Public Sector Policy and Strategies for Facilitating Social Innovation

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Introduction

With numerous intractable problems facing the world today, calls for innovative solutions have become increasingly commonplace. Frequently, these calls are accompanied by suggestions that government policies need to be responsive, flexible, and adaptive to keep pace with the rapidity of changes taking place across the social, ecological, and economic spheres. This thinking has long been encouraged around technical innovation. Is social innovation different? With a range of policy instruments available as options, which are best suited to facilitate social innovation and address complex problems? Our answer is that there are four phases to any social innovation process, and different policies are needed for each phase.

Social Innovation and Public Policy

Social innovation is defined here as any new program, product, idea, or initiative that profoundly changes the basic routines, and resource and authority flows or beliefs of any social system. Successful social innovations have durability and a broad impact, and lead to systemic change. As such, the innovation does not rely on mass adoption to be considered a success; rather, it disrupts a larger institutional context (Westley & Antadze, 2010).

A growing body of research focuses on the role of entrepreneurs, partnerships with private actors and non-profit organizations, the role of foundations, and the support of social networks in generating and sustaining social innovations (e.g., Austin et al., 2006; Mair and Marti, 2006; Shaw and Carter, 2007; Thompson, 2002). But in practice, the role of public policy and governments has also come to the forefront of discussions about social innovation. Some attempts have been made to support social entrepreneurs and social enterprises, with examples such as the Office of the Third Sector in the United Kingdom and the newly created Center for Social Innovation in the United States. Other governments have chosen simply to promote the "production" of innovation, with

funding for research and development, specifically for the technology sectors. Yet, while funding technological innovations can be one option, it neglects the role of social innovations in creating the context for technical innovations to arise (Collins, 1997) and the need to change the problematic cultural, economic, legal, and political context that created the need for innovative solutions in the first place. Without attention to supportive institutional change, technical innovations in response to social problems may represent short-term Band-Aid solutions that mask but do not address worsening conditions. And the focus on technology may obscure the role of social innovation in providing the means whereby technological innovations come into being.

Therefore, an understanding of the role of social innovation in all innovation, on the one hand, and the importance of broad system change to support both social and technical innovations on the other, is key for policy makers.

This article briefly explores the relationship between social and technical innovation, and argues that for governments to support innovation, the first step is to understand how such innovation unfolds. It then argues that successful social innovations have at least four distinct phases and, therefore, different policies are needed to support social innovation depending on the phase. Consequently, policy makers need to understand what system they are trying to change and the phase of the innovation in order to apply the most useful strategies and policies.

The Relationship between Social and Technical Innovation

Social and technical innovations share a number of similar characteristics. First and foremost, all novelty is created not so much in the primary elements, but in their combination. Innovation lies in the relationship between elements – the more unusual the combination of elements, the more radical the innovation (Arthur, 2009). Some innovations – technical or social – dock rather seamlessly into existing products and processes, for example a new computer application or a new program for the homeless. Others are far more radical, demanding a change in a cascading series of adjacent areas in order to be made functional (Christensen et al., 2006; Love, 2003). The switch to electric or photovoltaic cars might be seen as such an innovation, demanding a retooling of large parts of the transportation supply and support system. On the social side, microfinance originally represented a radical proposition, demanding that banks readjust their definitions of risk and security. Needless to say, more radical innovations often provoke active resistance, as they are a threat to sunk costs. All this contributes to the notion that social conditions set the stage, and are a key part of any innovation "whose time has come" (Westley and Mintzberg, 1989).

Once an innovation is seen as a set of unusual links or relationships resulting in a new design for solving a problem, it is easier to explore the other way in which social and technical innovations are similar: they are often linked together as necessary parts of an innovative design. As Collins (1997) pointed out, social innovations in ways of doing things often provide the platform for multiple technical innovations. For example, the (social) invention of business partnerships formed a platform for the multiple technical innovations of the Renaissance (Padgett and McLean, 2006). Similarly, to support the growth and dissemination of most new technical innovations, social innovations from

marketing to distribution channels make it possible for the innovations to grow to scale and flourish. For example, the idea of lending circles, a social innovation, was a key factor in making microcredit work. Hence, social innovations and technical innovations are inextricably linked in most successful designs.

Policy initiatives in themselves may be social innovations (Voβ, 2007). Certainly, they may represent key links to successful social innovations – ultimately part of a design that characterizes an innovation, either technical or social, that has been successfully scaled. The more radical the innovation, the more unusual the policy approach may need to be. Tuning policy instruments to the emerging context of innovation, whether social programs or social products, can do much to create the conditions for linking and scaling such innovations, particularly for radical or disruptive innovations (Christensen et al., 2006). However, an understanding and awareness of the demands of each phase of social innovation are key.

The Phases of Social Innovation and the Policy Options

The following describes the characteristics of the phases of social innovation and the potential policy initiatives that would be well placed in the different phases. Examples illustrate each phase.

Phase 1: A crisis or disturbance makes it clear that the status quo is no longer an option, because it has increasingly made the system vulnerable with its rigidity.

In the first phase, the existing system can be imagined as relatively abundant in resources, rules, and institutions. The rigidity of these structures creates homogeneity and a strong resistance to change, but also vulnerability due to a lack of diversity. Then a disturbance may enter the system, such as a market crash, a natural disaster, or much less dramatically, a regular democratic election. The disruption could even be caused by another innovation that has reached its tipping point and is having a transformative impact. Regardless, as a consequence, the resources and capital, including social, intellectual, and financial capital, are released and freed up as the disturbance or crisis leads to a breakdown in some existing social structures.

In this phase, the greatest need is for new ideas and creative solutions as opposed to creating a market or "scaling up" (or "scaling out") an existing innovation. People may be genuinely uncertain about "what the right idea is" and how to make anything significant happen. In fact, many will not agree on the definition of the problem itself.

> **"Scaling up" or "Scaling out"?**
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> In the article, we use the term "scaling out" to refer to the replication of the same innovation in several different locations. In a different vein, we use "scaling up" to refer to moving an innovation into a broader system. Quite often, to effect transformative change in a broader system, the innovation will be reconfigured into an entirely new form to suit that context. For instance, the PLAN Institute of British Columbia scaled out its original innovation of creating support networks for children with disabilities by setting up networks for different families in numerous locations around the world. However, when it wanted to extend the application of its innovative thinking about how society could provide long-term security for people with disabilities, the social innovation required different tools and involved new legislation and new economic instruments, including Registered Disabilities Savings Plans. We believe the initial local networks and then the national policies are all part of scaling up a single social innovation.

With the lack of a clear problem definition and the high level of uncertainty about potential solutions that characterize this phase, policy levers that promote discussion, interaction, and social learning are needed to build knowledge (Hämäläinen, 2007). Research shows that new knowledge and different ideas are more likely to emerge when diverse actors that do not normally interact closely with one another come in contact with each other (Burt, 1992; Gilsing and Duysters, 2008), which provides a foundation for policy makers to consider. However, once this interaction occurs, the path may go one of three ways.

First, if decision-making processes are designed too simply for the complexity or scale of a problem, quick convergence may occur. That is, everyone may quickly agree on the same solution or idea, which may be useful in terms of the rate at which decisions and change can happen, but it can also lead to sub-optimal ideas rapidly spreading (Mason, et al., 2008). The consequence is that resources are devoted to one idea without adequate consideration and exploration of novel alternatives.

Second, while diversity is needed among actors, if too many different signals and knowledge inputs are received by people, their cognitive limits may be reached. This could eventually lead to possible misunderstandings (Hämäläinen, 2007; Mason, et al., 2008). As well, for people to be willing to share the risks of innovation, relationships that are characterized by trust are important, which is not inherent to relationships between people who never interact regularly (e.g., Uzzi, 1997). Social innovation then, can really only follow a third path where a mix of diversity and trust is found (Bodin and Crona, 2009; Burt, 1992; Gilsing and Duysters, 2008)

The most useful public policy instruments in this phase bring together different individuals or groups, providing a forum for sharing ideas, identifying the range of issues that contribute to the complexity of a problem, and building trusting relationships. Multi-stakeholder consultations, royal commissions, and participatory planning processes based on models such as Future Search are excellent examples of tools that help foster new insights, new partnerships, and new solutions. For example, the creation of the Central Coast Land Resource Management Planning process for the Central Coast Timber Supply Area in British Columbia brought together the conflict-ridden logging industry, environmental protesters, First Nations, and resource-dependent communities. The process eventually enabled a more nuanced understanding of the complexities of a situation that was not merely a profit versus environment conflict, but also a social

justice, community economic diversification, and cultural identity issue (Tjornbo et al., 2010). The outcome was the adoption of ecosystem-based management practices in what is now known as the Great Bear Rainforest, and a five-point deal between the different groups that fundamentally changed the flow of financial resources and the sites of authority (Tjornbo et al., 2010).

Policy Recommendation 1: When complex problems need to be better understood and new ideas are needed, processes that enable interactions and build trust between previously disconnected groups are helpful for creating the conditions needed for social innovations to emerge.

Phase 2: Reorganize groups around the new ideas, visions, and innovations themselves.

In the second phase, the actual definition of the problem is far clearer and, as a result, groups, structures, and opinions become formed, which will provide the eventual support of different innovations through the remaining two phases. In fact, this phase marks a key transition from mere "idea" or talk to planning for implementation. People start to cluster around the new ideas that have emerged or reorganize themselves with others who share a similar vision for the future (Van de Ven, 1986). Experiments with prototypes on a small scale or in a "safe" space are likely to occur (Geels, 2002; Voβ, 2007).

Public policies that support social innovation in this phase are those that assist innovators and the newly formed groups to develop short- and long-term plans and then encourage a selection process to choose among the range of options or ideas that have emerged. That is, forums for the mere generation of new ideas are not needed in this phase; rather, decisions about which innovation will be chosen and, therefore, which one should be invested in by the entrepreneur, the funders, the governments, and the general public become a primary concern.

One of the most significant difficulties with selection processes faced by governments and others is the lack of appropriate evaluation techniques to measure social innovation and the often intangible benefits they provide. Without appropriate metrics, it becomes difficult to determine which innovation is worth moving toward the next phase. While this difficulty often comes to bear in the funder-innovator relationship, with the funder demanding some type of targets and measurement for accountability, evaluation is not just important for financial investors. Investment in new ideas, initiatives, or programs also requires public support, political will, energy, and other forms of investment. Therefore, policies that help facilitate the selection process, which may include having to develop the selection criteria, will inform the investment process and are critical in this phase.

Pilot projects with complete developmental evaluations are effective in this phase (see for example, Patton, 2010). Likewise, challenges that are intended to stimulate, select, and reward innovations are also increasingly popular. The Big Green Challenge was hosted by NESTA (National Endowment for Science, Technology and the Arts) in 2009 in the United Kingdom to stimulate community-led responses to climate change. The potential reward was a £1 million prize, and the challenge required communities to submit proposals. Using criteria developed specifically for the competition, the organizers

selected 100 of the most promising groups, and the Big Green Challenge team then provided technical support to develop the ideas into detailed plans. From this group, 10 finalists put their ideas into practice to compete for the prize and to reduce CO_2 emissions in their community. While it is still too early to determine the effectiveness of the challenge in generating socially transformative solutions, early indications are that some novel ideas emerged and that those ideas came from communities and actors who would not normally have applied for or led activities to reduce carbon emissions (NESTA, 2009).

Many potentially good ideas will come forward out of the previous phase. One of the most common pitfalls is to develop a policy in the second phase that only commits to a principle of "fairness" in the distribution of resources (especially those coming from the public sector) for the next phase. The concern is that spreading resources widely but thinly typically translates to supporting any and every innovator, but with no single innovation receiving adequate support to succeed and no clear strategic policy being demonstrated by government. The fairness principle should instead be embodied in the opportunities to access and participate in the generation of new innovations and then in the process of selection. Policies that support the existence of protected spaces where innovation can occur and go through its own selection or review process could enable opportunities and access. Funding for universities and education, grants for the arts community, and student loans are all examples of options that would support this enabling environment.

Policy Recommendation 2: Policies that motivate and reward the generation of innovative ideas and involve an evaluation or selection process to choose among the many potential innovations become one of the more successful options for this phase.

Phase 3: Leverage resources and remove systemic barriers for the innovation. In this phase, the most important step becomes leveraging resources to support the development and adoption of the innovation selected through the previous phase. Often by this stage, the innovation has been successful at a local level and the goal becomes to scale out the innovation more broadly (Chappin et al., 2009). Many innovations get trapped here because their promoters cannot ensure support for their innovation or frame the innovation in a way that appears legitimate, desirable, and needed – an essential step given that transformative innovations initially do not have an established social market (Geels, 2002). Without sufficient resources devoted to these innovations, many never get past the pilot project stage.

This phase places less demand on the actual process of innovating while emphasizing the need to address any structural barriers to the innovation. Structural change will typically require resources and a source of authority or power that may not previously have existed for those seeking the change. Scholars studying social movements, networks, the relevance of social capital, innovation in the private sector, or the increasing role of a range of actors in governance all provide useful insights as to how different people and groups may seek to gain access and legitimately leverage new resources in certain circumstances. But how can public policy proactively support social innovations in this phase?

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Government incentives for environmental technologies, such as hybrid cars, geothermal heating systems for residences, water- and energy-efficient appliances are a good example for this phase, because these incentives help create a market or market mechanisms for innovations that in many ways, are already established (e.g., Braun and Wield, 1994). Policies in this phase are not intended to support the innovation in the phase when it was first trying to create the hybrid ; indeed, a growing body of research demonstrates that regulations and taxes do not encourage the generation of innovations (Chappin et al., 2009)

While this phase may sound less difficult than some of the other phases or less likely to lead to significant change, it requires an extremely strong capacity to adopt innovations. In many cases, the innovation may not have come from within that specific geographic region but, rather, is the result of external efforts. The capacity to recognize these innovations, adopt them in a timely fashion, and adapt them as needed to the local context is referred to as the "absorptive capacity" (Cohen and Levinthal, 1990).

Since government policies in this phase are intended to support adoption rather than generation, they should aim to reduce a range of uncertainties that serve as barriers for different actors – uncertainty about available resources, about the feasibility of adopting the innovation, about the relationship between the innovation and the structures in which it will become embedded, and the perceived risk by both the innovators and adopters (Meijer et al., 2007; Van de Ven and Polley, 1992).

Policy Recommendation 3: Policies that enable social innovations and the innovators to access resources – including social, intellectual, and financial capital – are critical to scaling out innovations. Policies that create a market or demand for the innovation (whether it is an idea, program, or technology) are necessary. These policies often involve proactively addressing structural barriers to social innovation, but must be very specific so as not to open opportunities for negative or needless exploitation of scarce resources.

Phase 4: Institutionalize the innovation, scale up, and prepare to be resilient in the face of the next disturbance.
The last phase may be the most crucial as it is imperative to both continue the process of completing the existing innovation while considering what has to happen next, what needs to be adjusted, what consequences and implications have occurred, and how best to respond. Therefore, this phase involves two important aspects to the social innovation process: the need to institutionalize and possibly scale up the innovation and invest in developing the next innovation.

With regards to the former, social structures that support the innovation need to be established whether this involves certain norms becoming accepted, institutions being created, or regulations being established. The specialization of skills, along with the productivity and efficiency of the new program, product, or initiative, and the social relationships involved, all tend to strengthen and become stabilized (Hämäläinen, 2007). While the freedom for further innovation tends to be negatively affected by the institutionalized nature of this phase (e.g., Braun and Wield, 1994; Chappin et al., 2009), it is equally important for achieving system change as the initial, openly creative process.

As the innovation and the system mature, it may be the most opportune time to determine if the innovation can be scaled out to other contexts or policy domains, thereby altering an even broader system. One example of a policy that supports seeking opportunities to scale up innovations involves the government-funded (mainly US government) International Tobacco Control (ITC) Policy Evaluation Project at the University of Waterloo. The project conducts survey research to analyze the effectiveness of anti-smoking policies in various countries, which can inform policy adoption in other countries where comparable policies do not yet exist and smoking rates are still very high. The ITC project first receives a guarantee from the governments of the countries in question that they will implement the research-based recommendations before the research begins (see www.ITCproject.org).

Second, given the nature of the complex problems that these social innovations are designed to address, there will be unforeseen consequences and implications to the innovations that create new issues or areas of concern. Additionally, priorities will shift once one problem has begun to be addressed. Thus, at this stage, government policy will want to examine whether other innovations are needed and to begin to understand the complexity of new problems being faced. A real tension exists at this point, given that the more successful an innovation is, the less likely people are to focus on new ideas, needs, and opportunities (Van de Ven, 1986). One way to do this would be to fund research, (e.g., through a Social Sciences and Humanities Research Council (SSHRC) special project fund, for example) that analyzes both what has happened and tries to anticipate what will happen. Creating and maintaining agencies within governments whose primary mandate is to conduct scenario planning, forward scanning, and other various future-focused activities to analyze trends and explore policy strategies is also a potentially valuable approach. However, such agencies must remain well informed of any current innovation processes in the sector or subject they are analyzing to ensure the research focuses on phase-appropriate analysis.

Policy Recommendation 4: In this phase, policies that help analyze what has occurred and which new policy priorities have emerged as a result of the innovation are important, along with policies that prompt or provide investments in possible social innovations that will build capacity to be resilient in the face of future change.
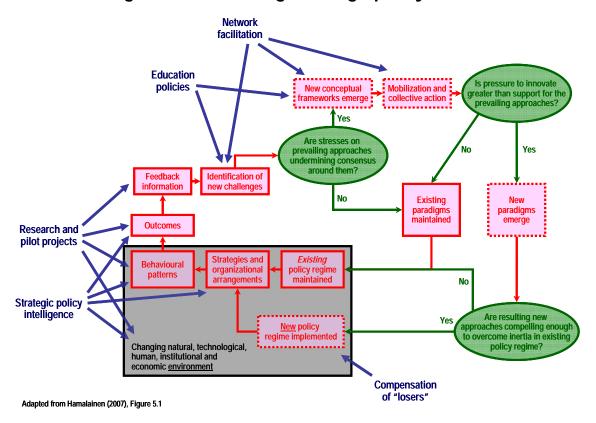
Note that here again, we emphasize that "investment" may refer to direct financial investment by governments, private actors, foundations, or others, but can also refer to the overall investment required in any social innovation. A more comprehensive definition of social innovation investment would include efforts to build political will and public support, seek early adopters, and create energy and momentum around the innovation. These are not government-only actions, but certainly are ones that we would suggest governments will need to lead or participate in for many social innovations to be successful.

Conclusion

Certain policy instruments will have greater impact on social innovation at specific points in the process. Recognition of the distinct phases of social innovation is central to

understanding which policy will be most suitable; that is, different policies are appropriate for the generation, selection, adoption, and institutionalization processes that any social innovation will need to undergo. This article argues for phase-appropriate government interventions to facilitate social innovation and clearly demonstrates that an active role for governments is entirely possible and does not simply require "getting out of the way."

Facilitating innovative change through policy interventions

Adapted from Hamalainen (2007), Figure 5.1

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