

## **Journey from Service Value to Business Opportunities: Designing the Voluntary Water Quality Monitoring Activity**

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In Finland, the gathering of information about water systems has been heavily dependent on public organizations. However, decreasing resources and new demands arising from the EU legislation have emphasized a need to find new cost-effective ways to produce legally required information. The monitoring strategy of the Ministry of the Environment in Finland has defined the strategic targets for the gathering, storing and utilizing environmental data up to the year 2020. In this strategy the voluntary work of citizens is raised as a potential resource in supplementing the official water quality monitoring.

On the other hand, citizens' spare time has become a scarce resource and different hobbies are competing with each other. Also voluntary activities like voluntary water quality monitoring, need to find its place in this ground. In order to increase the competitiveness of the activity, there is a need for new perspectives and tools for identifying attractive elements of voluntary work. There is an urgent need for creating the deeper understanding of what creates value for the customers in this sector. We argue that user-centered design can (1) help in identifying key element of service value, (2) assist in finding service concepts that create value for the customer and (3) support in revealing business opportunities in the field.

The purpose of this paper is to present the methodology for building new understanding of customers' value creation in the context of voluntary water quality monitoring. This paper also contributes by pointing out how the creation of value for the customer can act as a driving force in identifying service concepts and business opportunities. This paper focuses on the integration of service design and the use of information and communication technologies (ICT) in contributing the meaningful value for the customer.

Comprehensive picture of the users, i.e. people participating in voluntary water quality monitoring activity, was created with different research methods. Methods used in the research phase were literature review, expert interviews, consumer survey and probes. User understanding created in the research phase was crystallized and communicated by the means of current service journey. Potential moments for increasing service value with ICT based solutions were identified from the ground of understanding created in research phase. Conceptual design focused on creating ICT based service concepts for supporting the value creation of the user. Also business opportunities emerging from ICT service concepts were described and structured.