
Libre software business models
(from an European point of view)

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Wellcome to GNU/Linux fashion!!

GNU/Linux has emerged from the undergrounds:

- It is taught and used in main Universities.
- Huge companies as IBM or Sun are using it.
- “Big Money” is becoming interested (some Nasdaq IPO’s show it).
- The “media” is also interested: Forbes, NYT, CNN, etc.
- “Normal” users are starting to use it.

Wellcome to GNU/Linux community!!

GNU/Linux is the best:

- It is technically good (It even does not hang!).
- Its user interface is being improved.
- It is cheap (really cheap), and it includes lots of programs.
- It can be used for everything.
- There is an active community around it.
- ¡Viva GNU/Linux!

What happens if all this would not be so important?

Libre software, the unknown fact

Behind GNU/Linux there is a new way of doing things.

- So new that some years ago it was considered imposible.
- So new that we are start learning how to take advantage of it.
- So new that we do not really know how it works.

What is really new is the libre software model

¿What does libre software mean?

libre software \neq gratis software

Basically three freedoms to who receives it:

- Freedom to use it as he/she wants, wherever he/she wants.
- Freedom to redistribute it to whoever, and by using whatever media.
- Freedom to modify it (to improve it, or just to personalize it).

This requires availability of source code.

The libre software model

- GNU/Linux and Apache are very important, but...
- The really new thing is the libre software model:
 - Unprecedented combination of collaboration and competition.
 - Shift in emphasis from marketing to support and quality.
 - Classical assumptions about intellectual propriety are questioned.
 - End-users recover the control (instead of big software providers).
 - A new model for a new (global, networked) world?
- Next years will show feasibility (or unfeasibility) of the model.

Consequences for the software industry

If the libre software model is feasible enough, the software business will change upside down:

- Traditional software “manufacturers” will have to reinvent themselves completely (no more per-copy incomes).
- A whole new industry (based in support and libre development) will be needed as libre software gains market acceptance.
- It allows for (and encourages) competition in support, and even in the evolution of a piece of software.
- Users are benefited in several ways. Therefore, big pressure from end-users (including big companies) to switch to libre software.

Setting up shop: business of libre software

- No more licences fees, so ...
- ... new ways of making money have to be used.
- Some “models” have been proposed and used: Suport sellers, loss leader, etc.

“The purpose of any business is to create customers and to keep them”
(Peter Drukens)

- How does distributing source code create value for customers?
- How can a company convert that value into revenue and profits?

Value for customers?

- Protect investment (vendor goes out of business).
- Understand how software really works (wrong manuals).
- Can correct security flaws themselves.
- Independent audit (i.e. Y2000).
- Port to other O.S. and hardware platforms.
- Can create customize versions (by in-house or subcontracted teams).
- Standardization, but maintaining competition between providers.
- No more per-use licenses.
- Much more and better support (ensured by competition).

Libre software business models

Support sellers

- Revenue comes from media distribution, branding, training, consulting, custom development, and post-sales support.
- First implemented by Cygnus Solutions (support for gcc).
- Vendors differentiate themselves by providing more complete and/or easier-to-use software (Caldera, Redhat, Suse, etc.)

A case study: RedHat

- Sells GNU/Linux distribution and services around it.
- NASDAQ RHAT. Market capitalitation: \$ 4.150 Mdollars (Sept 2000).
- Best know GNU/Linux distributions provider.

Loss leader model

- Libre software used as loss leader of traditional software:
 - Libre software helps building vendor brand and reputation
 - Makes traditional products more functional
 - Increases the overall base of developers and users familiar with vendor's product line.
- Revenues may come from the “support sellers” model...
- but the idea is to get revenue from traditional software.
- Companies using this model: Netscape, Sendmail Inc., etc.

A case study: Netscape

- Web servers and browsers provider.
- One of the fastest growing companies in the 90's.
- Competition with Microsoft.
- It identified libre software as its best opportunity to win.
- It was the first “big” company in releasing the source code of one of their key products: Netscape Communicator (1998).
- Mozilla project and license.

Widget sellers

- Companies that are in business primarily to sell hardware.
- They will use libre software for drivers or interfaces.
- Hardware could be anything from a chipset to a controlled board or a peripheral device.
- Software could be driver code (e.g. graphics board), compilers (e.g. for a micropocesor), or complete operating system (for a workstation).
- Revenues would be generated through sales of the hardware itself.
- Use of libre software increases hardware sales as in the “loss leader” model.
- Vendor differentiate themselves based on attributes of the underlying hardware.

A case study: VA Linux

- Sells PCs designed and configured to run Linux
- NASDAQ LINUX. Market Cap: \$ 2.551 Mdollars (sept 2000)
- Best known provider of PCs for the GNU/Linux community
- It adquired Andover.Net which receives more than 90 Mvisits /month in their sites (slashdot, freshmeat, etc.)

Accessorizing companies

- Business model for companies which distribute books and other physical items associated with and supportive of libre software.
- Company does not participate in libre software development.
- Vendors can differentiate themselves based on quality of the goods, and can also build some brand loyalty.

A case study: O'Reilly & Associates:

- Publishing company of books about GNU/Linux, Perl, Emacs, etc.
- It organized the “first” conference on Open Source this year.

Sell it, Free it

- Essentially “loss leader” model repeated and extended through time.
- Company would deliberately structure to release software products, first as traditional commercial products and then convert them to libre software.
- Some problems:
 - When to convert it into libre software: fees vs. interest of clients
 - Clients willing to wait for the libre version.
- ACT uses this approach in GNAT, Matra in OpenCascade.

A case study: GNAT

- Ada compilers: clients are mainly big companies (military, aerospace, etc.)
- Ada95: a new standard, promoted by US Government.
- A project of about 1 million USD is awarded to NYU to build a compiler.
- NYU meets deadlines and budget, thanks to reuse of GCC (covered by GPL).
- A company (ACT) is founded to support and develop GNAT.
- Four years later, ACT (and ACT-Europe) dominates the Ada market (previously, there were no major European Ada vendors).

Service Enabler

- Companies that creates and distributes software to support access to revenue-generating on-line services.
- The service can generate revenue through subscription fees or advertising.
- Vendor can differentiate themselves based on the attributes of the services themselves.
- Some of these attributes are a function of the software serving as the front end.
- Example: Fee-based on-line game service which creates special-purpose software to access the service.
- Users could not only download the software, but to customize it for their use or to support special input or output devices.

Brand licensing and software franchising

Brand licensing:

- The idea is to retain the rights to the libre product trademarks.
- There will be official and unofficial versions.
- The owner can charge other companies for using the trademark in creating derivative products.
- Let's suppose that Netscape would license the use of "Netscape Communicator" to AOL.

Software franchising:

- Using franchising to extend the "brand licensing" or the "support seller" model.
- Software franchisor will supply franchisees with training (know-how)

and services (centralized support, advertising, marketing etc.)

A case study: Spanish Administration

- Some projects based on libre software.
- Reasons: cheaper, technically better, more reliable, less dependency on a given vendor.
- Example:
 - Installation of an Intranet linking offices in more than 50 cities across the country (first stage includes about 300 machines).
 - Software mainly includes WWW-based information systems.
 - GNU/Linux chosen instead of NT.
 - Local start-ups are providing support.
 - Hardware providers are providing installation.
 - “Traditional” vendors are providing ported software (e.g., databases).

- Experiment was a success. Further stages are planned.

A case study: Sweden and Lotus Notes

- Sweden administration and companies use Lotus Notes for groupware.
- The US legislation forces vendor of Lotus Notes to let US administration to key-escrow all the copies.
- As a result, nobody in Sweden can tamper communications of Lotus Notes users, but US administration can (even those of Sweden government).
- Two lessons to learn:
 - Technological dependence.
 - Unfeasibility of inspection of source code in proprietary products is harmful.

The situation in Europe

Good know-how, but not many commercial developments:

- European developers involved in mainstream projects (as never before: Linux, Apache, KDE, Gnome, Debian, etc.).
- User groups are blooming (in Spain, as many people around GNU/Linux as in major professional computer-related associations).
- Good technical training: many Universities providing different kinds of education using libre software.
- But: companies are still a US thing, (some exceptions: SuSe).
- But: lots of money in the US (not in Europe) to fund libre software projects (both federal and “big companies” money)
- Probably we are lagging two years behind US...

Opportunities for Europe

- A new opportunity for building a powerful software industry in Europe (covering all segments).
- In any case, libre software will be needed to improve the competitiveness of European companies.
- A golden opportunity to alleviate our technological dependency.
- Specially well suited for small and medium companies.
- Lots of opportunities for global business in niche markets.

If the libre software ever dominates, better be there as soon as possible.

What can be done?

- Promote the education using libre software tools.
- Speed up the introduction into the market of research results (by making them libre software).
- Force subsidized (usually precompetitive) research to produce free software.
- Favor libre software in contracts and purchases.
- Help to build libre software distributions well suited to European needs (e.g., localization and local languages support).
- Promote European networks of free software users & developers.
- Fight software patents!