CHA-IO-SS

[Community Health Analytics for InnerSource and Open Source Software]

CHAOSScon 2020, Brussels

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Daniel Izquierdo

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



<u>https://bitergia.com</u> <u>https://chaoss.community</u> <u>https://innersourcecommons.org</u>



/innersource

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

innersourcecommons.org





/innersource

Culture

Communication

Transparency

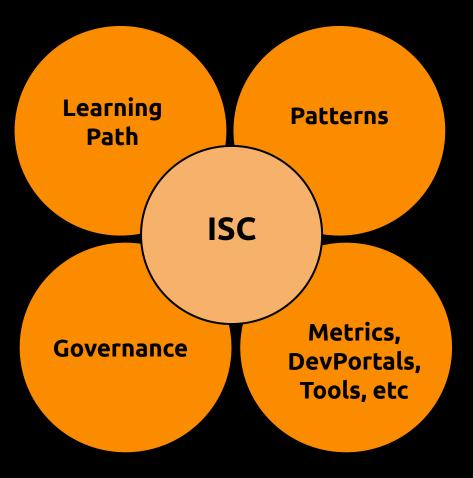
Collaboration

Community

Meritocracy



/working groups





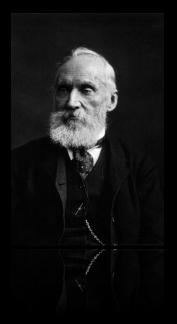


You know nothing, Jon Snow.



"To measure is to know"

"If you can not measure it, you cannot improve it"



Lord Kelvin



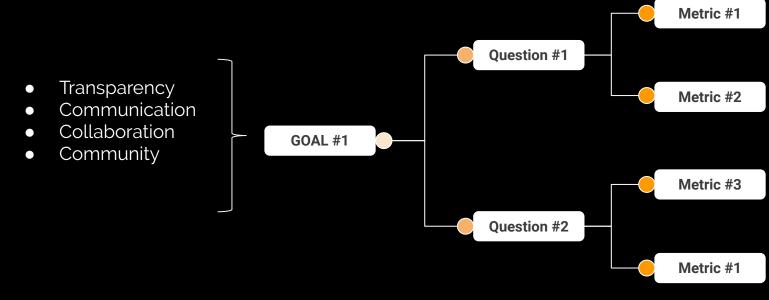
CHACSS &





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 <=> IS Projects / Product Development



IS Projects / Product Development

Lead Time / Process analysis	Lead Time/Code Review Effectiveness / BMI
Responsiveness	Responsiveness by Business Units (BUs)
Projects Lifecycle/Liveliness	Internal Projects Lifecycle
Community Engagement	Business Units/Developers Engagement
Organizational diversity	BUs diversity / Reusability
Contributors Growth	Internal Projects Adoption
Pony/Elephant/Bus Factor	Risk Analysis
Territoriality	Territoriality
https://chaoss.github.io/grimoirelab-sigils/	https://chaoss.github.io/grimoirelab-sigils/



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Pony/Elephant/Bus Factor Territoriality

Risk Analysis Territoriality

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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

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

Risk Analysis Territoriality

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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



StarlingX

Dashboard / Lifecycle

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

Add a filter +

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Top 25 repositories by commits

0 - 18 https://git.starlingx.io/stx-config 18 - 36 https://git.starlingx.io/stx-integ https://git.starlingx.io/stx-tools 36 - 54 https://git.starlingx.io/stx-upstream -9 54 - 72 https://git.starlingx.io/stx-metal 972 - 90 https://git.starlingx.io/stx-nfv 90 - 108 https://git.starlingx.io/stx-ha 0 108 - 126 https://git.starlingx.io/stx-root 126 - 144 https://git.starlingx.io/stx-gui • 144 - 162 https://git.starlingx.io/stx-fault -• 162 - 180 https://git.starlingx.io/stx-update https://git.starlingx.io/stx-docs https://git.starlingx.io/stx-distcloud https://git.starlingx.io/stx-manifest https://git.starlingx.io/stx-gplv2 https://git.starlingx.io/stx-specs https://git.starlingx.io/stx-clients https://git.starlingx.io/stx-utils https://git.starlingx.io/stx-governance https://git.starlingx.io/stx-gplv3 https://git.starlingx.io/stx-distcloud-client https://git.starlingx.io/stx-tis-repo -2018-10-01 Date (month)

Overview Data Sources Community Performance Data Status Abou

Uses lucene query syntax

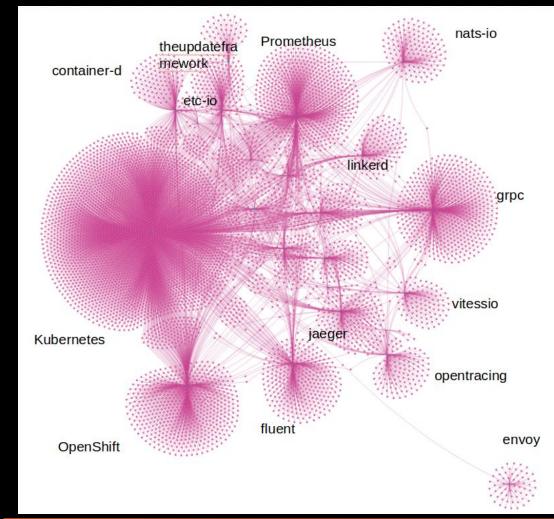
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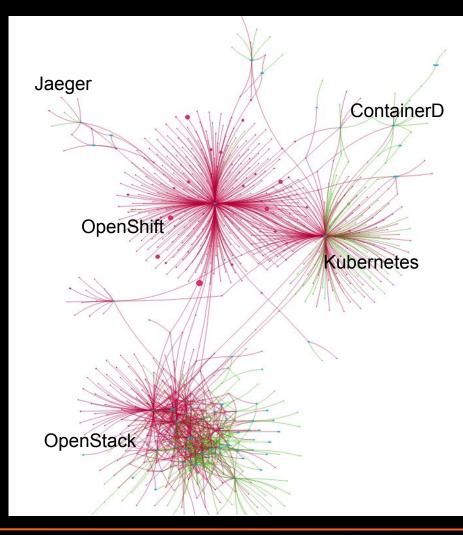
Lifecycle

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







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

https://conferences.oreilly.com/oscon/osco n-or-2019/public/schedule/detail/75932



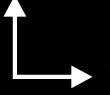
/collaboration

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!