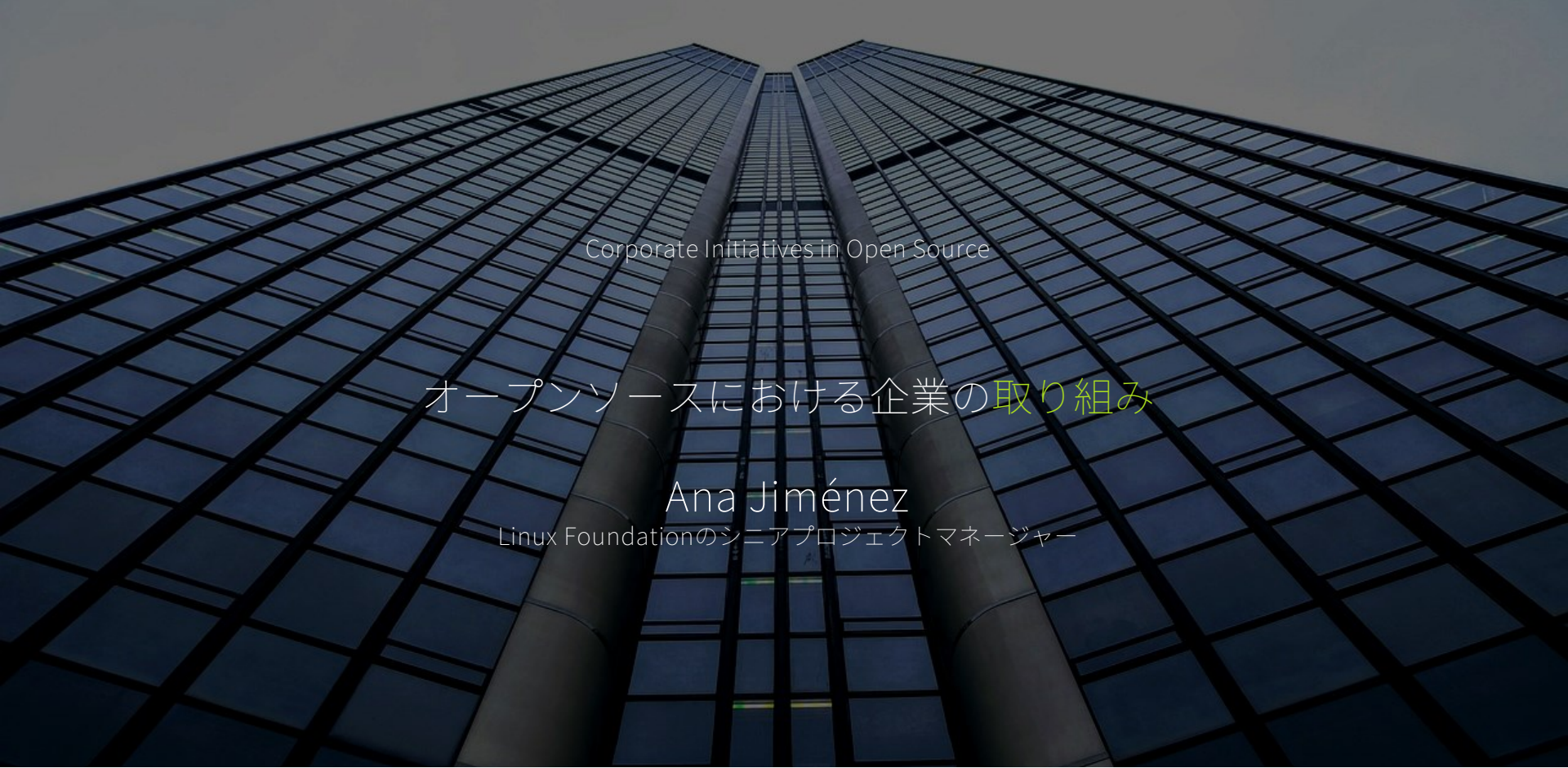




Corporate Initiatives in Open Source

オープンソースにおける企業の取り組み

Ana Jiménez

Linux Foundationのシニアプロジェクトマネージャー



独立行政法人 情報処理推進機構
Information-technology Promotion Agency, Japan

企業向けワークショップ「OSPOレベル1構築ワークショップ」

自己紹介



Ana Jiménez Santamaría

◆ Senior Project Manager at the Linux Foundation

Linux Foundationのシニアプロジェクトマネージャーとして、4大陸にまたがるオープンソースコミュニティと数千人の実践者を支援。TODO GroupとDevRel Foundationのマネジメント、PyTorch Foundation アウトリーチプログラムの戦略を担当。オープンソース機械学習フレームワークの普及拡大に向けた教育イニシアチブを推進している。データサイエンスの修士号を取得し、コミュニティとプロジェクトの健全性指標を専門としている。また、経験豊富な国際的な基調講演者としてアジア、ヨーロッパ、北米の組織やカンファレンスで専門知識を共有している。



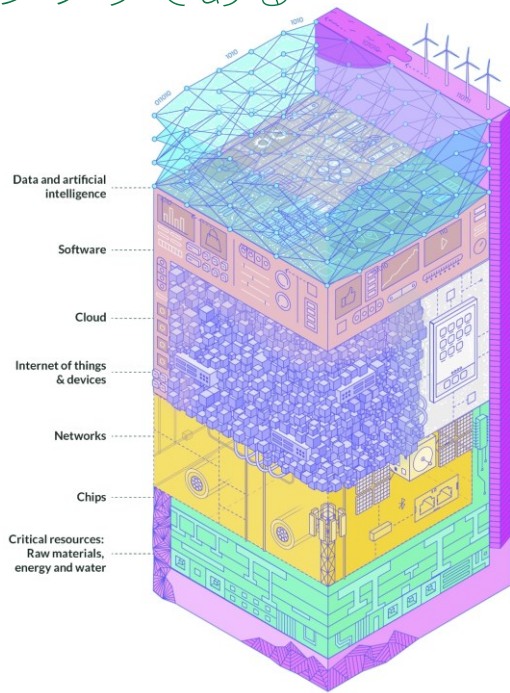


背景

多くのことが変わりました

Open Source = Critical Infrastructure

重要インフラである



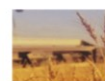
Chemical



Financial



Commercial
Facilities



Food &
Agriculture



Communi-
cations



Government
Facilities



Critical
Manu-
facturing



Healthcare &
Public Care



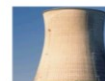
Dams



Information
Technology



Defense
Industrial
Base



Nuclear
Reactors,
Materials, &
Waste



Emergency
Services



Transpor-
tation
Systems



Energy



Water &
Wastewater
Systems

New Regulations

「EUのCRA（サイバー・レジリエンス法）へのコンプライアンスは、多くの組織においてOSPOがオープンソースのセキュリティに最初から関与する重要性を間違いなく高めています。政策との有意義な関わりや、オープンソースのセキュリティ戦略の実装は、今後も重要な注力分野であり続けるでしょう」

Natali Vlatko, Open Source Lead Architect, Cisco



2025

The Association of Southeast Asian Nations (ASEAN)

東南アジア諸国連合



2024

EU Cyber Resilience Act

EU サイバーレジリエンス法



2023

CISA Cybersecurity Strategic Plan (US)

米国 CISA サイバーセキュリティ戦略計画



2023

The European Union Agency for Cybersecurity (ENISA)

欧州連合サイバーセキュリティ機関



**Harvard
Business
School**

Supply-side OSS value: \$4.15 billion

Demand-side OSS value: \$8.8 trillion – Only 5% of OSS developers create 96% of demand-side value

Without OSS, companies would need to spend 3.5x more on software

The Value of Open Source Software

Manuel Hoffmann^a

Frank Nagle^b

Yanuo Zhou^c

This version: January 1, 2024

Abstract

The value of a non-pecuniary (free) product is inherently difficult to assess. A pervasive example is open source software (OSS), a global public good that plays a vital role in the economy and is foundational for most technology we use today. However, it is difficult to measure the value of OSS due to its non-pecuniary nature and lack of centralized usage tracking. Therefore, OSS remains largely unaccounted for in economic measures. Although prior studies have estimated the supply-side costs to recreate this software, a lack of data has hampered estimating the much larger demand-side (usage) value created by OSS. Therefore, to understand the complete economic and social value of widely-used OSS, we leverage unique global data from two complementary sources capturing OSS usage by millions of global firms. We first estimate the supply-side value by calculating the cost to recreate the most widely used OSS once. We then calculate the demand-side value based on a replacement value for each firm that uses the software and would need to build it internally if OSS did not exist. We estimate the supply-side value of widely-used OSS is \$4.15 billion, but that the demand-side value is much larger at \$8.8 trillion. We find that firms would need to spend 3.5 times more on software than they currently do if OSS did not exist. The top six programming languages in our sample comprise 84% of the demand-side value of OSS. Further, 96% of the demand-side value is created by only 5% of OSS developers.

A low-angle, upward-looking shot of a modern skyscraper with a glass and steel facade. The building's structure creates a strong sense of height and perspective, with lines converging towards the top. A semi-transparent white rectangular box is centered in the middle of the frame, containing text in English and Japanese.

OSS is Increasingly Professionalized
どんどんプロフェッショナルになっている



90%

of the code is coming from professional developers who are employed by some company to work on the Linux Kernel

Jonathan Corbet, Kernel Developer (2018)

More companies overseas understand the associated risks of underinvestment and innovation speed opportunities and makes direct contributions to OSS projects

多くの企業が、投資不足のリスクとイノベーション加速の機会を理解し、OSSに直接貢献している

Europe	India	China	US	South Korea
SAP: Cloud Foundry, Eclipse Foundation, CNCF	Infosys: Hyperledger, OpenChain (LF)	Tencent: Kubernetes, TARS, other CNCF projects	Google: CNCF projects, TensorFlow	Samsung: ONAP, CNCF projects
Siemens: Eclipse IoT	Wipro: CNCF projects, FINOS projects, etc	Ant Group: CNCF projects, Apache Software foundation projects, FINOS projects	Microsoft: TypeScript	LG Electronics: Automotive Grade Linux projects
Ericsson: ONAP, CNCF projects			Meta: React, PyTorch	
Nokia: Open RAN, CNCF projects		Huawei: Open Infra projects, ONAP, CNCF projects	Amazon: OpenSearch, CNCF projects	
BMW, Daimler, Volkswagen: Automotive Grade Linux projects, Eclipse SDV				



[Source: SAP OSS partnerships](#)

Direct Value



運用面

Reduce vendor lock-in
Faster time-to-market
Quicker vulnerability discovery and remediation
Interoperability



戦略面

Market differentiation on top of common foundation
Faster R&D
Leadership in ecosystem

Indirect Value



組織

Innovation capacity
Talent attraction
Customer credibility
Cross-department collaboration (innersource)



チーム

Skill development
Happiness
Motivation



プロジェクト

Faster market adoption
Resilience
Improved quality



じゃあ、エンジニアに
貢献してもらえばいい
のかな...

Many orgs have no overall open source strategy

(or it's limited to licensing & compliance)

Employees are frequently encouraged to contribute to open source without proper guidance about how to demonstrate the value of these efforts



Both the open source project
AND the organization begin to
suffer

オープンソースプロジェクトも
組織もダメージを受ける

Employees are encouraged
to contribute more to OSS

社員がOSSにもっと貢献す
ることを推奨しています

OSS Pitfall Loop

OSSの落とし穴ループ

Employees are told to spend
less time on open source

社員はOSSにかかる時間を減ら
すように言われています。

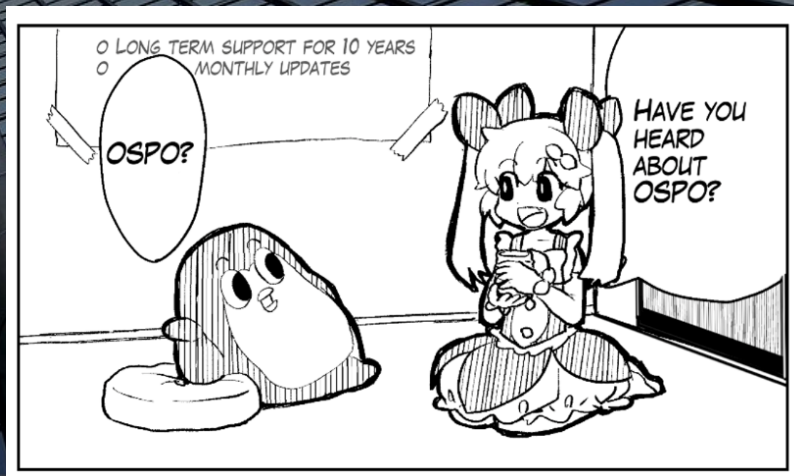
Leadership asks: "Why are we
spending time on something
that doesn't help us?"

「どうして役立つに
時間を使っているの？」

Who sets OSS methodology, processes and choices within our organization?

誰がOSS「方法論・プロセス・意思決定」を決めているのか？

- How to approach open source strategy?
- How to review and approve third-party software before using it?
- Which tools to use?



Source: [ospo manga](#) by みらくるちゃん(@miraclelinux) CC BY-SA 4.0

OSPO

日本語版は[こちら](#)

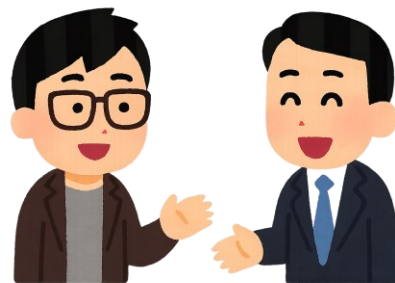
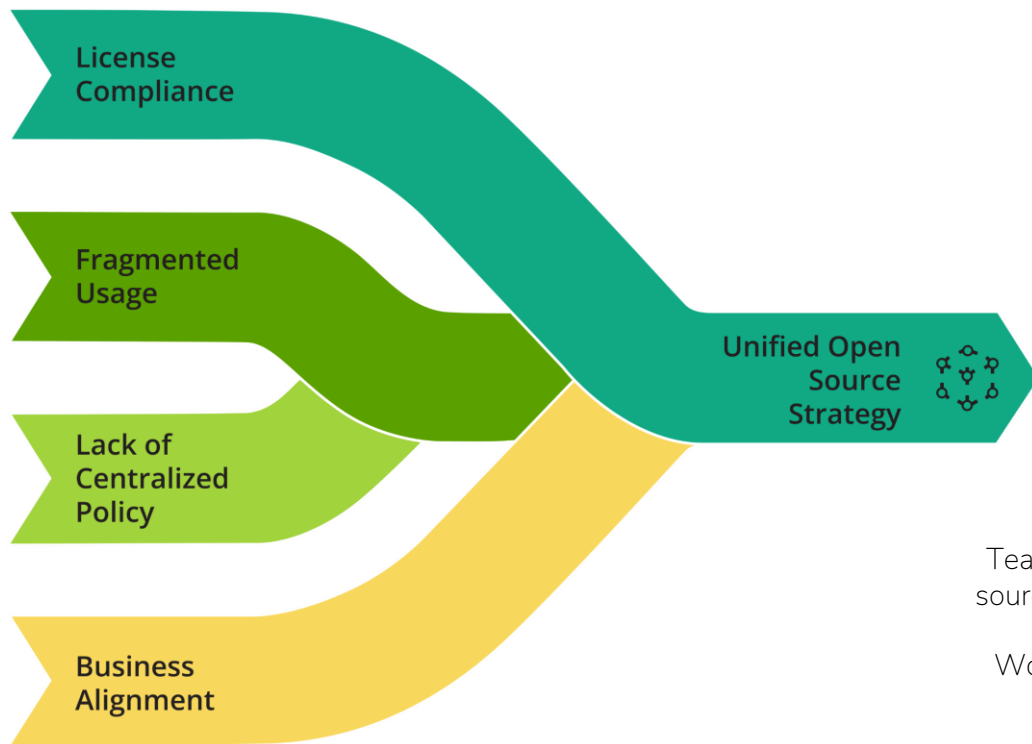
組織のオープンソースに関する運用と体制の中核的な専門機関として機能します。

1. OSPOs with formal reporting lines, job titles, and staff
1. Informal or virtual OSPOs without dedicated personnel



Source: ospo manga
by みらくるちゃん
(@miraclelinux)
CC BY-SA 4.0

Holistic OSS Strategy



Team focused on aligning the organization's open source goals with its overall organization objectives

Works with all lines of organization units/groups

Holistic OSS Strategy

THE 2025 STATE OF OSPOS AND OPEN SOURCE MANAGEMENT

89% of organizations report improved **DEVELOPER EXPERIENCE** through their OSPO initiatives.



THE 2025 STATE OF OSPOS AND OPEN SOURCE MANAGEMENT

85% of organizations gained **INCREASED INFLUENCE** within open source ecosystems due to having an OSPO.



THE 2025 STATE OF OSPOS AND OPEN SOURCE MANAGEMENT

88% of organizations perceive improved **SOFTWARE QUALITY AND SECURITY** as an impactful outcome of having an OSPO.



OSPO in Action: SAP

Our Commitments

Consistent Contributions

We actively participate in the open-source community, contributing code, expertise, and resources to projects that align with our values and vision.

Championing Open Standards

We advocate for and adhere to open standards, understanding their pivotal role in creating cohesive and interoperable systems.

Open-first Approach

We strive to adopt an open-first approach for our underlying technology, releasing numerous key innovations to the community and preferring open-source solutions in our endeavors.

Nurturing Open-Source Ecosystems

We actively support, promote, and nurture open-source projects and communities.

Feedback-Driven Approach

We are receptive to the open-source community, valuing their feedback so that we can learn from it.

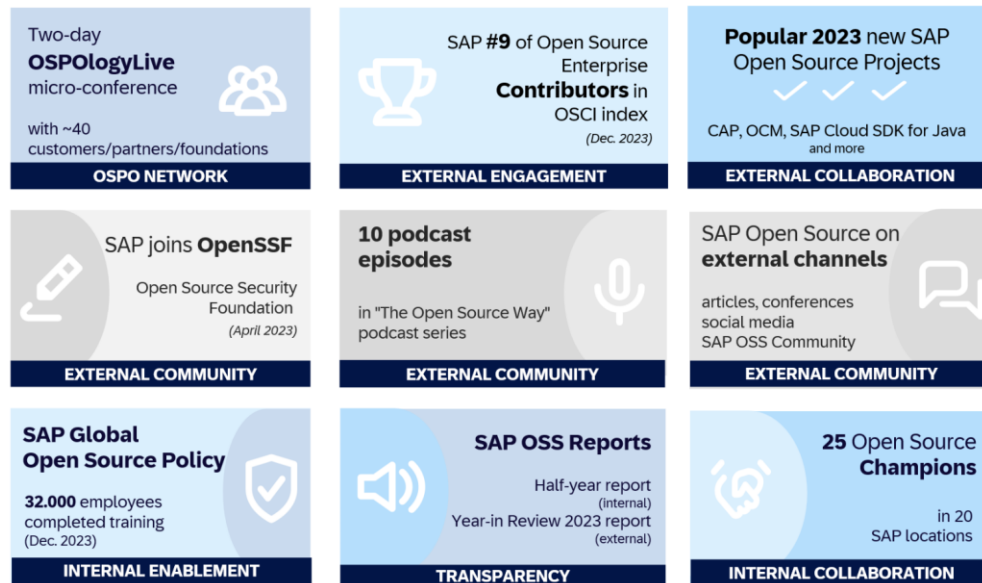


Figure 1: Highlights of SAP's open source engagement 2023

<https://news.sap.com/2024/06/sap-commits-open-source-manifesto/>

OSPO in Action: Porsche

FOSS@Porsche

Porsche Open Source Platform

With the Porsche FOSS Movement, we are continuing our open-source journey and creating a common understanding of values, principles and goals - in all teams, all subsidiaries and across all national borders.



<https://ospobook.todogroup.org/use-cases/>

OSPO in Action: Sony

Management Level

Alignment between OSS strategy and business strategy.

OSPO Level

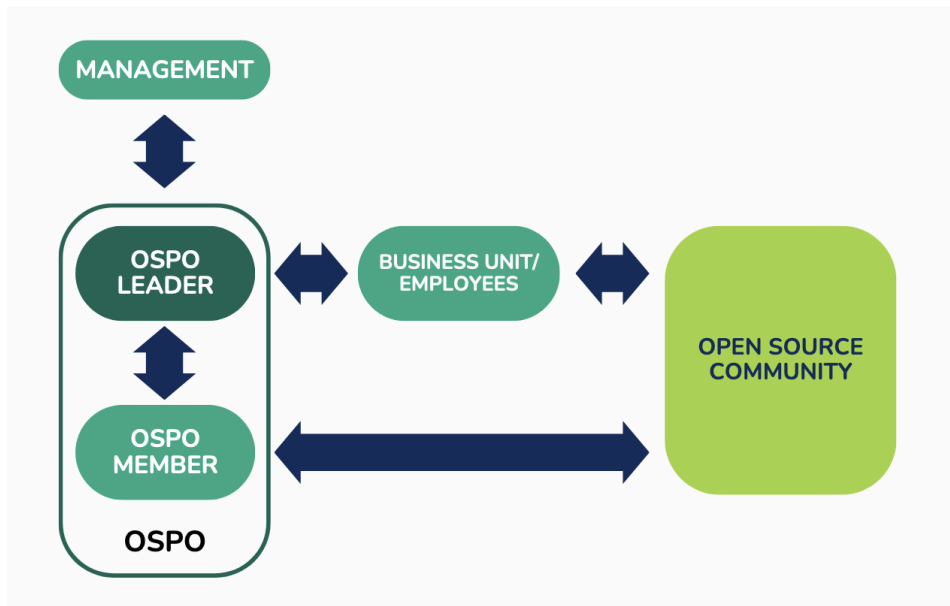
Evolving OSPOs and OSPO network inside the conglomerate company.

Employee Level

Driving cultural change and encouraging an open source culture among employees.

Business Units

Encouraging collaboration between different business units and sharing best practices.



<https://ospobook.todogroup.org/use-cases/>

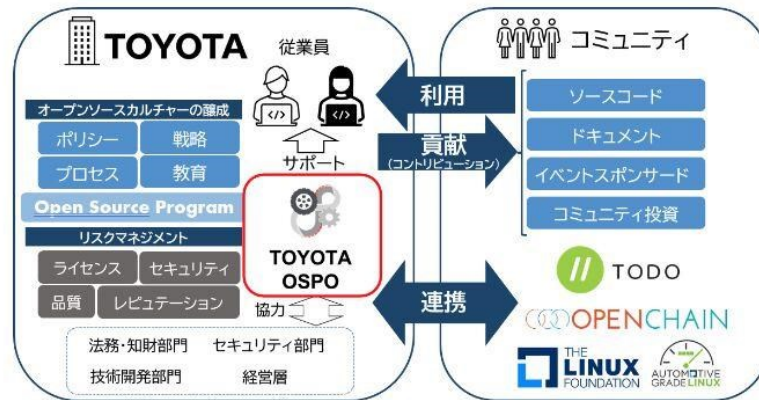
OSPO in Action: TOYOTA

2024.08.30

Toyota has established OSPO (Open Source Program Office) in Otemachi

Toyota Motor Corporation
Advanced R&D and Engineering Company
Open Source Program Group

■OSPO って何？



OSPO の役割

OSPO in Action: China Ecosystem



- 1、 Enterprise Motivation to establish OSPO
- 2、 Risks faced by enterprise open source
- 3、 Enterprise OSPO positioning
- 4、 Cases (different industries)

OSS Contribution Policies

Templates by TODO



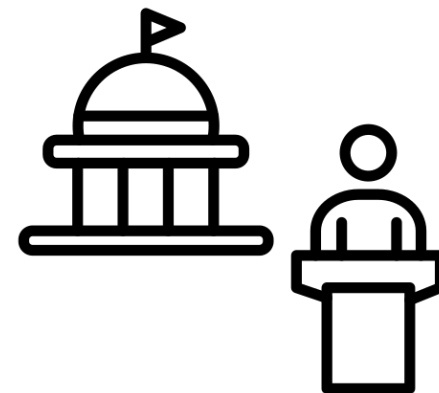
<https://github.com/todogroup/policies>

Examples and Templates

- Buffer
 - [Buffer Open Source Guide](#)
- Citi
 - [Citi OSPO](#)
 - [Free and Open Source Software Contribution Guidelines](#)
- eBay
 - [open source website](#)
- GitLab
 - [GitLab Team Handbook](#)
- Google
 - [OSPO Policies](#)
- Linux Foundation
 - [Open Source Approval Form Template](#)
 - [Open Source Generic Policy](#)
- FINOS
 - [FINOS Reference FOSS Policy](#)
- Indeed
 - [Indeed](#)
- Joyent
 - [Joyent Open Source Policy](#)
- Microsoft
 - [Microsoft's Open Source Program](#)
- OpenChain
 - [OpenChain Policy Template](#)
- Rackspace
 - [Model IP and Open Source Contribution Policy](#)
- Red Hat
 - [Red Hat's open source participation guidelines](#)
- Sauce Labs
 - [Sauce Labs Open Source Documentation](#)
- SUSE
 - [SUSE Open Source Policy](#)
- United States Government Services Administration (GSA)
 - [GSA.gov Open Source Policy](#)
- Yahoo
 - [Yahoo Open Source Guide](#)
- Zalando
 - [Zalando's Open Source Documentation](#)

Public Sector OSPOs

Country	Organization
Netherlands	NL National Government The Netherlands
France	FR La direction interministérielle du numérique (DINUM) FR Institut national de l'information géographique et forestière (IGN) FR City of Paris FR France Travail (employment service state) FR City and Eurometropolis of Strasbourg FR Direction de la stratégie et de la culture numériques FR Réseau de Transport d'Électricité (RTE)
Denmark	DK OS2 (danish association of public institutions)
Germany	DE City of Munich
United States	US Digital Service at the Centers for Medicare and Medicaid Services
Intergubernamental or Supranational	UN United Nations EU European Commission



Academic OSPOs

Carnegie Mellon University

ETH Zürich

Washington University

Georgia Tech

Johns Hopkins University Library

Lero

Mississippi State University

Oregon State University

RIT (Rochester Institute of Technology)

Saint Louis University

Stanford University

Syracuse University

Trinity College

Université Grenoble Alpes

SnT – Université du Luxembourg

University of California, Berkeley

University of California, Davis

University of California, Los Angeles

University of California, San Diego

University of California, Santa Barbara

University of California, Santa Cruz

University College London

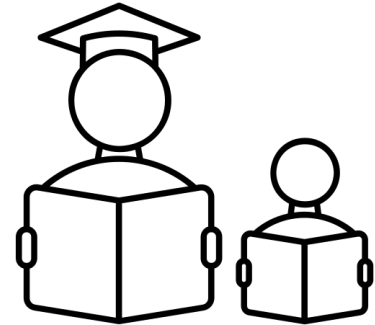
University of Michigan

University of Texas at Austin

University of Vermont

University of Wisconsin–Madison

[Source – CURIOS](#)



提案

POSITION THE OSPO AS GOVERNANCE HUB FOR EMERGING TECHNOLOGIES

Include AI policy guidance, AI-generated code compliance, in collaboration with risk, legal, and platform teams



Source: Photo from OSS Summit Japan
OSPOCon Track, 2024

提案

POSITION THE OSPO AS GOVERNANCE HUB FOR EMERGING TECHNOLOGIES

Include AI policy guidance, AI-generated code compliance, in collaboration with risk, legal, and platform teams

STRENGTHEN SECURITY STRATEGY WITH OSS MANAGEMENT

Embedding OSPOs early in the software development lifecycle enables scalable security practices, reduces exposure, and ensures alignment with regulations such as the E.U. Cyber Resilience Act



Source: Photo from OSS Summit Japan
OSPOCon Track, 2024

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MOVE BEYOND LAUNCH-INVEST IN LONG-TERM SUSTAINABILITY

Include practices such as internal reporting (ROI) to sustain OSPO activities



Source: Photo from OSS Summit Japan
OSPOCon Track, 2024

SHARED
RESOURCES

COLLABORATIVE
DEVELOPMENT

COMMUNITY OF
PRACTICE

THE **LINUX** FOUNDATION PROJECTS

90+

Organizations

2,000+

Practitioners

Founded in 2014

Years of experience in OSS
Management within Organizations

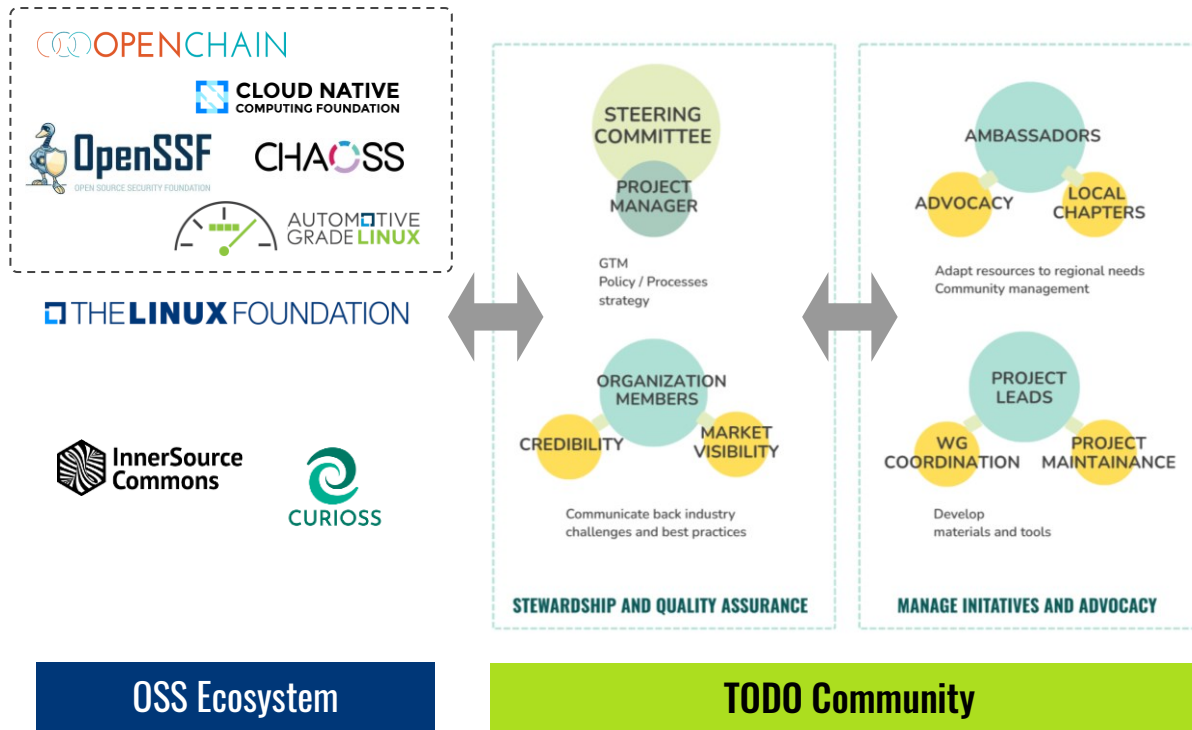


SHARED
RESOURCES

COLLABORATIVE
DEVELOPMENT

COMMUNITY OF
PRACTICE

Creating & Improving mechanisms to build an unified open source strategy bodies in organizations



SHARED
RESOURCES

COLLABORATIVE
DEVELOPMENT

COMMUNITY OF
PRACTICE

Creating & Improving mechanisms to build an unified open source strategy bodies in organizations



RSVP Only Virtual Event
[OSPO-JP] 58th Japan OSPO
Local Meetup supported by
TODO Group and OpenChain
Japan WG

→ [Ver detalles](#)



RSVP Only Virtual Event
[OSPO-JP] 57th Japan OSPO
Local Meetup supported by
TODO Group and OpenChain
Japan WG

→ [Ver detalles](#)



Virtual Event
[OSPO-JP] 56th Japan OSPO
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TODO Group and OpenChain
Japan WG

→ [Ver detalles](#)



Virtual Event
[OSPO-JP] 55th Japan OSPO
Local Meetup supported by
TODO Group and OpenChain
Japan WG

→ [Ver detalles](#)

 OPENCHAIN

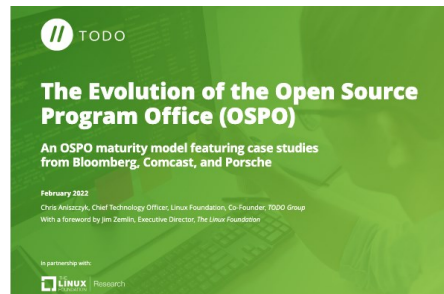
 TODO

SHARED
RESOURCES

COLLABORATIVE
DEVELOPMENT

COMMUNITY OF
PRACTICE

無料



Get Involved



Working Group (Individuals)



Member (Organization)