



Funding Free Blockchain Software projects

A novel way to fund the digital commons

By Marc Lijour

January 25, 2018

*The world-first Free/Libre Open Source and Crowdfunded R&Hub
focusing on Blockchain and related technologies*

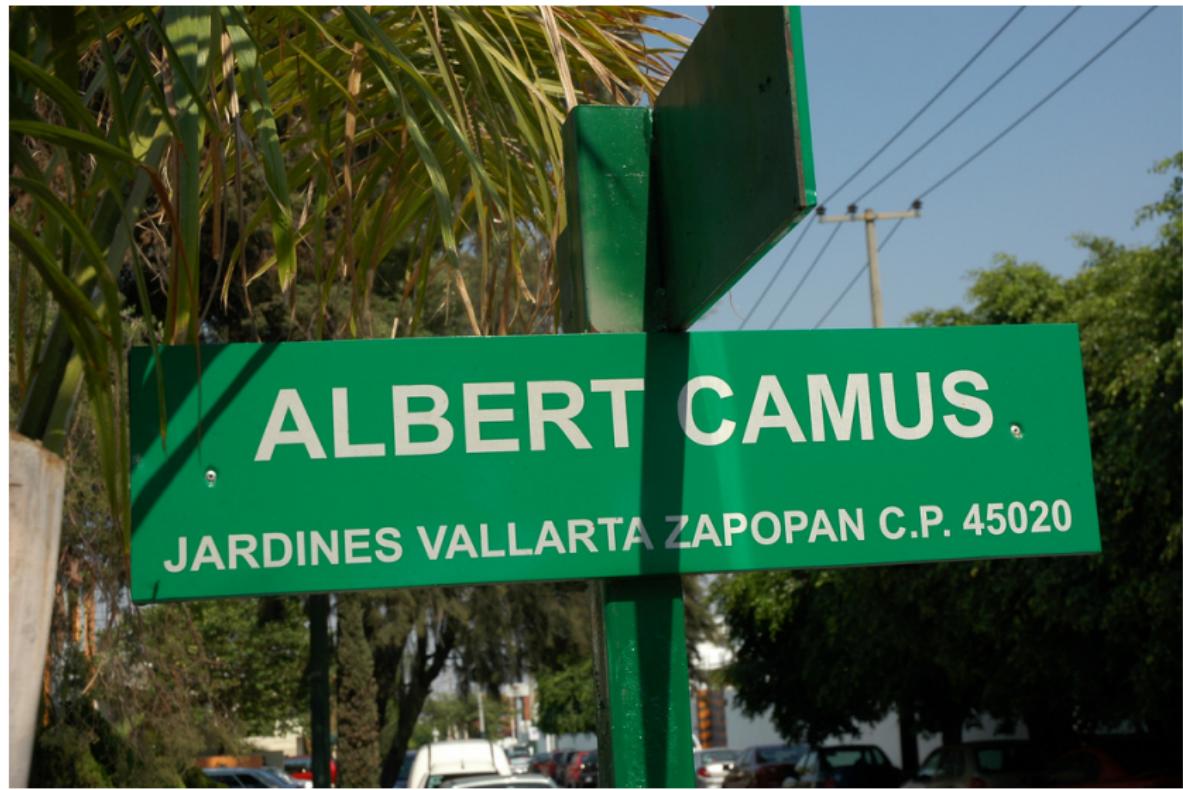


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Settling in the New World



Short History of Software

The birth of UNIX



Figure: Ken Thompson (sitting) and Dennis Ritchie at PDP-11

The Four Freedoms

Freedom 0

"The freedom to run the program, for any purpose"

Freedom 1

"The freedom to study how the program works, and adapt it to your needs"

Freedom 2

"The freedom to redistribute copies so you can help your neighbor"

Freedom 3

"The freedom to improve the program, and release your improvements to the public, so that the whole community benefits"



Free Software and Open Source Software

An introduction to Free/Libre Open Source Software (Intel, 2014)

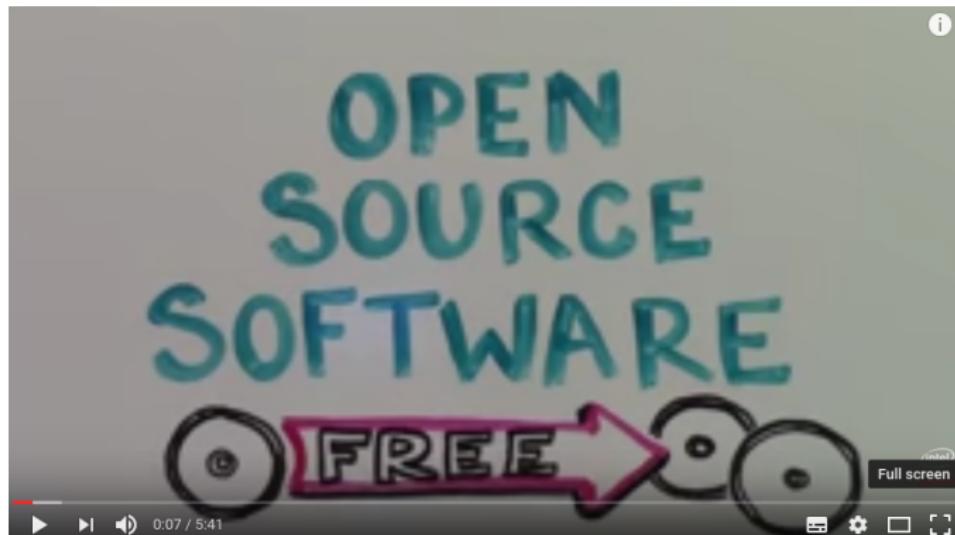


Figure: <https://www.youtube.com/watch?v=Tyd0FO0tko8>

©Intel Software (2014)



Open Source runs (almost) Everything

2015 was an inflection point

<https://www.blackducksoftware.com/future-of-open-source>

WIRED

Open Source Software Went Nuclear This Year

CADE METZ BUSINESS 12.27.15 7:00 AM

OPEN SOURCE SOFTWARE WENT NUCLEAR THIS YEAR

OVER THE NEXT 2 – 3 YEARS...

88% TO INCREASE OPEN SOURCE CONTRIBUTIONS **61%** EXPECT SECURITY OF OPEN SOURCE TO RISE

EXPECTED TO BE IMPACTED MOST:

- CLOUD COMPUTING **39%**
- BIG DATA **35%**
- OPERATING SYSTEMS **33%**
- INTERNET OF THINGS **31%**

HOW & WHY COMPANIES ARE USING OPEN SOURCE

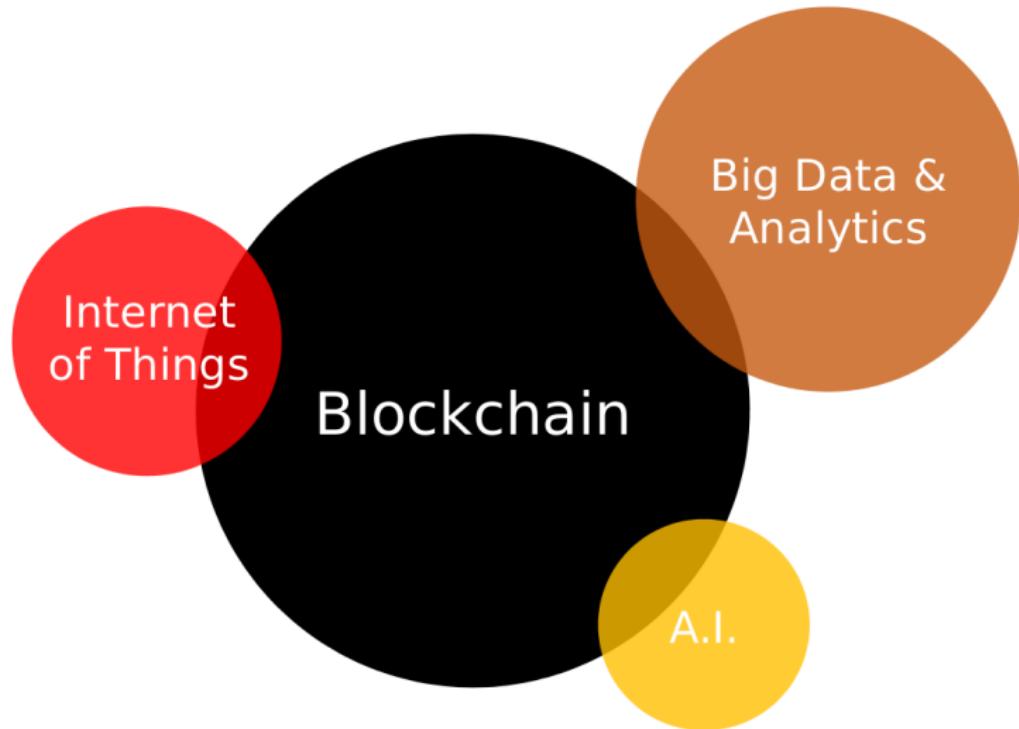
The 2015 Future of Open Source Survey finds

78% OF COMPANIES RUN ON OPEN SOURCE
(nearly double since 2010) &

64% PARTICIPATE IN OPEN SOURCE PROJECTS.

yet many still lack formal policies and processes to manage potential open source-related security, operational, and legal risks.

From IoT to Cloud and AI, and of course Blockchain



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The Milenials



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Marc Lijour

ColliderX

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*20% of the world's economy
will be digital by 2020.*

—Accenture #techvision2016



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The Tragedy of the Commons



Nadia Eghbal's report (2016)

Roads and Bridges: The Unseen Labor Behind Our Digital Infrastructure

Roads and Bridges:

The Unseen Labor Behind
Our Digital Infrastructure

Marc Lijour

- Open Source Software runs core infrastructure services
- It is poorly funded (e.g. OpenSSL)
- Who should fund roads and bridges?



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Other issues

- Ability (and need) to run software to open archived files



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- Deletion or lack of back-ups
(in 1999, 40% of companies had lost or thrown away the source code of their systems)



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- Repository taken hostage (e.g. Code Spaces)



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- Repository taken hostage (e.g. Code Spaces)
- The half-life of an URL is about 4 years



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The universal software archive

<https://www.softwareheritage.org>

Software Heritage

preserves software source
code for present and future
generations



We are building the universal software archive



Collect
Preserve
Share

We **collect** and **preserve** software in source code form, because software embodies our technical and scientific knowledge and humanity cannot afford the risk of losing it.

Software is a precious part of our cultural heritage. We curate and make accessible all the software we collect, because only by **sharing** it we can guarantee its preservation in the very long term.

[Discover our mission](#)



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Basic Tips to fund Free/Libre Open Source Software

see also Nadia Eghbal (2018)

- Individual Time



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Basic Tips to fund Free/Libre Open Source Software

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- Individual Time
- Community support (tee-shirt sales, ads, DVD burning, donations)



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- Sales (licensing)



Basic Tips to fund Free/Libre Open Source Software

see also Nadia Eghbal (2018)

- Individual Time
- Community support (tee-shirt sales, ads, DVD burning, donations)
- Corporate investment
- Sales (licensing)
- Large Donations and Grants



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ColliderX

<https://www.collider-x.org>

- World-first Open Source Crowdfunded R&D Hub focusing on Blockchain and related technologies (AI, IoT, ...)



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- Building **the digital infrastructure of tomorrow**



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- World-first Open Source Crowdfunded R&D Hub focusing on Blockchain and related technologies (AI, IoT, ...)
- Building **the digital infrastructure of tomorrow**
- Now building a Blockchain **Innovation Supercluster** in Canada



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ColliderX

<https://www.collider-x.org>

- World-first Open Source Crowdfunded R&D Hub focusing on Blockchain and related technologies (AI, IoT, ...)
- Building **the digital infrastructure of tomorrow**
- Now building a Blockchain **Innovation Supercluster** in Canada
- Open to all researchers/developers/tinkerers and backers in the world



Starting your own Free/Libre Open Source Software project

Nicely summarized by Roberto Di Cosmo (2015)

- Identify a need



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- Build a prototype



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- Grow a community



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Starting your own Free/Libre Open Source Software project

Nicely summarized by Roberto Di Cosmo (2015)

- Identify a need
- Build a prototype
- Grow a community
- Set up an ecosystem (users, developers, architects, designers, service providers...)



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How to engage with ColliderX?

- Backers
- Researchers/Developers



Thank you!

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