

# Navigating the cloud native ecosystem

Cheryl Hung, Director of Ecosystem, CNCF  
GDG Cloud London, 29 Apr 2019

# Agenda

1. Kubernetes community and the CNCF
2. The numbers on open source
3. How you can get involved



# Cheryl Hung (@oicheryl)

Previously eng at Google,  
DevRel, PM, manager.

I **advocate** for and **build**  
**communities** around  
Kubernetes, cloud native  
and open source.



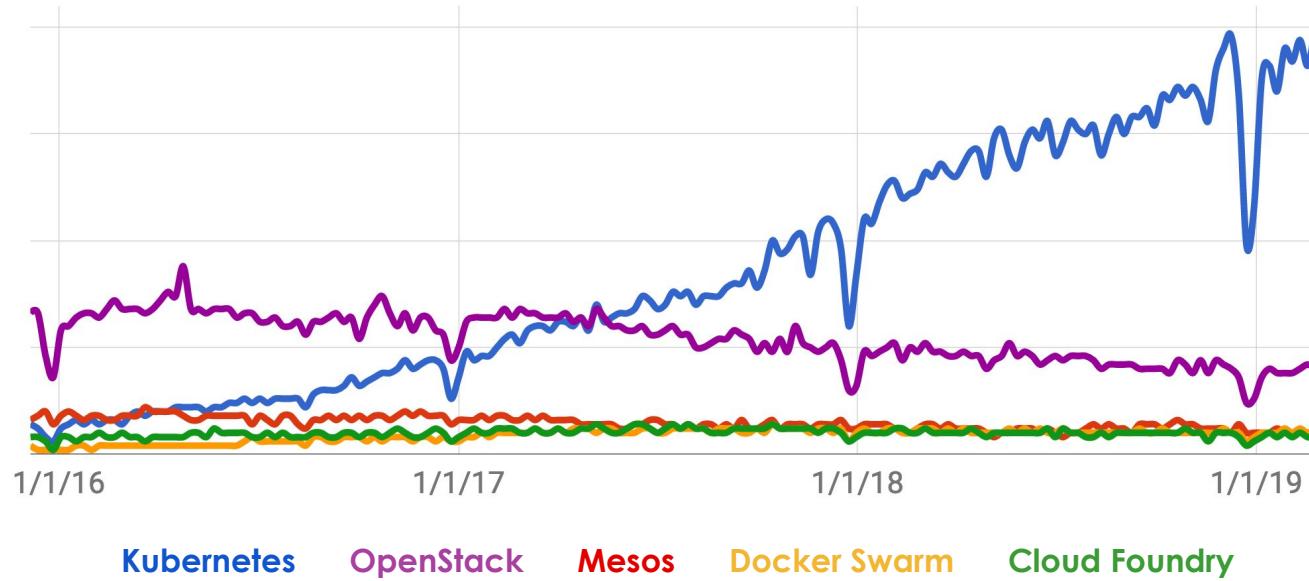
# Kubernetes community and the CNCF



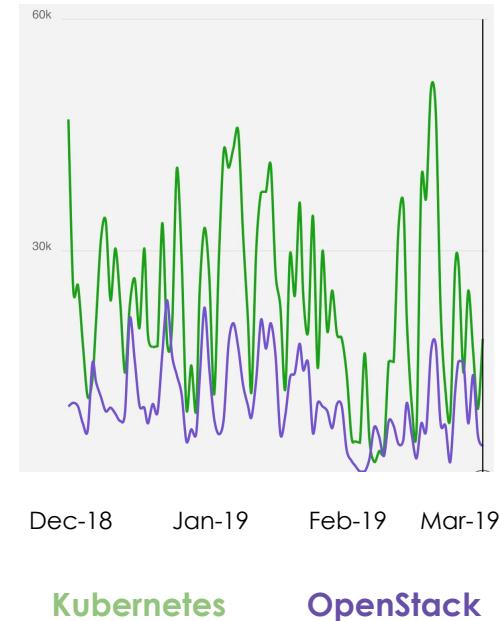
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# Kubernetes in Search Trends

Google Trends



WeChat



# Github + Slack

77,370 commits

2,104 contributors

#kubernetes-users

☆ | ⚡ 61,804 | ⚡ 6 | Ne

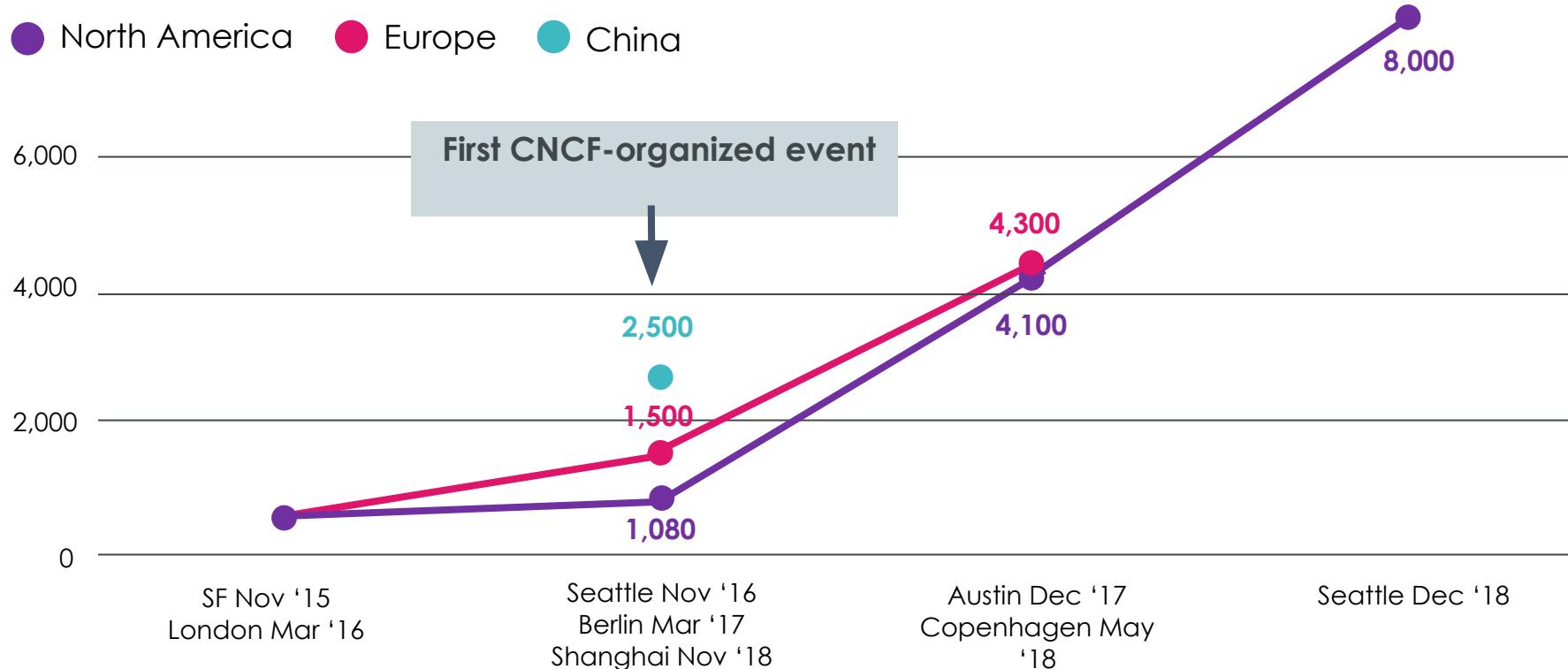
1,007 Open ✓ 44,832 Closed	Author ▾	Projects ▾	Labels ▾	Milestones ▾	Reviews ▾	Assignee ▾	Sort ▾
<p>kubelet: lookup node address for external provider if none is set ● area/cloudprovider area/kubelet cnf-cla: yes kind/feature priority/important-longterm release-note sig/node size/L #75229 opened 2 hours ago by andrewsykim</p> <p>Add metrics to monitor the kubelet http server ✗ area/kubelet cnf-cla: yes kind/feature needs-priority ok-to-test release-note-none sig/node size/L #75228 opened 2 hours ago by haiyanmeng</p> <p>apiserver log streaming &amp; de-flake audit test ✗ cnf-cla: yes kind/feature kind/flake priority/important-soon release-note sig/api-machinery sig/auth sig/testing size/XL #75226 opened 2 hours ago by tallclair v1.15</p> <p>Add bracket to the sig-window tag ✓ approved cnf-cla: yes kind/bug lgmt release-note-none sig/storage sig/windows size/XS #75225 opened 2 hours ago by jingxu97 v1.14</p> <p>kubeadm: print key inside the upload-certs phase of init ● approved area/kubeadm cnf-cla: yes do-not-merge/hold kind/bug lgmt priority/critical-urgent release-note-none sig/cluster-lifecycle size/S #75224 opened 2 hours ago by neolit123</p> <p>kubelet: include init containers when determining pod QoS ● cnf-cla: yes lgmt needs-kind needs-priority release-note sig/apps sig/node size/M #75223 opened 3 hours ago by sjenning</p> <p>Remove Istio manifests and configure-helper code ✗ cnf-cla: yes 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</p> <p>Fix the network policy tests. ● cnf-cla: yes do-not-merge/cherry-pick-not-approved 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</p>							



# Meetups in 48 countries, 108k members



# KubeCon + CloudNativeCon Attendance



# CNCF Mission: foster and sustain open source projects around cloud native



**kubernetes**



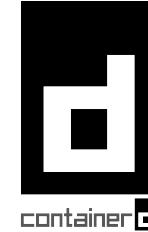
Prometheus



**envoy**



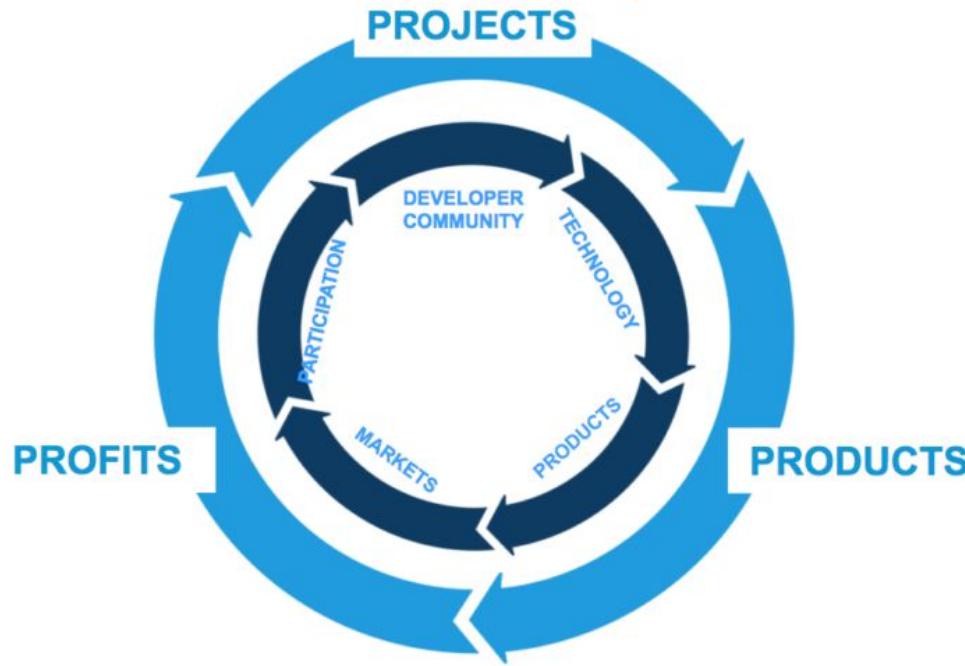
CoreDNS



**fluentd**



Non-profit, part of Linux Foundation, founded December 2015



# 375+ Members

## Platinum Members

Alibaba Cloud



DELL Technologies



Microsoft Azure

ORACLE

Pivotal



vmware

## Gold Members



AT&T

Baidu 百度

CapitalOne



HORTONWORKS

inspur 浪潮



Kingsoft Cloud  
Orchestrating a brighter world



Tencent Cloud

ZTE

## End User Members



Bloomberg



CapitalOne

ebay

DENSO

adidas

amadeus



cookpad

cruise

curve

doordash

form3

granular

psystems

cablelabs

cambia

cengn



globo.com

goldman sachs

indeed

intuit



mattermost

kuelap

la mobiliere

mastercard

nasdaq

the new york times

postfinance

pusher

reddit

ricardo.ch

golden gate university

internet

Morgan Stanley

MUFG

NAIC  
National Association of Insurance Commissioners

ncsoft

@Pinterest

salesforce

shopify

showmax

simple nexus

spredfast

statefarm

stix

testfire labs

textkernel

thredup

steelhouse

Spotify

squarespace

state street

tradeshift

twitter

advanced research computing technology services university of michigan

wikimedia foundation

yahoo japan

ticketmaster

two sigma

werkspot

wework

woorank

workday

wpengine

zalando

sel

advanced research computing technology services university of michigan

wikimedia foundation

## Academic/Nonprofit



# 375+ Members (Silver 1)



# 375+ Members (Silver 2)



# In practice

- Community
- Documentation
- Translation
- Security audits
- Certification
- Legal
- Marketing & PR
- Events



# Eight staff



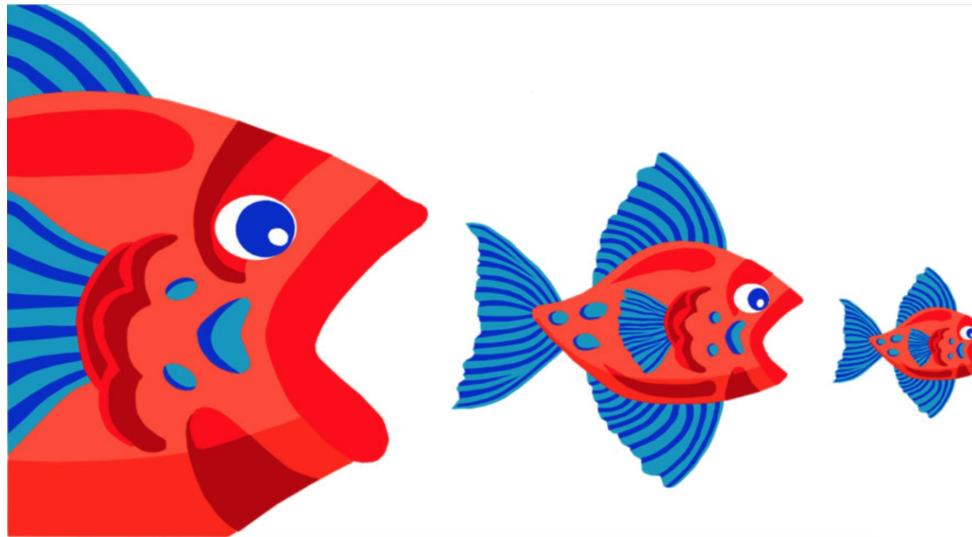
# The numbers on open source



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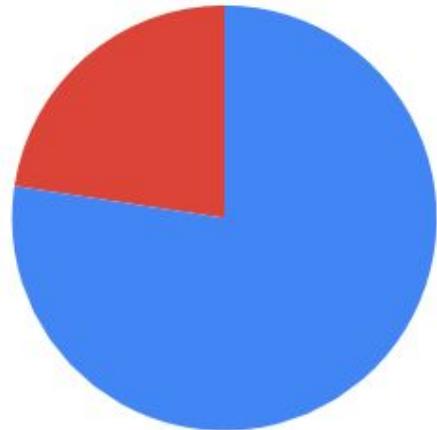
# Open source is eating the world

78% of companies [use](#) and 63% [participate](#) in open source.

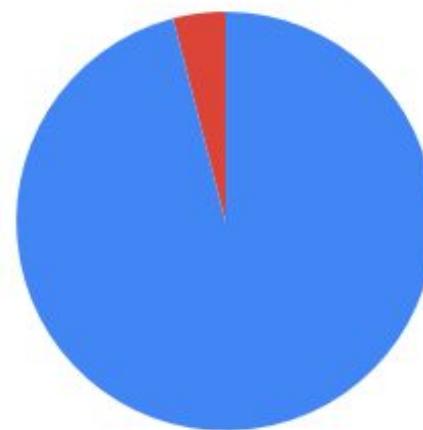


# But open source is (even) less representative than tech overall

Professional - 23%



Open source - 4%



Developers:  
Women  
Men



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

2x

as likely to  
have a  
negative  
encounter

50%

less likely to  
ask for help  
in a public  
forum

50%

less likely to  
receive  
unsolicited  
help



# Impact is both personal and universal

“Half of contributors say that their open source work... [helped] get their current role”

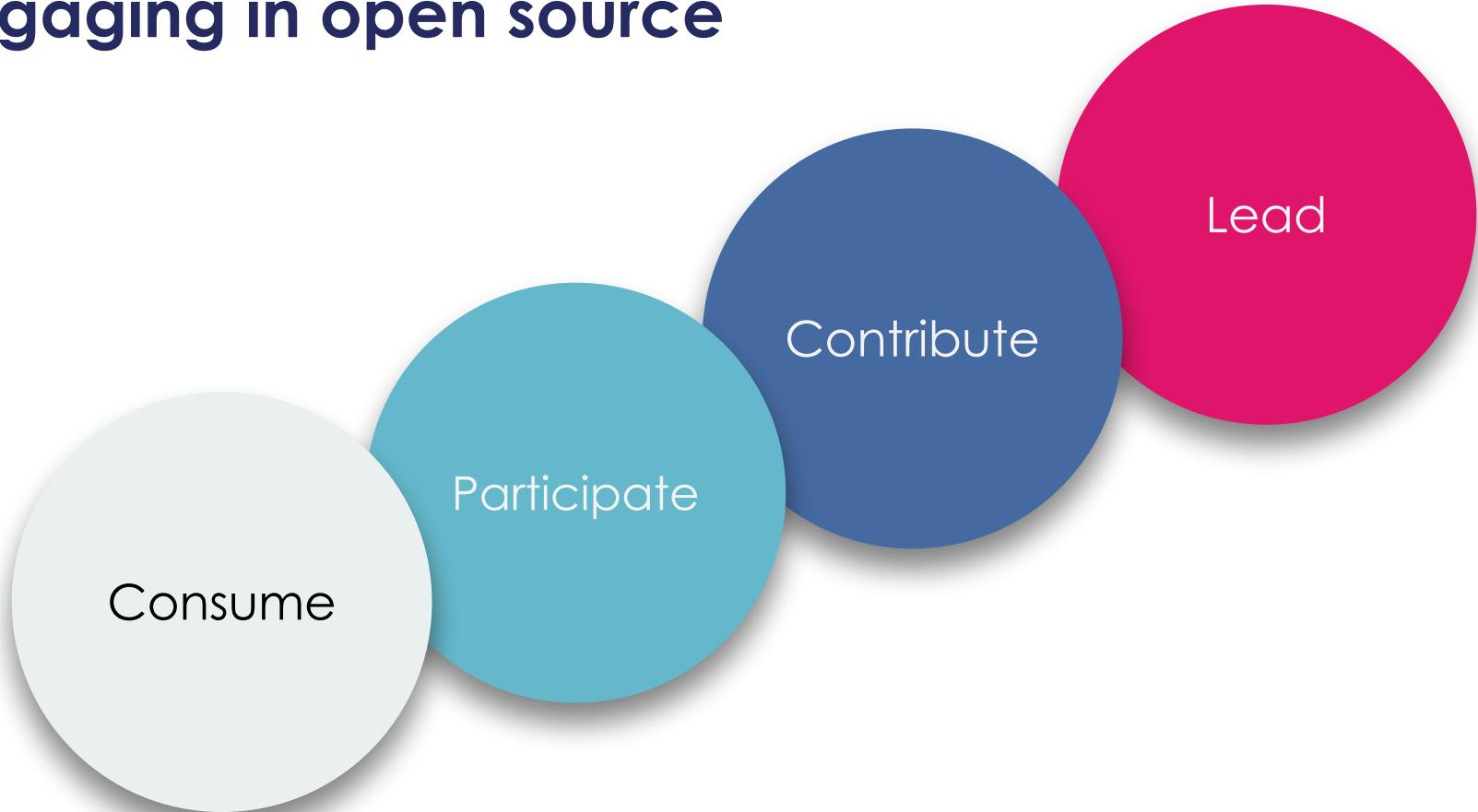


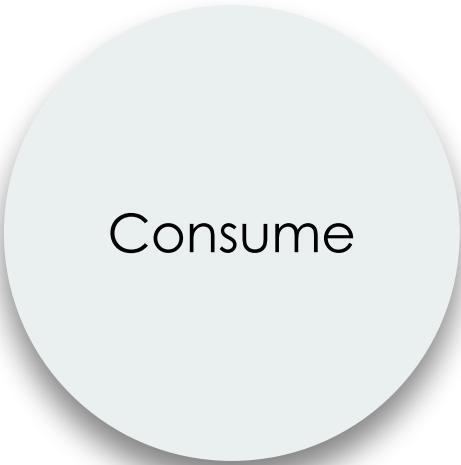
# How you can get involved



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# Engaging in open source





Consume

Evaluate and use open source  
tools

Attend events

File bug reports

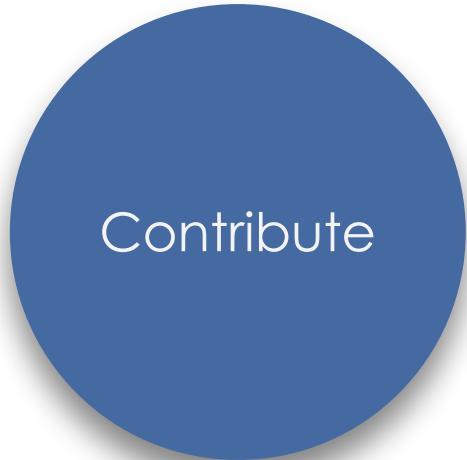




Participate

- Speak at meetups
- Run events
- Answer questions online
- Curate information





Write and translate docs  
Improve user experience and design  
Code and review code  
Improve tooling and testing





Organize issues  
Mentor others  
Governance  
Moderate discussions  
Formalize open source at your  
company



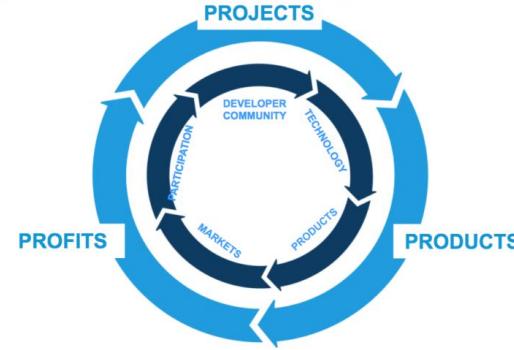
# Challenges

- Many unspoken rules in open source
- High barrier to entry in large projects
- Very few independent maintainers (70% are employed)



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# 1. Find an open source friendly employer



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



### 3. Find a sponsor



# Summary

The impact of open source is both personal and universal.

Find what you're good at, and specialize.

Find sponsors to help you with the unspoken rules.



# Resources

[opensourcesurvey.org/2017](https://opensourcesurvey.org/2017)

[opensource.guide](https://opensource.guide), [todogroup.org](https://todogroup.org),  
[chaoss.community](https://chaoss.community)

[github.com/cncf/contribute](https://github.com/cncf/contribute), [cncf.io/about/join](https://cncf.io/about/join)



First Wednesday of  
every month



Wednesday 1 May:  
Microsoft, Finimize,  
ForgeRock



# Thanks!

Slides at [oicheryl.com](http://oicheryl.com)



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