Standardization, open source, open innovation models

Improving the impact

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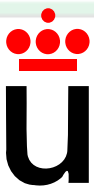

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Structure of the presentation

- Definitions
- Goal
- Role of standards, free software
- Is this for you? (winners, losers)
- Problems in the current FP7 context
- Howto and ideas

Open standards

- Adopted by a non-profit
- Developed following an open decision-making procedure
- Available and redistributable either freely or at a nominal charge
- Intellectual property irrevocably available on a royalty-free basis
- No constraints on the reuse of the standard

European Interoperability Framework for pan-European eGovernment Services

`http://ec.europa.eu/idabc/en/document/3761/5845.html`

Free / open source software

In short, free / open source software guarantees:

- freedom to use
- freedom to study, and to adapt
- freedom to redistribute
- freedom to improve and release improvements

"Free Software Definition":
`http://www.gnu.org/philosophy/free-sw.html`
"Open Source Definition":
`http://opensource.org/docs/osd`

Open innovation

"Open innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology"

Chesbrough, H.W. (2003).
Open Innovation:
The new imperative for creating and profiting from technology

The goal: leveling the playground and generating trust

- Innovation is the key: let others join the game...
- So, increase incentives for third parties:
  - More chances of getting a large user base
  - Less chances of being out-of-the-game for lack of control
  - Access to all the details of the technology
  - Fair competition (no one has hidden advantage)
- And make them credible (avoid fear of domination)
  - Clear copyright, patents, trademarks rules
  - Clear governance
  - Inclusive decision-making process

The role of open standards

Standards:

- Well defined rules, contribute to trust
- Lower barriers to other actors (competition in the market)
- Easier interoperability

In addition, when those are open:

- Neutrality with respect to vendors
- Non-controlled evolution path
- No developer lock-in

...but also lack of control for first player

The role of free software

- Implementation of reference
- Ideas that "work" (software as a demonstrator)
- Lower barriers for incremental innovation
- Easier paths for collaboration (even without formal agreements)
- Easier to build and sustain a community of innovation
- Easier to show multiple sources of the technology

Winners and losers

- Who may win?
  - Funding agencies: more chances of developing technologies with an impact
  - Promoters of the technology: healthy evolution, more chances of having it adopted by the market
  - Third parties: access to promising technology with little investment
  - Users: more competition, more chances of massive adoption
- Who may lose?
  - Actors with strategies based in user and developer lock-in
  - Actors not needing external communities
  - Actors in areas where innovation is slow, or competition is (very) limited

Is this for you? (as a project)

Cons:

- You lose control
- More actors are involved: more interests, more complexity
- The community needs seed resources to rise
- You accept higher risks
- You lower barriers to your competition

Pros:

- New potentials, extra innovation
- You may raise resources from third parties
- Credible market (several providers)
- If it works, it may take the niche by storm

Of course you can try mixed approaches

Is this for you? (as the funding body)

- Impact in all the technological fabric, not only consortium
- Higher risk, but higher impact when succeeds
- Even if the consortium fails, others may bring outcomes to market
- Less developer and user lock-in
- Less risk of anti-competition practices
- Need to fund community, in addition to pure R&D

No more major outcomes forgotten in a hidden drawer somewhere

Problems (in the context of FP projects) (1)

- Short timeframe to build a community of innovation:
  technology is usually ready at the end of the project, no time to build community
  How to fix:
  - extended period for building open innovation communities
  - start early in the life of the project (open development)
- Difficult to plan:
  difficult to be realistic and detailed enough in the proposal or DoW
  How to fix:
  - allow for extended plans once the project is running
  - adapt when environment changes
  - let the community influence the evolution of the DoW

Problems (in the context of FP projects) (2)

- Lack of resources:
  community usually a part of the dissemination strategy, small budget
  How to fix:
  - realistic budget: need to invest to create a community
  - plan a part of the resources for third parties
- Experts:
  building a community is different from R&D
  How to fix:
  - include the needed expertise in the consortium
  - work with established communities

How to

Should a project be interested in this approach...

- Plan early, plan often (adapt to new circumstances)
- Ensure all partners understand and share the plan
- Allocate enough resources
- Ensure expertise is available in the consortium
- Be ready to fund third parties
- Include competition elements (meritocracy, for partners and third parties)
- Be inclusive once the community starts to build up

Some other ideas

- Release early: promote usage well before project is done
- Ensure involvement of external users
- External support for projects (experts on FLOSS exploitation)
- Active networking actions (projects, communities, industry)
- Early involvement in FLOSS communities (eg, incubators)
- Support for the creation of stable structures post-project
- Recommendations for designing DoWs?

The "open way" maybe is not for you...

but if you want to try it,

be sure you plan to get all the benefits