



***Building metrics models based on
the state-of-the-art best practices***

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- What are the characteristics of an excellent community?
- Framework of Open Source Communities
- How to Link Metrics and Models?

What are the characteristics of an excellent community? -- People

Contributor-related

- **Design of CLA**
- **Signed-off on each submission**
- **Code of Conduct - Respect Others**
- **"Do your homework first"**
- **Who, When, What, Why**
- ...

Maintainer-related

"The Apache way"

- Open communications
- Consensus decision making
- Earned authority
- **Mentorship**
- **Leadership**
- **Support and responsive**
- ...



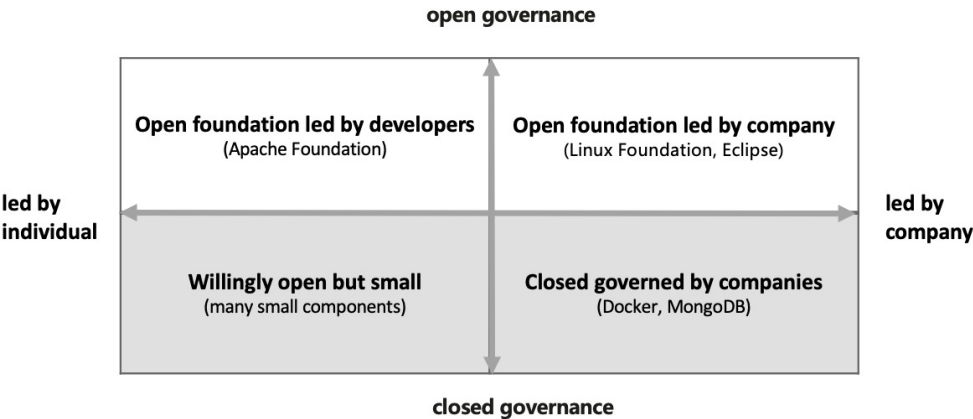
Conclusion: Characteristics presented by participants in a good community: show respect, show responsibility, diversity and inclusion.

What are the characteristics of an excellent community? -- Organization

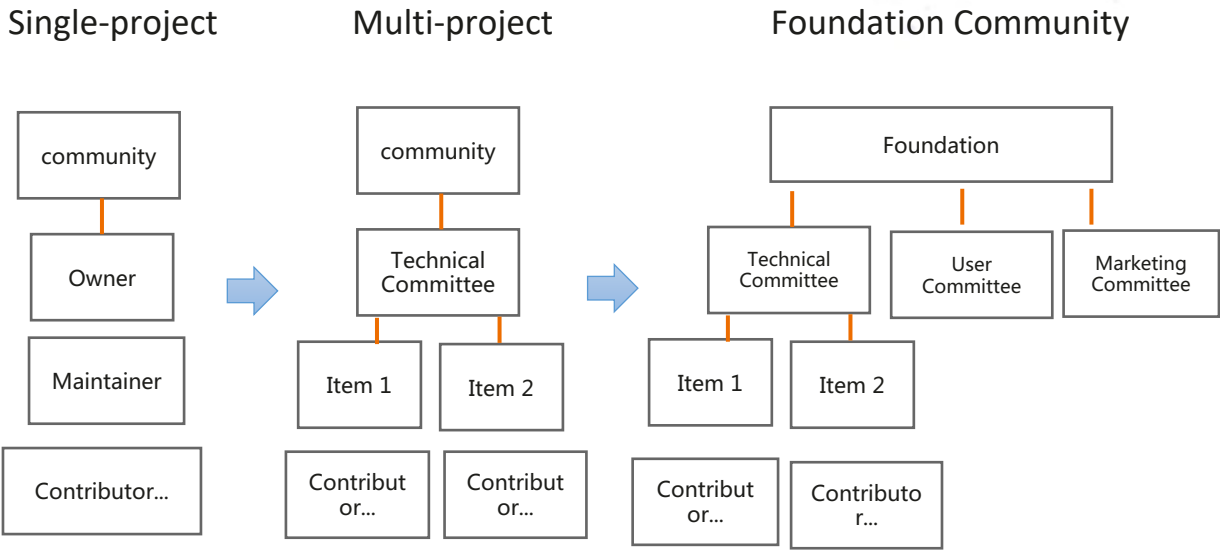


Community Governance Model

- Open governance model (Apache)
- Enterprise-led model(CNCF)
- Enterprise control model (Andriod)

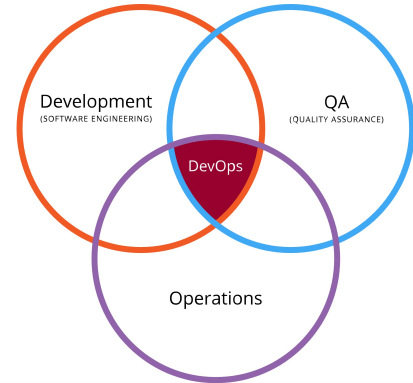
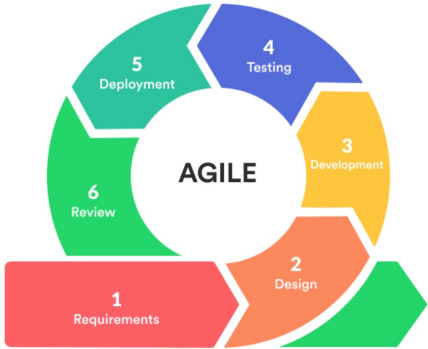


Organization Structure Evolves



Conclusion: Business strategy will influence the degree of openness. With the increase of openness, the community autonomy grow stronger. The organizational structure evolves with the complexity of community.

What are the characteristics of an excellent community? -- Development



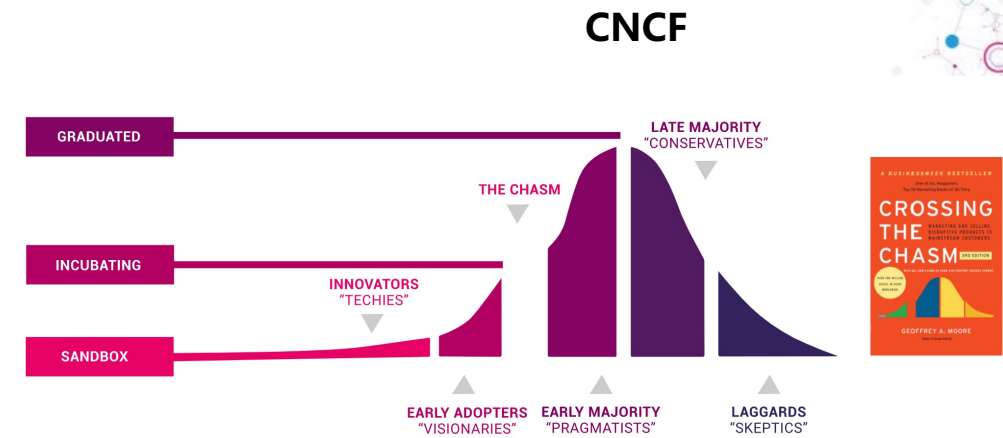
Fedora Release Engineering Philosophy

- Repeatable
- Auditable
- Defineable
- Deliverable

Conclusion: The software should be reproducible. The open-source development process is inclined to agile development. DevOps is the development practice, where softwares apply continuous integration, continuous delivery, and continuous deployment.

How do they measure community...

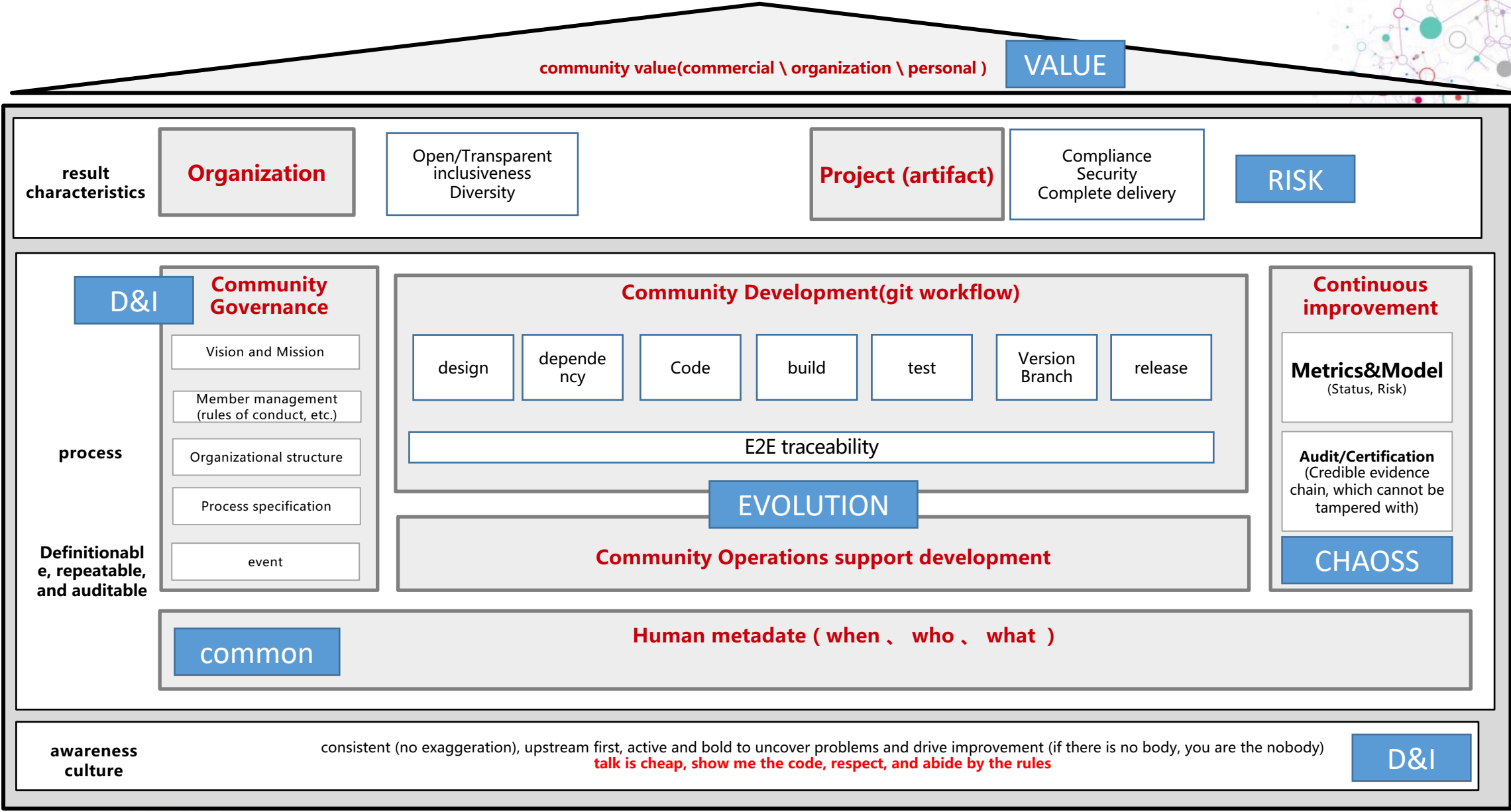
Apache	
Community Development	Code
	Licenses and Copyright
	Releases Version
Community Governance	Quality
	Community
	Consensus Building
Independence	



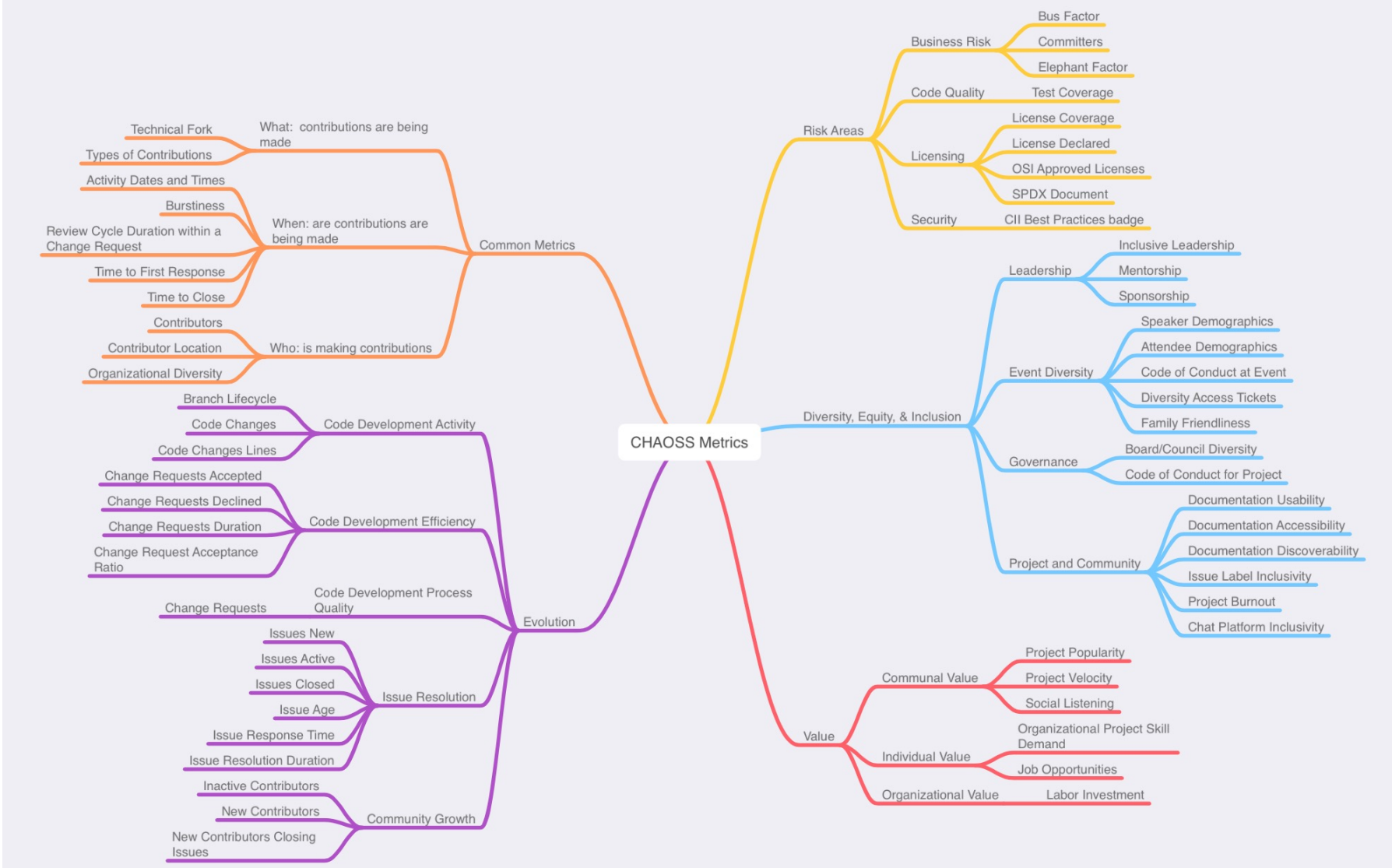
CII Best Practice Badge	
Gold	website, license, documentation
Silver	Change control
Passing	But and vulnerability reporting
In Progress	Quality and test
	Security
	Static and dynamic code analysis

Conclusion: From different perspectives, the division and criteria of measurements vary a lot. The areas that can not be ignored are licenses, code, individuals and the organization.

Framework for Open Source Communities: Everything is measurable

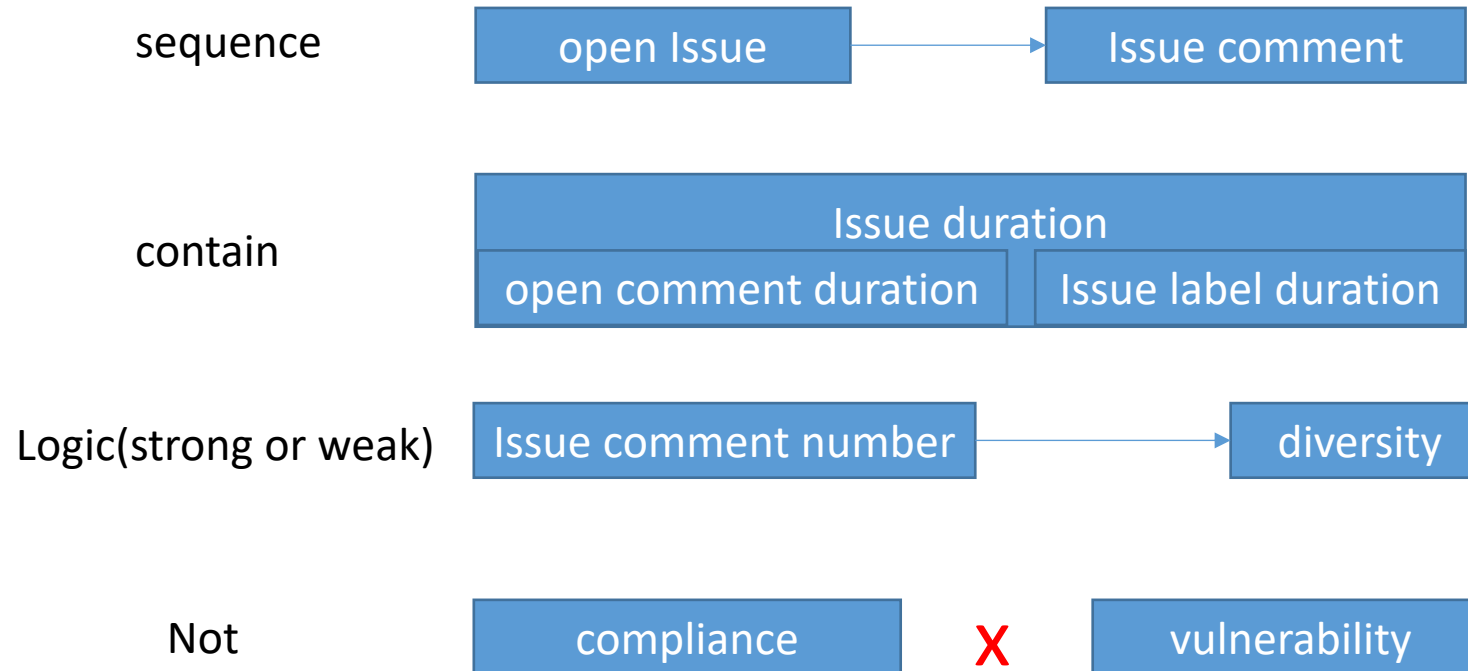


We're looking for relationship between metrics



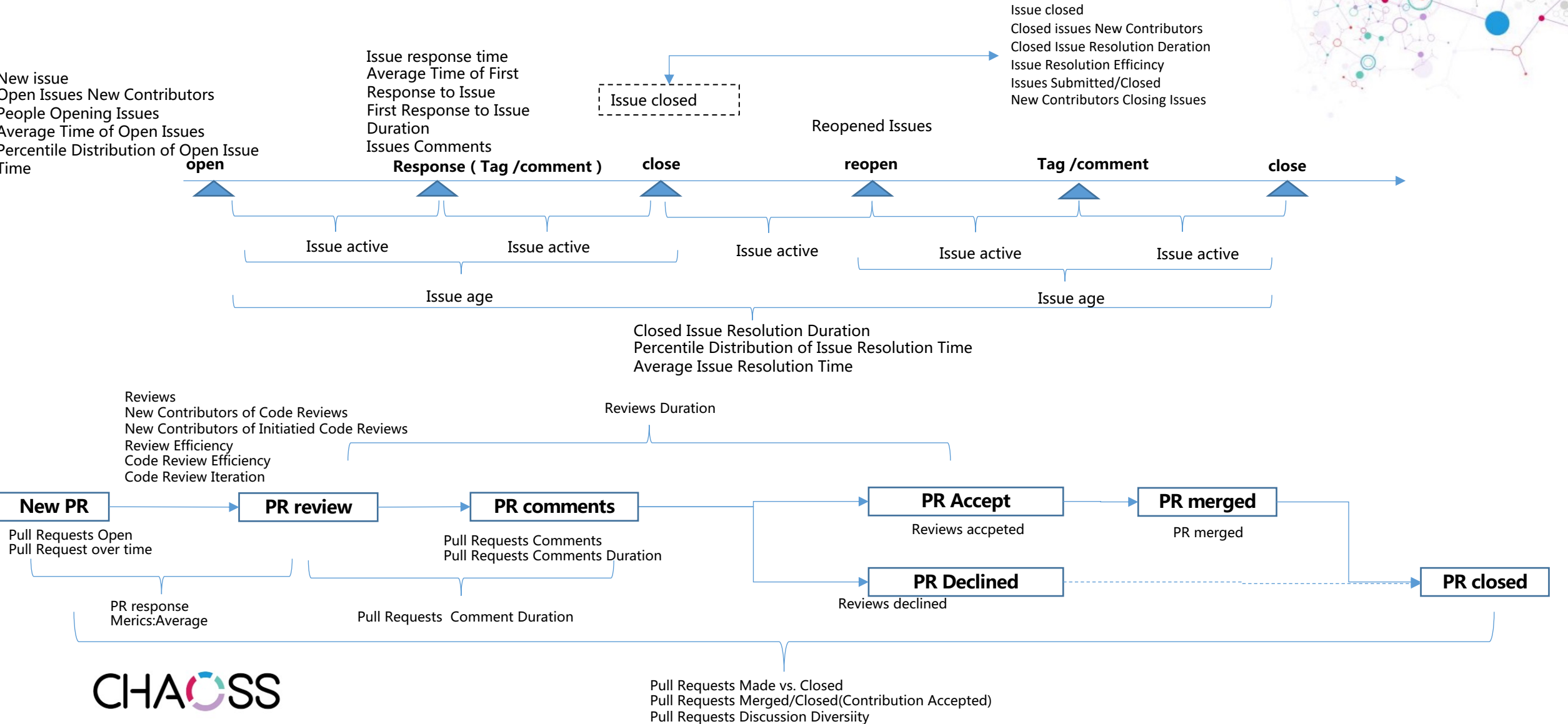
What kinds of relationship between metrics?

- Metrics have a time sequence.
- There is a containing relationship between metrics.
- There is a logic relationship between metrics.
- There is no relationship between metrics.

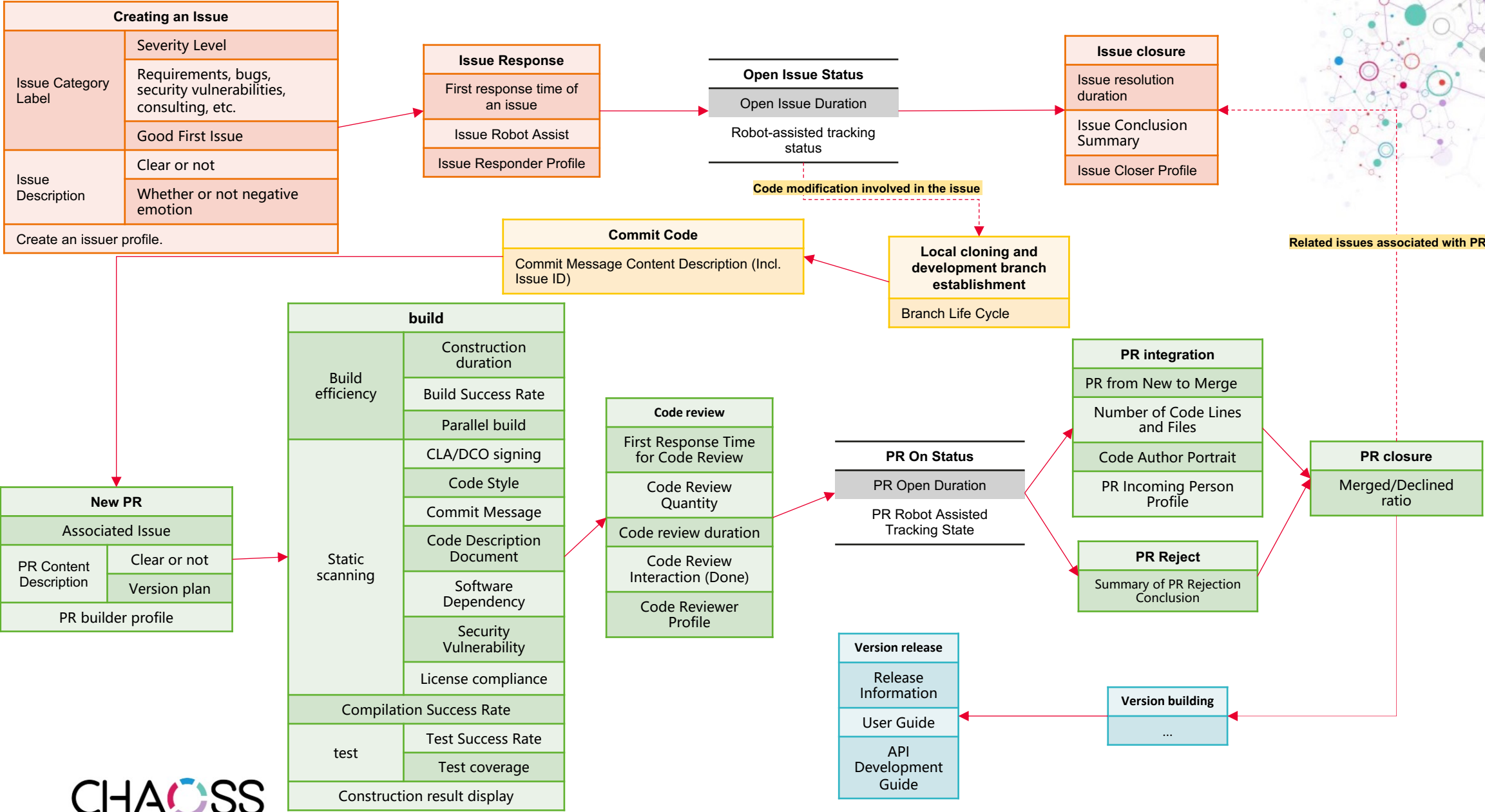


We continually explore the relationship between metrics and build models

what we do last year?



what we do this year?





Thank you!

Welcome to explore with us