Open Source Software Engineering

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Session 5 : Open Source Business Model

Recap Previous sessions

- **Intellectual Property Rights and Software Licenses**

- **Licensing Models in OSS:** Copyright,

  - **Copyleft – Strong and week, Permissive, Creative Commons**

- **Choosing Open Source Licensing Models**

- Option 1: Work with a community

- Option 2: Keep it simple and permissive

- Option 3: Need to share improvements

- Option 4: Work without a license

Agenda session 5

- Open Source Business Model

- By Intellectual Property :

    - Dual Licensing Model

    - Open Core Model

- By Services and other Business model

    - Open source SaaS model

    - Selling Users advertisement, Services and Merchandise

    - Donation, Crowd Funding and Crowd Sourcing

    - Freemium Business Model

Open Source Business Model

- In traditional commercial business model for companies :
  - Sale of Software Products - Product Companies
  - Sale of Software development - Services companies
  - Sale of Support services
- Companies that create and promote Open source software referred to as :
  - **Commercial Open source Software companies (COSS , or**
  - **Professional Open source Software companies (POSS)**

- **Why ?** **To solve the challenge of how to make money providing software that is by definition licensed free of charge**.

Open source Business model

- **Business strategies rests on the premise that users of open-source technologies are willing to purchase additional software features under proprietary licenses, or purchase other services or elements of value that complement the open-source software that is core to the business.**
- This **additional value** can be, but not limited to, enterprise-grade features and up-time guarantees to satisfy business or compliance requirements, performance and efficiency gains by features not yet available in the open source version, legal protection (e.g., indemnification from copyright or patent infringement), or professional support/training/consulting that are typical of proprietary software applications.

Open source Business Model

For Financial viable and successful, POSS companies

Business Model :

1. Selling Intellectual property - the code itself

- **Dual Licensing model**
- **Open – core model**

2. Open Software as a Service (SaaS)

3. Selling Services

- Selling Support and Consultancy service – professional services

4. Others :

- Advertising
- Partnership with funding organisations
- Selling branded merchandise
- Freemium

1. Selling Intellectual property : By Dual License Model

Dual license products are generally sold as :

- Community version – under GPL

- Enterprise version – under commercial license

Examples : Oracle's MySQL database – dual licensed

- Under GPL : MySQL Classic edition , and My SQL community edition

- Under commercial license :
    - MySQL Enterprise Edition
    - MySQL Cluster CGE, an
    - MYSQL Standard Edition

Dual Licensing Model

In this model, the OSS licensed by the POSS company under two licenses :

- **An open source license - Using GPL licenses, and**

- **A commercial license**

- The company generates revenue by selling the OSS under commercial license.

Why would a consumer of OSS buy a license from a company by paying a heavy amount for a software which is already available freely and at a no cost ?

This is necessary when the consumer wants to link his own proprietary software to the OSS, but does not want this to cause its proprietary software to become open source ; as it would under the GPL license

Dual Licensing Model

- According to the GPL license, if someone uses the GPL licensed source code and links it with some other code (dynamic linking or static linking), the linked software also becomes open source.

  - Thus the only way proprietary software vendor can link GPL software without causing their own software to become GPL is by buying a commercial license from the company

- The POSS company provides the same software to the proprietary software company under a commercial license **which saves the proprietary software from becoming open source**

Open- Core Model

- In this model , a core portion of the software, which provides the basic functionality - is made available as open source

- The outer or the other portion or extensions are designed to provide extended or additional functionality and are built over the core.

- The extended portion is licensed under commercial license and sold as a propriety software.

- Also called **Split open source** software

Examples : Open-Core Model

Example : Used by - Apache and Mozilla

- GitLab CE (Community Edition) is under a MIT style open source license , while GIT Lab EE is under commercial license

- Initially, Elastic core , which includes Elastic search, Kibana , Logstash and Beats , is under an Apache 2.0 license , while additional plugins are distributed under Elastic's own proprietary license

2. Open Software as a Service (Open SaaS)

Another way to commercialise an open source project is by using the Open SaaS business model

- **WordPress** and **Sharetribe** are popular examples products that make successful business through the open SaaS model

- software **stored in cloud** and accessible using a wen browser

- Purchase via **subscriptions**, offering varying levels if services

- No vendor locking

- **OpenSaaS**' : Coined in 2011 by **Dris Buytaert**, creator of **Drupal**.

3. Selling users : Professional services

- Sell services – such as consulting service , technical support service, or training services.

- Make available only the source code of OSS application or product :
  - Sell executable binaries to the buyers or customers on demand

- Offers the commercial services of compiling and packaging the software

- Example : companies like RedHat, IBM that have successfully used this model

- Additionally , selling good like physical installation media (e.g. DVDs) is another frequently used business model

Selling Users : Advertising – supported software

- Another POSS Business model :
  - For e.g. Google and Mozilla
- Example : Google pay Open source application for allowing whitelisted acceptable Ads display.
  - This is carried out by bypassing browser Ad remover.
- SourceForge, have a revenue model of advertising banner sales on their model

Selling users : Branded Merchandise

- Some POSS companies like Wikimedia foundation and Mozilla foundation, attract customers by selling branded merchandise articles like T-shirt and coffee mugs.

Freemium Business Model

- Feature limited - basic Features vs. Extended features
- Time limited – fixed duration after that paid versions
- Example : widely used in Gaming Industry, Anti-Virus, LinkedIn

References and Recommended Reading:

- How Developers Can Make money with Open Source Projects

https://rubygarage.org/blog/how-make-money-with-open-source-projects

- What Motivates a Developer to Contribute to Open-Source Software?

https://clearcode.cc/blog/why-developers-contribute-open-source-software/

- How do Open Source Programmers make money

https://www.thewindowsclub.com/open-source-companies-programmers-make-money

- **https://en.wikipedia.org/wiki/Business_models_for_open-source_software**

References and further readings

- **Choose a license https://choosealicense.com/**
- **Open Source Initiative https://opensource.org/**
- **Open Source Resources https://opensource.com/**
- **Open Source Guides (https://opensource.guide/**
- **Creative commons https://creativecommons.org**
- **GNU https://www.gnu.org/**
- **Copyleft https://copyleft.org/**