

# CHA-IO-SS

[Community Health Analytics for InnerSource  
and Open Source Software]

*CHAOSScon 2020, Brussels*

Daniel Izquierdo  
@dizquierdo

**Daniel Izquierdo**

@dizquierdo

@Bitergia co-founder. Open and Inner Source advocate. Love data analytics. Python developer.



<https://bitergia.com>

<https://chaoss.community>

<https://innersourcecommons.org>

/innersource

...use of open source best practices for software development within the confines of an organization.

*[innersourcecommons.org](https://innersourcecommons.org)*



/innersource

**Culture**

**Communication**

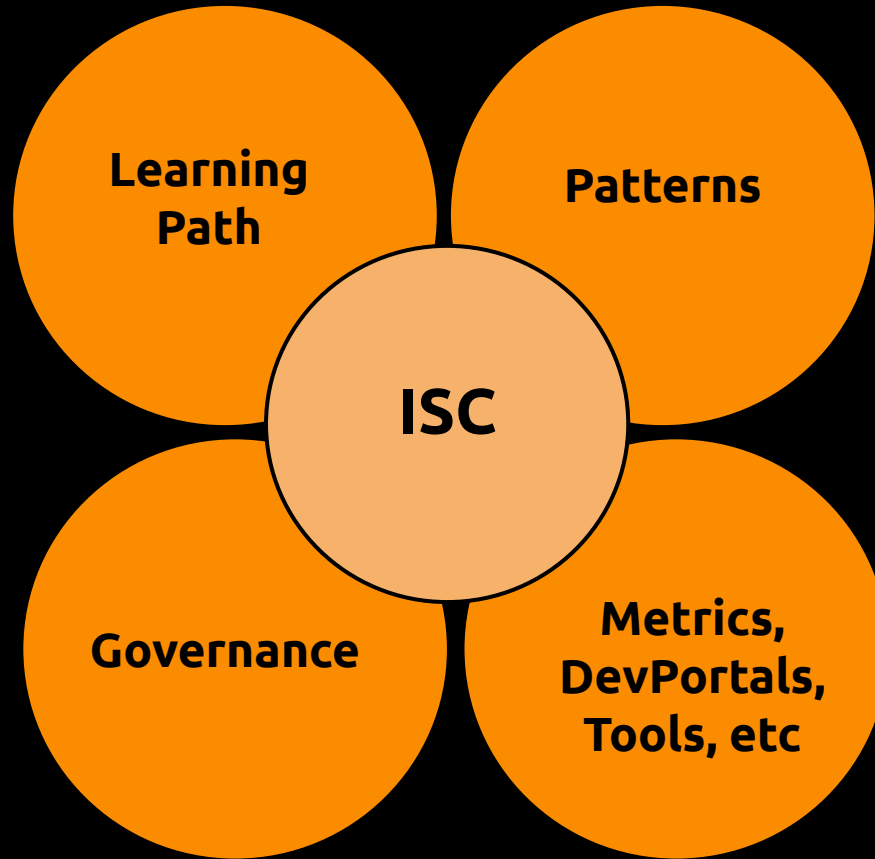
**Transparency**

**Collaboration**

**Community**

**Meritocracy**

/working groups



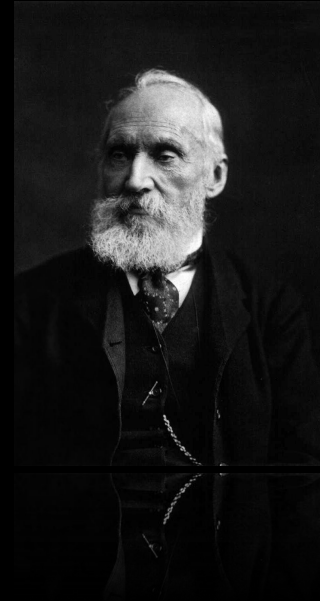
/data



“To measure is to know”

“If you can not measure it,  
you cannot improve it”

Lord Kelvin





CHAOCSS

&

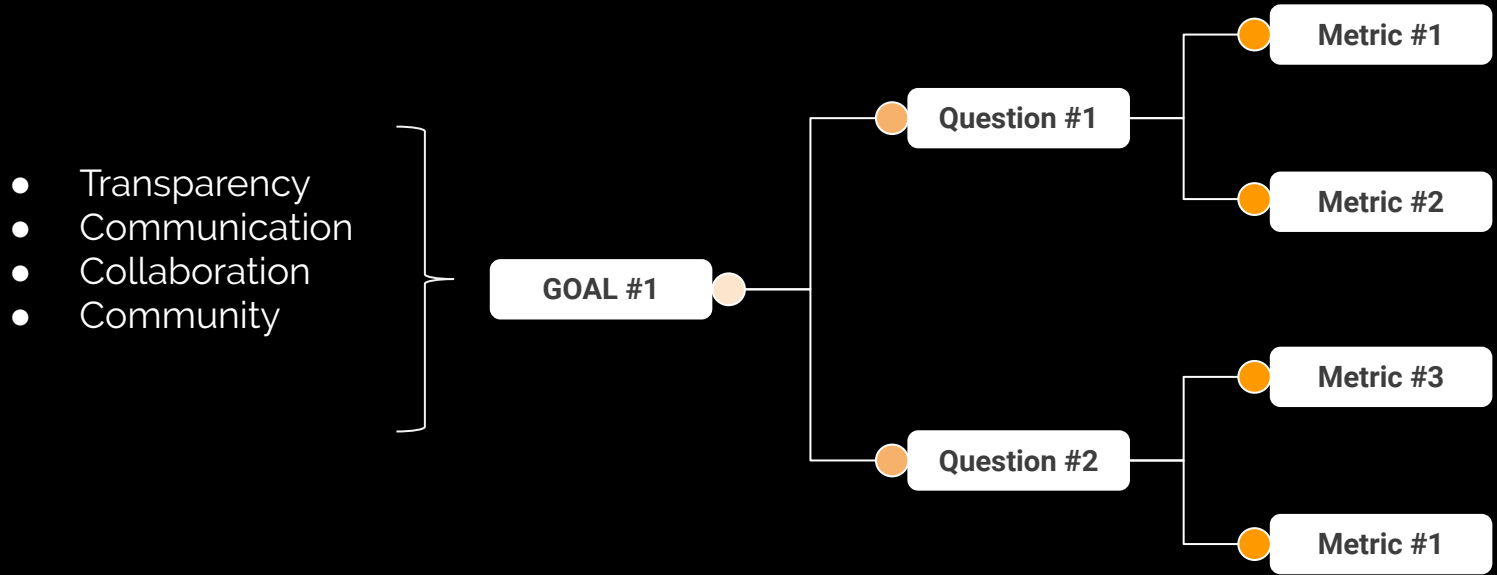


?



Different business goals, but similar metrics and tooling

We need now to understand how to measure the basics of open source (main principles of InnerSource):



OSS Projects / OSPO Use Case  $\Leftrightarrow$  IS Projects / Product Development

## OSS Projects / OSPO Use Case

Lead Time / Process analysis  
Responsiveness  
Projects Lifecycle/Liveliness

Community Engagement  
Organizational diversity  
Contributors Growth

Pony/Elephant/Bus Factor  
Territoriality

<https://chaoss.github.io/grimoirelab-sigils/>

## IS Projects / Product Development

Lead Time/Code Review **Effectiveness** / BMI  
Responsiveness by Business Units (BUs)  
Internal Projects **Lifecycle**

Business Units/Developers Engagement  
BUs diversity / **Reusability**  
Internal Projects **Adoption**

**Risk** Analysis  
Territoriality

<https://chaoss.github.io/grimoirelab-sigils/>

## OSS Projects / OSPO Use Case

Lead Time / Process analysis  
Responsiveness  
Projects Lifecycle/Liveliness

Community Engagement  
Organizational diversity  
Contributors Growth

Pony/Elephant/Bus Factor  
Territoriality

<https://chaoss.github.io/grimoirelab-sigils/>

## IS Projects / Product Development

Lead Time/Code Review **Effectiveness** / BMI  
Responsiveness by Business Units (BUs)  
Internal Projects **Lifecycle**

Business Units/Developers Engagement  
BUs diversity / **Reusability**  
Internal Projects **Adoption**

**Risk** Analysis  
Territoriality

<https://chaoss.github.io/grimoirelab-sigils/>

## OSS Projects / OSPO Use Case

Lead Time / Process analysis  
Responsiveness  
Projects Lifecycle/Liveliness

Community Engagement  
Organizational diversity  
Contributors Growth

Pony/Elephant/Bus Factor  
Territoriality

## IS Projects / Product Development

Lead Time/Code Review **Effectiveness** / BMI  
Responsiveness by Business Units (BUs)  
Internal Projects **Lifecycle**

Business Units/Developers Engagement  
BUs diversity / **Reusability**  
Internal Projects **Adoption**

**Risk** Analysis  
Territoriality

<https://chaoss.github.io/grimoirelab-sigils/>

<https://chaoss.github.io/grimoirelab-sigils/>

## OSS Projects / OSPO Use Case

Lead Time / Process analysis  
Responsiveness  
Projects Lifecycle/Liveliness

Community Engagement  
Organizational diversity  
Contributors Growth

Pony/Elephant/Bus Factor  
Territoriality

<https://chaoss.github.io/grimoirelab-sigils/>

## IS Projects / Product Development

Lead Time/Code Review **Effectiveness** / BMI  
Responsiveness by Business Units (BUs)  
Internal Projects **Lifecycle**

Business Units/Developers Engagement  
BUs diversity / **Reusability**  
Internal Projects **Adoption**

**Risk** Analysis  
Territoriality

<https://chaoss.github.io/grimoirelab-sigils/>

Short Term Business Goal: Increase InnerSource projects engagement within the organization

Question #1: Which projects contributors/BUs interacts most with?

Question #2: What is the general trend my contributors follow across data sources?

Question #3: What path are my contributors following when getting involved with InnerSource projects?

**Proposed panel: engagement panel**  
**Proposed panel: lifecycle**



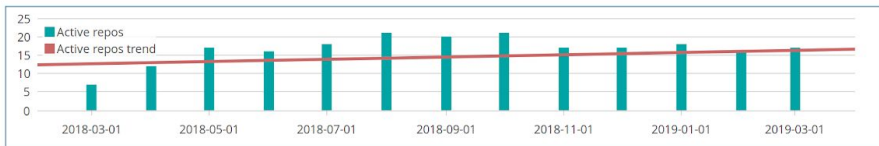


Search... (e.g. status:200 AND extension:PHP)

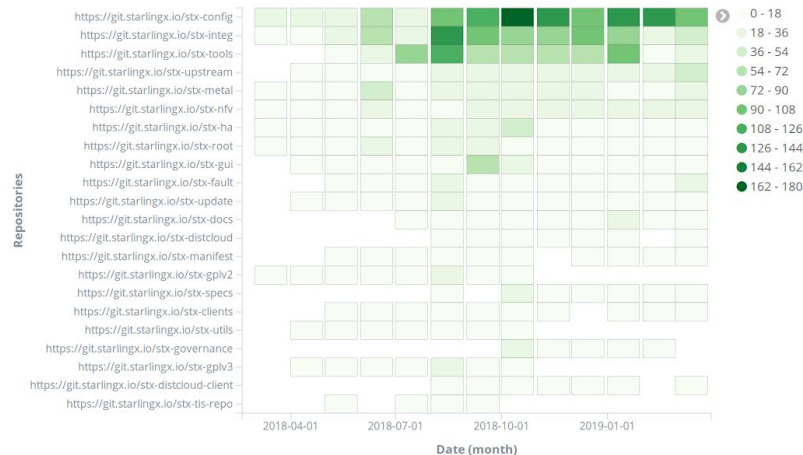
Uses lucene query syntax

Add a filter +

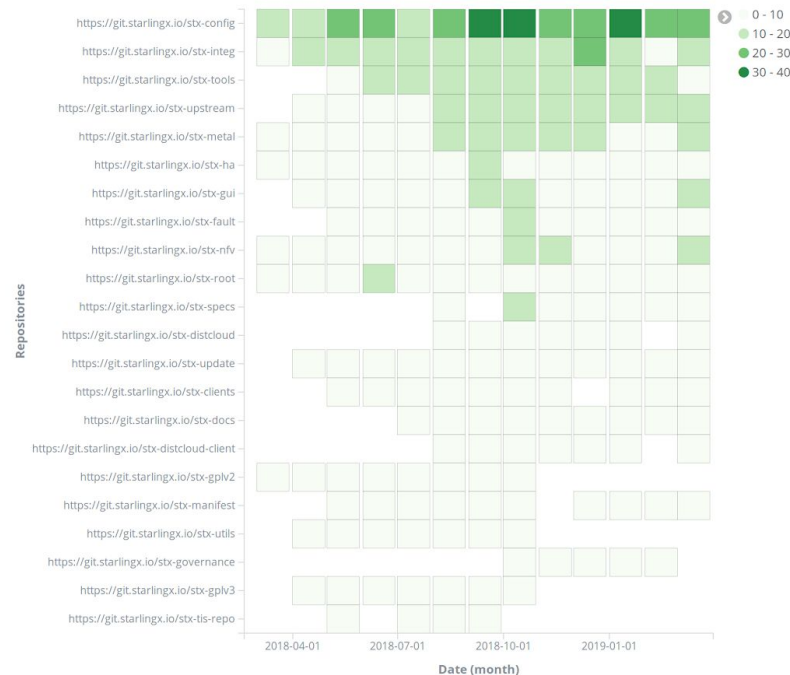
## Active git repositories



## Top 25 repositories by commits



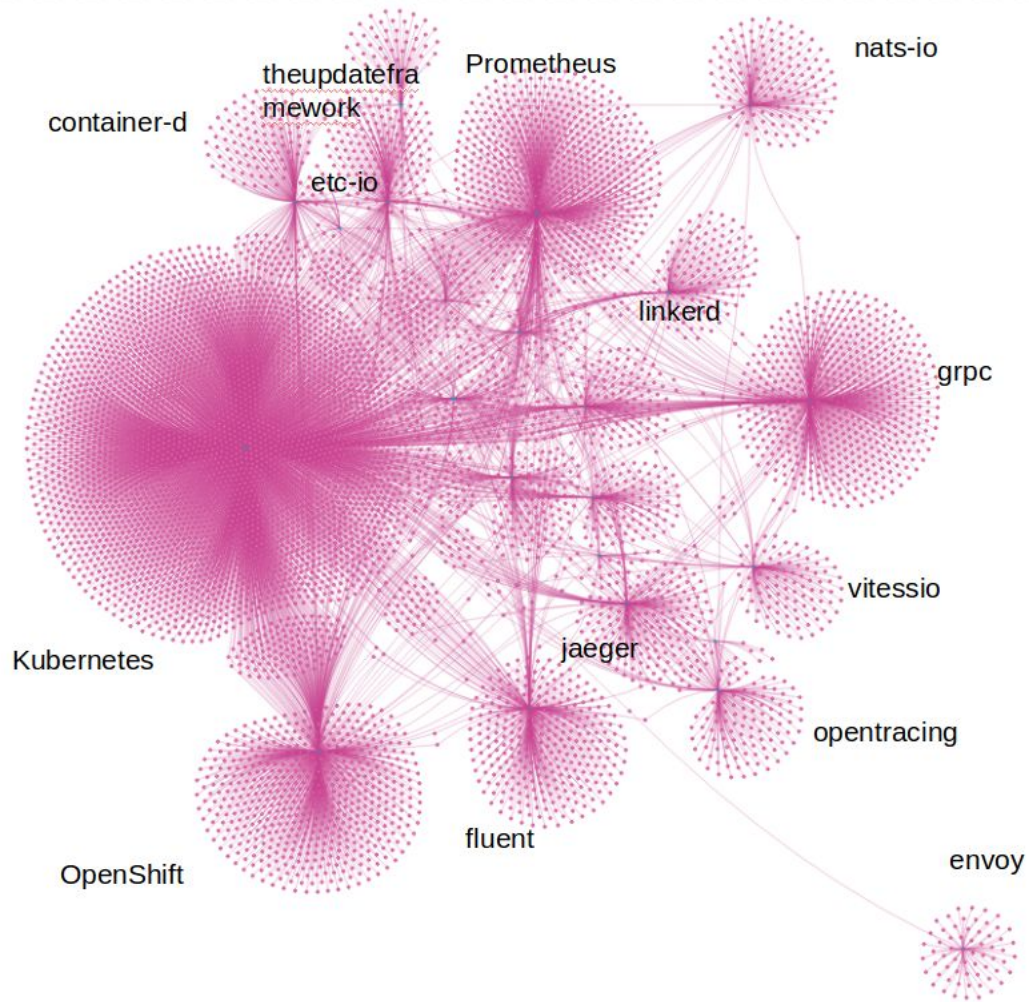
## Top 25 repositories by authors



## Lifecycle

This panel provides a quick view of the lifecycle of the top 25 git repositories by activity and authors for a given period of time.

## Definition



Jaeger

ContainerD

OpenShift

Kubernetes

OpenStack

The connected community  
model: Research findings and  
lessons learned.  
OSCON 2019  
Diane Mueller / Daniel Izquierdo

<https://conferences.oreilly.com/oscon/oscon-or-2019/public/schedule/detail/75932>

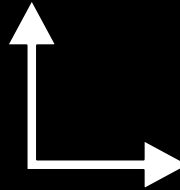
## /collaboration

CHAOSS => InnerSource Commons

- GrimoireLab tools are used by community members
- CHAOSS presentation at ISC Baltimore
- Metrics patterns discussion (how to start, maturity model)
- ...

InnerSource Commons => CHAOSS

- New use cases
- Tool requirements
- But, **not** focused on analyzing OSS
- ...



- Transparency
- Communication
- Collaboration
- Community





# InnerSource Commons

Spring Summit 2020  
14th-16h April  
Madrid, Spain

<https://innersourcecommons.org>

Thanks for attending!

