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Making the business case for *contributing* to open source

"*In short, ~~software~~ is eating the world.*"
open source
—Marc Andreessen, WSJ, <u>August 20, 2011</u>.

96%
OF APPS CONTAIN
OPEN SOURCE COMPONENTS

57%
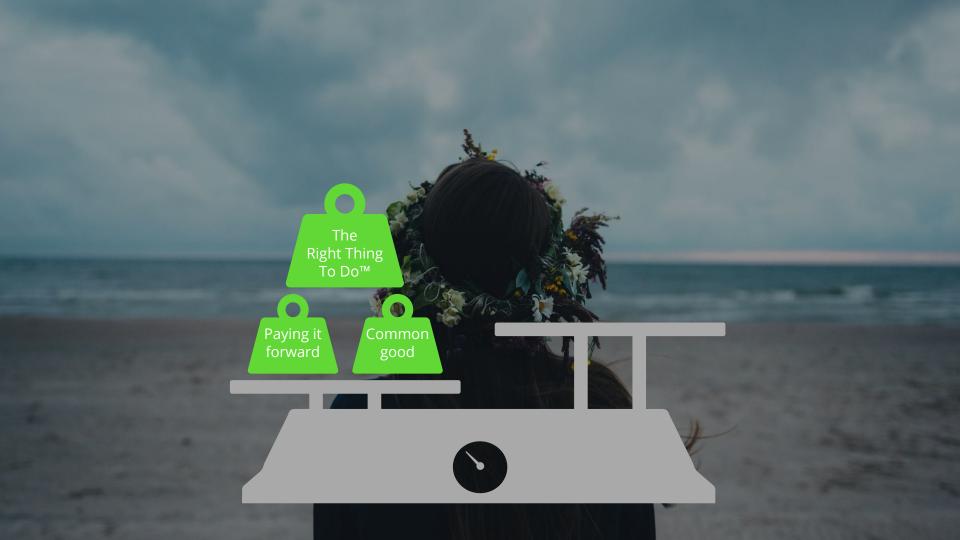OF CODEBASE IS
OPEN SOURCE

Source: <u>Black Duck 2018 OSSRA</u>

And yet...

...few companies *contribute* back.

Why should companies *contribute* to open source?

Common good

The Right Thing To Do™

Paying it forward

Etc.

The **ROI** of *using* open source is well understood.

The **ROI** of *contributing* to open source: not so much.

The **risk** of *contributing* to open source is:

- not well understood,
- generally exaggerated.

Understanding the value of contributing to open source

1. Strategic benefits
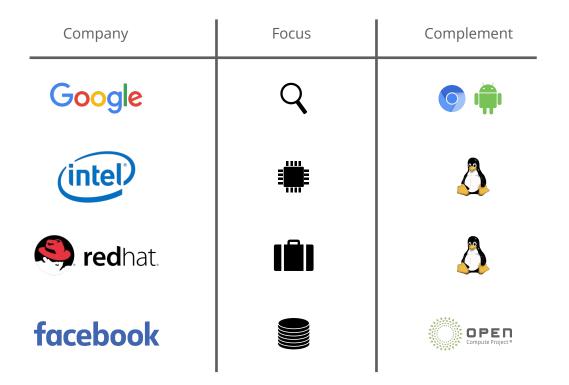
2. Operational benefits

3. Second-order benefits

Understanding the value of contributing to open source

1. **Strategic benefits**

2. Operational benefits

3. Second-order benefits

Commoditize Your Complement

Company	Focus	Complement
Google	🔍	Chrome / Android
intel	💻 (chip)	Linux
redhat	💼 (briefcase)	Linux
facebook	🗄 (database)	OPEN Compute Project®

On-ramp developers

Understanding the value of contributing to open source

1. Strategic benefits

2. **Operational benefits**

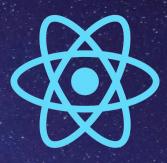3. Second-order benefits

Payback Technical Debt

Economic

Web browsers

Leverage external contributions
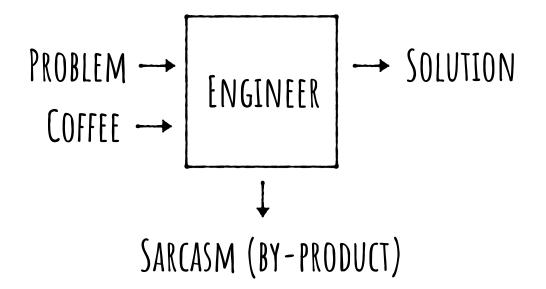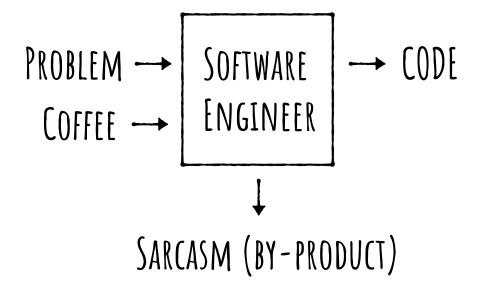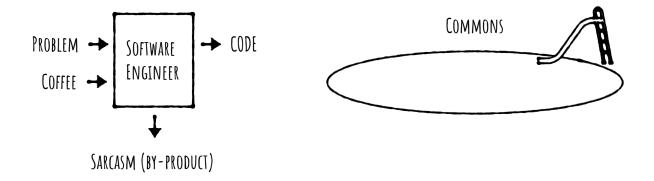
React Router

Redux

React Ecosystem

Understanding the value of contributing to open source

1. Strategic benefits

2. Operational benefits

3. **Second-order benefits**

Problem → | Engineer | → Solution

Coffee →

↓

Sarcasm (by-product)

Problem ➤

Coffee ➤

| Software Engineer |

➤ CODE

↓

Sarcasm (by-product)

Commons

PROBLEM ➔

SOFTWARE ENGINEER

COFFEE ➔

⬇ SARCASM (BY-PRODUCT)

COMMONS

OPEN SOURCE CODE

CONVERSATIONS
CODE REVIEWS
MENTORING
NETWORKING
ETC.

SOFTWARE ENGINEER

⬅ PROBLEM

⬅ COFFEE

⬇ SARCASM (BY-PRODUCT)

PROBLEM →
COFFEE →

SOFTWARE
ENGINEER

Commons

OPEN SOURCE CODE

SOFTWARE
ENGINEER

← PROBLEM
← COFFEE

↓

↓

SARCASM (BY-PRODUCT)

Conversations
Code reviews
Mentoring
Networking
Etc.

SARCASM (BY-PRODUCT)

↓

BY-PRODUCTS

ADOPT BEST-PRACTICES

INCREASE CODE QUALITY

IMPROVE SOFT-SKILLS

IMPROVED CULTURE & MORALE

LOWER TECHNICAL DEBT

IMPROVE DOCUMENTATION

REDUCED CHURN

REMOTE FRIENDLY

INNOVATION

INFLUENCE PROJECT DIRECTION

ACCESS TO TALENT POOL

INCREASE EFFICIENCIES

PERCEIVED AS INDUSTRY LEADER

LEVEL-UP ENGINEERS

"KNOWLEDGE SPILLOVER"

SERENDIPITY

ACCESS TO EXPERT NETWORK

BETTER CAREER OPPORTUNITIES

BY-PRODUCTS

PROJECT	INDIVIDUAL	TEAM	ORGANIZATION
Improve documentation	Level-up engineers	Increase efficiencies	Improved culture & morale
Increase code quality	Adopt best-practices	Serendipity	Perceived as industry leader
Lower technical debt	Improve soft-skills	Innovation	Access to talent pool
Influence project direction	Access to expert network	"Knowledge spillover"	Remote friendly
	Better career opportunities		Reduced churn

2✕ TWICE AS EFFICIENT
Contributing firms capture up to 100% more productive value from usage of open source than their free-riding peers.

Source: Franck Nagle, Learning by Contributing, 2017.

75% 75% of facebook's new engineering recruits mention facebook's open source program as a key reason they accepted their offer

"But we also noticed some effect that we didn't expect. All the public visibility [sponsoring Webpack] have given us lead to a situation where we suddenly became one of the most interesting companies to work for as a JavaScript developer. [...]"

"We've hired a lot of really great engineers who mentioned during their job interview that our sponsoring for Webpack was one of their primary motivations for applying, [...]"

—Patrick Gotthardt, Lead JavaScript Architect, Trivago, 9 July 2018.

Mitigate the risk of
contributing to open source

"I skate to where the puck is going to be, not to where it has been."

—*Wayne Gretzky*

Photo: Rick Dikeman, 1997 (CC BY-SA 3.0)

Lost IP

"In today's world of fast-paced internet services deployment, owning IP has become considerably less important than turning research results into innovative products as quickly as possible, and deploying them at scale."

—Yann LeCun, Business Insider, Aug. 3, 2018.

- Increased Risk
- Wasted resources
- Lack *know-how*
- Etc.

Now it's your turn!

Now it's your turn!

- **Framework** to think in terms of **business tradeoffs**.

- A **toolkit** of **benefits** and **mitigation strategies**.

- See how it applies to *your* organization.

Now it's your turn!

- Be reasonable.

- Show empathy to others' needs in the organization.

- Aim for small wins. Start small.

- Remember it's a mindset shift.

Thank you!

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