Challenges at the Intersection of Social Media and Social Innovation: A Manifesto

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Abstract Inspired by recent critical social and economic developments – and their most visible eruptions in the Arab world, Spain and Greece – which demonstrate that there is a relatively low barrier of entrance for individuals and groups to adopt social media for virtually any shared purpose, objective or cause, a "manifesto" has been written by a group of transdisciplinary researchers, activists and practitioners from the fields of ICT and social movements.

It promotes the possibility of using social media as a platform to effectively support the processes of social innovation, overcoming its limitations of speed and scale to become an alternative to currently established institutional mechanisms. Such social innovations comprise all new strategies, concepts, ideas and organizations that meet current social needs and strengthen civil society.

Further, the present paper proposes a framework for research into the elements of socio-technical architectures capable of sustaining large scale social innovations enabled by the availability of social media, considering the "paradigm shift of communication" in a knowledge society and describing key challenges of social innovation initiatives. In this context, the objective of the Manifesto on Social Media for Social Innovation is to propose actions oriented to extract the best of the potential synergies among those two concepts of social innovation and social media.

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1   Introduction

Social media, an umbrella term designating a constellation of internet platforms allowing users to publish, share, comment, distribute and remix all types of digital content, are causing significant changes in the way the internet is used and perceived. The most popular platforms, including social networks like Facebook, content sharing sites such as YouTube, collaboration sites such as the Wikipedia and new communication channels such as the micro-blogging site Twitter, are among the internet platforms with the largest absolute number of users (Comscore 2011). Most significantly, the amount of time spent by the average user on those social media sites is much larger than time spent on traditional sites such as Google or Yahoo! (Nielsen 2011). It therefore seems plausible to foresee that social media will have a lasting and significant effect both in the functionalities of the internet platforms and in the practices of the users accessing them, similar to the impact that the World Wide Web had during the 1990s. (Berners-Lee 1999).

In parallel, social innovation is also becoming an attractive concept for both public authorities and the so-called social entrepreneurs. As there is growing evidence that social innovation can bring about tangible results (Goldsmith 2010), it is receiving increased attention from public agencies (Bepa 2010; SIX 2010; White House 2010) as well as from academia (Phills et al. 2008; Howaldt and Schwarz 2010), the private sector (Hunt 2009) and even business magazines (Baker 2009). One of the reasons for the surge of interest in social innovation seems to hinge on the expectation that the contribution from social entrepreneurs can bring about a transformation and an increase in productivity in the public sector similar to the one that many businesses experienced from the mid 1990s. Nevertheless, those expectations are moderated by the evidence that social innovation has a problem of "speed and scale" (The Economist 2010).

Overcoming this problem might just be a matter of time. As demonstrated by economic analysis (Solow 1987; Brynjolfsson 1993; Castells 1999: chap. 2), it took several decades for business investments in information technologies to result in measurable increases in productivity. In fact, the process of organisational rearrangement towards the so-called network economy (Castells 1999) is still fully underway in sectors such as music and content publishing. Something similar could happen regarding the full exploitation of the capabilities of information technologies to help social innovation to gain greater speed and scale, although taking place at a different pace in the diverse categories of social innovation (Bepa 2010). Some locally oriented practices, such as the 'social innovation camp',[1] are already highly intensive in their use of technology. But tackling the challenges of the large scale, systemic changes needed to solve today's most pressing social problems (Touraine 2010; Morin 2011) will inevitably take some more time.

Addressing the prospect of the uses of social media to foster social innovation requires a proper sociological approach to both the processes of innovation

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[1] http://www.sicamp.org/global/

(Howaldt and Schwarz 2010) and of social appropriation of technology (Tuomi 2002). Innovation, even technological innovation, is as much about creating new meanings as it is about creating novel material artefacts (Tuomi 2002, p. 13). As meaning is constructed in society through the process of communicative action (Castells 2009, p. 12), mediated by whichever communication mechanisms are available at a given time, social media can be expected to become increasingly relevant.

2 Framing the Manifesto: Social Media for Social Innovation

In order to frame the Manifesto, we start from the current economic and political situation, characterized and dominated by an acute and prolonged economic and financial crisis, social and civil uprisings in both Arab and European countries and an expanding social movement unified by its "indignation". Citizens, political and economic leaders start to understand that new governance models are needed to face the present situation. Social innovation and social media might help to find bottom-up, participative, innovative and new solutions.

2.1 What Are Social Innovations?

Howaldt and Schwarz (Howaldt and Schwarz 2010, p. 21) define social innovations with a reference to Schumpeter:

> A social innovation is a new combination and/or new configuration of social practices in certain areas of action or social contexts prompted by certain actors or constellations of actors in an intentional targeted manner with the goal of better satisfying or answering needs and problems than is possible on the basis of established practices. An innovation is therefore social to the extent that it, conveyed by the market or 'non/without profit', is socially accepted and diffused widely throughout society or in certain societal sub-areas, transformed depending on circumstances and ultimately institutionalized as new social practice or made routine.

With this definition Howaldt and Schwarz do not only distinguish a social innovation from technological innovations (that are "tangible", in comparison to "intangible" social innovations) but also from social inventions and social change. Social inventions are intended, new and social, but not necessarily used. And social change is not intended, it "happens". With this scientific understanding, we also deny that there is a normative layer of social innovations. Our scientific perspective is the adoption of an innovation by society. While the manifesto itself is a political type of text which naturally has to consider its claims and approaches as "good" or socially desirable, this distinction is very important in transdisciplinary cooperation, especially if the disciplines involved are not only scientific ones. So in framing the manifesto, we will not define "good" social innovations, but can only indicate

which innovations as social practices could be useful because of their potential to contribute to a *common goal* (see Chap. 3.2).

Here, as Howaldt and Schwarz (Howaldt and Schwarz 2010, p. 3) say, the "preparedness of society to adopt new solutions for needs and challenges comes into play. (...) Social values, ideologies, institutions, power imbalances, other disparities, and – last but not least – prevailing patterns of innovations have an effect on the success of different kinds of innovation ('path dependency')." One important factor of preparedness is the extent of use of social media in a society. Social media, obviously, are dependent on an active involvement of a broad and interconnected public (Kaletka and Pelka 2010, p. 152). In recent years while the use of the internet and social media has increased tremendously worldwide, the socio-demographic characteristics of the internet users have also changed; users more and more represent the overall population. Setting this as a background, we can say that social media have the potential to give birth to social innovations. Its problem – not only with or within social media – seems to be the issue of "speed and scale" (The Economist 2010). This is the anchor for the manifesto: It aims at describing pathways for speed and scale of social innovations through social media.

2.2 Empowerment Through Social Media

In this context of a growing need of and expectation from social innovations, the manifesto formulates the requirements and options we currently see to initiate social innovation processes supported and accelerated by social media. This vision contrasts the current hype around the latter which mainly is concerned with its use for leisure and entertainment and the opportunities thereby generated for the marketing and advertisement industries, the "attention industry" (Globalwebindex 2011).

Our understanding of social media and their impact on society goes far beyond that: We see a new communication pattern raised by social media with the potential to better empower individuals to participate in different processes in modern society. This entails the replacement of top-down, linear processes and "finished products" by "never finished products" created and evolved incrementally through bottom-up, collaborative, distributed processes. This development is in line with the change from an industrial to a knowledge society as well as with the decentralisation of knowledge and content production processes taking place in a variety of social fields; although its consequences and implications have not been analytically analysed yet.

Communication mechanisms are one of the threads in the fabric of societies. The new communication and coordination possibilities through social media are and could further be used for a societal evolution going much beyond the economics of leisure and consumption. The paradigm shift of communication challenges multiple layers of the knowledge society. The four most striking ones are:

1. *Change of labour*. The shift from an industrial to a knowledge society goes hand in glove with a shift in forms of labour and management, which means: the way people work and the way organizations are managed and generate potential innovations. The way social media support cooperation between individuals and foster the production of user-generated content shows analogies to cooperation strategies in knowledge based labour processes. The potential of social media – not seen as a technology, but as a new communication paradigm – seems underexploited in labour processes.

2. *Political participation*. The availability of social media, which enables many new options for online interaction and content creation for all kinds of users, has already severely influenced both horizontal and vertical political communication processes. The "horizontal" level addresses new or accelerated coordination potential among political interest groups, with the extensive use of social media by Greek and Spanish youth movements of 2011 as the most prominent and recent example. "Vertical" communication takes place between citizens and interest groups with public authorities. Here, the impact of social media becomes visible in the substantial research effort which is being organized in the USA to address national political priorities (Pirolli et al. 2010). Its objective is to create new socio-technical architectures for the online public spaces that allow citizenship at large to contribute to vital community and national projects. Similarly in Europe, the European Commission has declared the objective to "empower citizens and business by eGovernment services *designed around users' needs and developed in collaboration with third parties* [. . .]" (European Commission 2010a).

3. *eInclusion*. Quite strongly linked to the field of political participation is the question of participation. E-inclusion is, on the one hand, an approach to overcome the "digital divide" of society and to support *digital* inclusion. Social media, even if quite simple to use, are still means of ICT and demand basic ICT skills and access to ICT and internet. So called "digitally excluded persons" either lack ICT access or competences or motivation. The potential of social media for e-inclusion is high, if social media are embedded in supporting social structures that these target groups will need to make full profit of social media as e-inclusion means (Kluzer and Rissola 2009; Kaletka et al. 2011). On the other hand, e-inclusion is also a concept and political approach to support *social* integration by making use of ICT. In this sense, e-inclusion is the use of ICT to overcome social and economic disadvantages and exclusion, especially of already disadvantaged people, being a central aim of the Digital Agenda for Europe (European Commission 2010c).

4. *Education and training*. Education has long since discovered the potential of user-driven learning approaches. Modern learning environments deny "teaching" in the sense of mediating knowledge but place the learner in the centre of the learning process. This shift from "teaching" to "learning" came along with pedagogical approaches and technological environments that enable learners to find their own way of acquiring needed knowledge, skills and competences. Social media show analogies to this approach: They also put the learner in the

middle of the process and offer him the instruments of navigating through learning content. The potential of social media for education and training seems underexploited by far (Pelka 2010).

The increasingly shared view of local and global risks and the necessity of new and innovative governance models is confirmed by the European Commission, stating that there is a need "to move towards a more open model of design, production and delivery of online services, taking advantage of the possibility offered by collaboration between citizens, entrepreneurs and civil society" (European Commission 2010a). Even then, the writing of a manifesto seems to be still necessary in order to emphasize the need of the merging of the social and technological aspects in an effective process. Therefore, the Manifesto starts from the assumption that communication mechanisms and especially the social interactions enabled by the new and social media are one of the threads in the fabric of societies. In this context, one of the main research questions is how to improve the success of social innovation initiatives by supporting collaboration among the disparate players who must work together to bring these projects to bear. While the importance of establishing networked collaboration for successful innovations has been demonstrated across a variety of sectors (Dubini and Aldrich 2002; Jenssen 2001), we still do not know how best to support this process in the social arena. Nevertheless, a first review of existing literature and theories (Ruiz De Querol and Kappler 2011) shows that the widespread availability of 'social computing' mechanisms can have a significant impact fostering "bottom-up" networks of innovation and collaboration that incorporate a wide array of diverse parties, including social entrepreneurs, communities, not-for- and for-profit organizations, and government agencies.

In spite of the relevance of horizontal communication, it has been demonstrated that there exists a number of limitations and risks of applying the current generation of Web 2.0 tools to the often simplistic cliché expectations about the "wisdom of the crowds" and similar metaphors (Sunstein 2006, 2007).

Aside from the current hype around social media, it seems to be clear that "effective Technology Mediated Social Participation (TMSP) designs" are needed that "improve usability and sociability to better engage people with diverse motivations, experiences, perspectives, skill and knowledge and to create the conditions for citizens to participate, connect and undertake constructive action" (Pirolli et al. 2010). According to Castells, "the greater the autonomy of the communicating subjects vis-à-vis the controllers of societal communication nodes, the higher the chances for the introduction of messages challenging dominant values and interests in communication networks" (Castells 2009, p. 413). These new socio-technological architectures of the online public space can be crucial in order to change the existing power relations. In this sense, the potentials of social media represent a paradigm shift in the way people communicate and work.

3 A Socio-technical Framework for Social Media and Social Innovation

3.1 Basic Challenges

It would be naive to foresee that social innovation would overcome barriers of speed and scale just by throwing in social media. Not only should one not expect to solve social problems with algorithms (McQuillan 2011); technology by itself does not solve social problems either. We should not forget, for example, that besides a transformation of the technological base of society the industrial revolution entailed at least equally radical ideological, political and organisational transformations (Polanyi 2002). On the same footing, the worldwide expansion of the internet can only be fully understood in the framework of the process of globalisation (Castells 1999; Tuomi 2002). Social change does not happen when society adopts new technologies – it happens when society adopts new behaviours.

With this in mind, one can note that the many definitions of social innovation (for example Bepa 2010; Howaldt and Schwarz 2010; Phills et al. 2008) have all in common the attempt to deal with a phenomenon which does not fit and does not want to be fitted into a dichotomous world of the 'market' and the 'state'. This suggests using the work of scholars such as Elinor Ostrom as a starting point in looking for the coupling of social media and social innovation. The following statement of Ostrom's (2009) Nobel Prize lecture is readily applicable to social innovation:

"*Designing institutions* to force (or nudge) entirely self-interested individuals to achieve better outcomes has been the major goal posited by policy analysts for governments to accomplish for much of the past century. Extensive empirical research leads me to argue that instead, a core goal of public policy should be to *facilitate the development of institutions* that bring out the best in humans. We need to ask how diverse polycentric institutions help or hinder innovativeness, learning, adapting, trustworthiness, levels of cooperation of participants, and the achievement of more effective, equitable and sustainable outcomes at multiple scales". (Ostrom 2009 (emphasis added)).

Ostrom's research helped to identify design principles for bottom-up organisations to be sustainable over time, as well as rules for individual behaviour inside those organisations. Communication and information sharing among the participants are elements of these principles and behaviours, as well as a substrate for the build-up (or the loss) of trust and other key elements. It seems therefore worthwhile to explore how to best blend those design principles and rules with the communicative capacities of the currently available social media or with those of other platforms yet to be developed.

The shortcomings of early attempts to bind social media and social innovation are evident, for instance, in a recent call from the European Commission to open a dialogue about the desirable characteristics of platforms for "collective awareness

and actions" (Madelin 2011). The call emanates from the vision that "individuals can save the planet if they are given the opportunity to act socially, based on trusted information [...] Such an extended awareness can be enabled by ICT technologies". The proposed objective would be to deploy "social innovation platforms for sustainability aware lifestyles and for collective action" that would support "innovative environmentally aware, bottom-up processes and practices to share knowledge, to achieve changes in lifestyle, production and consumption patterns, and eventually to set up more participatory democratic processes" (Madelin 2011).

It is obvious that the nature of the envisaged social and collective action seems pretty much limited to sharing knowledge and generating 'awareness', while achieving more participatory democratic processes is left out to be handled 'eventually'. This rings a tone of 'libertarian paternalism' (Thaler and Sunstein 2008) where the framing of the problem and the affordable choices are defined and set up in a pre-established top-down matter. The contrast with the spirit of Ostrom's quote above is quite evident.

3.2 A Layered Socio-Technical Architecture

In the light of the above, we propose to consider a socio-technical architecture with three basic components:

- A top layer encompassing the overall design principles and rules of governance of communities involved in social innovation, including those affecting the other layers underneath. The transposition of Ostrom's results to contexts of social innovation, including the evidence that there is not a universal all-encompassing governance scheme applicable to all kind of contexts and issues, could be a starting point. When the context where innovation takes place is closely connected to a larger social-ecological system, these governance activities might be themselves organised in multiple nested layers.
- An intermediate level which would include the rules and practices regarding the social creation and sharing of content supported by the technical infrastructure, including crucial issues such as that of the management of online identity, reputation and trust, as well as of the mechanisms ensuring transparency and accountability of content, among others. Ostrom's research also indicates the relevance of allowing the individuals in a community to take part in making and modifying its rules. Therefore, mechanisms for effective online deliberation and resolution of conflicts should also be included.
- The bottom level would comprise the design principles and governance rules of the technical infrastructure required for social media communication. Separate consideration should be given, on the one hand, to the design, implementation and management of the software implementing the functionalities required by the two levels above and, on the other hand, to the provision and management of the hardware and communications infrastructure (Fuster 2010).

One can easily establish indicative parallelisms between this framework and those at work in success cases such as those of the invention of the internet (Abbate 2000), the development of open source (Tuomi 2002, Weber 2004) and that of Wikipedia (Fuster 2010).

Fleshing out this framework and filling out the missing details will require specific research which is way beyond the objective of this paper. A manifesto proposing a set of research questions and a call for action regarding them is motivated by these arguments.

4　The Manifesto on Social Media for Social Innovation

This Manifesto was compiled by a group of transdisciplinary researchers, activists and practitioners from the fields of ICT and social movements. They came together in a workshop of the 5th International Conference on Weblogs and Social Media (ICWSM-11), held on the 21 July in Barcelona. The Manifesto was composed in order to address researchers in social sciences and internet technologies, people and organizations interested in the applications of social media for social innovation and institutions potentially interested in supporting researchers and practitioners to further social innovation through social media. The following ideas were leading the discussions in the workshop.

4.1　Motivation

Based on the above, the joint scenario for social innovation and social media could be summarized as following:

1. There is an increasingly widespread agreement that the economic and social reference models that have worked during the last decades are not sustainable any more.
2. The financial crisis demonstrates that many current socio-technical systems need to be redesigned and redeployed, not merely readjusted. A similar conclusion can be reached about other relevant societal issues.
3. Social innovation is proving to be a sensible alternative to some of the traditional government-led institutional frameworks for addressing social issues and concerns. Nevertheless, many conventional, top-down, public policies do not yet take enough into account the potential benefits of social innovations.
4. Social innovations can and will be a key ingredient to the solution of new and existing societal problems; but it needs improvements in speed and scale.
5. Social media or other forms of technology-mediated social participation (TMSP) can provide platforms and tools supporting social innovation to grow more effective and at a larger scale.
6. Existing social media tools will need to be adapted or redesigned for a TMSP directed to social innovation.

4.2   Objectives

In this context, the objective of the Manifesto on Social Media for Social Innovation is to propose actions oriented to extract the best of the potential synergies among those two concepts. The Manifesto puts forward a frame of principles and intentions that, if widely shared, will help fighting the limitations of speed and scale that need to be overcome for social media to become an alternative to currently established institutional mechanisms.

In order to accomplish social media evolving towards a support as effective as possible for the growth of consolidation of social innovation worldwide, the technologically innovative communities and the socially innovative communities should establish a close and interdisciplinary collaboration towards the shared goal of more sustainable societies, emphasizing the social components and processes of social media-platforms.

4.3   Proposed Actions

The Manifesto proposes a set of actions, mainly focused on the research needs detected and described previously. The main task of the Manifesto is the promotion (within FP7, "Horizon 2020" and elsewhere) of research and discussions about policies and practices that would enable valuable social innovation initiatives to acquire speed and scale comparable to those of successful businesses and organizations, as well as the promotion of research and development of social media technological platforms which in their provisioning, interface design, functionalities and management are most suitable for the needs of social innovation. Based on these research initiatives and development, the objective is to launch prototype socio-technological architectures and platforms in order to test their functionality in large scale social experiments.

Furthermore, the Manifesto proposes to promote awareness and training programmes for social innovators and entrepreneurs to reinforce their management skills as well as their ability to effectively use social media to support their ventures.

Third, we suggest more research on the needs and resources of people using – and people not using – social media. If social media are supposed to become a discourse platform for political participation, education, e-inclusion or the world of labour, society has to give the chance of participation to all citizens. Social media – even though very simple – still are means of ICT that not all citizens can handle. But a society can not exclude parts of its citizens from a discourse platform. Therefore, the needs, resources and restrictions, especially from disadvantaged persons, have to be identified and mechanisms, support structures and technologies have to be developed to include these parts of society. It is our conviction that it is necessary to offer social support structures on top of ICT-tools to these target groups in order to avoid their exclusion (Kluzer and Rissola 2009; Kaletka et al. 2011).

The Manifesto envisions a future where social innovations evolve with enough speed and acquire enough scale to become alternatives to existing public and private organizations, locally as well as globally. In this context, we have limited the scope of the Manifesto to the European context and developed countries, at least in its initial state, but – considering its international support group, including representatives of non-European countries, and the global need for social innovations – it is planned to open the Manifesto to other partners, i.e. non-European and underdeveloped regions, and related issues, such as questions of e-inclusion and e-participation.

Annex: Social Media for Social Innovation: A Manifesto Draft

Because...

- There is an increasingly widespread agreement that the economic and social reference models that worked well during the last decades are not sustainable.
- The financial crisis demonstrates that many current socio-technical systems need to be redesigned and redeployed, not merely readjusted. A similar conclusion can be reached about other relevant societal issues.
- Social Innovation is proving to be a sensible alternative to some of the traditional government-led institutional frameworks for addressing social issues and concerns.
- Social Media provide socio-technical platforms that can be used to empower individuals and groups to pursue many valuable causes through Social Innovation.

We Envision a Future Where...

- Social innovations evolve with enough speed and acquire enough scale to become alternatives to existing public and private organizations, locally as well as globally.
- Social Media, in parallel to its current orientation towards leisure and consumption, evolves towards a support as effective as possible for the growth of consolidation of Social Innovation worldwide.
- The technology innovative communities and the social innovative communities collaborate towards the shared goal of more sustainable societies.

In Order to Accomplish this, We Will...

- Promote (within FP7 and FP8 and elsewhere) research and discussions about policies and practices that would enable valuable social innovation initiatives to acquire speed and scale comparable to those of successful businesses.
- Promote (within FP7 and FP8 and elsewhere) research and development of social media technological platforms which in their provisioning, interface design, functionalities and management are most suitable for the needs of social innovation.
- Promote awareness and training programs for social innovators and entrepreneurs to reinforce their management skills as well as their ability to effectively use social media to support their ventures.
- Use Social Media to nucleate a support group that will further develop these initiatives.
- Seek and obtain support for the above from socially responsible businesses as well as from socially responsible public administrations. Use Social Media widely in order to develop our cause and obtain increased support.

We Address this Manifesto to...

Researchers in Social Sciences and Internet technologies; People and organizations interested in the applications of Social Media for Social Innovation; Institutions potentially interested in supporting researchers and practitioners to further Social Innovation through Social Media.

Context

Most of the current hype around Social Media turns around its use for leisure and entertainment and the opportunities thereby generated for the marketing and advertisement industries, the 'attention industry'.

While those applications are and will be relevant indeed, they only touch the surface of the 'social' potential of Social Media. Communication mechanisms are one of the threads in the fabric of societies. The new communication and coordination possibilities afforded by Social Media could be used for a societal evolution going much beyond the economics of leisure and consumption.

In this context, the objective of this Manifesto on Social Media for Social Innovation is to propose actions oriented to extract the best of the potential synergies among those two concepts. The Manifesto puts forward a frame of principles and intentions that, if widely shared, would help fighting the limitations of speed and scale that need to be overcome for Social Media to become an alternative to currently established institutional mechanisms.

A first version of the Manifesto emerged from the workshop on Social Innovation and Social Media (SISoM) which took place during the 5th International Conference on Weblogs and Social Media (ICWSM-11) in Barcelona.

We intend to present a final version of the Manifesto on Social Media for Social Innovation at the event *Challenge Social Innovation – Innovating innovation by research – 100 years after Schumpeter* that will take place in September in Vienna. In the meanwhile, we'll seek further input and feedback from interested persons and parties.

Research Questions

An initial, tentative set of research questions to be explored would include the following:

RQ1. Which are the characteristics of the outstanding policy questions which would make them more amenable to be helped by social innovation?

RQ2. What is the current perception by policy makers of the potential of social innovation to address outstanding social and policy problems? Which are the social and policy challenges? Which are the technological challenges?

RQ3. Which are the conceptual stages of policy making and/or implementation in which social innovations could potentially have greater impact? (e.g. identification of problems and issues, policy design, modeling and simulation, implementation, management, . . .)

RQ4. Which are the functional primitives of Social Media that would be potentially most relevant for fostering social innovations in the public policy domain? What would be the requirements? How can the performance of currently available platforms, tools and services be measured and compared to those requirements?

RQ5. How can the results of the research of Elinor Ostrom and others regarding the rules and conditions that allow bottom-up organizations to succeed be potentially translated to social scenarios in which social media technologies would be widely available?

RQ6. Which modeling strategies and tools would be best suited to model the potential impact of social media on policy design, evaluation and implementation? (e.g. increased user feedback, distributed coordination and management among others).

RQ7. What would be the functional and performance requirements of a Social Media Toolbox that would be useful for policy practitioners to best exploit the potential of social innovation?

Support Issues

At this stage, previous to its presentation in its final version at the Vienna Conference, we are not yet asking for any kind of commitment in support of the Manifesto.

Contributions and suggestions are of course most welcome. But they will not be taken as neither implicit nor explicit support.

Communication Issues

We will use and promote the Twitter hashtag #SISoM in order to communicate progress and updates on the Manifesto.

Who Are We

This first draft of the Manifesto is being promoted by a network of researchers and practitioners working at the intersection of social and technological development. It is known that many of the most relevant innovations happen at the boundaries between disciplines and knowledge domains. We believe that this is much needed in order to generate new solutions to pressing existing problems. We will join our expertise and resources to make it happen.

References

Abbate, J. (2000). *Inventing the internet*. Cambridge, MA: MIT Press.

Baker, S. (2009). A bull market in social entrepreneurs. *Business Week*, 10 June 2009.

BEPA. (2010). Empowering people, driving change: Social innovation in the European Union, Bureau of European Policy Advisors. Accessible online (Download: http://ec.europa.eu/bepa/pdf/publications_pdf/social_innovation.pdf. Aug 2011.

Berners-Lee, T. (1999). *Weaving the web*. New York: Harper Business.

Brynjolfsson, E. (1993). The productivity paradox of information technology. *Communications of the ACM, 36*(12), 66–77.

Castells, M. (1999). *The rise of the network society*. Oxford: Blackwell.

Castells, M. (2009). *Communication power*. Oxford: Oxford University Press.

Comscore. (2011). comScore Media Matrix Ranks Top 50 U.S. Web Properties for June 2011, press release. (Download: www.comscore.com. Aug 2011).

Ruiz de Querol, R., & Kappler, K. (2011). Challenges at the intersection of social media and social innovation, challenge social innovation, Vienna, September 19.

Dubini, P., & Aldrich, H. (2002). Personal and extended networks are central to the entrepreneurial process. In N. F. Krueger (Ed.), *Entrepreneurship: Critical perspectives on business and management* (pp. 217–228). London: Routledge.

European Commission. (2010a). The European eGovernment Action Plan 2011–2015, COM (2010) 743, December.

European Commission. (2010c). *A digital agenda for Europe,* Brussels.

Fuster, M. (2010). Governance of online creation communities: Provision of infrastructure for the building of digital commons. PhD thesis, European University Institute.

Globalwebindex. (2011). Annual Report 2011: Welcome to Social Entertainment. (Download: http://www.slideshare.net/Tomtrendstream/welcome-to-social-entertainment-annual-report-2011. August 2010).

Goldsmith, S. (2010). *The power of social innovation*. San Francisco: Jossey-Bass.

Howaldt, J., & Schwarz, M. (2010). Social innovation: Concepts, research fields and international trends. In K. Henning, & F. Hees. (Eds.), *Studies for innovation in a modern working environment – international monitoring* (Vol. 5). Aachen: Eigenverlag (Download from: http://www.sfs-dortmund.de/odb/Repository/Publication/Doc%5C1289%5CIMO_Trendstudie_Howaldt_Schwarz_englische_Version.pdf. Accessed 09 June 2011).

Hunt, T. (2009). Ethical banks cash in after trouble on the high street, The Guardian Green Living Blog, April 20 (Download: http://www.guardian.co.uk/environment/ethicallivingblog/2009/apr/17/ethical-money-ethical-living, August 2011).

Jenssen, J. I. (2001). Social networks, resources, and entrepreneurship. *The International Journal of Entrepreneurship and Innovation, 2*(2), 103–109.

Kaletka, C., & Pelka, B. (2010). Web 2.0 zwischen technischer und sozialer Innovation – Anschluss an die medientheoretische Debatte. In J. Howaldt & H. Jacobsen (Eds.), *Soziale Innovation. Auf dem Weg zu einem postindustriellen Innovationsparadigma* (pp. 143–161). Wiesbaden: VS Verlag.

Kaletka, C., Kopp, R., & Pelka, B. (2011). Social media revisited. User generated content as a social innovation. Proceedings of ICWSM 2011 – international AAAI conference on weblogs and social media, SISoM-11, pp. 17–19.

Kluzer, S., & Rissola, G. (2009). E-inclusion policies and initiatives in support of employability of migrants and ethnic minorities in Europe. *Information Technologies and International Development, 5*(2), 67–76.

Madelin, R. (2011). Platforms for Collective Awareness and Action, DG Information Society (Download: http://ec.europa.eu/information_society/activities/collectiveawareness/index_en.htm, August 2011).

McQuillan, D. (2011). Social Innovation Hacktivism, ICWSM 2011 – SISoM-11 Workshop (Download: http://www.slideshare.net/internetartizans/social-innovation-hacktivism, August 2011).

Morin, E. (2011). *La Voie: Pour l'avenir de l'humanité*. Paris: Fayard.

Nielsen. (2011) June 2010: Top Online Sites and Brands in the U.S., NielsenWire (Download: http://blog.nielsen.com/nielsenwire/online_mobile/. Date Aug 2011).

Ostrom, E. (2009). Beyond markets and states: Polycentric governance of complex economic systems, 2009 Nobel Prize address. (Download: http://www.nobelprize.org/nobel_prizes/economics/laureates/2009/ostrom-lecture.html. Aug 2011).

Pelka, B. (2010). Die Potenziale des Web 2.0 bei der Unterstützung von Lernprozessen. In Medien und Erziehung, Zeitschrift für Medienpädagogik, 54. Jahrgang, 4/2010/2010, pp. 58–62.

Phills, J. A., Deiglmeier, K., & Miller, D. T. (2008). Rediscovering Social Innovation. *Stanford Social Innovation Review, 6*(4), 34–43

Pirolli, P., Preece, J., & Shneiderman, M. B. (2010). Cyberinfrastructure for social action on national priorities. *IEEE Computer Magazine, 43*(11), 20–21

Polanyi, K. (2002). *The great transformation: The political and economic origins of our time*. Boston: Beacon Press.

SIX. (2010). Study on Social Innovation, Social Innovation eXchange (SIX) and the Young Foundation for the Bureau of European Policy Advisors at the European Commission. (Download: http://essesummerschool.files.wordpress.com/2011/06/six-study-on-social-innovation.pdf. August 2011).

Solow, R. (1987). We'd better watch out. *New York Times Book Review*, July 12, 36.

Sunstein, C. R. (2006). *Infotopia*. Oxford: Oxford University Press.

Sunstein, C. R. (2007). *Republic.com 2.0: Revenge of the blogs*. Princeton: Princeton University Press.

Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth and happiness*. New York: Penguin.

The Economist. (2010). Let's hear those ideas, August 12 (Download: http://www.economist.com/node/16789766. August 2011).

Touraine, A. (2010). *Après la crise*. Paris: Seuil.

Tuomi, I. (2002). *Networks of innovation: Change and meaning in the age of internet*. Oxford: Oxford University Press.

Weber, S. (2004). *The Success of Open Source*. Cambridge: Harvard University Press.

White House. (2010). Blog of the White House Office of Social Innovation and Civic Participation. (Download: http://www.whitehouse.gov/administration/eop/sicp. Date Aug 2011).