STS Conference Graz 2015
"CRITICAL ISSUES IN SCIENCE, TECHNOLGY AND SOCIETY STUDIES"
http://www.sts.aau.at/ias/IAS-STS/Upcoming-Activities/Call-for-Abstracts-STS-Conference-2015

Transitions to Sustainability
SESSION 19: STS – Design – Sustainability

Authors:

Heidi Uppa, Aalto University, School of Arts, Design and Architecture, Finland,
heidi.uppa@aalto.fi

Marja Seliger, Aalto University, School of Arts, Design and Architecture, Finland,
marja.seliger@aalto.fi

Danielle Pichlis, Aalto University, School of Science, Finland
danielle.pichlis@aalto.fi

Sofia Pusa, Aalto University, School of Arts, Design and Architecture, Finland,
sofia.pusa@aalto.fi

Mikko Raatikainen, Aalto University, School of Science, Finland
mikko.raatikainen@aalto.fi

Marjo Kauppinen, Aalto University, School of Science, Finland
marjo.kauppinen@aalto.fi

ABSTRACT:

Designing for sustainability:
Shape Sustainable Meal communication concept

Keywords: design, sustainability, awareness, service design, food practices

Food is an everyday necessity, which has major environmental implications globally. Several researchers have stated that agriculture and food production cause about 30 percent of global greenhouse gas emissions. Considering this, we need to design and implement more sustainable food systems for the future. According to research, one option to improve sustainability and decrease environmental impacts of food is to decrease the consumption of meat and dairy and increase vegetable and fruits instead. There are also several significant health reasons to support vegetarian diets but it is still challenging to change current practices. First, consumers make many food-related decisions unconsciously. Secondly, unsustainable behaviour patterns exist because it is difficult to understand complex relations of the food chain. Social innovations are needed to encourage change and to solve wicked problems, such as creation of ecologically friendly food chain.

The purpose of our design case is to make ecological consequences of the food chain and individual decision-making more visible and understandable to consumers. We explore how design and communication can contribute to support behaviour change towards more sustainable practices. Behaviour change itself is typically a long and complicated process. However, providing knowledge and relevant, contextualised information can help in creating awareness of the problem. Awareness is needed for the reflection and it can eventually lead into behaviour change.

Our multidisciplinary team developed a communication concept for sustainable eating. We used a service design approach to provide solutions related to lunch catering in Finland. Ethnography and interviews were utilised to examine current food, eating and consumption practices in four different catering companies. We used methods and tools such as customer journey, SWOT

analysis, brainstorming, benchmarking, information visualisation, sketching, scenarios, concept videos and prototypes to design solutions for the Shape Sustainable Meal communication concept. Also participatory and co-creation methods (particularly design games) were applied during the design process. Outcomes of the project were a communication concept for a lunch cafeteria called "Shape" and a mobile application prototype to support the concept. Concept ideas were developed during student projects with master-level students as a part of their studies.

Our findings address that design supports sustainability in many ways: in defining the context and in framing the problem, in supporting end-user's decision-making processes by providing useful information, and by making sustainable solutions more usable and appealing for consumers. Food is a culturally sensitive subject and therefore, there is a particular need for deeper cultural knowledge and understanding in order to create good, sustainable solutions for food related services.

We conclude that design research and visual communication combined with information technology and HCI can contribute to solve problems dealing with sustainability and behaviour change. With this design case we are able to exemplify how to make complicated cause–consequence structures more visible and understandable for consumers. In the future, we aim to develop the concept further.