Open Source To Accelerate Development Of Smart IoT Products

Sachin Bhakar

Agenda

- Introduction to Open Source

- Open Source licensing

- IoT & Open Source

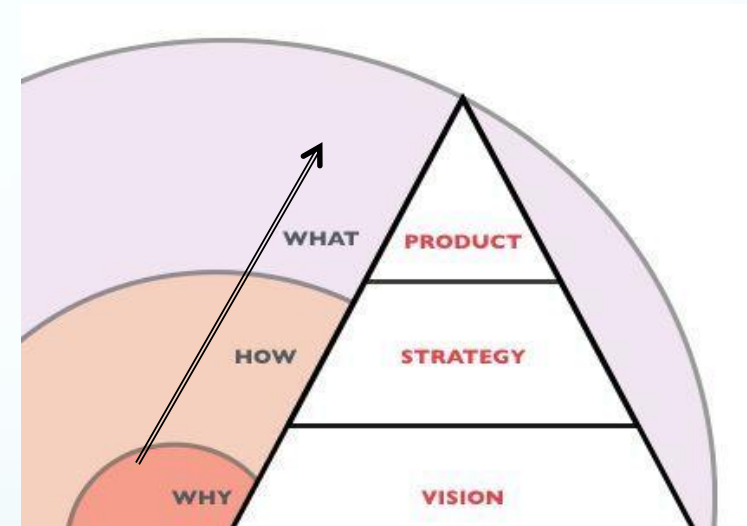- Impact

- Strategy & Monetization

Open Source Software

"Open-source software (OSS) is a computer software whose source code is released under a license in which the copyright holder grants users the rights to study, change, and distribute the source code to anyone and for any purpose"

* **What**
    * Source code → Shared within a community
    * Decentralized development

* **How**
    * Open Source guidelines
    * Complying to license obligations
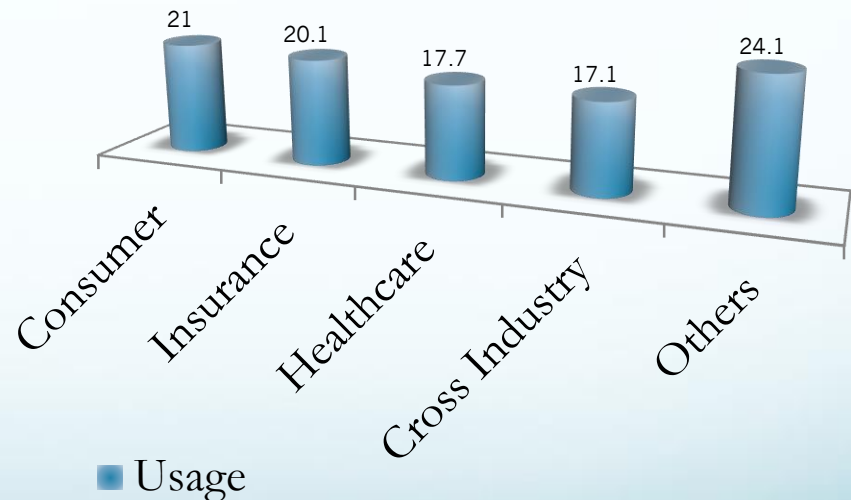   * Security Vulnerability check

The Golden Circle
(Simon Sinek)

OSS Licensing

- **Public Domain-> No Restrictions**
  - No License (Unlicense, WTFPL, CC0)
  - 'No warranty' clause is absent

- **Permissive license-> Few Restrictions**
  - MIT, Apache, BSD…
  - Explicit 'No warranty' & 'Patent grant' clause

- **Restrictive license-> Multiple Restrictions**
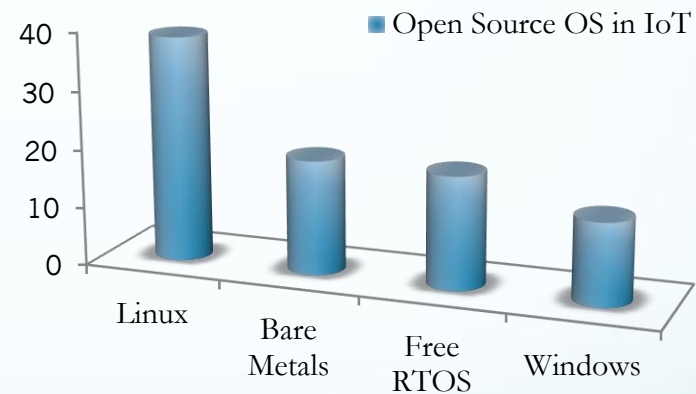 - GPL, AGPL, LGPL…
  - Copyleft & Patent retaliation clause

Open Source in IoT

- 21 billion connected devices by the year of 2020 (Gartner Inc.)

- Worldwide IoT to surpass $1 trillion mark in 2020 (IDC)

- Focus on:-
  - Reliability & Scalability
  - Longevity
  - Security
  - Data management

Open Source in IoT

- Majority of databases & OS used in IoT are Open Source.

- 42% IoT leaders uses proprietary tools to develop IoT products (Redhat)

- Only 37% IoT development has reached late majority (Redhat)

- Inhibitors of Open Source usage:
  - Compliance
  - Risk of loosing IP
  - Integration
  - Absence of Open Source policy

Impact

Reduces development cycle

Reduces cost (It's not about profit)

Bleeding edge technology

Secure

Decentralized developed code

Strategy & Monetization

- Open source software -> Project (Linux, Apache etc) not a product.

- Community engineering collaboration.

- Leverage >> complete control.

- Open source can be monetized in following ways:
  - Donations
  - Web ads (Google AdSense)
  - Support & Maintenance
  - Dual-licensing

Questions?

Presenter: Sachin Bhakar
Email: Sachinbhakar1@gmail.com