

Economic Impact of FLOSS

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Outline

- FLOSS market position
- Economic value, productivity, skills, jobs
- Innovation, competition, R&D, growth
- Europe: trends and policy

FLOSS market position

FLOSS has a big share of many software domains

web servers (70%: apache)

mail servers (about 50%: sendmail, exim, postfix)

scripting languages (perl, php)

domain name system

FLOSS market position

Emerging applications rely on FLOSS

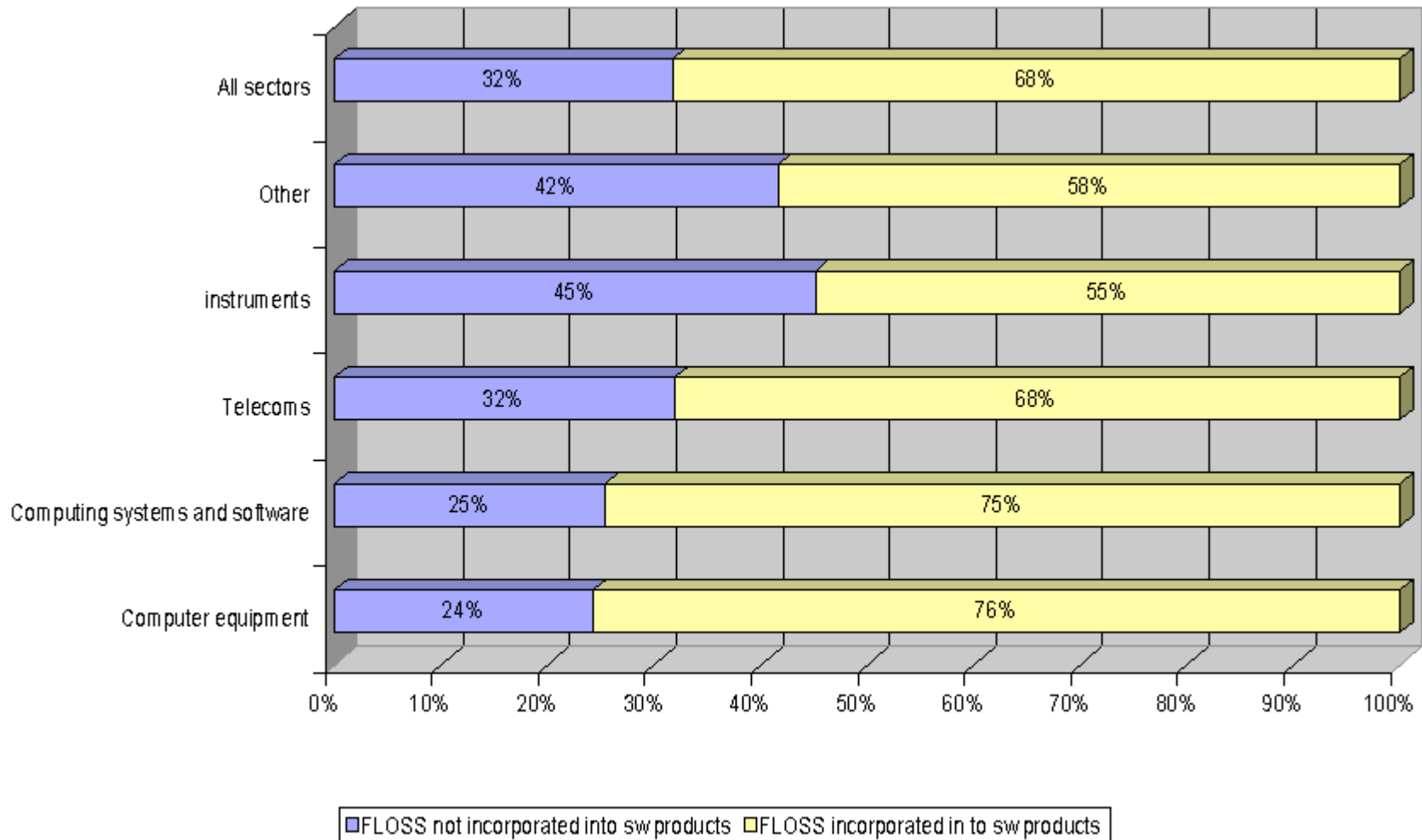
application servers (plone, zope)

“web 2.0” / AJAX

mobile VoIP (e.g. Truphone, rebtel, jajah)

FLOSS market position

Use of FLOSS in software products, by industry



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FLOSS market share

- Linux has a 23% share of smartphones (advanced cellular phones) after Symbian (51%)
- Growing at 85% per year
- Hardly seen in Europe / America, mainly China

FLOSS economy: value

- Existing FLOSS code – if a company were to recreate it, this would cost:
 - Euro 12 billion (substitution cost, till 2005)
 - 163 thousand person-years
 - Euro 100 billion (till 2010)
- Doubling in size every 18-24 months
- Actual investment by firms in code development: at least Euro 1.2 billion

FLOSS economy: value

- Existing FLOSS code – actual effort by individual developers:
 - Euro 3 billion (opportunity cost, average salaries)
 - 131 thousand person-years (over 5 years)
 - Full-time-employee equivalent: 26 000 (in 2006)
- Half of all code rewritten every 5 years

FLOSS economy

- FLOSS-related services could reach a 32% share of all IT services by 2010
- FLOSS-related share of economy could reach 4% of European GDP by 2010 (IT-related share of GDP is about 13% by 2010)

FLOSS economy: jobs

- Only 7% of programmers in the US work in packaged software companies
- 30% work in sectors producing mainly custom software / integration / support
- Almost 60% work in the “user sector” - finance, government, manufacturing, retail, etc

FLOSS economy: jobs

- 16% of software spending in the US is on packaged proprietary software (19% in EU)
- >50% is in-house software development (30% in EU)
- Rest is custom software

FLOSS economy: jobs

- *Today's* economics of software: most people (and firms) who write software do *not* make money by selling software, but by selling their time!
- This is the economics of FLOSS, not the economics of proprietary packaged software

FLOSS economy: skills

- Job postings: 70:30 ratio of proprietary software skills to FLOSS software skills (overlapping)
- FLOSS developer community is for most participants a place to “learn and develop new skills”
- These skills are not just technical, they are often better learnt than in formal courses, and lead to jobs

FLOSS economy: skills

- Proven FLOSS development can compensate for the lack of a formal degree/certificate
- Employers agree with developers on these findings

FLOSS economy: growth

- FLOSS potentially saves industry over 36% in software R&D investment
- Increased profits, or invest more usefully spent in further innovation
- Increasing FLOSS share of investment from 20% to 40% in EU would lead to 0.1% higher GDP growth (excluding ICT industry benefits)

FLOSS economy: investment

- FLOSS represents about 20% of total software investment in Europe and the US (notional value of investment)

FLOSS economy: policy scenarios

- **CLOSED:** existing business models are entrenched through legal and technical regulation;
- **GENERIC:** current mixed policies lead to a gradual growth of FLOSS while many of the opportunities it presents are missed;
- **VOLUNTARY,** recognise and utilise the potential of FLOSS and similar collaborative models of creativity to harness the full power of active citizens in the information society.

Thank you

Press release, executive summary, full report via:

www.flossimpact.eu

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