Introducing Automated Unit Testing into Open Source Projects

Christopher Oezbek

Freie Universität Berlin

The 6th International Conference on Open Source Systems, 2010-05-30 - 2010-06-02
Study Design

- Goal: Explore Innovation Introduction in OSS
- Innovation: Automated Unit Testing via JUnit
- Target Project: FreeCol
- Prescribed Phases:
  - Lurk
  - Code & Collaborate
  - Withdraw
  - Observe
After the intervention more than 200 additional tests were created.
Results II - Concepts

- The role of signaling in innovation introduction
- Learning behavior in OSS projects

Other results:
- Test cases as a communication device
- The role of the test-masters
First withdrawal failed to transfer responsibility
Explicit signaling can provide necessary awareness
Learning behavior

- Testing done by only a small proportion of developers
- Affinity to testing appears static over time
Summary

1. Demonstrated the feasibility of introducing an innovation
2. Presence is informally managed ⇒ signaling recommended
3. Hypothesized: Learning behavior in OSSD is limited
Thank you

christopher.oebzbek@fu-berlin.de