Google | DORA

Amplifying Impact

Documentation and Supply Chain Security

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Agenda

01 DORA research program

02 Measure: Documentation, security practices

03 Impact: Documentation is like sunshine

04 Create quality documentation

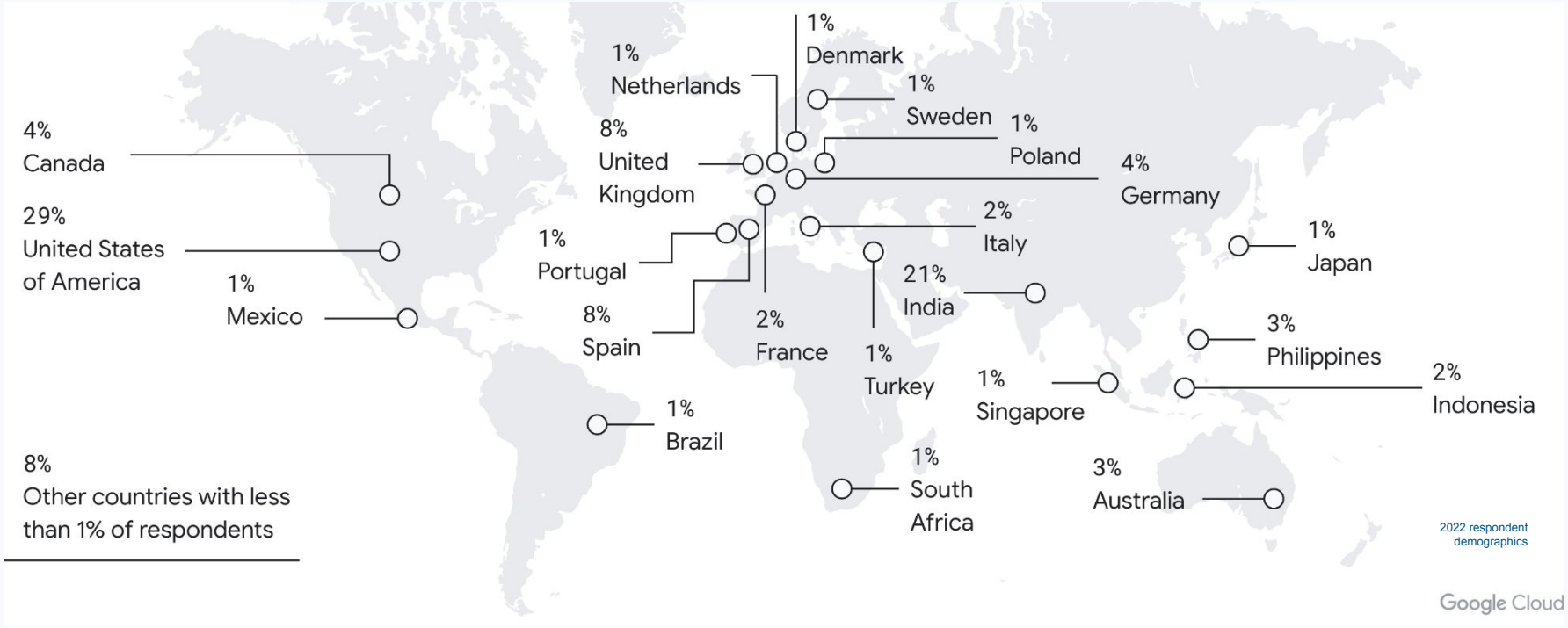
05 Wrap up

DORA

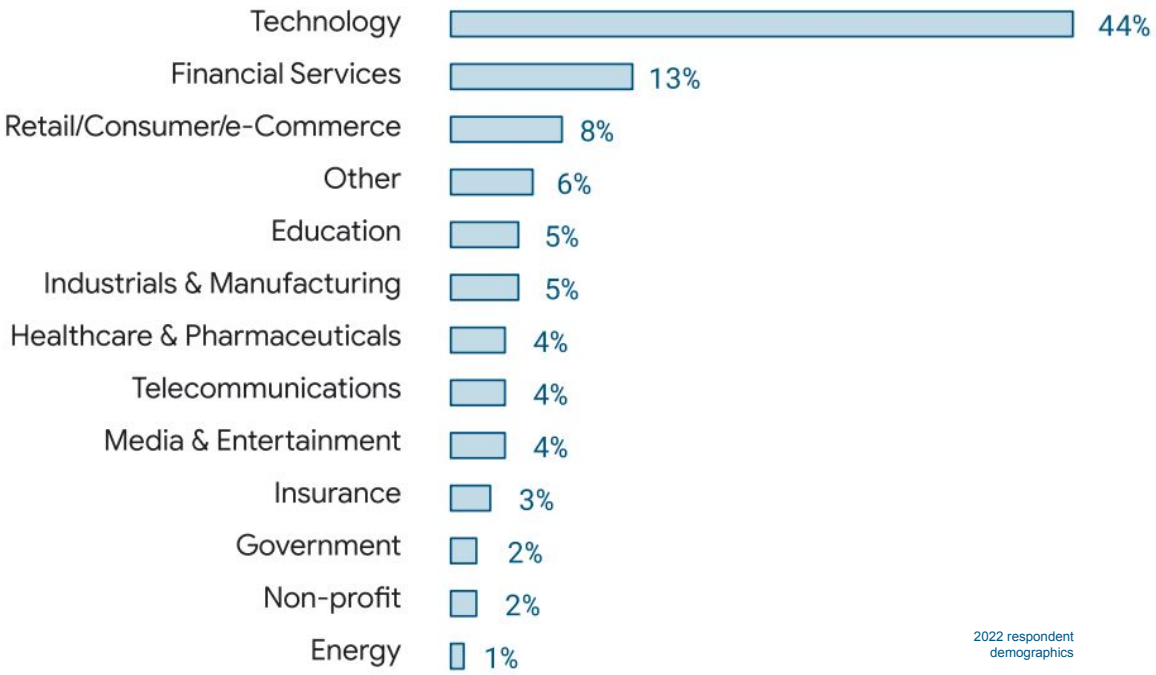
Research Program


DORA
DEVOPS RESEARCH & ASSESSMENT

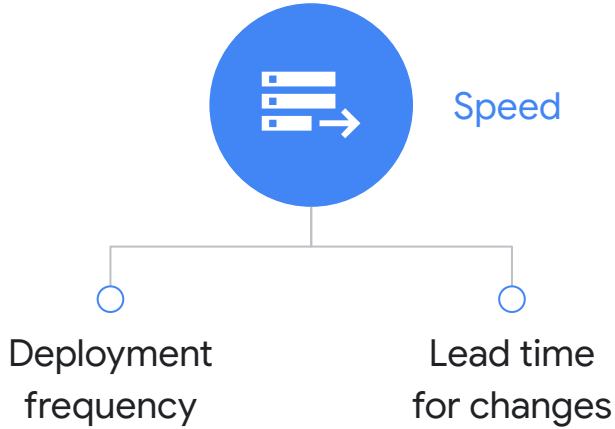
Respondents from around the world

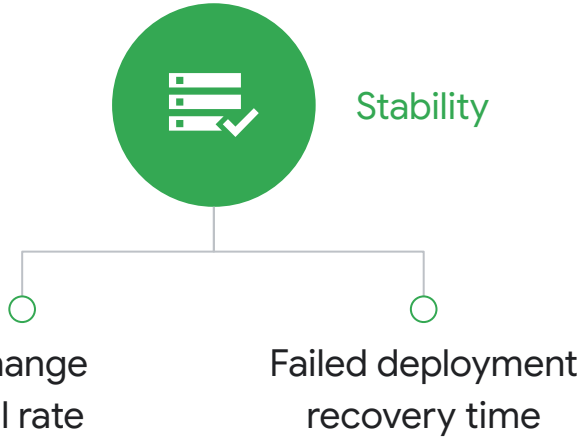


Diverse industries



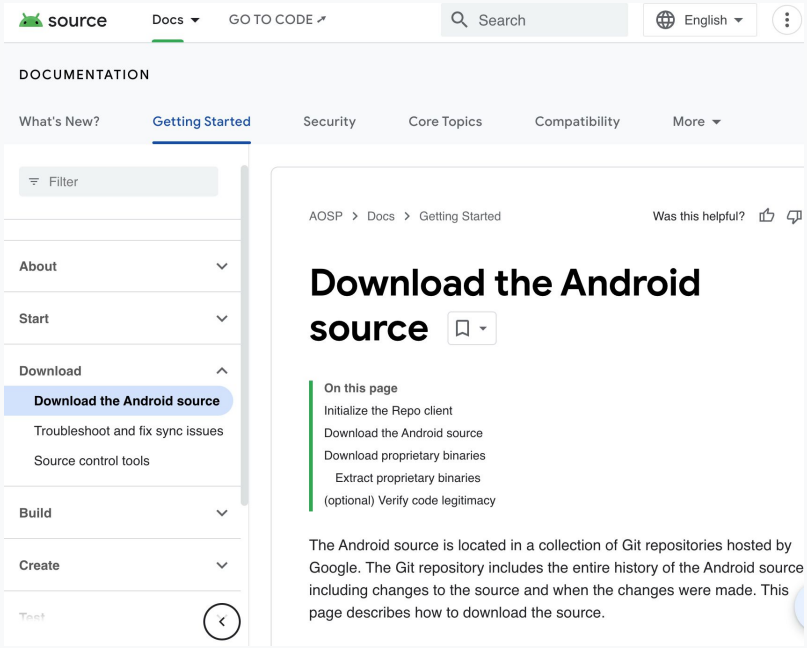
Software Delivery & Operations Performance

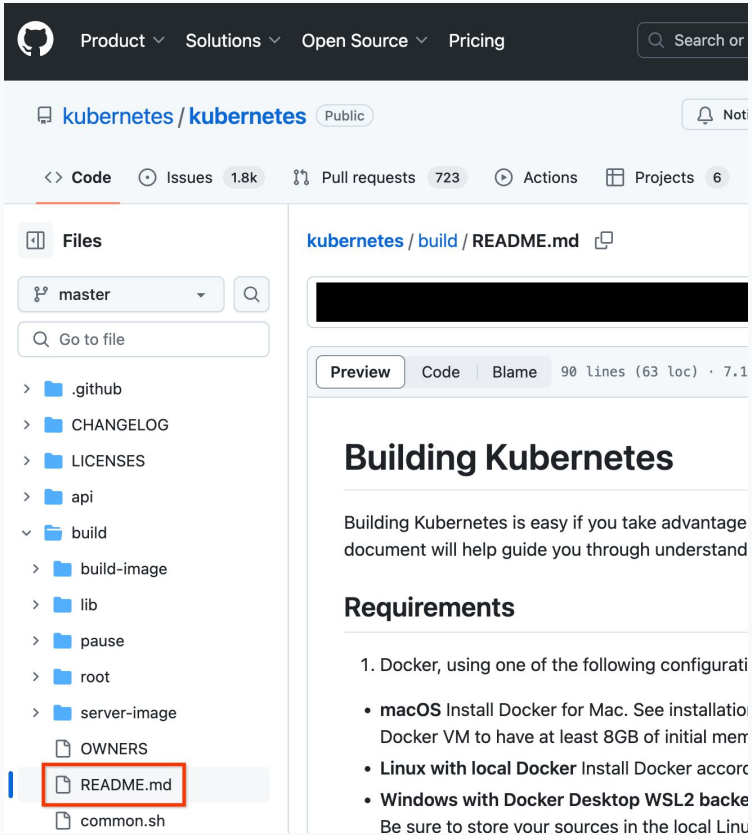




Measure:
Docs, security practices

Internal documentation





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Measure documentation quality

- Reliable (functional)
- Clear
- Findable
- Comprehensive
- Organized
- Up-to-date
- Accurate
- Relevant

Statements used to assess these metrics are published here:
https://dora.dev/research/2022/questions/

Measure security practices

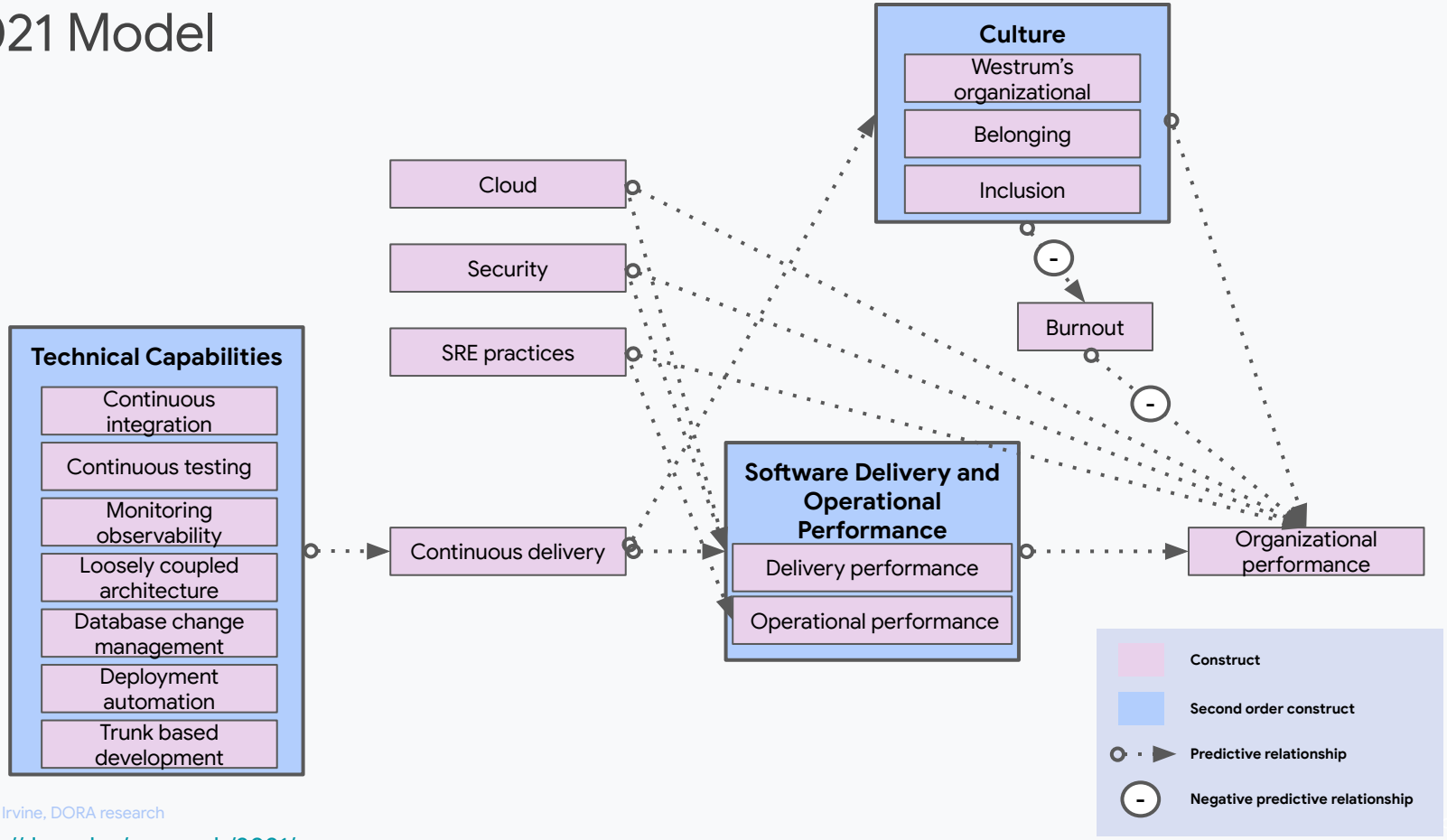
- Pervasive security[1]
- Software supply chain security[2]
  - Supply-chain Levels for Software Artifacts (SLSA)
  - NIST Secure Software Development Framework (SSDF)

Statements used to assess these practices are published here:

1. https://dora.dev/research/2021/questions/
2. https://dora.dev/research/2022/questions/

Impact:
Documentation is like sunshine

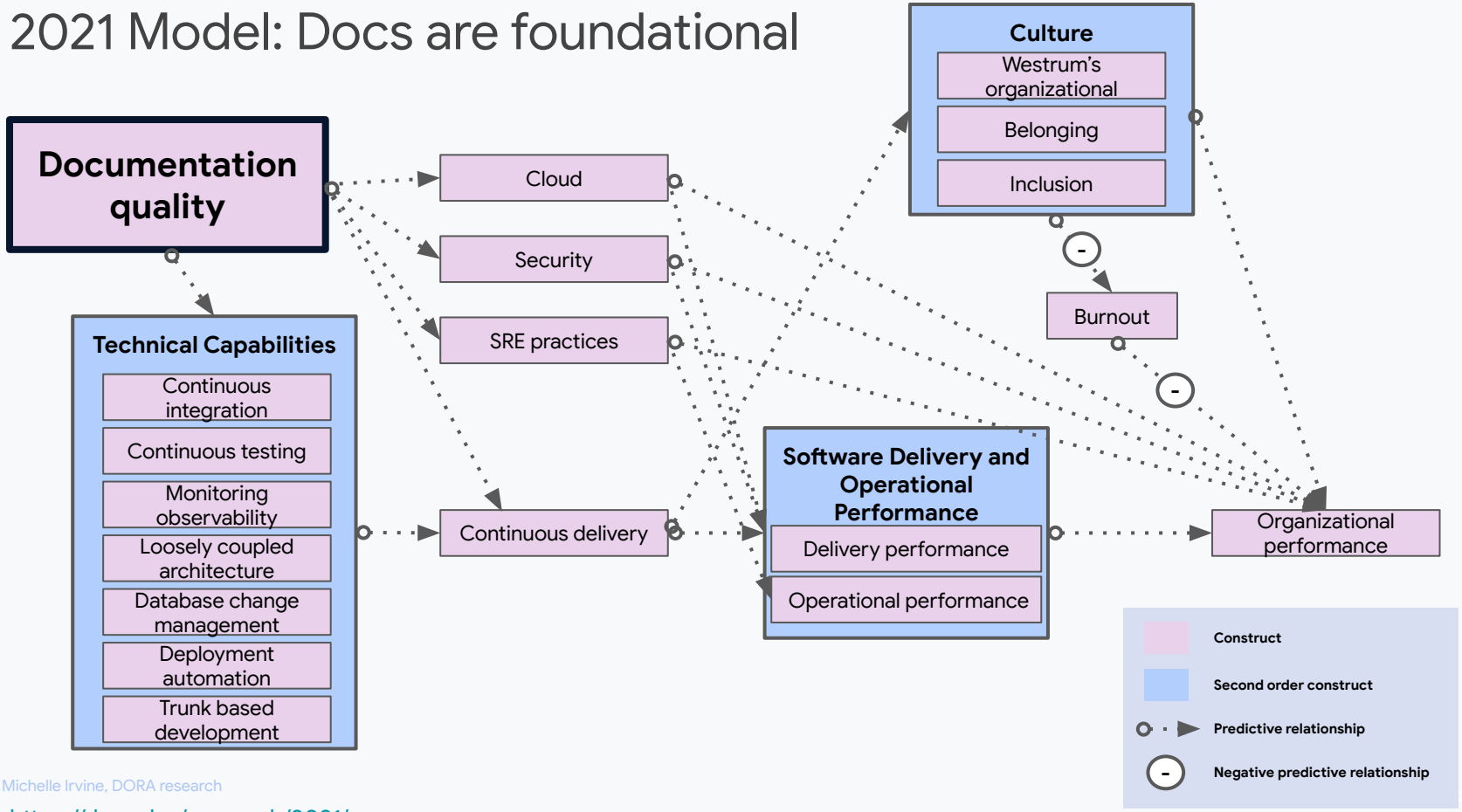
2021 Model



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https://dora.dev/research/2021/

2021 Model: Docs are foundational



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https://dora.dev/research/2021/

Teams with quality documentation are:

3.8 x
more likely to **implement security practices**

2.5 x
more likely to **fully leverage the cloud**

2.4 x
more likely to meet or **exceed** their **reliability targets**

3.5 x
more likely to **implement Site Reliability Engineering (SRE) practices**

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Source: 2021 DORA report

Teams with quality documentation are:

3.8 x
more likely to **implement security practices** (pervasive security)[1]

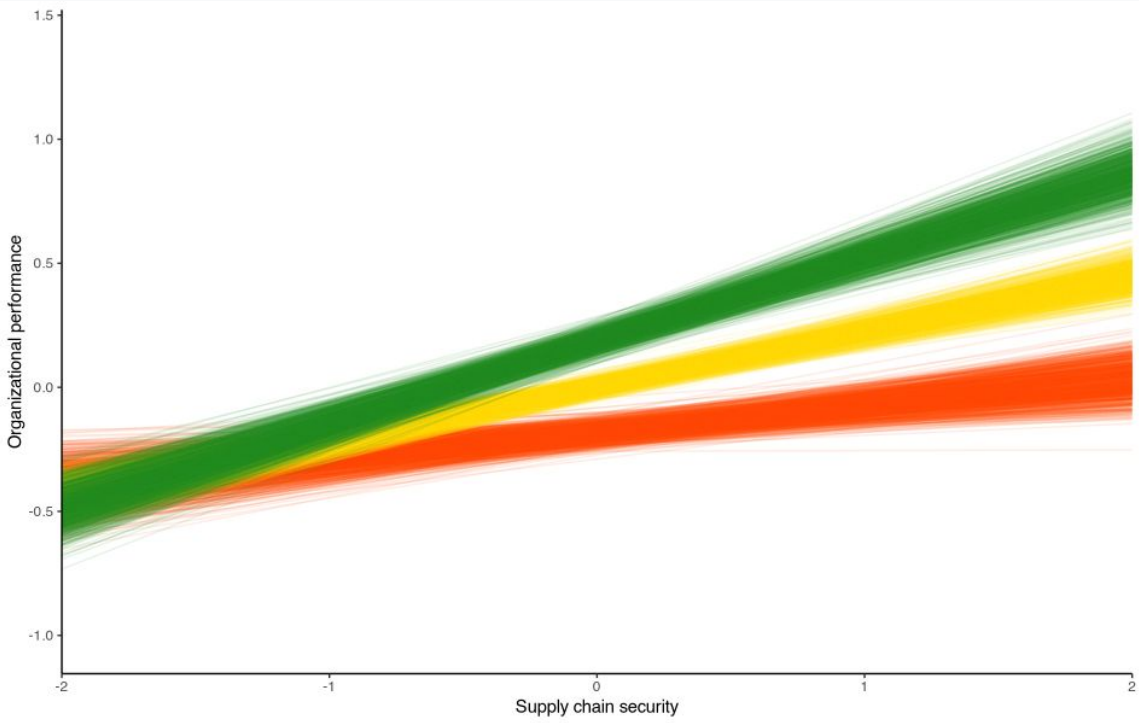
1.7 x
more likely to **implement SLSA security practices**[2]

1: 2021 DORA report
2: 2022 DORA report, number published for this presentation

Documentation is like sunshine



Impact of **supply chain security** on **organizational performance**



Michelle Irvine, DORA research

High quality documentation

Supply chain security practices have **451% impact** on revenue and customer satisfaction

Low quality documentation

Supply chain security practices have **37% impact** on revenue and customer satisfaction

For more info and discussion about this effect: [Documentation is like sunshine]

Teams with **quality documentation** see a:

- Substantial increase in **productivity**.
- Substantial increase in **job satisfaction**.
- Substantial decrease in **burnout**.

Source: 2023 DORA report

Create quality documentation

Create quality documentation



Training

Technical writing training for engineers and other writers.



Guidelines to update docs

Clear guidelines for updating and editing existing documentation.



Style guide

For example, style guides and guidelines about writing for a global audience.

Source:

- 2021 DORA report

Create quality documentation



Owners

Clearly defined ownership of documentation.



Distribute doc work

Formal processes to distribute documentation work.



Docs in the SDLC

Include documentation as part of the software development process.

Source:

- 2021 DORA report
- 2023 DORA report

Create quality documentation



Critical use cases

Document critical use cases for your products or services.



Remove stale content

Removing content can be just as important as creating new docs.



Value doc work

Recognize documentation work during engineer's performance reviews and promotions.

Source:

- 2021 DORA report

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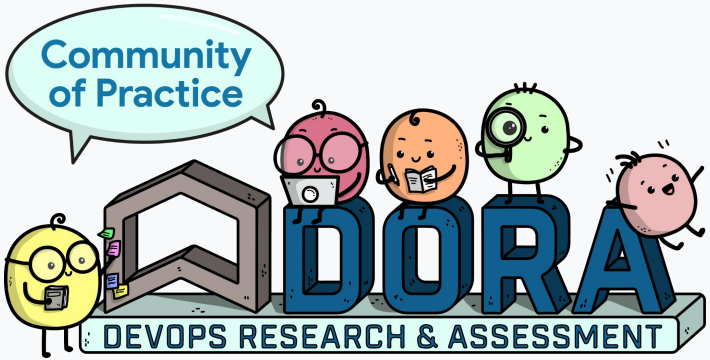
Wrap up

Documentation resources

- **Training**
  - Technical Writing courses from Google
- **Style guides** and **templates**
  - Google Developer Documentation Style Guide
  - Templates from the Good Docs Project
- **Programs**
  - Google Season of Docs
- **Community**
  - Write the Docs, Slack
- **Books**
  - Software Engineering at Google
  - Docs for Developers

- Explore the research
  - Blog post: Documentation is like sunshine
  - All reports and lots more at dora.dev

- Join the DORA community
  - dora.community



The 2024 DORA research survey is live!

Have your voice heard through the data,

help us learn more about software development

https://google.qualtrics.com/jfe/form/SV_8uCHA4aRzcGDjg2?source=cnsc

Thank you