Sketches and Diagrams in Practice

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"The UML is already ‘the lingua franca of the software engineering community’ and it is very likely to spread even further."

Harald Störrle, 2001

„UML has become a de facto standard in industry."

Dag Sjøberg, 2011

Is that true?

• There is evidence that UML is not widely used.
• But how do developers visualize software architecture, requirements, relevant domain knowledge, context, etc.?
Research Design

Existing Studies
- purpose, media, formality, etc.

Exploratory Field Study
- 3 companies
- 13 developers
- 47 sketches

11 Dimensions
- Revision
- Lifespan
- Effort
- Purpose
- Contributors
- Context
- Relation to Source Code
- Archiving
- Medium
- Formality
- UML-Elements

Online Survey

Sebastian Baltes – Sketches and Diagrams in Practice

XP 2016, May 26
Online Survey

- **Target population:** "software practitioners"

- **Concise:**
  - ~10 minutes to complete
  - 28 questions, 15 about last sketch

- **Recruiting:**
  - Network of colleagues and contacts
  - Social networks
  - IRC channels and online communities
  - Directly contacted software companies
  - Article on major German IT news website
Participants

- n=394
- 32 countries
  - 54% Germany 🇩🇪 15% North America 🇺🇸 🇨🇦
- 52% software developers, 22% software architects
- Time spent developing software: 80% (median)
- Professional work experience: 10 years (median)
- Software projects from various application areas
Results

• Some are on the **poster**, others can be found in the **paper**:

Sebastian Baltes and Stephan Diehl:
*Sketches and Diagrams in Practice*


fse14.sbaltes.com
We need more input from practitioners...

- Interviews with software practitioners about how and why they use sketches
- Study on the effects of sketching on program comprehension here at XP

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Questions?

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