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

innersourcecommons.org
Culture
Communication
Transparency
Collaboration
Community
Meritocracy
You know nothing, Jon Snow.
“To measure is to know”

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

Lord Kelvin
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):

- Transparency
- Communication
- Collaboration
- Community
OSS Projects / OSPO Use Case ↔ IS Projects / Product Development
<table>
<thead>
<tr>
<th>OSS Projects / OSPO Use Case</th>
<th>IS Projects / Product Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Time / Process analysis</td>
<td>Lead Time / Code Review Effectiveness / BMI</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Responsiveness by Business Units (BUs)</td>
</tr>
<tr>
<td>Projects Lifecycle/Liveliness</td>
<td>Internal Projects Lifecycle</td>
</tr>
<tr>
<td>Community Engagement</td>
<td>Business Units/Developers Engagement</td>
</tr>
<tr>
<td>Organizational diversity</td>
<td>BU diversity / Reusability</td>
</tr>
<tr>
<td>Contributors Growth</td>
<td>Internal Projects Adoption</td>
</tr>
<tr>
<td>Pony/Elephant/Bus Factor</td>
<td>Risk Analysis</td>
</tr>
<tr>
<td>Territoriality</td>
<td>Territoriality</td>
</tr>
</tbody>
</table>

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

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/
<table>
<thead>
<tr>
<th>OSS Projects / OSPO Use Case</th>
<th>IS Projects / Product Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Time / Process analysis</td>
<td>Lead Time/Code Review Effectiveness / BMI</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Responsiveness by Business Units (BUs)</td>
</tr>
<tr>
<td>Projects Lifecycle/Liveliness</td>
<td>Internal Projects Lifecycle</td>
</tr>
<tr>
<td>Community Engagement</td>
<td>Business Units/Developers Engagement</td>
</tr>
<tr>
<td>Organizational diversity</td>
<td>BUs diversity / Reusability</td>
</tr>
<tr>
<td>Contributors Growth</td>
<td>Internal Projects Adoption</td>
</tr>
<tr>
<td>Pony/Elephant/Bus Factor</td>
<td>Risk Analysis</td>
</tr>
<tr>
<td>Territoriality</td>
<td>Territoriality</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSS Projects / OSPO Use Case</th>
<th>IS Projects / Product Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Time / Process analysis</td>
<td>Lead Time/Code Review <strong>Effectiveness</strong> / BMI</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Responsiveness by Business Units (BUs)</td>
</tr>
<tr>
<td>Projects Lifecycle/Liveliness</td>
<td>Internal Projects <strong>Lifecycle</strong></td>
</tr>
<tr>
<td>Community Engagement</td>
<td>Business Units/Developers Engagement</td>
</tr>
<tr>
<td>Organizational diversity</td>
<td>BUs diversity / <strong>Reusability</strong></td>
</tr>
<tr>
<td>Contributors Growth</td>
<td>Internal Projects <strong>Adoption</strong></td>
</tr>
<tr>
<td>Pony/Elephant/Bus Factor</td>
<td><strong>Risk</strong> Analysis</td>
</tr>
<tr>
<td>Territoriality</td>
<td>Territoriality</td>
</tr>
</tbody>
</table>

https://chaoss.github.io/grimoirelab-sigils/  
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
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/oscon-or-2019/public/schedule/detail/75932
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-16th April
Madrid, Spain

https://innersourcecommons.org
Thanks for attending!