Open Source Software as a strategic weapon

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What is Open Source Software (OSS) ?

- OSS is that software which:
  - Can be used without restrictions
  - Can be re-distributed
  - Can be modified without restrictions, generating “derivated work” you can distribute
- All the above can be done for free
- Source code of the software is a requirement
- There are several kinds of OSS licenses, which put conditions on how software or derivated work can be distributed

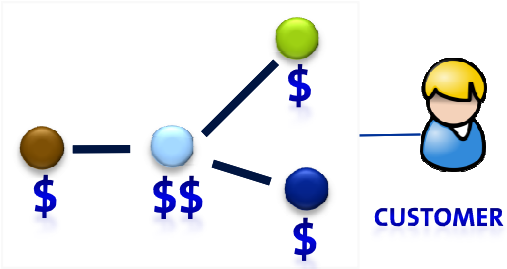
Understanding the economics behind OSS

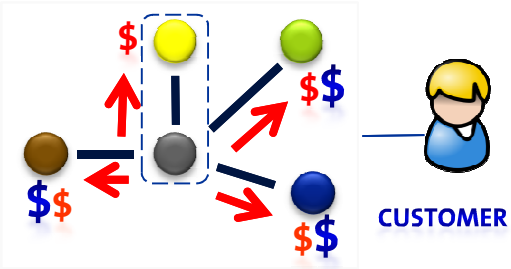
- OSS pushes commoditization of products or services in the value chain, transferring attractive profits to players commercializing adjacent products or services

"The Law of Conservation of Attractive Profits"

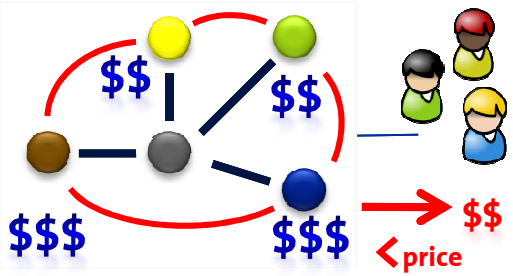
"When attractive profits disappear at one stage in the value chain because a product becomes modular and commoditized, the opportunity to earn attractive profits with proprietary products will usually emerge at an adjacent stage."

Clayton Christensen, author of "The Innovator's Dilemma"
Harvard Business Review, February 2004





- Christensen's law is key to explain how development of OSS may become strategic for companies whose core business is not selling software but adjacent products/services
- Companies can join forces in development of OSS because they share a common interest to commoditize some product
- They may let end users take part of transferred profits through price discounts, activating demand on market



Learning what Google is doing with OSS

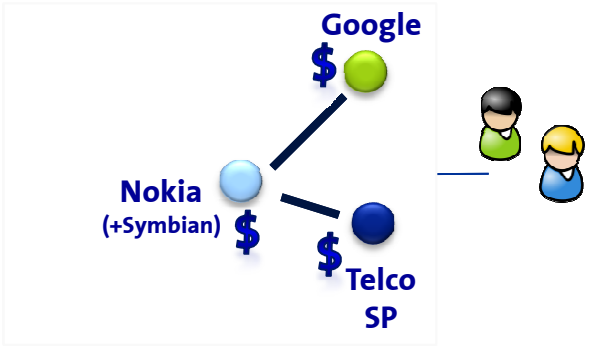
Google uses OSS (e.g., Android) to commoditize activities adjacent to its core business and capture profits

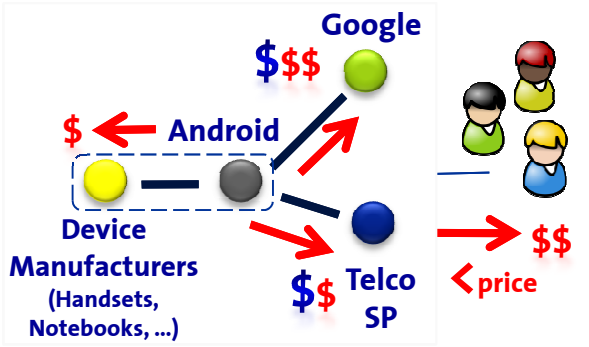
Step 1: Modularization & Commoditization

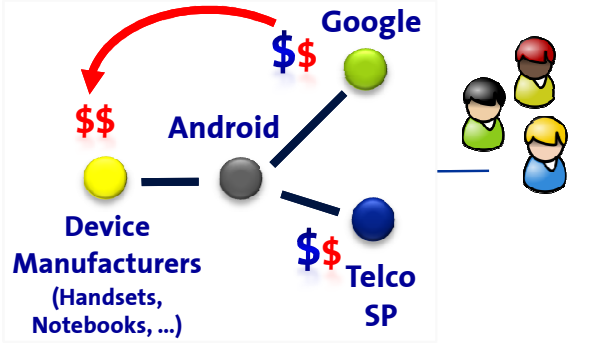
- Google has modularized what is being offered in devices and has commoditized the Operating System (Android)
- This has allowed new and cheaper device manufacturers to enter the market
- Cheaper prices stimulate growth on demand of Android terminals where access to Google Services come as a built-in feature

Step 2: Less Than Free

- Google will setup strong partnerships with device manufacturers by sharing part of its revenues with them (e.g., advertising)
- Google will leverage on this partnership to play next steps

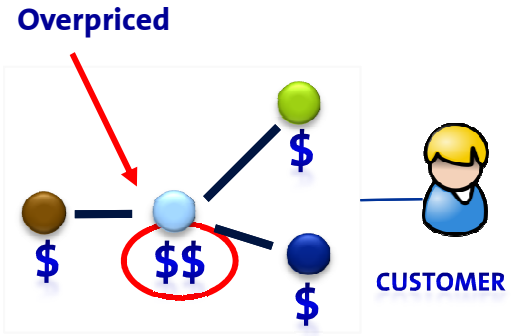


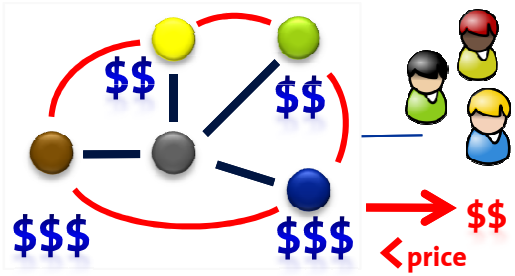


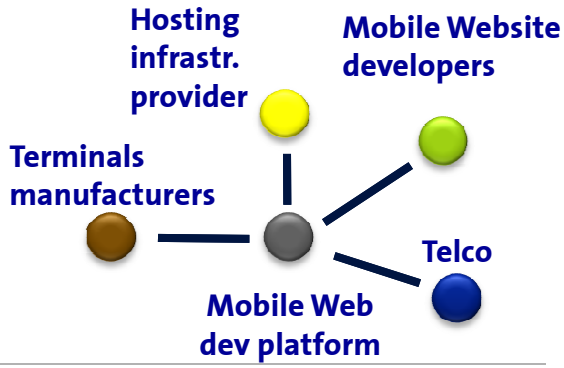


OSS as an engine of growth (1/2)

- In some cases, the price a software vendor wants to apply for a component in the value chain implies that the overall cost of the solution is too high for some end customers (SMEs overall) ...
- ... this circumstance not only leads to a lock in market growth which penalizes actors in adjacent activities (typically, ICT SMEs) but slows development of the Information Society ...
- By commoditizing the conflicting software element, the problem goes away ... the overall cost of the solution becomes reasonable, market demand gets activated and adjacent actors start to earn profits !
- Some governments may decide to fund development of OSS products which may become an enabler for development of a local ICT SME industry as well as a faster digitalization of local SMEs
- Telcos may become natural partners in this move, when the OSS product is adjacent to its core business

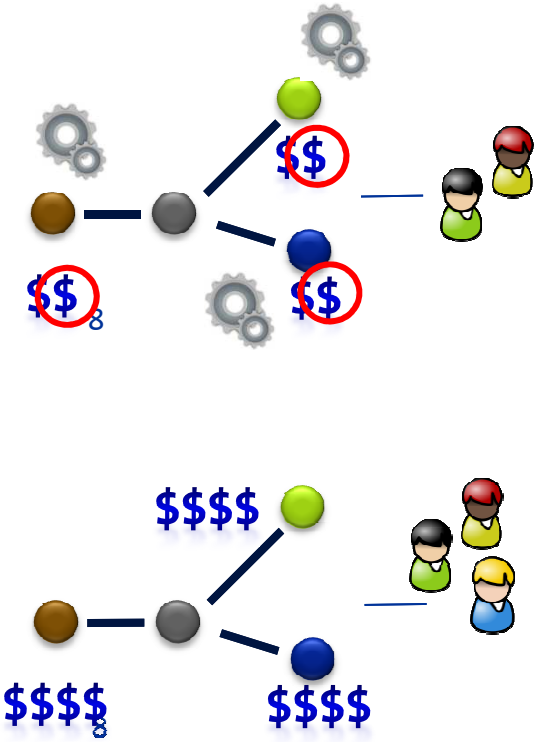






OSS as an engine of growth (2/2)

- Transforming a component in the value chain into a commodity do not only transfer attractive profits to adjacent areas, but fosters innovation in those areas ...
  - New attractive profits attract competition and push actors in adjacent stages to innovate as a way to gain differentiation
  - Perdurability of commoditized elements (thanks to Open Source) also stimulates innovation because investment made in innovation is better protected (does not rely on a product that may get deprecated because of the will of vendors)
- ... and this innovation may lead to more attractive products for the end customer, at reasonable prices ...
- ... which in turn may lead to a jump in market demand and the growth of the whole sector involving higher profits for adjacent actors



Some side benefits

- Open R&D
  - Share CAPEX
  - Bring talent from different parties
  - IPR management model ease collaboration and integration of results with other projects
- Brand image
  - Demonstrate your profile as high-tech company
  - Give some things for free (return to the society)
  - Sponsor of development in countries where you operate (R&D, SMEs)
  - Get closer to those customers who haver embraced OSS (e.g. Public Administration) or are friendly to OSS (many customers and sw developers)

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What is Morfeo ?

- Morfeo is an **Open Source Software (OSS) community hosting R&D projects** aimed to:
  - Definition of standards (base sw technologies or standard vertical applications)
  - Create business opportunities around defined standards (Christensen's law)
- Its success relies on the capacity to establish **win-win relationships** where all actors win:
  - Large companies and SMEs
  - Universities & Technology Transfer Centers
  - End customers
- Continuously **growing**:
  - Budget: 300 K€ in 2005 => > 80 M€ in 2010
  - Members: 3 in 2005 => 100 in 2010
  - Projects: 2 in 2005 => 75 in 2010
- Born local but with **global ambition**

http://www.morfeo-project.org

Morfeo: a true win-win ecosystem

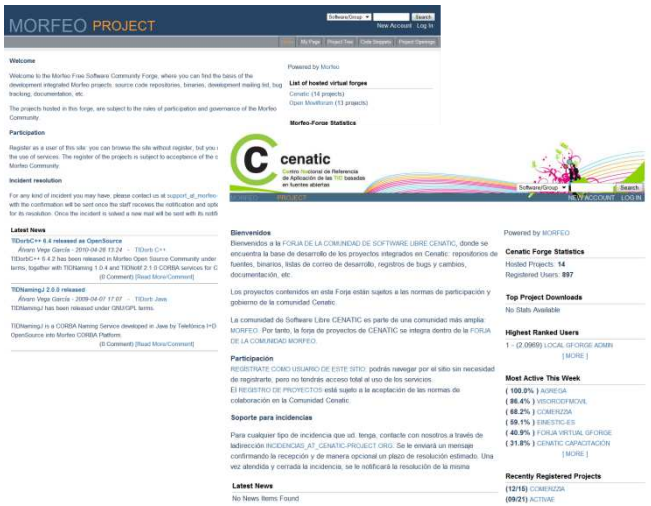
- Collaboration model with SMEs:
  - SMEs integrate Morfeo's technologies into their open source software portfolio of products and acts as a sales channel, exploring opportunities to commercialize consulting and integration services among their customers
  - In return, SMEs gets involved in R&D&I projects (typically dealing with pilot / experimental prototyping activities) and get access to funding
- Collaboration model with Universities:
  - IPR, access and exploitation rights are crystal clear from the beginning
  - Scientific groups obtain the visibility and recognition they deserve
- Collaboration model with Research Centers:
  - Morfeo supports Research Centers in their mission to transfer technology to SMEs in their regions and get them involved in relevant regional and international R&D projects
  - Research Centers help to find SME partners and customers who want to experiment with Morfeo technologies

Morfeo Offices in Latinoamerica

- Attempt to exercise the successful experience of Morfeo in Latinamerica
- The concept of Morfeo Office was introduced end of last year
- Activities in the different Morfeo Offices is structured in four phases:
  - Dissemination through organized events
  - Gather and analyze local feedback
  - Training around Morfeo technologies / best practices
  - Incubation of new projects
- Lack of attractive R&D programmes in Latam implies a difficulty

Sponsored chapters in Morfeo

- Enable partners who pay a fee to:
  - Have a dedicated chapter
  - Benefit from negotiated SLAs
  - Keep access to blog/forge/wiki under a domain they designate with their own branding (this besides the standard Morfeo look&feel under morfeo-project.org)
- Some examples:
  - CENATIC chapter
  - Open Movilforum
- Some parties have shown interest:
  - Some Public Administration
  - Open Telefonica
- Also offered to EC in order to host EU FP7 projects related to software and services



Morfeo Open Innovation Labs

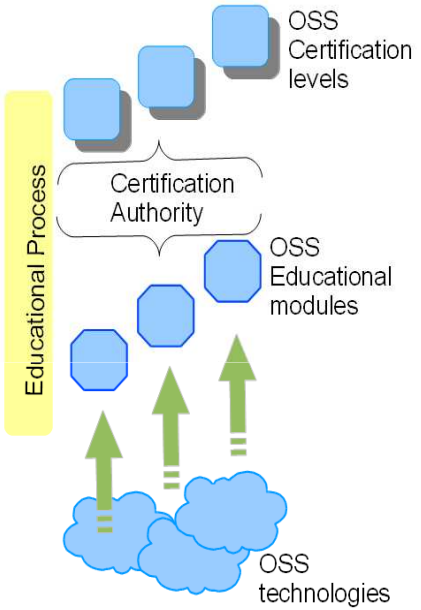
- Attempt to create a stable link with specific research groups / universities
- Two Open Innovation Labs already created:
  - Universidad Rey Juan Carlos
  - Universidad Politecnica de Madrid
- Activities within Open Innovation Labs:
  - R&D activities/projects in areas of common interest
  - Help to disseminate Morfeo technologies at the University (workshops, training, lectures, ...)
  - Help to disseminate Morfeo technologies in scientific world
  - Incubate and follow-up development of final grade projects

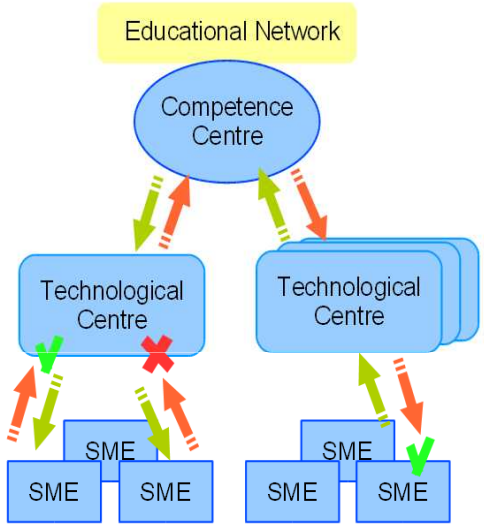
Universidad Rey Juan Carlos

Facultad de Informática
Universidad Politécnica de Madrid

Morfeo training

- Training & Labeling schema to foster trustworthiness on OSS
- Two levels of training
  - Educational modules
  - Certification modules
- Collaborative network to:
  - Fostering Educational Services.
  - Improving Technology transfer.
  - Building strong open innovation re
    - Universities
    - SME's
    - Technological Centres





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EzWeb: Mashup as a Service (MaaS)

- EzWeb materializes the concept of MaaS
  - Most advanced front-end web mashup platform existing today on the Internet (significantly ahead of iGoogle or NetVibes) – check http://ezweb.tid.es
  - End users search for, pick and select gadgets in a catalogue and assemble them together to support most frequent operations in their daily life
  - Some gadgets linked to network capabilities/APIs or Cloud Services (e.g., Terabox, Google Maps, ...)
- Target scenarios:
  - **Consumers**: pick a photo on flickr and send it by MMS, Take a photo on Terabox/Flickr and publish it on Facebook, twitt a feed you read, ...
  - **SMEs**: Access to a marketplace of SaaS applications, pick Trouble-ticketing app from provider A, Customer Database app from provider B, combine them together with Cloud Services, ...
  - **Internal IT**: let systems users get involved in the development lifecycle

MyMobileWeb: Pushing the Mobile Web

- MyMobileWeb is an already stable open source platform that ease development of mobile websites
  - Once-for-all-devices development approach, only requiring basic Web/XML/Java skills
  - High performance (no transcoding) at runtime
  - Compatibility with WURFL (defacto standard)
  - Support also low-cost handsets as far as they incorporate a browser
  - Some components are being used to implement mobile access channel to EzWeb
- Growing references
  - India
  - Several SMEs in Spain
  - W3C, Programming books, 3-rd party scientific papers
- Target scenarios:
  - **Internet**: Mobile access to Cloud Services
  - **IT Departments**: Mobile access to internal systems