Engaging the rural in sharing environmental 'know how': Insights into small to medium enterprises' experiences of social networking

Alex Bell
Senior Lecturer in Computing at Trinity University College, Wales.
a.bell@trinity-cm.ac.uk

Anthony Samuel
Senior Lecturer in Marketing at Trinity University College, Wales.
a.samuel@trinity-cm.ac.uk

Abstract

This paper is a report on a pilot project supported by the Welsh Assembly Government, Academic Expertise for Business programme. In this study, the authors examine the use of a social media technology to engage rural small to medium enterprises (SMEs) in the climate change agenda. During a six month period the network attracted ninety six members made up of employees/owners of SMEs and relevant business support agencies who had come there to learn about, share or support environmental sustainable business practices.

Using Web 2.0 technologies to facilitate a community of practice and encourage business to business collaboration, local pioneers were identified and encouraged to share experiences of their activities related to reducing their businesses' carbon footprints. This study reports on how the members engaged with the social network and critically explores the lessons learned from using social networking technologies.

The paper draws its results from a mixed method research approach. Firstly, semi-structured interviews were undertaken with four members of the network that provided insight into the common and variant experiences of the participants through analysis of their lived experiences. Secondly, participant observation was used to further inform the study and also to provide verification of inferences drawn from the interviews. The study draws on both the interviewees' and the researchers' own experiences and provides a critical insight into the lessons learned from attempting to create and foster a sustainable social network.

Our findings suggest that Web 2.0 social media tools can be very useful in capturing tacit knowledge in a variety of media providing useful opportunities for a vicarious exchange of 'know how'. They also suggest that the network enabled business support agencies to communicate their services and stories of success. The paper concludes that whilst there are potential benefits the issue of initiation and ownership are important considerations for sustainability.

Introduction

The development of sustainable business education and the need to learn and adopt sustainable business practices has been identified as a vital component in creating future sustainable societies (Peattie, 2005). When conceptualising increased sustainable production as the 'diffusion of innovation' or the 'spread of a new idea', Uzzell et al. (2006), suggest that social networks may have the possibility to play a key role in facilitating greater understanding and wide scale adoption of more sustainable business practices.

> "In the 25 member EU, there are some 23 million SMEs,
> representing 99% of all EU companies and employing
> around 27 million people." (Ponti and Hodgson, 2006)

Carmarthenshire is a rural West Wales community heavily dependent on agriculture and tourism and is reported to have 6,375 SMEs (UK National Statistics, 2007). Like many rural communities it depends on the success of SMEs to provide the region with economic and social sustainability. Despite their significant size, very limited activity if any beyond national and regional government schemes, has taken place to engage Carmarthenshire's SME population in environmental sustainable business practices. Complementing this, the findings of Jenkins (2004) and Bell & Samuel (2008), suggest that the 'know how' that exists for SMEs' regarding socially responsible business practices is perceived as being confusing. SMEs' preferences for learning about these issues is through informal social channels, was the basis on which this pilot project was initiated. Concepts concerning informal learning suggest that learning takes place in groups. Learner interactions can stimulate stronger learning effects when participants engage in discussion groups, sharing ideas and experiences through opportunities derived from exposure to multiple perspectives (Uzzell et al., 2006; Hodgson et al., 2004). Influenced by these concepts (Pettie, 2005; Uzzel et al., 2006; Jenkins, 2004; Bell & Samuel, 2008; Hodgson et al., 2008) it was recognized that the use of Web 2.0 social media technology to create a social network of SMEs and business support agencies could help improve rural (Carmarthenshire) SMEs' knowledge of and engagement in sustainable and responsible business practices.

Web 2.0 provides a platform where learning is essentially a participatory process in groups and the practice of learning is through interactive dialogue between members, not only through written words, but through knowledge artefacts using images, video and other forms of digital media. "Web 2.0 is more than a set of cool, and new technologies and services." (Anderson, 2007). It encompasses at least six powerful characteristics that are changing the way people interact, not based around the inherent properties of the technology itself but the "power of the network." (Downes, 2006). The six key characteristics are: user generated content; harnessing the power of the crowd; data on an epic scale; architecture of participation; network effects and openness.

Procedures

April 2008 witnessed the launch of an online media rich Web 2.0 social network (http://susbuzz.ning.com) that aimed to create a learning community for SMEs' and business support advisors from Carmarthenshire, West Wales. Its primary function was to help rural SMEs to learn, share knowledge and improve their business practices in relation to combating climate change. It focused on developing business understanding and practices in three key areas; waste reduction, energy efficiency and transportation. The network also aimed to include key business support agencies who were perceived as potential experts in these areas and as key to help initiate activity, improve credibility, disseminate information and offer advice and support to the SMEs.

To facilitate the development of the Web 2.0 social network the Ning social network platform (http://ning.com) was selected for a number of key reasons relevant to the demands of the context. Logistically the platform was able to provide the necessary trusted private and secure environment to instill confidence in participation (Jones et al., 2008). It was also able to set two key 'boundaries' that enabled membership to be restricted to a geographical area (Carmarthenshire) and organisation type (SME or business support advisors). These vital requirements were also augmented by the platform's ability to handle a wide mix of media rich tools essential for social and knowledge exchange requirements. These included the ability to podcast videos, add pictures, add textual content, create individual membership profiles, participate in discussion forums, event announcements, and self selecting associations between members. RSS feeds make external access to ongoing activity easier to manage. Ning was also deemed to be user friendly, affording members a short learning curve to participation and content contribution.

Prior to the launch of 'SusBuzz' it was decided that the practice in the network needed some scaffolding (Hung et al., 2005) and the authors set about capturing relevant information in a variety of media to upload into the network. The first activity was to identify a small number of SMEs who had the potential to act as trail blazers in sustainable business practices (Uzzell et al., 2006). Key business support agencies related to sustainability were contacted to nominate SMEs who had demonstrated best practice in waste management, energy efficiency and transportation reduction (Arena Network Wales, Carbon Trust, Carmarthen Chamber of Commerce, Sustainable Development Commission for Wales, Business Eye and The South West Wales Integrated Transport Consortium). To initiate membership and generate a 'network effect' (Anderson, 2007) aimed at increasing the potential for engagement in SusBuzz, the work of four SMEs and key business support agencies was recorded as video podcasts. Photographs and activity designed to initiate dialogue in discussion forums were also included. Clark's (2000) recommendations, suggest that greater participative success can be achieved by using existing trusted intermediaries to communicate with SMEs. Following this a second wave of invitations was sent to SMEs via e-mail through the Carmarthenshire Chamber of Commerce database of members. During a six month period from April 2008 the network attracted ninety six members representing

SMEs , Social Enterprises, Business support agencies and Carmarthenshire County Council.

Following a few weeks of initial activity on the social network interviews were undertaken with two business owners and two business advisers to ascertain their 'lived experiences' of the network. The interviews were of an 'open conversational' style seeking to identify the existence of participation and learning though the use of the web 2.0 platform, its promise of an architecture of participation and the potential for a network effect. Questions were therefore semi-structured around what the participants perceived as: the purpose of the social network; their perceived role; activity and interaction undertaken; the benefits they perceived to have or expected to gain from participation and finally the bridges/barriers that they had encountered during the first few weeks. The interviews were transcribed and a process of validation was undertaken to check that statements matched activity observed in the social network. A subsequent analysis of the transcripts involved the identification of meaning statements that were relevant to ownership, participation and learning.

Discussion of Findings

Sustainable Business was seen as important for all, and all agreed that businesses need to change their sustainability behaviour. SusBuzz was seen as in its infancy. Its viability as an active network of people was seen in a positive light, but as yet unproven. However, initiation and ownership of the network was strongly seen as being with the network facilitators and business advisors, and not with the businesses, potentially acting as a barrier to participation. McKenzi-Mohr and Smith, (1999) suggest commitment to involvement in sustainable behaviour is more likely to be effective when a group member who is already engaged in the behaviour that is being promoted agrees to initiate interest.

> "From my understanding it's not something that's grown
> from grassroots, its come from above, its been concocted
> from somewhere up there."
> (Interviewee 3, Business)

Membership was understood to be restricted to businesses in Carmarthenshire. For some this was perceived as an important reason to participate, for business advisors it was seen as a barrier to potentially wider allegiances. This and other network activity observed implies that the SMEs were interested in the network from the perspective of the local.

> "I had an email inviting me and I was curious, so I
> joined. It was something local, Carmarthenshire, and
> about sustainable energy, or sustainable living, which is
> what we all have to do, basically. But it was the
> Carmarthenshire bit that actually got me, that got me
> hooked."
> (Interviewee 3, Business)

"I saw it and it meant straight away to me – sustainable business"
"I also thought this shouldn't just be Carmarthen and I was very
enthusiastic to tell everyone about it."
(Interviewee 5, Business Sustainability Advisor)

There appeared to be ambiguity regarding SMEs expectations of
participation. The SMEs suggested they were unclear about their role and
were very wary of others' expectations of them. Although they had an
underlying support for environmental sustainability, they appeared more
concerned with benefits to their business through the potential for
networking and promotional activity. SMEs primarily respond to pressures
from their customers who see SMEs as having low environmental impact
because of their size, a perception also held by the SMEs themselves.
(Hillary, 2000). An important challenge therefore may be to get SMEs, like
individuals, to see their contribution to the collective impact on the
environment.

Their expectation of engagement is primarily low due to SusBuzz's infancy,
suggesting the 'network effect' had yet to take hold. This was potentially
acting as another barrier to participation, despite initial attempts to
stimulate a significant scale of interactivity. It is difficult to say, and beyond
the scope of this study, whether the architecture of equal participation that
web 2.0 technologies invokes was new to the participants. It is likely that
participants are more used to traditional dissemination and acquisition ways
of learning. Perception of others engagement through their contributions is
a key initiator for increased participation in a group. Responses to
contributions invoked a very positive feeling of belonging through the
reassurance of contribution appropriateness; being connected and
considered as valued. This suggests that positive emotional responses have
potential for increased participation and the network effect (Uzzell et al.,
2006).

Observation showed that participation was at a very simplistic level with
members greeting each other and sharing information about themselves
and offering services. Some requests for information were made and
dialogue between members assisting with information about products or
services was only evident in a limited number of cases. Some, but not all of
the business advisers provided additional information about their events and
services, and again only some made attempts to engage. Those that did
engage saw themselves as key participators and viewed the platform as an
opportunity to interact with SMEs, accessing a new client group.

Generally, participants' levels of confidence were dependent upon their
previous experiences with similar media. Textual dialogue was perceived as
being straight forward by those participants who had used other social
networking tools e.g. Facebook, and who were familiar with engaging
socially using Web 2.0 technologies. However, the majority of members
were non contributors, but may have been playing a key role as an
audience for information dissemination. Not everybody will openly
participate.

I have done a little bit, written on their wall and I've had
replies back as well and a I have a few friends requests
that I am waiting for. But without my experience of
Facebook I would have thought twice about this, especially
with work.
(Interviewee 4, Business Sustainability Adviser)

Finally personal relevance and application to one's 'real' off-line world was seen as an important aspect of developing a effective social network. Wittel (2000) reminds us that networks are still strongly related to geographical space. Identity, dialogue and contribution are key to a web 2.0 networks viability. To foster network participation it was perceived that off-line meetings were also necessary to nourish engagement.

"I think what would make it work for me, if there were some
real hands on stuff, proper meetings not just cyberspace, for
me to make more input would be to make real life contact,
with other people."
(Interviewee 3, Business)

In summary the findings suggest that a commitment from SMEs to identify their own role and forge an identity within the practice of sustainability is essential, not only in participating in learning but in participating in a community of practice (Wenger, 1999).

My role is to point people in the right direction (businesses) to help
them, to help them work with us to work on their travel plans, to
show that they are not too small or, they often think they are
unimportant. What we would like to do is invite business in, get them
on board and if we can get them to network to help this with what it's
useful for.
(Interviewee 5, Business Sustainability Adviser)

Yes, definitely a role, to be able to provide people with information,
about sustainable travel, to give information on car share, where to
go for cycling maps, walking, public transport.
(Interviewee 4, Business Sustainability Adviser)

There is evidence that web 2.0 technologies have the potential for collective learning in networks. We suggest that in using web 2.0 participants need not only to have the means to enable them to initiate, govern, communicate, participate and collectively engage for themselves, but also need to see themselves as owners of sustainable business practice. They need to select their own communication technologies, identify their own role, their own learning needs and set their own learning trajectory within their community of practice. For all educators like us [the authors] this has particular relevance for how we facilitate the learning of sustainability by future business owners so that participation in 'real life' practice is seen as central to their learning.

References

Anderson, P. (2007). *What is Web 2.0? Ideas, technologies and implications for education.* JISC, UK.

Bell, A. & Samuel, A. (2008). *The Role of Corporate Social Responsibility (CSR) in Carmarthenshire SMEs Tackling Climate Change*. Knowledge Exploitation Fund, Knowledge Exchange Project, Welsh Assembly Government, Cardiff and Trinity University College, Carmarthen.

Downes, S. (2006). *Learning networks and connective knowledge*. Retrieved August 14, 2007, from
http://it.coe.uga.edu/itforum/paper92/paper92.html.#

Clark, G. (2000). "Developing Better Systems for Communications: Environmental Best Practice in Small Business'". Published in: Hillary, R. (2000) *Small and Medium Sized Enterprises and the Environment*. Greenleaf Publishing, Sheffield.

Hillary, R. (2000) *Small and Medium Sized Enterprises and the Environment*. Greenleaf Publishing, Sheffield.

Hodgson, V. E., Tickner, S., & Gustafson, J. (2004). "Identity construction and dialogue genres: how notions of dialogue may influence social presence in networked learning environments." In *Networked Learning Conference Proceedings, (Lancaster), 2004*.

Hung, D., Chee, T., Hedburg, J. and Seng, K. (2005). "A framework for fostering a community of practice: scaffolding learners through an evolving continuum." *British Journal of Educational Technology* **36**(2): 1159-1176.

Jenkins, H. M. (2004). *Corporate social responsibility– engaging SMEs in the debate*. BRASS Centre, Cardiff University, Cardiff.

Jones, C., Ferreday, D. and Hodgson, V. (2008). "Networked learning a relational approach: weak and strong ties." *Journal of Computer Assisted Learning* **24**: 90-102.

McKenzie-Mohr, D. & Smith, W. (1999) *Fostering Sustainable Behavior*, New Society Publishers, BC Canada.

Peattie, K. (2005) "Climbing the ESD Pyramids: An Exploration of the Context for Sustainable Business Education." *Working paper series No:26* BRASS Centre, Cardiff University. Cardiff.

Ponti, M., & Hodgson, V. (2006). "Networked Management Learning for Managers of Small and Medium Enterprises". *Networked Learning Conference Proceeding, (Lancaster), 2006*.

UK National Statistics, *UK Business Activity Size and Location 2007*. Retrieved March, 2008, from

http://www.statistics.gov.uk/hub/search/index.html?
newquery=UK+Business+Activity+Size+and+Location+2007.

Uzzell, D., Muckle, R., Jackson, T., Ogden, J., Barnett, J,. Gatersleben, B.,
Hegarty, P. & Papathanasopoulou, E. (2006). *Choice Matters: Alternative
Approaches to encourage Sustainable Consumption and Production*.
Department of the Environment Food and Rural Affairs, Environment
Psychology Research Group, University of Surry, Surry.

Wenger, E. (1999) *Communities of Practice*. Cambridge University Press,
New York.

Wittel, A. (2000) Ethnography on the move: from field to net to internet [23
paragraphs]. Forum: Qualitative social research. Retrieved March, 2008,
from http://www.qualitative-
research.net/index.php/fqs/article/viewArticle/1131/2517