

F/LOSS

User Survey & Firms' Open Source Activities



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Motivation of FLOSS

...and outline of presentation

- **Collect data on importance and role of OSS in Europe**
- **Assess implications of OSS for policy and decision making**

Part I of presentation (Final I):

- **Provides data on OSS usage in European enterprises and public institutions, on motivations for OSS usage, and on benefits from using it.**

Part II of presentation (Final II):

- **Provides analysis of firms' OSS development activities and the resulting policy implications.**

Whom did we ask?

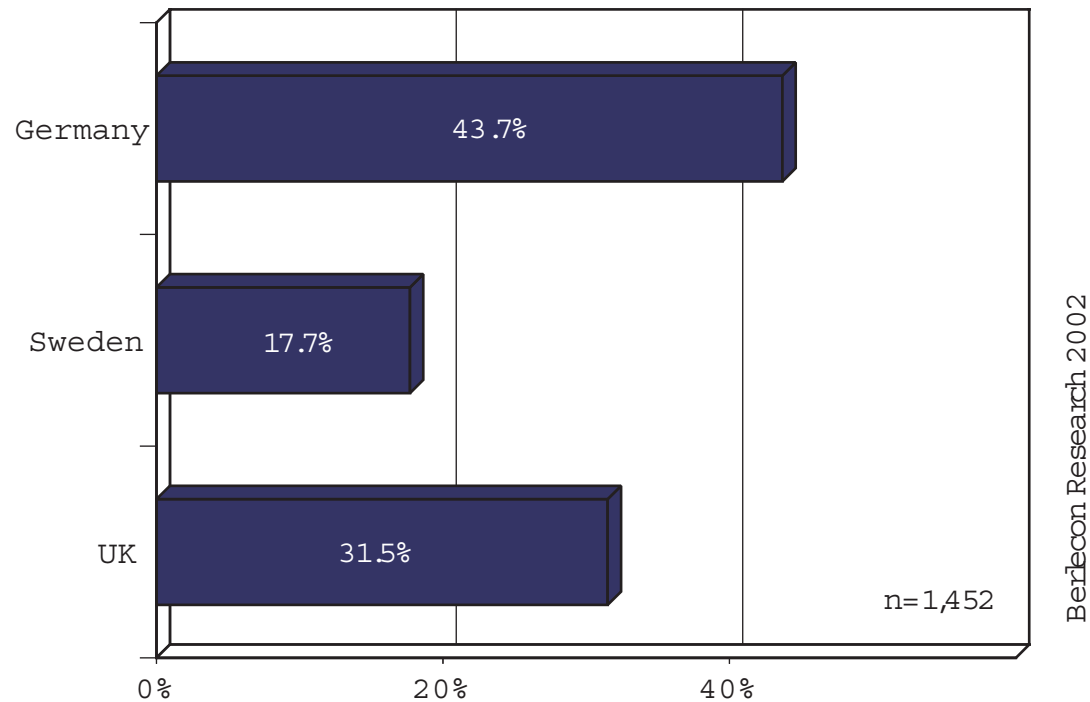
Methodology I

- **Firms and public institutions with min. 100 employees in Germany, Sweden, UK**
- **1452 establishments contacted, of which 395 used OSS**
- **Telephone interview instead of online or print since:**
 - **IT decision makers difficult to reach**
 - **Minimizes selection problems**



Current and planned OSS usage

Results I



- **OSS used most widespread in Germany**
- **Usage rates higher in public sector than on average**
- **Usage rates higher in large than in small establishments**

Hitlist of application areas for OSS

Results II



Germany

1. Server operating system (30.7% of establishments)
 2. Creating or operating web sites (16.2%)
 3. Databases (15.7%)
 4. Desktop (12.0%)
- Same picture in Sweden, although percentages between 3.3% and 10.1%
 - In UK, OSS usage for databases most important (9.9%), followed by server OSS (6.4%) and web sites (6.5%).

Benefits from OSS usage

Results III



- **Results for usage motivations are surprisingly similar across application areas:**
 - 1. Higher stability and better access protection**
 - 2. Low or zero license fees**
 - 3. Installation and administration cost savings**
 - 4. Open and/or modifiable source code**

Attitude to OSS in general

Results IV



General motivations for OSS usage

- independence from pricing and licensing policies of big software companies (56%)
- better availability of IT specialists (21%)
- company policy (19%)

Support of OSS development

- 36% allow developers to work on OSS projects on company time
- For 35% support of OSS community is motivation for OSS use
- 14% use OSS service companies to support OSS community

Part II: Firms' Open Source Activities

Motivations and Policy Implications

Explanation of OSS development activities

Many for individuals, few for firms



- **Motivations for OSS development activities by individuals discussed intensively, e.g.**
 - **Signaling effects => show ability to program, be part of team**
 - **Learning and training => accumulate human capital**
 - **Cooking pot model**
 - **Have fun, annoy Microsoft**
- **But motivations by firms are less-well understood**
 - **OSS activity often simply explained by complimentary-good argument (give away software, sell server)**
==> misses spillovers

Firms' Open Source activities

A quick view at the large software companies

- According to their web sites, a third of the world's 25 largest software companies do engage in major OSS development activities.
- 3 out of 25 have smaller projects.
- Many of those without projects support Linux with their software.

Example IBM:

- Around 70 Linux-related projects within Linux Technology Center.
- Claims to have invested \$1bn in Linux activities.
- A few dozen OSS projects related to Java, XML, Web Services.

Motivations behind OSS activities



- **Motivations that explicitly take into account the spillovers from developing OSS:**
 1. **Standardisation: overcoming the ghost of Unix wars**
 2. **Open Source software as low-cost component**
 3. **Strategic considerations**
 4. **(Enabling compatibility)**

OSS activity as standardisation effort

Motivation and policy implications



- **Standardisation reduces investment risk and can make future path of product more focused.**
- **Participation in activity ensures head-start and helps to influence standard development**
- **Competition policy: OSS development less problematic than other standardisation activities, as OSS is generally open and information exchange takes place in public.**
- **Property rights: “Hijacking” of OSS development possible in theory, but incentive may be lower. ==> Has to be investigated in more detail.**

OSS activity as basic research

Motivation and policy implications

- Firms engage in basic research when some returns can be captured. Also knowledge from basic research can best be understood when companies are involved in research process.
- Social returns from basic research estimated to be considerably higher than private returns. ==> Argument for policy support
- Property rights: Trade-off between tight property-rights to protect research investments and loose property-rights to allow for spillovers.
=> Which regime to choose for government-funded projects?
=> What are the effects of patents on this type of basic research?

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