A Strategic Approach to Assessing Viability of OSS Projects

FOSS Backstage March 2024
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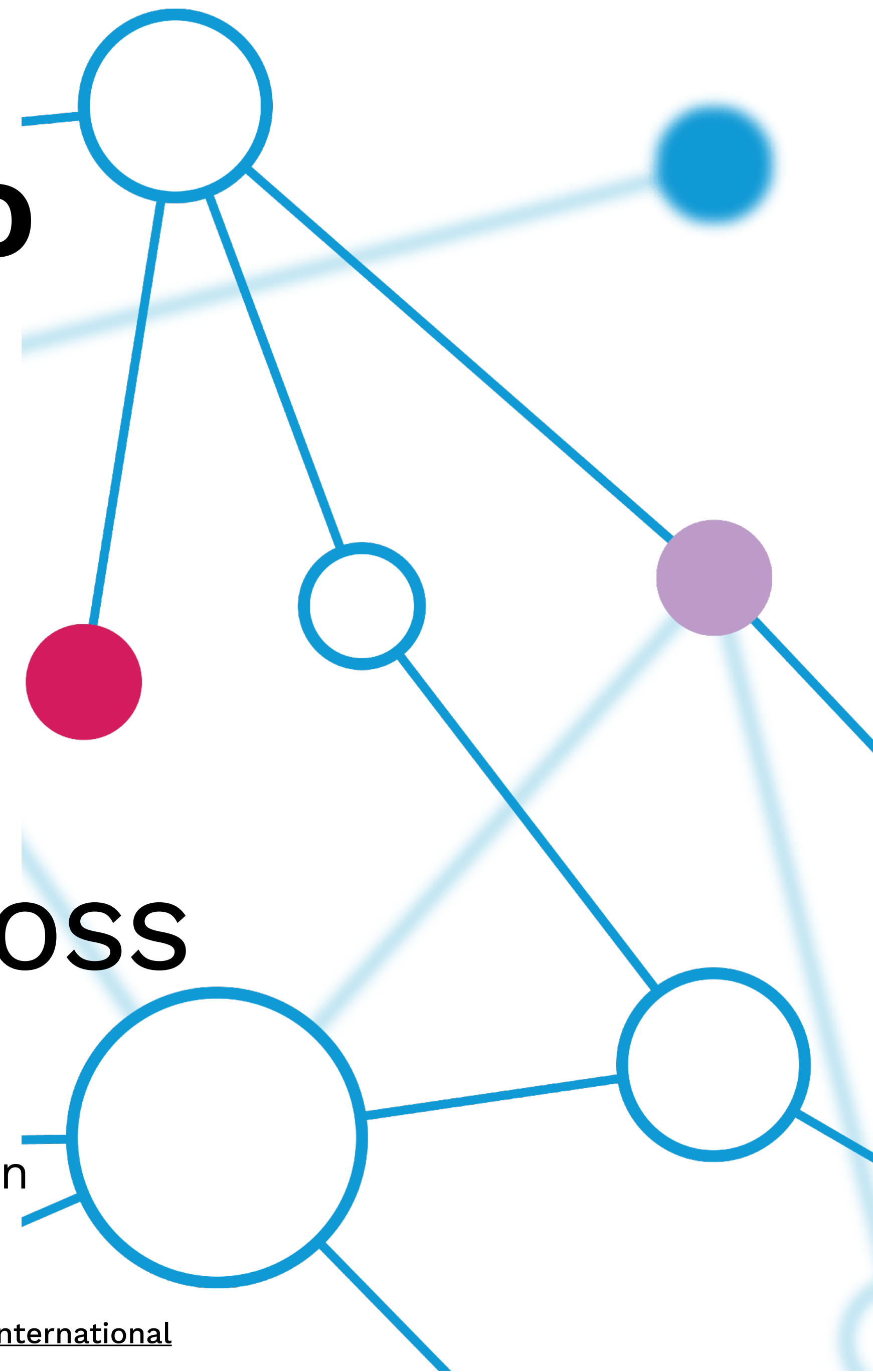
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Thank You!
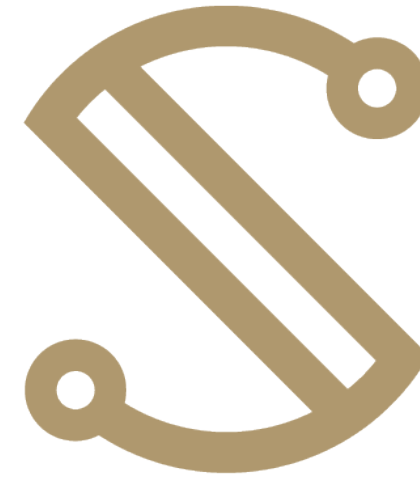
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FOUNDATION

Whoami

- Geek, traveler, reader
- 20+ yr tech career focused on community & open source (VMware, Intel, Puppet, ...)
- OpenUK Board
- CHAOSS Board and Maintainer
- CNCF TAG Contrib Strategy co-chair
- PhD on Linux kernel collaboration

Photos by Mom, Josh Bancroft, Don Park

Why Does Viability Matter?

Your business

could be disrupted

ALL MODERN DIGITAL INFRASTRUCTURE

A PROJECT SOME RANDOM PERSON IN NEBRASKA HAS BEEN THANKLESSLY MAINTAINING SINCE 2003

https://xkcd.com/2347/

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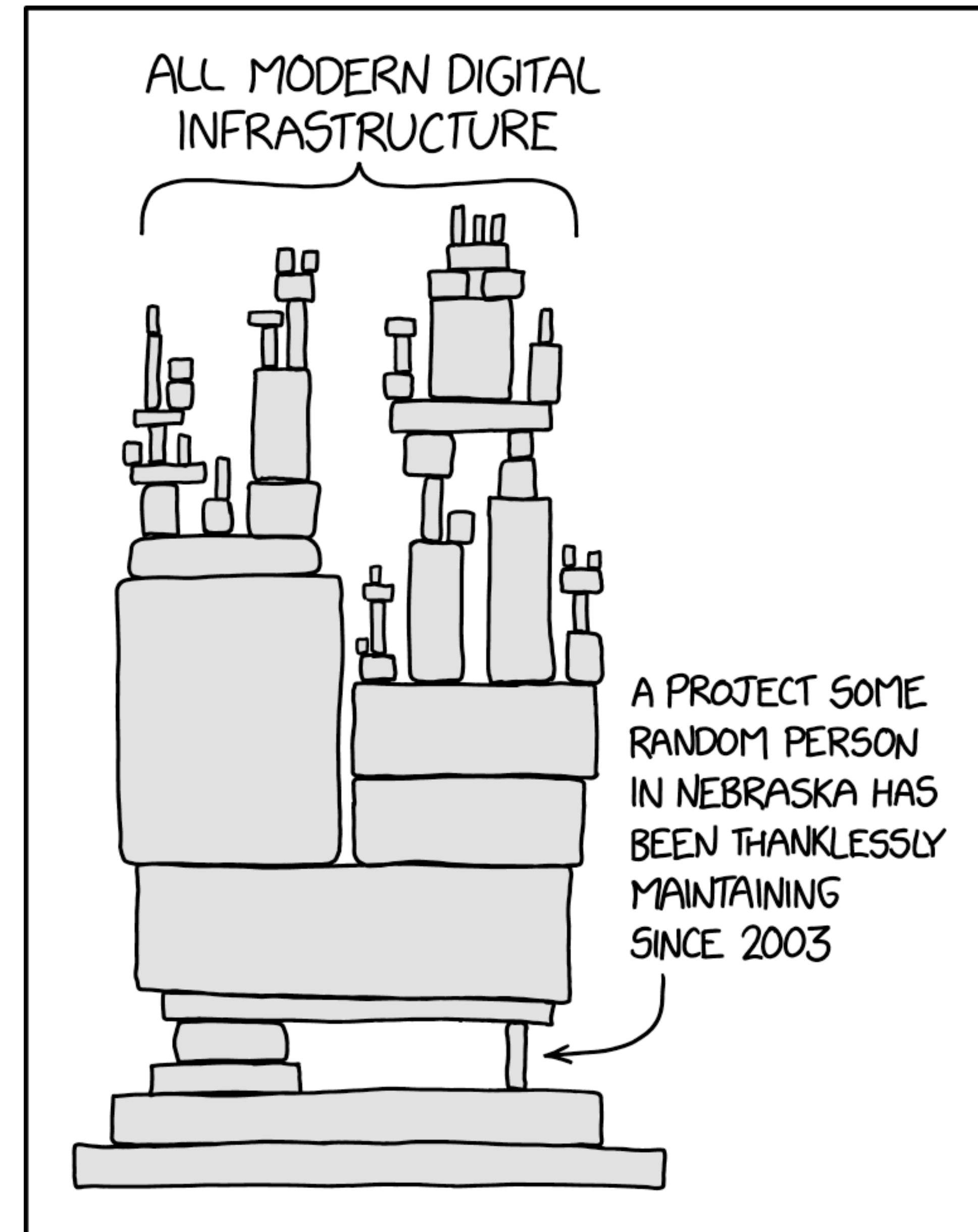
Agenda

- **Foundations vs. Companies**

- **Assessing and Measuring Viability:**

  - **Governance**

  - **Community**

  - **Compliance and Security**

  - **Strategy**

- **Resources and final thoughts**

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Ownership:

Foundation vs. Company

Neutral Foundations

Participate as equals,

but make sure the

foundation is really neutral

Company Originated

Higher risk:

single company

in control

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Assessing and Measuring

Project Viability

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CHAOSS Viability Metrics Models

Governance

Community

Compliance and Security

Strategy

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Governance is about People

Processes for how people collaborate and make decisions

Leadership

Fair and transparent process for selecting leaders

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Metric Model: Governance Viability

Metrics:

- **Issues Inclusivity**

- **Documentation Usability**

- **Time To Close**

- **Change Request Closure Ratio**

- **Project Popularity**

- **Libyears**

- **Issue Age**

- **Release Frequency**

https://chaoss.community/kb/metrics-model-oss-project-viability-governance/

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Community

Look for helpful, kind, respectful, and welcoming

Image by the CNCF CC BY-NC 2.0

Adopters

Projects with many adopters / end users are more viable

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Responsiveness

Project that can keep up

with contributions will

be move viable

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Diversity, Equity, and Inclusion
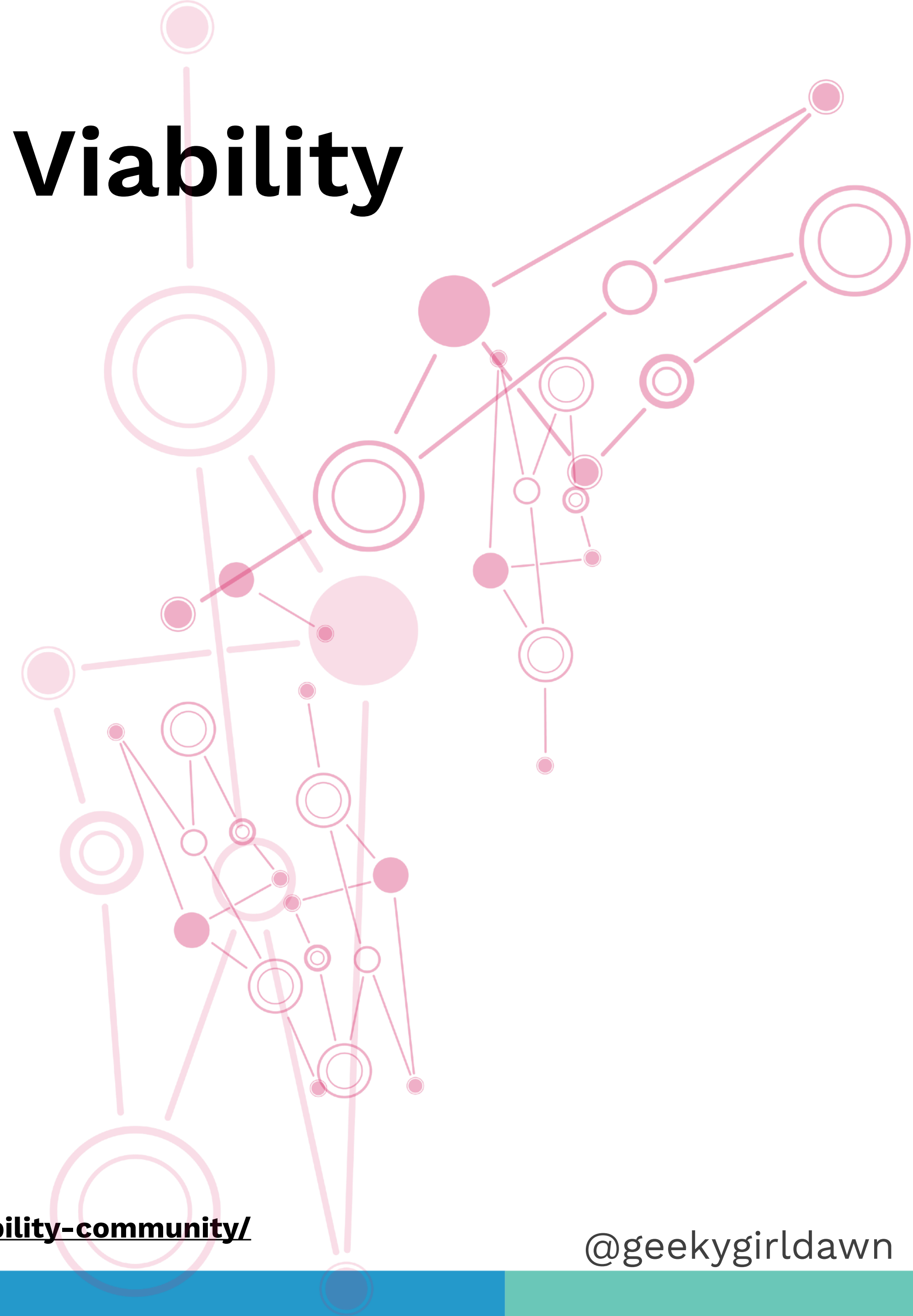
Inclusive projects are more viable

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Metrics Model: Community Viability

Metrics

- **Clones**

- **Forks**

- **Types of Contributions**

- **Change Requests**

- **Committers**

- **Change Request Closure Ratio**

- **Project Popularity**

- **Libyears**

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Security

Look for proactive security response and policies

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Metrics Model: Compliance and Security Viability

Metrics

- **OpenSSF Best Practices**

- **Licensing**

  - **License Coverage**

  - **OSI Approved Licenses**

  - **Licenses Declared**

- **Defect Resolution Duration**
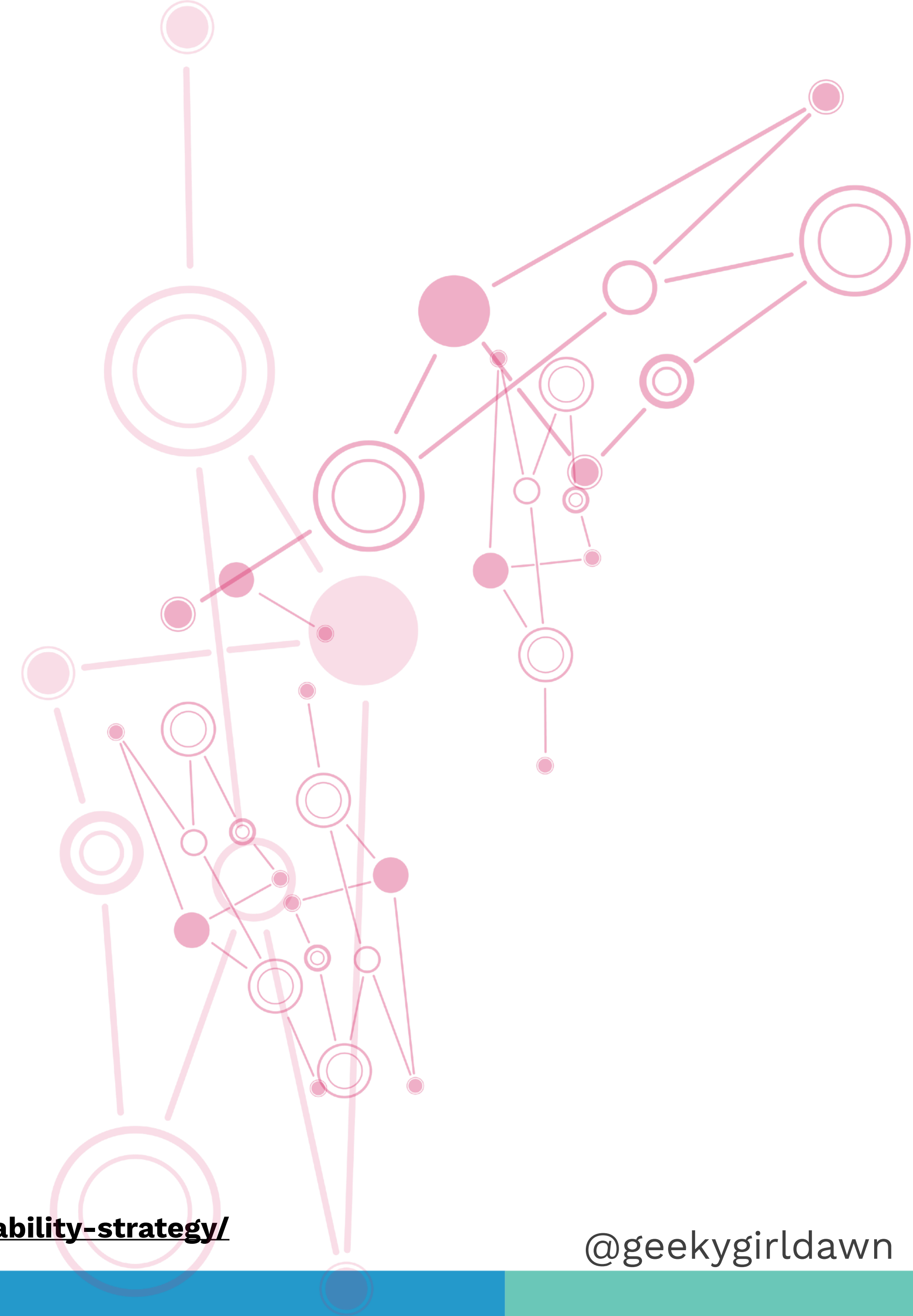
- **Libyears**

- **Upstream Code Dependencies**

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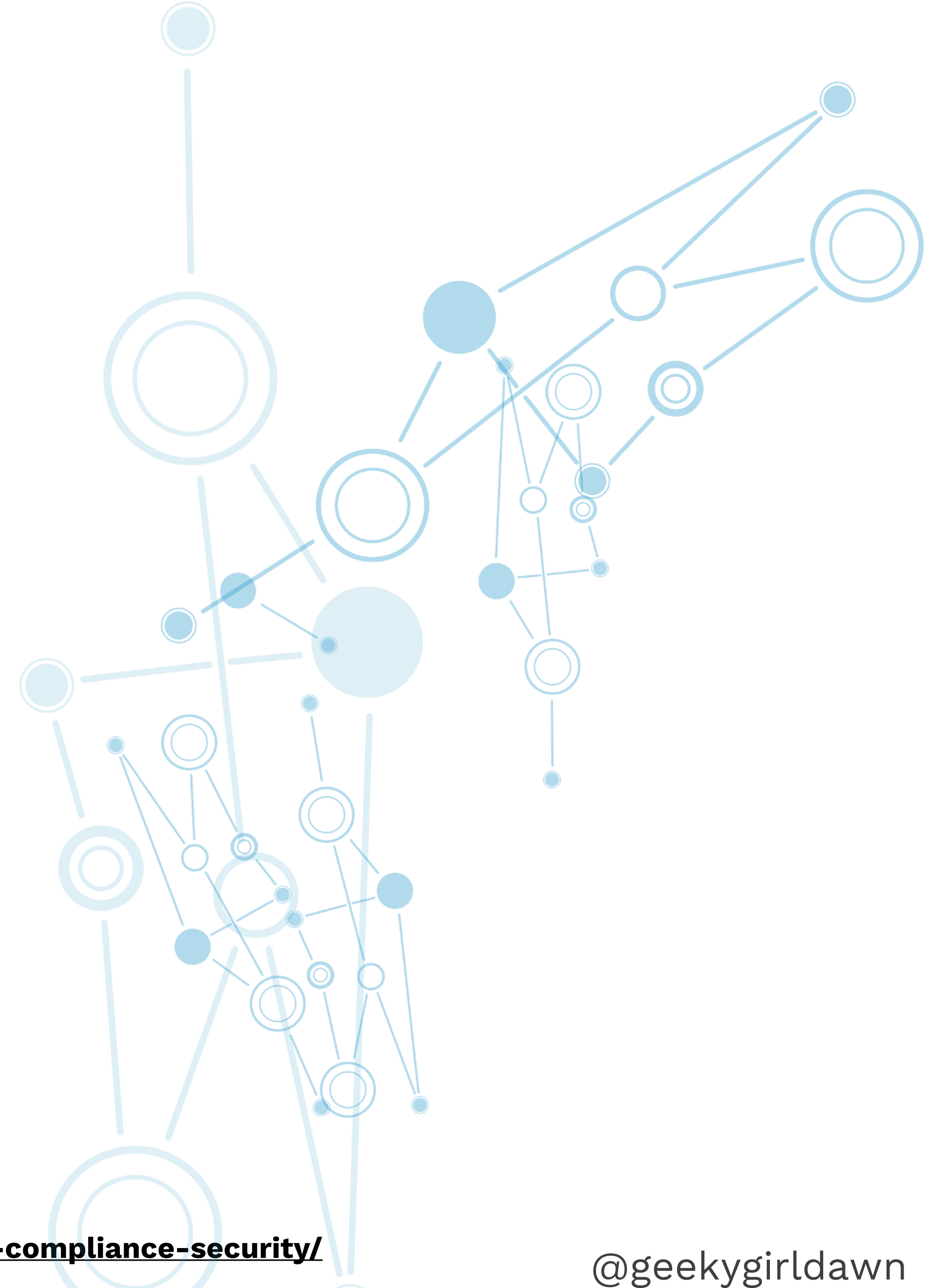
Contributor Risk

Active contributors and organizational diversity

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Metrics Model: Strategy

Metrics

- **Programming Language Distribution**

- **Bus Factor**

- **Elephant Factor**

- **Organizational Influence**

- **Release Frequency**

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Mitigating Risk

Can you employ contributors to mitigate the risk for projects that are less viable?

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Resources

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https://chaoss.community/

https://chaoss.community/chaoss-guide-oss-viability/

Linux Foundation's TODO Group

https://todogroup.org/guides/

The Open Source Way Guidebook

https://github.com/theopensourceway/guidebook/

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Final Thoughts

Assessing project viability is an ongoing process required to protect your reputation and avoid negative implications for your customers.

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THANK YOU!
Any Questions?

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