

knowledge

influence

network

**SAUG National Summit 2016**  
5–6 September 2016 • Hilton Hotel • Sydney

# Standing on the shoulders of giants

## Being a good open source citizen

John Patterson • 6<sup>th</sup> September 2016



Transformation





Waterfall  $\Rightarrow$  Agile



Data Centre  $\Rightarrow$  Cloud





Sys Admin  $\Rightarrow$  DevOps



<https://www.flickr.com/photos/lucasarazzi/>

Closed  $\Rightarrow$  Open Source

# Why did SAP bet big on Open Source?

An aging proprietary code  
base

# Why did SAP bet big on Open Source?

Customers technology  
needs are changing



# Why did SAP bet big on Open Source?

Competitors are innovating

# Why did SAP bet big on Open Source?

Investors have many options

# Why did SAP bet big on Open Source?

For a cultural change



SAP bet big on Open  
Source because

They needed to create a  
platform for innovation

# SAP HANA Cloud Platform

Business Results in the Cloud Start Here



Deliver Modern **User Experience**  
to Any User on Every Device



Acquire Insights and Intelligence  
with **Analytics**



Connect, transform and reimagine  
with the **Internet of Things**



Unlock Knowledge and Maximize  
Productivity through **Collaboration**



Free Your Apps and Data from Silos  
with Cloud and On-Prem **Integration**

built using Open Source and Open Standards

# Did you know?

## SAP adopts Open Source





[Home](#) > [Digital Service Standard](#) > 7. Use open standards and common platforms

## Digital Service Standard

1. Understand user needs
2. Have a multi-disciplinary team
3. Agile and user-centered process
4. Understand tools and systems
5. Make it secure
6. Consistent and responsive design
7. Use open standards and common platforms
8. Make source code open

# 7 Use open standards and common platforms

Build using open standards and common government platforms where appropriate.

## Why it's in the Standard

Using [open standards](#) and common government platforms helps you to:

- meet the needs of your users by building with proven solutions
- make users' experience of government more consistent, which generates trust
- save time and money by reusing things that are already available
- be more efficient by sharing data appropriately
- move between different technologies when you need to, avoiding vendor lock-in.



## Digital Service Standard

1. Understand user needs
2. Have a multi-disciplinary team
3. Agile and user-centered process
4. Understand tools and systems
5. Make it secure
6. Consistent and responsive design
7. Use open standards and common platforms
8. Make source code open

# 8 Make source code open

Make all new source code open by default.

## Why it's in the Standard

It's important to share your source code so others with a similar need can reuse it.

Open source helps to:

- reduce costs for your project and others'
- avoid lock-in
- stop duplication
- increase transparency
- add benefits, from improvements by other developers.



<https://www.flickr.com/photos/nauchisylvain/>

# Not Gratis



SAP  
Australian  
User  
Group



A tall, clear glass filled with a golden beer, topped with a thick, white head of foam. The glass is condensation-free and sits on a light-colored wooden surface, likely a bar. The background is dark and out of focus, showing some bokeh light effects. A semi-transparent black rectangular box is overlaid on the lower left portion of the image, containing the text "Free as in beer" in white.

Free as in beer



FREE SPEECH

Free to run

\***CONDITIONS APPLY** FUKT





A person wearing a pink t-shirt, black shorts, and a black cap is painting the words "FREE SPEECH" in large, bold, red capital letters on a red brick wall. The person is holding a paintbrush and a can of paint. Above the wall is a window with a white frame, and some green foliage is visible in the top left corner. The scene is outdoors during the day.

FREE SPEECH

Free to study

\***CONDITIONS APPLY** FUKT



A photograph of a person in a pink shirt and black shorts painting the words 'FREE SPEECH' in large red letters on a brick wall. The person is on the right side of the frame, holding a paintbrush. Above the wall is a window with green foliage visible outside. The text 'FREE SPEECH' is partially obscured by a semi-transparent dark box containing the text 'Free to redistribute'.

FREE SPEECH

Free to redistribute

\***CONDITIONS APPLY** FUKT



A photograph of a red brick wall. A window with a white frame is visible at the top center. Large red graffiti letters spell out 'FREE SPEECH' across the middle of the wall. To the right, a person in a pink shirt and black shorts is painting a small black star on the wall. At the bottom, black graffiti reads '\* CONDITIONS APPLY' and 'FUKT' is visible on the far right.

FREE SPEECH

Free to improve

\* CONDITIONS APPLY FUKT

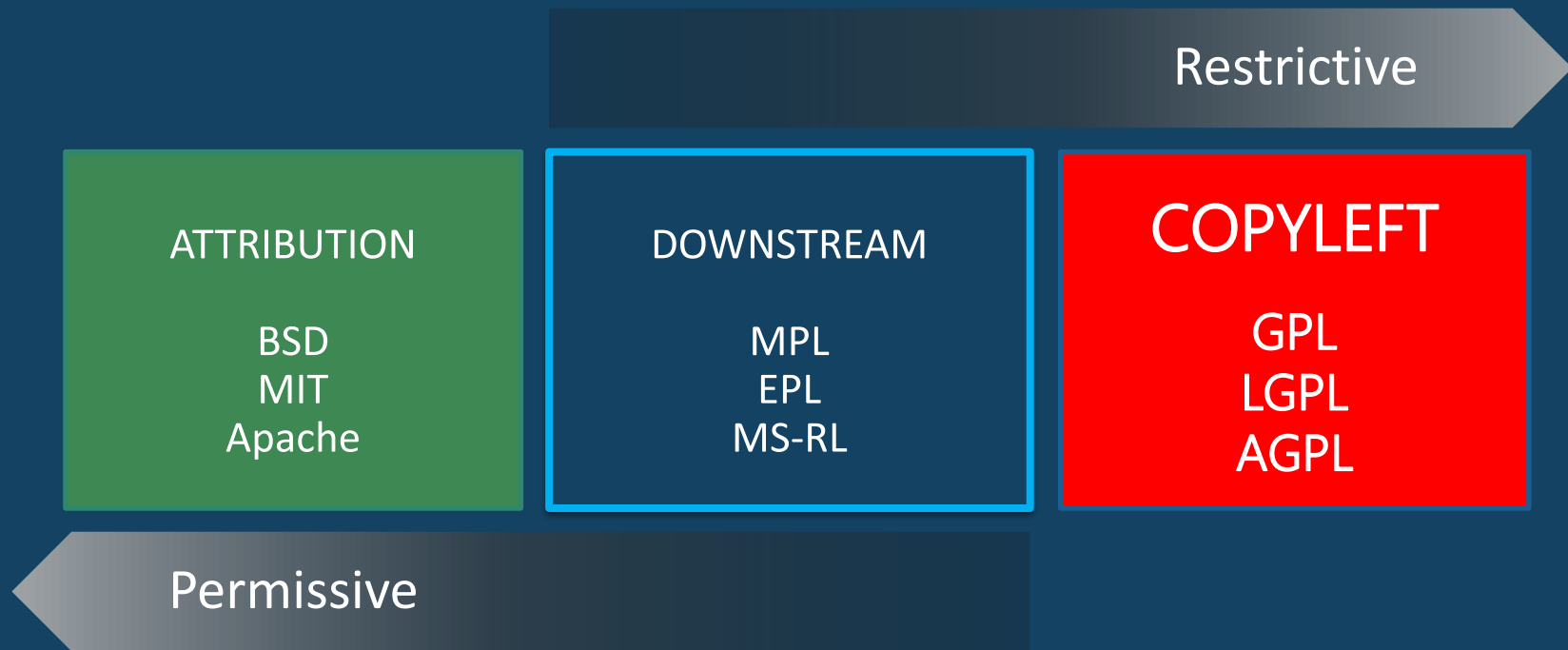
# Quality Code

*“Given enough eyeballs, all bugs are shallow.”*

-- Linus Torvalds --

Shared code is copyrighted  
until it is licensed

# License spectrum



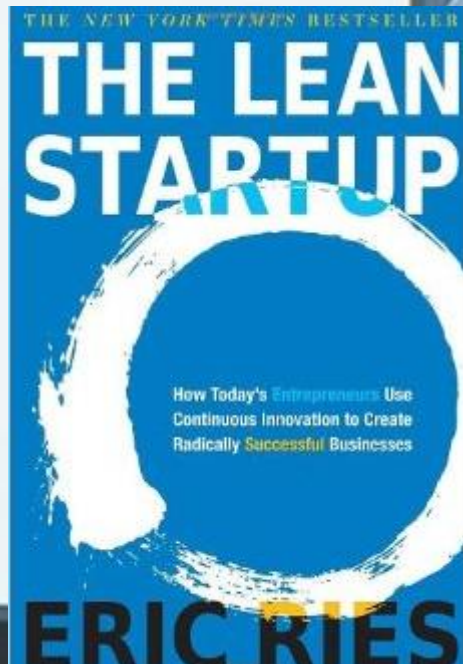


# Sharing Ideas

*“If you have an apple and I have an apple and we exchange these apples then you and I will still each have one apple. But if you have an idea and I have an idea and we exchange these ideas, then each of us will have two ideas.”*

**-- George Bernard Shaw --**

# MOVE FAST AND BREAK THINGS



MOVE  
FAST WITH  
STABLE  
INFRA



THE **LEAN** SERIES

ERIC RIES, SERIES EDITOR

Jez Humble, Joanne Molesky & Barry O'Reilly

# LEAN ENTERPRISE

How High Performance  
Organizations  
Innovate at Scale

O'REILLY®

# REASONS WHY



*“People don't buy what you do; they buy why you do it. And what you do simply proves what you believe”*

**-- Simon Sinek --**



It's in our DNA

1

“The Facebook” Day 0 Dorm Room,  
LAMP stack

# It's in our DNA

# 1

*“Standing on the shoulders of giants and  
give back in turn”*

-- James Pearce head of Open Source --

# Part of our mission

# 2

“To make the world more connected”

-- Mark Zuckerberg --

# Accelerates Innovation

3

Sharing ideas to help the industry grow

We write better  
software

4

“The more the Open Source philosophy  
bleeds out through the engineering  
team, the better the systems”

-- James Pearce head of Open Source --



# An opportunity to share our challenges

5

Attracts the interest of people who want  
to work on them

Becoming a good citizen

# Benefits of contributing to open source

A sense of giving back to the  
community

# Benefits of contributing to open source

Become a better developer

# Benefits of contributing to open source

Improve your CV / Portfolio

# Benefits of contributing to open source

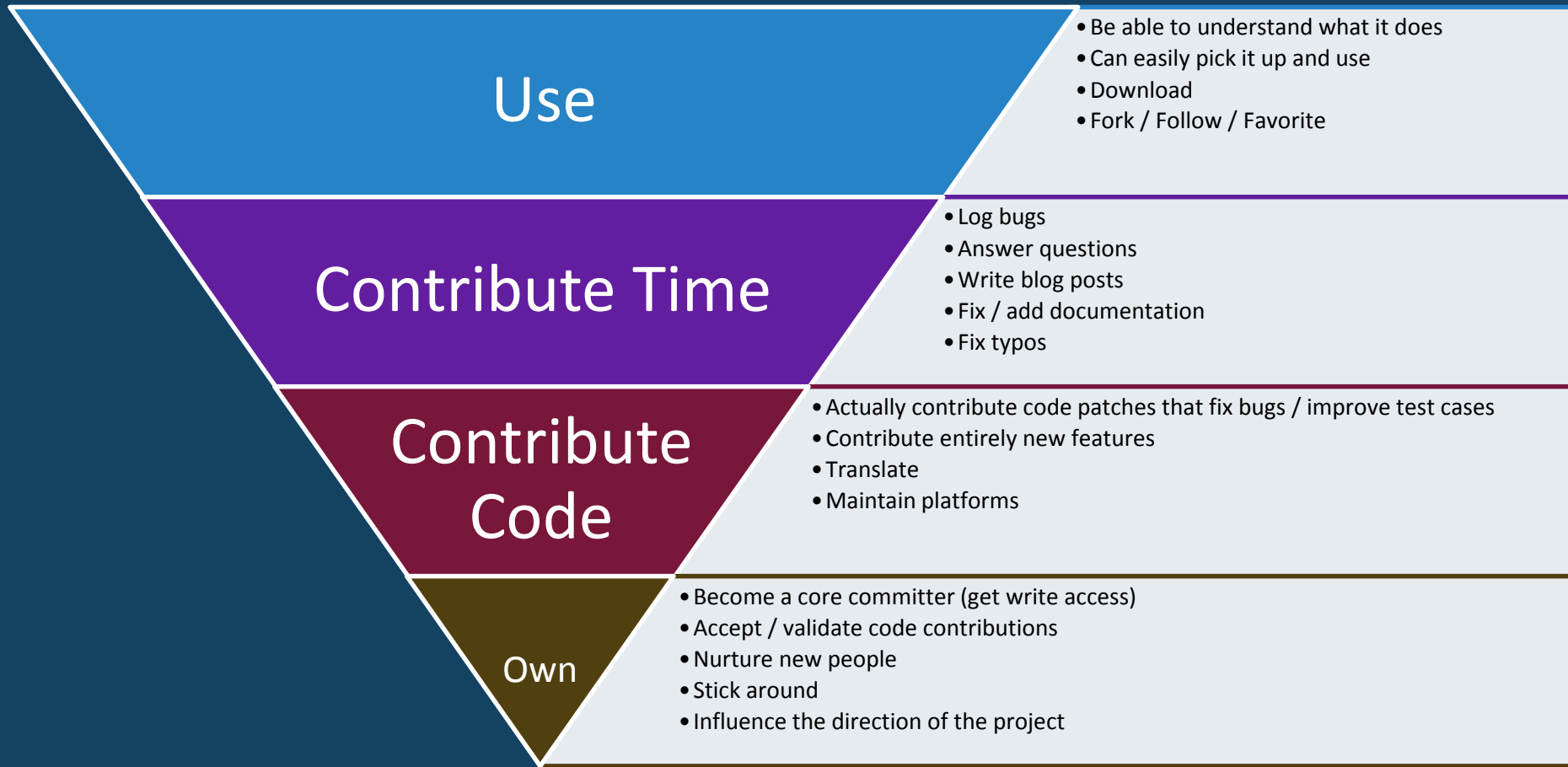
Make yourself known



# Benefits of contributing to open source

Be an authority and make  
money

# OSS Contribution Funnel



10

Questions to ask  
before consuming?

# What are people saying about it?

# 1

Read the reviews, blogs, tech journals,  
determine the reputation

Does it have a currently  
active community?

2

Are questions being asked + answered  
on StackOverflow, is there a Slack  
channel or a mailing list?

Do you have the skillset  
to maintain?

3

Before the contractor leaves ensure you  
have a training plan



Does it have good  
documentation?

4

Readme, Contribution Guidelines,  
Tutorials, Examples, Help + License

# How frequently are versions being released?

5

Major versions, breaking versions, patches, is there a roadmap etc.

# How many open issues?

6

The type of issues, how long and who is supporting?

# Is quality baked in?

# 7

Look for a good testing story,  
programming guidelines, a formal review  
process, Continuous Integration etc.



# Does it use open standards?

# 8

Ensure its not reinventing the wheel,  
interoperability with other software is  
key

# How secure is the code?

9

Use audit software to catalog open source and third party dependencies and remedy vulnerabilities and violations found

Should we make time to  
give back?

10

A great way to attract new talent and  
upskill existing

# Takeaways

1

Open source is as much a movement as it is a licensing approach

2

Open source and open standards are core to business software transformation and innovation

3

Do your due diligence before consuming code and have a plan for supporting it

Give something back to  
the community

