



# The Eclipse Foundation

Enabling Industry Collaboration and Open Innovation

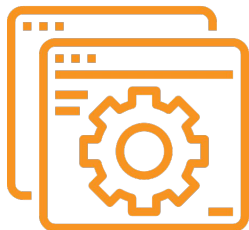
March 2023 | [eclipse.org](https://eclipse.org)

- 
- > **Why Open Source?**
  - > **Why Participate?**
  - > **About the Eclipse Foundation**
  - > **Our Services**
  - > **Industry Collaborations**
  - > **Research Programs**
  - > **The Opportunity**



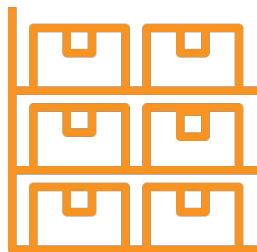
**Open source**

**participation is surging**



**80-90%**

**Open source makes up  
80-90% of applications**



**100M+**

**GitHub hosts  
over 330M repositories**



**65M+**

**GitHub users**

Sources: Forrester, GitHub



**81%**

**% companies consuming  
open source in products or  
services**



**44%**

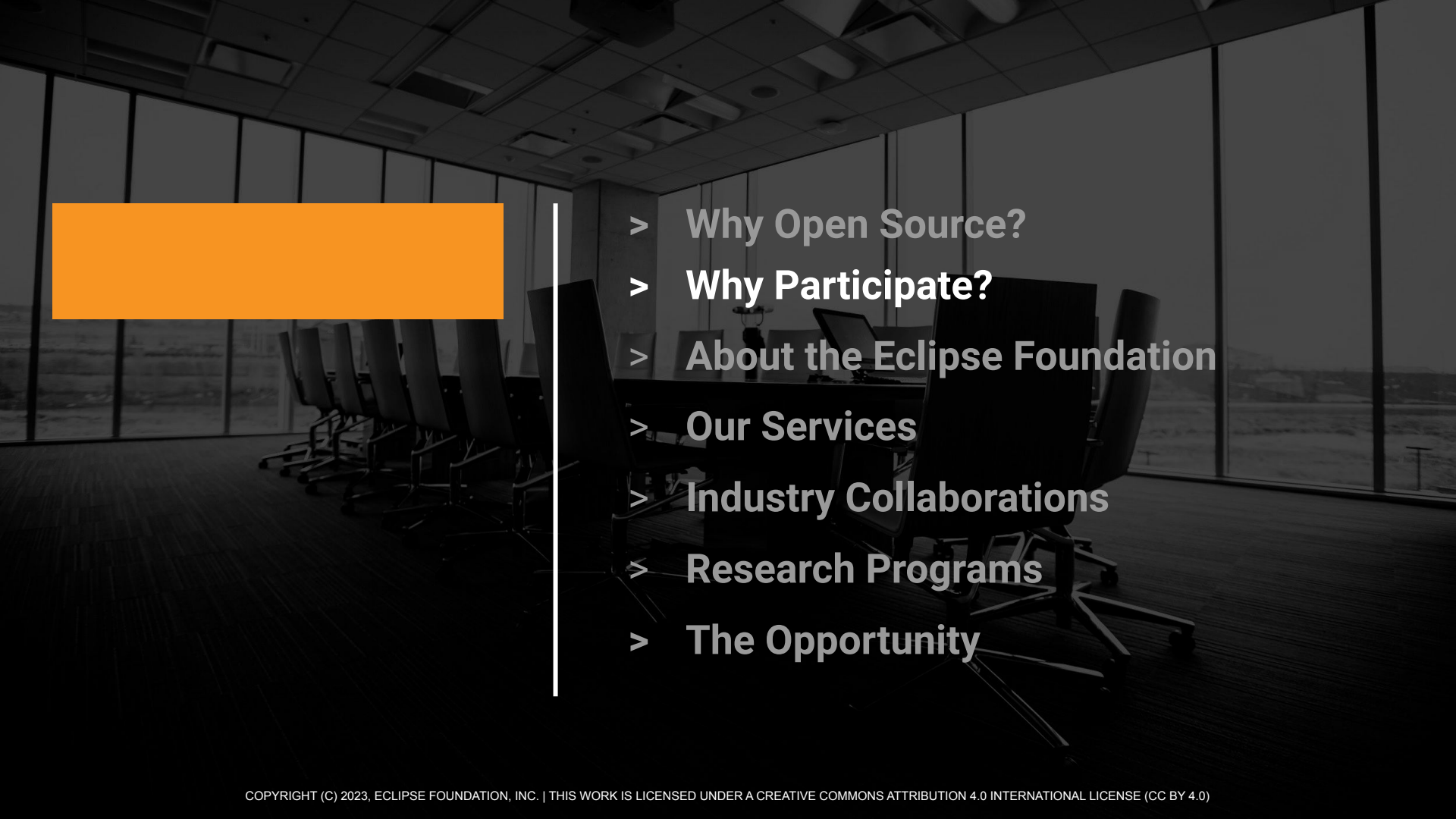
**% firms contributing to  
upstream open source  
projects**



**100%**

**% productivity improvement seen  
by firms contributing to open  
source**

Sources: TODO Group, Harvard Business School

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# Demonstrate good corporate citizenship

# Accelerate innovation







# Participate in open collaboration



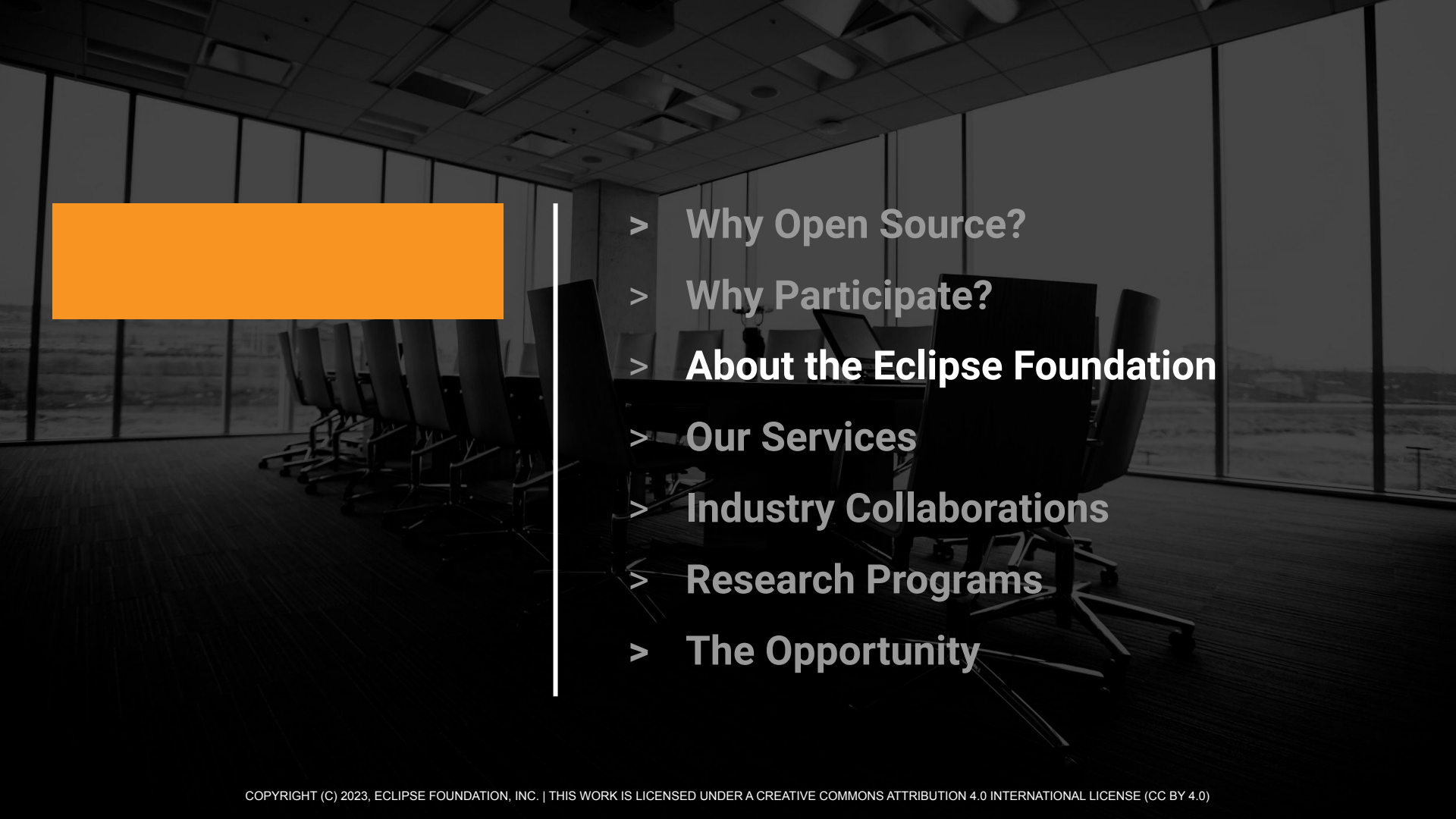
# Safeguard investments



# Mitigate business risk



# Retain and recruit top talent

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# The Community for Open Innovation and Collaboration

Community driven.  
Code first.

Commercial-friendly.

# Our Unique Approach

	GitHub	Single-Vendor Open Source	Eclipse Foundation
<b>Thriving developer community</b>	✓	✓	✓
<b>High quality code</b> that solves complex problems	✓	✓	✓
<b>Ecosystem development and marketing services</b> to drive adoption and monetization		✓	✓
<b>Predictable processes and guidance</b> to deliver large-scale innovation on a regular cadence			✓
<b>Vendor-neutral governance</b> model to support industry-wide collaboration			✓
<b>Business-friendly IP and licensing</b> services to enable commercialization			✓

# The Eclipse Foundation - By the Numbers

**418**

**Projects**

**357**

**Members**

**1890+**

**Committers**

**450M+**

**Lines of Code**

**55+**

**Staff Members**

**18**

**Industry Collaborations**



# Strategic Focus Areas

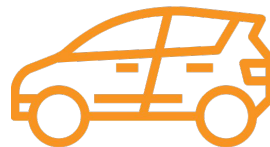
**Cloud Native Java**



**IoT & Edge**



**Automotive**



**Tools**



## Eclipse Foundation Services

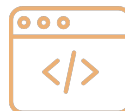
**Governance  
& Processes**



**Ecosystem  
Development  
& Marketing**



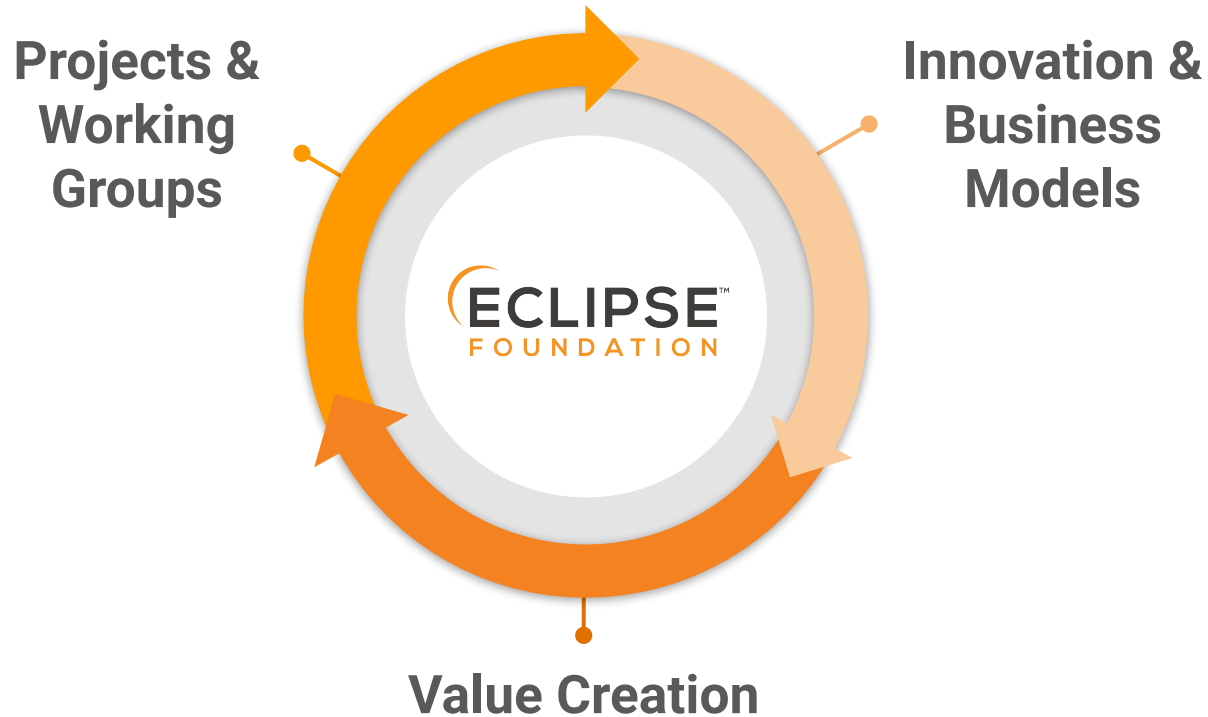
**IP Management  
& Licensing**



**Infrastructure**



# A Sustainable, Business-Friendly Ecosystem



# Strategic Focus Areas - What We Do

## Cloud Native Java



We provide a collaborative environment for the world's leading Java ecosystem players to advance open source enterprise Java technologies for the cloud.

## IoT & Edge



We enable industry leaders to collaborate on an end-to-end IoT architecture that is secure, flexible, and fully based on open source and open standards.

## Automotive



We provide leading automotive OEMs, their suppliers, and partners with a sustainable, transparent, and vendor-neutral platform to collaborate on open technologies and standards.

## Tools



The Eclipse IDE is the critical development environment for more than 6 million active users. Our community is innovating on the next generation of cloud native developer tools.

# Open Source Innovation for Cloud, Edge and AI

The Eclipse Foundation is home to industry standards and an open source stack for building and running enterprise applications and workloads from the Cloud to the Edge



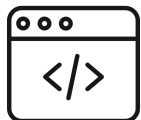
# Eclipse Foundation Core Services



Governance & Processes



Ecosystem Development & Marketing

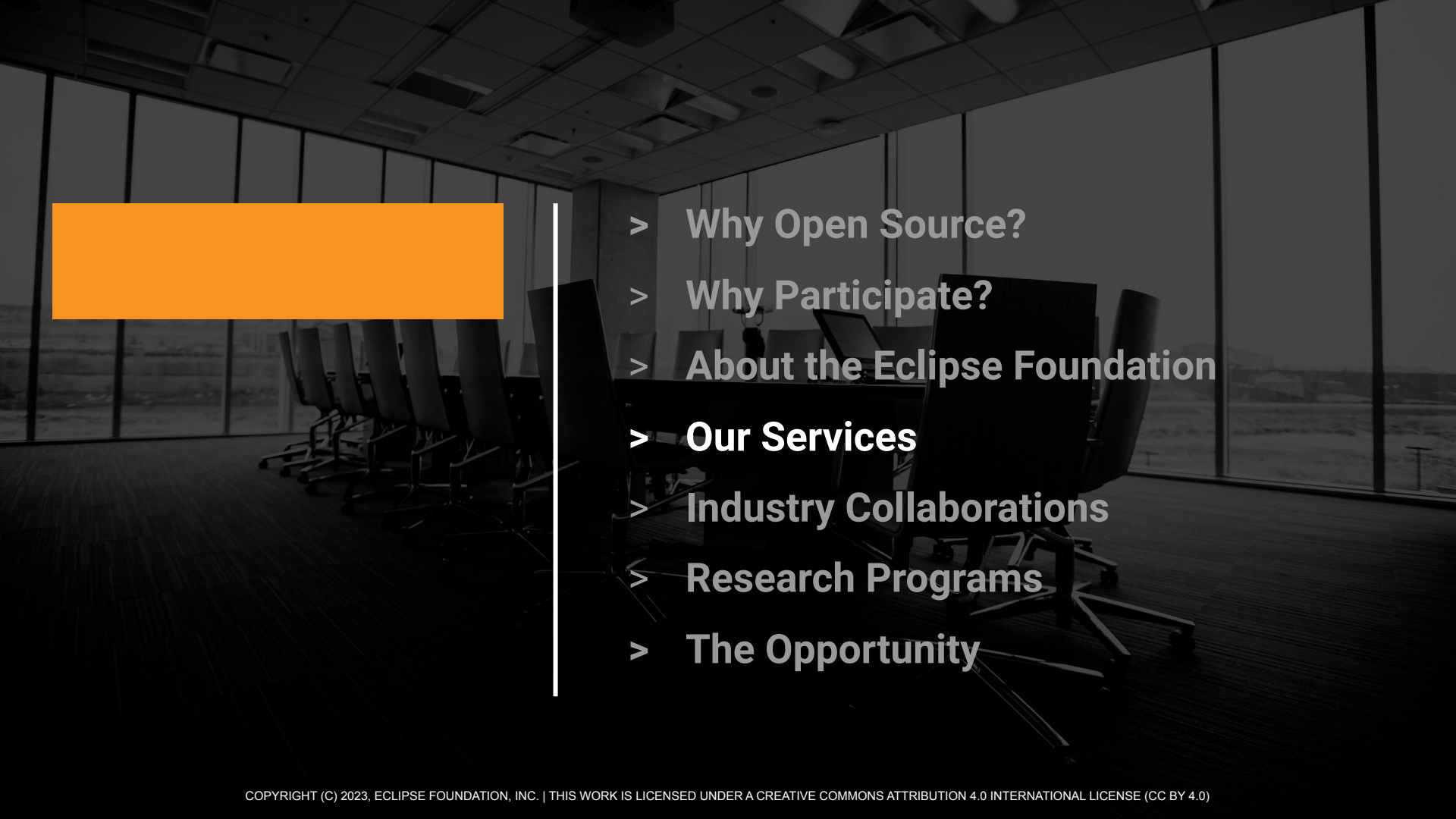


IP Management & Licensing



Infrastructure



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## Governance & Processes

- > Community of Practices: Eclipse Development Process
- > Vendor-neutral governance structure
  - Legal entity, bylaws, member agreement, antitrust policies
- > Well defined project lifecycle
- > Technical decisions made by project leadership





## Infrastructure

- > Professionally managed open source forge
  - Git, Gerrit, Jenkins, download servers, website hosting
  - Scalable and repeatable build service
  - SLA for 99.98% uptime
- > Flexibility to use Github



## IP Management & Licensing

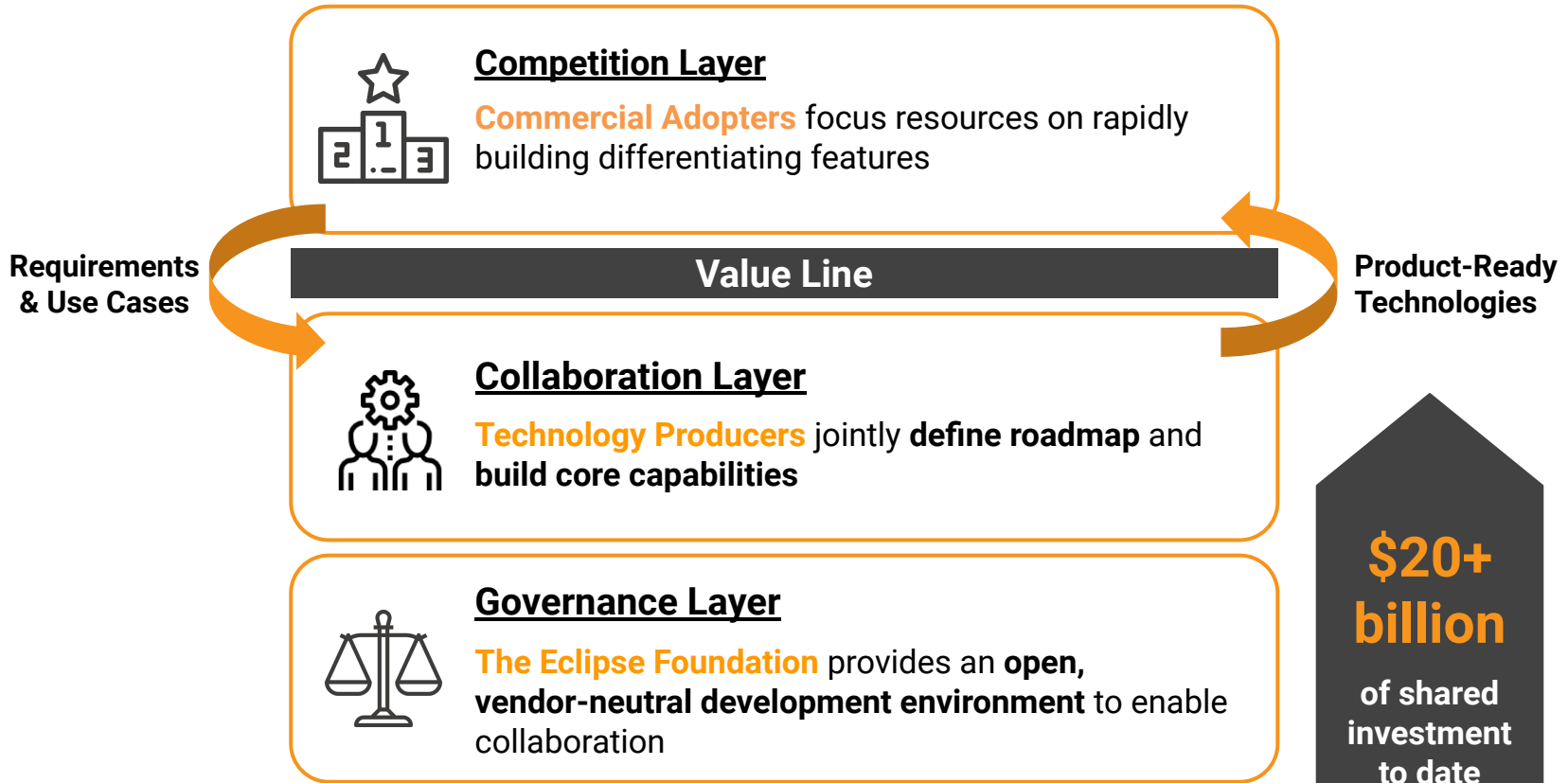
- > Management of Committer Agreement and CLA
  - Provenance and License Compatibility (no GPL or AGPL)
- > Trademark stewardship for projects, working groups, and industry initiatives

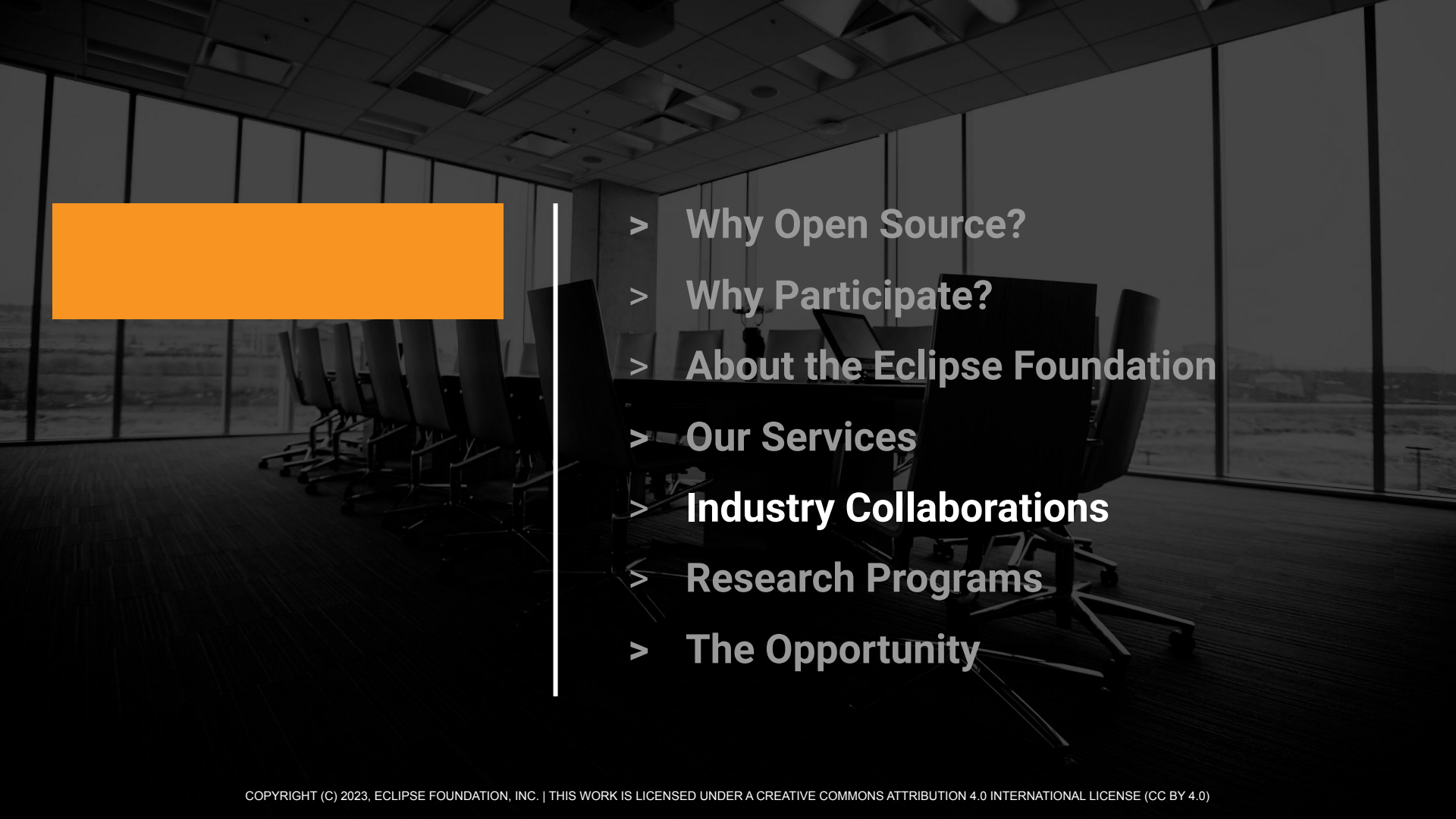


## Ecosystem Development & Marketing

- > Business development staff to assist with recruitment
- > Professional marketing staff
- > Event planners

# Our Impact: Open Innovation at Industrial Scale



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## Eclipse Foundation Industry Collaborations

- > Provide an open and vendor-neutral governance framework for collaborative development
- > Enable industry collaboration and coordination across many open source projects
- > Extend the best practices of the Eclipse Development Process
- > Support the shared development of requirements, specifications, marketing strategy, test environments, security policies, etc.

# Key Functions of Industry Collaborations

- > Requirements gathering across open source projects and organizations
- > Creating and committing to long term multi-project roadmaps
- > Architectural discussions and collaboration across open source projects
- > Testing and certification of industry platforms
- >
- > Ecosystem and community development







ADOPTIUM

## Adoptium Working Group

The Adoptium Working Group promotes and supports high-quality runtimes and associated technology for use across the Java ecosystem. Our vision is to meet the needs of Eclipse and the broader Java community by providing runtimes for Java-based applications. We embrace existing standards and a wide variety of hardware and cloud platforms.

# AICE

## WORKING GROUP

## AICE Working Group

The Eclipse AI, Cloud & Edge (AICE) Working Group will manage and operate an open lab (the “AICE OpenLab”) that will provide a set of resources to promote the advancement, implementation, and verification of open source software for AI, Cloud, and Edge computing.



## AsciiDoc Working Group

The AsciiDoc® Working Group drives the standardization, adoption, and evolution of AsciiDoc. This group encourages and shapes the open, collaborative development of the AsciiDoc language and its processors.



E C L I P S E

**Cloud DevTools**

## Eclipse Cloud Development Tools Working Group

The Eclipse Cloud Development Tools Working Group drives the evolution and broad adoption of de facto standards for cloud development tools, including language support, extensions, and developer workspace definition.

Learn more about our [Projects](#)



# ECLIPSE Cloud DevTools

## Eclipse Cloud Development Tools Working Group

The Eclipse Cloud Development Tools Working Group drives the evolution and broad adoption of de facto standards for cloud development tools, including language support, extensions, and developer workspace definition.

### Projects:





## Eclipse IDE Working Group

The Eclipse® IDE Working Group is formed to ensure the continued sustainability, integrity, evolution and adoption of the Eclipse IDE suite of products and related technologies. In particular, it is formed to provide governance, guidance, and funding for the communities that support the delivery of the Eclipse Foundation’s flagship “Eclipse IDE” products.

# EDGE | NATIVE™

## Edge Native Working Group

The Eclipse Edge Native Working Group drives the adoption of Edge Computing technologies. It provides services like vendor-neutral marketing to the Eclipse Edge Native ecosystem and defines licensing and intellectual property flows that encourage the community to open collaboration.

### Edge Native Working Group Projects:



# Gemoc

## GEMOC Working Group

The GEMOC Research Consortium is an open and collaborative initiative which supports the development, coordination, and dissemination of the research efforts on the use and globalization of modeling languages.





## Eclipse IoT Working Group

The Eclipse IoT Working Group enables collaboration on the development of open source implementations of IoT standards and protocols, frameworks and services used by IoT solutions, and tools for IoT developers for commercial-grade IoT.

### IoT Projects:





# JAKARTA EE

## Jakarta EE Working Group

The Jakarta EE Working Group enables Java ecosystem players to collaborate on advancing enterprise Java technologies in the cloud. This initiative focuses on cultivating the business interests associated with Eclipse Enterprise for Java (EE4J) technologies.

**Builds the  
community**

**Approves  
Specifications**

**Drives the  
Jakarta EE  
brand**

**Establishes the  
technical  
roadmap**

**Ensures  
compatibility**



## MicroProfile Working Group

The MicroProfile<sup>®</sup> Working Group drives the evolution and broad adoption of technologies related to the MicroProfile Project. MicroProfile is an open forum that optimizes Enterprise Java for a microservice architecture by innovating across multiple implementations and collaborating on common areas of interest with a goal of standardization.



## Oniro Working Group

The Oniro Working Group will foster an ecosystem of organizations that supports the community in the production and evolution of the Oniro operating system and platform. Oniro is a new commercially oriented, modular, and multikernel open source software platform. Its ecosystem will be developed in an environment where collaboration is promoted via the core Eclipse Foundation principles of vendor-neutrality, transparency, and openness.



## OpenADx Working Group

The OpenADx Working Group is centered around the autonomous driving toolchain and aims to bring transparency and better integration capabilities into the autonomous driving tool space.

### OpenADx Working Group Projects:

Eclipse Cloe



Eclipse Cyclone DDS





GROUP  
**OPENHW**  
— PROVEN PROCESSOR IP —



**CORE-V™**

## OpenHW Group

OpenHW Group is an independent not-for-profit, global organization where hardware and software designers collaborate in the development of open-source cores, related IP, tools and software, using industry best practices. OpenHW has released its first 32bit RISC-V compliant processor core and has several processor cores in active development.

**CORE-V Projects (open source RISC-V cores):**

**CORE-V-CORES**

**CORE-V-DOCS**

**CORE-V-VERIF**

**CORE-V-SW**



ASIA WG  
**OPENHW**<sup>TM</sup>  
— PROVEN PROCESSOR IP —

## OpenHW Group Asia

This working group is a joint initiative of the Eclipse Foundation AISBL and its partner the OpenHW Group. The overarching goal of this working group is to address Asia-focused initiatives complementing the work program of the OpenHW Group. Those initiatives may address strategic or market analysis, technical requirements, and digital sovereignty.

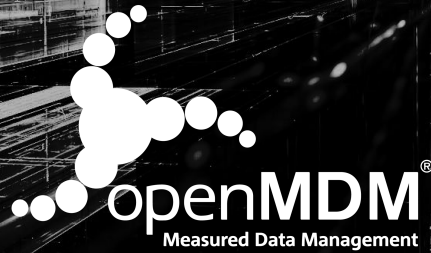


EUROPE WG  
**OPENHW**<sup>TM</sup>  
— PROVEN PROCESSOR IP —

## OpenHW Group Europe

This working group is a joint initiative of the Eclipse Foundation AISBL and its partner the OpenHW Group. The overarching goal of this working group is to engage in initiatives complementing the general work program of the OpenHW Group that are of strategic interest to the joint members of Eclipse Foundation and OpenHW Group that relate to the European marketplace, including strategic market analysis, development of technical requirements, and digital sovereignty.



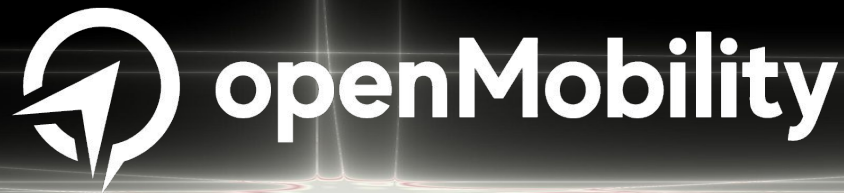


## openMDM Working Group

The openMDM Working Group fosters and supports an open and innovative eco-system providing tools and systems, qualification kits and adapters for standardized and vendor independent management of measurement data in accordance with the ASAM ODS standard.

**openMDM Working Group Project:**

**MDM|BL**



## openMobility Interest Group

openMobility drives the evolution and broad adoption of mobility modelling and simulation technologies.

### openMobility Project:





## openPASS Working Group

The openPASS Working Group promotes a collaborative and innovative ecosystem by offering tools, systems, and adapters for a standardized, openly-available and vendor-neutral platform for traffic scenario simulation.

### openPASS Working Group Project:

**sim@  
openPASS**



## OSGi Working Group

The OSGi Working Group drives the evolution and broad adoption of software technologies derived from or related to the OSGi Specification Project which is an open source initiative to create software specifications, compatible implementations and TCKs to enable development, deployment and management of embedded, server-side, and cloud-native applications by using software modularity to vastly improve the evolution, maintainability, and interoperability of applications and infrastructure.



## Science Working Group

The Science Working Group represents a collaborative effort involving industry, academia, and government with the purpose of developing reusable open source software for scientific research.

**Science Working Group Projects:**



Eclipse  
ChemClipse

Eclipse  
XACC



## Software Defined Vehicle Working Group

The Eclipse Software Defined Vehicle (SDV) Working Group will provide a forum for individuals and organizations to build and promote open source software, specifications, and open collaboration models needed to create a scalable, modular, extensible, industry-ready open source licensed vehicle software platform to support in-vehicle and around the vehicle applications development and deployment.



## Sparkplug Working Group

The Eclipse Sparkplug Working Group seeks to drive the evolution and broad adoption of the Eclipse Sparkplug protocol and related technologies that enable the creation of open, collaborative, and interoperable Industrial IoT (IIoT) solutions.

Sparkplug Working Group Project:





# Structure of Eclipse Working Groups

- > Eclipse Foundation Members can join an Eclipse Working Group
- > Eclipse Working Groups have at least two tiers of members:
  - Steering Committee members
  - Participant Members
- > Eclipse Working Group Steering Committee:
  - Approve Working Group Charter
  - Set Working Group Budget and Fees
  - Establish Working Group Committees: Requirements, Architecture, etc.



# Starting an Eclipse Working Group

- > Define vision and scope
- > Create a Working Group Charter
- > Secure initial list of participants
- > Establish initial budget and fees




## Resources Required to Get Started

- > Management and leadership
- > IT Services to create and maintain website
- > Community management services to assist with outreach and events
- > Project management to assist with work group meetings, onboard new members, facilitate collaboration
- > Ecosystem development to recruit new members
- > Typical cost \$200K-\$300K/year but will grow depending on services required
- > Funding driven by working group membership fees

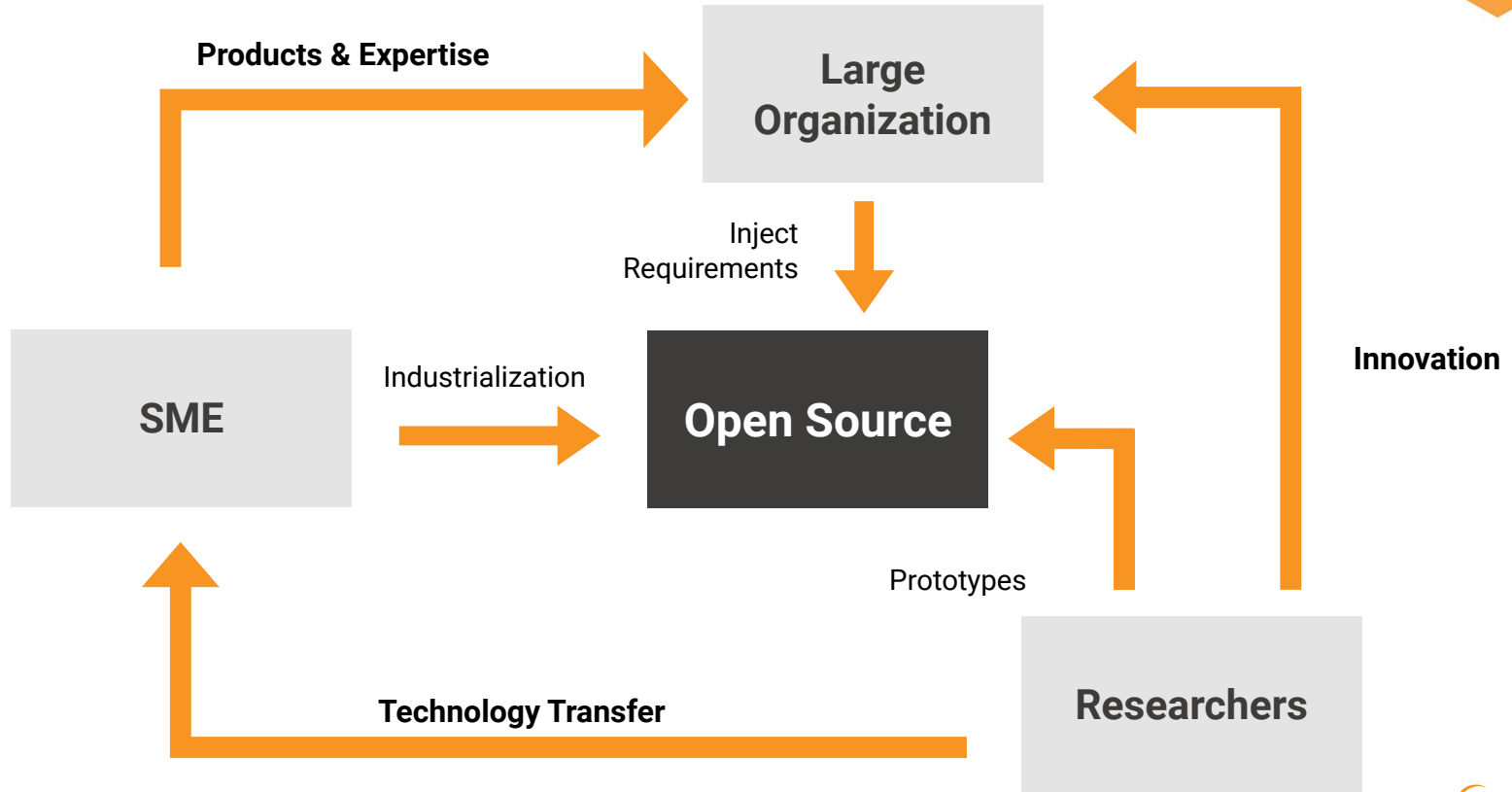
# Eclipse Interest Groups

Interest groups are a light-weight, low-cost way for Eclipse Foundation members to collaborate on a common interest or domain in a vendor neutral manner based on the Eclipse Foundation's governance structure, including its antitrust policy.

[Learn more](#)

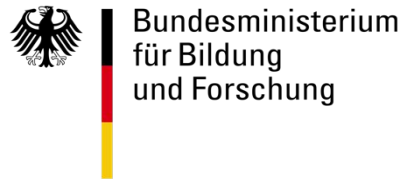
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# The Eclipse Foundation as a Research Catalyst



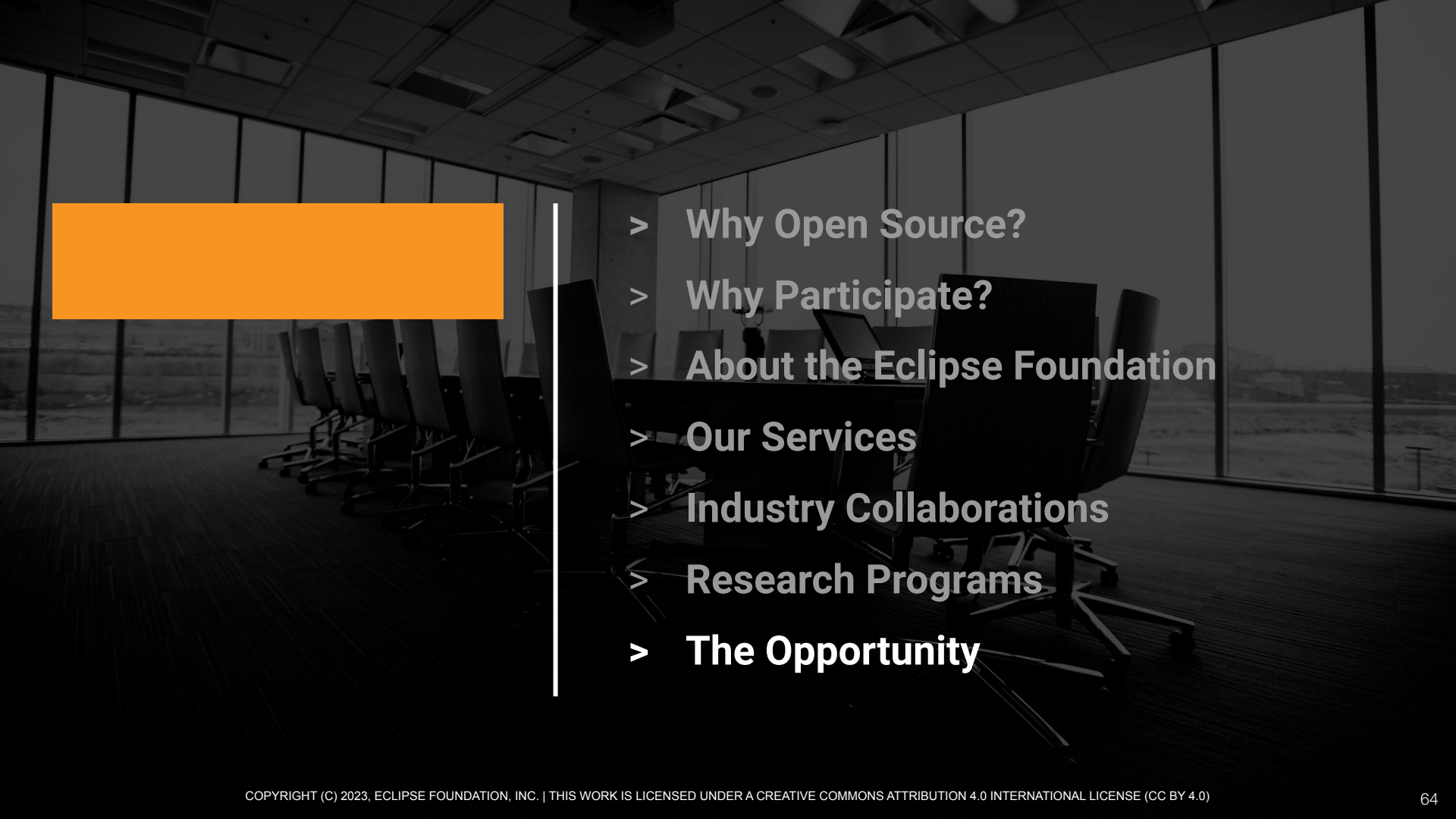


# Research Projects: Funding Organizations



# Research Projects



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# Join Us!



**Become an  
Eclipse  
Foundation  
Member**

**Join an Eclipse  
Foundation  
Collaboration**

**Participate  
in open  
collaboration and  
innovation**

To learn more, or to participate visit:  
**eclipse.org**

or connect with us at:  
**membership@eclipse.org**



# Thank you!