Using Metric Time-Lines for Identifying Architecture Shortcomings in Process Execution Architectures

SAM @ ICSE 2015
Florence, 2015-05-16

Daniel Lübke
Terravis - Process Integration across Switzerland
Project Evolution

> Iterative Development over 4 years (cont.)
> High-Level Architecture from the beginning:
  > Multiple concurrent service versions
  > Access via Portal vs. Integration
> New Features
  > Functionality
    > Processes, Variants, Mortgage Management, …
  > Multi-Channel Access
  > Legal Constraints
Problems

> Iterative Development over 4 years (cont.)
>   Much Functionality/Complexity
>   Unforeseen Architecture Components
>   Technical Debt, especially:
>     Tools getting slower (Increasing Process Size)
>     “Forgotten” Clean Up (e.g. Zombie Processes)
>     Constraint Violations (e.g. Human Tasks)
Activity Counts/Timelines

> Easy (= simple to calculate) Metrics
> Explain a lot more than LOC
Thank you!

Dr. Daniel Lübke
daniel.luebke@innoq.com
@dluebke

http://www.innoq.com