



UNDERSTANDING SMALL BUSINESS NETWORKING AND ICTs: EXPLORING FACE-TO-FACE AND ICT-RELATED OPPORTUNITY CREATION MEDIATED BY SOCIAL CAPITAL IN EAST OF ENGLAND MICRO-BUSINESSES

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Abstract:

Small businesses that are sole traders or micro-businesses—with few, if any employees—notoriously suffer from a ‘liability of smallness’ (Aldrich and Auster 1986), including poor access to various resources. However, many authors argue that the inherent problems of smallness can be overcome with networking and good network connections. Resources, the opportunities to access them and other benefits apparent from networks and networking are readily apparent in the literature. However, few articles, if any, have examined small business networking from the perspective of this study—using in-depth qualitative methods, the theoretical construct of social capital and exploring the increasing role of Information and Communication Technologies (ICTs) in networks and networking—as part of understanding a variety of entrepreneurial opportunities. This article provides much needed empirical insights on how and if ICTs support opportunity creation amongst small businesses within a spatial and social network perspective. Its ‘media ecology’ approach does not over-prioritise the role of ICTs, but instead examines their interrelationships with face-to-face contact—putting technology in its ‘place’. The article focuses on the notion of ‘opportunity creation’ from networks, since this is the outcome critical for the small businesses themselves in order to generate economic benefits for their business. It seeks to provide a higher level, outcome-based framework that helps specify the various sorts of opportunities created by networks for small businesses, based on original ethnographic material and findings from a case study of East of England micro-businesses.

Keywords/tags:

networks, social capital, ICTs, small businesses, opportunity creation

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1 INTRODUCTION AND LITERATURE

Small businesses with the fewest employees or indeed sole traders—that come under the heading of ‘micro-businesses’ (Burgess 2002) or ‘micro-firms’ (Small Business Service N.D.)—suffer from a ‘liability of smallness’ (Aldrich and Auster 1986), which pertains to particular disadvantages of size and is empirically supported (see Brüderl and Schüssler 1990; Singh and Lumsden 1990). Larger organizations are assumed to have more resources (Brüderl and Schüssler 1990; Poon and Swatman 1999); and having few if any employees makes certain aspects of running a small business burdensome (see Aldrich and Auster 1986). However, it has been argued that networks and networking can off-set the fragility of smallness (Szarka 1990), and that the availability of resources relates strongly to network connections (Gulati 1998). Birley, Cromie and Myers (1991) also suggest that networks themselves are a resource for the entrepreneur, and that the informality and opportunism associated with networking may allow the business to be more effective and thrive in a variable business environment (*op. cit.*)—with changing competition, market demand and government intervention (Donkels and Lambrecht 1995). Indeed, Jarillo (1988) argues networking is a strategic method entrepreneurs use in the pursuit of the opportunity to use more resources than they actually control. Other commentators suggest networks can offer critical leveraging opportunities when capital investments are less (Larson 1992), and social assets like friendship, trust and obligation are used to secure resources much lower than the market price (Starr and Macmillan 1990). Although it is clear from the literature on entrepreneurship and networks and Economic Sociology generally that a number of resources, opportunities and other benefits are apparent from networks and networking, a relatively small amount of the recent literature connect these with theoretical notions of social capital. Indeed, Westlund and Bolton (2003) note that the: “sundry forms of social capital . . . run . . . like a golden thread through both the economic and sociological literature,” yet few contributions “have explicitly discussed the link between social capital and entrepreneurship” (Westlund and Bolton 2003: 79). Indeed, Cooke and Wills (1999) lament that: “Although the literature on small business networking has become voluminous . . . little attention has been paid to the broader theoretical construct to which it relates. Social capital provides that construct” (Cooke and Wills 1999: 232).

The term social capital has its origins in the writings of Pierre Bourdieu (Schuller, Baron and Field 2000). The concept was defined by Bourdieu as: “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition” (Bourdieu cited Portes 1998: 3). However, Adler and Kwon (2002) show the broad variety of definitions and the heterogeneity of the term. Bourdieu’s social capital focuses on the benefits accrued by individuals through participation in groups, including the purposive construction of sociability for social capital advantages (Portes 1998), and is thus highly relevant to understanding small businesses’ access to opportunities and resources through networking. Actors, through social capital, can gain access to other forms of capital such as economic capital (markets, loans) and cultural capital (various kinds of knowledge through experts). James Coleman is additionally associated with the concept of ‘social capital’, and he also defines it in terms of a set of resources which facilitate the actions of actors. The resources comprise entities which have as part of them some elements of social structures, but the resources facilitate acting within the structure. Coleman sees social relations as providing social capital resources through creating information channels, establishing obligations and social norms (Schuller, Baron and Field 2000). Relevantly for this study, Adler and Kwon (2002), in their article which seeks to clarify the concept of social capital within an organizational perspective, highlight the importance of social networks for social capital transactions—where opportunities are created through external ties for actors to leverage the resources of their contacts.

With the semi-detached relationship between the literature on networks, entrepreneurship, small businesses and social capital, it is then not surprising that there is a paucity of literature on the impact of Information and Communication Technologies (ICTs) in this area. In other research on social networks and social networking more typically related to non-business domains, commentators such as Wellman *et al.* (2001), Hampton and Wellman (2003) and Resnick (2002) have debated the impact of the Internet particularly on social capital. In social

networking, there is increasingly a choice of face-to-face or computer-mediated interaction (see Hampton and Wellman 2003; Wellman 2001), and some commentators (see Falk and Kilpatrick 2000) have questioned the nature (electronic or otherwise), quality and communication channels needed to build and use social capital, and have suggested this for further research. This article aims to have an 'updated' perspective on small business networks and entrepreneurship—one which takes account of the role of ICTs and the increasing normalisation over time of the Internet in the practices of everyday life (Wellman *et al.* 2001).

The purpose of this article is to examine the role of ICTs in small business networking, through an evaluation of ICTs' contribution to creating various kinds of entrepreneurial opportunities through the case study of East of England micro-businesses who are all members of a particular small business group. These 'entrepreneurial opportunities' are mediated by building, maintaining and exploiting social capital. However the businesses which are the focus of the research do not just 'network' between themselves—they are part of a multitude of other networks useful to their work—business and non-business, face-to-face and virtual. As such this article seeks to contribute to and develop the literature on small business networks, networking and entrepreneurship, including the broader work from Economic sociology on the 'embeddedness' of economic action in social relations (see for example Uzzi 1997), through a nuanced account of the role of ICTs in opportunity creation generated by an empirical case study. It uses a 'media ecology' approach so as to not over-prioritise the role of ICTs in business networks, examining the complex interrelationships of ICTs and face-to-face contact and putting technology in its 'place.' The article focuses on the notion of 'opportunity creation' from networks, since this is the outcome critical for the small businesses themselves in order to generate economic benefits for their business. Indeed, this approach is doubly significant when policy performance is measured in terms of outcomes (Falk and Kilpatrick 2000). It is not new to examine entrepreneurs and opportunities—however, the notion of 'opportunity' has often been looked at in a narrow way in the literature, mostly focusing on alliance opportunities, rather than other kinds of opportunity. Other literature which suggests various sorts of 'opportunity creation' from networks examines these in different, lower level and more thematic terms (see Birley 1985). This article seeks to provide a higher level, outcome-based framework that helps specify the various sorts of opportunities created by networks for small businesses, based on original ethnographic material from a case study of East of England micro-businesses. These opportunities draw on the social capital built through networks and networking. It aims to explore the interrelationships of ICTs, and particularly the Internet, with face-to-face contact in creating and accessing a variety of opportunities.

'Opportunity creation' is broadly conceived of in this article to reflect the range of findings from participant observation work and in-depth interviewing, which does not map well onto the existing literature in this area, but does reflect the 'on the ground' small business view of networking benefits. Opportunity creation from networking is viewed in this article as finding ways to progress or advance the business. This study is interested in the most common opportunities from networks—opportunities which do not directly involve financial capital, but instead provide indirect paths to making money or acquiring benefits. However, while this article is focused on opportunity creation, it will also be acknowledged throughout the article that networking and networks can have negative effects (see Adler and Kwon 2002; Portes and Sensenbrenner 1993), and that the use of ICTs in networking may produce negative effects in their own right or compound them. The main opportunities and benefits that small businesses sought from their various networks can be characterised from the empirical fieldwork as being split along the following dimensions: (1) **customer opportunities**. One of the principle benefits small businesses sought from their networks was, at a very basic level, opportunities to work and earn money. This might be related to an immediate job, or building up lists of contacts which may generate work at some point in the future. It could involve being recommended by a member of the network. (2) **Supply opportunities**. Small businesses sought out opportunities to use new suppliers for a variety of inputs. This was often about getting a reliable, local supplier who could provide a better financial deal than anyone else or get things quickly. (3) **Alliance opportunities**. Another key networking benefit concerns finding 'associates' to work with in alliances. Micro-businesses or firms with the fewest employees frequently seek to work with others in order to increase the areas of expertise they can offer to customers under their firm's name or subcontract work to when they are too busy (see Riemer and Klein 2003). (4) **Business practice opportunities**. These are varied

opportunities that networking creates enabling small businesses to supply a greater number of products and services themselves, or supply them with some kind of improvement. For example, this may involve acquiring specialist production knowledge from someone else. (5) **Mentoring opportunities.** These are informal opportunities to gain business advice from other businesses on problems or business direction. (6) **Local knowledge opportunities.** These involve the ability to use the network to acquire the kind of varied local knowledges which may be useful for a small business—such as a competitor locating in the area. (7) **Collective opportunities.** These are opportunities only created by a network working together to generate economies of scale, positive externalities or things which only a group effort can achieve, such as a local event supported by a network.

This article argues that ICTs, and particularly the Internet, are used by micro-businesses to bridge 'structural holes' (Burt 1992), supplementing limited face-to-face networks with virtual networks mediated by new social media sites and sector-based discussion forums. These are opening up a variety of opportunities: including customer, alliance, business practice and mentoring opportunities. This is particularly apparent in the article's relatively geographically isolated case study, where threshold populations are too low for specialised small businesses to find similar businesses from whom it is possible to derive industry-specific opportunities. The article first situates opportunity creation from networks and networking in the broader literature by examining the work on the intertwining of the social and economic in inter-firm networks, including the more general notion of 'embeddedness' (Granovetter 1985; Uzzi 1996; 1997). This encompasses some of the various types of opportunities it is possible to gain when firms are organised in networks. It then moves on to explore the diverse and voluminous literature on networks, networking, small businesses and entrepreneurship; including work on 'business groups'. A subset of this literature looks at the spatial aspects of networks, and this is also important in the article due to the place-based nature of the small businesses group studied and the role of local knowledge opportunities. The article then moves on to consider the research methodology used in the study before looking at the findings on the role of networks in creating opportunities—using a 'media ecology' approach to explore the interrelationships of face-to-face networking and ICT-mediated networking. In conclusion, the article reflects on the role of face-to-face networking and ICTs, suggesting 'best practice' and policy implications in the ways in which ICTs can supplement face-to-face contact for small businesses.

1.1 The intertwining of the social and economic in inter-firm networks: insights from Economic Sociology

Economic Sociology has developed some important insights relevant for a consideration of small business networking. However, much of the material was written before the major ICT developments that would certainly have made a difference to how firms were seen to interact in ethnographic fieldwork. Carruthers and Uzzi (2000), in their foresight article on Economic Sociology in the new millennium, see information technology as determining identity bricolage, which is also increasingly involved in embeddedness. Identity bricolage is said to concern a recombination and reconfiguration of economic identities and roles to create novel modes of exchange. eBay is cited as creating new economic identities with public reputations, used for social governance in exchanges which are not face-to-face. This section begins by considering seminal work from Economic Sociology on inter-firm networks. Granovetter's (1985) much cited and highly influential article (Uzzi 1997) on the 'problem of embeddedness', examines the embeddedness of economic action in social relations. In terms of our framework of 'opportunities', it is suggested by Granovetter (1985) that embeddedness in terms of long term relationships allows for the formation of the 'quasifirm' of contractors and subcontractors (alliance and supplier opportunities). The embedded relations place norms on expected standards of behaviour and discourage malfeasance (*op. cit.*). Social networks and networking therefore allow for 'alliance opportunities,' which Granovetter identifies as further evidence of the interweaving of the economic and social, where social relations play a crucial role. He also suggests that small firms may persist because the network of dense social relations overlaying economic relations may reduce the pressure for firms to formally integrate. Uzzi (1996; 1997), building on this work, then sought to further develop notions of embeddedness using original ethnographic fieldwork from 23 New York apparel firms.

Uzzi defines embeddedness as: “the process by which social relations shape economic action” (Uzzi 1996: 674). However, there are some crucial differences with the network we are considering—Uzzi’s network is an inter-firm network for a particular industrial sector of manufacturers, contractors, retailers and designers. Our small business network and the other networks they are part of have much more heterogeneous relationships. Uzzi identifies three main components that embedded relationships have, to regulate exchange partners’ behaviours and expectations: facilitation of trust, fine-grained information exchange and joint problem-solving (Uzzi 1997). Uzzi gives some examples of opportunities facilitated by the trust inherent in embedded ties. These are constructed as ‘favours’ and seem to fit under the heading of ‘supplier opportunities’—being able to jump the queue for a piece of work or get something supplied more quickly. Fine-grained information transfer, in Uzzi’s study, involved information on learning in practice, strategy and profit margins. These seem to relate to ‘business practice opportunities,’ where embedded ties suggest how to produce something technically better or more in tune with the market. They may also suggest what to produce by relaying inside knowledge about trends or demand. Finally, there are joint problem-solving arrangements. These also relate to ‘business practice opportunities,’ but tend to involve inter-firm feedback relationships between contractor, manufacturer and retailer.

Uzzi (1996; 1997) also comments on network structure, which has previously been considered (see Granovetter 1973) as important in the type of opportunities available. Uzzi (1997) suggests that embedded ties can be developed and expanded by the referral of third parties by a ‘go-between’ (or broker), who has personal links to another actor. New inter-firm relationships are often established because people know each other from different social circles (Uzzi 1996). The go-between transfers the opportunities and expectations from the existing embedded relationship to the third party, calling on the reciprocity owed to the go-between (Uzzi 1997). This is referred to as ‘transitivity,’ and the ties between firms and the ties of their ties become a network and repository of accumulated benefits (*op. cit.*). Ultimately, Uzzi suggests, firms in the network get Pareto improvements, where at least one party is made better off without making another party worse off. However, Uzzi poses the question of whether embeddedness always leads to the best access to opportunities, following on from Burt’s (1992) material on the importance of structural holes to get a flow of information and resources. Structural holes are equated to buffers between people which stop the flow of information between groups (Burt 2002). Indeed Uzzi found that opportunities could turn into liabilities with too much embeddedness. In particular, information flows could be restricted (Uzzi 1997), which could limit access to certain opportunities. Collective opportunities, from the perspective of this article, may also turn into private liabilities through a sense of obligation. Uzzi therefore suggests the optimal network structure to be part of includes both close, embedded ties and arm’s length ties. Uzzi (*op. cit.*) agrees with Granovetter (1985) in suggesting the small employment size of firms and therefore the personal nature of ties between firms may prove fertile for embeddedness to occur. Uzzi (1996) also suggests the logic of embeddedness can be extended to business groups, composed of independent firms which are not formally controlled, but may be linked by friendship or family. This is a highly relevant area of literature for our case study of a small business group network.

1.1.1 Business groups

Granovetter (1995) went on to develop some of his general themes from his earlier paper about the interweaving of the social and the economic. Granovetter defines business groups as “...those collections of firms bound together in some formal and/or informal ways, characterized by an ‘intermediate’ level of binding” (Granovetter 1995: 95). Granovetter argues that business groups are somewhat a lacuna in the literature of Economics and Sociology, because the business group is at an intermediate level above firm issues and entrepreneurship and below policy issues. Granovetter examines the background from the existing literature, and argues that being in business networks may be part of conditions which favour ‘flexible specialization’ (Piore and Sabel 1984)—which suggests advantages in small firms working together flexibly, perhaps to take advantage of customer and business practice opportunities. However, Smångs (2006) critiques the extant literature for an inconsistent and ambiguous use of the concept of ‘business group’. Smångs does, relatively unusually for the literature in this area, reconnect ideas of the business group and the business network to the concept of social capital. He links the logic of reciprocity within business groups to business

groups being carriers of substantial quantities of social capital, and argues social capital is the collective property of business groups, which is not the same as the social capital of individuals (*op. cit.*). Smångs conceives of business groups as having three separable elements: intersubjectivity, multiplex networks and the logic of reciprocity. Intersubjectivity relates to individuals interacting with common interests and specific standards. Multiplex networks refer to firms interrelated by several multifaceted networks—for example simultaneously ownership, knowledge and exchange networks. Of more interest to our 'opportunities framework' is the issue of 'reciprocity,' which maps on to our 'alliance opportunities'. Communal exchange systems are noted by Smångs (*op. cit.*), and this concerns distributive justice within the group, rather than narrow self interest. Insiders to the group are treated preferentially, and there are shared norms about exchanges. Smångs sees business groups as being based on a communal exchange system, where some track is kept of favours, compared to a standard of expectations about behaviour (*op. cit.*). More empirically based articles on business groups such as Dean, Holmes and Smith (1997) report on the perceived benefits for small and medium sized service and manufacturing sector enterprise owners of their participation in business networks. The benefits noted by Dean, Holmes and Smith in a small business survey cross-cut our 'opportunities' framework, because they often took benefits to their ultimate conclusion such as 'profit' or 'growth'. Other benefits are too broad to map exactly, but certain informed speculations can be made. Their category 'business recognition and expansion of sales', maps onto 'customer opportunities', and this accounted for 35% of service firm responses on benefits and 18% of manufacturing firm answers. Their 'share ideas' category may relate to mentoring opportunities and account for 5% of service firm responses and 7% of manufacturing firm answers. Finally, combined 'advertising/marketing' relates to 'collective opportunities' and has 8% of responses from service firms and a nil response from manufacturers. This article moves on to consider the literature on networks, networking and entrepreneurship through the lens of what it can tell us about social capital and opportunity creation.

1.2 Networks, networking and entrepreneurship

As far back as the late 1980s, Jarillo (1988) claimed that networking was a fashionable topic for academic journals. Indeed, the academic literature relevant for small businesses on networks, networking and entrepreneurship is both voluminous and heterogeneous in nature. In part, relating the networks and networking literature to small businesses is made more difficult by the emphasis on entrepreneurship and newly founded firms. Entrepreneurs and newly founded firms are most often small in nature, and indeed may be 'micro-businesses.' However, they are not exclusively so. Another difficulty is the greater emphasis on hi-tech and innovative businesses, when the businesses in this study are less concerned with 'innovation.' This article does not seek to provide an exhaustive summary of the networks, networking and entrepreneurship literature, but to examine it through the framework of the various types of opportunity creation noted, derived as a network or networking benefit. It also seeks to examine that literature from a 'media ecology' perspective of what it has to say intrinsically about the importance of communication methods and settings, such as face-to-face meetings. The networks and networking literature can be divided into that which specifically examines the small business situation, and studies which look more generally at entrepreneurship or new business formation. This article firstly follows that division before examining the literature on business networks in space and place. Finally, the role of ICTs in the networking literature is evaluated.

1.2.1 Network benefits and mapping on to 'opportunity creation'

The small business literature

One of the most cited articles on small business and networking is by Szarka (1990), who examines organizations and companies with which a small business has commercial transactions—exchange networks. Szarka notes (*op. cit.*) that networking gives small firms alliance opportunities and a competitive advantage from that. They are able to specialise in areas of the value chain that they are good in, while 'farming out' other areas to network partners who have strengths in that area. Szarka argues that networking and a regional concentration of small firms from related sectors seem to coincide, and cites literature

indicating firms in close proximity take part in joint projects which reduce competition and bring partners together—suggesting a strong element of face-to-face contact. Alliance opportunities are a common topic in the small business literature on networking. BarNir and Smith (2002) look specifically at inter-firm alliances and the role of social networks, and examine the results of a survey of 149 small manufacturing firms. They deconstruct the benefits of alliances as the sharing of information, costs and technology transfer, as well as access to resources and new customer opportunities through entry to new markets and being stronger than the competition. They found 11-22% of the variance in inter-firm alliances was explained by the social network of an individual in a small business. The stronger the ties of an executive with their close network, the more likely is the firm to engage in inter-firm alliances.

Cooke, Clifton and Oleaga (2005) also look at outcome measures—small and medium sized enterprise (SME) performance—but do so through an examination of the effects of social capital from firm embeddedness, relating them to firm capabilities. They take a multi-method approach: of a large-scale survey, telephone and face-to-face interviews. Being involved in networks was shown to create certain social capital benefits for SMEs. Firms who self-rated themselves highly in terms of innovative capacity were more likely to strategically develop transaction partners (alliance opportunities). Information exchange outside of commercial relations was also rated as highly important, as well as external information. It is less clear what the content of this information is in order to map it to our opportunities framework. Crucially, Cooke, Clifton and Oleaga (2005) note that innovative SMEs rate three forms of interpersonal communication higher than other firms—ICT-based, tele-based and face-to-face; with face-to-face being particularly important. Those firms self-ranking their market share as higher also placed a greater emphasis on face-to-face communication. The authors suggest that the social capital benefits innovative SMEs are taking advantage of may not just be local but global. They also give a much needed regional perspective to social capital, networking and small businesses. In terms of this article's case study, the East of England is noted to be the most highly ranked in terms of links to non-local networks (which are most likely ICT-supported). The study also notes that social capital benefits may be made greater use of by certain types of firms, such as knowledge businesses or innovators.

The networks, networking and entrepreneurship literature

Dubini and Aldrich (1991) argue that as soon as we add the concept of 'entrepreneurship' to 'networking', we move from a consideration of static relations towards including process. The process includes opportunities opened or withheld, and they cite Stevenson and Jarillo's definition of entrepreneurship as: "the process by which individuals—either on their own or inside organizations—pursue opportunities without regard to the resources they currently control" (Dubini and Aldrich 1991: 305). This may involve finding new product or service opportunities, and the authors argue pursuing opportunities generally requires networking in terms of getting help from others. The broader literature on networks, networking and entrepreneurship tends to reproduce the small business literature in making an examination of alliances the most popular outcome of networking. Dubini and Aldrich associate 'networking' with a network of strong ties and long relationships. Opportunities relating to information, the authors contend following Granovetter, will be better for entrepreneurs if strong ties have diverse links, or weak ties are widely spread. They also note the importance of face-to-face communication in physical meeting places to create synergies between people and businesses. Importantly, Dubini and Aldrich propose, based on a review of network principles, that effective entrepreneurs are reflexive networkers—planning and monitoring their networking and increasing their network density and diversity. Jarillo (1988) also concentrates on a type of reflexive networking—strategic networks. He suggests strategic networking gives 'alliance opportunities' that allow a firm to work to its competitive advantage, while other work can be given to associates—reaping the benefits of specialisation. Gulati (1998) additionally explores strategic alliances. During field interviews, Gulati observed many new 'alliance opportunities' were presented through existing alliance partners. Gulati suggests the frequency and nature of alliances is dependant on how firms are embedded in social networks. Rowley, Behrens and Krackhardt (2000) also work with notions of 'embeddedness' within alliances, building on Gulati with an empirical study of the steel and semiconductor industries. They examine how network structure and strategic alliances relate to firm performance—the benefits and opportunities of the network. They enter into the debate about whether weak ties and

networks spanning structural holes (Burt, 1992) or dense networks with strong ties (Coleman 1988) enjoy more advantages, arguing that forming strategic alliances through strong or weak ties is dependant on how a firm is already structurally embedded in a network. More strong ties may be less advantageous in an already dense network. In addition, they speculate that strong ties are beneficial in stable environments, but that weak ties may be beneficial in conditions of uncertainty. Larson (1992) also looks at alliances, but in particular dyadic relationships between an entrepreneurial firm and a partner, often manufacturer and supplier or distributor. A case study approach is taken with seven examples, but her sample looks at firms which had the kind of revenues unlikely for micro-businesses. Larson noted mutual economic advantages, mostly through opportunities to improve business practices through improved communication and information flows. This sometimes led to innovations and further customer opportunities. Starr and Macmillan (1990) explore other alliance advantages, in particular how new ventures co-opt resources from alliances with other businesses through using social assets such as friendship and obligation to get their resources. They use two case studies and show resources could be gained from other businesses which gave them customer opportunities, such as access to a business premises which gave legitimacy, or the ability to gain customers from goods or routes the other business does not intend to use.

Elfring and Hulsink (2003) also examine new venture development and networks in entrepreneurship, moving beyond a pure focus on alliances, and identify three entrepreneurial processes which are important for survival. They aim to deconstruct the causal mechanisms behind firm performance, and see entrepreneurship as concerning the discovery of opportunities. Networks are seen to give market information ('customer opportunities') and ways of dealing with customers ('business practice opportunities'). Resources are then needed to exploit the opportunities. They present empirical material from three case studies of hi-tech Dutch firms. The exploration of weak ties was identified as a key process for gaining customer opportunities on the basis of incremental innovations. More radical innovations and market uncertainty required strong ties to exploit mentoring opportunities for feedback and business practice opportunities before exploiting customer opportunities. Other authors also examine the opportunities gained from networks, beyond alliances, for newly founded businesses. Birley (1985) examines the role of networks in starting new firms in St Joseph County, Indiana: drawing on a survey of 160 firms. She examined interaction with formal networks—including government agencies, accountants and banks; and informal networks of previous colleagues, family and friends. She found formal networks were hardly used, except for finance. Informal networks were used for 'local knowledge opportunities' about sources of potential employees and premises. Beyond the new firm, Birley, Cromie and Myers (1991) examine entrepreneurial networks in Northern Ireland, America, Sweden and Italy through the use of a survey to owner managers. They specifically asked questions about the development of customer and non-customer links. They suggest customers are not likely to be part of entrepreneurs' personal networks. Their study produces various snippets for our opportunities framework. Their findings suggest that as firms develop, they incorporate a range of heterogeneous professionals into their networks such as accountants and lawyers.

Situating networks in space and place

A strand of the literature on networks and entrepreneurship deals specifically with the role of space, place and the local. It is particularly important for this article's discussion to examine the interrelationship between space, place and networking, in order to understand the interrelationships between face-to-face meetings and other forms of information technology-supported communications. It is also relevant in considering 'local knowledge' opportunities and 'collective' opportunities. Westlund and Bolton (2003) suggest that social capital can often be defined by spatial relationships, and their article uses the literature to contribute to the discussion on localised social capital. They argue that space-bound social capital can contribute to producer surplus for a region—either through reducing supply costs or increasing revenues. This may include increasing supplier opportunities or customer opportunities. Westlund and Bolton see social capital in relation to space and place in terms of three broad topics. First, that social capital can be a community characteristic, a present or absent resource endowment in a community. Secondly, the amount of social capital in a community is seen to give satisfaction or dissatisfaction, which may mean businesses are happy or look elsewhere for connections through a variety of means. This is also dependant on the kind of social capital

benefits available in the community. Finally, social capital is regarded as a community characteristic that: "permits the community as a whole to act effectively as a collective entrepreneur" (Westlund and Bolton 2003: 80). This might involve solving common problems and most closely adheres to this article's notion of 'communal opportunities.' The authors recognise the importance of 'real capital' such as meeting places for the creation of social capital through face-to-face contact. They also importantly note that free-riding on community social capital may be a problem (see also Adler and Kwon 2002). Dubini (1988) additionally suggests, through an empirical study, that there are 'munificent' environments in terms of the resources than can be exploited in an area for new venture creation, where networks provide information on skills and markets (business practice and customer opportunities).

Physical meeting places come out of the literature as particularly important. Venkataraman (2004) notes the importance of informal meeting places in technological entrepreneurship, such as restaurants or bars. Such places are argued to encourage the face-to-face exchange of ideas and lower inhibitions, and where other opportunities are learned of. Feld (1981) explains the importance of physical places with focus theory, which aims to explain loosely connected social circles. Feld contends that individuals whose activities revolve around the same focus will become interpersonally tied. Such a focus may be a physical entity such as a workplace or hangout. Markusen (1996) suggests that in a world of improved communications where distance is obliterated, it is a puzzle as to why certain places remain attractive to capital and labour—so called 'sticky places'. She suggests small and innovative firms, who are embedded in a system of governance which is regionally cooperative, allows them to adapt and flourish. She suggests that the stickiness of place may reside in the external economies derived for each firm through its spatial conjunction with other suppliers and firms. However, Keeble *et al.* (1998) and Keeble *et al.* (1999), examining technology-based SMEs, note the importance of both local networking (more likely to be face-to-face in physical meeting places) and global networking, through empirical investigation. Small technology firms need to internationalise to capture their specialised market. Firms with international links could potentially have substituted global links for local links (Keeble *et al.* 1998). However, internationalist SMEs were shown to have higher intensities of local linkages, in particular collaboration or 'alliance opportunities.' Local links were shown to provide customers, alliances and contact with competitors (Keeble *et al.* 1999), and they suggest the importance of Amin and Thrift's (1994) 'institutional thickness' to the Cambridge region—where support organizations such as chambers of commerce, development agencies and trade associations form an integrated web of organizations and create synergies of interaction, potentially including 'local knowledge' opportunities.

Small business networking and ICTs

In the articles relevant to small business networking and entrepreneurship, or those dealing with the interrelationships of Economics and Sociology (Cooke, Clifton and Oleaga 2005; Keeble *et al.* 1998; 1999; MacGregor 2004), few articles discuss an ICT-basis to networking. ICTs are mostly taken for granted as part of the networking process for partly virtual organizations, often in the context of internationalisation. Southern and Tilley (2000) suggest that small business research in the domain of ICTs is relatively new. However, Riemer and Klein (2003) examine inter-firm networks which are ICT-based collaborative virtual organizations, through a social capital perspective. They argue social capital in inter-organizational networks is largely unaddressed in the literature. In terms of the framework of this article, virtual organizations (VOs) are based on taking advantage of 'alliance opportunities'. They suggest VOs involve "distributed, ICT-based work arrangements" (Riemer and Klein 2003: 2) that replace physical meeting up. Three types of VOs are identified in their article: (1) ICT-enabled corporations. This is a single firm that uses ICTs to bridge time and space to create virtual teams, in a dispersed organization where travel is minimised. (2) Dynamic network organizations. This is a co-operative partnership of firms where firms collaborate to achieve a virtual size and superior strength and comparative advantage together. Firms join forces temporarily on a project basis. (3) Virtual network organizations. This is a combination of (1) and (2) where the partners co-ordinate activities via ICTs. Forms of VOs are used by SMEs to flexibly meet market or 'customer opportunities' (Riemer and Klein 2003). They see the collaborative capabilities of the VO as social capital in the VO teams. The authors also suggest which type of media may be better for certain types of information

exchange and therefore opportunity creation. For example, lean media (text message, e-mail) is used for well-structured tasks, whereas rich media (videoconferencing, face-to-face) are used where there is task ambiguity. In terms of our framework, this has implications for the type of opportunities which can be created or supported by different types of media.

Other material on small businesses, networks and ICTs tends to come from the literature on international development. This is often because mobile phones in particular have leapfrogged the problems of installing fixed line networks in many developing countries, and rapidly created new communications and therefore business possibilities. Wolf (2001) suggests the role of ICTs for SMEs may be to facilitate direct contact between trading partners, reducing the 'rents' able to be extracted from better informed buyers or sellers in a situation of information asymmetry. Thus 'supplier' and 'customer' opportunities may be opened up. She also cites Duncombe and Heeks' (2001) fieldwork with SMEs in Botswana, where information on customer opportunities in export markets was a major problem which could be offset with ICTs. Donner (2004; 2006) has particularly examined the use of mobile phones by small business owners in Rwanda. He found the mobile helped micro-entrepreneurs and small businesses keep in contact with suppliers (Donner 2004). His (2006) article reports on the results of 277 survey interviews. Those purchasing phones for the first time were shown to increase their networks of weak ties to build their businesses. He suggests studies such as the one reported in this article, which take a holistic approach to micro-entrepreneurs' networks including both face-to-face and mediated communication, would be useful (Donner 2006). This article now looks at the research methodology behind the article's case study, before examining the qualitative findings on the role of networks in creating opportunities for a group of small businesses.

2 RESEARCH METHODOLOGY: A 'MEDIA ECOLOGY' AND MULTI-METHOD APPROACH FOR A CASE STUDY OF A SMALL BUSINESS NETWORKING GROUP IN AN EAST OF ENGLAND MARKET TOWN

The focus for data collection in this case study was the members of a small business group in an East of England market town. The small business group consisted of 85 active small businesses as of March 2009. The purpose of the business group was to foster the linkages between business people, acting in Dubini and Aldrich's (1991) terms as a broker: keeping members informed of matters of interest and representing members' views to a variety of authorities, including government-related ones and community links. For reasons of anonymity of its members, the business group is given the pseudonym 'Market Town Group' (MTG) throughout this article. The original data collected for the case study this article is based on consisted of data from a variety of methodological approaches. It was part of a wider international project called 'MOSCITO' (MOBilizing Social Capital in ICT-based global Organizations), examining social capital and ICT issues across a range of organizational types in Norway, the Netherlands and South Korea. A multi-method approach was used in order to gain a variety of perspectives on members of MTG, and so that there might be a degree of triangulation of data between the methods.

2.1 A 'media ecology' approach

The 'media ecology' approach used in this article in order to treat face-to-face and ICT-based methods of networking (and their interrelationships) as equally important, owes a significant amount to Marshall McLuhan (Levinson 2000), who inspired Neil Postman. In *Technopoly*, Postman (1993) describes a process of technological change as 'ecological'. He argues for the consideration of an ecology of the media—that the introduction of a new technology is not merely additive or subtractive. One change generates total change, just as introducing or removing insects or plants in an environment reconstitutes the conditions of the natural environment. In the context of this article, a media ecology approach is used to suggest that an examination of ICTs in relation to networking should not be regarded in simple terms as just adding to communication possibilities or subtracting the importance of place-bound face-to-face communications. ICTs, as they change in form, use and affordances—such as the rise

of the Internet—change people’s media strategies in complex ways in which ICTs supplement or hollow out face-to-face contact in unpredictable and contingent ways. Nardi and Whittaker (2002) have also used the concept of ‘media ecologies’ to understand the mix of face-to-face and other media, defining them as “an ‘information ecology’—local habitations of people, practices, technologies and values” (Nardi and Whittaker 2002: 102). Boase (2008) has additionally suggested the benefits of taking a holistic approach to communications media which includes “in-person contact” (Boase 2008: 491), and calls for more research to understand how and the extent to which multiple media are used together for personal network maintenance. ICTs are not viewed in this article as automatically preferable to face-to-face communication, but are regarded as just another way of communicating and building networks which can create both new possibilities and liabilities. Indeed, small businesses may not fully engage with the growing range of ICT capabilities for a variety of reasons including views on how ICTs may detrimentally affect communications, cost and required technical knowledges.

2.2 A multi-method approach

The case study of the East of England small business network (MTG) involved three different methods—participant observation, in-depth interviewing and an offline and online survey. This article draws on the rich qualitative information drawn from participant observation and in-depth interviewing. Neergaard, Shaw and Carter (2005) note the lack of qualitative research methods in studies of small firm networks, and this article aims to fill that lacuna. Firstly, participant observation data was collected between September 2007 and May 2009, involving the face-to-face attendance of nine ‘business breakfasts’ held at 7.30am every two months at a venue in an East of England market town. The researcher also attended the first meeting of a subgroup of MTG—which was interested in getting more business vibrancy into the town by improving tourism and visitor rates. This sub group (the Market Town Tourism Group or MTTG) was of interest to the research because it focused in on generating ‘collective opportunities.’ Participant observation was part of an ‘ethnographic approach,’ which aimed to explore the nature of small business networking, rather than having preconceived ideas or hypotheses (see Atkinson and Hammersley 1994). Participant observation has no straightforward definition (Atkinson and Hammersley 1994), and can best be described in general terms. The approach used here follows Jorgensen: “Participant observation generally is practiced as a form of case study that concentrates on in-depth description and analysis of some phenomena or set of phenomena” (Jorgensen 1989: 23). The recording of participant observation data involved writing up in a diary what had happened at the business breakfast immediately after the meeting.

Face-to-face and online methods were both used to recruit small businesses for interviews from the sample of 85 in order to undertake a ‘media ecology’ approach and try not to skew the sample through the recruitment method. A semi-structured interview schedule was developed amongst the MOSCITO project group members and iteratively refined. This was based on extant work on social capital, work-related networks and organizations. 10 in-depth, semi-structured interviews were carried out in total with MTG members, lasting between one and a half and two and a half hours—and they were also asked to draw out a sociogram of people important to them in their work, including people they regarded as being ‘within the business,’ ‘private relations’ (friends and family) and those ‘external to the organization.’ An in-depth interview was also carried out with a key network ‘gatekeeper’ in terms of providing more background on the MTG group, his role in it and the relationship between the MTG group and his own business. Interviews were tape recorded and transcribed in full. Data analysis followed a grounded theory approach (Glaser and Strauss 1967), and the data was coded through a process of critical deconstruction and linkage to higher level themes in Atlas TI qualitative software. The interviewees recruited were an ‘opportunity sample’—they represented those firms who wanted to be interviewed, rather than being representative. Table 1 provides a description of the opportunity sample. Most of the businesses were ‘portfolio’ businesses (see Westhead and Wright 1998)—they actually had more than one type of business in order to generate sufficient income and offset risk. It should be noted that true to a networking and social capital perspective, that this opportunity sample to some extent reflected the small businesses’ interest in the contacts and opportunities the researcher could provide, and there was a certain *quid pro quo* and reciprocity in providing names to contact in

the university as customer opportunities.

Description of small business	No of employees in the business	Size definition*)	(EC Associate/ structure?	branch	Location of business
Glass engraver	1 (sole trader)	Micro	No		Market town
Health care and social work consultant	2	Micro	Yes (subcontract)		Village close to market town
Careers coach/ debt counsellor	1 (sole trader)	Micro	Yes (informal)		Village near the coast
Career change consultant and accounting	1 (sole trader)	Micro	No		Market town
Florist and collectables dealer	1 (sole trader)	Micro	Yes (informal)		Market town
Estate agent	7	Micro	Yes (branch and informal)		Market town
Graphic designer and bed and breakfast	2	Micro	Yes (informal)		Village close to market town
Administration, payroll and property management	6	Micro	Yes (subcontract)		Fishing coastal town
Artist, art teacher and garden designer	2	Micro	No		Village close to inland market town
Career coach and LED bulb supplier	1 (sole trader), but partnership with LEDs.	Micro	Yes (informal)		Village close to market town

* See European Commission (2009).

Table 1: Summary of Opportunity Sample for In-depth Interviews

3 FINDINGS: THE ROLE OF NETWORKS IN CREATING OPPORTUNITIES

3.1 Customer opportunities

The micro-businesses interviewed relayed countless stories of their networks creating customer opportunities. Indeed, in terms of the scope of opportunities covered in the article’s framework, the social capital benefits of networking were by far talked about most by the micro-businesses in terms of customer opportunities, in line with Dean Holmes and Smith (1997). However, this is counter to Birley *et al.*’s (1991) findings that customers are not part of an entrepreneurs’ personal network. Members of MTG were not just members of that networking group, but often also other local groups and friendship networks, and this study was concerned not only with the MTG network, but the other networks MTG members were part of. Offline networks tended to dominate the discussion of customer opportunities where some degree of face-to-face contact was important, but it should be noted that most business groups are involved in a significant amount of computer mediated communication through round robin e-mails, newsletters and their own websites. Purely online and virtual networks also played a significant and strategic role. These are all discussed below.

3.1.1 The MTG network, other local business groups, non-business interest groups and friendship networks

It was clear during participant observation that the MTG network was in part about providing members with customer opportunities, often through reminding small businesses that the MTG network was also a useful supply network. ICTs played an important part of supporting this network of contacts, as all MTG members, their contact details and what their businesses involve are listed on the MTG website:

The chairman of network reminded people about the website which listed all the members and the kinds of goods/ services they offered. He said to look there first for things they needed in order for [small market town] to help itself.

(Diary notes, business breakfast, 28th May 2008).

Indeed, this tended to be played out face-to-face, and is partly what business breakfasts were concerned with. For example a writer who sat on the same table as a builder and property management business owner was soon asking his advice on fitting home insulation and a downstairs toilet. Interviewees reported getting work from MTG, but some respondents felt that this was often a long haul—that an MTG contact might eventually want some work doing, but that actually it was just the “same old faces” who they knew weren’t potential customers, with a feeling that the group was just not big enough to generate much potential work. Going to MTG business breakfasts was regarded as generally important as a particular form of advertising, as part of ‘showing your face’—to display that you are still active, trading and part of the community. There is a feeling amongst the micro businesses that a network will not refer you on to others for customer opportunities (encompassing Uzzi’s (1997) notion of ‘transitivity’) if they think that you are no longer trading or might fail, since this would reflect badly on themselves as a broker of the contact. MTG was clearly useful in terms of the broader scope of opportunities, and this is investigated in the next sections. However, customer opportunities were also derived from other networks than MTG.

The micro-businesses studied were involved in many other local networks simultaneously, reminiscent of Smång’s (2006) multiplex networks. These included other local business groups, based around a slightly different geographic area or scale, such as the chamber of commerce; or a different focus such as women’s networking or men’s breakfasts. Micro-businesses were also often heavily involved in non-business networks such as the church and the golf club in the local area, which provided additional but sometimes overlapping contacts. Friendship networks were additionally important, and again these sometimes overlapped with the groups they were part of. There was often a blurring of friendship and usefulness for business purposes, as business contacts became friends or friends provided customer opportunities. The important thing about these multiplex face-to-face networks is that in total they provided a rich tapestry of potential customers, and micro-businesses in the study went on ‘collecting’ and keeping track of contacts they met in their networks. These present a set of rather intangible business opportunities, because it is unclear which contact is going to come ‘alive’ at any one time and recommend you or provide business directly with a business opportunity. Yet these networks of relatively weak ties were maintained diligently:

...it’s very important for me to maintain almost a good distant friendship with people. Not to upset them. To continue to show some interest in what they are doing, so that they might refer somebody else to me. It’s all a bit nebulous, but it’s the way the business is.

(Interview, career change and accountancy business).

The career change consultant/ accountant also noted that it is often important that more than one network overlaps—that referrals from two face-to-face groups, such as the church and MTG, enables him to approach a potential customer with much more confidence of getting work. Embedded ties to the new customer are established by the referral of these third parties (see Uzzi 1997). Micro-businesses in the study were also shown to network strategically and reflexively with their local networks (see Gulati 1998; Jarillo 1988). They were aware of where the holes were in their network, and often had ideas about where their next face-to-face networking target should be to try and bridge those ‘structural holes’ (Burt 1992) to the contacts who could most usefully provide customer opportunities. These differed according to the nature of the micro-business, but included golf clubs which were thought to contain gregarious members with other contacts who needed helping or who may be employers, or

networks which contained a great deal of professional contacts such as solicitors or chartered accountants (see Birley *et al.* 1991). Some of the 'structural holes' that micro-businesses hoped to fill with networking were also geographic in nature. This was particularly apparent when the nature of their business involved a great deal of face-to-face contact, and they had set themselves geographic limits on the catchment area of their customers.

3.1.2 Professional associations and formal and informal sector-based networks

Professional associations and sector-based groups were very important to certain micro-businesses studied in terms of providing customer opportunities. These again often involved the complex interweaving of face-to-face meetings, conferences and various sorts of mediating ICTs. They were particularly important for more specialist micro-businesses who could not rely on general members of the public for their trade, such as the health care and social work consultant and graphic designer. Their customers were often organizations who commissioned the work. The health and social work consultant was a well known figure in a professional association and had held a senior position there, as well as having a dense network of contacts within her sector both formally and informally. She had not had to advertise for work since going freelance, and had got constant referrals and repeat business from her sector-based network. While a great deal of her work came in via e-mail from contacts that she already knew in person, she recognised the importance of attending sector-based conferences in order to get work and catch up:

I do fund several conferences, two or three day conferences a year, and I go on them, and I carve out the time to do it . . . It's really important that you do. And I learnt that the hard way when I didn't go to one conference and then I had a real sort of dip in people contacting me about things.

R: So is it about refreshing you with them?

H: Yes, and the exchange of information and just catching up, and a bit of serendipity—because inevitably there'll be a serving director at these conferences with a problem, and they'll see you and you'll be talking. And they'll say: "How do you do and what are you doing?" and then "Have you thought about, could you do a bit of this?" So it does tend to feed the work as well as keep the profile. And your profile can disappear 'like that'.

(Interview, health and social work consultant).

Again, as with local networks, 'showing your face' is very important as well as the serendipitous qualities of meeting other people in a rich media environment.

However, the experience of the graphic designer for the music industry in the study showed that the interweaving of contacts known through face-to-face meetings and ICTs does not always lead to repeat business or a pool of readily accessible customer opportunities. He recounts the story of being able to get work in the 1980s through networking face-to-face with the 'right' people. However, e-mail is now used to mediate all contact with people in the industry who may provide work. In fact, the industry appears to have a strategy which reduces the media richness of its contacts—a phone call will only follow a successful e-mail enquiry, and people in the relevant sub-departments such as production who used to have leverage over decisions no longer have phones. This enables the music industry to give yes or no answers without the need for prolonged polite conversation.

3.1.3 Online networks

Online networks are shown in the study to be highly important to those micro-businesses whose business is not purely dependant on face-to-face contact, but can be mediated remotely. The 'glass engraver' and 'careers coach and debt counsellor' had both embraced online networks. However, often using online networks was a choice for micro-businesses—two other careers-related small businesses were not so enthusiastic about online networks because of their belief in the importance of face-to-face contact with their clients. It is no coincidence that the two businesses embracing online networks in the sample are relatively 'rural' small businesses isolated from the level of threshold population they need in order to keep their businesses going with customer opportunities, and we may speculate that Cooke, Clifton and Oleaga's (2005) findings on East of England small businesses being most highly ranked in relation to non-local networks may in part be due to a degree of geographic isolation from key markets. The glass engraver was exceptionally active in augmenting local networks which brought her work with various kinds of online network, which were different in terms of their

form and cohesiveness. Many were 'fragmented' communities (Gurak 2001) in the sense that contact between people could be very fleeting and mostly concerning latent ties. The glass engraver used online networks in order to have links with thousands of potential weak ties, and often to fill particular 'structural holes' (Burt 1992). For example, she joined the online business network Xing to find customer opportunities she was lacking from professionals: ". . . you'd expect somewhere along the line, someone would go to your website, and want something for their big corporate award." Online networks were often used by her in a similar way to offline networks, in being a way to increase her profile and advertise herself. Her use of featured items on eBay was one way of doing this, and she regarded it as a very cheap way of advertising. eBay, however, also gave her access to international customer opportunities and the ability to strengthen ties with repeat business (see Carruthers and Uzzi 2000), such as a New York woman who purchased her mermaid glass items, with the social and economic intertwined: "She'd be the last sneak in bidder, right at the end. And in the end we were e-mailing each other, almost becoming distant friends kind of thing, and if I am putting something on eBay I will drop her a line and say 'by the way . . .'" A myriad of other online networks of people who followed particular websites were also directed towards her own website to increase customer opportunities. This included a French website who listed her as an 'artiste extraordinaire,' as well as her own blog and set of YouTube videos on glass engraving—which were used to capture interest.

The 'careers coach and debt counsellor' also used online networks, and these in turn fostered customer opportunities. In particular, she did some remote mentoring by telephone for a mostly virtual women's networking group which led to further referrals. The coach additionally used networks of latent ties fostered by particular Internet sites to interweave offline and online local networks. This was in the form of the website 'Meetup': where an online network funnels people to her offline coaching events in their local area.

3.2 Supply opportunities

Supply or supplier opportunities were also something the micro-businesses expected to get and did get from their networks (see Uzzi 1997). Supplier networks were relatively local in origin, or at least involved some kind of face-to-face contact if suppliers were more distant. Online networks were not mentioned as sources of supply, for a variety of motivations in using more local networks set out below.

3.2.1 MTG network

The MTG network was used by businesses to seek out opportunities to find suppliers of certain products or services, as inputs into their own businesses. This local, face-to-face network was often preferred as a source of supply for a number of different reasons. Trust and confidence played an important part in using these suppliers, and the micro-businesses felt they could leverage long-term relationships in order to get the best financial deals possible or to get what they needed in a hurry—equivalent to Uzzi's 'favours' (see Uzzi 1997). However, there was an understood *quid pro quo* for this—that there would be repeat business. This was also acknowledged by one more nationally-facing micro-business as a way of channelling resources back to the local community, to play more of a part in sustaining it: "I see it as I can put back into the community I live in. The resource that comes from a national, wider community" (interview, health care and social work consultant). As already stated, the MTG website was promoted amongst the group as a way of finding out information about other small businesses who could supply you with products and services.

3.2.2 'Friendship' networks

Friendship networks, surprisingly, provided supply for one business interviewed for the study—the florist and collectables dealer. 'Friendships' for small businesses in the study often tended to feature the blurring of the social and economic (see Starr and MacMillan, 1990). The 'collectables' side of the dealer's business tended to involve a group of friends operating a collective purchasing strategy when visiting sites of second-hand exchange, in order to maximise their supply opportunities while minimising their travel costs. It was also used by the friendship network to cover the widest geographical area possible. For example, a buyer of vintage clothes would look out for second-hand jewellery for her friend at charity shops or car

boot sales, and reciprocity was expected when the friend visited such sites of second-hand exchange in a different area. ICTs were heavily involved in mediating this supply network (see also Donner 2004), through the use of mobile phone MMS: "Like my friends were down in [port town] yesterday, doing all the charity shops down there, and she texts me about 12 times to tell me what she's got. Sends a photograph. Are you interested in this?" (Interview, florist and collectables dealer). Such an approach enables friends to buy for each other without risk as the full information about an item has been exchanged. Of course, supply opportunities of this kind which involve collaboration, are a subtle variation on the usual types of alliance networks explored below.

3.3 Alliance opportunities

In the literature on networks, small businesses and entrepreneurship, alliance opportunities received a disproportionate amount of attention compared with other sorts of opportunities that networks and networking could provide. However, alliance opportunities were very important to the micro-businesses, joint second in importance with 'mentoring opportunities' in terms of frequency of mentioning. Alliance opportunities amongst our heterogeneous micro-businesses interviewed, took many different forms. However, the data suggested that the formation of alliances was accentuated in the deep recession which was hitting businesses hard at the time of the interviews. As the career change and accountancy business noted in his interview: "Business for everybody is getting much more difficult now. And I think there are perhaps more opportunities for two people doing a not dissimilar thing, maybe to cooperate. Better for two people to have half a loaf each than neither of them to have anything." This was also understood within the context of a local market with potentially diminishing customer opportunities. Rowley, Behrens and Krackhardt (2000) suggested that a network of weak ties may be beneficial in conditions of uncertainty, but trust is vitally important in alliances, and a cooperative response in a local area may be a way of achieving 'Pareto improvements' (Uzzi 1997) in a local area which may otherwise lose the entire customer opportunity. Purely online networks were not significant in providing alliance opportunities, suggesting a correlation between the strength of ties and the formation of alliances (see BarNir and Smith 2002).

3.3.1 The MTG network, other local business groups

The MTG network and other local business groups run along similar lines were important for certain sorts of alliances in a local geographic area. These tread the careful path between cooperation and competition. Micro-businesses were shown in the data to actively keep tabs on other businesses they met face-to-face who were doing similar or related things to themselves. In part this was about market research, but they were also looking for certain forms of alliance. For example, the administration, payroll and property management small business would seek out other small businesses who had expertise in a slightly different area, in order to potentially subcontract them to do work, where they could collaborate to achieve comparative advantage and virtual size (see also Riemer and Klein 2003). This was additionally felt to enhance their reputation amongst clients—because they had got in specialists and not turned the work down. Subcontracting or alliances were also used in situations where firms had too much business to cope with (see Jarillo 1988; Szarka 1990). If the work was formally subcontracted then the main firm would make money from the alliance through taking a cut of the contract. However, not all alliances worked that way in the study, and some involved much weaker, informal links. For example, bed and breakfasts in the MTG network area tended to collaborate to the point that if one was full, they would refer customers to the others. This was about being helpful to the customers and keeping trade in the area, described as: "friendly competition."

3.3.2 Professional associations and sector-based groups

Professional associations and sector-based groups were highly instrumental in providing alliance opportunities for the micro-businesses in the study. But again, the impact of these was often filtered through space and place, and required face-to-face communication to build up trust, even if this was later mediated by ICTs. In a local area, small businesses which dealt with closely related aspects of business services often formed alliances of reciprocity and fine grained information exchange (see Uzzi 1997) in order to achieve Pareto improvements in

their situation. For example, the administration, payroll and property management company who does book-keeping has an alliance with a local accountancy firm. The accountancy firm does not want to do the book-keeping work for clients since this is not their specialism, so they pass the work to the book-keeping firm. Meanwhile, the book-keeping firm is not qualified to do accounts, and so pass that kind of work over to the accountants. Both firms recommend each other because they believe each is doing a good job, and it enhances their own reputation to make a good referral. The book-keeping firm will often use the accountancy firm as a mediator of information back to the client if they believe the client could change the way they do things and save money—they will make that effort if the accountant has a long-term relationship with the client. Networking in sector-based groupings often led to strong friendships amongst the micro-businesses in the study, and to strong cooperative alliances. The health and social care consultant often subcontracted work to people from her sector-based network in order to take advantage of their expertise for particular projects. These people were known as part of the same professional association and had similar positions in organizations and were close friends, conforming to the view of alliances with strong ties (BarNir and Smith 2002). They meet regularly face-to-face as part of the professional association, and socially, as well as using e-mail regularly for work-based tasks. This again conforms to Riemer and Klein's (2003) dynamic network organization. Some of the specialist micro-businesses in the study cannot achieve the regional concentrations of firms they need for joint projects (see Szarka 1990), and so use a mixture of face-to-face contact and ICTs to co-ordinate work.

3.4 Business practice opportunities

Finding business practice opportunities from networks and networking was much rarer than other kinds of opportunity, but still evident from the data.

3.4.1 Local business groups and online networks

Local business groups like MTG were used in order to see the kinds of things micro-businesses could add to their business portfolio to diversify what they do: "It's also very interesting just to go along and find out the sorts of things people have done. You might just get that little nugget of knowledge that makes you think: 'Ah, I could do that'" (interview, administration, payroll and property management small business). However, online networks, based around the micro-business's own sector, tended to be used more frequently to look at business practice opportunities. For example, one of the careers coaches was part of several online e-mail discussion lists to both share knowledge and see if he could apply what other people were doing to his own business. As with other online networks, this was often very much about filling 'structural holes' in networks (Burt 1992) with more specialist businesses in a related area. The glass engraver not only used online networks to fill structural holes in terms of missing parts of her network for customer opportunities, but also to add to her network with people who know about sand blasting and production processes. Online networks provided the kind of fine-grained information transfer about business practices that is usually only seen in inter-firm networks (see Uzzi 1997). An American sand blasting forum, where people ask for advice on design and process, has filled a network gap for her, and she has formed weak but friendly ties with other sand blasters both dotted around the UK and around the globe. Online networks provided the kind of fine-grained information transfer about business practices usually only seen in inter-firm networks (see Uzzi 1997). This enabled her to work with materials she hadn't worked with before, as they told her how to sand blast the new material. However, the participation in such forums is not cost free, and she noted being overwhelmed with questions on how to do particular things as part of the *quid pro quo* of the forum.

3.5 Mentoring opportunities

Being able to benefit from mentoring and general business support from other small businesses is an important component of what the micro-businesses in the study looked for in their networks.

3.5.1 The MTG network, friendship networks and sector-based groups: face-to-face

MTG was significant in providing mentoring opportunities, as particularly witnessed through participant observation. One of the micro-business even described them as much more of a support group than a network which would generate business. Many of the conversations witnessed and participated in at business breakfasts involved small businesses talking about their everyday practice and quandaries, with other businesses offering advice from the particular perspective of what they knew about. For example, a local writer provided everyone on her breakfast table with information on how to get books published, but later asked for advice about how to market one of her children's books locally involving local schools. Other forms of business support seemed to strongly come from friendship networks (see Greve and Salaff 2003) which were also sector-based networks.

3.5.2 Mediated and online networks

Due to some of the inherent risks in asking business advice locally about difficult situations with their business (see Birley *et al.* 1991), or in gaining sector-specific support in a relatively geographically isolated area, many of the micro-businesses accessed mentoring opportunities through situations which were not face-to-face but mediated by ICTs. Again, ICTs play a role in filling structural holes in networks. For example, one of the careers coaches advertised for a coaching swap on an online coaching forum—where two coaches would coach each other: "If I have a problem with a client, it's nice to have a supervisor—somebody to just bounce ideas off, and just say: 'I could do this, I could do that, what do you think?'" (Interview, careers coach and debt counsellor). Interestingly, mentoring support in general was often sought on the phone rather than by e-mail, following Riemer and Klein's (2003) suggestion about using rich media where there was ambiguity.

3.6 Local knowledge opportunities

3.6.1 MTG network

One of the MTG network's great uses in terms of opportunities was seen as providing local knowledge (see Birley, 1985). For the glass engraver: "The meetings were a way of finding things out she needed to know via social interaction—mostly about what was going on in the local area" (diary notes, business breakfast, 27th September 2007). Various kinds of local knowledge are valued, such as information on new firms moving into the area, important changes in local infrastructure or local authority decisions. For some micro-businesses, such as the estate agent, local knowledge is a vital part of his business, and that is picked up by face-to-face interaction in the local area including attending the MTG network:

I think if I go and see somebody in their house, and I don't know when the Christmas lights switch on is happening. . . In this kind of environment, estate agency is usually the first introduction to an area for people, and they want to know what's out there, and the only way that you can sell your services which is what we're doing is selling our services, we're not selling houses, is by being aware of what their services are and what there is in the area.

(Interview, estate agent).

However, although face-to-face interaction is important to gain local knowledge, many of the micro-businesses who are unable or cannot spend the time attending MTG business breakfasts rely on the frequent circulation of e-mails which augment the face-to-face contact between MTG members, to keep up with local knowledge. This is particularly important for shop-based micro-businesses with long opening hours which preclude meeting attendance. Local knowledge was not gained through purely online networks, since these were infrequently local in their nature.

3.7 Collective opportunities

Collective opportunities involve a group of people working together or contributing to achieve economies of scale, positive externalities (see Markusen 1996; Nijkamp 2003) and opportunities that require a group effort to put them together. A single small business is unlikely to have the knowledge, skills or finances to independently put together such collective

endeavours. This requires the building of social capital that allows the community to act as a 'collective entrepreneur' (Westlund and Bolton 2003), and Smångs refers to this as 'communal systems of exchange' (Smångs 2006: 898). Collective opportunities indeed tended to be community and locally based, as the benefits of collective action were spatially defined. This relates to Westlund and Bolton's 'spacebound social capital' (Westlund and Bolton 2003: 79), which helps to create producer surplus for a region. Collective opportunities did not arise in the data in relation to purely online communities, perhaps because small businesses rarely worked together there, the benefits would be too diffuse, and because free-riding is much easier online where you can be a 'lurker' rather than in a local community where you are more accountable and available.

3.7.1 The MTG network and the tourism group

Both the MTG network and its subgroup, the Market Town Tourism Group (MTTG), played a significant role in creating collective opportunities for individual micro-businesses to participate in during the period of study. The creation of these collective opportunities were dependant on the development of social capital within both groups, as individuals together co-operate with each other—donating time and expertise for the collective good of MTG members and the market town and surrounding area as a whole, in an organised division of labour. These opportunities were shown to be inherently part of face-to-face local networks who met regularly, albeit supported by ICTs. E-mails kept people up to date with current news and happenings, while e-mail and telephone calls were used to arrange meetings. E-mails tended to be used as a way to inform people of what the groups, and particularly the group committees, had decided to do in terms of collective endeavours. Much of the organization of the work required media richness as the committees decided the best strategy. Face-to-face interaction between businesses in meeting places (see Westlund and Bolton 2003) was also necessary in order to effectively raise funds for some of the collective opportunities—to actually get the money on the spot and to explain in person what it would be used for. Examples of collective endeavours that the MTG and MTTG network put together included a Sunday opening event of the market town's main high street just before Christmas. Businesses were asked to contribute to the cost of street entertainers and local advertising.

The MTTG network had a similar role, aiming to increase footfall in order to increase everyone's business and producer surplus. This involved raising funds in a variety of ways to improve tourism in the area, including: the promotion of a local national cycle route, better notice boards at major transport nodes with the location of businesses, information on bike hire and guided tours of the town. It was acknowledged during an MTTG meeting that collective endeavours are not constructed out of pure altruism—some businesses have more to gain from this kind of opportunity, such as those on the high street with shops or those who rely on the tourist trade. Indeed, the MTTG network was dominated by bed and breakfast and hotel owners, and those with a professional or voluntary sector interest in promoting tourism. Here, self-interest and community interest was aligned—although even in a market town where people were accessible and accountable there was a lot of free-riding (see Westlund and Bolton 2003)—with people not contributing to labour or attending meetings. An e-mail newsletter was used to document the achievements of the group, in an attempt to bring the free-riders into the group by dispelling any notion that MTTG was a 'talking shop' (diary notes, MTTG meeting, 9th September 2008).

4 DISCUSSION

Unlike earlier approaches to small business networking, this article has focused on the full range of opportunities that small businesses get from their networks and networking activities, in order to examine more clearly the outcomes of social capital which can potentially make a difference to their businesses. This is interwoven with a 'media ecology' approach, in order to examine the role of ICTs in networking—to understand what ICTs can contribute, while recognising face-to-face contact as a critical and rich media strategy in networking which ICTs can often only supplement. This article presents much needed qualitative empirical material on how ICTs support opportunity creation amongst small businesses within a spatial and social

network perspective, based on in-depth ethnographic fieldwork. It also provides an outcome-based framework that helps specify the various sorts of opportunities created by networks for small businesses, which is doubly significant when policy performance tends to be measured in terms of outcomes (Falk and Kilpatrick 2000).

The data gathered from the ethnographic fieldwork with East of England micro-businesses suggests that face-to-face networking is still vitally important for the creation of particular opportunities. Face-to-face networks that meet regularly at physical meeting places, albeit supplemented with ICTs for co-ordination and information exchange, are shown to be vital in providing both local knowledge opportunities and collective opportunities (see also Venkataraman 2004), and in Feld's (1981) terms these provide a focus for individuals to become interpersonally tied. This is due to the inherently place and community-based nature of those opportunities. Supply or supplier opportunities were also orchestrated primarily through face-to-face and local networks. This was so long-term relationships could be leveraged for 'favours' (Uzzi 1997) such as better prices or quicker delivery. Supply opportunities also came from localised 'friendship' networks that formed collective purchasing networks, and met regularly to exchange items for supply and for sociality. ICTs were often intertwined in the face-to-face networks. Mobile phones were shown to reduce the risk of such collective purchasing networks, as they enabled supply opportunities to be taken advantage of with less risk and on the spot, through the exchange of MMS messages which gave a picture of the item and the price. Alliance opportunities depended on media rich face-to-face contact through meeting at events in order to build initial trust between the alliance partners. However, ICTs were then often used to supplement face-to-face contact in networks, as more specialised small businesses looked to both professional associations and sector-based groups at the national level to provide alliance opportunities and contacts to work with. ICTs enabled forms of distributed work in the form of dynamic network organizations (Riemer and Klein 2003), where individual firms were brought together on a particular project for their expertise.

Although the remaining opportunities—customer, business practice and mentoring—were shown to be available from the MTG network and other local business networks, as well as face-to-face non-business networks (specifically for customer and mentoring opportunities)—ICTs were increasingly contributing a new set of networks to gain these opportunities. Online networks were shown to provide a myriad of new contacts in the form of latent and weak ties (Granovetter 1973), to complement the embedded ties of local face-to-face networks. Uzzi (1997) suggests a mixture of embedded and arm's length ties can provide the optimal network structure to get the best access to a variety of opportunities (see also Elfring and Hulsink 2003), and this article argues that the use of both face-to-face and virtual networks achieves such a structure. Westlund and Bolton (2003) suggest that if the amount of social capital in a community is not sufficient, that businesses may look elsewhere. If the small ethnographic study in this article is an indicator of what is happening in the wider small business community, then this 'elsewhere' may be online. It also ties in with the findings of Cooke, Clifton and Oleaga (2005), who argue that SMEs, particularly in knowledge-based work or those who are 'innovators,' are taking advantage of social capital benefits both locally and globally. They are doing this through a mixture face-to-face links with other firms, but supplementing that with ICT and tele-based communication. Keeble *et al.* (1998) similarly note the importance of both local and global networks for the competitive success of technology-based SMEs, and this is replicated in having both face-to-face and virtual networks. Small businesses appear to be bridging the 'structural holes' (Burt 1992) in their social networks with ICTs, through strategically targeting key Internet portals such as sector-based websites, specialist discussion forums or business social networking sites—which are likely to provide new contacts and give specific opportunities with the groups of people they are looking for. These contacts are unlikely to be found in their local and relatively isolated geographic area, which does not have the sufficient threshold population to provide links to people in more specialist occupations.

The study suggests 'best practice' in the ways in which ICTs can supplement face-to-face contact, which is important for the policy community. Face-to-face contact is shown to be extremely important in terms of micro-business networking, and in particular the 'multiplex' (Smångs 2006) and myriad of networks that the businesses are involved in, centred on a particular place. This includes a variety of small business groups and sub-groups such as MTG and MTTG, but also the chamber of commerce, men's breakfasts and women's business

networking groups. Along side such groups there are non-business networks associated with institutions such as the church and golf club. Although these are not all business groups, they are all shown to provide a variety of business opportunities and support, having synergies between them, and so could be said to be part of Amin and Thrift's (1994; 1995) notion of 'institutional thickness'—which is recognised as having a strong influence on economic development (Amin and Thrift 1995). This occurs through trust and local embeddedness, which promotes collective benefits from information flows, supply structures and skills (*op. cit.*; see also Keeble *et al.* 1999). In the study, ICTs were seen to support this kind of local institutional thickness through keeping the groups up-to-date with planned events and fine-grained information transfer involving local knowledge and local news via round robin e-mails and group websites. Details on individual members and the nature of their small businesses, detailed on business group websites, also played a part of facilitating synergies and embeddedness. Resnick (2002) suggests such ICTs have the affordance of 'large fan-out'—of one-to-many communication. He suggests that some social relations would be unfeasible without computer-mediation, particularly such loosely coupled activity in large groups. The MTG group's approach to ICTs is a good model to consider in terms of 'best practice' for other groups newly setting up which aim to foster interaction between businesses to create opportunities for those businesses and create Pareto improvements (Uzzi 1997) in a local area. They are sensitive to the fact that ICTs do not supplement face-to-face interaction for all the small businesses in their group: because not all are computer users, some only infrequently interact with e-mails and the Internet, and others have variable levels of IT expertise which means important e-mails frequently end up in the spam. Telephony then takes the place of computer-mediated communication.

Cooke and Wills (1999) have argued that improvements in business performance may be achieved through linkage beyond the home-base, which extends the social capital available to small businesses. The micro-businesses in this study have been shown to do just that in using ICTs to create virtual organizations and do distributed work as a geographically scattered project team. They are also shown to attempt to bridge 'structural holes' (Burt 1992) by making contacts with people in groups they would like to access via key Internet portals for a variety of opportunities. As Keeble *et al.* (1998) suggest, business support agencies must be aware of the importance of both local and national/ global networking. Whilst small business support must continue to focus on supporting and developing 'munificent' local environments (Dubini 1988) to foster entrepreneurship with informal face-to-face forums and places to interact (Venkataraman 2003), it must also help small businesses think strategically about their networks and networking in terms of what online networks and spaces can do for them. Training courses or one-to-one mentoring provided by business support agencies or educational institutions embedded in business networks could raise awareness of the national and global networks which can supplement the opportunities and social capital available to small businesses from local face-to-face networking. This would also involve the extension of reflexive networking into the computer-mediated domain, to think about strategic networking (Gulati 1998; Jarillo 1988) beyond the possibility of inter-firm alliance. It would encompass the bigger universe of opportunities a small business can benefit from, in terms of the vast and growing network society (van Dijk 1999) of weak and latent ties that the Internet provides—reducing some of the inherent constraints of geography and augmenting the 'liability of smallness' (Aldrich and Auster 1986) that many micro-businesses face as a business with few, if any, employees.

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