Open Source vs. Proprietary Software – A Development Perspective

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The Cathedral & the Bazaar

Two main development models:

- The Cathedral Model:
  - Deployed in the commercial world
  - Development is tightly organized and centrally planned

- The Bazaar Model:
  - The “model” of the Open Source world
  - Open Source is “a great babbling bazaar of differing agendas and approaches”

Tenets of Open Source

- Every good work of software starts by scratching a developer’s personal itch.
- To solve an interesting problem, start by finding a problem that is interesting to you.
- Often, the most striking and innovative solutions come from realizing the your concept of the problem was wrong.
- The next best thing to having good ideas is recognizing good ideas from your users.
- Good programmers know what to write – great ones know what to rewrite (and reuse).
Tenets of Open Source (cont.)

- Release early – release often. And listen to your customers.

- Treating your users as co-developers is your least hassle route to rapid code improvement and efficient debugging.

- Given a large-enough beta-tester and co-developer base, almost every problem will be characterized quickly and the fix obvious to someone.

- Perfection (in design) is achieved not when there is nothing more to add, but rather when there is nothing more to take away.
Characteristics of OSS Development

- “Plausible Promise”
  - An idea that can be evolved into something useful in the foreseeable future.
  - A stable and testable first version
- Iterative/incremental development (with frequent releases)
  - “Maintainers” oversee code base
  - Contributors provide new/changed code
  - Community of users test code base, provide feedback etc.
- Features driven by needs/ideas of community
- Highly decentralized development
- Informal planning
“I really do not think that it is the [development] model per se that decides the quality. As in everything, it comes down to the people – the quality of a product is a reflection of the people.”

– James Russel, ACM Queue, May 2004
References

Questions?