Digitally-enabled network intermediation in the internationalization of SMEs: A dynamic capabilities perspective

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Introduction

How small and medium sized enterprises (SMEs) sense and seize new opportunities in international markets is particularly important for economies, enterprises and innovation (Teece, 2007; Weerawardena et al., 2007). The Department of Business, Innovation, & Skills (BIS) estimates, for instance, that “between 1996 and 2004 60% of UK productivity growth was attributable to exporting firms” (BIS, 2010: xi). As widely recognized, SMEs are centre stage in the UK economy, representing over 99% of all enterprises and contributing disproportionately “both in terms of its growth and in terms of its ability to respond to a rapidly changing international business environment” (BIS, 2010: 1). SMEs that are involved in exporting are also much more likely to be innovative. Higon and Driffield (2010), for example, found that 43% of exporters were innovative in products, 27% in processes and 21% in both.

SMEs’ sensing and seizing international activities do not happen in a vacuum. Nor are they a solitary endeavour. Research has shown that firms are more likely to internationalize successfully when they can leverage international value creating ecosystems (Dana, 2001; Kudina, Yip and Barkema, 2008) – i.e. “the community of organizations [which] includes complementors, suppliers, regulatory authorities, standard-setting bodies, the judiciary, and educational and research institutions” (Teece, 2007: 1325).

Network intermediaries such as government agencies, regional institutions, universities and venture associations may play an important role for SMEs in their internationalisation activities because of their limited internal resources and expertise to address new markets. In addition, such intermediaries can influence SME’s incentives to collaborate in international markets (e.g. O’Gorman and Evers, 2011). For example, initiatives led by UK Trade & Investment (UKTI) – the UK Government Department with responsibilities on the support of exporting UK firms and the attraction of foreign investments – helped over 29,000 exporters to generate £49.6 billion in additional sales and land 1,172 investment projects from 58 countries bringing over 60,000 jobs to the UK (UKTI, 2013).

In recent years digital technologies have clearly created new opportunities for international exchanges. A well-researched example is the rise of online marketplaces (e.g., Granados, Gupta and Kauffman, 2010; Koch and Schultze, 2011; Lee et al., 2013) which allow firms to easily access customers across geographic boundaries. Arguably, the most prominent examples of such marketplaces are Ebay for B2C and C2C transactions and Alibaba for B2B ones.

It is often asserted that the advent of the digital economy has substantially reshaped how SMEs conduct their sensing and seizing activities across international markets. For

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1 For a review of different types of network intermediaries, see Howells, 2006.
example, the Directorate-General for Enterprise and Industry of the European Commission (2010: 74) has pointed out that:

“[T]he Internet has already made it easier for SMEs of all sizes to overcome some of the barriers to internationalisation. Public bodies may support this process not just by developing specific programmes but also by fostering the development and use of electronic signatures.”

More recently, the House of Lords’ Select Committee on SMEs (2013: 10) has highlighted that:

“[T]he Internet, the World Wide Web and the social media sites have vastly increased and have fundamentally changed the way people and businesses communicate internationally. They have provided many businesses with new opportunities for international business... We have no specific recommendations to make in this area but recognize the huge potential for growth.”

Government-led initiatives such as the UK’s ‘Open-to-Export’ (www.open-toexport.com) represent only the tip of an iceberg composed of countless network intermediaries (for examples of UK intermediaries, see Mortara, 2010) which invest regularly and substantially to support the internationalization of SMEs, both in the UK and in many other countries (European Commission, 2008a). A prominent example, co-financed by the European Commission, is the PIPEnet initiative (www.portalpipe.com) developed by the Spanish Institute for Foreign Trade “to promote the strategies of international business... by using personalized consultancy services and the most appropriate technology tools” (European Commission, 2008b). With a clear focus on digital technologies, in the first two years of PIPEnet around 1,500 Spanish SMEs have reportedly benefited from the initiative (European Commission, 2010).

Yet, despite the existence of these networks and important anecdotal and evaluation evidence about their operation, very little is known about the specific role of digital technologies in amplifying the activities of network intermediaries to help SMEs succeed in global markets. An EU report published in 2013, for example, has identified 658 intermediaries based in EU-27 countries offering 993 support services for the internationalization of SMEs, but paid little attention to understanding its digital characteristics beyond the acknowledgment of their role in aggregating information (European Commission, 2013). Academic research is surprisingly silent as well.

This pilot research, therefore, explores how SMEs leverage international value creating ecosystems, with particular attention to the role of digital technologies used by network intermediaries to promote their activities and provide their services, e.g. mailing lists, social media, online matching platforms, etc.

**Theoretical background**

**Dynamic capabilities and internationalization**

The research project draws upon the research stream on dynamic capabilities (Giudici and Reimmoeller, 2012) with a focus on international value creation ecosystems (Teece, 2007, 2012). The dynamic capability view (Eisenhardt and Martin, 2000; Teece, Pisano and Shuen,
suggestions that, in order to prosper in rapidly changing environments, firms need to develop a systematic capacity to conduct activities to sense and seize new opportunities and to transform themselves accordingly (Teece, 2007). These dynamic capabilities allow firms to extend, modify, or create those organizational capabilities of the enterprise to continuously pursue competitive advantage (Helfat et al., 2007; Winter, 2003). Dynamic capabilities are particularly important for firms seeking to export because “they must develop certain strategic and organizational capabilities to counteract the natural advantages unique to local businesses” (Luo, 2000: 357).

Prior research has conceptualized three classes of dynamic capabilities: sensing, seizing and transforming (Teece, 2007). Sensing dynamic capabilities encompass a firm’s search activities ‘to position itself for making the right products and targeting the right markets to address the consumer needs and the technological and competitive opportunities of the future’ (Teece, 2012: 1396). Sensing activities entail “an inherently entrepreneurial set of capabilities that involves exploring technological opportunities, probing markets, and listening to customers, along with scanning the other elements of the business ecosystem” (Teece, 2011). In the earlier stages of the internationalization process, in particular, the development and deployment of sensing dynamic capabilities may help SMEs overcome a lack of international experience and go beyond “its domestic routines in terms of collecting information, disseminating that information across the organization, and designing a corporate response to the market” (Armario, Ruiz and Armario, 2008: 490).

If sensing dynamic capabilities can provide access to external knowledge, seizing dynamic capabilities focus on the realization and exploitation of this knowledge. In this respect, the internationalization process itself can be seen as “a path a firm decides to follow in order to seize worldwide opportunities” (Prange and Verdier, 2011: 127). Seizing dynamic capabilities thus pertain to the creation of new product or services – as well as new business models – which can transform recognized opportunities into valuable outcomes (Harreld et al., 2007; Teece, 2007). They also involve securing access to capital and skilled human resources. This often entails forging new relations with customers, co-operators, suppliers and distributors because “companies that successfully build and orchestrate assets within the ecosystem stand to profit handsomely” (Teece, 2011). For instance, Zhong, Peng and Liu (2013: 2482-2483) found that Chinese companies were more effective in going abroad when building on “accumulated internationalization experience [obtained] through cooperation with partners from the developed markets”. Similarly, Karra, Phillips and Tracey (2008) provided a detailed account of how a Bulgarian serial entrepreneur initiated the first ever menswear chain in Russia by forming first a partnership with a large Turkish manufacturer at the time focused solely on the home market.

Once opportunities are recognized and seized upon, transforming dynamic capabilities are needed to achieve “semi-continuous asset orchestrations and corporate renewal” (Teece, 2007: 1335). Strategic renewal includes “the process, content, and outcome of refreshment or replacement of attributed of an organization that have the potential to substantially affect its long-term prospects” (Agarwal and Helfat, 2009: 282). Semi-continuous asset orchestration includes processes such as coordination/integrating, learning and reconfiguring (Teece, 2007; Teece et al., 1997) which are fundamental to achieving “the best strategic ‘fit’: firm with ecosystem, structure with strategy, and assets with each other” (Teece, 2011).
Key to effective transforming dynamic capabilities is excellence in knowledge management and properly designed corporate governance mechanisms. For example, Pan and Scarborough (2010: 372) investigated the process through which Buckman Laboratories developed a systematic knowledge management capability “to effectively and efficiently share tacit knowledge from on-going practice and to create explicit organizational knowledge for future events”. The company used a mix of corporate intranets and communities of practices to connect its international subsidiaries and keep its global strategy aligned. Bedrow and Lane (2003: 28) also found a significant role for knowledge management in leading “enhanced adaptability and responsiveness for [international joint ventures], and long term strategic benefits for the parent firms”. With respect to corporate governance, for instance, Fernando and Nieto’s (2006) study suggested that corporate ownership tends to favour internationalization of SMEs whereas family ownership does not unless a corporate blockholder is present. Zahra, Neubaum and Naldi (2007: 309) also found that ownership and governance systems, particularly the presence of independent outside directors in SMEs’ boards, “significantly influence the development of knowledge-based resources necessary for internationalization” and how SMEs sense and seize opportunities in international markets.

Dynamic capabilities and network intermediation

A dynamic capabilities perspective focuses attention on the importance for internationalizing firms to be fully aware of how many their internal processes and routines fit the characteristics of the intended target markets. Sensing and seizing activities in global markets must be conducted with a deep level of what Schreyögg and Kliesch-Eberl (2007) termed ‘organizational self-awareness’. As Teece argued (2007: 1341), in environments undergoing rapid change and “exposed to the full force of international competition, there is little room for big mistakes”. Organizational self-awareness is grounded on a careful, self-conscious assessment of a firm’s resources (Danneels, 2010) and on detailed market intelligence to acquire information “regarding lead users, customers, competitors, and relevant publics” (Song and Thieme, 2009: 47). In this respect, prior research suggests that linkages with external parties may substantially influence how firms become self-aware of their internal and external environment (Granovetter, 1973; Gray, 2007; Lee, Lee and Pennings, 2001; Uzzi, 1997). Nevertheless, despite calls for more studies (e.g. Teece, 2012), the influence of external linkages such as those with network intermediaries has been mostly overlooked in dynamic capability research. Recent exceptions are studies which started to show that external linkages with consultants (e.g. Døving and Gooderham, 2008) and service organizations (e.g. Agarwal and Selen, 2009) may play a crucial role in how firms sense and seize new opportunities. Equally rare are studies on SMEs in this context. A notable exception is Raymond and St-Pierre (2013), who focused on the strategic capabilities that enable SME internationalization and suggested that a more tailored approach by network intermediaries would be beneficial. Similarly, Tang (2011) observed that the networking capabilities of SMEs helped them in obtaining resources for overseas business development.

The case of network intermediaries – and more generally of formal business networks (Parker, 2008; Schoonjans, Van Cauwenberge and Vander Bauwede, 2013) – is particularly interesting because they often sit at the intersection of firms’ value creation ecosystems (Teece, 2007). For example, Paquin and Howard-Grenville (2013) provided a detailed analysis of how a business network focusing on industrial symbiosis was created and developed by the UK National Industrial Symbiosis Programme. Similarly, Schoonjans et al. (2013) found a significant correlation between SME growth and participation in a Flemish government-funded programme named PLATO aimed at formal networking.
As it may be expected, external linkages can also impact on how firms internationalize (Loane and Bell, 2006; Sharma and Blomstermo, 2003). Indeed, firms often approach international markets by building on long-standing relationships with intermediaries such as trade associations, industry cluster organizations, government agencies and the likes which provide access to information and communication as well as support the creation of new contacts with potential suppliers, partners, and customers (Hallen, 1992; O’Gorman and Evers, 2011). For instance, as reported by Chetty and Blankenburg-Holm (2000) government agencies such as Trade New Zealand and local Regional Development Boards were instrumental in supporting the internationalization process of SMEs in New Zealand.

In international environments network intermediaries can influence SMEs’ dynamic capabilities by shaping how they absorb market knowledge and transform it via valuable innovations (e.g., Zahra and George, 2002). For example, in a study on the Irish seafood industry, (O’Gorman and Evers, 2011) found that government-funded export promotion organizations played an important role in enhancing firms’ availability of resources and information on internationalization opportunities. They concluded that “the critical function of [export promotion organizations] is information intermediation between local firms and international customers” (O’Gorman and Evers, 2011: 359).

The role of network intermediaries in this context is significant. Network intermediaries can help SMEs “to market their products better in the international market place (Gillespie and Riddle, 2004: 462) thus subsidising “the international marketing efforts of resource-constrained” firms (O’Gorman and Evers, 2011: 341). They can also promote institutional trust among home and foreign firms thus encouraging outward internationalization – e.g. access to foreign markets and seeking international partners – and inward internationalization – e.g. accessing management skills and technology as well as attracting direct investment from foreign partners (Zhou, Wu and Luo, 2007). In this way, for instance, SMEs can overcome a lack of production capacity and obtain better institutional support (Zhou et al., 2007; Wan and Hoskisson, 2003). As Zhou et al. (2007: 675-676) conclude, network intermediaries may be “vital to the identification of new opportunities (Ellis and Pecotich, 2001), to gain access to foreign markets (Ellis, 2000), and to develop specific competitive advantages through the accumulation of international knowledge and/or the development of formal business linkages across borders (Styles and Ambler, 1994; Sapienza, De Clercq and Sandberg, 2005)”.

Dynamic capabilities and digital technologies

Scholars have long argued that dynamic capabilities are likely to be the only robust source of sustainable competitive advantage in rapidly changing environments (Teece et al., 1997). With the advent of the digital revolution (Lanzolla and Anderson, 2010), dynamic capabilities seem to have become even more relevant. Digital change is highly pervasive (e.g. Mayer-Schönberger, 2009) and “transforms commercial practices and reshapes major industries” (Rosembloom, 2000: 1083). As Shuen and Sieber observed (2009: 59), “the emergent technological landscape enables firms to put dynamic capabilities into practice easier than ever before, since it allows for ongoing collaboration and interaction between companies and users, hence fostering new types of innovation”. Digital technologies “have created new opportunities for hitherto separate markets and feed the growing desire among consumers for
integrated solutions and services” (Doz and Kosonen, 2007: 100). Prahalad and Oosterveld (1999) similarly suggested that companies should engage in strong transformation processes to cross their traditional industry-boundaries and respond to digital convergence pressure. Other scholars (e.g. Sambamurthy, Bharadwaj and Grover, 2003; Yoffie, 1996) pointed out the existence of a process of increasing convergence and the blurring of traditional industry boundaries. Afuah (2003) suggests that digital technologies such as the Internet are a major driver of this process.

Taking stock of the literature, there is evidence that “contemporary firms are making significant investments in information technologies (such as Web services, data warehousing, customer relationship management, or supply chain management technologies) to leverage the functionalities of these technologies in shaping their business strategies, customer relationships, and extended enterprise networks” (Sambamurthy et al., 2003: 238). As a result of the emergence of digital networks, “companies can no longer conceive of their capabilities in isolation, but must learn to co-create them within a broader, dynamic and non-zero-sum ecosystem of external partners” (Shuen and Sieber, 2009: 59). Leveraging digital networks, firms can greatly enhance their sensing and seizing activities (Overby, Bharadwaj and Sambamurthy, 2006; Sambamurthy et al., 2003). The execution of transactions, the exchange of information and the development of innovative business processes can be completed at an unprecedented pace (Weill and Vitale, 2001). By timely and continuously reconfiguring their resources, such digitally-enabled organizations have “new channels for accessing customers, real-time integration with supply chain partners, new efficiencies in internal operations, and offer new digital products or services” (Wheeler, 2002: 126).

There are many ways through which digital technologies may enable dynamic capabilities (El Sawy et al., 2010; Pavlou and El Sawy, 2010; Zhang, Sarker and Sarker, 2013). Overall, there seem to be growing evidence that digitally-enabled dynamic capabilities can positively influence firm performance (e.g. Poulis, Poulis and Dooley, 2013; Wang et al., 2011). Arguably, the most immediate influence is on how firms conduct their sensing activities. Frasquet, Dawson and Mollá (2013), for instance, observed the growing importance of social media and digital data in how retailers gain market intelligence by analysing customer perceptions and to communicate to potential customers. Examples include the use of the Clubcard programme by Tesco (Turner and Wilson, 2006). Selander, Henfridsson and Svahn (2013) also found that digital technologies helped Sony Ericsson search for complementary capability partners across different ecosystem in which the company participated.

Digital technologies may also play a central role in seizing activities. Digital platforms, for example, can enhance supply chain and partnerships activities by supporting the unbundling of information flows from physical flows and by enabling firms “to share information with their supply chain partners to create information-based approaches for superior demand planning, for the staging and movement of physical products, and for streamlining voluminous and complex financial work processes” (Rai, Patnayakuni and Seth, 2006: 225). On the customer-side, Barua et al. (2004: 609) found that “the extended reach and increased richness of electronic interactions may enable firms to acquire new customers, retain existing customers through improved customer satisfaction, and to up-sell and cross-sell through better and timely customer knowledge”.

Finally, reconfiguration dynamic capabilities can also be shaped by digital technologies with particular respect to knowledge management processes (e.g. Nonaka,
1994). Vaccaro, Veloso and Brusoni (2009), for instance, found that digital tools helped a large European automotive company to generate richer tacit knowledge, to coordinate socialization activities between geographically dispersed individuals, to diffuse more effective training material, to enable the precise repetition of specific tasks with workflow systems with a reduced number of mistakes, and to improve the prototyping process. Similar conclusions have been also drawn by Mahr and Lievens (2012) in their study on the creation of innovation-related knowledge in Nokia BetaLabs, a large virtual community used by Nokia to engage with technology-savvy lead users.

With respect to SMEs, Alegre, Sengupta and Lapiedra (2011), found that knowledge-management dynamic capabilities mediates how knowledge management practices foster innovation performance in high-tech SMEs. However, whereas it is clear that, overall, knowledge management is central for SMEs growth and development (e.g. Chirico, 2008; Desouza and Awazu, 2006; Durst and Edvardsson, 2012; Hutchinson and Quinta, 2008; Salojärvi, Furu and Sveiby, 2005; Van de Vrande et al., 2009), there is very little research on how SMEs use digital technologies to manage their knowledge base. An important exception is the recent study by Kim, Lee and Lee (2013: 156) who analysed Web 2.0 practices of 100 US SMEs and concluded that, while most firms in the sample adopted web-enabled technologies to some degree, “SMEs needs to increase their efforts to improve their performances, to connect with consumers and to remain competitive”.

**Digitally-enabled network intermediation in international markets: A pilot study**

The above literature review highlights how the dynamic capabilities perspective can provide promising useful lens to explore the variety of approaches followed by network intermediaries to deliver their internationalization support services, with particular attention paid to the use of digital technologies. In this respect, both academic and policy-oriented research is surprisingly absent. Whereas somehow disconnected research streams underline the importance of network intermediaries in technology clusters (e.g. Zhang and Li, 2010) and in developing virtual networks (e.g. Verona, Prandelli and Sawhney, 2006) as well as in facilitating open innovation in SMEs (e.g. Lee et al., 2010), research has yet to systematically investigate how network intermediaries can use digital technologies to support firms’ sensing and seizing activities.

In this pilot project, we aimed to address this gap. Our long-term aim was to contribute both to a more complete theoretical explanation of the digital revolution in internationalization activities and to a more detailed understanding of the practical challenges experienced by network intermediaries and firms when leveraging digital networks. The key underlying question was to assess the widely-held assumption suggesting that digital technologies – and particularly the Web 2.0 – might be substantially transforming how business is done across national borders.

We were also particularly interested in the relationship between the use of digital technologies and more traditional channels for international business, such as trade shows and matching events (Ellis, 2003). These channels are, indeed, very central in how SMEs identify potential international partners, customers, and suppliers (Evers and Knight, 2008; Hara and Kanai, 1994; McAuley, 1999; Raymond and St Pierre, 2013). In this respect, Kontinen and Ojala (2011: 490) found that trade exhibitions formed “the primary context for the international opportunity recognition” of a sample of eight Finnish family-owned SMEs. In the same vein, Reid (1984: 154) suggested that participation in international trade-fairs is
often “more likely than any other information search activity to be of use to the export decision-maker”.

Clearly, traditional internationalization initiatives do not happen out of the blue and are generally organized by specialized network intermediaries with or without the collaboration of government agencies (Lu et al., 2010). These intermediaries provide what Hallen (1992) termed as ‘infrastructural networks’, that is a set of social ties which “can include business actors and institutional actors, that are not directly related to a specific purchase or sale, but who act as vehicles for information, communication and influence” (Evers and Knight, 2008: 546). As widely recognized (e.g. Munuera and Ruiz, 1999; Godar and O’Connor, 2001), most firms – and SMEs in particular – participate in trade shows and matching events to gather information about international market access, sell their products or access potential suppliers. They can also be used as a means of building horizontal networks with government agencies. As Evers and Knight (2008: 556) conclude, international trade shows and matching events can provide “a ‘neutral territory’ and a ‘network space’ for firms to interact and exchange vital resources to advance their internationalization… [they] emerge as an important ‘accelerator’ of internationalization, irrespective of what stage a firm is at in the internationalization life cycle”.

Given the increasing utilization of digital technologies as part of the organization of such internationalization channels, the current paucity of research is surprising. Through this pilot project, we offer a first step towards a better understanding of digitally-enabled network intermediation in international markets. We began with a brief explanation of our methodology and then outline the main characteristics of the cases involved in our pilot study. We conclude with some preliminary consideration and outline some suggestion for a systematic research agenda.

**Methodological considerations**

Since there is very little research on our theme of interest, we followed an exploratory case study approach (Yin, 2008) that has also been advocated in SME research (Perren and Ram, 2004). Importantly, as observed by Teece (2012: 1400), “[dynamic capabilities] can best be analyzed through in-depth qualitative research”. To conduct this pilot research, we thus relied on a number of complementary qualitative sources. More specifically, from August to October 2013 we conducted interviews with eight key informants connected to three network intermediary organizations based in the UK, in Finland and in Italy. Of these, five were employees of the organizations providing the internationalisation services and three informants were entrepreneurs using these services. Five interviews were conducted face-to-face in each target country by both investigators whereas three via video-Skype.

We also obtained a good amount of documents and archival material, including evaluation data collected by one of our informant organizations, to assess the effectiveness of its services. We then buttressed our evidence with data coming from a previous study in a fourth network intermediary (based in Italy) which generated our original interest in the use of digital technologies to support the internationalization of SMEs.

Given the exploratory nature of the research, the interviews were relatively unstructured though guided by research objectives and prior experience. We asked questions on the set of internationalization services provided by each network intermediary and then probed each interviewee for clarification regarding the use of digitally-enabled services. All
participants were fully briefed about the objectives of the research prior to the interviews and allowed us to record the conversation. All but one interview were audio recorded providing the researchers with approximately five hours of conversation, detailed notes and interview summaries for the two investigators.

**Case summaries**

Our target sample included the following organizations of which we now provide a brief description based on the material we were able to collect.

1) **UK Trade & Investment (‘UKTI’, UK – www.ukti.gov.uk).**

UKTI is the UK Government Department with the key responsibility to work with UK-based businesses “to ensure their success in international markets, and encourage the best overseas companies to look to the UK as their global partner of choice.” It offers several programmes ranging from expert advice and practical support leveraging an extensive network of experienced sector and location consultants in over 100 markets worldwide. In the UK, UKTI has two headquarters in London and Glasgow and Regional Directors in England coordinate trade teams composed by a mix of public and private sector and chambers of commerce staff, whereas trade and investments are devolved in Scotland, Wales and Northern Ireland. Abroad, British diplomats and locally recruited staff with in-depth country knowledge and contacted word under the responsibility of a Head of Trade and Investment, with a third of the markets also having a dedicated investment team. As of 2013, UKTI has overall around 1,150 staff members in the UK and 1,265 overseas and collaborates with strategic partners including government related bodies such as BIS, the Foreign and Commonwealth Office (FCO) and UK Export Finance as well as private organizations such as PA Consulting Group, the British Chambers of Commerce and other key trade and membership organizations (UKTI, 2013).

UKTI is currently following a five-year strategy plan named “Britain Open for Business” which was launched in 2011 and included five strategy streams, focusing respectively on outward and inward internationalization services, the support of defence and security sectors, as well as marketing and operations. This strategy includes a structured variety of over 400 events in the UK and abroad as well as dedicated marketing activities to promote UKTI services. To cover its costs, UKTI has its own budget direct from the UK Treasury (£152.7m in 2013) and is also funded by FCO (£52.6m) and BIS (£42.4) as well as income from customers (£11.5m) (UKTI, 2013). UKTI activities are evaluated regularly and reports are published on its performance in terms of number of clients supported etc. With respect to export support, particularly notable are the following initiatives:

- **Passport to Export**, for new and inexperienced exporters
- **Gateway to Global Growth**, for experienced exporters
- **Export Marketing Research Scheme**, to investigate a potential export market
- **Overseas Market Introduction Service**, to access research, identify contacts and plan events
- **Tradeshow Access Programme** support, to attend overseas exhibitions
- **Open-to-Export** platform

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Business opportunities email alerts

Open-to-Export (www.opentoexport.com)

Open-to-Export is a new digital platform launched by UKTI at the end of 2012 to support its outward internationalization strategy. The starting point was the recognition that the level of export support was at the time rather fragmented (Figure 1) and in need of consolidation.

[UKTI (Manager 1)] [T]he vision for the site really came from feedback from the industry... although there were lots of different sources for information and advice on exporting topics, it was very fragmented and, for businesses coming into the space looking to internationalise, there was no clear, single, place that they could go to find what they needed to know... The site emerged as a place to bring together information from across the government and private sector to support SMEs who are considering going [international]... [it] was basically developed as a single point for information that you could get about all the different topics, all different markets, all in one place as a way to make it easier for companies to come and find out what they need to know and move forward.

Figure 1: Fragmentation of support for exporters in the UK (source: UKTI corporate presentation)

Open-to-Export positions itself as a “free online community that brings together experts from the private sector and government agencies to help SMEs successfully enter new markets.” Its main aim is to help exporters gain market intelligence and get bespoke advice on foreign markets as well as share relevant opportunities and expertise and search for potential partners. The first year of operation has been positive and Open-to-Export is consistently achieving over 20k unique visits per months and has features a monthly average of around 4,000 articles, events and opportunities posted by nearly 170 contributing organizations (Figure 2). An important part of this content is a regular series of tutorials and webinars which focus on specific content developed following the evolution of user-activities on the portal (Figure 3).

Figure 2: Examples of organizations contributing to content generation on Open-to-Export (source: UKTI corporate presentation)

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3 UKTI corporate presentation.

EEN is an EU-led initiative to strengthen the growth of the European economy and job availability with particular attention to SME development. EEN was launched in 2008 by the EU Directorate-General for Enterprise and Industry and acts as a ‘network’ of network intermediaries from most European countries, including national chambers of commerce and industry, technology centres, research institutes and development agencies. EEN connects all the participant intermediaries through a digitally-enabled database in which they can share their knowledge, source complementary resources and search for business partners. EEN also works closely with the European Commission in order to contribute to the development of EU policies as well as to feed SMEs’ feedback back to policymakers. EEN is mostly financed through the 2007-2013 Competitiveness and Innovation Framework Programme of the European Commission and it is managed on a daily basis by the EU Executive Agency for Competitiveness and Innovation (EACI), using a large decentralized structure of national and regional offices with over 3,000 staff members. Through the EEN database, firms have “the possibility to identify possible business partners with profiles matching their needs. The firms in the database – currently including 13,000 profiles – are kept anonymous and the request goes to the EEN-offices, but it nonetheless enables firms to act proactively in seeking to establish international cooperation ventures” (Dubois and Hedström, 2011: 11). EEN’s main services include support for:

- Technology Transfer
- Access to Finance
Through its Going International service, EEN acts as an active matchmaker between companies searching for complementary expertise or products. Most of EEN’s matchmaking events take place at international trade shows with a dedicated stand, an agenda of scheduled meetings and support for the preparation. Recent success stories include the successful match facilitated by EEN between a Dutch supplier to the composites industry and a German developed of a promising new eco-friendly technology as well as between a Swedish furniture designer and a Polish manufacturer for her new ceramic vase.4


Video: “Enterprise Europe Network: The beginning (launch video)” - http://www.youtube.com/watch?v=W3kR3-RWtIM&noredirect=1

Video: “The Enterprise Network in Action: Matchmaking” - http://www.youtube.com/watch?v=fERuBYG7sWI&noredirect=1

3) Know-Net Officine Italiane Innovazione (Italy - www.k-n.it)

Know-Net is a strategy consultancy founded in 2005 to support SME development with particular emphasis paid to process and product/service innovation. Know-Net collaborates on a regular basis with a network of universities, research institutions, large firms, and public bodies involved with a variety of challenges pertaining to SMEs. Besides bespoke consultancy services, Know-Net organizes regular training workshops on a variety of themes – e.g. innovation strategy, Web 2.0, product/service innovation - in collaboration with some SME venture associations in several Italian locations.

Officine Italiane Innovazione (www.officineinnovazione.it)

In the summer 2010, Know-Net decided to explore the possibility to use digital technologies to help SMEs improve their productivity. The company investigated the state of the art in terms of open innovation and B2B platforms and decided to create the first social network purposefully dedicated to Italian SME entrepreneurs. In October 2010, the seminal idea for this social network, called Officine Italiane Innovazione (‘Italian Innovation Workshops’) was formed. Given the background of Know-Net consultants – mostly engineers, designers and marketers – the seminal focus was on offering a new product, i.e. a social network. Over time, this focus has shifted towards a more service-based proposition.

[KNOW-NET (Manager)] [Our CEO] had been stimulated by the launch of the iPad and the rise of smartphones and thought that maybe the consultancy industry should embrace these digital tools... nowadays all entrepreneurs... have this tablet, like a newspaper, always in their hands... and therefore we as a consultancy should intervene ‘inside’ this tablet, this smartphone... this has been our seminal insight.”

The name ‘Officine Italiane Innovazione’ was intended to integrate the intangible concept of innovation with the practical side of any business, building on the belief that the essence of innovation is to be a community-based phenomenon that is innovation is something which happens more easily in a relational environment.

In January 2011, the first prototype was ready and, after a rather quick internal beta-testing phase, in March it was launched with a group of friend entrepreneurs already collaborating with Know-Net so to start creating critical mass. In less than two months the number of subscribers grew from 4-5 to 200 and on the 1st of May the social network was officially launched online. By the end of June it achieved around 1,000 members and by Christmas around 5,000. The growth has steadily continued so that in September 2012 Officine Italiane Innovazione had 10,000 members and it currently works with around 11,300 participants (Figure 4).

Since the beginning the online portal has included a forum section with a specific focus on internationalization and an automatic email system which aggregates and forwards to the mailing list international business opportunities submitted by participants and partner organizations both from Italy and foreign countries.

Figure 4: Traffic on Officine Italiane Innovazione up to July 2013 (source: Know-Net data)

4) Compagnia delle Opere (‘CDO’, i.e. “Companionship of Works” - complementary case, Italy)

CDO is a non-profit, membership-based venture association established in 1986 to promote a networking culture and mutual collaboration among its members. CDO currently has around 34,000 cross-sector members, mainly SMEs and works closely with partners such as banks, IT and energy companies, universities and other institutions to provide a wide spectrum of consulting, training, financial and commercial services. Similar to trade unions and industry
associations, it also coordinates some of its member firm’s lobbying activities. CDO has a total of 38 local branches on the Italian territory, formal branches in 17 foreign countries including, among others, Brazil, France, Israel and Kenya, and non-geographic departments specialized in the Agri-Food, IT, and Social Enterprise sectors as well as on entrepreneurial education and the non-profit sector. At the local level, each branch is generally managed by a steering committee composed of owner-entrepreneurs or senior managers of member organizations. Local presidents and vice-presidents are usually businessmen periodically elected by local members whereas day-to-day operations are the responsibility of managing directors and staff members, employed on a full or part time basis depending on the size of the branch.

Matching 2.0 (www.e-matching.it)

In 2005, CDO started organizing an innovative B2B networking initiative called Matching to foster the creation of inter-firm networks among SMEs and SME-large firms. The initiative is supported by the Italian Ministry for Economic Development, the Italian Trade Agency, the national Association of the Chambers of Commerce and the Lombardy and Veneto regional governments.

The cornerstone of Matching is a national 3-day event held in Milan every year involving on average by over 2,000 participating firms, institutions and supporting bodies. There are two critical success factors, leading to the generation of over 50,000 B2B appointments during the event. First, CDO leverages an online matching-mechanism through which participant organization can create an agenda of pre-matched appointments before the event. In the preparation period, local CDO advisors regularly encourage firms to create online virtual showrooms, scanning the list of other participants and send appointment requests. Second, CDO advisors from all branches meet on a weekly basis during the pre-event phase and actively cross-check the creation of the agendas, filtering out potentially fake requests and offering suggestions for additional cross-branch synergies.

During the year, CDO also organizes a series of complementary networking activities at the local level, including preparatory workshop on how to use the agenda and post-event sessions to follow up on new contacts. In addition, the main event is enriched by over 100 thematic workshops organized in collaboration with a network of experts in a variety of fields (e.g. export, innovation, etc.).

Since 2010, CDO has given Matching a more international orientation to support the internationalization of its member firms with the organization of mini-Matching events in countries such as Brazil, China, Qatar, Russia and Spain involving between 150 and 300 participants and based on the same online agenda formula. These international mini-Matching events complement a network of similar replica events held at local and regional level in many Italian branches to facilitate continuous interaction among participants during the year.

Finally, in 2013 Matching has been rebranded as Matching 2.0 to emphasize the growing use of digital technologies. The initiative now formally includes four areas of focus: Inter-firm networks, Internationalization, Relationship with Large Firms, and Clusters (Figure 5). With respect to the Internationalization area, the online portal now allows firms to interact and book appointments with export consultants, legal, marketing and accountant consultancies as well as logistics and transport firms, foreign chambers of commerce advisors, banks and financial institutions and event or trade show organizers. All these
services are aggregated in a dedicated Export Services Portal open to members only. There is also the opportunity to explore the agenda of Matching workshops with a focus on internationalization activities and to search for potential international customers, partners and suppliers among participants. Interestingly, this search function is managed in collaboration with Know-Net Officine Italiane Innovazione.

Figure 5: Home Page of the Matching website (Italian version)


Themes for an emergent research agenda

There seems to be little doubt that network intermediaries can leverage digital technologies to more effectively support SMEs’ sensing activities with particular reference to:

- Information

[UKTI (Manager 1)] “[F]or existing exporters there has been a more mixed feedback... some of them they don’t have the time to use the site or they feel they already know the basic information that we have got so they are more interested in ‘Is this site helping me to find new buyers?’... we are finding is that the value [for] existing exporters is more [related to] keeping them up to date, particularly with [legislation]... We need to look at how we position the site and develop the proposition, but it feels like that is quite a common need.”

[EEN (Staff)] “[I]n our network we offer information about legislation which includes some new directives which influence internal markets... for example [we may] arrange event-days [which] is one of our major services and there are also... courses funded by the EC...”
• **Market knowledge**

[EEN (Entrepreneur)] “[The main value for us is] about following what is happening and what other companies are doing.”

• **Partner search**

[EEN (Staff)] ”Regarding the internationalisation our Company has a service… where companies can upload their company profile and then the web service is available to all the member companies… [They] can search through these profiles and look for matches… [I]t is a database which has proven to be the most efficient way to find international partners for these companies.”

• **Training and education**

[UKTI (Manager 1)] ”[W]hat we have started to do more recently is to do specific educational features on specific topics or sectors that we know are of interest to our user base, partly as evidenced by the type of companies that are using the Q&A and the questions that they are asking… for example an area where we get lots of questions is documentation and the legislative side of export so we have done [some training events which] are proving to be a very effective channel for real-time interaction with companies.”

However, the evidence collected seems to suggest that this digitally-enabled support is at best used to facilitate the first contact but does little to sustain the creation of durable valuable connections.

[EEN (Entrepreneur)] ”[For example], we find one British organisation through the network and we have started discussing with them… EEN helped to get the first contact [then it was up to us and they were not involved anymore]. I don’t know if they offer company [additional] support… I don’t really think that would have helped us because you have to do the sales work yourself after that first contact. Of course, it helps to get the first contact…”

[KNOW-NET (Entrepreneur 2)] ”[A big] problem we had from an institutional point of view is that the institutional agency perhaps organizes a business mission abroad… they could even find the right contact for you… then you go abroad, you do the meeting and then ‘very nice to meet you’ and goodbye! At that point they abandon you… when you would need help the most… that meeting is not even the aperitif… it is a step before the aperitif… from this point of view, you are left completely alone!”

In this respect, the participation in online platform needs to be sustained because otherwise firms risk being overwhelmed by information and contact redundancy.

[KNOW-NET (Entrepreneur 1)] “This is a very interesting thing! [However] you need to take into account the risk of being unfocused… I mean, with so many contacts, so many opportunities, you need to be selective [otherwise] you run the risk of spending a long time nurturing channels you think are going to be useful and you never conclude any business deal… Therefore I am a passionate supporter of these platforms, yet with very selective criteria… nowadays to do business you need to be very certain and close your deals very rapidly!”

How seizing and reconfiguring activities can be supported is however, more of an open challenge. The evidence suggests that inter-firm collaboration – an important aspect of seizing activities - can be very important to access international markets. Network intermediaries can certainly foster this collaboration, particularly when they can build upon a set of shared values as in the case of most venture and trade associations (e.g. Spillman, 2012). It is more unclear, however, how this could be achieved in private organizations and government-led initiatives.
"On this path, I found it very useful to be part of a network... We have been participating in Matching for six years now... I found a lot of support within CDO. More specifically, I met a small entrepreneur like me based in my area, with who I shared my international adventure. They produce lifts, things which have nothing to do with my products... but somehow we found some synergies... and I am living this adventure with him. It seem simplistic, but the very fact that you have somebody on whose shoulders you can 'cry' when you are disheartened or who could give you a pat on the back when you are very optimistic it is very helpful... because, honestly, if I had to do what I did all alone, I am not sure I would be able to...”

Nevertheless, all network intermediaries seem to play a role in enacting institutional trust through the proactive managing of their networks.

"The feedback [from new exporters] has been that... this is an invaluable research tool so they can do their business planning and they can ask questions and they can find out about all the key topics. It is trusted because of the government backing and it is all in one place and it has got a fresher, more accessible, feel than a lot of government websites... it has been well received.”

"We are rather proactive... We go out to people and connect... one of my recent examples is a Finnish company... for personal reasons they were planning to go [to Spain]... so they asked us if it was possible to get some contacts from [the target region] which would help them establish the business there... [it was] relatively easy for me to send an email to my contact in [Spain] but first we had to identify the access needs for the partnership or the information that they were requiring... then we drafted the email together... and [then our partner there] provided an extensive [list of contacts] from this region who could provide a service for this company.”

Digital technologies are also perceived to be potentially important to enhance mutual support, yet how this could be successfully achieved in practice remains a challenge.

"The other key element of the site was... the idea of creating a forum where companies could get advice from experts and other businesses that had been through it and their specific business questions. I think that the aspiration was that it would be peer-to-peer [that is] businesses advising other businesses... [However] at the moment it has been more transactional, so someone asks a question and an expert gives an answer...”

"[Our] overall objective is to get the site to be more of a network so that there is also a peer-to-peer support network... at the moment there is not enough [interaction] between exporter and exporter and I think that is very much something that we want to develop with projects.”

"[We had hoped that all specialist forums, like that pertaining to tenders], could be managed by companies offering services for tenders... yet it did not happen, because on the one hand they are perhaps not used to using the Internet for this purpose or, on the other hand, perhaps the numbers were too low and they did not want to make an effort for 20 people... I do not think that group took off!”

One reason may be the natural tendency of entrepreneurs to ‘protect’ access to valuable opportunities. From a research point of view, it would be interesting to further investigate the dynamics of B2B social media which seem to work in a rather different way from more consumer-oriented social media, e.g. Facebook, LinkedIn, Twitter, etc.

"[You should consider] the fact that these platforms are not like Facebook... there is a fundamental problem... [on Facebook] you go online and automatically you want to invite everybody else... for entrepreneurs it is the opposite! You get online and think ‘this thing is really interesting! I can do some business here... I am not going to let anybody else know!’ It is therefore absolutely not going viral! We were hoping – and we were wrong – to make it viral... yet as soon as an entrepreneur understands that it is useful, he/she keeps the secret! This becomes a barrier!”
An important barrier to successful network intermediation seems to be the challenge of content generation which requires substantial investments both in terms of resources and time if it is to be attractive to potential users.

[KNOW-NET (Manager)] “The real Trojan horse is, in my opinion, the content... All very successful portals have an enormous amount of content. They are based on a lot of journalistic work in the background... moreover, generally all the websites which work have a single theme, they are not generic... the Internet does favor the niche, special themes, not generic ones... yet we are forced to be generic otherwise our numbers are too small.”

[KNOW-NET (Manager)] “[It is important that the forum] is moderated and animated so that when you see somebody who is generating an interesting conversation, then you can engage with him... and perhaps you bring it to the home page... you highlight all the most interesting conversations... [yet this] requires money and effort...”

[UKTI (Manager 1)] “In terms of the overall services, the website provides a whole bunch of static information, [such as] some articles and some videos that are uploaded by contributors... there is no editorial voice on the website itself so we don’t create any bespoke editorial... [Then there are] other sections of the site which list events, trade shows or missions that are happening... another section is on business opportunities...”

[UKTI (Manager 2)] “[I]t is the same challenge of constantly having to find new content and that is an area that we are conscious of in our site and we need to do more to make sure that it keeps coming through... I think that there is just under-estimation of the amount of effort that it takes to get a website like this off the ground and to keep it running on a regular basis... there is a lot of day to day grind that was behind it and I guess that is what other country forums will be finding as well... it is not you launch it and off it goes... you launch it and you have to hold the hand the whole way through and constantly think of new things to do or new ways to pull people into the site.”

In this case, government-led initiatives have the potential to be effective.

[UKTI (Manager 1)] “[T]he site hasn’t been very actively curated so we basically have welcome content from whoever wants to put it in... [now] we are adopting a more editorial approach so, whilst we are not writing the content, we are being much more selective about finding the best articles... and we arrange the content that we think will best support exporters... we are keen to combine the benefits of having the whole community contributing and having a site that aggregates all that content with the value to a user of having someone cherry-picking and saying 'This is the stuff that is most worth spending your time on'. I think moving from the light-touch model to a more curator-approach and having a navigation support is another key element of the site’s future... [W]e are still in discussions about which bits should be managed internally versus agency... the skill set would be internal and the preference would be to have in-house skills.”

Nevertheless, in terms of value capturing potential, important questions regarding the return on investment remain open. It is unclear if it is possible to create viable business models of this type without public investment/subsidies. This may also unveil an important space for innovation. Appendix 1 details the evolving challenge experienced by Know-Net in trying to develop a sustainable business model.

[UKTI (Manager 1)] “[F]or example, if we were a commercial entity and we wanted to earn our membership fees, we would need to provide some additional value beyond the website and that additional value would have to be something around [a consultancy service].”

[EEN (Staff)] “[Access to contact is free, yet if] you need some legal advice or [other services], this extra advisory services could be charged.”

Besides evidence related to core themes within the dynamic capabilities perspective, this pilot report also highlights at least other two important themes for future research: a) the complex and still evolving impact of digital technologies on traditional B2B channels; b) the
challenges related to the coordination of internationalization efforts put in place by individual network intermediaries and across different – and often complementary – ones, particularly within the European context.

**Web 2.0 and physical events**

Although our case study approach does not allow us to draw definitive conclusions, we observed a recurrent theme related to the relationship between digitally-enabled services and traditional B2B channels, with particular regard to networking and training events and trades shows. Open-to-Export, for instance, is managed as a purely digital initiative with only limited interaction with other physical events organized by UKTI.

**UKTI (Manager 2)** “[O]rganising physical events kind of takes away from what our core position is... it is not really a natural thing to do that. If you look at organising an event and getting people to go there... we have done it in the past and found that it has not been as effective as other methods... we service a lot more people using... digital marketing or partner channels... web groups are far more effective for us as a means of pushing things than actually organising physical events.”

**UKTI (Manager 1)** “By virtue of our association with UKTI, they have a massive programme of events, so in terms of marketing we can pick those events that are relevant... we haven’t really had to face the decision as though we were a stand-alone entity whether or not we needed to run our own events... at the moment we stay with that...”

**UKTI (Manager 2)** “The big one for us is Export Week, which UKTI runs in November [and in] which they bring over lots of commercial operators throughout the world... [W]e go along with an interactive stand with members of our staff to tell people about the site and talk to them.”

A central aspect worth further investigation is also the fact that firms – and in particular SMEs – seem to be reluctant to conduct B2B exchanges without face-to-face negotiation.

**UKTI (Manager 2)** “[T]he other aspect [is] that actually... [with respect to financial services] people just want to interact one on one with their bank managers and they don’t want to receive that information digitally because... they want to talk to other people... so I think that it doesn’t fit the digital [medium] as well as other [services].”

**EEN (Entrepreneur)** “I have found [the online network] very useful... to get a good view on what is happening, but if you really want to do business with somebody then [you have to go and meet the client]... [W]e are OEM manufacturers [and people] really want to know what is behind [the contact]... I think it can be very different if you sell... consumer stuff... [but] our instrument [is] not something that you just buy and then forget... we don’t sell any consumables.”

An explanation might be – at least in the case of firms dealing with Officine Italiane Innovazione – the limited digital experience of most entrepreneurs.

**KNOW-NET (Manager)** “In my opinion, most entrepreneurs are shy... I mean, it is not the case that people do not participate in the forum, in the discussion started by another entrepreneurs... because they think it is useless... An anecdote... One entrepreneur once told me: ‘I had written a complete answer [to a thread]... I spent a quarter of an hour creating a proper response... then I looked at it and I told myself that that was not something I wanted public because perhaps it was stupid’... and he did delete it!”

**KNOW-NET (Manager)** “The shyness of traditional entrepreneurs, who are not used to being online, is one of the challenges... we are talking of people in their 40s... who have some difficulties in using the web... therefore only the ‘usual suspects’, the most courageous and extrovert ones were participating...”
In addition, the data suggests the presence of a serious barrier to the effective diffusion of digital technologies in a B2B context. Long-standing, traditional intermediary operators, such as venture associations and trade show organizers perceive a threat from digitally-led support initiatives to their established membership-based approaches.

**[KNOW-NET (Manager)]** “These organizations, in my opinion, are at the end of the day blocked by the fact that they say ‘if my entrepreneurs get to know each other via web, even on my website... then they are going to understand that they do not need me anymore and they will start going only online...’ and then, if it is a trade show organizer, they think the entrepreneurs are not going to buy square meters anymore, if they are a trade association, that they are going to lose members…”

**[KNOW-NET (Manager)]** “Trade show organizers are worried because they fear the disintermediation... the relationship between physical trade shows and online B2B platforms is not easy... yet nobody really understands how it works... because it could even be like in scientific research... where people used to think that the Internet was going to make scientific conferences useless... yet physical meetings have actually increased in number because it became easier to work in teams... and with more teams, the need to meet face-to-face is now stronger... therefore it is not to be taken for granted that they are an alternative!”

**Intra- and cross- coordination in network intermediaries**

A second important suggestion to emerge from the research is the perceived importance of better coordination first, within different branches of each network intermediaries, as a way to enhance the quality of the referral process; and second, across different ones, to enlarge the pool of potential contacts and business opportunities.

**[KNOW-NET (Entrepreneur 2)]** “The most relevant limitation which I can see is that many contacts are not very well referenced... there isn’t a filter or a pre-screening process... there is a bit of everything! If all potential contacts were better selected... and therefore more professional!... [In the case of] internationalization, [perhaps it would be necessary] to have local advisors in each foreign country who could filter the contacts... If so, there could be a higher guarantee that the person you are going to meet is serious... Closing a deal is a different matter, yet, at least I am talking with somebody who is not going to waste my time, which is unfortunately the most precious resource, I – and all my colleagues – have! In this respect, the economic crisis has made things worse... particularly when we talk of going international... dealing with somebody in Italy requires time... but going abroad requires even more time... and then you have challenges in terms of time zone, language, etc... and if you travel the complexity goes up even more!”

**[KNOW-NET (Entrepreneur 2)]** “In my opinion Officine could launch a bidirectional service with foreign branches with local advisors who could act as the interface and the filter of contacts. In other words, when I interact with the platform of Officine with somebody from Morocco or Kazakhstan, I know that this person is not going to waste my time... he/she is surely professional and willing to do serious business... the fact that the business goes on is a different matter, but I know that the other person is like me... We need a sort of selection of contacts; otherwise the risk is to run behind meaningless contacts!”

Whereas the Enterprise Europe Network surely represents an important attempt of cross-country coordination among intermediary organization, there still seems to be a strong focus on the host country.

**[UKTI (Manager 1)]** “It has worked best because we work with great partners and use them effectively, to get the quality of content, the credibility and the reach... the proposition works when there is a strong combination of government and private sector organisations. [However] we don’t work with any other international entities, so it is mainly UK centric organisations.”

**[EEN (Staff)]** “[O]ur events are just for clients with an interest in the Finnish markets... and the match-making service is the third service that we offer... all the match-making events are in the main database... we also participate in them ourselves and try to find Finnish companies... so when an SME goes through this event list... we would have already identified [a potential partner].”
This is also reflected in a predominant emphasis on outward internationalization – i.e. export - versus the creation of inward partnership and business opportunities.

[UKTI Manager 1] “One of the areas of development to look at is how the site could support those more developed exporters by linking with them potential buyers and partners in other markets... [however] I do not think that it would ever be an inward investment focus... [the platform focuses] on export rather than getting investment back into the UK... but in terms of creating some sort of virtual market place... I think that is something that we are looking at in terms of our road map.”

Concluding remarks

In this pilot research project we have taken a dynamic capabilities perspective to investigate the use of digital technologies by network intermediaries, in supporting the internationalization of SMEs. Our starting point was the widely-held assumption that digital technologies are substantially transforming opportunities for the internationalization of organizations. In particular, we were interested in understanding how firms’ sensing, seizing and reconfiguration activities could be enhanced by digital technologies and external linkages with network intermediaries and build upon more conventional channels for international business such as trade shows and matching events.

Despite clear limitations of the research in terms of sample size and generalizability, it does provide some insightful findings and highlights some important areas for further consideration both from an academic and practice standpoint. Specifically these relate to:

1. **Supporting sensing dynamic capabilities**. Network intermediaries play an important role in supporting how firms sense opportunities in international markets. This is particularly important with regard to promoting information and partner search, market knowledge acquisition, and training and education. Digital technologies may surely amplify the effectiveness and efficiency of this aspect of support.

2. **Fostering inter-firm collaboration**. The research shows that, overall, network intermediaries have a limited role in supporting SMEs’ seizing and reconfiguring activities. However, they are significant in being able to foster inter-firm collaboration through cultivating shared values and institutional trust. Digital technologies show the potential for enhancing inter-firm collaboration yet the evidence is inconclusive at this stage.

3. **Limited network effect**. Network effects, e.g. virality, typical of more consumer-oriented social media, amongst SMEs do not seem to be valid in a B2B environment. SMEs tend to be unwilling to proactively and readily share access to valuable opportunities found in online B2B platforms because of their fear of loss of control and losing the market opportunity.

4. **The challenge of content generation**. Effective online platforms require detailed attention to generate relevant and useful content. This may require resources not easily available to non-governmental network intermediaries. However, this may raise important questions regarding the effectiveness of government investments, as well as open opportunities for digitally-enabled innovation in intermediate markets.

5. **Limited role for digital technologies in traditional B2B channels**. There seem to be important barriers to developing a more extensive role for digital technologies in traditional contexts. This derives from the perceived threat by longer-standing, traditional intermediaries such as venture associations, chambers of commerce and, importantly, trade show organizers with respect to their membership-base. In addition,
face-to-face interaction is regarded as essential in B2B negotiations, with the exception of low-price products sold via e-commerce portals (e.g. Alibaba).

6. **Need for enhanced coordination within and between network intermediaries.** The effectiveness of the support provided to SMEs in their internationalization efforts requires more internal and external coordination. Internally, better co-ordination between different branches of each network intermediary is required to enhance information sharing and cross-branch synergies in terms of national and international opportunities. Externally, more coordination between different network intermediaries, particularly in the presence of cross-country complementarities and especially within the European borders, would strengthen their role and support ‘offer’ – to the benefit of SME users.

In conclusion, the research suggests that the impact of digital technologies on network intermediation, in assisting the process SMEs’ internationalization, has yet to be fully realised. Hence, it is important to treat with caution those voices that advocate the revolutionary role of digital technologies, in changing how SMEs internationalize. It is clear that digital technologies and network intermediaries play an increasingly important role, particularly in the sensing phase and in searching for complementary partners. However, it seems to us that there is a lack of innovation in the space of online B2B intermediary network platforms. These opportunities might be only seized with a systemic, more coordinated effort among several public and private organizations, particularly across national boundaries such as at the European level. At the same time, based on these preliminary findings, we also argue that digitally-enabled network intermediation for SMEs represents a promising area for further research, with strong potential for impact and relevance in the business and policy domains.
References


Appendix 1: Business model evolution in Officine Italiane Innovazione

[Extracts from an interview with a Know-Net manager]

- [At the beginning] we used to create the content by ourselves and it was mostly educational. We used to select a theme, e.g. ‘how to set the price’, which, based on our consultancy experience, we knew was important... they were very straightforward workshops... there was an introduction from us with a recorded video on Mondays, plus some reflections based on selected material on Tuesdays... On Wednesdays we had a video interview with an entrepreneur who addressed the issue effectively... on Fridays and Saturdays [our CEO] was presenting his conclusive remarks and recommendations. This approach required quite a lot of time!... it was a successful approach because we were creating and delivering real value, but it wasn’t sustainable because we never understood how to monetize the initiative so to recover our investment...

- We tried several approaches... at the very beginning we thought: ‘Let’s go with the big numbers and follow the path of all the big guys!... sooner or later we will get some money from advertising!’... we then realized that advertising wasn’t paying off because entrepreneurs were willing to pay max 10-20 euro for a banner which was online for 2 months... it was impossible to be at break-even! We then tried other alternatives... such as the publication of special offers – a sort of B2B Groupon -... but it never took off!

- The most significant effort was... to try to put together a physical and an online intervention. In other words, we organized the exchange of ideas and a conversation on a specific topic online, using the forum, and then we organized a moment of physical interaction between entrepreneurs... Actually, all entrepreneurs are still willing to pay for something like that, and quite a lot. If you propose a physical meeting, they come... and, to an extent, this is the failure of online interaction! It was difficult to make them pay online, but if you organized a physical meeting and asked them 120 euro... they would come from far away... they were willing to pay the fee without any problem and to spend their time as well. It is clear that physical meetings and the exchange of business cards with somebody you meet face-to-face it still something they are willing to invest on... then they go back online and we couldn’t sell them anything else...

- The next step was to try to transpose this interaction online with an exclusive ‘club’... the online platform was free for everybody, but we launched a member-only section called ‘Club of Officine Italiane Innovazione’... whose members could attend all physical events as part of their fee, receive bespoke advice, etc... yet this approach got saturated very quickly, we never went beyond 100-150 members... We thought it was going to attract thousands of entrepreneurs and we were wrong... We did several trial and error rounds... but more error than trial! They never took off! We are now doing this latest attempt with the search-offer section which is having reasonable success...

- At a certain point we even thought about creating a model like Craiglist, with most content free and the most popular categories with a fee for posting a message... yet we did not go far: how many were willing to pay 10 euro to post a message? Consider that it is not just a
matter of posting messages... we had to develop a bit of software... and we saturated the proposition quickly, with 50-60 messages per week... not enough to provide a good return.

- A few months ago we therefore decided to switch the support off and let the system go into automatic... without our contribution... search/offer announcements go automatically... every Thursday the system collects the best offers and automatically aggregates them into a newsletter which is sent to everybody without any input from us.

- We are now trying to understand if this model could be sold to trade shows... in other words, you are a trade show organizer, you feel threatened by the level of disintermediation which the Internet could cause and we offer you to go digital very quickly... yet we do not have a magic wand... very often they told us: ‘no, no, we are not ready yet... for now we want to keep selling square meters!’...

- [We have reflected about other alternatives, such as] the possibility to create a federative system rather than just keeping it under the brand of Officine... in other words, the database is owned by Officine, yet we could offer an interface through which we don’t give access to only the final customer, but to programmers as well and whoever has a web portal on which firms interact could upload its announcements and let them be visible to its members... under its brand not ours... for now we have tried to approach a number of trade associations... but we have talked to some people... they get very excited... then they present the idea to their steering committees and the idea is aborted. We can’t really understand why l... we do not understand if it is just the fear of disintermediation or something else!
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Short bios of the authors

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Dr Alessandro Giudici is a Post-Doctoral Researcher at the Small Business Research Centre (SBRC) at Kingston Business School, London. Alessandro completed his award-winning PhD in Strategy and Entrepreneurship at Cranfield School of Management, UK, focusing on how network intermediaries – such as venture associations, universities-led forums and government agencies – can support entrepreneurial firms in systematically sensing and seizing new opportunities, through tailored training and networking initiatives. Alessandro is a regular reviewer for Long Range Planning and other management journals. He is a member of the entrepreneurship and strategy divisions at the US Academy of Management, the European Academy of Management, the British Academy of Management, and European Group for Organizational Studies as well as of the Institute for Small Business and Entrepreneurship. Alessandro has been involved in a number of research projects in the SBRC related to entrepreneurship including, for instance, the official OECD review of SME policy in Italy and an investigation of the drivers of customer loyalty among SME owners in the UK.

Professor Robert Blackburn

Robert Blackburn is Associate Dean of Research, Faculty of Business and Law; Director of the Small Business Research Centre, Kingston University; and Editor-in-Chief of the International Small Business Journal. He has undertaken research for private and public sector organizations worldwide, including the European Commission, the UK’s HM Treasury and HM Revenue and Customs, and banks and support agencies. Robert is a member of the Executive of the European Council for Small Business and has been appointed to the REF2014 Business and Management panel which will be assessing the quality of research across all UK. Robert has detailed experience of researching government-SME relationships, using qualitative and quantitative methods. His latest research involves understanding the role of trust in SME’s external relations and as Specialist Adviser to the House of Lords Select Committee on Exporting and SMEs. Robert is a holder of the Queen’s Award for Enterprise Promotion.