

Using Social Networks For Knowledge Acquisition In Regional Australian SMEs: Management Considerations

¹ Nina Evans, ² Rachelle Bosua, ¹ Janet Sawyer

¹ University of South Australia, ² University of Melbourne, Australia

ABSTRACT:

Small and Medium Enterprises (SMEs) are important sources of prosperity and employment and are viewed as critical to the economic development of a country. Relationships between SMEs and external stakeholders enable knowledge acquisition and therefore sustainable businesses. Limited research has been done to identify the role of social networks in supporting the acquisition of external knowledge in SMEs in regional areas of Australia. This research explores how SMEs in the Whyalla region of South Australia harness their Social Networks (SNs) to acquire external knowledge and exploit this knowledge to become more innovative. The results are presented as a number of management considerations that will provide useful information to SME managers and bodies such as regional universities and Regional Economic Development Boards, enabling them to support SMEs to create networking and knowledge acquisition opportunities.

Keywords: *SME, Knowledge, Innovation, Sustainability, Social networks, Social media*

1. Introduction

One of the most important management challenges that modern businesses face is that of *innovation* i.e. the creation of something new and useful such as new products, services, structures or processes. Such innovation requires creative thinking, development and advancement of best practices, the ability to foster organizational learning and ultimately ways to synthesize and apply ideas and knowledge from a variety of sources into new forms and situations (Hislop 2010). The resource-based view of the firm (Barney 1991; 2001) and the knowledge based view of the firm (Grant 1997) regard knowledge as one of the most important organisational assets and a key strategic resource that contributes unique value to a business. It is widely accepted that critical knowledge can be created internally (Nonaka 1994). However, rapidly changing environments, technologies and rules of competitiveness prevent organisations from creating all the required knowledge internally. Gathering information and knowledge from a variety of sources in a firm's external environment is central to innovation and firms can, therefore, improve their knowledge and innovative capabilities by leveraging the skills of others through the transfer of knowledge both within and across the firm's boundaries.

Newell et al. (2002) agree that gaining new knowledge is often the result of individuals collaborating to share knowledge and negotiate ideas and perspectives. An important prerequisite for knowledge acquisition is therefore the development of relevant and extensive inter-firm social networks (also referred to as informal networks, support networks or advice networks). These social networks (SNs) have been defined as key organisational structures for effective and efficient knowledge sharing and transfer (Bosua & Scheepers 2007) and consist of the set of people with whom an individual maintains contact, such as partners, customers, suppliers, bankers and family members (Rejeb-Khachlouf & Mezghami 2011; Granovetter 1983; Inkpen &

Tsang 2005; McPherson et al. 2001). Social networks are often supported by Web 2.0 technologies such as social media.

Small and Medium Enterprises (SMEs) are recognised as a major source of prosperity and employment and are regarded as critical to regional development in Australia. The Australian Government has a vision for strengthening rural and regional Australia through the delivery of better services for communities, investment in infrastructure, and innovation to help regional businesses grow, adapt and prosper (Commonwealth of Australia 2009). No previous research has been conducted that describes the role of SNs in the knowledge acquisition of small firms, especially in regional areas. In this research we investigated ways in which small to medium-sized business owners in the regional city of Whyalla in South Australia harness their social networks to acquire external knowledge and become more innovative. This paper describes how these firms obtain new knowledge from external sources and how the new knowledge enhances innovation and competitive advantage. It also reports the specific issues the firms face in relation to social networking in a rural and regional environment. The research question on which this paper is based is: *How do SMEs use social networks to acquire new knowledge from external sources?* The findings are analysed and presented as a set of management considerations to support the use of social networks to acquire external knowledge towards sustainable regional SMEs.

This paper is structured as follows: the next section revisits key background literature relating to SMEs, SNs and social media. Thereafter follows the Research Methodology section that outlines the approach followed to conduct this research. Key findings are shared in the Findings section followed by the Discussion and Conclusions and the Limitations sections.

2. Literature Review

This section describes and combines two streams of literature namely that of small businesses in regional Australia and the use of social networks for knowledge acquisition and sharing.

2.1 SMEs In Regional Australia

SMEs are important in the Australian context for a number of reasons: they provide essential job opportunities, they contribute to the Australian economy, and by supporting business activity in regional areas, they add to the financial growth of Australia as a whole (Wiesner et al. 2007; Wiesner & Millet 2012, 2008; Australian Bureau of Statistics 2012). Australia has more than 1.2 million SMEs and currently, more than 5 million workers are employed by SMEs representing 63% of the Australian workforce. These SMEs contribute approximately 35% to Australia's Gross Domestic Product (GDP) (Gadanne & Sharma 2009). SMEs in regional areas of Australia have been described as 'the backbone of the desert economy' (Desert Knowledge CRC 2009; Evans & Sawyer 2010). Tse and Soufani (2003, p. 306) argue that SMEs might carry even more importance in the future, stating: "While the traditional economic structure favours size and physical matters, the new economy is earmarked by relationships, networks, and information. It is in this light that it can be seen that small firms would become an even more important engine".

SMEs are unique and quite different to large organisations since they tend to have less formal organisational structures and informal management practices. They often face difficulties obtaining finance and consequently have fewer resources. As a result SMEs are generally reluctant to spend on information technology and, therefore, have limited use of technology and a lack of technical knowledge and specialist staff. In addition, SMEs tend to be time poor and find it difficult to quickly access reliable sources of information and advice (Macgregor 2003; Evans & Sawyer 2009, 2010). SMEs are considered to be more focused on conducting their key business, as they are often more concerned with survival as opposed to growth (Garengo et al. 2005). Given the limited access that SMEs have to knowledge, it is essential that appropriate

structures be in place to support SMEs to enhance their existing levels of expertise and foster growth and innovation opportunities. These structures need to enable the sharing and flow of information and knowledge into and through the organisation.

Chong et al. (2011) describe the importance of inter-organisational knowledge transfer in SMEs from a competitiveness perspective. Due to their inability to foster learning activities through research and development, SMEs also miss opportunities to advance their product and service-related knowledge. These aspects may force SMEs to focus their attention more outwardly to gather expertise and research-related information from sources in their external environments. To remain profitable SMEs in regional Australia should aspire to such innovative activities through knowledge acquisition and learning. One way of doing this, is to use the social networks of employees and managers. However, there is no research that explores how SME's external environments could supply the required information and knowledge to foster growth and innovation in these entities. This paper aims to address this gap.

2.2. Knowledge Acquisition

In a dynamic and turbulent business environment, innovation is critical for the creation of value and sustained competitive advantage. Innovation concerns the ability of a business to design and implement changes to its existing products, services, structures and processes. Such change is important for two reasons: 1) the business context often requires continuous change to attain competitive advantage, and 2) change is also important from an organisational learning perspective (Borgatti & Cross 2003). There is a large body of literature that describes organisational learning and the effect it has on the firm. Crossan et al. (1999) describe organisational learning as a principal means of achieving strategic renewal in an organisation. Such renewal requires the firm to explore and learn new ways of doing things or conducting business, while concurrently exploiting what they already know or have learned. Such learning can appear at three different levels namely the level of the individual, group and organisation.

Research indicates that the ability of a firm to learn through gathering external knowledge and internal learning ultimately determines its innovative performance. The creation and sharing of tacit knowledge is essential in organisations from an innovation viewpoint. Firms can therefore build such innovation capacity by tapping into external knowledge sources, for example contracts, licensing, R&D collaborations, knowledge-driven acquisitions and joint ventures (Zahra & George 2002; Fosfuri & Tribo 2008). There is a close link between knowledge acquisition, learning and innovation. Given the greater availability of external knowledge sources in modern economies, a dynamic capability to identify, acquire, transform and exploit external knowledge becomes a crucial source of competitive advantage. Schmidt (2010) confirmed that it is more important to create a culture and organisation that leads to informal knowledge transfer rather than a culture in which information provision is more centralized. One reason for this might be that the diffusion of new knowledge is faster and less prone to distortions through informal networks compared with formal systems.

2.3. Social Networks (SN)

Innovation in organisations is dependent on humans' ability to create and share new knowledge. Newell et al. (2002) contend that knowledge creation is not an individual activity but the result of individuals collaborating to bring together knowledge through sharing and negotiating ideas and perspectives. Innovation is therefore based upon the collaborative learning and idea generation or realisation practices in an organisation. Over the last number of years there has been an increased research focus on a variety of aspects that relate specifically to the use of social networks and how innovativeness in an organisation is based on the effective social interaction between its employees (Lin 2011; Bosua & Scheepers 2007). Such a personal network consists of the set of

people with whom an individual maintains contact, such as partners, customers, suppliers, bankers and family members (Rajeb-Khachlouf & Mezghami 2011).

A number of studies focus on inter-organisational knowledge sharing and transfer (Bayer & Maier 2006; Easterby-Smith et al. 2008; Perez-Nordtvedt et al. 2008). These studies confirm the importance of networks to share and transfer knowledge, in particular, the role of a person's environment and the SNs he or she can tap into. It has been shown that *who you know* has an impact on *what you know* since the relationships one has with others impact on obtaining information, solving difficult problems and learning how to conduct one's work (Cross et al. 2001). Individuals play an important role in the knowledge transfer process. In a small business it is important to acknowledge the strong influence of the small business owners' personal objectives and attitudes, as well as their personal networks on the success of their businesses.

Additional research also describes the role of specific individuals in SNs to encourage or promote the sharing and transfer of knowledge. Such roles include brokering, advocacy and gatekeeping roles in particular (Wenger 1998). Brokering roles serve as bridges to link people from different networks while advocacy roles push information of relevance to nodes that need specific information. Gatekeepers are individuals with informal contacts outside the organisation who play a key role in importing novel information and linking the organisation with its environment (Obstfeld 2005). Nonaka (1994) indicated that organisation members share knowledge through a socialisation process. When employees trust a member of their social network, they are willing to spend the required time to ensure that information exchanged is comprehended and can be fully exploited. Hedlund (1994) also indicate that socialisation play an important role in the knowledge conversion among different individuals and groups.

In an empirical study done by Noblet et al. (2011) managers indicated that trust is the key ingredient to their relationships. They regard trust as the glue that helps bind them together and prevents disagreements or conflicts. Lin [38] highlighted that an increase in trust will provide wide-ranging communication channels among employees and external parties. Innovation is based upon the collaborative learning in an organisation and idea generation or realisation practices in an organisation. Such effective social interaction is purely based on the establishment of trust and flexibility in communication. Lane et al. (2006) refers to "what you want to learn, whom you want to learn it from, and how you want to use it", as well as an ability of an organisation to understand knowledge from a "foreign parent" (other organisations, often referred as the 'teacher organisation') with three similarities in place prior to successful learning, namely similar student-teacher knowledge base, similar social contexts and similar organizational problems.

3. The Role Of Technology And Social Media In Regional SMEs

Small firms in the regional parts of Australia are often isolated, yet entrepreneurs and small business owners have the need to connect with like-minded individuals in other businesses. In today's age electronic technology cannot be neglected as a medium to channel social capital across networks. ICT can be used to enhance communication and knowledge exchange between and among SMEs (Evans & Sawyer 2009). Previous regional development initiatives focused on the implementation of ICT to link regional and metropolitan areas. However, it was found that ICT initiatives alone are not sufficient for sustained regional development. Unless the socio-economic dynamics and the nature of the networks are understood, ICT based initiatives will be ineffective (Mason et al. 2006).

Recent advances in computer-mediated communications have made it easier for the members of open networks to build relationships and to share information in great detail. Emerging social networking web sites have leveraged the Internet to provide a platform for the members of a network to assimilate new knowledge with ease and convenience (McLure-Wasko & Faraj 2005).

Examining the social networking research, we find that Web 2.0 social networking tools have had significant impact on the professional relationship building and the accrual of social resources over the Internet (Kane et al. 2010). For example, LinkedIn has more than 60 million registered users worldwide (www.techcrunch.com) who share information quickly, with large numbers of individuals across the globe. Online public forums also play a vital role in enabling individuals to acquire new knowledge and to broaden their network by establishing connections with other members of the network. Although individuals who are connected through a network of practice may never know or meet each other face to face, they are capable of sharing a great deal of knowledge primarily through computer-based communication technologies (McLure-Wasko & Faraj 2005).

In a relatively recent study Mason et al. (2006) still found a reluctance of many SME owners to use the Internet and ICT. Furthermore, the small business owners were concerned about loss of control in their business. They also found that regional small business networks often operate across industries.

Considering the characteristics of SMEs, there are a number of challenges that SMEs face, for example, limited access to knowledge sources and expertise, smaller number of employees or experts in these firms, absence of Research and Development units or functions, and limited use of technology to support SME operations. Based on the description of SNs and the value they bring as conduits of knowledge sourcing and sharing, there is a gap in the literature that explores how SMEs acquire external knowledge. Moreover, there is no literature that explores this issue in combination with the role that social media can play to support this process. Hence the focus of this study is to explore how external SMEs acquire new external knowledge and how Social Media can facilitate this process.

The next section describes the research methodology and methods used to collect and analyse the empirical evidence associated with this study.

4. Research Methodology

The aim of this research was to investigate the use of social networks and –media for knowledge acquisition, innovation and sustainability in regional Australian SMEs. The research was conducted in the Whyalla region of South Australia. Whyalla is one of the industrial hubs of the Upper Spencer Gulf region with a population of approximately 23 000 people. The compact nature of the city and the fact that it contains a wide range of organisations of different types, sizes and occupations made Whyalla a suitable location for the study.

The overall research question was:

How do SMEs deploy social networks and –media to improve knowledge acquisition and enhance innovation in SMEs?

The sub-questions were as follows:

What are the triggers that motivate SMEs to acquire new external knowledge?

Who are included in the social networks of SMSE owner/managers and employees?

How do owner/managers of small businesses use the social networks and –media to keep them abreast with developments in their industry and to take advantage of new opportunities?

What are the benefits of using social networks in SMEs?

What are the challenges for owner/managers in using social networks in small businesses?

The research design and methodology was exploratory in nature using a qualitative approach through personal interviews. Potential participants were identified in collaboration with Regional Development Australia – Whyalla and Eyre Peninsula (RDA). Twelve SMEs located in Whyalla, each with a turnover of less than \$5 million, were selected for the study. The participating firms were as follows:

Table 1: Participants

Participant / Interviewee	Business type	Classification as Small or Medium Enterprise (no of Employees)
P1	Cleaning	Small (1-4)
P2	Accommodation	Small (5-19)
P3	Real Estate	Small (5-19)
P4	Cleaning	Small (1-4)
P5	Finance	Small (1-4)
P6	Training	Small (1-4)
P7	Construction	Small (5-19)
P8	Automation	Small (1-4)
P9	Stevedoring	Medium (20-199)
P10	Accommodation	Medium (20-199)
P11	Dental	Small (5-19)
P12	Accounting	Small (1-4)

Data were gathered using face-to-face interviews, which enabled the collection of rich information by providing researchers with the ability to probe and expand the participant's responses (Sweeney 2007). Interview questions were semi-structured and open, giving each participant the opportunity to elaborate on key aspects. The owner/managers were mostly selected as they closely control the business and make all the critical management decisions

(Meredith 1994). The interviews lasted approximately 60 minutes and focused on participants' experiences and opinions of how they harness their social networks and –media to acquire and assimilate new knowledge from external sources for innovation within their organisation (Krueger & Casey 2000; Shultze & Avital 2011). Pseudonyms were used throughout the study to protect the identity of each case organisation.

All interviews were audio-recorded and transcribed verbatim, then analysed and summarised according to emerging themes using relevant qualitative data analysis techniques (Miles & Huberman 1984). More cycles through the data followed, which enabled the clustering of themes into more specific categories and the drawing of inferences with respect to causal effects that came up in the interviews. Powerful quotes (in participants' own words) were identified and are reported here. The next section outlines key findings in the form of the major themes that emerged from the data analysis.

5. Findings

5.1. The Triggers For Acquiring New External Knowledge

There are different triggers necessitating SMEs to network and gather new knowledge, such as a *crisis* happening within the business. For example P1 had a personal accident that forced her to take time off and reflect on her situation. The accident and the fact that she was in debt with her business forced her to search for external knowledge to put her business on a new track. *Changes in the external environment* such as a shutdown or a large new mining project, as well as *new competitors* forced the manager of a real estate firm to adjust their staffing levels (P10). *Changes in government decisions*, such as a decrease in the first home owners grant had an impact on a home loan firm (P5).

A *change in industry practices* also acts as a trigger for innovation: “As the structure of the business changes, you have to change and 90% of the business effort lies in keeping up with these changes” (P12). If *clients have problems*, the need for new techniques or services forced the business to be innovative (P8, P9). *New contracts in new fields of business*, motivates businesses to rethink the way they work and expand their knowledge, e.g. in the case of a training company that expanded their business to include government contracts (P6). A project manager (P8) mentioned that, if they have a new job that involves software programming he will generally have to source expertise in that area. *Changing laws*, for example Human Resource laws or the Occupational Health and Safety law is another external trigger for innovation. The manager of an accounting firm, agreed that “changes in legislation happen a lot and you have to keep up with it” (P11). Occupational health and safety issues also triggered the need for new knowledge to source or develop a water-based paint that does not need to be contained in a fireproof cabinet, in a building supplies business (P4).

5.2. Who Is Part Of The Network?

SMEs include and exclude different stakeholders as nodes in their social networks. In some instances, *other companies* and *people in related businesses* become part of the social network, e.g. a firm working in the finance area sourced information from real estate agents, conveyances and other banks (P5). A business in the hospitality industry talked to the Visitor's Information Centre, other hoteliers, and the general public to keep abreast of what's happening. An interesting comment made by an SME owner/manager (P2) was that he runs his ideas by the *locals* and older people in town as “there's a lot of knowledge out there”. P1 built networks with business owners who can provide opportunities for her cleaning business and owners of large companies who can help her with business decisions. She also uses contacts overseas and has sourced information from Europe regarding a new business idea. P8 has an alliance with a company in New Zealand and also with a company in America.

The *Regional Economic Development Board* is also a great source of networking opportunities and support for some of the small business owners. P1 attended a couple of meetings and will continue to do so. She added “I know that if I have a problem I can ring them”. Some SMEs (P1, P12) join *forums* to gather knowledge and P12 said: “There are message boards that I regularly look at”. *Professional bodies* such as the Institute of Public Accountants can also be a source of information. One manager relies on her professional association as “the core source of technical information” as they constantly send her some technical bulletins and updates (P12). The manager of a dental firm is a member of a professional group of specialists and GPs. They have a meeting once a month and everyone presents cases and things they have done. “Everyone gets the benefit from everyone’s idea” (P11).

Most of the participants indicated that their network included *friends* and *relatives*. In Whyalla new contacts are made “by word of mouth” and P3 added that “fortunately, I met a couple of people who brought me into the community network”. Since running her own business P1 has made friends who are interested in business. “So really it’s my social life that’s giving me knowledge” (P1). Obtaining knowledge from family is useful. A business owner/manager often asks his brother whether he has ever come across a particular problem and what he would do to solve the problem (P4). One participant (P8) said that he has made a lot of contacts through the *local government* and various *sporting clubs*. He also has networks from *previous jobs*. “I’ve worked with [Company A] for 26 years before I left, so I made a lot of contacts that I can now ring them up to find if anything is happening (P3).

Small business owners often include their *competitors* into their networks. “We do have competitors but we all work together” (P6). *Clients* are also part of the network, as “these are the people who pay the bills, so we need to stay in contact with them to make sure we are doing things right” (P6). *Suppliers* add value to the innovation process as well. The manager of a building supply firm commented: “If we don’t know how to configure certain pieces of equipment, we will go to the suppliers for knowledge and ask for advice” (P8). Networking with *subcontractors* also seems to be effective, especially if they take on a major job and they don’t have all the knowledge internally (P8). A *silent partner* can also be a good source of knowledge and was regarded as an important part of a hospitality business owner’s network (P2).

5.3. How Is Networking Carried Out?

The manager of a small firm is usually the one who identifies opportunities and acts as the *Social networking* champion in the business “I push the employees to use their networks to get involved” (P3). Networking on forums is mostly conducted through *emails* (P1) which means that business managers can “talk to people in Sydney and Melbourne as if they are at the end of the road” (P12). The manager of a cleaning company sometimes gets personal *telephone calls* from contacts, such as builders in neighbouring cities and towns (P1). The *internet and on-line forums* are another key source of new knowledge and P12 commented “I live on the Internet”. Some networking is also done via *Teleconferencing* (P8). A few managers mentioned that their firm had signed on to a network of friends and acquaintances via the social network ‘LinkedIn’ and online forums such as Flying Solo and Whirlpool, world-wide-web sites such as Smart Company, and message boards are also regarded as “good for learning”. Some managers have regular *personal visits* from suppliers who run knowledge *workshops* about new products (P8). Small businesses also often subscribe to different *trade magazines* that “outline new processes, new ways of doing stuff, new hardware, new software” (P8). Some businesses communicate and spread new ideas by using *organisational diaries or data reports*. “When staff members hear something on the grapevine or in the pub about something that’s happening in Whyalla, they would put it in a written diary that is sent via email to our director every day. It’s like a data report” (P10). The programs run by the *Regional Economic Development Board (REDB)* forum is a good way to network and gain external knowledge about “what’s happening in the town”. “They bring in speakers in each week, they provide training in e.g. technology and social media” (P1) and

business owners meet new people with similar interests. P10 commented that “everyone pretty much knows it’s a forum to *help each other*”.

One manager indicated that he also *reciprocates* and acts as a source of knowledge to others on the forum. “People ask general questions on the online forums. I give them a general answer so I act as a conduit to other people in the social network”. Out of the knowledge pool of people who is reading [the forum], someone is bound to know the answer” (P12).

5.4. Benefits Of Networking By SMEs

SME owners and managers articulated the important role of personal networks and P3 commented “Networking is what we do” (P3). Although P1 said that she worked on the job all the time and didn’t have enough time for networking, she and most other managers of regional SMEs realise the need to continue *learning* and *extending internal knowledge* to “know different methods of doing something” (P9). P6 is of the opinion that “businesses fail because they have this grand idea but they never source the information; they need to *see if an idea is a workable idea*”. P8 agreed that his networks are often used to *showcase and test new inventions*.

Gaining local knowledge is also important and P3 said that the network provides the opportunity “to have a voice”. The network acts as a grapevine to find out what is happening in the local community: “I want to know what’s going on in Whyalla, I want to be part of it” (P1). A real estate manager (P3) said that one of the staff managed to sell a house only because it was owned by someone well known in town. The manager of a local hotel added: “We have to *adjust and adapt* to new people coming into town and what their needs are” (P10). Another purpose of networking is therefore to *provide a service and gain clients* and *new business opportunities*. Businesses learn about new innovations from other companies who supply them with newsletters and ideas or innovations that come from their own networks worldwide (P1, P11).

Businesses need each other in the competitive environment. The manager of a driving school said that “previously everyone was happy doing their own thing. But it’s so regulated now that unless we stay together as an organisation, an individual would not be able to register as a training organisation because of the cost involved and the information you need to source to deliver to the government to pass an audit” (P6). In certain cases the network also *protects the business* as was the case in a real estate agency: “Some of the younger people who rent from us are also known to other people in our networks. So our networks also protect us and we rely on that trust on the network” (P3).

5.5. Problems/Issues/Challenges With Networking

SMEs in regional Australia encounter many challenges to remain sustainable. One such an issue is *isolation*. P7 mentioned that “the country access can be frustrating” but added that technology helps. P11 said that it is harder [being regional] when he needs to attend face to face professional development sessions. “When I go to [the city] for a course, that’s a couple of days I’m away and that implies costs. On top of that, there is travel, accommodation and the course fees.” P8 agreed that it is a hurdle that new product training is always offered in [the city]. “Suppliers often have road shows and travel around the country, with a couple of days in each capital city, showcasing all their new equipment, new products and new software. If you don’t know about this stuff then you get left behind by your competitors”. P3 is of the opinion that because Whyalla is so isolated, they need to work their networks more effectively: “People have networks; they just don’t know they have them and they don’t how to use and cultivate the network”. P1 did not agree that isolation is a problem and is of the opinion that “if I can’t do it in a small town, I probably won’t be able to do it in a city”.

Confidentiality is an important issue. SMEs are often concerned about having to protect/guard their ideas. “If I tell them they’ll love it, and that’s talking to the whole world” (P1). P9 agreed that “you have to be very careful”. P10 added that when they go to the meetings “everyone is a bit guarded about giving away too much information but we do help each other”. It is therefore often *difficult to know/choose whom to network with*. SME owners regard it as important not to alienate a contact to protect the business. P3 said: “You don’t know where people come from and who they could be talking to. That’s who we approach our business. Don’t presume and don’t discriminate”. However, some SMEs do not *trust* everyone in their network. P3 indicated that “there are people in that network that I can’t deal with because they will use whatever you offer for their own benefit and not that of the group” (P3). He had a bad experience and added that “within that network now, anybody that I spoke to who is associated with that guy, I would say no”. Businesses may derive benefits from networking but they also have to make sure that the opportunity is good for the business, also for longer term. *Conflict* sometimes occurs in the network. P3 commented: “I’ve possibly alienated other people within networks but I made the decisions that they are people who I won’t get business from anyway”. P1 added that “I’ve just realised over the years that sometimes it’s better to just keep your mouth shut. You know, whatever you do reflect on others” (P1).

Small business owners are often *too busy to network* as they “work on the job all the time and don’t have enough time for networking” (P1). *Information overload* was also mentioned as a barrier to absorbing and remembering new knowledge. “There’s so much going on, you tend to forget. This is one of my biggest problems, absorbing it all and trying to keep track of it all. I started to use voice messages for myself and the camera to try to remember things” (P12). One government-owned business is *restricted by government regulations*. “We may have an idea about a new product that can help people out, but the Government has to approve it before we can do anything about it. It does restrict the innovation to a certain degree” (P5). *Lack of technical knowledge* and the training for these skills sometimes pose a problem. “You should use Facebook and Twitter, but how does Twitter work? How does Facebook work? Do you have to pay for it? I don’t want to go and join up with everything and it’s going to cost me a fortune and I don’t know what I’m doing” (P1). Some SMEs managers find it too *expensive* to link with certain networks, e.g. the Company of Board Directors which is expensive for non-members. “If I was a director of a board I probably would not hesitate, but something like \$5000 would probably set me back a year” (P1). Sourcing *labour* was also an issue and P9 indicated that he had to bring in labour from other cities and towns in the region.

6. Discussion

The following management considerations have been identified:

Management consideration 1: Networks are essential for the acquisition of knowledge.

While larger organisations have the luxury of formal and informal communication channels and extended networking capabilities with external partners, the absence or limitation with respect to these activities in SMEs may hinder their growth, development and learning. It is clear that there is no focus on dedicated activities to build and nurture SNs to acquire and source external knowledge from a SME’s environment. Local business people sometimes do not use or appreciate the need to use networking to benefit their firm. Furthermore, a large number of SME owners and managers are not aware that they have SNs and how to better exploit them as a vehicle to increase innovation.

Management consideration 2: The networks should include key nodes or knowledge sources.

Owners/managers are often unaware of specific roles that could be identified in SNs to ensure that new ideas are continuously imported into SMEs. For example, the notion of assigning a

'conduit' role to specific individuals to encourage the flow of new knowledge into an SME was never mentioned during the interviews. The SME's limited access to key resources and specific roles such as gatekeepers and knowledge brokers imposes a major challenge in terms of innovation, which in turn impacts on growth and feasibility.

Management consideration 3: *Both face-to-face and technology mechanisms are required for effective knowledge acquisition.*

A surprising finding was that communication technology played a limited role in social networks within the regional SME community. The majority of relationships were formed face to face and external knowledge was generally obtained by owner/managers talking with other people within community networks. It was through functional roles that they established the majority of their relationships. Participants did not believe that the technology had an effect on the range and diversity of their network and technology was used to sustain the relationships rather than to form new ones. The technology was therefore just a medium they chose to communicate and most participants in this study used e-mail on a regular basis to communicate with their network.

Management consideration 4: *Managers should encourage the use of social media to acquire knowledge and provide training for employees.*

A few organisations were linking to formal SNs through professional organisations or bodies, and perceived these as useful sources of external knowledge. These SMEs indicated that they were confident in using social media to get new ideas from their external environments. Overall, not all SMEs were confident in using social media to support their social networking activities nor had adequate technical skills to fully exploit social media to support social networking activities. Based on the findings, this study indicates that SMEs have not yet fully embraced the advantages that SNs can bring to import new knowledge from the SME's external environment.

Management consideration 5: *If the use of social networks is not rewarded, people will not do it and, therefore, SME managers should invest in social networks.*

It was surprising how limited the use of social media was in most of the SMEs which may suggest that up-skill programs may be required to improve IT skills of SME employees with respect to the use of social media. It may be useful to create a more direct awareness in SMEs of the value of using social media to acquire new ideas, share and inject complementary external knowledge between SMEs. This may engender more confident use of social media to facilitate social networking activities with external SNs.

Management consideration 6: *Managers should be aware of the power and risks of the use of social networks and ensure that they are used in a way that is beneficial for the firm, i.e. they have to mitigate the risks.*

Trust and confidentiality in dealing with networks and external knowledge were regarded as important, particularly within a competitive business environment. Furthermore, some of the SMEs indicated that they did not have adequate time to invest in learning new technologies and was concerned about extra costs of joining Facebook or Twitter.

7. Conclusions

Based on the evidence that emerged from the study it was clear that links to informal external SNs (in the form of social acquaintances) were useful to source external knowledge to create new ideas in SMEs. To improve sustainability, it helps to be first with information and develop a rapport with other industries. It became evident that collaboration and the sharing of knowledge, even with competitors, were valuable to businesses in the regional city. New external knowledge

enabled some firms to undertake work and perform tasks they may not otherwise have been able to. Other firms were able to adapt and enhance the products and services they provided to the benefit of the regional community. Innovation in organisations is therefore dependent on humans' ability to acquire new knowledge. The successful conversion of this knowledge into new products and services can provide the basis for superior performance and give firms a competitive edge. This study highlighted the importance of SME owner/managers being aware of the benefits of networking, understanding their own social networks, and using these networks to their firm's advantage.

8. Limitations

As with any empirical study, there are limitations to our findings. Only a few SMEs from one specific region (South Australia) participated in this study. The small number of participants in the study limits the validity of the findings. However, the high similarity between responses from SME managers suggests there is no reason to believe that our results will not generalise to the larger population of SME managers in other regional areas of Australia. However, this needs to be empirically investigated. The researchers, therefore, plan to extend this study to include SMEs from regional areas of other states within Australia to gain more representative evidence of SME needs and competency levels across Australia and identify ways in which innovation in SMEs can be fostered and supported.

9. References

Australian Bureau of Statistics (2012). 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2007 to Jun 2011. Available at: <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/8165.0Main%20Features>. Accessed online 21 June 2012.

Bayer, F. & Maier, R. (2006). Knowledge Risks in Inter-Organizational Knowledge Transfer, *Proceedings of I-KNOW '06 Graz, Austria, September 6 – 8*. Barney, J. (1991). Firm resources and sustained competitive advantage, *Journal of Management*, 17, 99-120.

Barney, J.B. (2001). Resource-based Theories of competitive advantage: a ten year retrospective on the resource-based view, *Journal of Management*, 27, 643-650.

Borgatti, S.P. & Cross, R. (2003). A relational view of Information Seeking and Learning in Social Networks, 49 (4), 432-445.

Bosua, R. & Scheepers, R. (2007). Towards a model to explain knowledge sharing in complex organisational settings, *Knowledge Management Research and Practice*, 5 (2), 93-109.

Chong, C.W., Chong, S.C. & Gan, G.C. (2011). Inter-organizational knowledge transfer among small and medium enterprises. *Library Review*, 60 (1), 37-52.

Commonwealth of Australia, (2009). The Global Financial Crisis and regional Australia. House of Representatives Standing Committee on Infrastructure, Transport, Regional Development & Local Government. Available at: <http://www.aph.gov.au/binaries/house/committee/itrdlg/financialcrisis/report/gfc%20final%20report.pdf>. Accessed 6/4/2012.

Cross, R., Parker, A., Prusak, L. & Borgatti, S. (2001). Knowing what we know: Supporting Knowledge Creation and Sharing in Social Networks, *Organizational Dynamics*, 30 (2), 100-120.

Crossan, M.M., Lane, H.W. & White, R.E. (1999). An Organizational Learning Framework: from Intuition to Institution, *Academy of Management Review*, 24 (3), 522-537.

- Desert Knowledge CRC. (2009). Online. Available at: <http://www.desertknowledgecrc.com.au/research/desertbiz.html>. Accessed 6/4/2012.
- Easterby-Smith, M., Lyles, M. A. & Tsang, E. (2008). Inter-organizational knowledge transfer: Current themes and future prospects. *Journal of Management Studies*, 45 (4), 661–674.
- Evans, A. & Sawyer, J. (2009). Internet usage in small businesses in regional South Australia: Service learning opportunities for a local university. *Education in Rural Australia*, 19 (1), 15-33.
- Evans, A. & Sawyer, J. (2010). CSR and Stakeholders within Small Businesses in Regional South Australia. *Social Responsibility Journal*, 6 (3), 433-451.
- Fosfuri, A. & Tribó, J.A. (2008). Exploring the antecedents of potential absorptive capacity and its impact on innovation performance. *Omega*, 36 (2), 173-187.
- Gadenne, D. & Sharma, B. (2009). An investigation of the hard and soft quality management factors of Australian SMEs and their association with firm performance. *International Journal of Quality and Reliability Management*, 26 (9), 865-880.
- Garengo, P., Biazzo, S. & Bititci, U. (2005). Performance measures systems in SMEs: a review for a research agenda, *International Journal of Management Reviews*, 7 (1), 25-47.
- Granovetter, M. (1983). The Strength of Weak Ties: A Network theory revisited, *Sociological Theory*, 1, 201-233.
- Grant, R.B. (1997). The Knowledge-based View of the Firm: Implications for Management Practice, *Long Range Planning*, 30 (3), 450-454.
- Hedlund, G. (1994). A model of knowledge management and the N-form corporation. *Strategic management journal*, 15, 73-90.
- Hislop, D. (2010). *Knowledge Management in Organizations*, 2nd edition, Oxford University Press, 310p.
- Inkpen, A. & Tsang, E. (2005). Social Capital, Networks, and Knowledge Transfer, *Academy of Management Review*, 20 (1), 146-165.
- Kane, K., Robinson-Combre, J. & Berge, Z.L. (2010). Tapping into social networking: Collaborating enhances both knowledge management and e-learning, *VINE*, 40 (1), 62 – 70.
- Krueger, R.A. & Casey, M. (2000). *Focus Groups: A Practical Guide for Applied Research*, Sage Publications.
- Lane P.J., Koka B. & Pathak S. (2006). The reification of absorptive capacity research: a critical review and rejuvenation of the construct. *Academy of Management Review*, 31, 833–863.
- Lin, H.F., (2011). The Effects of Employee Motivation, Social Interaction, and Knowledge Management Strategy on KM Implementation Level, *Knowledge Management Research and Practice*, 9 (3), 263-275.
- MacGregor, R.C. (2003). The role of formal networks in the ongoing use of electronic commerce technology in regional small business. *Journal of Electronic Commerce in Organizations*, 2 (1), 1-14.

- Mason, C., Castleman, T. & Parker, C. (2006). Virtual Communities of Practice for Regional Small Businesses: Bringing Informal Networks Online. 19th Bled eConference, Bled, Slovenia, June 5 – 7.
- McLure-Wasko, M. & Faraj, S. (2005). Why Should I Share? Examining Social Capital and Knowledge Contribution in Electronic Networks of Practice. *MIS Quarterly*, 29 (1), 35-57.
- McPherson, M., Smith-Lovin, L., & Cook, J. (2001). Birds of a Feather: Homophily in Social Networks, *Annual Review of Sociology*, 27, 415-444.
- Meredith, G.G. (1994). *Small Business Management in Australia*. McGraw-Hill: Glenroy.
- Miles, M. & Huberman, A. 1984. *Qualitative Data Analysis: a sourcebook of new methods*, Sage Publications.
- Newell, S., Robertson, M. & Scarborough, H. (2002). *Managing Knowledge work*, Palgrave.
- Noblet, J-P, Simon, E. & Parent, R. (2011). Absorptive capacity: A proposed operationalization. *Knowledge Management Research & Practice*, 9, 367-377.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organisation Science*, 5 (3), 14–37.
- Obstfeld, D. (2005). Social Networks, the *Tertius lungen* Orientation, and Involvement in Innovation, *Administrative Science Quarterly*, 100-130.
- Perez-Nordtvedt, L., Kedia, B.L., Datta, D.K. & Rasheed, A.A. (2008). Effectiveness and Efficiency of Cross-Border Knowledge Transfer: An Empirical Investigation, *Journal of Management Studies*, 45 (4), 714-744.
- Rejeb-Khachlouf, N. & Mezghami, L. (2011). Personal networks and knowledge transfer in inter-organisational networks, *Journal of Small Business and Enterprise Development*, 18 (2), 278-297.
- Schmidt, T. (2010). Absorptive capacity-one size fits all? A firm-level analysis of absorptive capacity for different kinds of knowledge. *Managerial and Decision Economics*, 31 (1), 1-18.
- Schultze, U. & Avital, M. (2011). Designing interviews to generate rich data for information systems research, *Information and Organization*, 21 (11), 1-16.
- Sweeney, L. (2007). Corporate Social Responsibility in Ireland: barriers and opportunities experienced by SMEs when undertaking CSR. *Corporate Governance*, 7 (4), 516-523.
- Tse, T. & Soufani, K. (2003). Business strategies for small firms in the new economy. *Journal of Small Business and Enterprise Development*, 10 (3), 306-320.
- Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity*, Cambridge University Press.
- Wiesner, R., McDonald, J., & Banham, H.C. (2007). Australian small and medium sized enterprises (SMEs): A study of high performance management practices, *Journal of Management and Organization*, 13, 227-248.
- Wiesner, R. & Millett, B. (2012). Strategic approaches in Australian SMEs: Deliberate or emergent? *Journal of Management and Organization*, 18 (1), 98-122.

Zahra S.A. & George G. (2002). Absorptive capacity: a review and reconceptualization and extension. *Academy of Management Review*, 27, 185–203.

Contact the Authors:

Associate Professor Nina Evans: Associate Head, School of Information Technology and Mathematical Sciences (ITMS), University of South Australia, Adelaide, Australia; Tel: +61 8 8302 5070; Email: nina.evans@unisa.edu.au

Dr Rachelle Bosua: Lecturer, Computing and Information Systems, University of Melbourne, Australia; Tel: +61 3 83441398; Email: rachelle.bosua@unimelb.edu.au

Dr Janet Sawyer: Head, Business and Regional Enterprise, Centre of Regional Engagement, University of South Australia, Australia; Tel: +61 8 8302 2668; Email: janet.sawyer@unisa.edu.au
