

오픈소스

디지털 전환시대의 소프트웨어 글로벌 표준 해답

박수홍

그룹장, 삼성전자 오픈소스그룹

[Email: soohong.park@samsung.com](mailto:soohong.park@samsung.com)

[Home: http://opensource.samsung.com](http://opensource.samsung.com)

Open Source, It's new ?

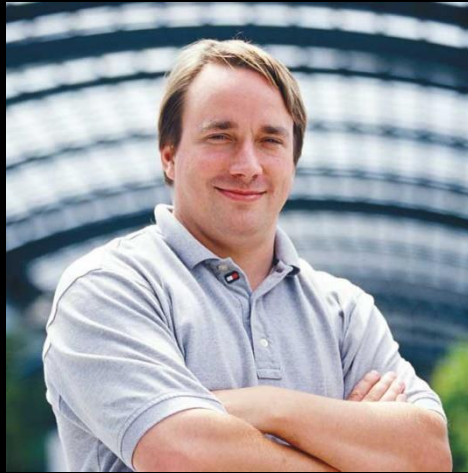


Open Source Definition

(Open Source Initiative – <http://opensource.org>)

01. Free Redistribution
02. Source Code
03. Derived Works
04. Integrity of The Author's Source Code
05. No Discrimination Against Persons or Groups
06. No Discrimination Against Fields of Endeavor
07. Distribution of License
08. License Must Not Be Specific to a Product
09. License Must Not Restrict Other Software
10. License Must Be Technology-Neutral

Development based on the sharing and collaborative improvement of software source code has a history essentially as long as software development itself. In the late 1990s, interest and participation in this phenomenon increased markedly with mainstream recognition of Linux in publications like Forbes and the release of the Netscape browser's source code.



Since 1991



is better than ?



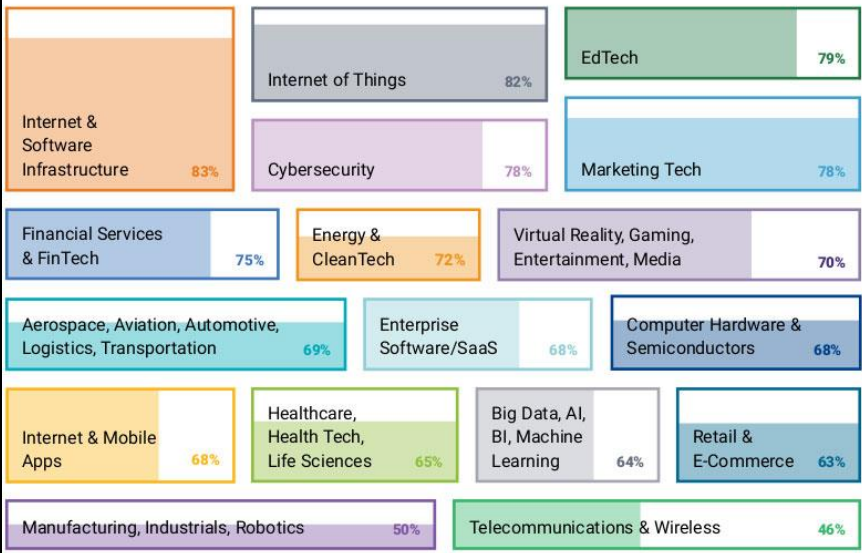
Why Open Source in Industry



Open Source is everywhere

Industries represented in the 2020 OSSRA report

Percentage reflects amount of open source in codebases by industry



[Ref: Synopsys 2020 Open Source Security and Risk Analysis Report]

Despite the pandemic and economic downturn, skills in open source continue to be in high demand among employers

81%

of hiring managers say **hiring open source talent is a priority** for 2020, and they are more likely than ever to look for open source professionals who hold certifications.

93%

of hiring managers report **difficulty finding sufficient talent with open source skills**, up from 87% in 2018.

56%

of hiring managers **plan to increase their hiring of open source professionals** in the next six months compared to the last six months.

57%

of employers report that **training existing employees to gain the necessary skills** is now the top tactic utilized in 2020.

57%

of hiring managers stated that **hiring certified professionals is a priority**, up significantly from 47% in 2018.

[Ref: Linux Foundation 2020 Open Source Job Report]

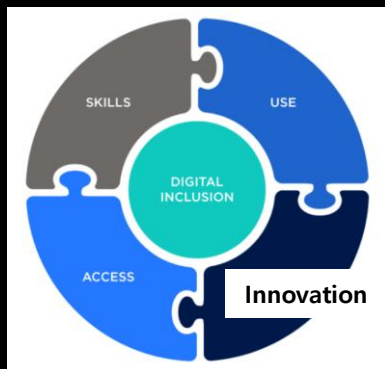
Open Source is Innovation

“공유를 위한 진전“, 삼성전자 디지털포용성 우수 기업으로 선정

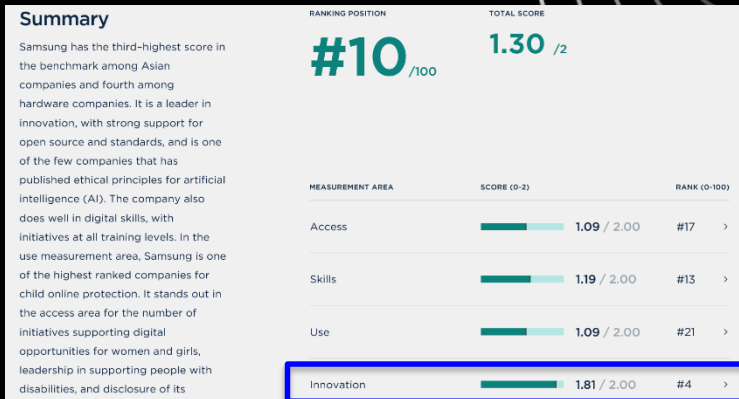
전세계 가장 영향력 있는 디지털 100대 기업 대상

글로벌 지속가능경영 연합체 WBA 평가, 2020년 12월

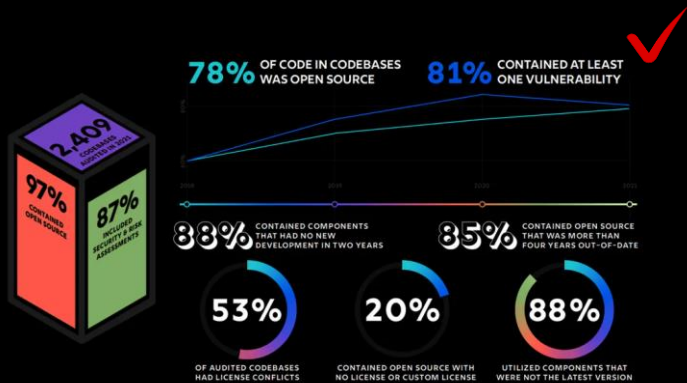
*디지털포용성 (Digital Inclusion) 이란 기업이 디지털 기술을 어느 정도 수준으로 연구하고 사회와 얼마나 공유하는지를 나타내는 척도로 최근 ESG 대두와 함께 기업의 주요 가치로 인식



가장 높게
평가된 항목



Secured Open Source is not free



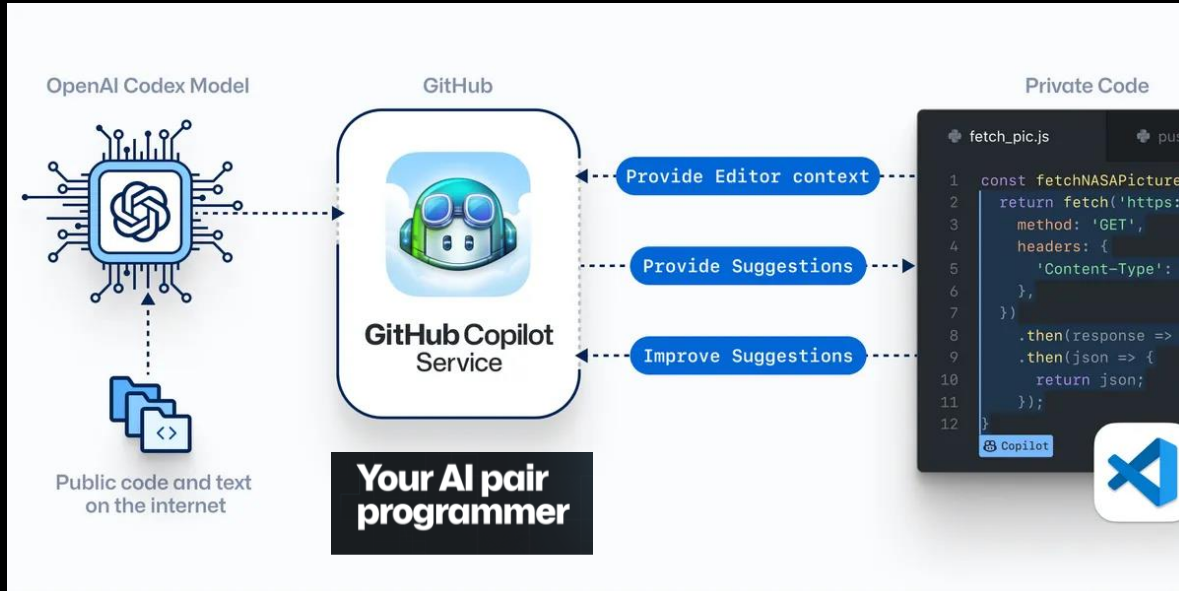
The Open Source Software Security Mobilization Plan



Focused on the core OSS w.r.t. Cloud

Google Created 'Open Source Maintenance Crew' to Help Secure **Critical Projects**

Open Source is for a new biz



Open Source is Global S/W Standards



IoTivity @Linux Foundation



Software Community @Linux Foundation



Open Standards Can Make Technology Pervasive

The diagram compares two models of technology development. On the left, "Open Standard = Shared Specification" shows a central point with five arrows pointing outwards to five separate "Implementation" boxes. On the right, "Open Source = Shared Implementation" shows five separate "Contributor" boxes with arrows pointing towards a central point.

Open standards enable consistency across **multiple implementations** that can meet the needs of diverse markets and use cases

Open standards often use open source for sample implementations, tools, samples, conformance tests, validators etc...



Open Source
Technology Center



Open Source
Program Office



Open Technology
Center



@fbOpenSource



Qualcomm
Innovation Center



Open Source Group

OSPO Associate

OSPO Adopter

OSPO Adopter

A grid of logos for OSPO Adopters. The logos are arranged in approximately 10 rows and 15 columns. Some logos are greyed out, indicating they are not open source. The logos include: Adobe, aiven, AWS, IBM, Intel, Microsoft, Oracle, SAP, Salesforce, VMware, etc.

OSPO Tools

A grid of logos for OSPO Tools, categorized into four groups:

- Documentation projects:** Backstage, Docusaurus, MarkDoc.
- SCA:** Black Duck, FOSSA, Snyk, etc.
- Metrics:** Scancode, etc.
- Project Quality:** Code Climate, etc.

General

A grid of logos for General members. The logos are arranged in approximately 4 rows and 15 columns. Some logos are greyed out. The logos include: Adobe, AWS, IBM, Intel, Microsoft, Oracle, SAP, Salesforce, VMware, etc.

TODO Group Member

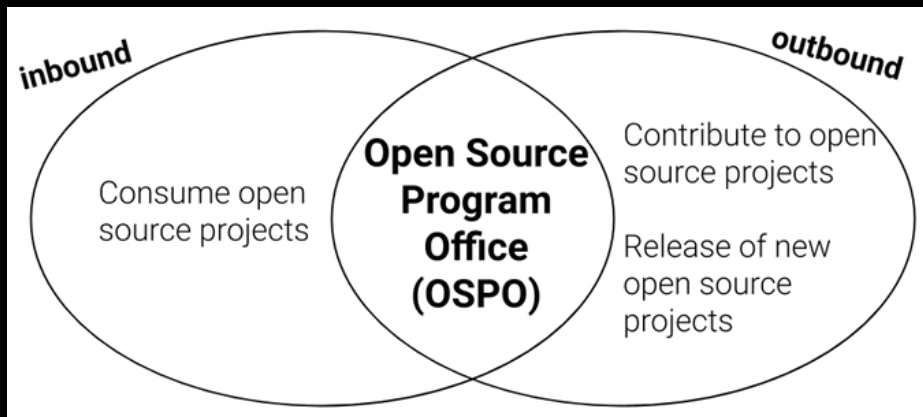


l.todogroup.org



This landscape is intended as a map to explore the OSPO community, and also shows the member organizations of the TODO Group.

Open Source Program Office (OSPO)



Role and Responsibility

- Legal Risk Mitigation
- Improving Engineers' Practices
- Enabling Financial Benefits

[Reference] <https://opensource.com/article/20/5/open-source-program-office>



Linux is a cancer that attaches itself in an intellectual property sense to everything it touches.

(Steve Ballmer)



Culture changed ?



블로그 | 오픈소스 커뮤니티 '뒤통수 쳤다'? 마이크로소프트에 대한 변명 - CIO Korea

회사가 그저 이타주의적인 의도로 오픈소스 프로젝트에 기여하는 사례를 단 한 번도 본 적 없다.
오픈소스는 본질적으로 이기적이며, 그것이 오픈소스가 자생하고 번창하는 이유이다.
수많은 개발자가 개인의 이익을 위해 오픈소스에 기여하며 회사는 이런 개발자들에 대가를 지불하고 있다.

하지만 필자의 의견은 별로 중요하지 않을지 모른다.
진정한 평가는 실제로 닷넷을 사용하는 개발자나 사용자이기 때문이다.
만약 닷넷 개발자 커뮤니티가 반발하여 라이선스 익스텐션을 구매하지 않는다면 마이크로소프트는 결정을 번복할 것이다.
다른 모든 회사와 마찬가지로 **마이크로소프트의 '오픈소스 사랑'을 유발한 것은 수익이었다.**
이번에도 **회사는 시장의 판단을 따를 수밖에 없다.**



Linux Foundation Membership

As open source adoption grows, commerce and society come to depend on that code. The future of critical technologies such as Linux, Node.js, Hyperledger, and others can't be left to chance. They need a neutral, independent organization to manage the infrastructure and sustain their communities over the long term.

More than half of all Global 2000 software and telecom companies are members of the Linux Foundation and our projects. They know their contributions not only help accelerate their own technology and innovation, they're critical to developing billion-dollar markets and ensuring that modern society continues to run on open source.

Move markets and help support critical code. Join more than 1,000 supporters of the Linux Foundation and our projects in building and sustaining open source technologies.



[VIEW ALL LINUX FOUNDATION MEMBERS](#)

화웨이 CEO, 美 제재 극복 위해 '소프트웨어 집중' - '21.5.26



OPEN SOURCE
LEADERSHIP SUMMIT

Keynote: The Power of Open Source in a 5G World

Mazin Gilbert, Vice President of Advanced Technology and Systems, AT&T



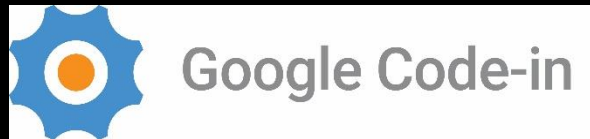
Another open sources in 5G against 4G ?

O'REILLY®

OSCON

We hire.

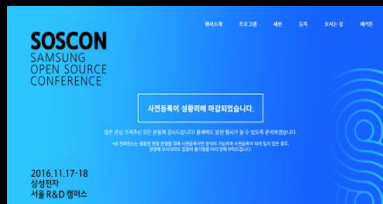




[Video] <https://www.youtube.com/watch?v=BS4kTgajydQ&t=189s>

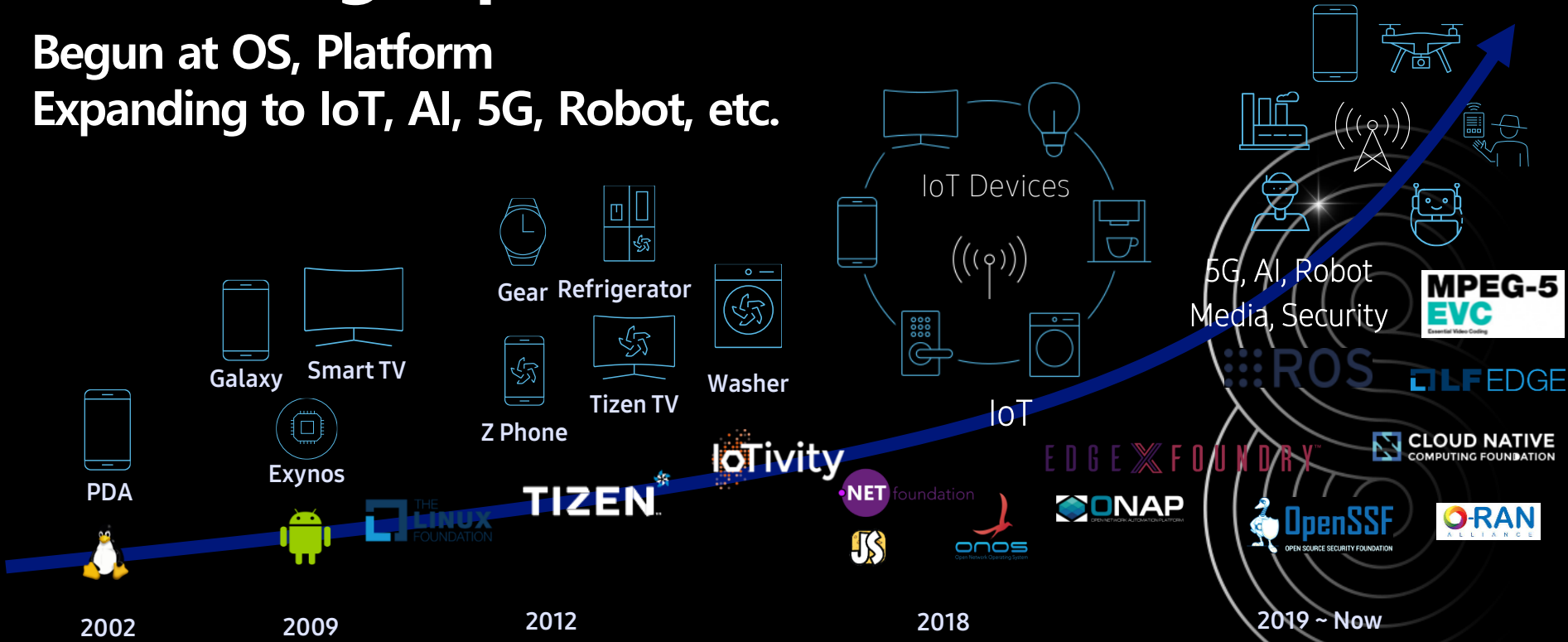


Samsung Software Developer Conference 2022
November 15~17
<https://ssdc.kr>



Samsung Open Source

Begun at OS, Platform
Expanding to IoT, AI, 5G, Robot, etc.



Key Value for Future Tech in Samsung



1. OPENNESS

- Source Code and Project Open
- Communities Participation



2. Collaboration

- Global Open Source Leading
- Korean Association, Dev Program



3. Development Culture

- Internal Infrastructure
- Inner Source Program

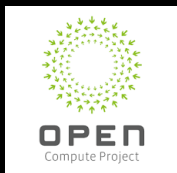
Concluding Remarks



Open Source 에서의 Source 는

현재 Software,

하지만 미래에는 더 많은 자원들로 확대



Compute
Networking
Storage
Rack & Power

 RISC-V®

RISC-V: The Free and Open RISC
Instruction Set Architecture

