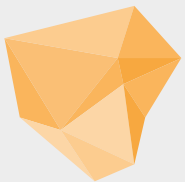Digital Social Innovation

Interim Report Executive Summary

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DSI Interim Report Executive Summary

Digital Social Innovation (DSI) is an emerging field of study, with little existing knowledge on who the digital social innovators are, which organizations, and activities support them and how they use digital tools to change the world for the better.

In the context of this research we define Digital Social Innovation (DSI) as

> *'a type of social and collaborative innovation in which innovators, users and communities collaborate using digital technologies to co-create knowledge and solutions for a wide range of social needs and at a scale that was unimaginable before the rise of the Internet'.*

This research aims to explore the potential of the network effect of the Internet (activity i.e. the service becomes more powerful when more people use it), emphasizing the characteristics of digital tools that can effectively empower citizens and civic innovators. The challenge is to exploit the collaborative power of networks (networks of people, of knowledge, and connected things) to harness the collective intelligence of communities in order to tackle big social challenges. There is great potential to exploit digital network effects both in social innovation activity and in new services and approaches that generate social value. But much of this potential isn't yet being realized. Indeed, the "network effect" of the Internet may still be in its early technical phases and early implementation to maximize social good.

The development of open data infrastructures, knowledge co-creation platforms, wireless sensor networks, decentralized social networking, and open hardware, can potentially serve collective action and awareness. However, today it still fail to deliver anticipated solutions to tackle large-scale problems, and the growth of digital services has resulted in an imbalance between the dramatic scale and reach of commercial Internet models and the relative weakness of alternatives, mainly filling marginal niches and unable to gather a critical mass of users and exploit the network effect.

Digital social innovation plays a central role in the development of the Future Internet. One of the motivations underpinning this research is the need to investigate the key role that civil society organisations and grassroots communities play to enable bottom-up social innovation that leverage the power of the Internet. This research project has started to identify, map and engage communities that are constructing the emerging Digital Social Innovation field and provide policy recommendations for concrete policy actions to foster, support, and scale DSI in Europe.

This report describes our work to date, having investigated more than 250 case studies of digital social innovation services, support organizations and activities. The report presents interim findings and conclusions and highlights next steps for the research project. The study shows that civil society organizations, non-profit NGOs, social movements, and civic innovators (developers, hackers, designers) are key stakeholders in support of innovation for social good. In the reserach we distinguish between the initiation of innovation via often non-institutional actors that are not taken into account in traditional innovation analysis, and the socialisation of innovation via institutional organisations and the public sector that support and enable them to scale. We also investigate how this process can lead Europe to embrace new innovation models and experimentation, while too often in the past civil society organizations were ignored or left behind in the big picture of a top-down technology-push or large top-down innovation programmes.

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Emerging Findings

Crowd-Mapping DSI organizations and their activities

There are many cases of DSI being spread throughout society that we attempt to define and cluster in this report. Some of the best examples of DSI in Europe are transforming Governments, businesses and society.

We have developed a crowdmapping facility http://digitalsocial.eu/ based on open linkeddata to crowdmap the different types of DSI organisations, where they are based and how they are connected, including a prototype analysis of strong and weak links between organizations. In the DSI Network Data-Set, there are a total of 285 organisations with a total of 178 activities as of 13 December 2013. The emergent network represents DSI organisations and their social relationships mapped in the form of graph that is a collection of nodes and edges between them.

We highlighted 5 areas that capture key dimensions of the phenomenon under investigation: (i) New ways of making including the Makers movement and open hardware projects like Arduino that is recoluzionising open design and manufacturing; (ii) Participatory mechanisms and open democracy featuring new projects pioneering direct democracy and citizens paretcipation such as Open Ministry or Liquid Feedback that are transforming the traditional models of representative democracy; or Openspending. that encourages transparency and accountability, participatory web platforms such as Wikigender and Wikiprogress developed by the OECD that facilitate the linking of National statistics to actual individual living conditions; organisations like MySociety and the Open Knowledge Foundation in the UK that are developing services like FixMyStreet allowing citizen to report city problems and CKAN, the biggest open source data platform in Europe that is underpinning a new bottom up ecosystem for digital public services; (iii)The sharing economy that includes crypto digital curencies like Freecoin and many sharing economy platforms such as Peerby and Goteo creating new forms of crowdfunding methods, exchanges and new economic models; (iv) Awareness networks enabling sustainable behaviours and lifestyles such as the Smart Citizen Kit – an initiative that empowers citizens to improve urban life through capturing and analysing real-time environmental data, and Safecast – a project that enables citizens to capture and share measurement on radiation levels; (v) Open access and information Commons including cities like Vienna and Santander pioneering new practices in Open Data and open sensor networks; and mesh networks projects such as Guifi.net , projects such as Confine, Commotion, and Tor that are using bottom up privacy-preserving decentralised infrastructure for the open Internet constituted by open standards, open data, free and open software, and open hardware. Other projects are exploring the potential of federated social networking, such as D-CENT and Diaspora, and the promotion and diffusion of knowledge systems in the Public Domain, such as Communia.

Most, if not all, of the above examples of civil society digital social innovation take place via the Internet or are highly enabled by new technology trends such as open networks, open hardware and open data infrastructures. The selected organizations have been classified into four types:

• Different typology of organisations (e.g. Government and public sector organisations, businesses, academia and research organisations, social enterprises, charities and foundations; and grassroots communities);

• The way these organizations are supporting DSI (e.g. such as undertaking research, delivering a service, organising networking events and festival etc.);

• The main technological trends the organisations and their activities fit under (open data, open networks, open knowledge, open hardware); and

• The area of society the organisations and their activities operate and seek an impact in: The DSI field does not have fixed boundaries; it cuts across all sectors (the public sector, private sector, third sector and movements) and cuts across domains as diverse as (1) health, wellbeing and inclusion; (2) innovative socio economic models (3) energy and environment; (3) participation and open governance, (4) science, culture and education; (5) public services.

Experimental policy tools and actions to enable DSI to scale in Europe

The big challenges for the EU are how to make it easier for small scale radical innovations involving digital technology to emerge and evolve, but perhaps more important how to create the conditions for the really powerful ones to get to scale – which will nearly always involve disrupting existing structures and institutions. The aim of this research is to clarify the goals of policy; the tools available for both the Commission and others across Europe; and to frame a more detailed discussion on how these could be implemented within the frameowrk of the Digital Agenda for Europe and under the Horizons 2020 Work Programme, and in particular, but not limited to, the Collective Awareness Call.

The elements below have been identified in our research as key enablers to reach sustainability of DSI initiatives:

- Building communities based on the right mix of motivation and incentives, such as need, passion, and acquisition of reputation

- Access to knowledge, enabling open and distributed infrastructures, and open licensing schemes

- Mix of financial and non-monetary incentives and outcomes (beyond GDP and beyond monetization)

- New indicators and metrics are needed to measure the impact of DSI and to access what works and what doesn't to calibrate interventions and investments.

- Addressing barriers to growth and scale. Growth & scale is an ambition that should be fostered; you should not stay small and you should connect across boundaries. Reusability of solutions is key to scale without lock-in solutions

- Making social impact most important

The value of this DSI experiments is still difficult to quantify using traditional indicators of success and impact, such as GDP, profitability and competitiveness. New sustainable business models and socio-economic mechanisms based on collective and public benefit are starting to clearly emerge. Once the network of digital social innovation actors in Europe is mapped and its dynamics understood, it will inform future EC initiatives, research and policy to foster open and inclusive innovation for social good in Europe. Once complete, the evidences gathered in this study will enable this project to recommend how best to combine research, strategy, and policy recommendations for DSI with the context of the DAE and Horizons 2020.

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