Building a Collaborative Open Source Program

Brian Hsieh, Uber

Manrique Lopez, Bitergia
Consume open source projects

Contribute to existing projects

Create new open source projects

M&A

consume open source projects
Collaboration: The Nature of an Open Source Program

- Complex
- Many areas of expertise
- Multiple teams
Program Structure

it decides your collaboration type

internal

external

team

matrix

centralized PMO

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

open source program

legal

product

technology

business

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
Over 350 projects and repositories on GitHub.

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

Sponsoring 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
Consume open source projects
M&A

Contribute to existing projects
Create new open source projects

inbound

external

outbound

internal
Contribute to existing projects
Create new open source projects
<table>
<thead>
<tr>
<th>Source Code</th>
<th>Mailing lists / Forums</th>
<th>Meetings</th>
<th>Tickets / issues</th>
<th>Code Review</th>
<th>Continuous Integration</th>
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<tbody>
<tr>
<td>Git, Baazar*, Mercurial* (*exporting to git)</td>
<td>Askbot, Discourse, Gmane, Hyperkitty, mbox files, NNTP, Pipermail, Stack Exchange</td>
<td>Meetup, Mozilla Reps events</td>
<td>Bugzilla, GitHub Issues, GitLab Issues, JIRA, Launchpad, Phabricator Maniphest, Redmine</td>
<td>Gerrit, GitHub Pull Requests, GitLab Merge Requests</td>
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<td>Chat</td>
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<td>IRC (Supybot), Slack, Telegram</td>
<td>Apache http logs</td>
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<td>Others</td>
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<td>crates.io, Docker Hub, RSS, Twitter</td>
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Data sources supported by **CHA OSS**/**GrimoireLab** project and **Bitergia Analytics**
Community
This panel focuses on Engagement in terms of number of contributions.

The heat map allows to find most active organizations and which projects they are targeting their contributions to.

Bar charts show evolution of contributions in total and stacked by data source and allows to identify the general trend and local trends based on moving averages.
Performance

This panel focuses on time to first attention and time to close tickets.

**Bar chart** compares the difference in average between first attention and closing time of tickets created in a given time frame. Ideal case would be low values for both, which means contributors are attended soon and tickets are closed in a reasonable time. Worst case would be having long bars for both, which means customers have to wait a long time to get their first attention and also closing time is of course longer than desired.
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
GOALS

Worldwide talent attraction
Charming company

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?
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!
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METRICS?
+30 data sources supported
Predefined and customizable panels collections
Contributors multi-identity management
Rest API for data consumption
100% free, open source software

GOALS
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GrimoireLab
chaoss.github.io/grimoirelab
Uniform and consistent reporting

Single entry point
Allow deeper digging
Transparency matters
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METRICS
Community Health Analytics for Open Source Software

chaoss.community

GrimoireLab is one of CHA OSS software projects

chaoss.github.io/grimoirelab
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