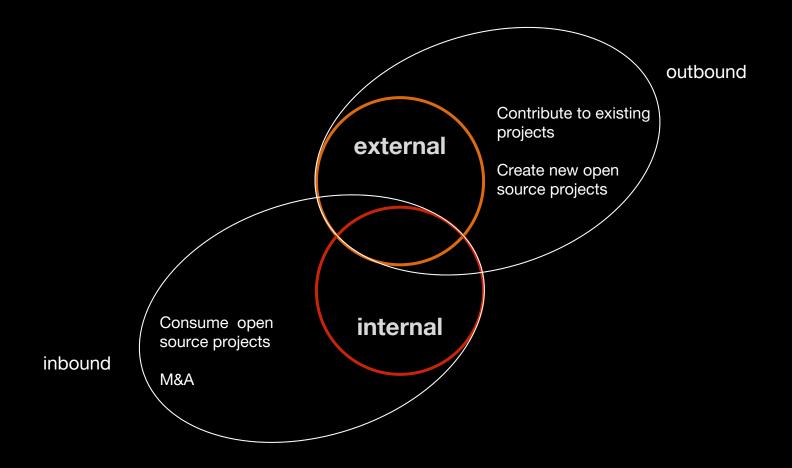
# Building a Collaborative Open Source Program

Brian Hsieh, Uber

Manrique Lopez, Bitergia









# Collaboration: The Nature of an Open Source Program



Complex

Many areas of expertise

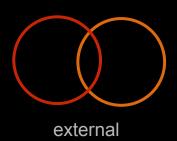
Multiple teams



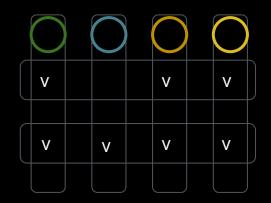
## Program Structure

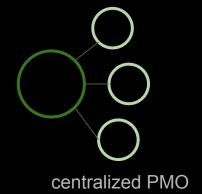
it decides your collaboration type

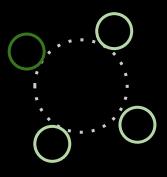














coordinated PMO

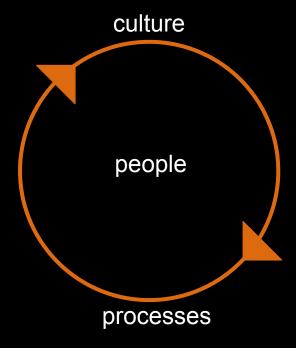
## Collaboration Type: Control Level

decide your process



process is the key to organizing and managing work

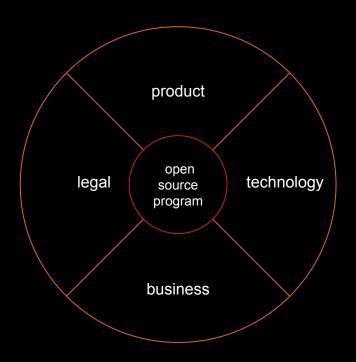




processes driven by the culture for the people just enough process for planning and execution



## the stakeholders



interconnected matrix

both internal and external

cross-functional governance

coordinated project execution



it's complicated



inclusive, everyone can contribute committee based, meritocracy decision making process

safe environment to collaborate



and then...
when it's somewhat successful



350+

Over 350 projects and repositories on GitHub.

Open source 1 project per week since 2012! (What!@#\$!@??)

3

Community projects.









#### so Brian....

What's the strategy?

How is the projects doing?

What's the value?

How big is the community?

Did the foundation brings value to us?

Should we continue doing it?

How can we improve?



#### and Brian...

I don't think we should continue doing it.

Hosting meetups is waste of money and doesn't help our open source projects.

Sonponsing that conference is definitely going to increase project adoption.

It costs too much to maintain open source project.

People love our open source project. I think our hiring number has grown because of it.

Only project with high code quality is good for us!

Why did you even approve open source that project? It's so bad.

....



"Opinions are a dime a dozen and nearly everyone will share theirs with you. Many will state them as if they are facts. Don't mistake opinions for facts." ~ Ray Dalio



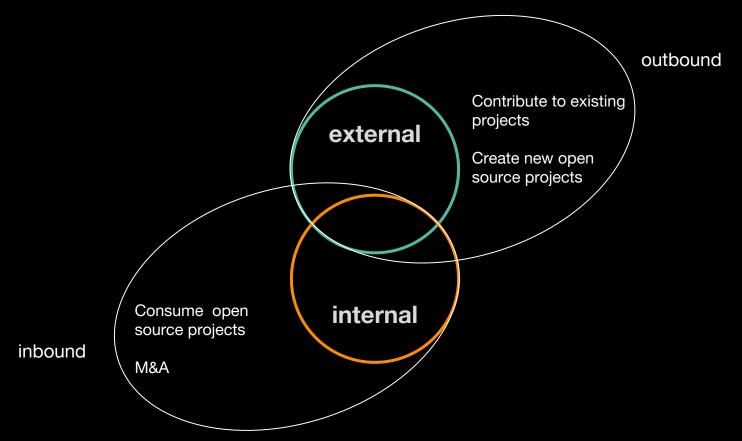
fact: data and analytics



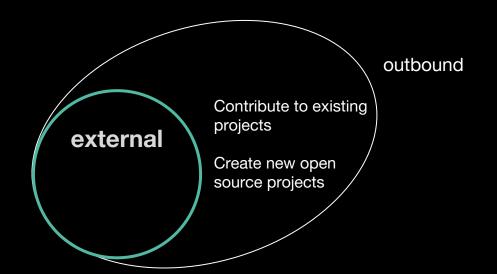
"Without data, you are just another person with an opinion"

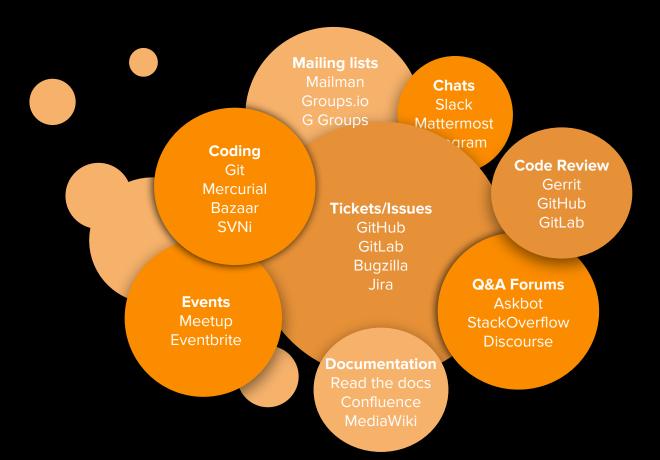
W. Edwards Deming















#### Source Code

Git, Baazar\*, Mercurial\*
(\*exporting to git)



#### Tickets / issues

Bugzilla, GitHub Issues, GitLab Issues, JIRA, Launchpad, Phabricator Maniphest, Redmine



#### Code Review

Gerrit, GitHub Pull Requests, GitLab Merge Requests



#### Continuous Integration

Jenkins



#### Mailing lists / Forums

Askbot, Discourse, Gmane, Hyperkitty, mbox files, NNTP, Pipermail, Stack Exchange



#### Chat

IRC (Supybot), Slack, Telegram



#### Downloads

Apache http logs



#### Wiki

Confluence, MediaWiki



#### Meetings

Meetup, Mozilla Reps events



#### Others

crates.io, Docker Hub, <u>RSS</u>, Twitter



Data sources supported by **CHAOSS/GrimoireLab** project and **Bitergia Analytics** 



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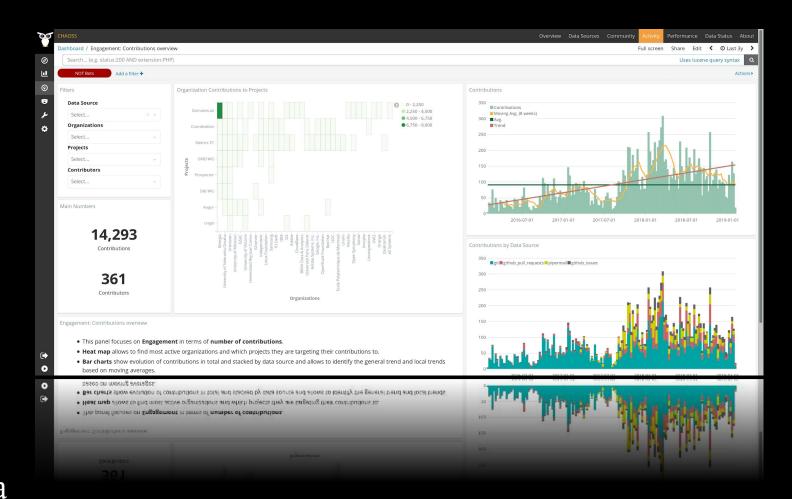


### Community



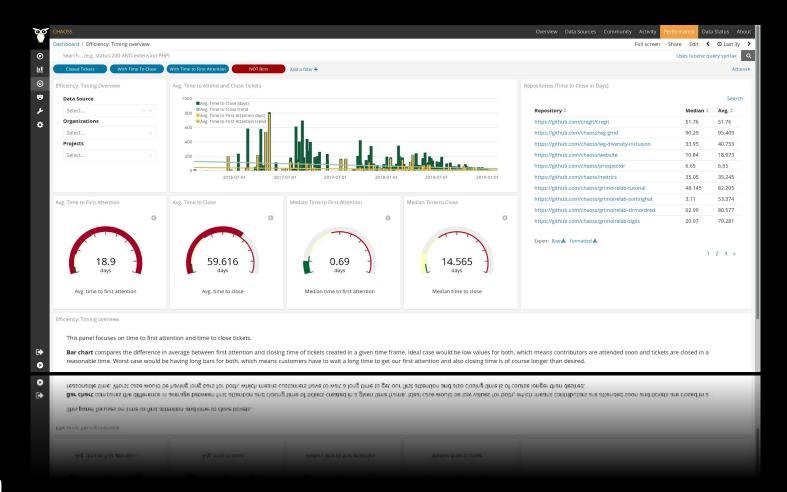


### Activity





#### Performance





What do I do with all these data?

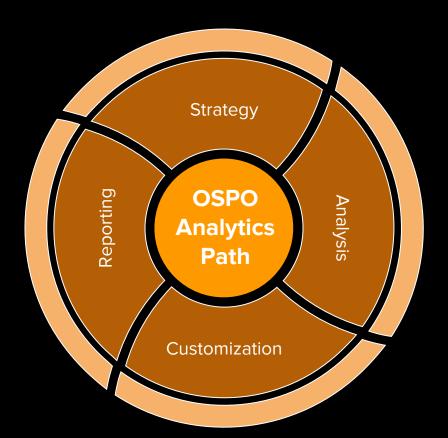






"Strategy without tactics is the slowest route to victory. Tactics without strategy is the noise before defeat"

Sun Tzu







What are your goals?
What do you want to achieve?

Transparency
Self awareness
Governance support
Motivation
Talent attraction

. . .

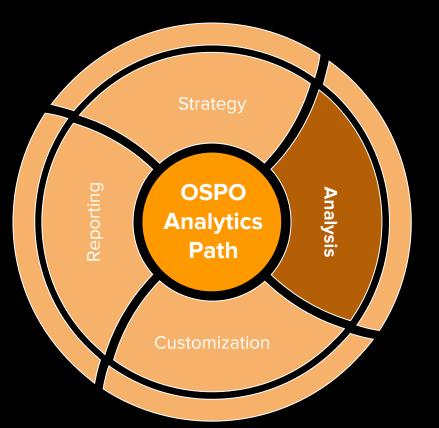


**GOALS** 

Worldwide talent attraction

Charming company



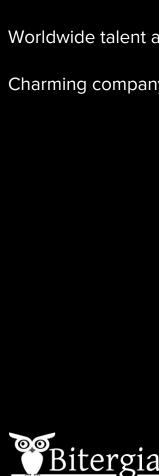


#### Turn goals into questions

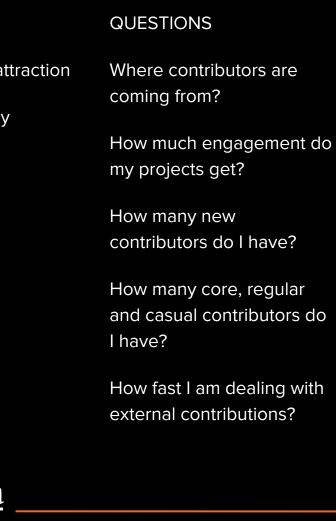
About community
About activity
About performance

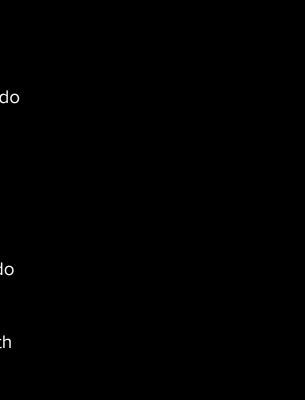


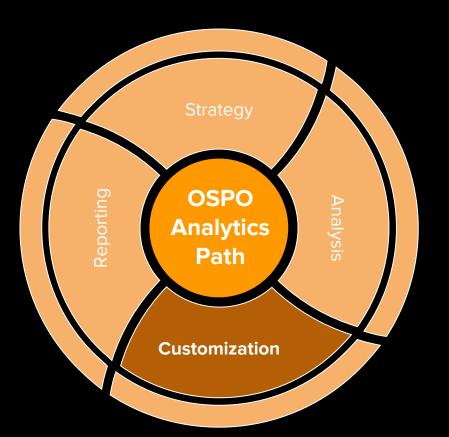
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**GOALS** 





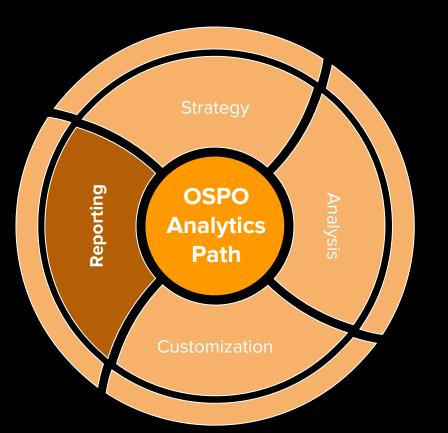


## Adapt the tools to answer those questions

Don't start from scratch
Try to reuse existing tools
Try to contribute to existing tools
Don't go alone!



GOALS **QUESTIONS METRICS?** GrimoireLab Where contributors are Worldwide talent attraction chaoss.github.io/grimoirelab coming from? Charming company How much engagement do +30 data sources supported my projects get? Predefined and customizable panels collections How many new contributors do I have? Contributors multi-identity management How many core, regular Rest API for data consumption and casual contributors do I have? 100% free, open source software How fast I am dealing with external contributions?



### **Uniform and consistent reporting**

Single entry point
Allow deeper digging
Transparency matters



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Worldwide talent attraction

Charming company

Where contributors are coming from?

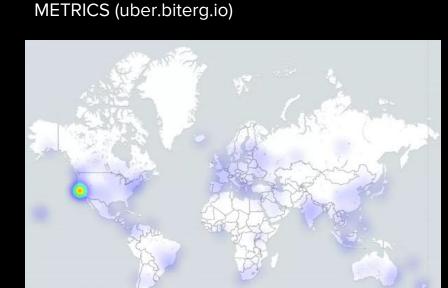
QUESTIONS

How much engagement do my projects get?

How many new contributors do I have?

How many core, regular and casual contributors do I have?

How fast I am dealing with external contributions?



Worldwide talent attraction

Charming company

**GOALS** 

QUESTIONS

METRICS (uber.biterg.io)

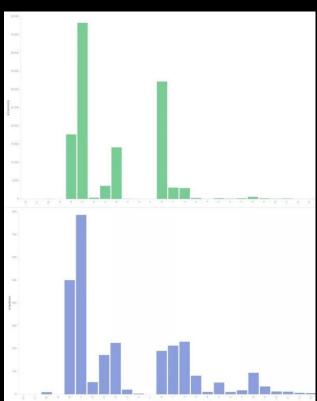
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Charming company

QUESTIONS

METRICS (uber.biterg.io)

Worldwide talent attraction

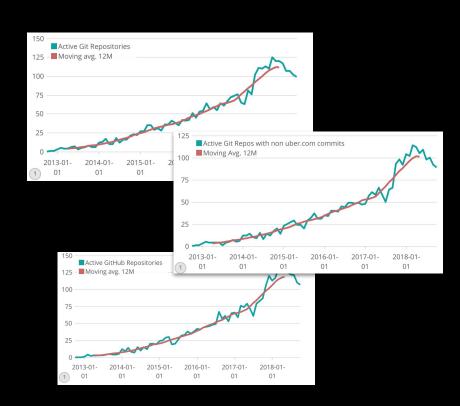
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Charming compan	
Bitergia	
Billergia	

Worldwide talent attraction

**QUESTIONS** Where contributors are coming from?

How much engagement do my projects get?

How many new contributors do I have?

How many core, regular and casual contributors do I have?

How fast I am dealing with external contributions?

**Time** 

METRICS (uber.biterg.io)

Worldwide talent attraction

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QUESTIONS
Where contributors are coming from?
How much engagement

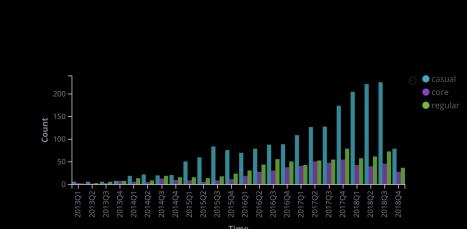
How many new

I have?

engagement do my projects get?

contributors do I have? How many core, regular and casual contributors do

How fast I am dealing with external contributions?



METRICS (uber.biterg.io)

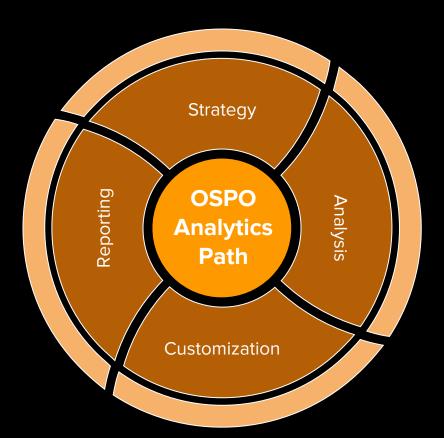


Worldwide talent attraction	Where contributors are coming from?				
Charming company	coming from:				
	How much engagement do my projects get?				
	How many new				
	contributors do I have?	NOT author, org. nume: "Ubes" Add a filter +  Efficiency Closing GitHub Pull Requests  Organizations	REI 1.75	Repositories	
	How many core, regular and casual contributors do I have?	Frigets Select Assiry Cannot Charge form  Time to Marge  Chicago Cis  Charge Congnitate  Congnitate	100   100	Repository © uberviberSignature uberviberSignature uberviberSignature ubervibersines disk ubercherami-cleint go trirhrwihrtive node ubervibersines	Median Time Open (da 230.835 118.62 55.32 54.525 38.405 38.405 37.16 34.84 32.44
	How fast I am dealing with external contributions?	recipies Select.  Medium Time to Marge (Duys)	75 50 25 2017-07-01 2018-07-01 2018-07-01 2018-07-01	Export: Raw ▲ Formatted ▲	1 2 3 4 5
	external contributions:	Time to Marge  Lead Time  100  100  100  100  100  100  100  1	Nys. Lead Theo dayol Nys. Lead Theo dayol	### 17.78 ###################################	2 3 4 5
Bitergia		Median Time to Merge (Days)	2017-07-01 2018-01-01 2018-01-01		

**METRICS** 

QUESTIONS

**GOALS** 







Community Health Analytics for Open Source Software

chaoss.community

GrimoireLab is one of CHAOSS software projects



chaoss.github.io/grimoirelab















## opensource.uber.com

Let us know how we can collaborate. Let's have fun and make an impact.



@briankhsieh



opensource.uber.com facebook.com/uberopensource



bitergia.com



@jsmanrique

# Thank you



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