

Applying Open Source Development Practices Inside a Company

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ToC

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Intro: OSS and inner source

- Inner source = OSS practices inside company walled garden
 - > limit the openness inside a company or selected partners
- Community style development as a possibility
- Open development practices as a challenge for hierarchical organisations
- Our case NSN iSource



Intro

- Portal projects are heterogeneous
- Projects benefit from portal
- There is a growing interest towards iSource portal

-> *iSource helps to leverage innovation potential inside a company*



Previous research

- Trad. software development in hierarchical units
 - Information flows mostly vertical and controlled
- Organisations benefit from free flow of ideas (Krogh&Hippel 2006)
- Community-type development as a way to respond to misalignment of experience, skills, and interests (Melian & al., 2001)



Methodology

- Interpretative case study of one organisation (Eisenhardt 1989)
 - Four interviews
 - iSource portal data
 - One researcher as an insider
 - Managerial perspective



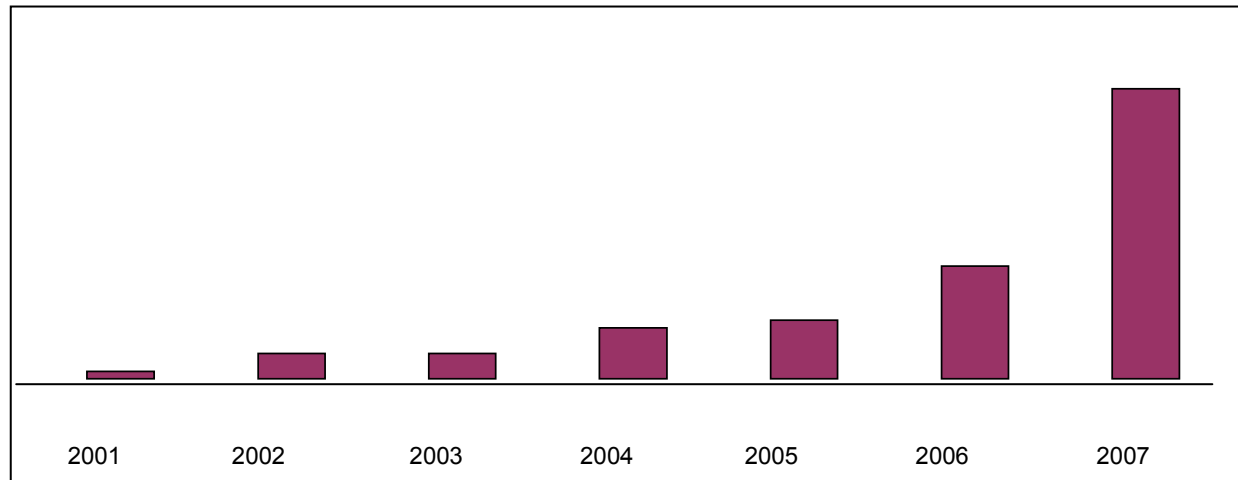
NSN iSource

- Nokia is a publicly held company, traded in five major exchanges
- iSource as a company wide portal and a service to manage software assets
- Created in 2001 as a Sourceforge fork
- Hundreds of projects, but status varies depending on life-cycle and funding
- NSN Merger did not effect the gathered data

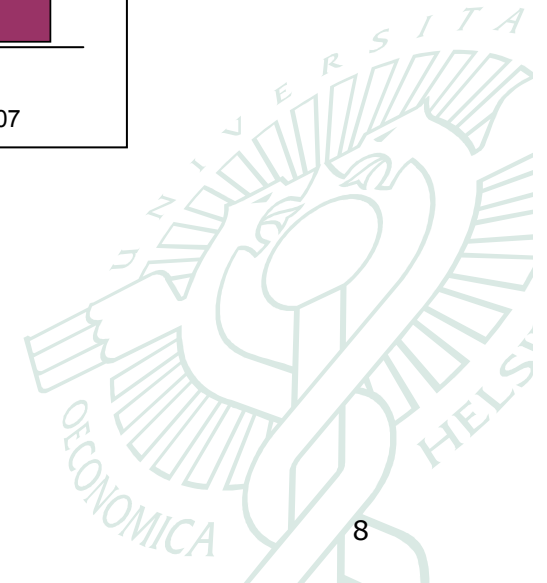


Findings

1) Increase in adoption

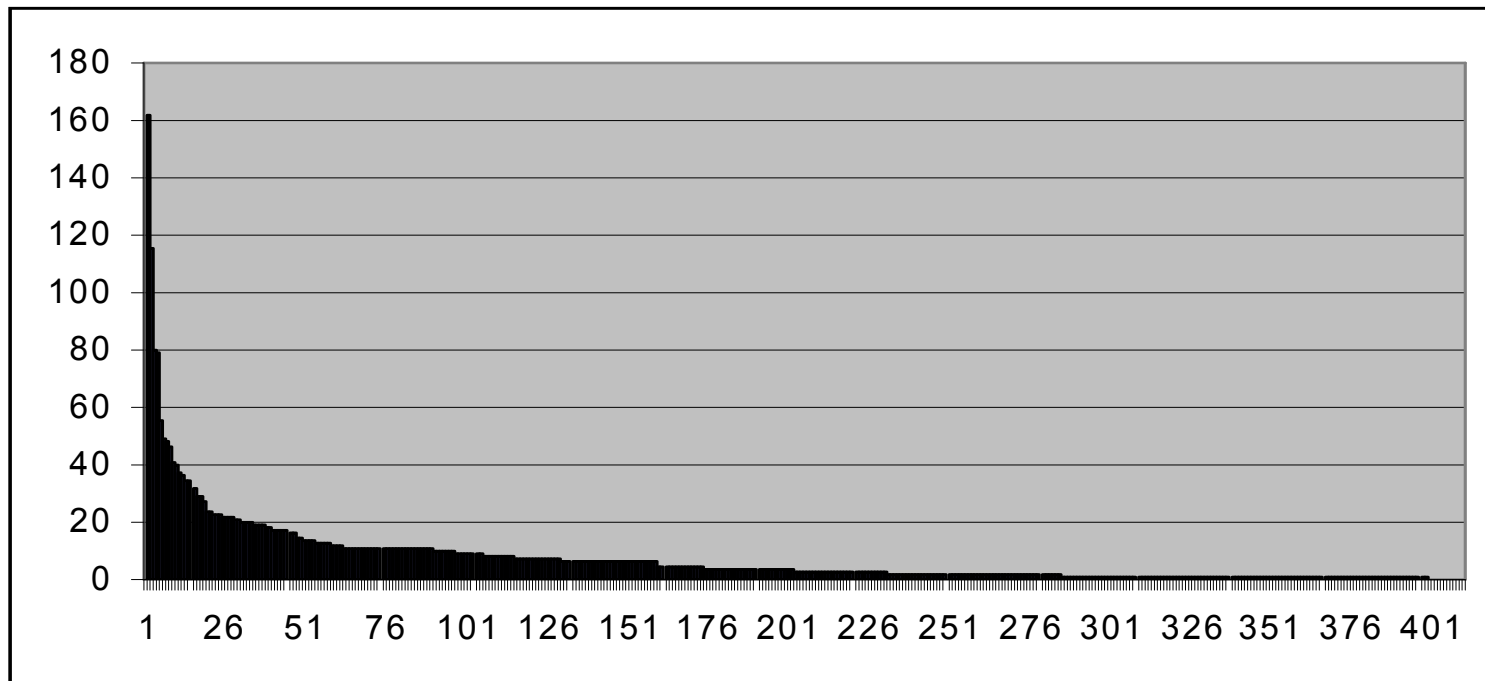


New iSource projects with their creation year



Findings

2) Project heterogeneity and openness



Number of developers per project

Findings

3) Project heterogeneity and openness

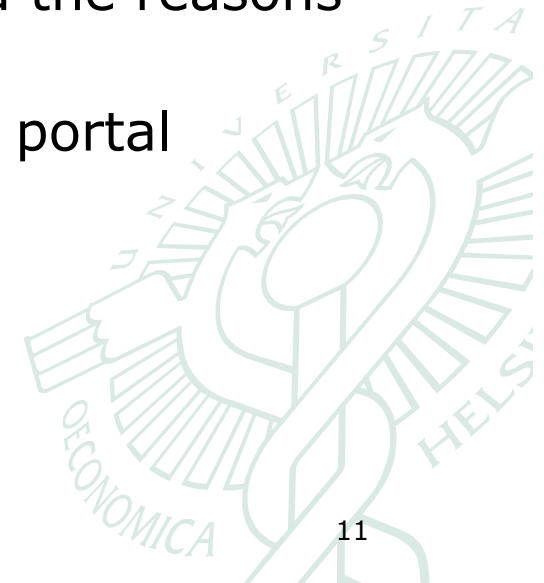
Categorization (Most devs)	#	Categorization (File Downloads)	#	Categorization (CVS commits)	#
Platform	6	Framework	3	Platform	4
Simulator	2	Scripts and libraries	2	Framework	2
Reference Implementation	1	SDK	1	Emulator	1
Testing environment	1	Software suite	1	Simulator	1
		Platform	1	Language	1
		Emulator	1	Protocol architecture	1
		Language	1		

Breakdown of top-10 lists: # of developers, file downloads and CVS usage (commits).

Discussion

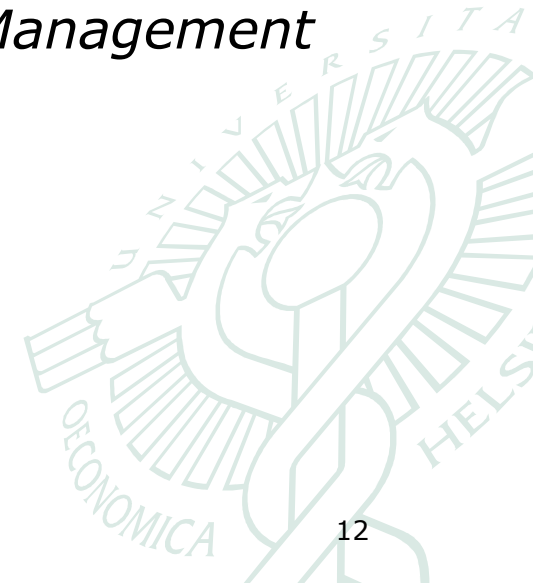
- Use has grown steadily. Perceived long tail is a problem.
- Platform projects are widely used (as is)
- Libraries and frameworks another popular class (as part of new development)

- In the future we will try to understand the reasons for the uneven distribution of interest
- Take projects into spotlight instead of portal



References of presentation

- K. M. Eisenhardt. Building Theories from Case Study Research. *Academy of Management Review* 14 (4): 532-550, 1989.
- C. Melian, CB. Ammirati, P. Garg, and G. Sevon. *Building Networks of Software Communities in a Large Corporation*. Hewlet Packard POS, 2001.
- G. von Krogh, E. von Hippel. The Promise of Research on Open Source Software. *Management Science*, 52(7):975-983, July 2006.



Thanks

- We would like to thank the ITEA-COSI project.
Thank you.



Q&A

- Comments and questions welcome!

