

Economic Value and Best Practices of User Experience Design in Product Lines

Summary

This combined NYT (10 ECTS) + Master Thesis (30 ECTS) thesis researches the economic value, challenges to, and best practices of engineering a common user experience in a given software product line.

The research questions are:

- What is the (believed) economic value of a common user experience across all products?
- What are current problems in creating that common user experience?
- What are the best practices of creating a common user experience

The research is performed as multiple-case case study research following Yin (2013). The process is split into the initial NYT work (winter semester 2015/16), followed by the Master thesis (summer semester 2016). Following an incremental approach, the NYT work builds an initial theory using one case only, while the Master thesis adds two more cases.

Work Packages, Increment 1 (NYT, WS 2015/16)

- WP1: First case study (x interviews, Siemens syngo.via)
 - Definition of research question
 - Literature review
 - Case study protocol
 - Case selection (aligned with a-priori interests)
 - Data collection (interviews)
 - Thematic coding
 - Theory sketch

Work Packages, Increment 2 (Master Thesis, SS 2016)

- WP2: Second case study (y interviews, Siemens TIA portal)
 - Refinement of interview guide
 - Data collection (interviews)
 - Thematic coding
- WP3: Third case study (z interviews, TBD)
 - Refinement of interview guide

- Data collection (interviews)
- Thematic coding
- WP4: Theory building 1
 - Model of economic value
 - Formulation of hypotheses for model testing

Optional Work Packages

- WP5: Theory building 2
 - Summary of current problems
 - Definition of best practices
- WP5: Theory confirmation
 - ...

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