Fostering Digital Skills in Communities in South Africa and Finnish Lapland*  

Extended Abstract†

M. Alhonsuo  
University of Lapland  
P.O. Box 122  
Rovaniemi, Finland  
mira.alhonsuo@ulapland.fi

H. Marttila  
University of Lapland  
P.O. Box 122  
Rovaniemi, Finland  
henna.marttila@gmail.com

ABSTRACT

This abstract introduces three case studies conducted with marginalized communities in South Africa and Finnish Lapland. It discusses the service design methods used in the cases, and how these have fostered digital skills in the communities. Service design provides tools and methods for human-centered and participatory approaches, and through visualization, rapid prototyping, and storytelling, for example, increase common understanding and empathy (Miettinen, 2016; Polaine, Løvlie, & Reason, 2013; Oosterom et al., 2010).

The first case study was conducted in two rural communities in South Africa. It focused on the healthcare work of semi-trained caregivers who provide basic healthcare services to people in their own homes and who support people suffering from tuberculosis (TB), human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS), and other chronic condition. The main challenges are communication and information sharing among caregivers who encounter difficult cases and patients. The data was collected through interviews, observations, and co-creative workshops where, for example, paper prototyping was used. As an outcome, the new application was co-created with the users.

The second case study in South Africa developed a radio station in order to support San youth, providing a new channel to help the youth express themselves, and educate them from their own life, and culture. The data was collected through interviews and co-creative workshops.

The aim of the third case was to develop a communication system for circumstances in which mobile phone and public authority networks are not working. Development was focused on small villages in Finnish Lapland, where distances to the municipality centers are great, and support is required for the elderly living in their own homes. Design work was done together with public authorities and villagers. The main working tools were storytelling, and ‘what if’ questioning and scenarios. The end result was a communication system called The 24/7 Free Community Radio Network.

Service design and its tools and methods can be seen as a versatile approach when developing digital services in communities. First, users are strongly involved into the entire process, and have a large degree of influence while simultaneously learning how to use technologies. Second, visualizations help users to perceive services around the technologies. These increase understanding and empathy among the users, and are important aspects when designing digital services with people in marginalized communities.

KEYWORDS

Digitalization, technology, case study, service design

REFERENCES


*Digital Outreach: Designing Technologies for Diversity, Participation and Social Inclusion, an OZCHI workshop, Nov 28 2017, Brisbane, Australia. Copyright in material reproduced here remains with the author(s), who have granted the workshop organisers a perpetual, non-exclusive license to distribute it via the workshop website (https://digitalparticipationhci.wordpress.com/) For any further use please contact the author(s).