Social Factors Relevant to Capturing Design Decisions

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SHAring and Reusing architectural Knowledge
Research Question

How do software designers make design decisions?

- Social & Cognitive Process
- Ubiquitous during Development
- Qualitative Description
Design Decision Optimality

Satisfice, Serial Evaluation, Appropriate

“…if [an option] is not obviously a bad thing, then it's probably good enough for my purposes for now.”

Anonymous Developer
Considering Alternatives

Depends on developer’s mental model.

“...when you’ve got a large production system you are a lot more constrained sometimes with the options that you can use. In this fun pet project ... I really set myself up from the beginning so that I would have a lot of options because I wanted to try different things and really kick the tires...”

Anonymous Developer
Conversation

Environments that fostered continuous communication led to more use of consequential choice.

# of Case Studies Using Consequential Choice:

- Company A: 4/12 (33.3%)
- Company B: 9/11 (81.8%)
- Company C: 2/5 (40%)
Impact on Tool Support

- “Just Because” rationale
- Interwoven with mental models
- Groupware support
Further Details

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