the potential benefits inherent in networks participation and enabled their network capability development.

This research advances the academic research literature by addressing the factors influencing network capability development and explores the similarities and differences in the network capability development of entrepreneurs in Ireland and Belgium. This is important as findings suggest that culture matters; entrepreneurs differ in their network capability development based on national cultural context. Both Ireland and Belgium are regarded as a hotbed for entrepreneurial talent and creativity in the food and beverage industry. However, Irish firms have not developed growth trajectories similar to their Belgian or other International

counterparts which may be due to a lack of participation in networks. The insights gained from the research can be translated to practice in Ireland and Belgium. For practitioners, understanding network capability development may assist them to follow a process leading to participation relieving some of the resource/time pressure on entrepreneurs by providing them with strategic routes through their existing and potential network ties. It is hoped that the insights gained in this research will assist support agencies in both Belgium and Ireland as they attempt to develop network and growth programmes suitable for entrepreneurs. As with all research, the current study has certain limitations. One of the limitations of the study concerns the fact that the paper is centered on the micro-brewery sector. Therefore, the next phase of the research could encompass entrepreneurs from other sectors employing a similar qualitative methodology. In addition, the study involves two countries, Ireland and Belgium. Perhaps future research could broaden the contextual scope of this paper which may bring to light other factors impacting the development of network capability. This could lead to a larger scale empirical testing of network capability development further advancing knowledge in this area.

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