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Project Electronic Labour Markets

Structure and Organization of KDE

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Outline

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- 2. What is KDE? the structure of the large-scale project
- 3. The Developers: the inner circle
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- 5. Summary





1. Research question:

- Does the software production at KDE only work through cooperation? **Method of the case study:**
- explorative
- half-structured expert interviews
- analysis of documents, esp. homepages
- quantitative questionnaire (55 answers)
- secondary analysis of 62 interviews (selfinformation) from KDE-members



2. What is KDE? – the structure of the large-scale project

- KDE = large-scale open source project
- approx. 1200-1300 participants; number still growing
- embedded in social movement hobbyists: focus on technical excellence
- institutional basis: open source code; licence (GPL)





- founded in 1996 at the University of Tübingen
- focal point: production of joint software (desktop und applications)
- several tasks:
 software developers 2/3,
 translators/documentators 1/3,
 graphic/sound <5%, only some exclusive
 homepage-journalists, bugreporters





- important media of communication: mailing lists (chat >face-to-face>phone)
- important media of production: versioning system on the Internet, bugreport system, developer tools



- the large-scale project consists of subprojects for special software themes
- software/projects are central (core libs.)
- in projects: one project leader and several participants
- projects: average 4 persons (min=1; av. max=8; max=20/50)
- work done: average in 2 projects, majority in 1 project (min=0; max=9)



A typical KDE-participant is:

- young (between 20 and 30 years old; min 16, max 50)
- male
- highly qualified (went to college/university)
- a student or employed
- an IT-professional (has an IT- or IT-relevant qualification)
- principally from Germany (worldwide: Europe and USA/Canada)
- partially regional clusters
- single (not married/no kids)
- working voluntarily in his spare time (only few are paid for work on KDE)



- Working time: arithmetical mean 15,3/ median 10 hours per week (min 0,5; max 90)
- → Different motivations:
- personal requirements: self-motivation/ preference for developing (bricolage mentality)/intellectual interest
- supported through teamwork, relations in the community = cooperation

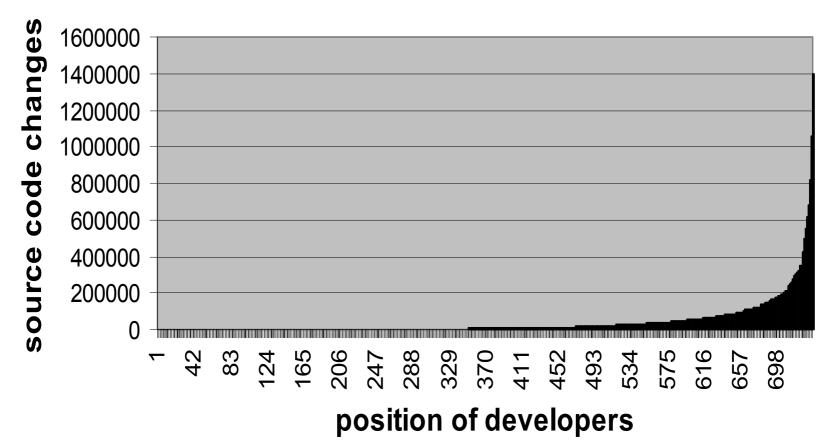


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3a. The developers: the inner circle – definition





The inner circle:

- is a loosely coupled group of long-time project participants without leading figures; rest = outer circle
- have a high reputation:
 permanent achievements for the project,
 quality, complexity of the work task,
 expectation of rapid revision of work



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- work on important software (core libs.)/mailing lists (visibility)
- important positions as founding-member or takeover through reputation (project leader, release coordinator, project maintaining functions)

⇒competition for positions through reputation

- cooperative communication expected



3b. The Developers: the inner circle – the tasks Tasks <u>in</u> KDE:

- Entrance prerequisites = number of code lines, control of quality and test of persistence and
 ⇒ self-motivation and control through inner circle
- no influence on work/task distribution, because of voluntary selection according to interest
- production: influence on planning discussion through high experience; help with problems/ tasks



- work/task combination: through release coordinator with support of participants (both from inner circle)
- Control:
 - a) self- and peer-review-control; inner circle through random sampling
 - b) compliance with communication/production norms
- Summary: aim is unity of the project
 ⇒ hierarchical element





Tasks <u>outside</u> KDE:

- 1. monitoring of norms with respect to licence (GPL) at companies:
- logos/copyright
- prompt return of source code
- 2. contact to other OS-projects with overlapping aims/themes (debian, gnome, ...)



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4. The other groups

- Not so important as developers because of distance to source code development
- a) Documentators: One person as project leader on top, several subprojects around important software with project leader and participants
- b) Translators: each language has a translation project with project leader on top level. Projects are divided into subprojects around important software.





- 4. The other groups
- Both groups depend on self-motivation with cooperative communication.
- but are more hierarchical than the developers because only (sub-)project leaders have access to versioning system.
- competition for project leader position





5. Summary: How KDE works

- <u>Cooperation</u> (supports self-motivation)
- <u>Hierarchy</u> (coordination of the whole project; no instructions)
- <u>Competition</u> (motivation for reputation, occupation of a small amount of positions)