Navigating open source

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2019/4/20, TECH(K)NOW Day, Taipei

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Agenda

1. The numbers on open source

2. Case study: Kubernetes community and CNCF

3. How can you get involved?

Cheryl Hung (@oicheryl)

Ex-Google software engineer, now I speak on Kubernetes, cloud native and open source.
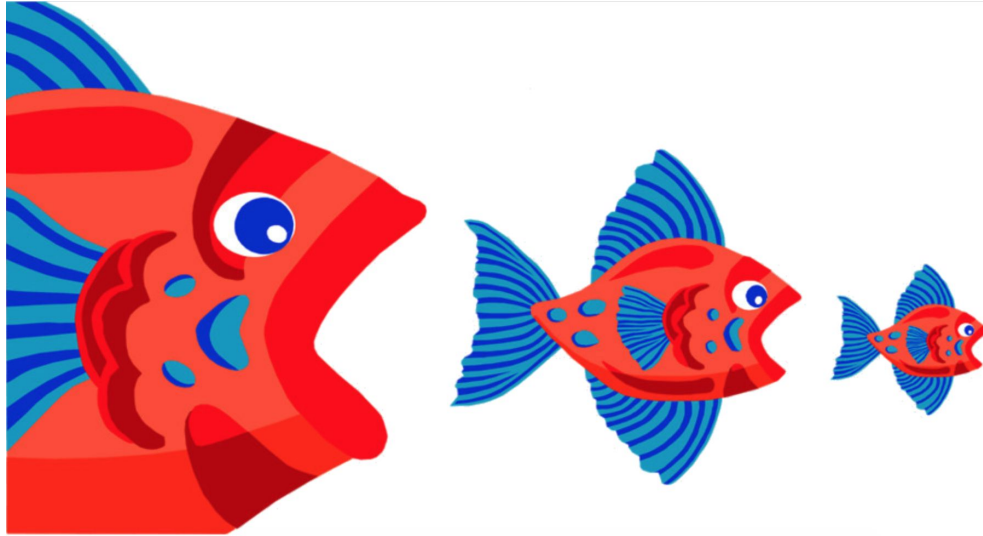
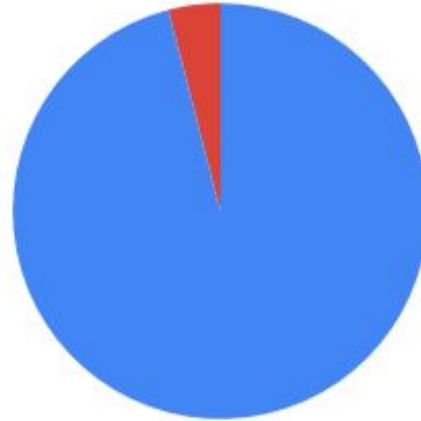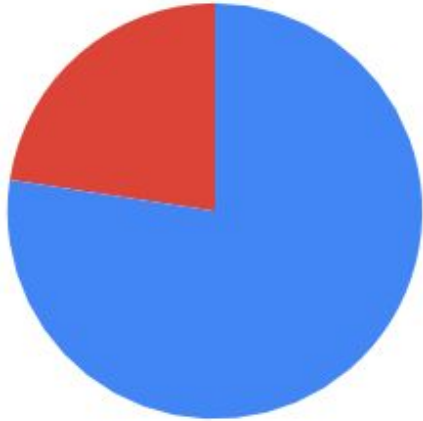Founder of Cloud Native London.

The numbers on open source

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Open source is eating the world

78% of companies use and 63% participate in open source.

Diversity in open source is even worse than tech overall

Women vs men developers, professional US (23%) and open source globally (4%)

Women are just as interested as men in contributing to open source, but are

2x
as likely to have a negative encounter

2x
as likely to seek help from people they already know
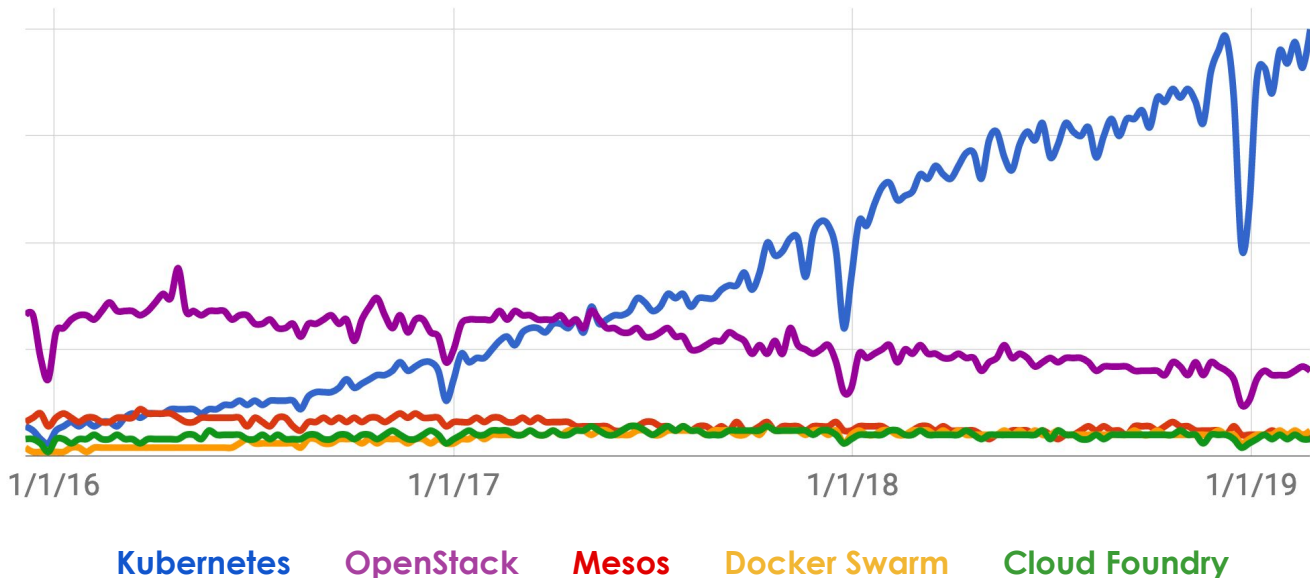
Impact is both personal and universal

"Half of contributors say that their open source work... [helped] get their current role"
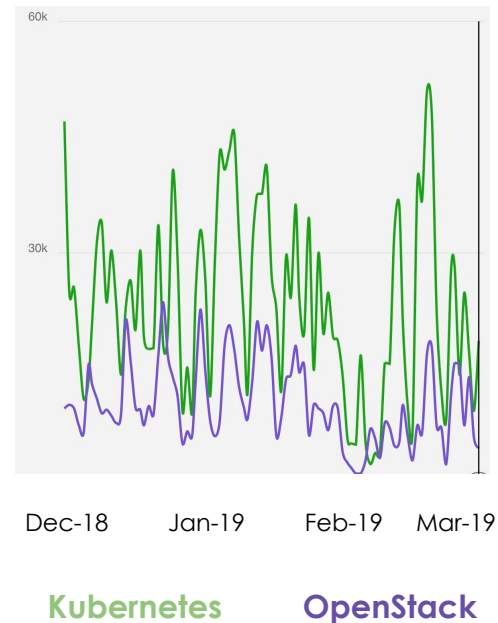
Case study: Kubernetes community and CNCF

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Kubernetes in Search Trends

Google Trends

WeChat

Kubernetes   OpenStack   Mesos   Docker Swarm   Cloud Foundry

Kubernetes   OpenStack

Github + Slack

77,370 commits

2,104 contributors

#kubernetes-users

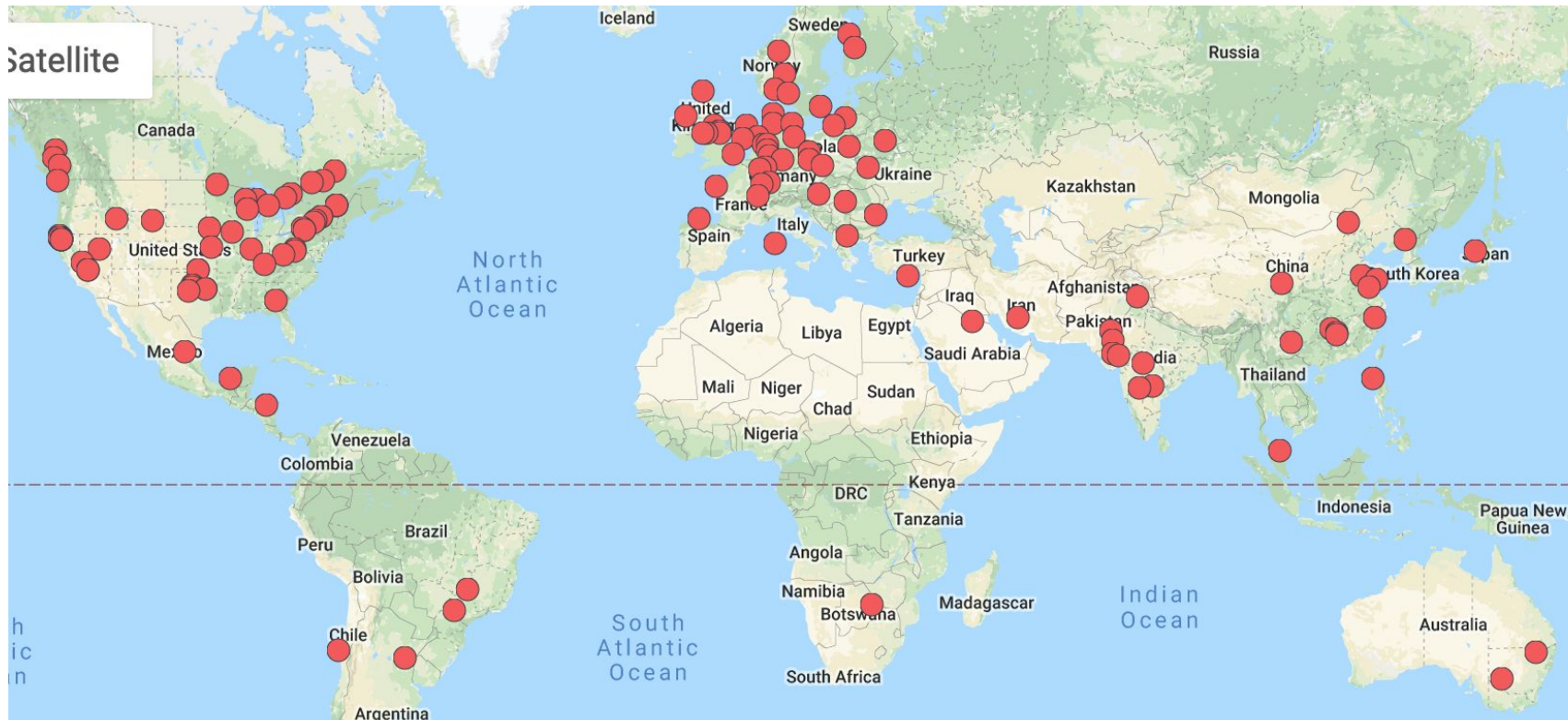☆ | 👤 61,804 | ⑂ 6 | Nex

⑂ 1,007 Open ✓ 44,832 Closed   Author ▾   Projects ▾   Labels ▾   Milestones ▾   Reviews ▾   Assignee ▾   Sort ▾

⑂ **kubelet: lookup node address for external provider if none is set** ●   `area/cloudprovider` `area/kubelet`   💬 5
`cncf-cla: yes` `kind/feature` `priority/important-longterm` `release-note` `sig/node` `size/L`
#75229 opened 2 hours ago by andrewsykim

⑂ **Add metrics to monitor the kubelet http server** ✕   `area/kubelet` `cncf-cla: yes` `kind/feature`   💬 7
`needs-priority` `ok-to-test` `release-note-none` `sig/node` `size/L`
#75228 opened 2 hours ago by haiyanmeng

⑂ **apiserver log streaming & de-flake audit test** ✕   `cncf-cla: yes` `kind/feature` `kind/flake`   💬 3
`priority/important-soon` `release-note` `sig/api-machinery` `sig/auth` `sig/testing` `size/XL`
#75226 opened 2 hours ago by tallclair   ⚰ v1.15

⑂ **Add bracket to the sig-window tag** ✓   `approved` `cncf-cla: yes` `kind/bug` `lgtm` `release-note-none`   💬 3
`sig/storage` `sig/windows` `size/XS`
#75225 opened 2 hours ago by jingxu97   ⚰ v1.14

⑂ **kubeadm: print key inside the upload-certs phase of init** ●   `approved` `area/kubeadm` `cncf-cla: yes`   💬 3
`do-not-merge/hold` `kind/bug` `lgtm` `priority/critical-urgent` `release-note-none` `sig/cluster-lifecycle` `size/S`
#75224 opened 2 hours ago by neolit123

⑂ **kubelet: include init containers when determining pod QoS** ●   `cncf-cla: yes` `lgtm` `needs-kind`   💬 2
`needs-priority` `release-note` `sig/apps` `sig/node` `size/M`
#75223 opened 3 hours ago by sjenning

⑂ **Remove Istio manifests and configure-helper code** ✕   `cncf-cla: yes`   💬 7
`do-not-merge/cherry-pick-not-approved` `kind/cleanup` `needs-priority` `ok-to-test` `release-note-none`
`sig/cluster-lifecycle` `size/XXL`
#75221 opened 3 hours ago by ostromart

⑂ **Fix the network policy tests.** ●   `cncf-cla: yes` `do-not-merge/cherry-pick-not-approved`   💬 4
`do-not-merge/release-note-label-needed` `needs-kind` `needs-ok-to-test` `needs-priority` `sig/testing` `size/XS`
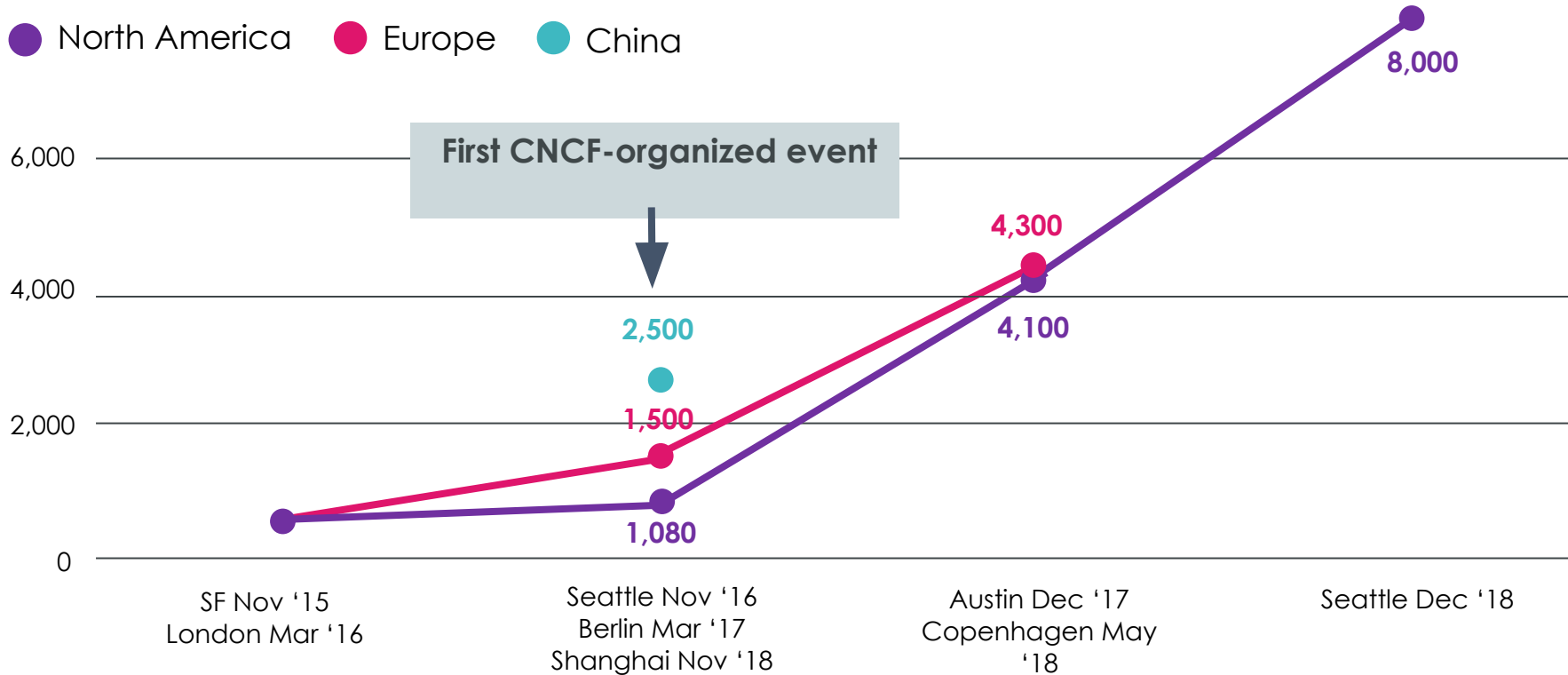#75219 opened 4 hours ago by lzang

Meetups in 48 countries, 106k members

KubeCon + CloudNativeCon Attendance

Legend: ● North America ● Europe ● China

First CNCF-organized event

8,000

4,300

4,100

2,500

1,500

1,080

SF Nov '15
London Mar '16

Seattle Nov '16
Berlin Mar '17
Shanghai Nov '18

Austin Dec '17
Copenhagen May '18

Seattle Dec '18

The mission of the CNCF is to foster and sustain open source projects around cloud native

Non-profit, part of Linux Foundation, founded December 2015
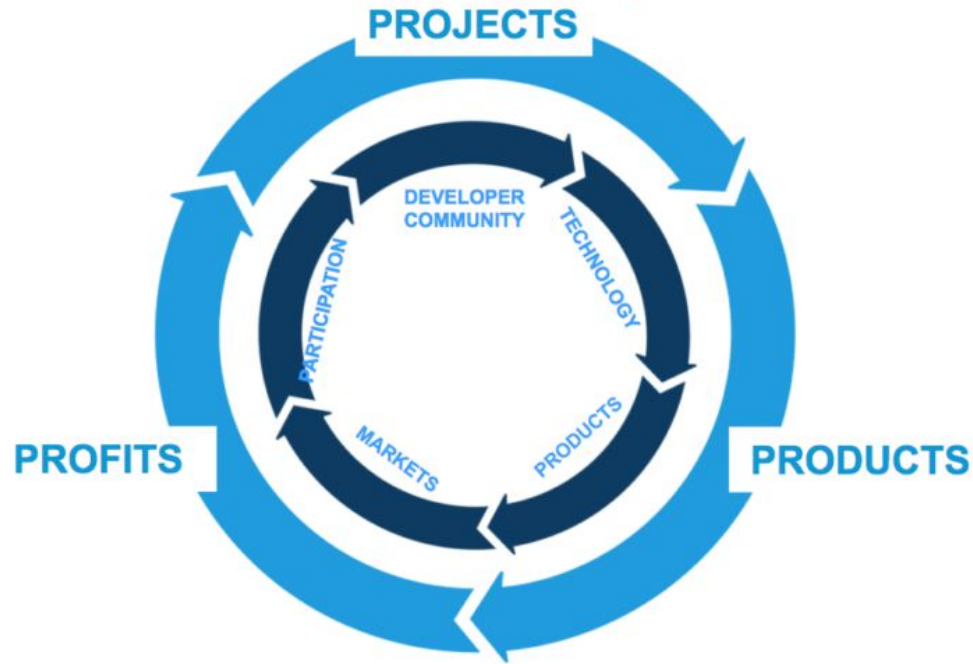
375+ Members

375+ Members (Silver 1)

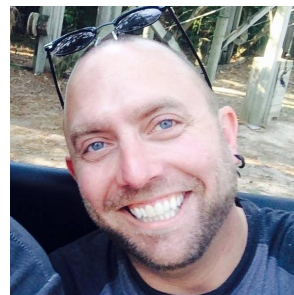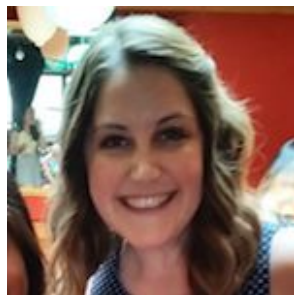# 375+ Members (Silver 2)

In practice

- Community

- Documentation

- Translation

- Security audits
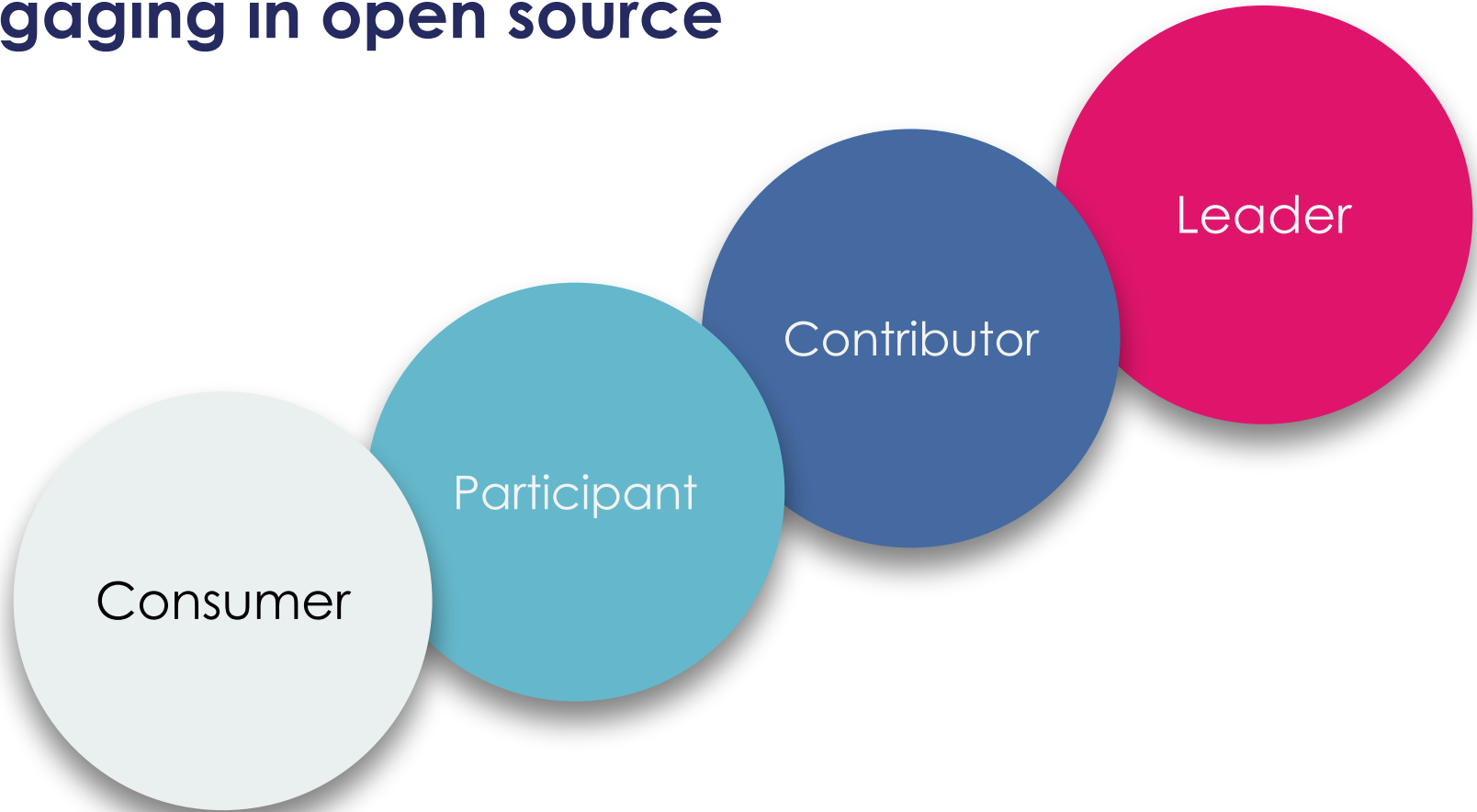
- Certification

- Legal

- Marketing & PR

- Events

8 staff

How can you get involved?

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Engaging in open source

Consumer

Participant

Contributor

Leader

Consumer

Evaluate and use open source tools

File bug reports

Attend events

Participant

Speak at meetups

Run events

Answer others' questions

Moderate discussions

Curate

Contributor

Write and translate documentation

Improve user experience and design

Code and review code

Improve tooling and testing

Leader

Organize issues

Mentor others

Governance

Formalize open source at your company

Challenges

- Many unspoken rules in open source

- High barrier to entry in large projects

- Very few independent maintainers (70% are

  employed)

1. Find an open source friendly employer

2. Find what you're good at, and specialize

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3. Find a sponsor

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Summary

The impact of open source is both personal and universal.

Understand how you want to engage.

Find sponsors to help you with the unspoken rules.

Resources

opensourcesurvey.org/2017

opensource.guide, todogroup.org, chaoss.community

github.com/cncf/contribute, cncf.io/about/join

Thanks!
Slides at oicheryl.com