

Co-creation in Living Labs - Experiences from Halmstad Living Lab

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Halmstad Living Lab was established in 2007 with the application areas of health technology and media, but have been working with co-creation since 2004. Our experiences from co-creation is derived from four research projects, two within media (DigiNews and UbiMedia) and two from health technology (Secure at Home - Living Lab and Secure at Home - Smart Locks). We have conducted 100 user involvement activities with around 500 individuals in face to face activities and over 7000 individuals in online surveys. The empirical activities all relates to different innovation processes concerning both products and services. The innovation processes has involved different stakeholders such as companies, researchers and users who have worked in an open environment to create and validate innovations. Below we discuss our experiences.

Different methods and techniques: We have worked with different types of methods such as future workshops, prototyping, surveys, test, evaluation and validation and used a multitude of techniques, e.g. personas, scenarios, mock-ups, image boarding, interviews, questionnaires, diaries, observations and think aloud. Our experiences of the future workshop method are mainly positive. These workshops have served as a foundation for both generating ideas but also making them tangible by the

usage of scenarios and mock-ups. Low-fi prototypes generated by users are quite easy to analyze, both as a way of finding new design solutions, but also to use as input data for other users to evaluate and comment on. User generated scenarios, personas, mock-ups and image boards are quite similar to low-fi prototyping, with much information easily gained.

In the projects these techniques have generated valuable information leading to new design solutions as well as shaping existing IT-solutions. The information has also served as a base for new ideas of IT-products and services which in two cases this have lead to spin off development projects. Furthermore, the techniques have served as a base for finding requirements and guide the developers of how to shape IT to better fit specific target groups.

From a Living Lab perspective the methods and techniques have generated valuable input in all phases of the innovation process. However, the extensive work that has been conducted within the research projects might be problematic to implement in innovation processes, due to the extensive resources needed.

Different degree of user involvement: In the four projects we have elaborated on three different degrees of user involvement, decision, information and creation. In our cases, surveys, questionnaires, tests, evaluation and validation have formed the base for the decision degree of user involvement. The methods and techniques that have been based on the information degree of user involvement are primarily interviews, diaries and observations.

Moreover, the first phase in the future workshops has also served as an information gathering

activity. The third degree of user involvement (creation) has been used in the future workshop and prototyping methods used in our projects. Our experiences regarding different degrees of involvement are that the decision degree is the easiest to apply to methods and techniques. Asking direct questions about preferences, use behaviour or what design solution that is preferred are rather straight forward. These activities are also less resource dependant, both to conduct and to analyze. To work with the information degree of user involvement requires a higher amount of resources and is also harder to analyze, but generates a rich set of data.

The creation degree of user involvement is from our experiences the most challenging and demanding way to incorporate in methods and techniques. The facilitator's ability to provide a creative environment for the users to work within as well as the group composition affects the outcome of the methods and techniques that we have worked with. Though, if successful, the material generated by for example mock-up activities can prove very valuable as guidance for design decisions in the prototype phase in innovation processes.

Different types of users: Users can be categorized in different ways and it's important to keep in mind that different user groups can differ in more than how they put a specific product or service to use. In some cases, they might also have conflicting values depending on diverse views on what the products purpose is. It's also important to keep in mind that a user's characteristic is very hard to pin down. Based on our experience it doesn't matter what kind of

category of users you are dealing with; the group dynamic and consensus of a group of users is still very fragile and can easily be effected by individual members of the group. This puts a lot of pressure on the facilitator of the workshop who has to be able to balance this in order to let everyone add to the discussion.

We have also noted the importance of having dedicated users taking part of the workshops.

To get satisfying results from an activity the users have to be both interested and dedicated to

the cause. This might be even more important in a Living Lab approach since the users are

supposed to be a part of the whole development process from the start until the end. This

raises the question of how dedicated users can be identified during an early stage and how

they can be supported during the innovation process to keep them dedicated.

Challenges: We have identified the following challenges with co-creation activities in a Living Lab setting.

a) Finding a heterogenous group of engaged and motivated users that complement each other.

b) Using the “right” mix of methods and techniques that delivers the data needed for a specific stage in the innovation process.

c) Working with different degrees of user involvement in different phases of the innovation process to secure the development of usable products and services.

d) To be able to involve more users in their home environments (i.e. the real life setting), there is a need to translate methods and techniques to work in a distributed way over the internet.