Social Innovation, Sustainable Futures and Commercial Concerns: People, Profits and Social Well-being

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ABSTRACT

This paper draws attention to the growing interest in social innovations as they seek to improve the well being of people, communities and society. Social innovations are recognised as the development of new concepts, strategies and tools that support individuals and groups to achieve improved well-being. We examine here the growing interest in social innovation before turning our attention to more theoretical and conceptual concerns. We examine the link between the social and technical dimensions of innovation and identify how the scope of our definition is important in delineating our phenomena of interest. Some of the earlier academic work on the social shaping and social construction of technology is considered and the use of Socratic dialogue as a tool for accommodating different viewpoints in assessing processes of innovation is evaluated. We conclude by calling for more debate and discussion on this emerging theme of social innovation that links with other topical areas such as, business ethics, sustainable communities, social capital and corporate social responsibility.

Keywords

Social innovation, sustainability, change, social capital, corporate social responsibility, social entrepreneurship, Socratic dialogue.

INTRODUCTION

This paper examines social innovation, sustainable futures and commercial concerns and in so doing, explores what we understand by the concept of innovation. Historically, the emphasis has been on science led innovations with a focus on how to translate innovations in science and technology into commercial applications. Typically, company survival is explained in terms of an 'innovation imperative' where new products and services are part of the dynamic business environment of securing and maintaining competitive advantage. Entrepreneurship and innovation are often seen to go hand-in-hand as new markets and opportunities are identified and exploited in the pursuit of profits and the drive for growth. Market economic forces are seen to promote the need for new products and services in rapidly changing markets and yet in recent years, social impediments and cultural barriers have been identified as a

major, and often overlooked, central determinant of 'successful' innovation and change. In our exploration of social innovation, we aim to uncover some of the similarities with previous concerns and interests in integrating innovation into the human experience (Orlikowski 1992), as well as showing how a shift in emphasis can shed useful insight on how to promote and develop innovations that provide new and novel ways of tackling 'problems' that provide collateral outcomes that will ultimately benefit society as a whole. Whilst company innovation remains rooted in the world of commerce and competition, social innovation has as a starting point, the notions of social beneficence and public good that supports people in organisations, communities and society.

Innovations in science and technology have brought about a range of different products and services that have both improved, for example, community health, as well as those that have threatened, for example, the life of others through the development of ever more sophisticated military equipment. There can be spin-offs from military research and space programmes that can have major social benefits, for example, developments in materials science and knowledge of advanced compounds that can be used to improve construction, the insulation of homes and so forth. Similarly one could anticipate that innovations with good social intentions could result in unanticipated outcomes, the introduction of rabbits or toads into Australia provides a well known example. Thus, innovations driven by social or commercial concerns may produce unexpected outcomes that whilst influenced by objectives are not determined by them. Furthermore, while commercial innovations may compliment social developments these two types of innovation can also come into direct conflict. For example, the development of pharmaceutical products to make a profit and the drive for low cost drugs that can alleviate health problems in the developing world. In these cases, social innovations may compete with hard commercial ventures and be a threat to business objectives. Under such circumstances, socially responsible and environmentally beneficial innovations may be stifled and patents secured in order to sustain market domination for certain types of products and services. For example, Mike Coley, at the Lucas Aerospace Combine, showed in the 1980s how commercial products are often purposefully developed to require higher levels of maintenance as much of the profit is based on the need for users to replace products or components over ever-shorter timeframes. From an advanced engineering perspective, this is clearly not an innovation in technical performance but, rather, a business innovation to secure market share and maintain income flows as customers need to replace worn components. Alternatively the design of irrigation systems and simple pumps for use in the third world context was functionally innovative and socially considerate through the development of robust and simple machines that required little maintenance. While this was not technically difficult to achieve, the experience highlights how business market pressures can frequently skew innovations in the development of new products and services away from those that support social well being towards the profit needs of companies.

In the next section we briefly look at the growing interest in social innovation before turning our attention to more theoretical and conceptual concerns. We examine the link between the social and technical dimensions of innovation and identify how the scope of our definition is important in delineating our phenomena of interest. Some of the earlier academic work on the social shaping and social construction of technology is considered and the use of Socratic dialogue as a tool for accommodating different viewpoints in assessing processes of innovation is evaluated. We forward a provisional model for making sense of social innovation that integrates two key knowledge domains and highlights the complex processes involved. We conclude by calling for more debate and discussion on this emerging theme of social innovation that links with

other topical areas, such as, business ethics, community sustainability, social capital and corporate social responsibility..

A BRIEF HISTORY OF INNOVATION AND SOCIAL CONCERNS

Forces of social change have been the concern of academics for a long time. The founding fathers of sociology: Karl Marx, Emile Durkheim and Max Weber, were all concerned with social change. For example, Durkheim was concerned with showing how under modern conditions the rise in suicide rates at certain times of the year reflected social rather than individual mental states. His famous book, *Le Suicide*, accepted that there can be some psychological predisposition but posited social determination as the main explanation for suicide. Karl Marx was interested in understanding the movement from one socio-political economic setup to another through his theory of dialectical materialism. He argued that within each social system there were contradictory forces that would undermine the very system from which they emerged. This antithesis to the main thesis would lead to the emergence of a new order until reaching what he viewed, as the more equitable system of socialism. In the case of Weber, he was concerned with developing a system that did not support favouritism or nepotism, but represented a more ordered social world where people took positions on merit rather than on the basis of who they were or who they knew. His concept of *versthen* highlights the importance of the subjective and the social, in needing to understand at the level of meaning rather than in some purely technical, objective sense. Although from different backgrounds with different contributions to make to the founding of sociology, each in their turn were concerned with the forces of social change and its implications for people in society. During this period, society was going through profound social change and thus concerns with order, stability and well being of people in their communities and at work was a natural focus of interest.

In the transition from a mainly agrarian society to an industrial economy (late 19th and 20th Century), to what Bell (1973) has termed post-industrialism (late 20th and 21st Century), social factors remain critical to understanding processes of change. This historical period was marked by major changes in the relationship between nations, our attitudes to work and the family, and to the ways in which we make sense of the world in which we live. For example, during the early phases of industrialisation considerable emphasis was placed on the effective utilisation of machinery. The new industrial entrepreneurs were inventors, quick to adopt new ideas and to find news ways of doing things. For example, Richard Arkwright established a mill in Nottingham that used a water-powered spinning frame that he had developed. Steam provided the basic source of power for mechanisation (Thomas Newcome built the first usable steam engine in 1712 which was considerably improved in 1781 by James Watt). The harnessing of steam power to newly developed machines enabled rapid improvements in productive output. The abundance of rich mineral resources, particularly in coal and iron ore, led to the construction of bridges and canals, the building of ships and the development of railways. George Stephenson built the first practical railroad locomotive in 1829 and his famous 'Rocket' could travel at 36 mph. New industrial towns developed around Glasgow, Newcastle, Manchester and Birmingham, and new forms of industrial organization were imposed on workers seeking employment in these growing urban centres. In its infancy, the industrial revolution offered wealth to the new industrial owners and hardship for working families who often had to suffer long hours and poor working conditions for little pay. Rapid urbanisation brought with it many social problems and prior to the Factory Act of 1833, many - including children - suffered under unregulated factory regimes. During this time, employees had little say in the changes imposed on them by owner-managers other than through classical forms of resistance, such as, industrial sabotage.

Processes of innovation were central to the industrial revolution which, through the development and refinement of 'steam power', transformed the way people worked, lived and travelled, as well as improved the availability of products and services. Interestingly, the innovative steam engine – the major driver for change – was not a specific technical innovation but more of a synthesis of discrete knowledge domains. It was an innovation in its insight and assimilation of existing knowledge and extrapolation of understanding to produce something new. In this example, the control mechanisms associated with the watch making industry, together with the skills and knowledge associated with boiler construction (developed as part of the brewing industry) and the expertise to produce finely honed and accurate piston barrels all culminated in the development of cannon technology. These three domains of knowledge had existed for a while but there had been little cross-fertilization of ideas. In linking control mechanisms with boilers that can take considerable pressure (holding steam under pressure) and engineered barrel technology (for the design and development of pistons), steam power was harnessed and subsequently this innovation brought about radical social change. In this example, we see a mutual shaping of the social and technical in processes of innovation that bring about significant change. As Hobsbawn (1969: 60) notes:

> The early Industrial Revolution was technically rather primitive not because no better science and technology was available, or because men took no interest in it or could not be persuaded to use it. It was simply because, by and large, the application of simple ideas and devices, often of ideas available for centuries, often by no means expensive, could produce striking results.

Throughout the nineteenth century conditions for factory workers were hard, and in addition there were considerable health hazards from the accumulation of large numbers of people into the new urban areas. In fact, the development of the oval glazed sewerage pipe was one of the most significant social innovations in this period, as it improved sanitary conditions and reduced the health risks of urban living. Nevertheless, factories presented hazardous working conditions with industrial accidents, few rights and relatively poor wages. Henriques (1979: 76) captures the plight of children working in the cotton, flax and woollen mills of this period: 'there were accidents and industrial diseases. Machines were too close together and children drowsy from fatigue, caught their hands, or lost their fingers while cleaning moving machinery during mealtimes'. There were other social innovations in legislation and law that required improvements in the well being of worker and the treatment and education of children.

In the twentieth century and following two world wars, people were less willing to suffer harsh factory environments and expected more from the democratic society they had fought to sustain. With a growing demand for labour and a return to relatively full employment, the social and human aspects of work came to the fore. *Management and the Worker* by Roethlisberger and Dickson (1950) highlighted the social dimensions to change and the *Human Relations* movement conducted numerous studies illustrating the importance of democratic leadership and employee participation. Technical innovations in the development of new machinery that, for example, were able to increase coal output, provided a rich source of material for the Tavistock Institute of Human Relations. In a famous piece of research by Trist and Bamforth (1951), they demonstrated (through the concept of Socio-Technical Systems Theory) the importance of balancing the social and the technical and how too much emphasis on the technical side of innovation can reduce output and profitability (see, Trist and Murray, 1993). This concern with the social dimension of technical

innovation and change has continued throughout the twentieth century (see for example McLoughlin and Dawson, 2003; MacKenzie and Wajcman, 1999; Williams, 2000). However, since the 1990s and during the early twenty-first century, growing emphasis has been placed on the *social* as an aim of innovation rather than an element that needs to be accommodated into successful *technical* innovation.

Although the social has always been a factor in the successful uptake of new innovations, in recent years the emphasis has shifted towards recognition of the import of the social in the pursuit of societal well-being. Changing contextual conditions, media coverage and public debate, has raised public awareness about social and environmental issues and with the growing disparity between top income earners and the rest of the working population, the assumptions behind the drivers for economic prosperity are being called into question. New bodies, such as, the *Institute of Contemporary Scotland*, have emerged and developed with the aim of supporting social innovations that improve the education and well-being of individuals, groups and communities in economically constrained and remote areas. Thus, the 'economic' and 'technical' imperatives that have long been assumed as the drivers for innovation are now being questioned with the re-emergence of social issues and the rise of the social entrepreneur (Leadbeater, 1997). For example, in America Jerr Boschee founded *The Institute for Social Entrepreneurs* (ISE) in 1999 as a for-profit consulting company, the ISE provides seminars, workshops and consulting services for social entrepreneurs in the United States and around the world. The Said Business School, Oxford University, has recently founded the *Skoll Centre for Social Entrepreneurship* (SCSE) and ran a forum in March 2007 with speakers, such as, Charles Handy, David Galenson and Mahammad Yunus. This more recent and growing concern with social innovation, marks a shift in emphasis from the previous focus on technical imperatives and yet, these two elements remain interdependent and cannot be treated as discrete and separate entities. For these reasons, it is worth briefly examining the more conventional literature on innovation before developing our own model of social innovation'.

THE CONVENTIONAL VIEW OF INNOVATION

Bessant and Tidd (2007: 29) summarise innovation as: 'the process of translating ideas into useful – and used – new products, processes and services'. They support the Department of Trade and Industry (DTI, 2004) definition that: 'innovation is the successful exploitation of new ideas'. For them, innovation can take many forms but these can largely be reduced to four dimensions of change, namely: production innovation (changes to product/services); process innovation (new ways of creating and delivering products/services); position innovation (for example, the watch making industry and the quartz watch); paradigm innovation (a shift in long held assumptions about the organization/business (for example, the emergence of low-cost airlines). In managing innovations they view this as a process ('an extended sequence of activities') involving the generation of innovation possibilities; strategic selection of an innovation from a range of options; and the launching of an innovation – the introduction and implementation process of making it happen in practice. They also explain the difference between 'incremental' and 'radical' innovations (2007: 14): 'running from minor incremental improvements (incremental innovation) right through to radical change…sometimes they are so radical and far-reaching that they change the basis of society – for example the role played by steam power in the Industrial Revolution or the ubiquitous changes resulting from today's communications and computing technologies.'

For Bessant and Tidd, successful innovation is a complex and difficult process that

involves transforming ideas into new products or services that 'make a mark' (2007: 440). Their emphasis is largely on the profit-driven version of innovation but they do consider social entrepreneurship in discussing the growing public concern for greater Corporate Social Responsibility (CSR). They argue that these social entrepreneurs seek innovations that can make a social difference, that are socially valuable, that improve the health and well being of society. Social entrepreneurs do not measure success in terms of performance and return on investment in terms of profits but, rather, aim to achieve long-term change of significant social value. A good example of this would be the Aravind Eye Care system in Madurai, India, that performs over 200,000 cataract operations per year. Interestingly, in a manifesto for social innovation the *Young Foundation* (Mulgan, 2006: 5) note that it is surprising how 'little is known about social innovation compared to the vast amount of research into innovation in business and science'. Yet innovations that bring about significant change are necessarily composed of both social and technical dimensions, they are not devoid of social processes in the creation of new ideas and their implementation and broader diffusion. Spotlighting these social processes and their place in technological and organisational change as well as the intentions and agendas behind these developments, all help us to better understand this concept of social innovation. As Josephine Green (2005) states 'if you only concentrate on technology research then you invariably get technology innovation, but if you also research the social and the cultural, then you get social innovation. Technology and social innovation promises a more balanced quality of life and a more inspiring future'.

TOWARDS A MODEL OF SOCIAL INNOVATION

Innovation is often given complex definitions. We prefer the simple one: 'new ideas that work'. This differentiates innovation from improvement (which implies only incremental change); and from creativity and invention (which are vital to innovation but miss out the hard work of implementation and diffusion that makes promising ideas useful). *So social innovation refers to new ideas that work in meeting social goals in conjunction with other organisational, technical or scientific goals* (our emphasis). Defined in this way the term has, potentially, very wide boundaries – from gay partnerships and new concepts of 'family' to new ways of using mobile phone text messaging, and from new lifestyles to new products and services (Mulgan, 2006: 9).

Social objectives are a common driver behind discussions on what social innovation is and how it should be defined. We contend that there is always a mutual shaping in the development, uptake and use of innovations between the social and technical dimensions (McLoughlin and Dawson, 2003). However, there can be different intentions behind the development of innovations that can range from business, economic, political, social or militaristic objectives. Social innovations often have aims that draw on notions of contributing to welfare of society and improving the social capital of people in communities, organisations and society. Such innovations may involve using existing skills and knowledge in new ways to meet social goals, or they may involve using existing or new technologies in new ways to improve social circumstance by addressing domestic, infrastructure or environmental goals. Consequently, whilst there is a mutual shaping of the technical and social, the economic and political dimensions also come into play in securing the uptake and development of these innovations in the pursuit of well being.

Social innovation can occur at the level of society, broad communities and regions (for example, EEC), the nation state, regional areas within countries, and local communities. Within business organizations, social innovations may occur across

industries, industry sectors, with multinational companies, organizations and the more local branch and plant or site operations. An organization's ability to innovate is necessarily a result of the collective capabilities of its individuals, and their activities and relationships in supporting the organisation to reach its business goals. The social system internal to the organisation is fundamental to the development and adoption of innovations because without social sanctions the changes necessary to achieve successful integration of new or different regimes or technologies will fail. The organisational situation in fact presents a pertinent parallel to broader social issues in regional and national adoption of technologies and innovations. Organisational innovation is necessarily a confluence of factors across the various domains in the internal environment, which are further moderated by numerous contingencies relative to the social concerns and interests of organisational participants.

Social innovation is more than just R&D or product and process revolutions but a concept which must recognise an essential commitment to the people to whom the change seeks to contribute. Whilst company innovation remains rooted in the world of commerce and competition, social innovation has as a starting point the notion of social well-being and public good and seeks to benefit people in organisations, communities and society through collateral outcomes of achieving greater societal goals. Social innovations attempt to resolve economic, social and environmental challenges not provide market rewards.

A synthesis is offered here which integrates two key knowledge domains; social and innovation, through a complex event (Figure 1) and these fields of knowledge come together as 1 event. An event which occurs in a complex social system will inevitably have multiple dimensions. In order to manage that inherent complexity we propose that social innovation has four fundamental elements by which it can be understood. These consist of i) *people*, ii) the *challenge* (which may be a problem or an opportunity), iii) the *process* (by which that challenge is negotiated and understood), iv) the *goal* (resolution of challenge and increased social well-being).

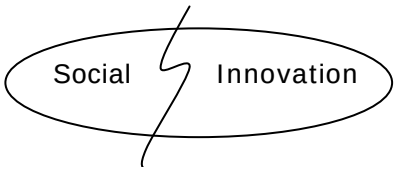

Figure 1. Knowledge domains of social innovation

Each of the four elements is sources of complexity themselves. The people involved in process may be part of a formal, informal or spontaneous group that are linked by special interests, common goals or a shared agenda. The need for cohesion and delineation are suggested to be fundamental to the successful management of social innovation projects. The challenge may be either a problem or an opportunity for the group. In situations where the resolution to the challenge is ambiguous new strategies, concepts or tools may be required to aid clarification, negotiation, and prioritisation. The challenge may be internal or external to group, it may be radical or apparently intractable, disruptive, incidental or dynamic (shifting). The process will necessarily be complex, contingent on context, culture and politics, and further confounded by functional and relational issues. It may be spontaneous, radical, fragmented or emergent but ultimately will be fundamentally unique. The goal of social innovation isn't about delivering breakthrough technologies or novel scientific advances but rather will be targeted to achieving resolutions to social challenges that will advance social well-being. The management of social innovation will inevitably require iterative negotiations to re-evaluate resolutions and outcomes for fit with the

community and the continuous inclusion of shared knowledge, evolving perspectives and interactive experiences. An example of social innovation can be seen in the concept of the micro-credit financing initiative Muhammad Yunus (founder of Grameen Bank) developed after recognising that traditional financing resolutions failed to address the cycle of poverty which appeared to present an intractable social problem. Similarly the use of song and dance as a method to deliver health education to illiterate communities in remote Indonesian islands to overcome preventable chronic diseases is an innovation that improves social well-being.

Sociology of technology suggests the interpretive flexibility of the human experience contributes to the final form an innovation takes. Similarly, in situations of social innovation interpretive flexibility is a fundamental to enabling the complex inter-relationships to contribute in the pattern of goal determination. A shared focus through common agendas and shared expectations will provide some boundaries for the group however priorities and differing experiences will mean interpretations of the nature and scope of the problem will vary. Open dialogue, constructive negotiation and reflective decision making are essential tools in the management of social innovation as it is dialogue here, not design, as with product innovation, which is essential. Peter Senge (2003) in his book *The Fifth Discipline* promotes dialogue as a way to common meaning and reduced conflict. Senge (2003) notes "In dialogue individuals gain insights that couldn't be achieved individually … there is the creation of a new kind of mind which is based on common meaning". When this has been attained Senge suggests participants are more likely to listen more effectively and contribute more constructively to the development and evolution of ideas with the likelihood of conflict being reduced.

In keeping with this position Socratic dialogue suggests goal evaluation can best be achieved through the mutual reflection and critical enquiry by participants of their own positions as well as the positions of others. In doing so, a forum for communication is established that can facilitate sustained and constructive dialogue. Socratic dialogue also requires more from participants than simply their own perspective. Participant must relinquish previously help views and refute previously held believes. Unconscious perspectives and implied or assumed knowledge must be made explicit to ensure all information is available for critique. Exposition of such tacit understandings ensures knowledge is accessible to all participants. In this way curiosity and open-minded reflection are encouraged.

In this exploration of social innovation we have developed a perspective which avoids the commercial agenda typically associated with innovation. We are seeking to develop a theoretical position and methodological model that can provide a useful perspective for further research into innovation in social systems. This approach to social innovation extends the fields of social entrepreneurship, innovation management, organisational ethics, corporate responsibility and sustainability issues beyond outcome agendas to acknowledge a fundamentally social agenda. By breaking down the inherent complexity of social innovation into four fundamental elements we hope to provide a method of accommodating shifting perspectives, collective contributions and novel approaches to social problem resolution. In this way the management of social innovation activities which seek to improve societal well-being through the novel resolution of challenges is no longer reliant on collateral opportunities but rather deliberate management strategies.

Conclusion

This exploration into processes of innovation and in particular, the concept of social innovation, represents an attempt to bring some different bodies of knowledge together in reflecting on social innovation, organization and management. This discussion makes opportunities for further development, and provides a useful starting point from which to reflect upon this concept of social innovation. The position we take is that innovation is an essentially social process that involves the consensus, reflection and interpretation of the people that it impacts upon as well as flexibility and social consideration in decision-making for the truly successful exploitation of new ideas. Although science and technology can provide the materiality of change, there is always an ongoing dynamic mutual shaping between the social and technical. As such, much of the conceptual debate gets caught up with promoting a certain divide between the technical and social, with a focus on dualism rather than duality. We seek to sidestep this diversion in considering the concept of social innovation – an innovation that brings about social benefits *in conjunction* with achieving particular technological, organisational or scientific advances – and the conditions that promote social innovation in the organisation, community or society. We suggest that a more critically reflective approach could go some way to opening up our minds to interpretive possibilities in the generation of new ideas and their application to innovations that meet social goals. Such a technique might usefully by used to facilitate social change in the burgeoning area of social entrepreneurship. The notion of a social entrepreneur is nothing new per se, as there have always been successful entrepreneurs who have directed some of their wealth and fortune to social needs of others (for example, philanthropists and the work of merchant venturers, such as, Colston who funded schools for the poor in Victorian England) and yet, this terms that emerged in the 1960 and 1970s, has taken on increasing significance and is currently a growing area of public and academic interest (see, Bornstein, 2003; Leadbeater, 1997). Essentially, a social entrepreneur can be defined as an individual who utilises their commercial skills in managing ventures that bring about well-being for others in the pursuit of social change. Muhammad Yunus, founder of Grameen Bank, is a social entrepreneur who has demonstrated how social good and business success need not be in conflict but can in fact service each other. His achievements in the area of microcredit - for entrepreneurs in developing countries unable to secure funds from traditional banking sector - has supported economic and social developments from below, and these achievements were recognised in 2006 with the award of a Nobel Peace Prize. In this case, it was itendifying a need that conventional business saw as uncommercial and then implementing an innovative solution that enabled the energies and ideas of those wishing to be innovative to be realized. Socratic dialogue opens up a broader dialogue which enables us to go beyond ‘traditional thinking’ and could be used in conventional areas to investigate the potential to service social good along with a venture that is commercially viable. Whilst we recognise that the concept of social innovation will evolve (like all new ideas) and new interpretations will present different ways of understanding and different applications, we are optimistic there is enough substance here for critical reflection and constructive debate on the concept of social innovation and the management of social innovation in organizations.

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