Open Source Software Engineering
SE ZG587

BITS Pilani
Pilani Campus

Kumar Manish
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Session 6 : Open Source Business Model

- Donations, funding and Crowd - sourcing

Recap Previous sessions

- **How individual / company Can Make money with Open Source Projects ?**
- **How do Open Source Companies and Programmers make money?**

1. **Selling Intellectual property - the code itself**
   - **Dual Licensing model**
   - **Open – core model**
2. **Open Software as a Service (OpenSaaS)**
3. **Selling Services**
   - Selling Support and Consultancy service – professional services
4. **Others Business Model :**
   - Advertising, Selling branded merchandise
   - Partnership with funding organisations
   - Freemium

Dual License Model

Dual license products are generally sold as :

- Community version – under GPL

- Enterprise version – under commercial license

- 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

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, and MYSQL Standard Edition

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

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

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.

Other Business Models ...

- **Sell Services** – such as consulting service , technical support service, or training services. Example : companies like RedHat, IBM that have successfully used this model

- **Selling Users : Advertising –** supported software, 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 Branded Merchandise :** like Wikimedia foundation and Mozilla foundation, attract customers by selling branded merchandise articles like T-shirt and coffee mugs.

Agenda : session 6

Open Source Business Model …….:

- **Freemium Business Model**
- **Re-licensing under a proprietary license**
- **Donations and funding**
  - **Crowd Funding for OSS**
  - **Crowd Sourcing for OSS**

Freemium Business Model

- **Freemium is combination of two words – free and premium**

- Feature limited - basic Features vs. Extended features

- Time limited – fixed duration after that paid versions
    - In this pricing strategy , the basic version of the software product or service is made available for free, but a premium amount is changed for additional or enhanced features or services that enhance or expand the functional of the free versions

- Source code not available

- Model extensively used in gaming industry

In OSS :

- Companies raises money by selling additional , but optional features , modules , extensions , or plugins to an open source software product

Re-licensing under a proprietary license

- In this model, a software company combines some portion of its proprietary software product, with an existing Open source software (under a permissive free software license),

- And relicenses the resulting software Product under proprietary licenses and sells it without the source code or associated freedoms.

- For example : Apple Inc, uses BSD Unix operating system kernel (Under BSD licenses) in the Apple's mac PCs, and sells it as proprietary product.

Revenue model followed by the version control system

- Different version control system provide different revenue models :

- SourceForge : making money Through advertising banner sales on their website

- **Making money by GitHub:**
  - Get funding for your GitHub Repository - interested company might pay you – they would may be using your code or need to promote themselves using your repository
  - Solving open issues in a GitHub repository
  - Finding bugs in GitHub

Donations and funding

- Voluntary Donations and Crowd – funding - other way of getting money for developers

Crowd Funding is the practice of raising funds for a project or event or a venture in small or large amounts - typically, from a large number of people - mostly via the internet.

Actors Involved :

- **Initiator** - Responsible for proposing idea of the project/ venture or event to be funded
- **Individual or group who support the idea**
- And **Moderating Organisation** that provides necessary infrastructure to launch and execute the idea
- Ex : for film making, eduction, medical expenses, NGOs, travel etc.

Crowd funding for OSS Projects

innovate   achieve   lead

Open source projects seek support for financial assistance through crowd funding; platform examples

- BountySource   https://bountysource.com/
  - Bountysource is the funding platform for open-source software. Users can improve the open-source projects they love by creating/collecting bounties and pledging to fundraisers.
- Snowdrift https://snowdrift.coop/
  - Snowdrift.coop is a nonprofit cooperative run by an international team driven by a common goal: To dramatically improve the ability of ordinary people to fund public goods – things like software, music, journalism, and research – that everyone can use and share without limitations.
- Gunio   https://gun.io/

Crowd - Sourcing

- Crowd sourcing is a participative and online activity
- In crowd sourcing , an individual or an institution reached out to an individual or group of induvial , requesting them to voluntarily undertake the proposed task through a flexible open call.
- Expectations :
  - The crowd is expected to participate by bringing their **work, money , knowledge and or experiences**
  - **Mutual benefit**
- **Example for crowdsourcing are Linux, Google Android, Wikipedia**

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

- Improve Coding Skills

- Gain Early Experience

- Increase Community and Peer Recognition

- Greater Job Prospects

- Improve Software on a User and Business Level

How do Open Source Programmers make money

- Companies Pay Open Source Programmers

- Earning By Creating Special Plugins, Etc.

- Earning by Customization of Code

- Earning By Providing Support

References and Recommended Reading:

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

- **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

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/**