Motivations and challenges of network formation: Entrepreneur and intermediary perspectives

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Abstract

This article presents findings from 14 in-depth interviews looking into the motivations and challenges of intermediaries and entrepreneurs engaged in the formation of a networking group for the information and communication technologies sector. The findings show that issues around communication and expectations exist and that the mechanisms used to address this problem create an environment that promotes a short term perspective, overlooking the importance of social relations. To overcome these issues, it is important that policymakers and entrepreneurs work in partnership to ensure resources are targeted appropriately and in a way that is conducive to supporting an entrepreneurial environment in the long term.

Keywords

entrepreneurs, intermediaries, network formation, regional economic development, regional networks, SMEs

Introduction

The formation of industry networks for small and medium-sized enterprises (SMEs) has been strongly encouraged by policymakers throughout the world. Too often inspired by the economic success of Silicon Valley, policymakers see such networks as an initial step in the creation of economic clusters and thus, as a mechanism to support economic growth and prosperity by replicating conditions that are perceived to support substantial achievement (Department for Business, Innovation and Skills, 2010; European Commission, 2008; Feldman et al., 2005;

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National Governors Association, 2002; Perry, 2005). Often, such industry networks are created regionally around similar or related technologies, with an embedded infrastructure of resources and support that tends to promote the interests of the whole network and its industry (Boschma, 1999; Feldman et al., 2005). In this way, the formation of industry networks is perceived to be a way to ensure productivity and increase the performance of regions in national and international markets (Collinson, 2000; Koh et al., 2005).

Due to the benefits that industry network formation is said to bring to the wider economy, a key aspect of policymaker strategy is to use these:

- as a mechanism for nurturing a socio-economic environment that allows entrepreneurs and the SMEs that they build to flourish;
- as a way for entrepreneurs to build dynamic informal networks with other types of organisations that support individual activities and those of an industry;
- to bring about cluster formation and participation by encouraging inter-firm collaboration (Collinson, 2000; Maillat, 1995; Perry, 2005).

While the formation of industry networks (commonly referred to as clusters[1]) is seen as a mechanism to create an entrepreneurial environment and bring about economic prosperity, trying to influence firm behaviour by 'encouraging' entrepreneurs to share ideas, knowledge and expertise through building and developing networks can be questioned in three ways. First, it is commonly accepted that the development of networks relies on aspects which, to a large extent, are socially constituted and dependent on social cohesion and social interaction over time (Collinson, 2000; Jack, 2005; Jack and Anderson, 2002; Jack et al., 2010; Parilli, 2009; Perry, 2005). This is increasingly evident from work focused upon at Silicon Valley and similar settings where factors related to social context and time have been identified as critical for their development (Brown and Duguid, 2002; Collinson, 2000). Second, the formation of industry networks tends to involve intermediaries who have an economic or regional policy agenda to be met through hard-and-fast results (Collinson, 2000). This often means ensuring that objectives are met quickly and demonstrated through numeric reasoning, overlooking the informal and softer side of both networks and entrepreneurship (Borgatti and Foster, 2003; Jack et al., 2010; Maillat, 1995). Third, while industry networks tend to be driven by economic need, often related to serving a specific industry or technology requirement (Bresnahan et al., 2001), feature or characteristic, networks revolve around an organisation, stakeholder or individual with their development being driven by the personal needs and goals of the entrepreneur (Hoang and Antoncic, 2003; Johannisson, 1986; Zhang, 2010). While policymakers tend to be under the impression that industry networks can be built, a more realistic view is that they tend to emerge and self-organise through common needs, requirements and goals.

Although industry networks are perceived to bring a range of benefits to individuals, organisations and industries, the manner which these benefits can be driven and achieved through formal processes of network formation can be questioned. In order to understand network formation more fully, it seems that more consideration could be given to the motivations of both intermediaries and entrepreneurs in participating in the formation of networking groups, and the challenges that the formal mechanisms of networking group formation create for those actively involved. By looking at the experiences of those who engage with network formation, more knowledge and understanding can be generated and used to support their practice. In addition, by looking at these issues, a broader understanding about what occurs within emerging

networks might be gained (Hite and Hesterly, 2001; Larson and Starr, 1993; Lockett et al., 2008; Uzzi, 1997), while lessons about how such activities might support an industry and region can be learned.

The purpose of this article is to broaden understanding about the formation of networking groups. In order to do so it addresses the question: what are the motivations and challenges of engaging in policy-driven network-forming activities? The findings are presented from a qualitative study which considered the motivations and challenges of both intermediaries and entrepreneurs engaged in network-building activities in the information and communication technology (ICT) sector in north-west England. The research deliberately takes a dual perspective, by interviewing both intermediaries from a range of local and regional government agencies and higher education institutions (HEIs), as well as entrepreneurs in small ICT firms. The empirical study is based on 14 in-depth semi-structured interviews that recorded the interactions and experiences of both intermediaries and entrepreneurs actively involved in forming regional networking groups. The objective of these groups was to provide a forum for networking and to bring together like-minded individuals (intermediaries and entrepreneurs) involved in the ICT sector.

The overall contribution of this work being to provide valuable insights into the challenges that policymakers face in facilitating the formation of an entrepreneurial environment in the form of a networking group. This study extends our understanding about the formation and development of a network driven by policy initiatives (Jack et al., 2010; Neergard and Ulhoi, 2006); previous studies have been concerned with network outcomes (Borgatti and Foster, 2003), whereas fewer studies have dealt with the motivations and challenges of being involved in this type of network. More specifically, this article extends our knowledge and understanding as follows: first, it demonstrates how there is little communication of expectations between intermediaries and entrepreneurs: neither party knows what to expect from these types of events. Intermediaries allocate resources to creating an environment based on what they think entrepreneurs need; entrepreneurs have to discover how that environment can work for their business and what opportunities may exist. Second, it demonstrates how the mechanisms that intermediaries use to create an environment whose aim is unclear can lead to entrepreneurs focusing on short-term, hard-and-fast results. These mechanisms can constrain entrepreneur ability to focus on the longer-term development of social relations critical for developing and realising opportunities. Thus, policymakers and entrepreneurs need to work in partnership to understand mutual needs, to ensure that resources are targeted appropriately and in a manner conducive to supporting an entrepreneurial environment in the longer term.

The article is organised in the following way. To begin, the literature relating to the formation of networks within the context discussed is considered. Following this, the methodology used to operationalise the research questions and background material about the industry and network on which the empirical study is based are presented. Thereafter, the findings from this study are discussed. Finally, conclusions, recommendations and directions for future research are provided.

Motivations and challenges

The relevance of entrepreneurship for economic development, growth and prosperity is now recognised (Hart et al., 1993; Jack, 2005; Wiklund et al., 1997). Since the 1970s, industry networks have been identified as one mechanism that might help to develop and encourage entrepreneurial activity and better position regions in global markets (Atherton, 2003; Collinson, 2000; Galbraith and De Noble, 1992; Koh et al., 2005; Parilli, 2009; Pickernell et al., 2007; Watts et al., 2006). As a consequence of this understanding, throughout Europe regional economic development policies

have placed considerable emphasis on either the creation of new industry networks, or the strengthening of those already established (Watts et al., 2006). This can be seen from the recent growth in science parks, which facilitate technology transfer and regional development through supporting and encouraging fast-growing, geographically networked firms within industries (Tan, 2006).

A number of benefits of industry networks have been identified (Al-Laham and Souitaris, 2008; Stearns et al., 1995) in that they provide a vehicle to bring together business support and drive technology transfer in a way that encourages the creation, growth and development of innovation-led, high-growth, knowledge-based businesses (Koh et al., 2005). Moreover, from the perspective of the business, establishing relationships with local government, universities or trade associations to increase knowledge has been said to result in substantial rewards for firms and new ventures (Gilbert et al., 2008). For example, close proximity or co-location with HEIs has been found to have a positive impact on networking activities (Lockett et al., 2009), and is being actively encouraged by a recent UK government review of business–university collaboration (Wilson, 2012). Added to this is the evidence that firms located within geographic industry networks are seen to exhibit higher innovation performance, rates of growth and survival than firms that are not (Gilbert et al., 2008). Furthermore, the extent and nature of the links between customers, suppliers and competitors are perceived to determine a network's advantages in terms of industrial structure (Tan, 2006). Therefore, networks designed in such a way are seen to encourage people to network actively with other organisations through various activities and in a variety of ways (Bollingtoft and Ulhoi, 2005). Given the evidence that there seems to be in support of their development, the combination of perceived benefits for all parties involved, and the value that such networks are believed to bring for economic growth, there is little wonder that their formation is strongly encouraged.

Yet, underpinning the success of these types of formal network is the important link between entrepreneurship, networking and culture (Drakopoulou Dodd et al., 2002; Georgiou et al., 2011). Culture has been defined as a system of shared meanings and social norms (Hofstede, 1980). Not only does culture shape individual and societies values, beliefs and perceptions, it also influences the way that individuals within a society behave and perform (Thornton et al., 2011). The culture in which entrepreneurs are immersed guides both the ways in which entrepreneurs interact and the purpose of those interactions. A culture that is supportive of interaction has been found to be of value for entrepreneurship (Miller et al., 2007). Thus, in order for industry networks to add value within the local region first, there needs to be an underlying culture that understands the importance of networking and, perhaps more importantly, recognises it as being critical for the co-creation of an entrepreneurial environment (Hayton et al., 2002; Minguzzi and Passaro, 2001). Previous work has established that culture has relevance for economic behaviour, entrepreneurship and entrepreneurial opportunities (Thornton et al., 2011). Institutions are constituted by culture and social relations because human, social and cultural capital are often antecedents to acquiring financial capital and other resources needed to start a business (Thornton et al., 2011). So, social and cultural properties are important, and together can have a significant impact on the shape and extent of network engagement and the outcomes to which such activity might lead.

While existing studies demonstrate the outcomes and benefits of industry networks, when it comes to the formation of networking groups, often three key factors are overlooked First, is whether government intervention aimed at bringing firms together through intermediaries can create a culture that promotes collaboration and sharing ideas through networking activity. Second is what mechanisms intermediaries can use not only to promote but also create conditions for the continuous existence of an entrepreneurial environment. Third, is whether the culture in that

specific society is supportive of networks and is open to the types of government interventions proposed.

Network formation

When it comes to industry network formation, entrepreneurs are a 'spark': they 'draw on existing resources in the local environment and, in turn, add new resources to that environment that others can draw on', thus acting collectively to 'shape local environments by building institutions that further the interests of their emerging industry' (Feldman et al., 2005: 130). All too frequently we are reminded of the success of Silicon Valley as something to aspire to, but what is overlooked so often are the intangible social and cultural characteristics that bind and cement the businesses in that region together, how such factors might influence the formation of a network, and how it evolves and emerges for a specific industry over time (Collinson, 2000). However, these factors and how entrepreneurs actually interact with and shape their environment have been largely ignored in models of economic regional development (Appold, 2000; Boschma and Lambooy, 1999). Instead, economic success and the sustainability of entrepreneur-catalysed networks are seen to rely on the policy environment and the ability of the growing resource base to adapt (Feldman et al., 2005). Whereas Silicon Valley is perceived to be entrepreneurial, decentralised and only loosely and flexibly connected to broader national institutions, cases of imitation tend to be government-sponsored with formal mechanisms (Bresnahan et al., 2001). Furthermore, given the nature of their environment, policymakers, and those given the task of driving regional economic development forward, often are looking for hard, fast economic indicators in the form of financial facts and figures. While such bodies play an important and critical role, too often the kind of socio-economic environment in which entrepreneurs flourish and grow, and the type of dynamic informal networks that support entrepreneurship, are ignored (Collinson, 2000; Maillat, 1995). Research highlights that any strategy aimed at improving the formal network environment for new firms must take account of the needs and expectations of entrepreneurs – a natural feature of informal networks (Birley, 1985). This is particularly important, as driving policy initiatives can mean formalising the informal which can lead to an oversight of the social mechanisms and processes that allow networks to form, develop and flourish over time (Collinson, 2000; Jack and Anderson, 2002). Thus, rather than just focus on outcomes and benefits (Borgatti and Foster, 2003), to enhance knowledge and understanding about these formal network arrangements it would seem useful to look at the motivations for engaging and the challenges faced by those who do engage.

Networking

Networking is seen to be a desirable activity for entrepreneurs (Jack, 2010). It leads to competitive advantage and ultimately increased performance (Madill et al., 2004). Having ties to others is especially important for entrepreneurs with early-stage organisations, because such ties help access information and know-how and so enhance the process of business knowledge acquisition and exploitation and innovation performance (Bollingtoft and Ulhoi, 2005; Cooke and Wills, 1999; Davidsson and Honig, 2003; Shane and Stuart, 2002; Yli-Renko and Autio, 1998; Yli-Renko et al., 2001). While whom the entrepreneur knows may be an important asset for entrepreneurship, it also could have an extensive impact on an entrepreneur and the wider industry in which they are engaged.

Forming regional industry networks also presents challenges. For example, according to Perry's (2007) findings, a network should be joined only if there is a definite benefit to the business. However, there are several issues around this view. First, it suggests that networks are one-sided and all about individual gain. Care needs to be taken that such a view does not emphasise a culture of calculative networking: a perspective which may have far-reaching consequences on the creation of entrepreneurial environments. Second, the benefits might not always be clear at the outset, especially if it is a new or emerging network, business or industry. This view fails to highlight the importance of social cohesion over time. Third, the requirements of the individual and the industry in which they are embedded might change. For example, take the entrepreneurs and managers of hi-tech firms: these individuals are clearly dependent and draw on specific kinds of networks that bring relevant timely knowledge and expertise (Collinson, 2000), so it may be that some industries as well as firms can benefit from such activity more than others.

The big issue is what policy can do (and not do), and how effective local networks are as a tool to support entrepreneurship (Bresnahan et al., 2001). Often, entrepreneur networks are perceived by policymakers to be the first step towards creating industry clusters. Steps in initiating and developing clusters are said to involve a process for building the economic fundamentals of an industry or technology and building firm capabilities critical for success (Bresnahan et al., 2001). The rationale for cluster formation is collaboration with a focus upon collaborative projects. However, this does not mean that network activities which are designed to ensure that collaboration takes place will actually lead to local economic outcomes and hence, provide a mechanism to build and develop an industry. Studies have shown that cluster formation is built on collaborative business interaction: a relational proximity where intimacy, trust and sharing exist, and access to support and interaction is provided (Atherton, 2003). This might be why policy processes which aim to recreate idealised interpretations of cluster groups have been heavily criticised (Perry, 2005). In creating formalised network environments for collaboration, the worry is that policymakers are attempting to formalise what is often an informal process, when in reality such arrangements more typically tend to emerge and self-organise, and be constrained or supported by local regional policies. Instead of seeking to form new networks, it may be effective for policymakers to tap into naturally occurring or potential clusters or business groupings, where opportunities for collaboration exist but have not been recognised or realised, and look to develop these beyond the early and embryonic stages (Atherton, 2003; Perry, 2005). Therefore, in formalising the informal, we would argue that to understand economically driven contractual relationships, the social aspects need to be taken into account: particularly given that individuals work together more effectively and efficiently when they know, trust and identify with each other (Bollingtoft and Ulhoi, 2005, referring to the work of Bolino et al., 2002). While clusters of entrepreneurial-led growth firms are valuable social institutions, examining only successful clusters (such as Silicon Valley) or industry networks does not provide an insight into how formalised networking activities begin or develop, or how networking activities might emerge in an industry (Bresnahan et al., 2001).

It is against this background that this study is set. In order to address the issues raised, we focus on the motivations of, and challenges for, intermediaries and entrepreneurs in engaging in policy-driven network-building activities. To do so, we consider an instance where policymakers purposefully looked to bring ICT firms together in order to form networking groups.

Method

To deal with our research interests, an interpretivist position was the most appropriate way to approach our study. This is justified on the basis that we were looking to develop in-depth understanding rather than measure outcomes (Oinas, 1999) and also, our research interests are grounded in people's understandings of their own experiences (Leitch et al., 2010). Accordingly, qualitative techniques were utilised to explore the softer side of networks, where elements related to the exchange of knowledge, information and advice tend to be harder to quantify in a more rational, traditional economic fashion (Collinson, 2000; Jack et al., 2010). Although policy-driven networking activity tends to be initiated through formal mechanisms, in order to work such activity is often reliant on informal aspects (Aldrich, 1989; Neergaard and Ulhoi, 2006).

Research context

Network-building activities have become increasingly strategic in nature. HEIs, university departments, Chambers of Commerce and multiple government agencies, including regional development agencies, county-level economic partnerships, local councils and city councils (intermediaries) are investing resources in their formation and development. Interestingly, while the networks comprise mainly small firms, the formation of networking groups has been largely instigated by these intermediaries.

   The ICT sector represents high-opportunity firms that are facing growing product demand and thus, attractive to investors because they face favourable market conditions (Feldman et al., 2005). The research is based on the experiences of both intermediaries and entrepreneurs who organised and attended five ICT networking groups which had been set up by regional and local development agencies and HEIs in north-west England. Each networking group (described as clusters[2] by all the participants) had a separate steering committee, which included local rather than regional stakeholders. While intermediaries were represented in each networking group, they are small firm-focused and in most cases meetings were chaired by entrepreneurs. These networking groups are described as 'groups of local businesses who meet together regularly and engage in a free and open exchange of knowledge, information and business opportunities' (quoted on the networking group's website). At the time of the research, these five networking groups were in various stages of development, with the intermediaries considering rolling out similar networks within neighbouring areas. Thus, the initial research was conducted at a timely stage in their development, with four established and one recently launched.

   It is important to recognise that the business focus of these networking groups was pragmatic on intermediaries' part in order to encourage participation, but was linked to the policy imperatives of engaging HEIs with SMEs in the region in knowledge exchange activities. Recent research (Huggins and Johnston, 2009) highlights the importance and challenges of engaging SMEs with research intensive HEIs in order to support regional economic development.

Data collection

The unit of analysis for this study was the individual and the networking activity in which they were engaged. The data comprise a series of 14 in-depth interviews carried out in September 2007.

Table 1. List of intermediaries.

Name	Details
Frank	Director, university-based ICT research facility
Allan	Business development officer, university-based ICT research facility
Emma	Business adviser, Business Link
Martin	Economic development officer, city council
Chris	Strategy and development manager, county economic partnership agency

Table 2. List of entrepreneurs.

Name	Overview of the business
David	Provides solutions for the online delivery of business applications, including bespoke server platforms for applications 'in the cloud'
John	Delivers solutions for real-time business performance monitoring
Peter	Specialist provider of software applications, and associated hardware, for the avionics sector
Luke	Full service marketing agency specialising in the delivery of digital solutions
Ian	Full service marketing solutions provider, specialising in the ICT sector
George	Marketing software solutions provider, specialising in digital solutions
Roy	Marketing solutions provider specialising in graphic design and photography, specific interest in the ICT sector
Steve	Bespoke online application solutions provider, specialising in e-commerce applications
Simon	Specialist provider of secure communications solutions for the health sector

The interviewees are categorised by their primary role: five managers in HEIs or agencies (intermediaries) (Table 1) and nine small ICT firm owner-managers (entrepreneurs) (Table 2).

Participants were purposefully selected based on their involvement in the formation of the networking group, and following recommendation from contacts who were embedded within the groups and whom they knew would be open to intensive research efforts (Hill et al., 1999; Miles and Huberman, 1994). In addition, the participants were selected to represent new and longstanding members and participants with knowledge of networks ranging from many to a single network. The value of an in-depth research design such as this one is that it is able to provide rich detail and thick description about the motivations of networking activities (Geertz, 1973). The entrepreneurs were the managing directors of their own firms and all had extensive experience in the ICT sector; the intermediaries were decision-making managers who were actively involved in the formation of the networking group. Potential interviewees were approached via email by the authors requesting their participation in the study. All the individuals approached agreed to be interviewed. Interviews were conducted by telephone, using interview guidelines (Table 3).

In order to provide continuity, an independent interviewer conducted all the interviews. This individual was known to the researchers and the network group members, and was used because of their familiarity with the research context and the participants individually, which meant that they would be comfortable to talk openly about their experiences. We had also recognised their research ability over a long period of time and thus had confidence in their being able to engage entirely with the research process. The authors worked closely with the independent interviewer to develop appropriate questions and ensure that they understood the objectives and context of the research

Table 3. Framework for semi-structured interviews.

Type	Details
Intermediaries	1. Why are you involved in cluster[a] building?
	2. What were you hoping to gain, and what have you actually gained?
	3. Why do you think the companies are involved?
	4. What are the alternatives?
Entrepreneurs	1. Which cluster(s)[a] are you a member of, and when did you join?
	2. Why did you join?
	3. What were you hoping to gain, and what have you actually gained?
	4. What interactions have you had with other members?
	5. Are there alternative ways that you could interact?
	6. Where did your best business idea come from in the last 12 months?
	7. If you were faced with a major business problem or opportunity, where would you go for advice and support?

[a]The term 'cluster' rather than 'network', because participants used this word.

and was familiar with the research process. This approach, combined with our confidence in the interviewer's skills, had a positive impact on the depth and type of material that we were able to collect through interviews. All the interviews were digitally recorded and transcribed.

Data analysis

An inductive approach was used to identify themes emerging from the data (Denzin and Lincoln, 1994; Silverman, 2000). Eisenhardt (1989) suggests starting data analysis by sifting through all the data, discarding what is irrelevant and bringing together the elements that seem most important. Wolcott (1990) argues that the key to qualitative work is not to accumulate all the data that one can, but instead to identify and reveal the essences with sufficient context to allow the reader to understand the situations in which the individuals are immersed. In essence, to deal with these aspects we looked at the data and asked: 'What is really going on here?' The data analysis was through inductive qualitative analysis and the constant comparative method (Alvesson and Sköldberg, 2000; Glaser and Strauss, 1967; Silverman, 2000). This involved an iterative reviewing of the data with emerging categories and concepts. The first interview transcripts were read looking for emerging themes on the motivations and expectations of engaging in network-forming activities. This was carried out independently by the three authors. In order to increase reliability there was comparison and discussion of the identified themes, and agreement on the those that would be used to analyse further and compare the data. We then returned to the interview transcripts to analyse and compare illustrative examples of the identified themes, and to refine the description and explanation of each theme. This has become an accepted approach and one reported in previous work (Hill et al., 1999; Human and Provan, 1997; Jack, 2005; Jack et al., 2010; Leitch et al., 2010). In order to preserve their anonymity, the names of intermediaries and entrepreneurs have been changed.

Findings

The purpose of this study is to explore the motivations and challenges of engaging in a policy-driven network. We took a dual perspective and considered the situations for both intermediaries

and entrepreneurs. In order to demonstrate in more detail the dual and often dichotomous nature of the complexities, the findings are divided into two sections. The first presents the intermediaries' perspective, and the second, the entrepreneurs'.

Intermediaries

Intermediary motivations for initiating the networking groups were officially twofold: the need to engage with government policy and deliver against its objectives of the development and growth of regional businesses. The pressures to be seen to be promoting economic growth and increasing gross value added[3] (GVA) were discussed. As Martin, who worked for the City Council, stated:

> One of the key targets of the regional development agency [is] to … look at sectors of the economy that can create higher value jobs, jobs that command higher earnings, [which] tend to be ones where people have specific expertise.

The ICT sector had been identified already as a high priority for other regional development agencies. In addition, Emma, who worked for Business Link, highlighted how recent research had pointed to networking as a fundamental component of sector growth, and that one way of achieving growth was thought to be through bringing together businesses and facilitating networking among entrepreneurs. Moreover, through joining forces with local development agencies and an HEI, the regional development agency believed that it could create something different for the north-west: a sector-specific networking group based on knowledge exchange. Thus, networking was seen as the primary method of achieving growth, as Chris from the local economic partnership stated:

> We are not trying to push the private sector companies down a road of increasing growth. Growth is not something that we are trying to prescribe – it is something that we hope will come out of it anyway in terms of how the companies develop and hopefully the sector develops.

The group's marketing materials created a vision of the north-west region becoming a centre for excellence for ICT, so that:

> [C]ompanies can better source new knowledge and pursue innovation opportunities through stronger links with institutions, service providers and educational establishments. (quoted on the networking group's website)

As well as the official line, intermediaries saw that the formation of a networking group would create new opportunities for themselves; not only would it allow them to pool their resources, also to access more regional businesses to cross-sell other regional initiatives. It was apparent that this was the main driver for setting up the networking group, as Frank from the HEI stated:

> It's an opportunity to access more companies and roll out potential connections. I see it as a medium, a process really, of getting people together … a means to an end which I am not supposed to say – but I see it as somewhere we can tap into for the work we are doing and the projects we are running.

Setting up the groups presented two key challenges: to understand how intermediaries could create opportunities to attract entrepreneurs to the group and what mechanisms could be put in place to

facilitate the creation of those opportunities; and how intermediaries could support the continuous existence of an environment of entrepreneurial opportunities.

The first challenge was to determine what opportunities would entice entrepreneurs to attend the networking groups. As knowledge exchange had been highlighted as a central component of collaborative networking activity, the intermediaries decided that the format of the events needed to facilitate knowledge sharing among entrepreneurs. In order to encourage this, the intermediaries decided that each group meeting would be based around presentations either on a particular technology or an aspect of business. Refreshment breaks would provide an opportunity for entrepreneurs to discuss and share ideas around the presentations. Initially, the presentations proved of interest to local entrepreneurs and successfully drew in well in excess of 100 entrepreneurs to the events. However, as Emma from Business Link stated, the problem with using presentations was that 'if the topic and the presentations are of interest to [entrepreneurs] then they turn up – if not, they probably won't come that month'. After the initial meetings, it was becoming increasingly difficult to identify presentation topics that would appeal to a wide audience. The intention had been to source speakers from within the group to further encourage and facilitate knowledge exchange. This was not easy to maintain; a diverse range of members meant that not only was it difficult to identify topics of interest across a wide audience, but also to find willing speakers among the members. This led the steering committee to suggest pooling resources across the regional networking groups to source external speakers, but this would require funding and be beyond the scope of original intention. Besides, the intermediaries quickly became aware that it was not just the presentations that were the main attraction; some entrepreneurs were asking for more time to socialise and were even suggesting meetings in the local pub. Being able to meet the needs of all entrepreneurs was becoming apparent and increasingly difficult to achieve.

In order to try to meet the needs of different entrepreneurs and maintain their interest over time, intermediaries wanted to include entrepreneurs in deciding on the content of presentations and to provide them with opportunities to chair meetings. They wanted entrepreneurs to contribute to running the groups, but within the constraints of the existing formal mechanisms and under the intermediaries' control. The Intermediaries soon realised that the entrepreneurs did not want to be involved in organising these meetings. As Frank stated, entrepreneurs simply 'want a format, a process': they turn up to these events expecting the format and process to be in place, and that their role is simply to make the most of the opportunities that are available to them.

In addition, there were concerns over the sustainability of the support model, which was not helped by the nature of government initiatives which are usually time-constrained. The intermediaries wanted to remain in control of the meetings primarily so that they could achieve their objectives of cross-selling other initiatives, but also to help sustain the meeting format. Yet supporting, managing and organising the groups was becoming increasingly burdensome (in terms of both finance and time) for the intermediaries, and therefore its sustainability was in question. As Frank from the HEI stated:

> There's uncertainty on funding streams, uncertainty with organisational changes and so on that doesn't necessarily help in the sort of longer term. I suppose there is a life expectancy for anything.

This posed a serious constraint on achieving the longer-term vision of the exemplary north-west ICT networking group, and added to the intermediaries' focus on achieving their short-term goals of cross-selling other initiatives.

Despite these challenges, the intermediaries had achieved some of their short-term goals. Allan from the HEI described the meetings as an effective conduit to engage with more regional businesses and sell other government initiatives (for example, innovation vouchers):

> It does bring businesses out of the woodwork that we weren't aware of previously, and still probably wouldn't be aware of if it hadn't been for that network … We are now much more aware of the wider range of businesses in the sector.

The city council also used the meetings to promote its new office space, as Martin stated:

> Some of the benefits have been just getting businesses through the door, because we wanted to promote [the new office space] and increase tenancies, and ashamedly that is one of the advantages for us doing it.

Moreover, the HEI had been successful in engaging with more businesses and cross-selling other government initiatives, which aimed to get HEIs more engaged with regional communities.

Entrepreneurs

The entrepreneurs attended for a number of different reasons and, particularly with an increasing number of networking groups within the region, tended to pick and choose which networking groups they attended. There was little doubt that the entrepreneurs interviewed were excited about the intermediary vision of what the groups could deliver for the region yet, the entrepreneurs had their own agendas for attending. They were motivated primarily by short-term opportunities, which fell into three broad, yet not exclusive, categories: knowledge exchange, sales and collaboration. Each opportunity required different mechanisms to create an environment that would support them. Table 4 briefly outlines entrepreneur motivations in this study and situates this within the context of the entrepreneur and their business.

The entrepreneurs motivated by opportunities for knowledge exchange were divided into two main groups. The first was interested in knowledge exchange around new technologies and creating new ideas for their business. For these entrepreneurs (David, Roy, Simon, Ian and Steve), the presentations provided an important opportunity. For example, Simon owned a specialist information technology (IT) hardware and engineering company, and was excited by new technologies. The presentations helped him:

> to see some of the research stuff going on at the university which gets your mind thinking … you can actually see the opportunities in the market and you can see where different academics are taking things, and then that starts to generate ideas about how you can bring those things together.

Similarly, David was excited by 'some of the ideas the university has come up with … [and how they] link technologies together – you see that and think, "That could be used for this"'. Yet, the way that the groups were organised around a technology presentation created a 'dip in and out' pattern of attendance, depending on the presentation's relevance to the entrepreneur's businesses.

The second group were interested in knowledge exchange about the everyday running of a small business, and were interested in finding out new ideas about how they could run their business more effectively. For these entrepreneurs (for example, Peter, Luke, Steve, Ian, George and Roy), informal time for socialising provided an important opportunity. They could find out about other businesses and share experiences and ideas. For example, George, who was actively involved also

Table 4. Entrepreneurs: motivations and context.

Name	Reasons and motivations for attending	Business or personal context
David	'I felt it was time and I didn't know there were any IT companies in the area', 'We are great believers in sourcing or outsourcing work to [local] companies'	Recently moved from London to north-west England. Business based on collaborative contracts and he wanted to work with local businesses. Actively involved in setting up the networking group, saw it as an opportunity to network with key organizations
John	'to meet people that I might just get some leads from', 'I have to ask myself the ultimate question: "How is this going to help [my business]?" and you know, "Is it going to bring in revenue?"'	Focused on increasing sales. Concerned over the best use of his time and only attends meetings that he thinks may draw in potential customers (based on the presentation)
Peter	'to network and find out what other businesses in my position were up to and so to make useful contacts'	Recently moved to HEI-sponsored incubator premises and heard about the meetings. His company had suffered from the collapse of a major customer and thought it might be a good opportunity to learn from other companies who had faced similar issues
Luke	'inspiration' and 'to chat about things'	Was involved in chairing some of the initial meetings, but found that it was time-consuming. He is happy to spend time getting to know other businesses and using this time to think about new ideas, but does not want the added responsibility of chairing and running meetings
Ian	'[Networking] that would increase the likelihood of opportunities', 'I [also] like the idea of chatting with people in similar businesses … sharing war stories, camaraderie or sharing ideas, frustrations', plus 'the potential also of working in collaboration'	Excited about networking opportunities. Actively involved in setting up one of the local networking groups, as he saw it not only as an opportunity to chair one of the meetings and get to know local businesses, but also to work more closely with the HEI and to become involved with public sector organisations, which he saw as potential future clients
George	'It is quite important when you run a business to see other people having the same sorts of problems'	Close friends with Frank (director of the HEI ICT research facility), who asked him to be involved in setting up the cluster. He is happy spending time getting to know other businesses and for them to be able to help him overcome some of his own challenges. He also sees his active involvement in the group as a way to work more closely with the HEI
Roy	'I believe that you don't stop learning', 'If I go to a meeting and I learn something that is going to improve my business, even if it is only going to improve my business £5 cash per month, then that is a good meeting'	Initially an email invitation, but now a fairly regular attendee. Open to new ideas and wants to learn about new technologies and ways in which he might be able to improve his business

(Continued)

Table 4. (Continued)

Name	Reasons and motivations for attending	Business or personal context
Steve	'In my view a cluster group is all about …working with each other, to work on large contracts or subcontract work with each other, working out ways of increasing our overall business'	Had been involved in setting up a networking group prior to this one, but the focus on alliances had created problems. Became involved in this networking group through his involvement with the HEI. He explicitly stated that networking is not for socialising but for increasing sales, particularly through building alliances to deliver to larger customers
Simon	'I find it particularly refreshing to see some of the research stuff going on at the university, and that gets your mind thinking as to commercial problems that have you have seen that can be solved'	Initially cajoled into attending through Frank, the director of the HEI ICT research facility. His business operates in a niche market and his focus is on identifying new ideas and opportunities

in setting up his local networking group, was motivated to meet other business owners: 'If it is there, just to let us gather and have a chat about what is going on – that is good enough for me … [It's nice] to speak to like-minded people.'

Steve also stated:

> There is a social element which is quite nice … it is just nice to see the same people again.

Ian commented:

> The whole spirit of it being a group for people that work in ICT really appealed to me … I like the idea of chatting with people in similar businesses and sharing ideas.

These entrepreneurs required mechanisms that supported time for socialising. However, in practice, given the current focus on presentations, free time often was restricted to refreshments before and after the meetings. Indeed, the quality of refreshments was seen to be linked to the quality of the discussions, as Roy stated:

> Sometimes we get a sort of entourage of council people turning up, in which instances there is good food and good coffee, and the chat is much better. If we don't get the council people we don't get the good food, and we don't get the good coffee, and things are cut shorter.

For entrepreneurs who were motivated by knowledge exchange, it was the time available to share ideas with other entrepreneurs that was most important; the presentations simply provided an instrument for the initiation of new conversations.

However, other attendees were driven more clearly by opportunities for sales and were looking for quick-wins. These entrepreneurs were more instrumental in choosing which networking groups to attend. For example, John's business offered a web-based application which had potential to be sold to other members; identifying new sales opportunities was his primary reason for attending. As he had found little opportunity in the first few months, he had begun to question the value of turning up:

> You are tired and hungry because it is after work … then you come home late and you are back to your business and you think, 'That was a waste of space'.

The intermediaries believed that this was one of the main reasons that they had had quite a high turnover of entrepreneurs within the first six months of running the groups – a pattern consistent with other networking groups (Laschewski et al., 2002).

In addition, the development of new collaborative opportunities was important yet, building trust between two businesses before they engage in collaborative activity was something that most entrepreneurs recognised only would develop over time. As George, an experienced entrepreneur, stated: 'It is really important that there is trust, and that comes with working with people for years rather than just meeting someone from the cluster.' For entrepreneurs interested in identifying new collaborative opportunities, continued and regular attendance was the only way that they could begin to build that trust. David had been lucky and met an old friend at the group; knowing each other for many years meant that they were comfortable to explore new opportunities together. For others, searching for new collaborative opportunities was time-consuming. For example Luke, whose primary goal was to look for new collaborative opportunities, was finding it 'difficult when

you have your own business to run and everything'. However, it was not just collaborative opportunities with other entrepreneurs that they were looking for: Ian, who was actively involved in setting up his local networking group, had done so because he saw an opportunity for collaboration with the intermediaries. His reason for setting up the cluster was

> an opportunity to work more with Frank at the university, and obviously that would increase the likelihood that other opportunities might arise out of that, and I quite fancy doing more work in the public sector … Certainly in the education side of things, I quite fancy getting involved with that.

This example was similar to that of George, who was also an active member of the steering committee because he knew Frank. He too saw it as an opportunity to build a closer relationship with the HEI.

Although previous studies have identified some of the reasons that entrepreneurs attend networking groups (Atherton, 2003; Huggins, 2000; Laschewski et al., 2002), what we have done here is to explore the complexities in how these motivations are supported or constrained by the mechanisms put in place by intermediaries. It is this detail which provides a greater insight into some of the challenges for intermediaries in forming organised networking events.

Discussion

Networking was an intended outcome of these events. However, attendance was sporadic and few of the entrepreneurs could articulate their participation expectations and what the advantages of attendance had been for the business. It is clear that entrepreneurs have a number of different motivations for attending, which echoes previous work in this area (Huggins, 2000; Laschewski et al., 2002). Nonetheless, what is demonstrated in this study is how difficult it is for intermediaries to design formal mechanisms that facilitate networking activities at the same time as trying to satisfy differing motivations. The present data highlight the way presentations were used to attract entrepreneurs to the events and guided their expectations: for many, the presentations became the primary reason for attending; the consequence being that the content of presentations then determined attendance.

The intermediaries saw the presentations as creating an opportunity for knowledge exchange. Opportunity is a critical condition for entrepreneurship (Shane and Venkataraman, 2000). There is a belief that knowledge exchange leads to the development of new opportunities locally, and that this has a positive impact on entrepreneurial activity within a sector (Feldman et al., 2005), thereby raising the profile, economic conditions and success of the region. In the study reported here, the entrepreneurs were certainly positive about the presentations but unclear as to how these might support business development, as were the intermediaries. Therefore, there is a need for intermediaries to be able to be clearer in their articulation of the purpose, aim and objective of the networking group, to be more precise in demonstrating what it is actually looking to achieve, and to actually deliver to meet these aspects.

The entrepreneurs described their motivations as the potential for activating opportunities. This meets the vision of intermediaries and policymakers because this is what the networking group is set up to do. However, while entrepreneurs see the group as a way to access potential opportunities, a problem arises in that the group tries to be everything to everyone. As a consequence, the group and the activities it instigates end up being interpreted in different ways. In part, this is because entrepreneur expectations tend to be different. The data show that

entrepreneurs want to engage, but they also want something to happen. Clearly, they are looking for opportunities.

The vision initiated by the intermediaries was to create a regional cluster of ICT business which would generate business growth locally; networking had been identified as a key first step towards achieving this (Collinson, 2000; Huggins, 2000; Maillat, 1995). However, the data demonstrate that the intermediaries were not clear as to how the longer-term vision would be achieved. Entrepreneurs' perceptions and needs are individual and idiosyncratic, and dealing with these aspects is clearly a challenge for intermediaries. The data show that intermediaries had met their initial short-term goal of bringing businesses together to engage, but they seemed less clear about how the long-term vision would be achieved. So, while there is nothing wrong with the long-term vision, it is how it is supported that raises an issue, because it is much less clear.

What is particularly interesting from the work reported here is entrepreneur commitment to networking activities. A small group of core members attended regularly and enjoyed informal discussions with like-minded individuals and organisations. For core members the group had taken on a social form, and as a consequence these individuals were more able, willing and prepared to share experiences, views and interests. By comparison, most others dipped in and out of the network according to their needs. However, should the core group of individuals leave the organisation, issues around sustainability might arise: this is something that intermediaries need to be aware of for reasons of continuity and longevity. However, financial and time constraints mean that entrepreneurs are under increasing pressure to choose wisely which events they attend thus, driving event organisers to be able to deliver results more quickly and be more realistic about aims and objectives.

Interestingly, in their work Neergard and Ulhoi (2006) found that government agencies may destroy existing cooperative arrangements. However, in the study reported here it seems that the government agency performed an important broker role (Aldrich, 1989; Jack et al., 2010) by providing a meeting place for like-minded individuals to come together, an interest in business development through organising appropriate speakers and providing a forum for trying to facilitate networking. It could be that the nature of government allowed sufficient latitude and that the local policy group had little direction, so in this case the entrepreneurs may have been allowed to decide with whom they wanted to engage. It is evident that while all presentations and discussions are not always applicable to everyone, these and the discussions around them offer a way to find out about up-to-date technology and issues. However, this also creates a concern about the resources required to run the sessions, particularly finding and funding new speakers. The presentations become limited to the network of the members. This presents difficulties when it comes to identifying possible key speakers, because if they lie outside the network then funding tends to be required. The nature of these networks tends to be that they are financially constrained, so this is something that needs to be borne in mind.

Figure 1 summarises a dual perspective of the motivations and challenges of engaging in policy-driven networking activities. It highlights how the overall vision of the group is to create a regional ICT networking group. However, the present study demonstrates that in practice creating such regional networking groups through formal mechanisms is fraught with challenges, which in many ways is due to the differing motivations of both intermediaries and entrepreneurs.

The present study points to the importance of situating the motivations and challenges of entrepreneurs and intermediaries within the wider context in which they are immersed. So even though the present findings, and that of other research, highlight the motivations of entrepreneurs (Huggins, 2000; Laschewski et al., 2002), the present findings also demonstrate how scholars
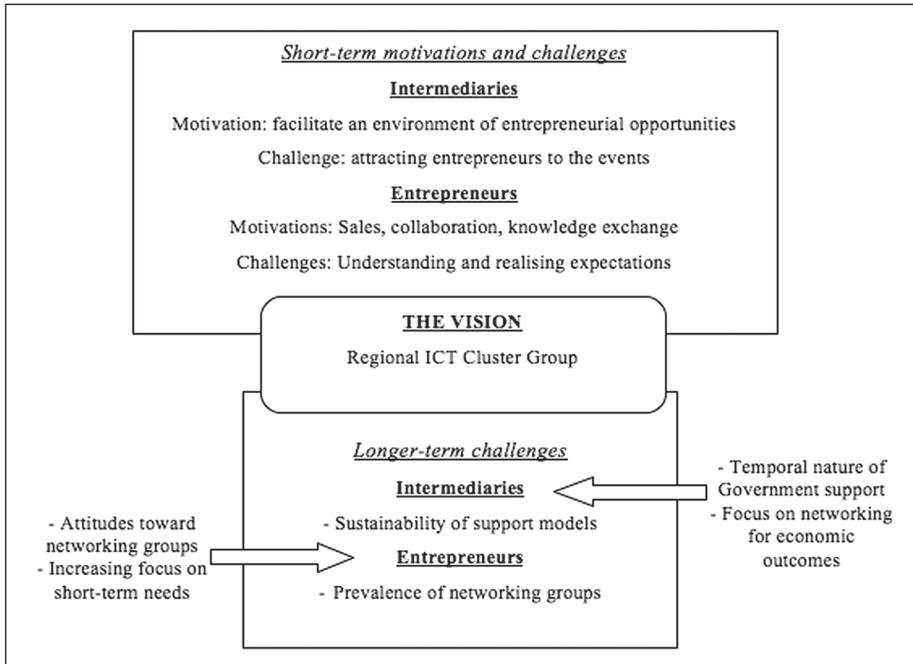
Figure 1. Motivations and challenges of engaging in policy-driven networking activities.

might want to consider the wider regional and national contexts in which these groups are situated. For example, the present findings show how the abundance of networking groups available to entrepreneurs actually creates a short-term focus on immediate needs. This is important when considering intermediary motivations and challenges. In this study it was clear how pressure from new government initiatives created a demand for intermediaries to engage with an increasing number of businesses simply to sell different initiatives and satisfy inherent short-term needs for quantifiable results. Thus, the findings highlight the paradoxical situation faced by intermediaries in designing formal mechanisms that attract and encourage entrepreneur participation: while the mechanisms need to create short-term opportunities that draw entrepreneurs to the events, at the same time those same mechanisms need to support longer-term opportunities that may emerge from creating a regional networking group. A similar situation is faced by entrepreneurs; the abundance of networking events within the region is creating a demand for more immediate rewards not conducive to contributing to the continuous existence of an entrepreneurial environment for ICT sector organisations.

Conclusion

The purpose of this study was to broaden our understanding about the formation of industry networks. In so doing, it addressed the question: what are the motivations and challenges, for intermediaries and entrepreneurs, of engaging in policy-driven network forming activities? In taking a dual perspective to address this question, this study makes important contributions to knowledge and understanding about these types of network activities and has notable implications for policymakers, researchers and practitioners.

Implications of the study

The first contribution of this work relates to the motivations and challenges of engaging. Communication about expectations is a challenge, and issues around this clearly need to be resolved in moving forward. In order to derive benefit, differing needs and expectations really do need to be understood and appreciated. Intermediaries allocate resources to creating an environment that they believe will facilitate knowledge exchange. While policymakers might believe that this type of activity leads to cluster-building, this vision should be treated with caution as it does seem to be a myth and even somewhat misleading. Policymakers and others do believe that because there is economic potential in formal inter-firm networks, they should be encouraged (Huggins, 2000). While we would support this view, it should be stressed that policy-driven networking activities alone do not build clusters: in this study it was apparent that intermediaries and entrepreneurs had unclear motivations and expectations. The intermediaries believed that creating networking groups would lead to the creation of opportunities, yet the entrepreneurs had to explore how the environment that the intermediaries had created may provide opportunities for their business. While the expectation of potential opportunities creates a symbiotic relationship between intermediaries and entrepreneurs, in that one party can create opportunities for the other, the *modus operandi* seems to be toleration of a lack of knowledge about what each others' needs are. So, rather than employ a top-down approach, there is a need for policymakers and SME owner-managers to work in partnership. This will ensure that expectations are more realistic and achievable, and will help to solve some of the issues around communication.

The second contribution of this work relates more specifically to mechanisms that support the vision around network activity and how that vision is operationalised. Without clear objectives on what the groups aim to achieve and appropriate mechanisms to support these long-term objectives, both intermediaries and entrepreneurs focus on hard-and-fast indicators and quick results. However, the networks that all parties involved are looking to build are reliant on developing social relations over time, and it seems that this is critical for developing and realising opportunities. With this in mind, designing policies to create entrepreneurial opportunities and mechanisms that support the development of those opportunities might be a more appropriate way forward (Feldman et al., 2005). In order to ensure that resource allocation facilitates and supports (rather than burdens) the continued existence of an entrepreneurial environment, these aspects need greater recognition in economic development policy. Therefore, greater focus needs to be placed on the long-term goals and ambitions of all involved. In addition, this will ensure that resources are targeted appropriately and in a way that is conducive to supporting an entrepreneurial environment in the longer term.

The ICT sector represents a high opportunity technology with favourable market conditions, and with demand it is attractive to investors (Feldman et al., 2005). This knowledge-intensive sector offers opportunities for knowledge exchange with HEIs (Huggins and Johnston, 2009; Wilson, 2012). Through key individual change agents, the configuration of a network may be jointly determined to shape an industry and benefit a region (Feldman et al., 2005). However, the underlying culture has to be accepting of such practices, as seemed to be the case in this study. While the findings reported here might be industry or indeed network-specific, it would be interesting to learn more about the experiences of other industries and countries where this type of activity takes place, in order to see if the patterns identified are replicated in any way. Culture may influence how receptive and willing parties are about engaging, and this should be borne in mind, especially by researchers and policymakers.

Limitations of the study

This work does not deal with the economic outcomes of engaging. What it does do is to demonstrate the all-too-often overlooked social side of engaging from which initiatives and collaborations can emerge, which then lead to economic outcomes. We acknowledge limitations in our approach. We appreciate it might be that the reputation of the intermediating public sector organisation was enough to attract interest, but engagement thereafter might have been limited by this organisation's facilitation skills. Future work might explore this aspect more directly. We did not deal with processes or structural factors using quantitative measures; instead, we purposefully sought to consider relational aspects, the experiences of individuals involved, motivations and the challenges faced. We also acknowledge that the interviews within this study may be subject to hindsight bias, in that the reasons articulated as the motivations for attending the groups could be influenced by the outcomes experienced at the time of the interviews. Future longitudinal research could look not only at the *a priori* objectives of entrepreneurs and intermediaries as well as economic outcomes, but also at the longer-term impact of engaging, timing and why entrepreneurs leave formal networks.

Finally, the nature of networking is changing. Undoubtedly, the ever-increasing role and use of social media will have an impact on the development, extent and type of engagement. Moreover, it will have an impact on expectations, collaborations and the way that relationships are managed. These are areas that as researchers we need to be mindful of, but which offer exciting prospects for future work.

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Notes

1. For the purpose of this study, we define a cluster as being centred upon common characteristics or features, and a network as revolving around a central organisation, stakeholder or individual.
2. The intermediaries used the term 'cluster' to describe the network as it represented 'a more inclusive approach, not only in identifying the types of issues which can confront the ICT cluster, but also to take into account the role of businesses important to the cluster's economic well-being' (quoted on the group's website). In this article we use the terms 'cluster' and 'networking group' interchangeably to refer to networking activities that are driven by economic need, often related to serving a specific industry or technology requirement.
3. Defined by the Office for National Statistics as: 'the contribution to Gross Domestic Product (GDP) made by an individual producer, industry or sector' (Lee, 2010).

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