Implementing Service Design Methods and Tools into Software Development

A case study: Service Design sprint

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Topics of research interest

- https://des.utu.fi
- https://www.oulu.fi/m3s/

Research Area & Research Gap

Research area:

- Utilizing Service Design in software development as a pre-development phase of the agile software development process
- Identifying the benefits, challenges & critical factors when implementing SD methods and tools

Research gap: *Service Design & Software development*

What is missing?

- Research about including Service Design as a part of the software development process
- Best methods and tools for software development
- Critical factors in the implementation process
- Attitudes & assumptions of different stakeholders

Service Design

- Can be seen as a mindset, a process, a tool-set, a cross-disciplinary language or a management approach
- In this research: a holistic and collaborative approach to create value for the service user and the service provider
- Includes multiple methods and tools for different phases of the process
- Combines different methods and approaches that have been utilized before
- Highlights the fact that value is co-created

Research questions

RQ1: *How can Service Design methods and tools be implemented into internal processes in B2B software development?*

RQ2: *What are the benefits, challenges and critical factors when implementing Service Design methods and tools into software development?*

Research process *- an action research approach*

Diagnosing (October-January)

- Literature review
- Focus group interview and analysis of relevant documentation

Action planning, round 1 (January-February)

- Planning a suitable Service Design sprint for the case study

Action taking (March)

- Case: 3-day Service Design sprint
  → Postponed to May due to Covid-19

Action planning, round 2 (March-April)

- Planning a remote version of the Service Design sprint

Action taking (May)

- Case: 3-day remote Service Design sprint

Evaluating (May)

- Meetings / discussion / query for Service Design Sprint participants

Specifying Learning (May-June)

- Identifying the general findings and planning further actions

Contributions

Research:

RQ1: *"How can Service Design methods and tools be implemented into internal processes in B2B software development?"*

- A carefully planned pilot project is in a key role while implementing Service Design
- The Service Design sprint worked as a compact and efficient pre-development phase in the agile software development process

RQ2: *"What are the benefits, challenges and critical factors when implementing Service Design methods and tools into software development?"*

- Benefits: e.g. improved internal motivation, identifying the actual needs and challenges of the customer, efficient resource allocation, improved customer satisfaction
- Challenges: e.g. lack of time and commitment, internal assumptions, selling Service Design as a concept to the customer, involving the relevant people to the process

Practice:

For Company X:

- Service Design sprint → a repeatable template, traditional + remote version
- The results were further utilized in Company X's product development
- Embedding Service Design as an ongoing activity

For the customers of Company X:

- Customer oriented approach
- Co-creating

Thank you!