

Writing Unit Tests: It's Now or Never!

Claus Klammer* and Albin Kern

*corresponding author:

Software Competence Center Hagenberg GmbH Softwarepark 21, 4232 Hagenberg, Austria claus.klammer@scch.at

IOHANNES KEPLER I IIZI

SCCH is an initiative of

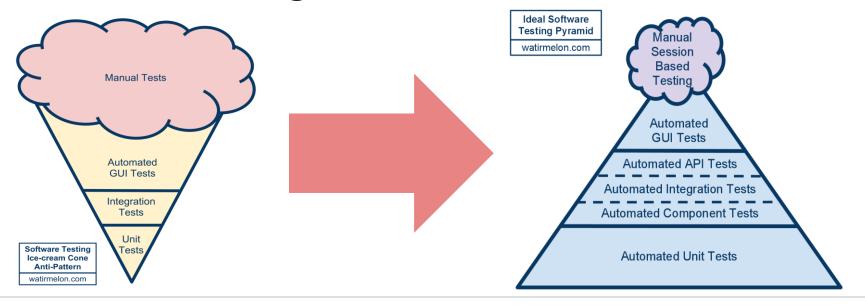
softwarepark hagenberg

Motivation



- Initial Situation
 - Large industrial software system
 - Continuously developed and enhanced for 10+ years
 - Includes legacy code with only few unit tests available

Goal: Retrofitting unit tests



Findings



- Code without unit tests ...
 - ... often has a very low testability ...
 - ... caused by a lack of modularization
- Explored solutions
 - Refactoring → rewriting from scratch
 - Mocking → complex, unusable tests

very costly!

- Conclusions
 - Low ROI for unit testing of legacy code
 - Code without unit tests will rarely get unit tests later