Why collaborate in long-term innovation research? An exploration of user motivations in Living Labs

Bastiaan Baccarne*[1], Sara Logghe*,Carina Veeckman** and Dimitri Schuurman*

* iMinds-MICT-UGent, Korte Meer 7, Ghent, Belgium
** iMinds-SMIT-VUB, Etterbeek, Belgium

[1]*Bastiaan.Baccarne@UGent.be*

Keywords: User involvement, User motivations, Open innovation, Collaborative design, Living Labs

---

One of the central elements of Living Labs is the focus on end user involvement in IT-product and service development processes (Ståhlbröst, 2008; Ståhlbröst et al., 2009). Whereas users definitely play a central role in Living Lab research, users' motivations to participate in such long-term, rather intensive research and development tracks are nevertheless largely unexplored. The question is not any longer about why we should involve users, but rather how they should be involved in Living Lab research activities, and specifically in long-term collaboration initiatives. This article contributes to this gap in literature by providing an overview of current academic understandings and presenting the first results of our own research on this matter.

So far, research on user motivations has been conducted from different academic disciplines and has been applied to different domains. Therefore, the concept of motivation has a rather complex nature. One of the most solid and cited academic theories that can be applied on innovation and user participation is the theory of planned behavior (Ajzen, 1988,1991). While this theory is rather broad, other authors specifically focus on user involvement in the development of innovations (e.g. Hassinger, 1959; Rogers, 2003). An important dimension in most of these theories is the end users' *need* for certain solutions or specific products (e.g. Xu, 2007; Yang & Liu, 2011, Von Hippel, 2005). Current understandings of user motivations to become part of a Living Lab are limited, with exception of Leminen & Westerlund (2012) and Ståhlbröst (2012), but we can learn from findings on motivation in firm-hosted user communities. These studies show that end users are mainly driven by *willingness to help*, to *support a good cause* and to *be part of a project realization* (Berglin and Handberg, 2013). According to Lu and Wei (2011) p*ersonal interaction* and *exchanging information* have the most positive effect on end user participation. Other authors such as Füller (2006) focus on the importance of intrinsic *interest* in the innovation activity and *curiosity* as the main motives for the consumers' willingness to participate in new product developments. Participants in firm-hosted user communities are mostly *hobbyists* or people looking for *firm recognition* (Jeppesen & Frederiksen, 2006). In crowdsourcing literature, some of the main identified drivers of participation are *idealistic reasons* and *career concerns* (e.g. Hann et al., 2002) and *building a meaningful product* (Chandler & Kapelner, 2013). While intrinsic motivations seem to be very important (Kaufman, Veit and Schulz, 2011), Rogstadius et al. (2011) show that there also exists interaction between intrinsic motivations and

extrinsic motivations, such as direct or indirect monetary compensation or recognition by others (Hars and Ou, 2002), for end users to participate in the innovation development process.

Existing literature on motivations of user participation is rather diverse and uses different measures and point of views. On top of that, there is a clear gap in literature when it comes to user motivations to participate in Living Lab research. Therefore, the central research question in this paper is: "What drives users to participate in Living Labs and which parameters affect long-term or continuous participation?" Within this research question we also take into account the diversity of the different Living Lab stages in order to capture some of the complexity of this question. Besides assessing the global motivations, this article also elaborates on the differences between motivations to participate in a survey, an offline workshop and a field trial within a Living Lab context. Finally, an analysis is made of the phenomenon of repeated participation.

The data for this research are collected in the Flemish Living Lab Platform, Mediatuin Living Lab and LeYLab. Measurements were conducted using a large scale survey (n:639), during nine co-creation sessions (n:63) and during a short survey after a field trial (n:26). The motivations to participate were being measured using binary variables measuring the following motivations: (1) collaboration with others (2) solving challenges (3) personal interest (4) being the first (5) contribute to society (6) curiosity (7) feeling part of a community (8) use of skills (9) learning (10) influence (11) fun (12) expanding the social network (13) expected professional benefit (14) financial or material incentive (15) doing friends a favor (16) peer influence and (17) duty. This article also compares these variables between three main Living Lab research activities: online surveys, co-creation sessions and field trials.

The results of our explorative research show that for Living Lab participation *collaboration with others* is the most occurring motivation (83,3%), followed by *solving challenges* (81,2%) and *personal interest* (78,1%). Nevertheless, 56,5% also expects a *financial/material reward*. Only 39,1% expects to have an actual *impact* on the innovation. In face-to-face co-creation workshops, the motivation *to have an influence* is more occurring than in field trials and online surveys. Compared to co-creation sessions and field trials, *curiosity* is a less occurring motivation for participation in online surveys. Furthermore, co-creation sessions have the highest ratings for both the *use of skills* and the motivation *to contribute to society*. Overall, the main motivators to participate have an intrinsic nature, but our results show that for repeated participation, material incentives become more important and the motivation *use of skills*, decreases.

These findings offer a deeper understanding of user motivations in Living Lab research. On a practical level, the most important dimensions should be central in the management of Living Lab user panels in order to reach maximum user engagement and to increase the quality of response. On a more theoretical level, these data are an exploration of user motivations, but should be the first step towards a theoretical model, which understands voluntary engagement in Living Lab research. Many future research questions exist on this largely unexplored domain, such as the relationship between motivations and panel drop-outs and a typology of different types of users in a Living Lab. These insights are important to assess the validity of Living Lab research as well.

Author bio

Bastiaan Baccarne is a researcher at the Department of Communication Sciences of Ghent University, where he started working for the MICT (Media & ICT) research group in October 2012. Also being part of iMinds-iLab.o, the facilitating infrastructure for Living Lab research within iMinds, his research focusses on Living Labs for media and ICT innovation and the optimization of user involvement in this context. Bas graduated in June 2012 as a Master in New Media & Society (Ghent University). His master thesis took a closer look at crowdsourcing as a tool for the evaluation of innovative ideas within a smart city.