



AALBORG UNIVERSITY
DENMARK

Aalborg Universitet

User-driven Innovation Programmes as Social Innovation?

Jensen, Torben Elgaard

Published in:
User-driven Innovation Programmes as Social Innovation?

Publication date:
2013

Document Version
Early version, also known as pre-print

[Link to publication from Aalborg University](#)

Citation for published version (APA):
Jensen, T. E. (2013). User-driven Innovation Programmes as Social Innovation? In *User-driven Innovation Programmes as Social Innovation?* (pp. 1-11)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

Take down policy

If you believe that this document breaches copyright please contact us at vbn@aub.aau.dk providing details, and we will remove access to the work immediately and investigate your claim.

User-Driven Innovation Programmes as Social Innovation?

Torben Elgaard Jensen

Professor in Techno-Anthropology and Science & Technology Studies

Aalborg University Copenhagen.

tej@learning.aau.dk

In 2007 the Danish Government established an ambitious and generous 3-year funding programme for projects and research on user-driven innovation. More than €55 million was granted, and more than a hundred different projects were launched. All projects were carried out by coalitions of 'knowledge organizations' (often universities) and private or public organizations. User-driven innovation has thus been high on the Danish agenda in recent years, and a substantial number of people have been involved. The question is if this burst of user-driven innovation activity is case of *social innovation*? Asking the question in this way implies that the answer will be a straightforward yes or no. But things are course more complicated. The first challenge is that social innovation is broad and fairly ill-defined notion. The second challenge is that the Danish UDI programme was a large, distributed and heterogeneous affair. A more cautious question might therefore be: in what sense is or isn't the UDI programmes a social innovation? This is the question that I will grapple with.

In the following, I will begin by considering a possible definition of social innovation. In the subsequent paragraphs, I will introduce the Danish UDI programmes and explore the extent to which selected aspects of these programmes seem to fit the definition of social innovation. Finally, I will offer a tentative conclusion.

Grappling with a definition of social innovation

Social innovation might lack a clear positive definition, but its proponents can muster something, which is almost as good: a number of self-reinforcing contrasts, that is a number of

reasons to prefer social innovation (cf. Elgaard Jensen 2008). Thus, innovations developed by technical experts in remote R&D departments in big corporations are *not* social innovations. Innovative products that are forced on the market through marketing campaigns or other kinds of sales tricks are *not* social innovations. Products, which are unsustainable environmentally or socially, are *not* social innovations. Innovations that are too weird, too elitist, or for some other reason out of touch with real social needs are *not* social innovations.

To put all this positively, and borrowing the well-chosen words from an FP7-application headed by Soneryd (2013): 'social innovation remains firmly associated with visions and aspirations aimed at furthering new relations, better life quality, and new sustainable systems with improved qualities and capacities'. In addition, Soneryd characterizes social innovation by saying that it is aimed at fulfilling social needs, that it entails 'new ways of organizing, combining and rearranging relations between people, things and ideas', that it engages concerned groups and that it affects larger populations.

As Soneryd makes clear, all these 'definitions' are tentative and undoubtedly too broad to draw a definite boundary between social innovation and other forms of innovation. However, the remarks offered by Soneryd are sufficient to begin exploring if or how the Danish UDI efforts seem to relate to social innovation.

A brief history of the Danish UDI programmes

The Danish UDI programmes can be described in three consecutive phases: an agenda-setting pre-history (2003-6), a funding phase (2007-10), and finally a phase where attempts were made to sum up and communicate the results (2010-). The latter two phases are overlapping, since some of latest funded projects are still on-going.

The division into three phases is not merely a question of calendar year. Significant changes took place with respect to the key ideas about the nature of UDI and the proper ways to conduct UDI. In the following, I will briefly sketch the three phases.

(a) Setting the agenda for UDI in Denmark (2003-2006)

From 2003 and onwards, a highly influential unit for business policy analysis (FORA) within the Ministry of Business, issued a series of reports that would later to become adopted as the

official policy of the Danish government. The issue at stake, in these reports, is what the national government should do to enhance the competitiveness and innovativeness of Danish businesses in the global economy. Addressing this overall concern, FORA made the case for user-driven innovation in the following way. First, FORA defined user-driven innovation as one out of three distinct forms or sources of innovation (Rosted 2003); Innovation, it was argued, may be either price-driven (competing for low costs), technology-driven (competing for new technological breakthroughs), or user-driven. Although Denmark in principle might pursue any or all of these sources of innovation, FORA argued that in practice we could not. Due to the high Danish wage levels we cannot compete on price, due to Denmark's limited size we can rarely afford the necessary investments to make technological breakthroughs, which leaves us with the third possibility: to compete on in-depth and up-to-date understanding of the users' needs. With this argument in place, FORA turned to international casestudies of fashion, medico and electronic industries (Jørgensen et al 2005; Riis 2005; Høgenhaven 2005). From a number of cases, which were predominantly North American, FORA suggested that leading companies have developed a capacity to systematically investigate user needs and to relate this knowledge to product development. The key to this capacity is the establishment of dedicated organizational units, and the employment of anthropological expertise and methods. The third and final part of FORA's argument returns to the conditions of business in Denmark. Based on a survey, FORA argued that the higher education system of Denmark provides the companies with plenty of candidates with technical qualifications (e.g. engineers), but very little is offered by means of candidates qualified in the systematic investigation of users' acknowledged and unacknowledged needs. For this reason, FORA concludes that a concerted national effort was needed to develop research and education in user-driven innovation (Rosted 2005).

As can be seen from this brief account, the ministry of business formulated a quite distinct account of UDI. UDI is defined as a particular source of innovation, which can be harnessed through the systematic efforts of social scientists. UDI is epitomized by cases collected from industrial clusters (fashion, medico, electronics), where leading companies study users and their preferences systematically. And finally, UDI is depicted as part of particular strategy; UDI is a national effort, which is necessary to improve (or rescue) the competitiveness of Danish companies.

(b) Funding UDI programs (from 2007)

Several Danish ministries have an interest defining the Danish innovation policy, and many observers have pointed out that the efforts of the Ministry of Business in the agenda-setting phase were a part of that ministry's struggle with the Ministry of Science. The efforts seemed to pay off, since the Ministry of Business was allowed to administer more than 70% of the funds allocated for the government's UDI effort. Thus, in 2007, the Ministry of Business announced a large funding programme (€40m) and the Ministry of Science announced a smaller one (€15m). The two programs invited applications and issued reports and other materials, which once again defined UDI and explained its purpose.

The purpose of these documents was on one hand to inspire applicants to take part in the development of the UDI efforts, on the other to lay down criteria for proper UDI. The material from the Ministry of Science emphasized that UDI projects should uncover 'the acknowledged and unacknowledged needs of the users'. This corresponds to the ideas of user knowledge as a hidden resource, which could be unearthed by the systematic effort of social scientists (particularly anthropologists and ethnologists). However, from 2006 and onwards the Ministry of Science also made reference to the so-called lead user method, which had been developed by MIT professor Eric Von Hippel. Von Hippel (2005) argues that certain groups of users have needs that are so much ahead of the market that no available commercial product will fulfill their needs. This might be the case for instance for computer game enthusiasts, who need particularly fast graphics. Users with such special needs will have a strong incentive to innovate for themselves; They may tinker with existing products, they may develop entirely new ones, and they may discuss and develop their ideas in collaboration with other users with similar needs. Von Hippel cites a number of cases where lead users have developed artefacts that later turned into commercially successful products. Von Hippel has also developed a number of methods for businesses that wanted to 'tap into' the creativity of lead users. As mentioned the Ministry of Business adopted the notion of lead user as a part of what they meant by user-driven innovation. However, the Ministry did not share Von Hippel's interest in the conditions under which users, such as open source programmers, can develop and distribute solutions freely and independently of commercial interests (so-called user innovation). Instead, the Ministry emphasized the commercial potential in harnessing the creative potential of lead users.

The Ministry of Science, contributed a third version of UDI. The ministry made reference to

the Scandinavian tradition for participatory design (Markussen 1996; Asaro 2000). This approach originated in the 1970's and was born out of the on-going struggles and negotiations between trade unions and industrial firms over the introduction of new technology in firms. In a number of projects, dialogues were established between workers and technology designers, the workers' knowledge of existing processes were communicated to the designers, and attempt were made by the trade unions to avoid deskilling and intensification of labour. Later, participatory design has come to signify the active involvement of users in the design phase, and has become fairly well-known as a development approach, particularly in the field of ICT.

Although the two ministries clearly had each their favorite versions of UDI, they both indicated that they would support a variety of different forms. However as a part of the funding programs, the two ministries made a number of more specific requirements. The projects should be trans-disciplinary (including social science, design & technology, and business economy), and the projects should include 'knowledge institutions' (e.g. universities) as well as either private companies or municipalities. The funding bodies decided to disseminate the support in order to cover all regions of the country. They also decided to fund the creation of networks, competence development, master level education and new methods. To sum up this phase, UDI was now defined and epitomized as three different types of projects (the uncovering of needs, lead user projects, participatory design). Furthermore, UDI now became associated with an effort to combine a relatively large number of relatively small groups of actors into trans-disciplinary projects.

(c)Evaluating and summing up UDI (from 2010)

In 2009 and 2010, yet another way of talking about UDI began to appear. In work done by 'Mindlab' a consulting unit shared between three ministries, and in similar work by the University of Aarhus (sponsored by the Ministry of Business), a systematic effort was made to give a comprehensive description of the *methods* that may be used to conduct UDI projects. Mindlab defined 26 such methods; the Aarhus university report listed 30 methods (Erhvervs- og byggestyrelsen 2010). Each of these methods was described, exemplified and illustrated on 1-2 pages. Almost all of the methods were well-know from other contexts; Some of the examples were 'brain storming', 'photo diaries', 'ethnographic interviews', 'observation'. However, the two method collections also gave advice on how to compose projects or project

phases out of these 'building blocks'.

The method collections indirectly define UDI is an activity that may take place as a relatively small part of almost any kind of project. The intended audience of the method collections is therefore managers on all levels, who are responsible for innovation projects. The method collections are presented as tool boxes, which the managers should use to enhance the connection with or the information from users at various points in their projects. The exemplary case of UDI is therefore a manager, who is well aware of the available methods, and who inserts or doses these methods if and when they are relevant.

To sum up, one might say the idea of UDI has travelled and transformed quite radically. It began as a vision of permanent expert units servicing particular industries, it turned into a flood of projects that engaged users (temporarily) in a more or less active roles, and it seemed to end with the production of method descriptions and toolkits to be used by developers and managers as a part of their repertoire for composing projects.

With this three-phase history, as my basis, I will now discuss the Danish UDI programmes in view of some of the specific characteristics associated with social innovation.

'Furthering new relations'?

Social innovations, one would expect, would generate new relations. Perhaps something along the lines of common folks collectively organizing to take charge of the situation.

Within the UDI field, there is one particular version that comes close to this notion of collective organizing among laymen. I am referring to Von Hippel's notion of lead users and user communities, such as the collectively organized and owned development work by Linux users. However, as I pointed out previously, this particular notion was left at an early stage, since the Ministry of Business had no interest in methods that didn't have a clear commercial potential.

If we were to look for new types of relations within the Danish programmes, the most obvious novelty would be the relations forged with university anthropologists or ethnologists. The funding programmes almost mandated that this kind of expertise should be included in every project, and these professions were therefore 'courted' by other types of participants. As a

consequence, anthropologists and ethnologists found themselves engaged with new kinds of collaborators and kinds of new challenges (Elgaard Jensen, 2012). This new orientation of certain university departments towards collaborators in the private sector may in fact be one of the lasting effects of the programmes.

One more observation about the furthering of new relations needs to be made. As I have pointed out, there was a shift from an initial vision of user-expert units to a flood of user engaging projects. This shift, i.e. the shift from the establishment of permanent expertise to the conduct of projects, meant that the users involved were always involved *temporarily*. Users were interviewed, visited at some relevant location, or they were invited to participate in one or a few workshops. But after that, the project had to end, sum up the insights or ideas gained from the users and pass these matters on to the 'receiving organization'. This receiving organization may in principle change its thinking about users (although very little anecdotal evidence suggests this effect). But what did *not* change permanently, was the relation to the users.

'Aimed at fulfilling social needs'?

If social innovation is innovation aimed at fulfilling social needs, then it is crucial, of course, who defines these needs. The UDI programmes cover quite a range of need definitions. Initially, the Ministry of business promoted the idea that particular professions (e.g. anthropologists) would be able to uncover the users' 'unacknowledged needs', i.e. needs of which the users were not aware. The ministry even produced a cartoon-like image of this idea, featuring an anthropologist spying on a user, detecting an unacknowledged need and contemplating a new product.



Such detection of unacknowledged social needs is hardly within the scope of what social innovation proponents would normally envision. In fact, it may easily be seen as an example of exploiting knowledge of users for purposes of sales, rather than an effort to address serious social needs.

In later stages of the UDI programmes, the well-established ideas about participatory design were rearticulated (although sometimes under different names). This approach is based on the vision of a close collaboration between designers and users and thus seems to be very much in line with common ideas about social innovation.

In general, it could be argued that the whole idea of UDI programmes, entails an ambition to take users and their needs more seriously. It is fair to say that the programmes involved a general commitment to further a mode of innovation, where not only the technical feasibility of novel ideas are tested but also the social relevance and validity.

'Affects larger populations'

Social innovation is associated with social change that affects larger populations. The potential to spread and mobilize on a large scale is therefore one of the characteristics of successful social innovation. I would like to suggest that UDI tends to fall short of this criterion. To make my point, I will draw on Cochoy & Grandclément-Chaffy's (2005) analysis of one of our most efficient devices for mobilizing individuals: the voting booth. A voting booth requires the individual to leave his immediate social relations (only one person may enter at a time) and it requires him to make a singular choice (only one box may be ticked).

Subsequently the votes will be counted and the viewpoint of the population can be clearly expressed. Compared to a voting procedure, a UDI project is remarkably entangled with the local circumstances. The UDI projects' accounts of users are usually rich, detailed and grounded in the specific localities of particular users. It is not uncommon to see results presented as quotes or testimonies. The role of such accounts is clearly not to be a step on the way to expressing a larger public. The purpose is rather to inspire a specific project's developers and designers, and to make them aware of potential user problems related to particular product features. Cochoy & Grandclément-Chaffy uses the metaphor of the synchrotron to depict the working of a voting booths: it momentarily separates the elementary particles of society. A metaphor for the process of user-driven innovation must be of a completely different sort. I would suggest the kind of shoveling that garden owners perform on their land in springtime. The soil is not separated into atoms, but lumps of soil are turned and tossed. This procedure will ventilate and loosen up matters and it will bring previously unconnected patches of soil into contact with each other. The whole field or garden will not be reorganized through this process, and matters are not mobilized in one particular direction. In fact, things are not moved very far at all. But the gardeners nevertheless believe that the soil will become more fertile.

Conclusion: Not a social movement..

As the previous paragraphs have shown, the UDI programmes did not fall clearly inside or outside the definition of social innovations. When considered closely, the UDI programmes contained quite a number of different ideas and efforts. It should be clear, therefore, that UDI is not 'a' method, and certainly not 'an' organized mass movement. The UDI programmes did also not have 'a' recognizable effect, such as one particular innovation.

It is more accurate to describe the UDI programmes as a small handful of project-genre ideas, which were adopted, developed and funded by the government. What was generated was not 'a social movement' but rather *a movement of the social*: A good deal of shoveling in the Danish innovation garden. For me, it remains an open question if such a government induced and funded 'movement of the social' should be included in the definition of social innovation.

References

- Asaro, P. M. (2000). Transforming society by transforming technology: The science and politics of participatory design. *Accounting, Management and Information Technologies*, 10(4), 257-290.
- Bisgaard, T. & C. Høgenhaven (2010) *Creating new concepts, products and services with user-driven innovation*, Oslo: Nordic Innovation Centre (NICE) project number: H08214.
- Cochoy, F., & Grandclément-Chaffy, C. (2005). Publicizing Goldilocks' choice at the supermarket: The political work of shopping packs, carts and talk. Making things public: Atmospheres of democracy, 646-657.
- Elgaard Jensen, T. (2008a). "Future and Furniture: A study of a New Economy Firm's Powers of Persuasion", *Science, Technology & Human Values*, 33(1).
- Elgaard Jensen, T. (2011) "The Map is the Territory - Cartographies, Categories and Categorizers in the Danish user-driven innovation programs", workshop on 'Cartographies of Innovation – new sites, new actors', Lancaster University, 27-28 June 2011.
- Elgaard Jensen, T. (2012) 'Intervention by Invitation: New concerns and new versions of the user in STS', *Science Studies*, Vol. 25 (1): 13-36.
- Erhvervs- og Byggestyrelsen (2010) 30 Innovationsmetoder – en håndbog.
- Forsknings- og Innovationsstyrelsen (2006) *Brugerdreven innovation - Baggrundsrapport til et strategisk forskningsprogram*.
- Høgenhaven, C. (2005) *Brugerdreven innovation i elektronikbranchen*, FORA, Økonomi- og Erhvervsministeriets enhed for erhvervsøkonomisk forskning og analyse.
- Jørgensen, S.H., Hansen, R.B., Høgenhaven, C. (2005) *Brugerdreven Innovation i dansk mode - den 5. globale klynge*, FORA, Økonomi- og Erhvervsministeriets enhed for erhvervsøkonomisk forskning og analyse.
- Markussen, R. (1996). Politics of Intervention in Design: Feminist Reflections on the Scandinavian Tradition, *AI & Society*, 10: 127-141.
- Riis, A. M. (2005) *Brugerdreven innovation i medicobranschen*, FORA, Økonomi- og Erhvervsministeriets enhed for erhvervsøkonomisk forskning og analyse.
- Rosted, J. (2003) *Tre former for innovation*, FORA, Økonomi- og Erhvervsministeriets enhed for erhvervsøkonomisk forskning og analyse.
- Rosted, J. (2005) *Brugerdreven Innovation – Resultater og anbefalinger*, FORA, Økonomi- og Erhvervsministeriets enhed for erhvervsøkonomisk forskning og analyse.
- Soneryd, L. (2013) *Emerging Futures: trans-local circulation of social innovation and situated practices*, application for the Seventh Framework Programme, European Union.

von Hippel, E. (2005) *Democratizing Innovation*, The MIT Press, Cambridge, Massachusetts