



Open Source The Eclipse Way

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About Me

Frédéric Desbiens
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B.Ed., B.Sc.A, MBA

Developer, Architect, Product Manager...

Oracle, Cisco, Pivotal...

Published author; Frequent Speaker

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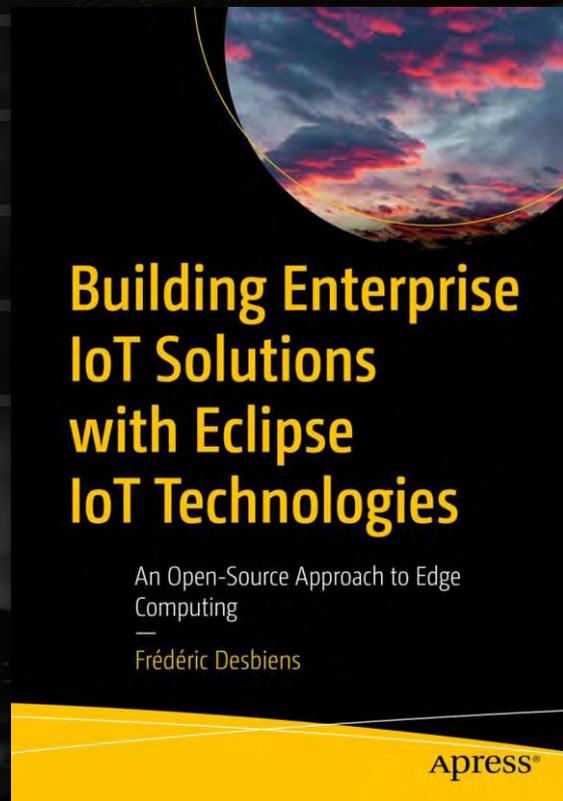
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I Don't Scale; The Book Does!

A comprehensive overview of the open-source IoT and Edge Computing platforms available at the Eclipse Foundation

ISBN: 978-1484288818



A top-down view of various breads, pastries, and nuts arranged in a circular pattern on a dark background. The items include round loaves with seeds, a small cup of coffee, a bunch of green herbs, and a pile of almonds.

Openness creates successful ecosystems



**Openness creates
successful ecosystems**

What is Open Source?

0

Freedom to **run** the program, for any purpose

1

Freedom to **study** how the program works, and change it

2

Freedom to **redistribute** copies

3

Freedom to **distribute** copies of your modified versions

What is Open Source?

Source code is made freely available by the copyright holder

The code may be redistributed and modified, including for commercial purposes

Vendor-neutral governance is essential to the ecosystem

The Open Source Foundation of Choice in Europe with a global presence, reach and reputation

Eclipse Foundation AISBL is based in Brussels
Under EU-based laws and regulations and hosting code in Europe

Visit eclipse.org/europe



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 - 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



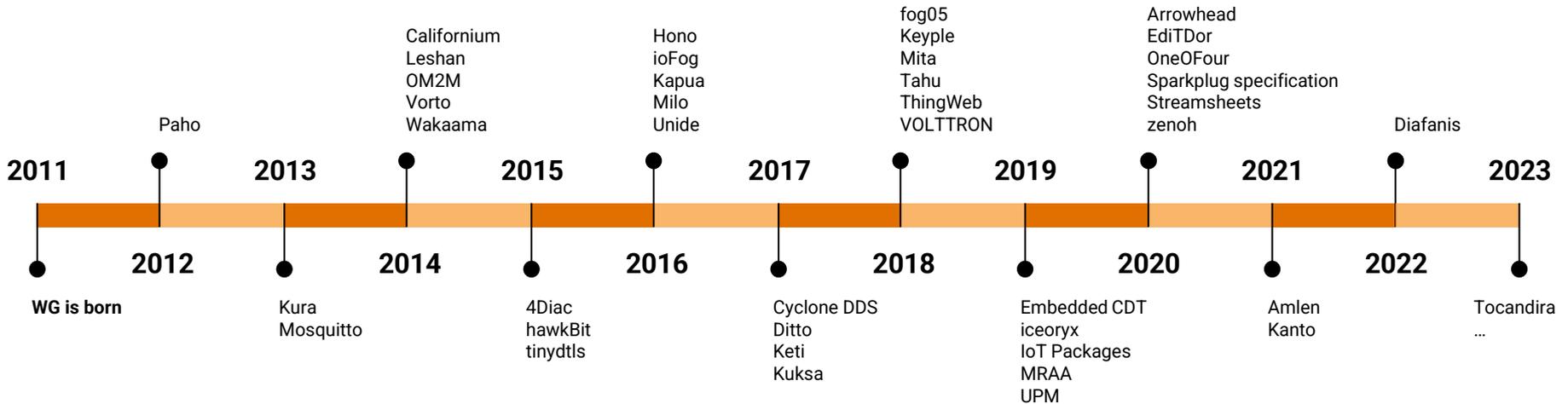
We provide leading automotive OEMs, their suppliers, and partners with a sustainable, transparent, and vendor-neutral platform to collaborate on open technologies and standards.

Tools

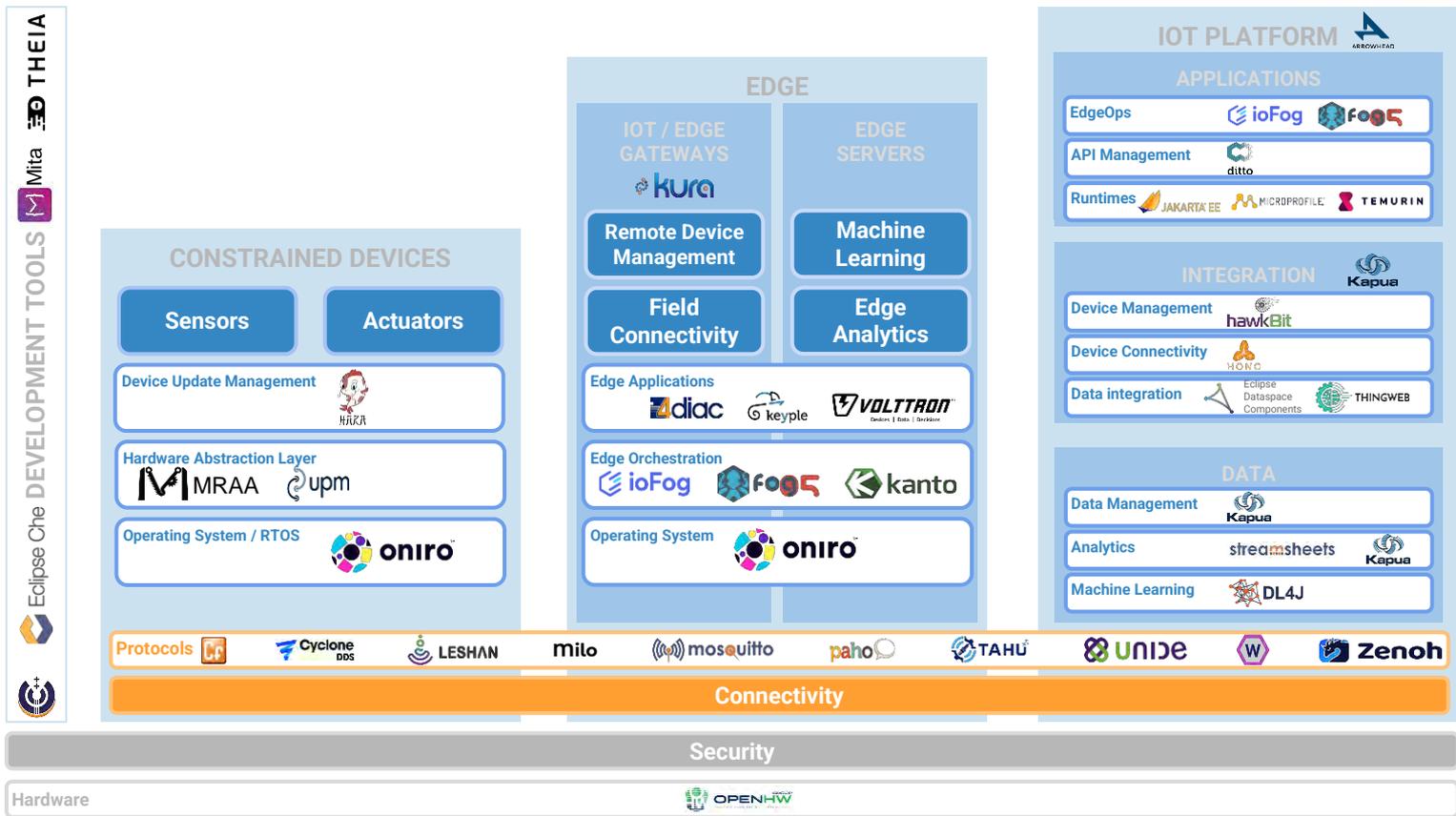


The Eclipse IDE is the critical development environment for more than 6 million active users. Our community is innovating on the next generation of cloud native developer tools.

12 Years of Innovation



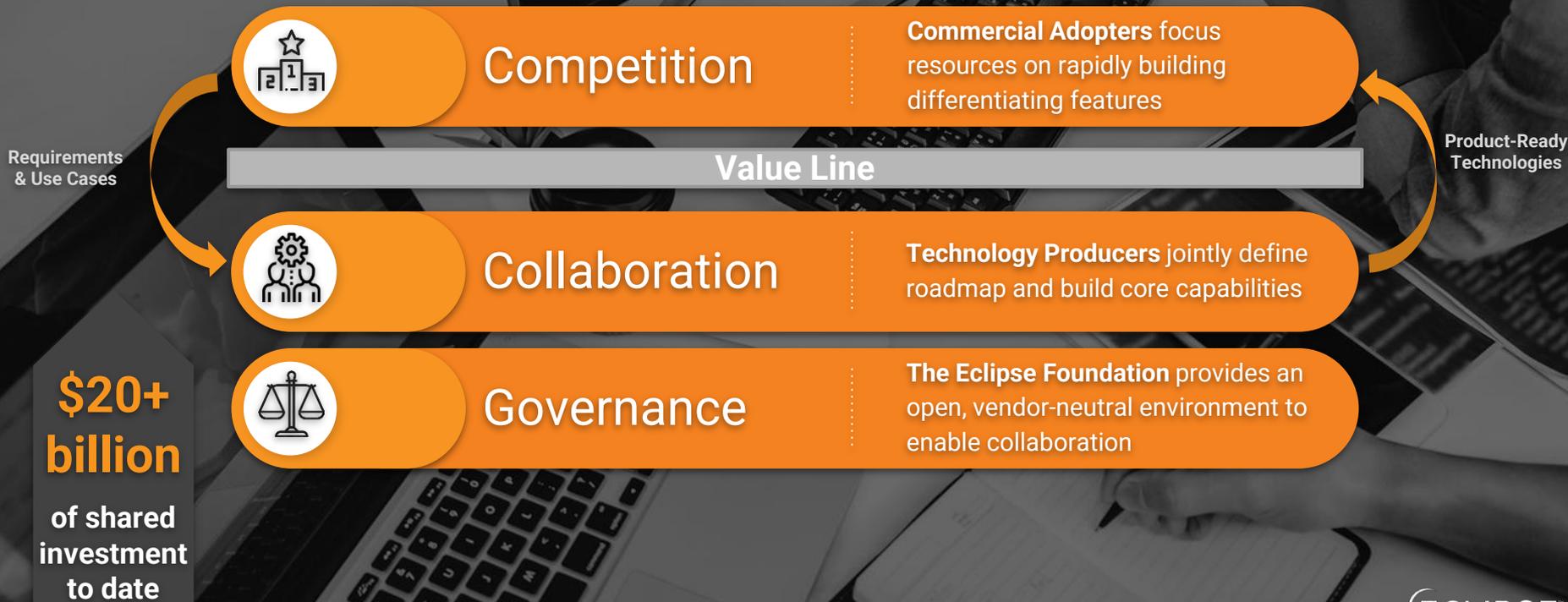
An Extensive Toolkit



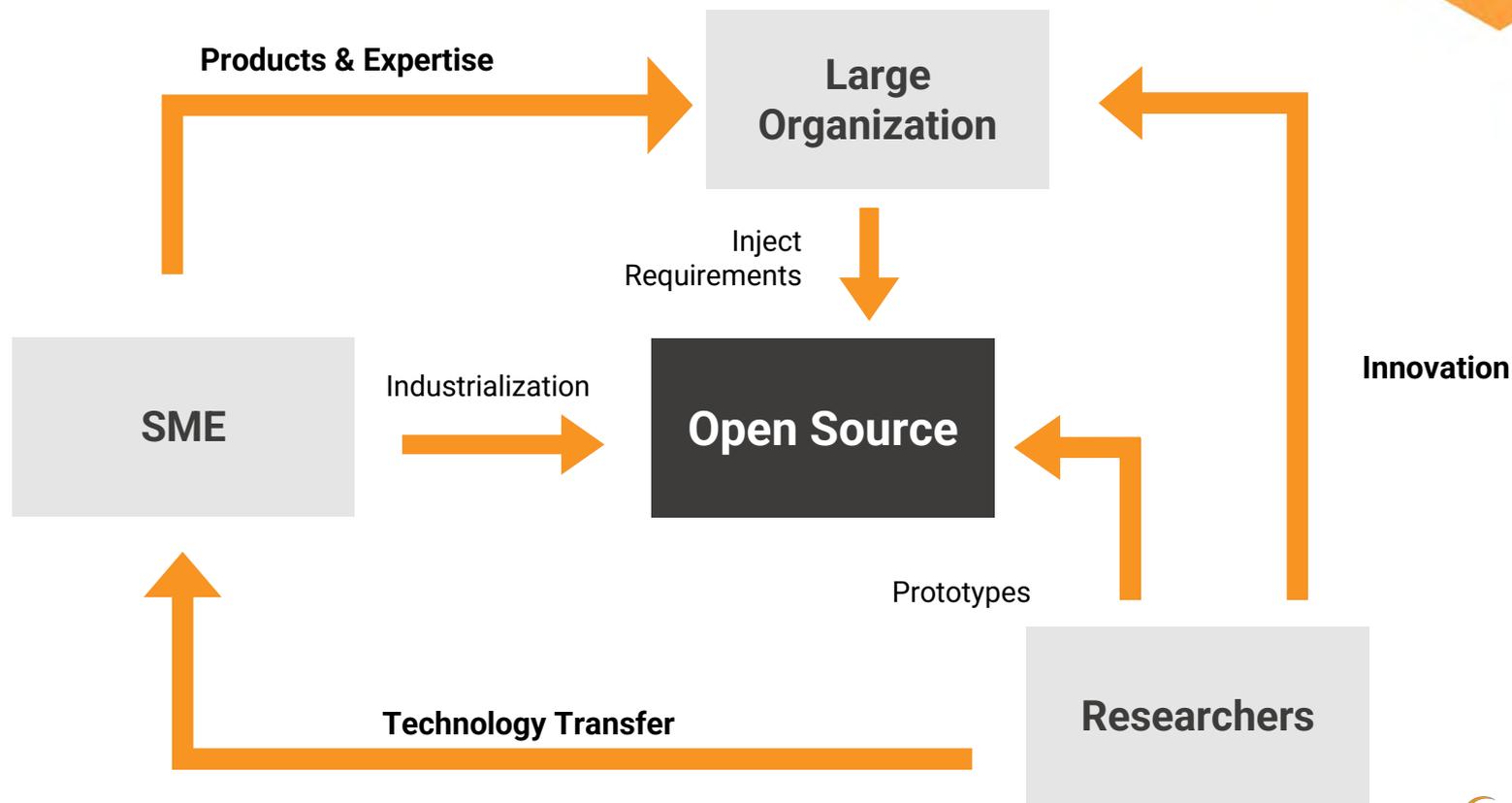
Our Unique Approach

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

Open Source is Innovation at an Industrial Scale



The Eclipse Foundation as a Research Catalyst



Breaking Silos Through InnerSource

InnerSource applies open source best practices to proprietary code. It can help establish an open source culture within an organization while retaining software for internal use.

Main Benefits

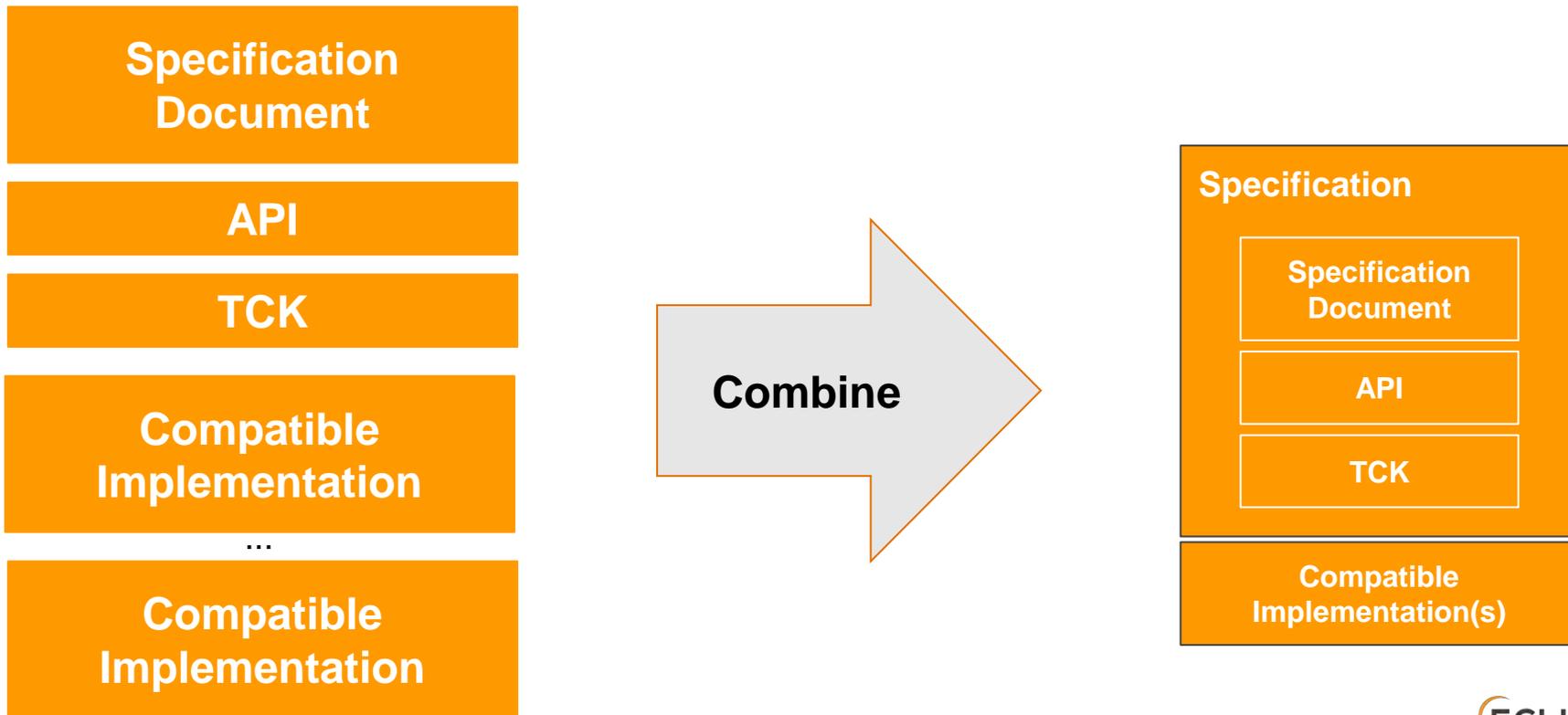
- > High-quality code
- > Comprehensive documentation
- > Effective code reuse
- > Strong collaboration
- > Healthy culture

Source: [GitLab](#)

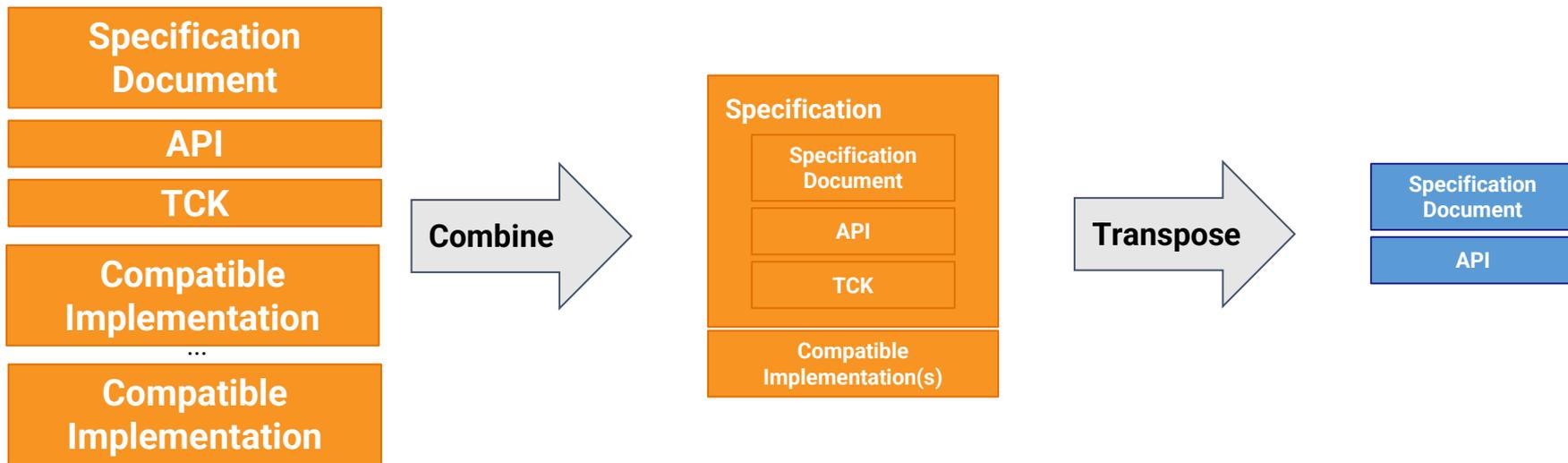
Industrial Automation Standards: The Old Way



What Is an Eclipse Specification?



Specifications at Eclipse and Beyond



The Eclipse Foundation is recognized by ISO/IEC JTC1 as a submitter of Publicly Available Specifications (PAS). Eclipse specifications can thus become international standards. Sparkplug will be published as ISO/IEC 20237 in 2023.





Sparkplug[®]

Interoperability for MQTT-based Industrial IoT solutions



Standard Payloads



Standard
Topic Structures



Session Management

Implement Sparkplug

Anyone can implement Sparkplug free of charge, no membership required

Anyone can use the Sparkplug Technology Compatibility Kit (TCK) to validate conformance

“Sparkplug”, “Sparkplug Compatible” and the logos are trademarks of the Eclipse Foundation

Now Available!

Sparkplug Compatibility Program



**Customer
Confidence**



Collaboration



**Marketing
Initiatives**

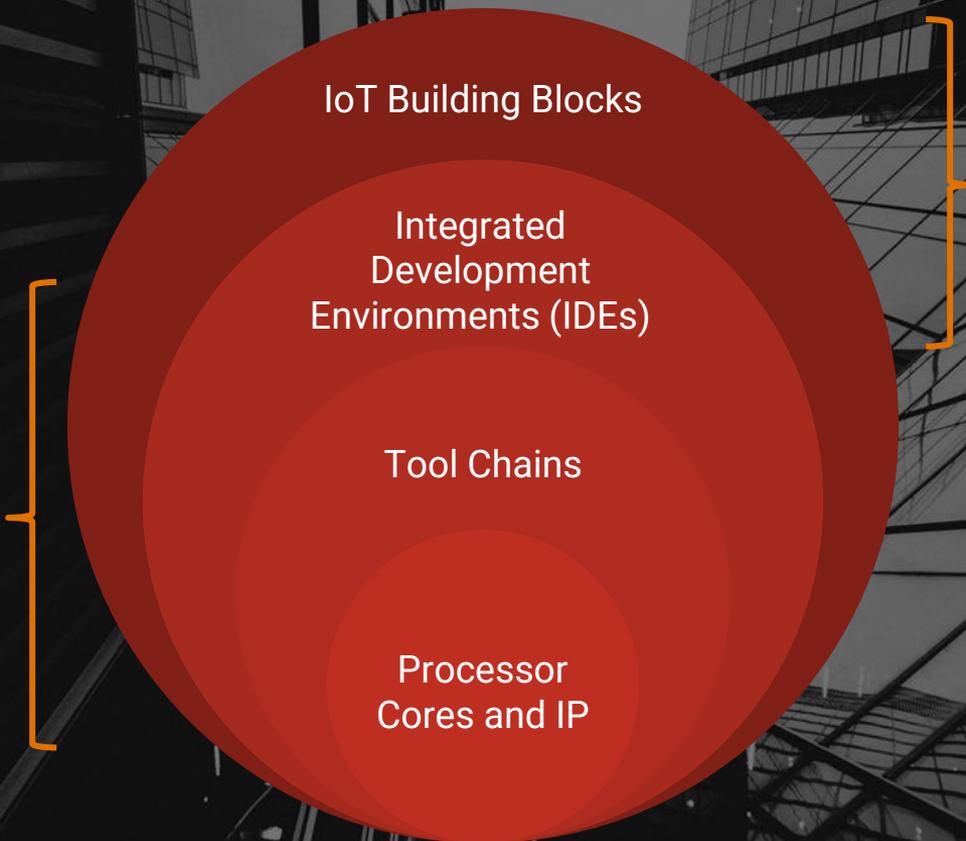


**Brand
Development**



**Community
Support**

Towards a Comprehensive Open Source IoT RISC-V stack



Thank You

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