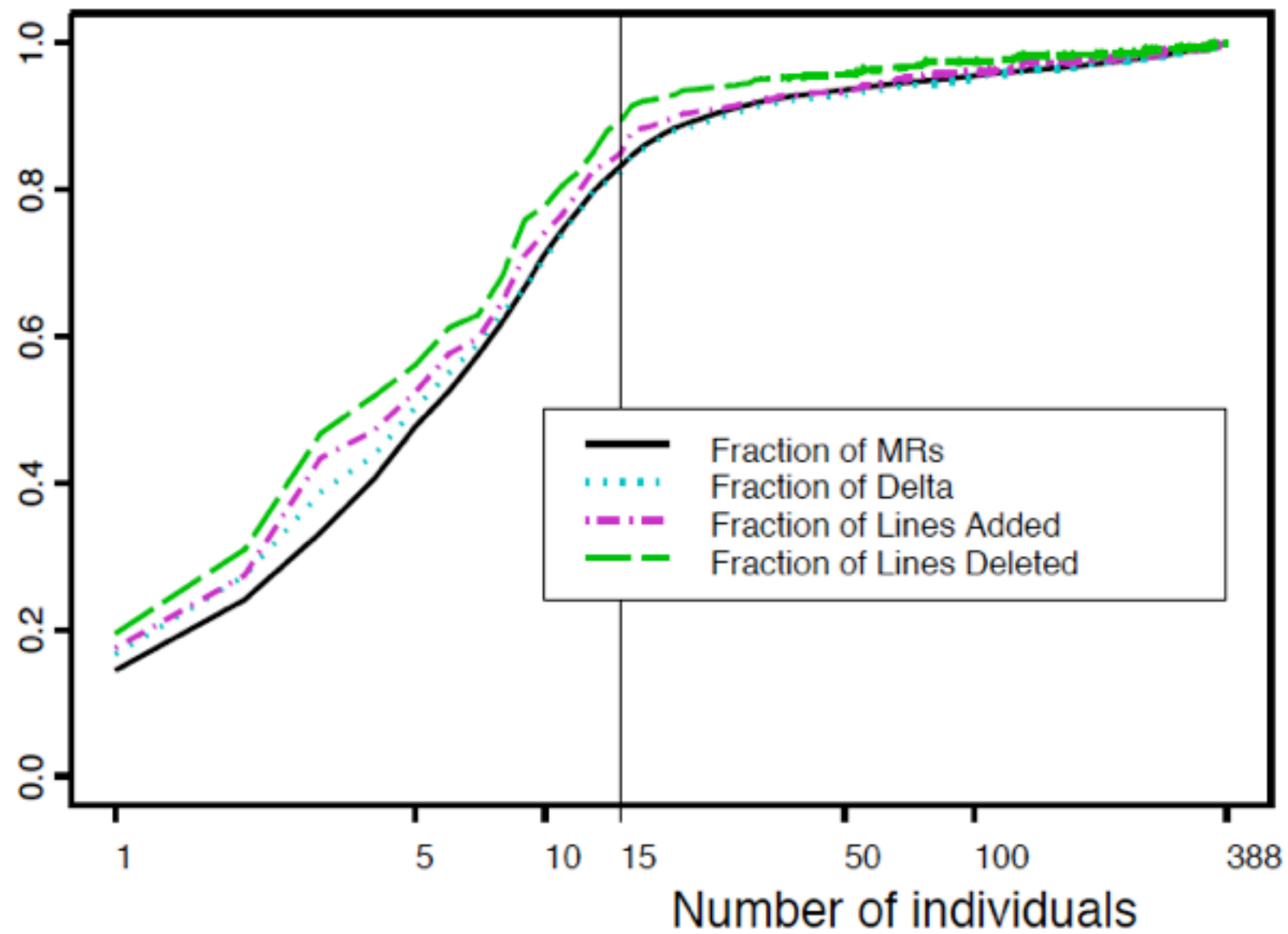


The Myths of Open Source Software

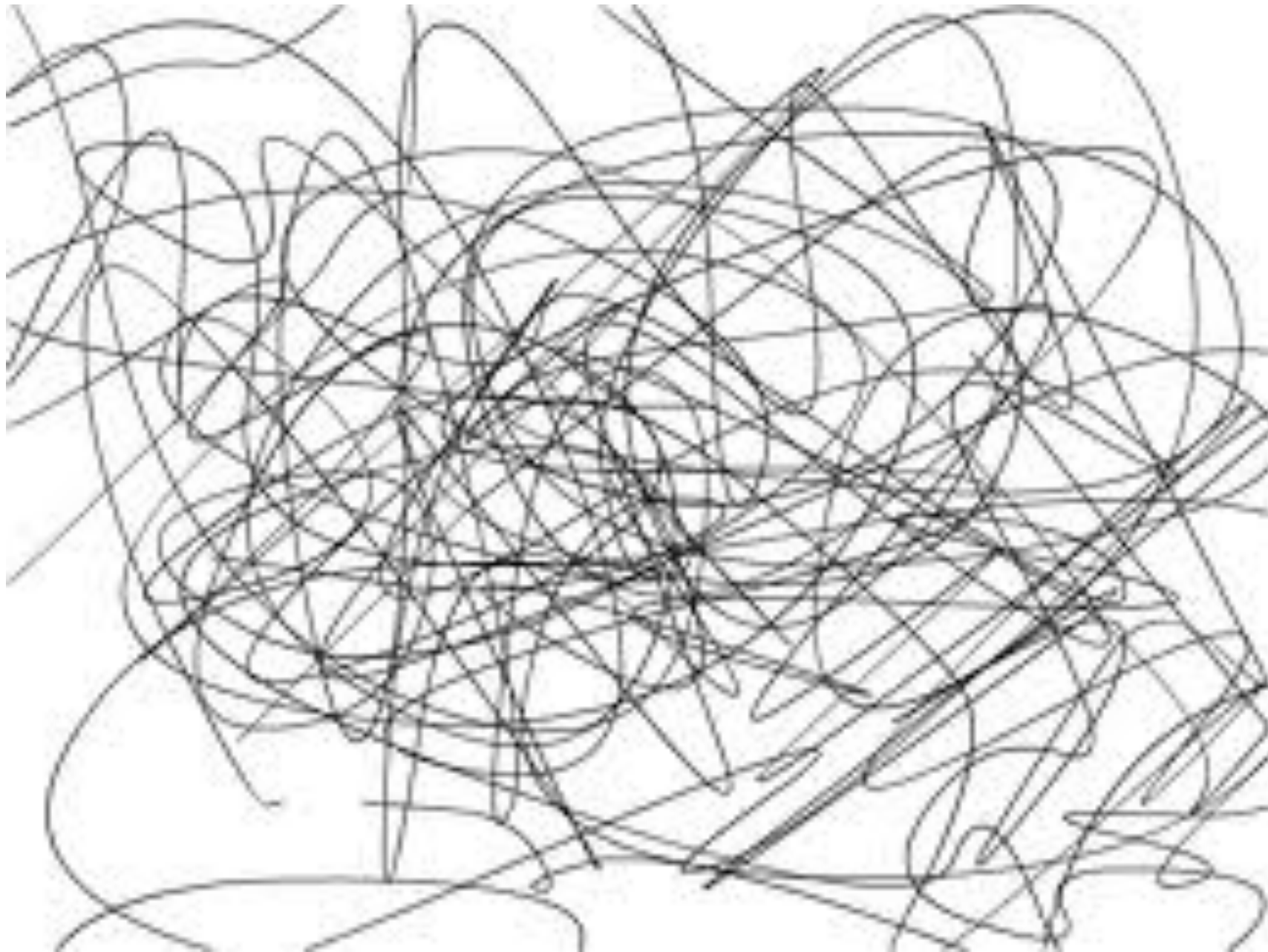
Peter C Rigby



Hundreds of Contributors?



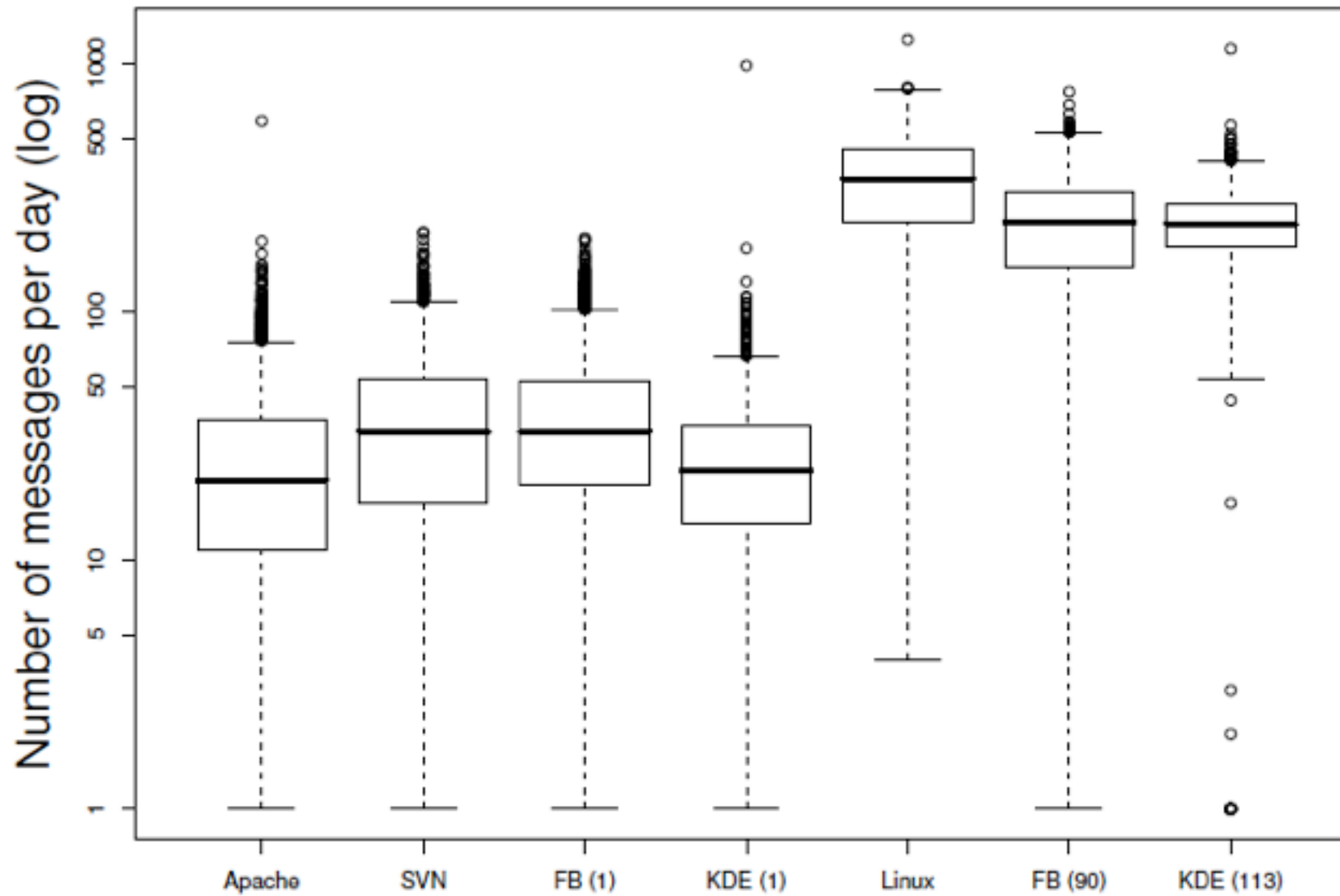
“80-20 rule”



Chaos

Governance

- Dictator (Benevolent)
- Oligarchy (peer group)



Massive Communication

Parkinson's Law of Triviality



Parkinson's Law of Triviality



Parkinson's Law of Triviality

	Apache	SVN	FreeBSD	KDE
Percentage of reviews:				
Outsiders involved	30%	23%	13%	18%
Outsiders majority	5%	3%	2%	4%
“Outsiders’ influence” measure correlated with:				
Time for review	−.17	−.24	−.32	−.20
Total messages	−.53	−.59	−.60	−.38
Core-dev messages	−.76	−.77	−.77	−.63

Bikeshed Impact?





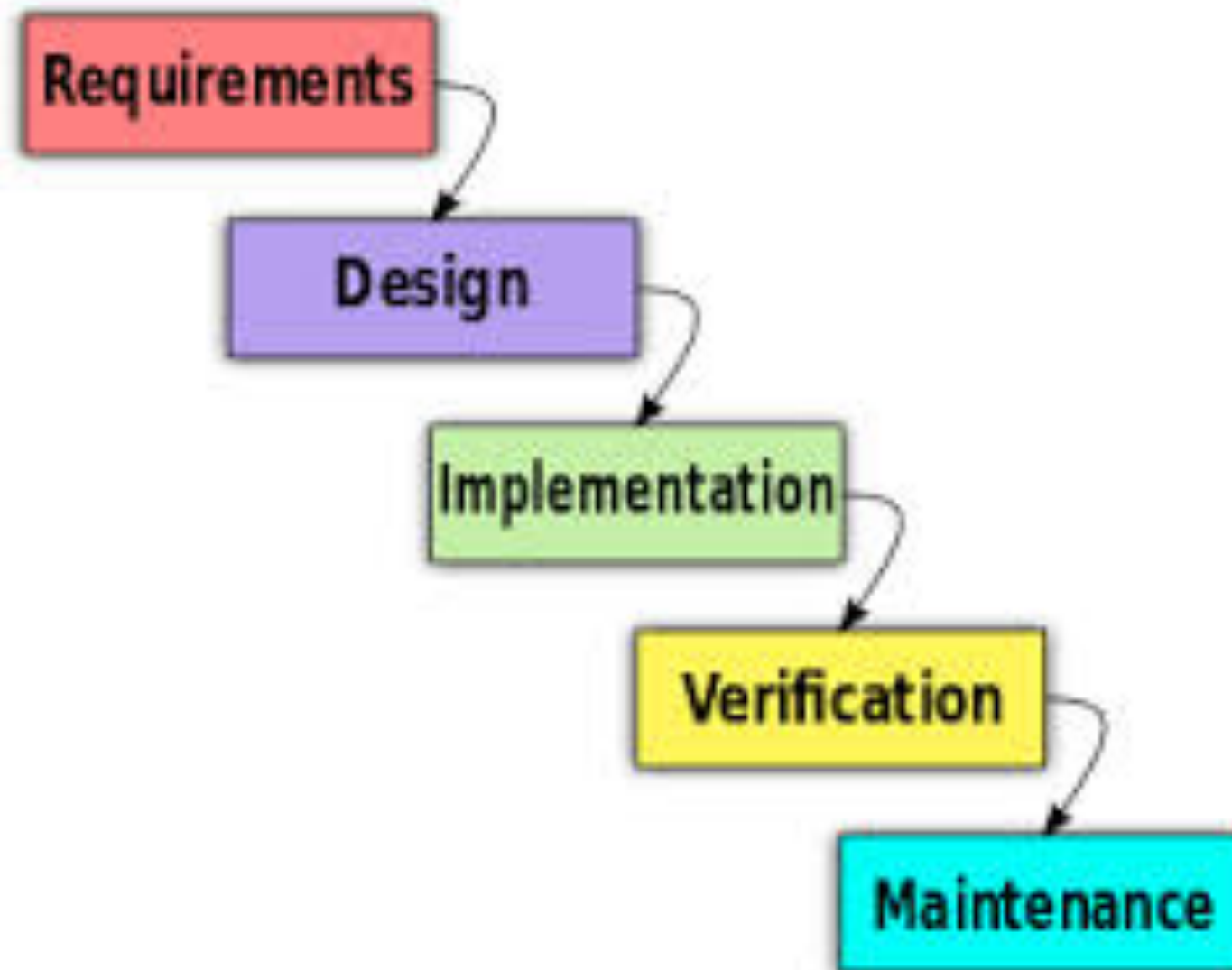
Hobbyists?

Revenue

- Firefox
 - 163 million in 2011
- Red Hat
 - 1.13 billion in 2012



No process?



Waterfall

Agile Manifesto

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

Frequent Integration

- Patches
- Branches
- Tools

Early Releases

- Release early, release often
- Continuous build environments

Users as co-developers

“given enough eyeballs, all bugs are shallow”

Reviewing

- Everything happens in the open
- Broadcasting messages
- Broadcasting changes

OSS Processes

- Keep the parts that work
- Throw out any redundant or excessive formality

What makes a project OSS?

Its License

- Three types
 - GNU General Public License
 - Mozilla Public License
 - BSD License

OSS Products

Do they threaten software development companies and paid developers?

Source code is freely available and distributable

- VMware bought SpringSource for \$420 million
 - 20 times annual sales
- But, SpringSource code is freely available!
- Why!?

http://www.nytimes.com/2009/11/30/technology/business-computing/30open.html?pagewanted=2&_r=0

Coca-cola brand?

Coca-cola brand?

worth \$72 billion

Why buy OSS?

- Brand, people will know you
- Good will - Investing money into a community project
- Critical mass of users
- It's the competition and will exist anyways
- Technical know how and infrastructure

Ways of making money

- Infrastructure Projects
- Dual-licensing & Support and Training
- Partnerships and grants
- Bounties and Crowdfunding
- Advertising & Donations

Linux revenue?

\$2.4 Billion in first quarter of 2012
For whom?

<http://www.internetnews.com/blog/skerner/linux-server-revenues-growing-faster-than-windows-hit-2.4-billion-in-1q12.html>

OSS Dev Motivation

OSS Dev Motivation

- Intrinsic interest in development problem

OSS Dev Motivation

- Intrinsic interest in development problem
- Building a resume

OSS Dev Motivation

- Intrinsic interest in development problem
- Building a resume
- Money is less important for OSS devs

What you'll learn

- Lightweight but empirically validated approaches to software development
- New licensing and business models for software development
- Data mining and software analytics