

# Applying Open Source Development Practices Inside a Company

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# ToC

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## Intro: OSS and inner source

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- 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

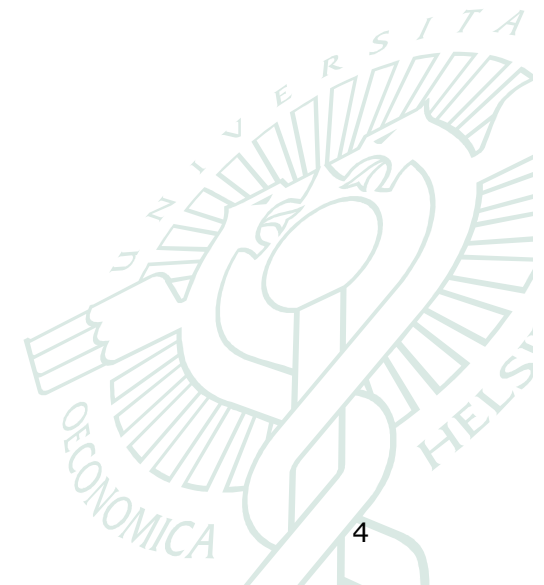


## Intro

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- 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

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- 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

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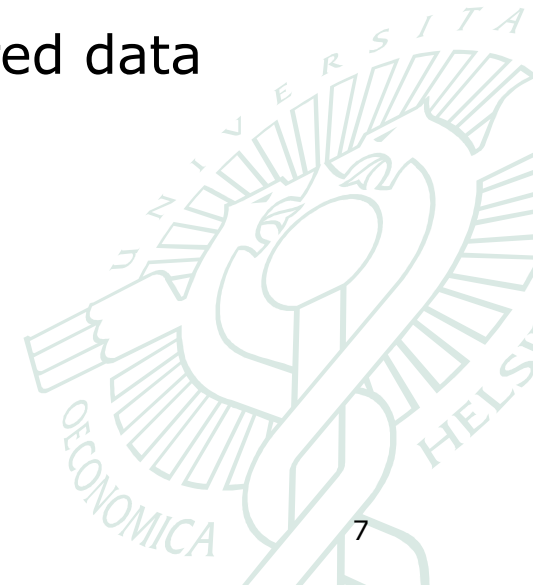
- Interpretative case study of one organisation (Eisenhardt 1989)
  - Four interviews
  - iSource portal data
  - One researcher as an insider
  - Managerial perspective



## NSN iSource

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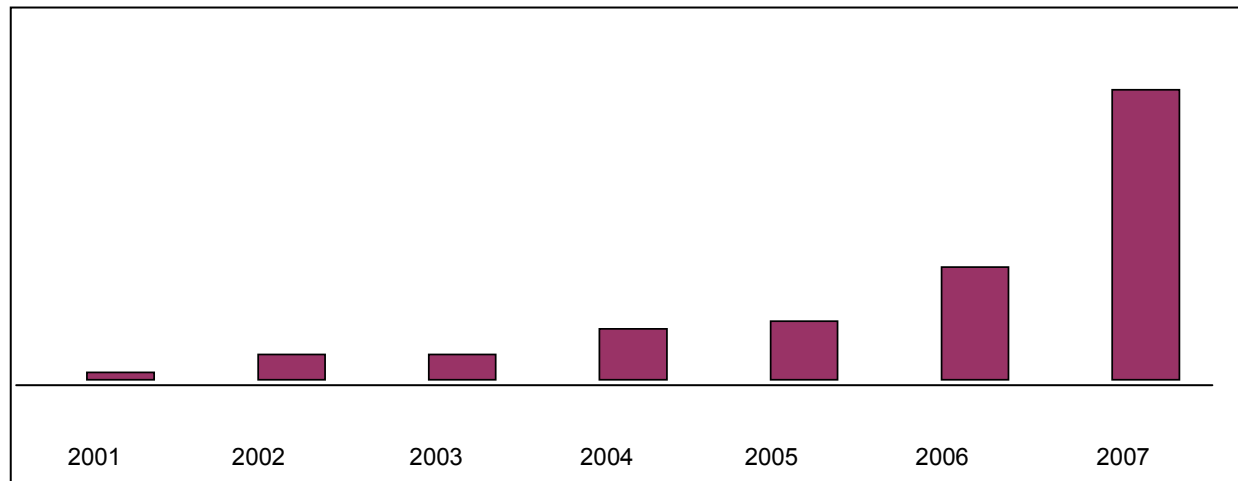
- Nokia is a publicly held company, traded in five major exchanges
- iSource as a company wide portal and a service to manage software assets
- Created in 2001 as a Sourceforge fork
- Hundreds of projects, but status varies depending on life-cycle and funding
- NSN Merger did not effect the gathered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



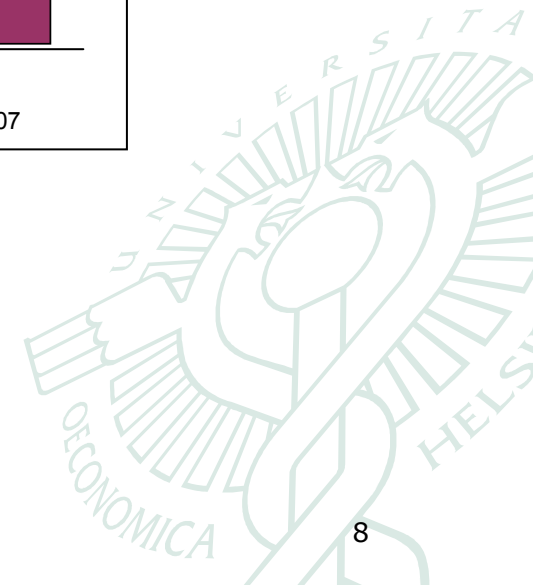
# Findings

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## 1) Increase in adoption



New iSource projects with their creation year

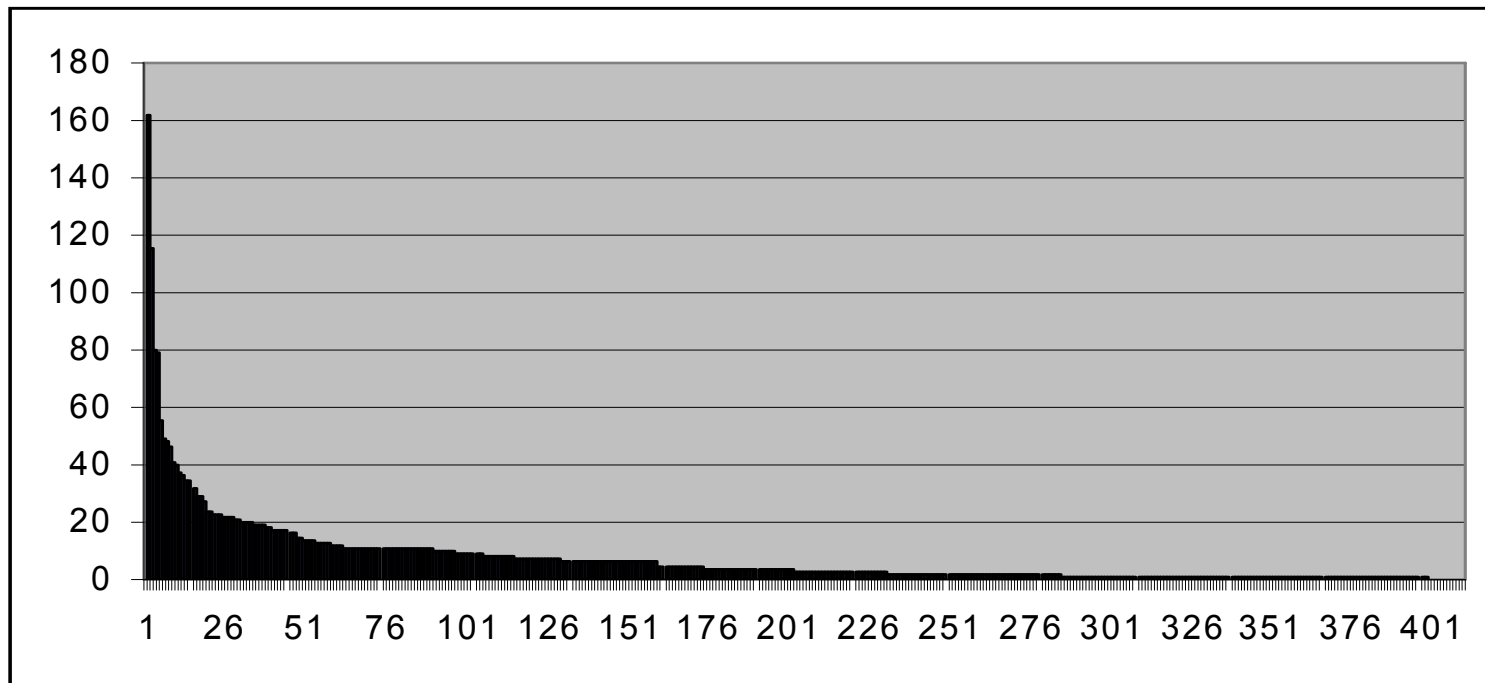




## Findings

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### 2) Project heterogeneity and openness



Number of developers per project

## Findings

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### 3) Project heterogeneity and openness

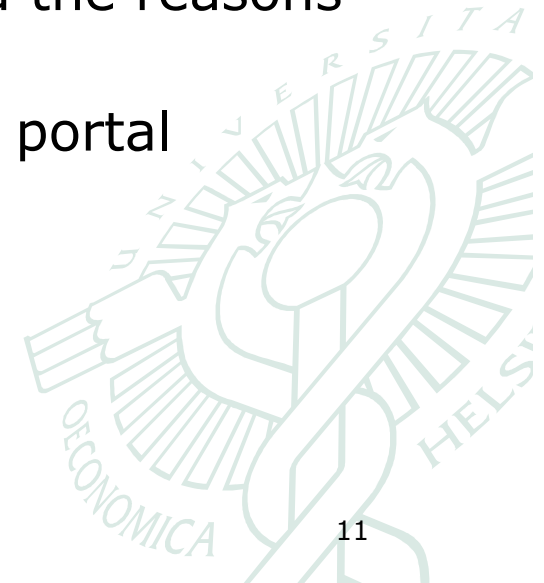
<b>Categorization (Most devs)</b>	<b>#</b>	<b>Categorization (File Downloads)</b>	<b>#</b>	<b>Categorization (CVS commits)</b>	<b>#</b>
Platform	6	Framework	3	Platform	4
Simulator	2	Scripts and libraries	2	Framework	2
Reference Implementation	1	SDK	1	Emulator	1
Testing environment	1	Software suite	1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

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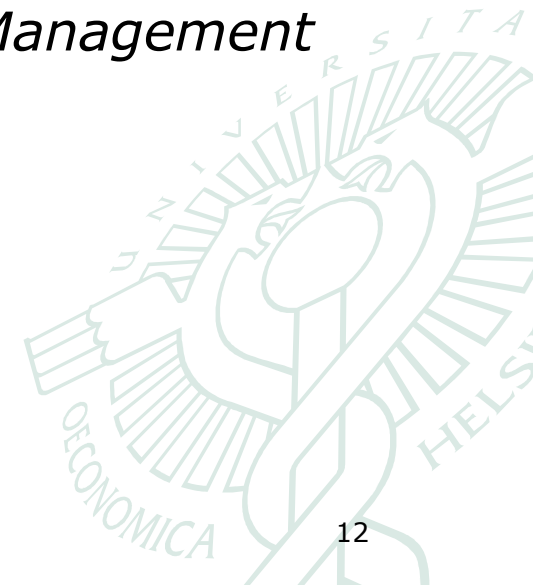
- Use has grown steadily. Perceived long tail is a problem.
- Platform projects are widely used (as is)
- Libraries and frameworks another popular class (as part of new development)
  
- In the future we will try to understand the reasons for the uneven distribution of interest
- Take projects into spotlight instead of portal



## References of presentation

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- 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

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



## Q&A

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- Comments and questions welcome!

