OpenForum Europe

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SACHIKO MUTO

What Open Source Can Teach Us About Building Innovative Data Spaces

Collaboration, Interoperability, and Permissionless Innovation

About me

- Chair and former CEO, OpenForum Europe

  – Brussels-based think tank promoting open technologies

- Senior Researcher, RISE Research Institutes of Sweden

- Drupal Association Board Member

- Advisory Board member Linux Foundation Europe and Linux Foundation Research

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Reflecting on 15 years of open source policy in Europe

- The undisputed success of open source

- Current momentum driven by digital sovereignty concerns

- Lessons learned for data-driven innovation

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Then:

Choosing open source or proprietary on the desktop

The main objective was avoiding lock-in and saving cost

Now:

All 500 of the world's supercomputers run Linux

Open Source is in 92% of all software

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Today there are two kinds of organisations:

1. Those that *know* they depend on open source

2. Those that *don't (yet) know* that they do

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SONY

MITSUBISHI

TOYOTA

HONDA

mazda

NEC

FUJITSU

HITACHI

NISSAN

Nikon

TOSHIBA

RENESAS

Panasonic

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What is the value of open source?

The impact of Open Source Software and Hardware on technological independence, competitiveness and innovation in the EU economy

FINAL STUDY REPORT

OFE's and Fraunhofer ISI's study for the European Commission

How much are open-source developers really worth? Hundreds of billions of dollars, say economists

A new report finds that open-source technologies have huge potential, but it is still largely untapped.

Written by **Daphne Leprince-Ringuet,** Contributor

Feb. 8, 2021 at 4:12 a.m. PT

At least 260,000 OSS contributors making more than 30 million commits to Github

€65 - €95 billion to annual EU GDP

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The Value of Open Source Software

Harvard Business School Strategy Unit Working Paper No. 24-038

42 Pages · Posted: 16 Jan 2024

Manuel Hoffmann
Harvard Business School

Frank Nagle
Harvard Business School

Yanuo Zhou
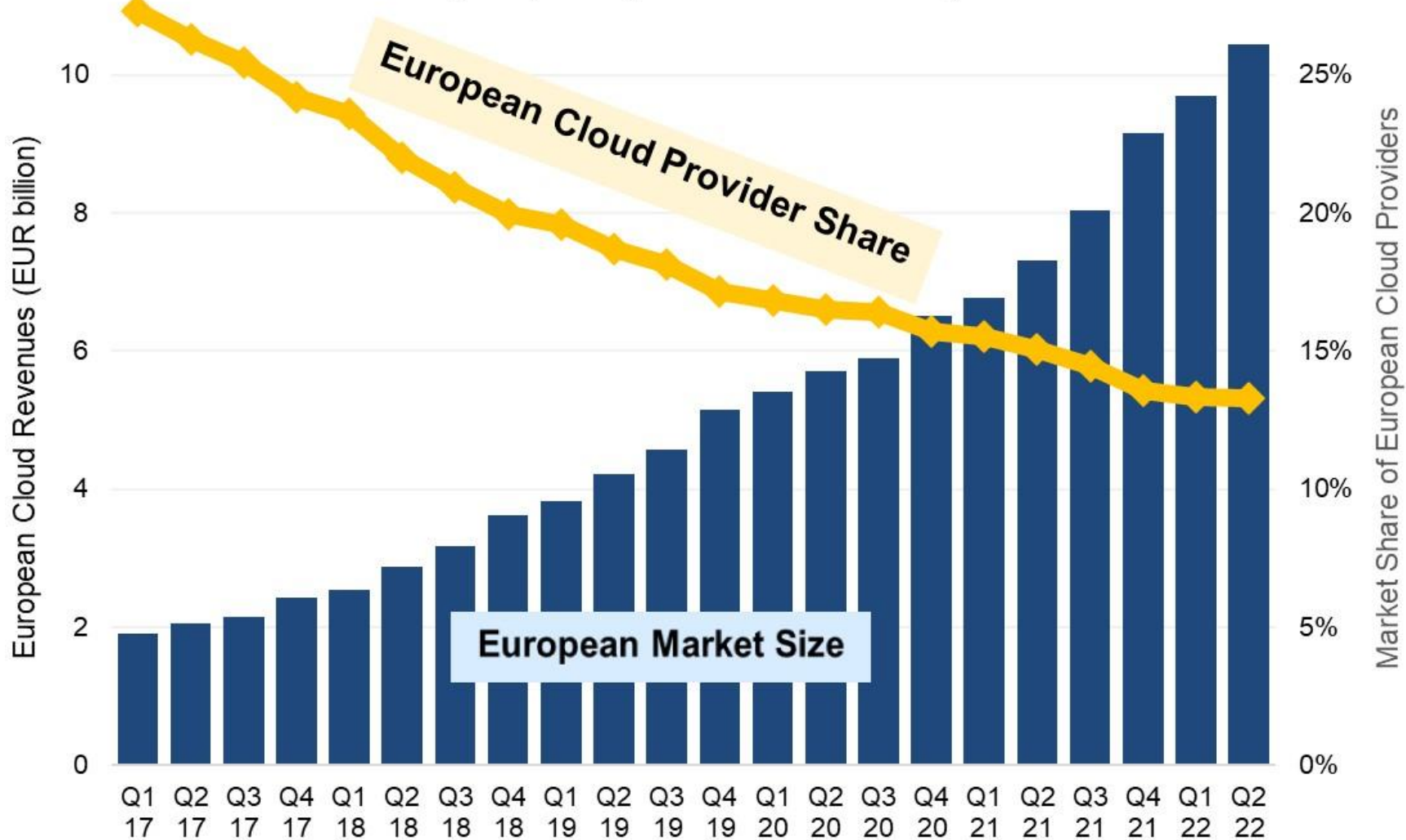University of Toronto

Date Written: January 1, 2024

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.

"In the digital decade, Open Source will be a key element to achieve Europe's resilience and digital sovereignty", Thierry Breton

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"It may be too late to replicate hyperscalers, but it is not too late to achieve technological sovereignty in some critical technology areas...we must have mastery and ownership of key technologies in Europe", Ursula von der Leyen

European Cloud Provider Share of Local Market
(IaaS, PaaS, Hosted Private Cloud)

European Cloud Revenues (EUR billion)

Market Share of European Cloud Providers

European Cloud Provider Share

European Market Size

Q1 17, Q2 17, Q3 17, Q4 17, Q1 18, Q2 18, Q3 18, Q4 18, Q1 19, Q2 19, Q3 19, Q4 19, Q1 20, Q2 20, Q3 20, Q4 20, Q1 21, Q2 21, Q3 21, Q4 21, Q1 22, Q2 22

Source: Synergy Research Group

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💬 Available languages: English ▾

PRESS RELEASE | Dec 5, 2023 | Brussels | 8 min read

Commission approves up to €1.2 billion of State aid by seven Member States for an Important Project of Common European Interest in cloud and edge computing technologies

This IPCEI will produce **significant positive spill-over effects** for the non-participating companies, competitors, and final users throughout Europe. The results and knowledge of the project will be widely shared by participant companies with the European industry and scientific community, beyond the companies and the countries that are part of the IPCEI. In particular, the participants will: (i) **beyond their usual open-source software practices and business models, grant permissive, non-restrictive open-source software licenses** to any interested party and **actively engage with and contribute to** the development of open-source communities; (ii) **provide access** to interested parties **to at least 20% of the**

THE GREENS/EFA
in the European Parliament

S&D

epp
european people's party

renew
europe.

TOWARD EUROPEAN DIGITAL INDEPENDENCE: *BUILDING THE EURO STACK*

European Parliament, Brussels
24 September 2024
14:15-19:15

Venue: European Parliament

Should we build a European stack?

Or focus on developing the capabilities to influence the direction of key digital infrastructure projects and, if necessary, fork, adapt, and maintain them?

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How open technologies promote digital sovereignty and global innovation

- Open source has the potential to alleviate vendor lock-in and minimize reliance on specific vendors and retain control over technological choices and infrastructure while still benefiting from global collaboration

- Still needed:
  – Awareness, skills and capabilities
  – Strategic use of open source to stimulate competitive markets, increase user choice
  – Solving the contribution challenge, find ways that public sector and industry can collaborate

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What can we learn from open source to unlock the potential of data spaces?

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- Shared resource allowing innovation and differentiation on top of shared commons – define where the value is created, find the cooperative layer

- Governance Matters
  - Clear, inclusive, and transparent processes build trust
  - Leverage lessons from successful open source consortia that provide neutral third-party project hosting (e.g. Eclipse, Linux Foundation, FIWARE).

- Promote permissionless innovation beyond pre-defined use cases – recognize that innovation can happen at the edges

- Open and permissionless does not mean the absence of rules - changing behaviour through clear use and contribution pathways

- Build institutional support within organisations – OSPOs are key

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Thank you!

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