



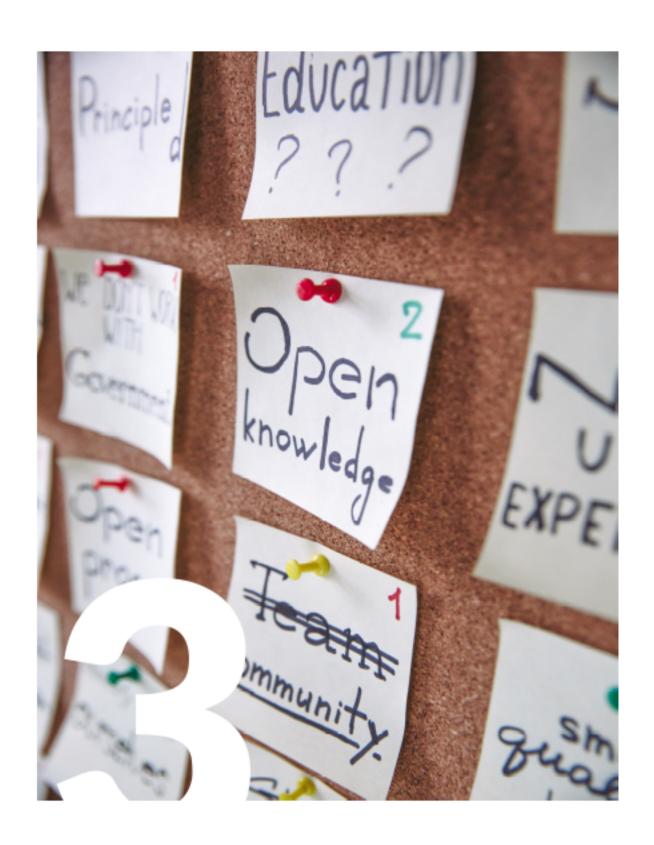




Standards



Reference Implementation



Open Operations & Community

















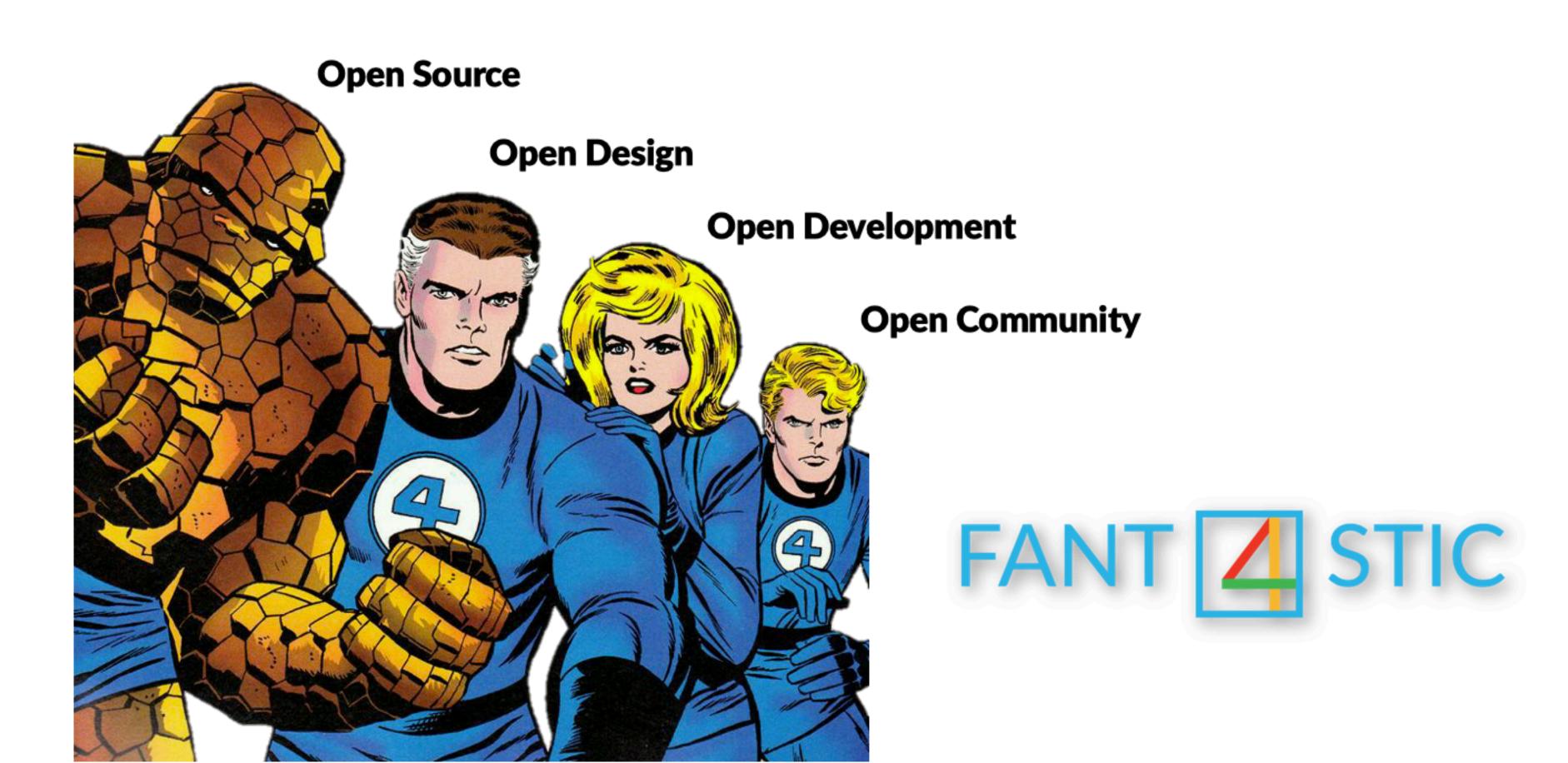














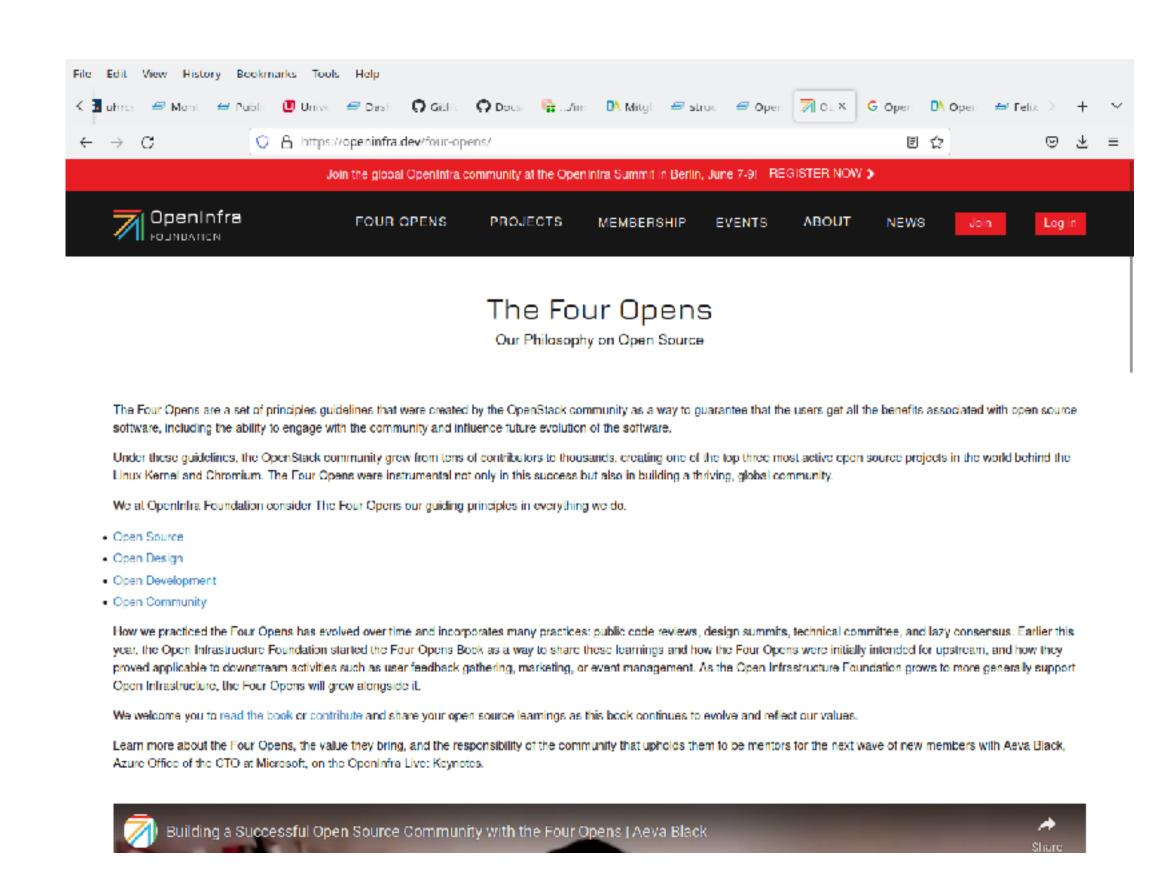




#### The Four Opens

- Open Source
- Open Design
- Open Development
- Open Community







fürWirtschaft und Klimaschutz







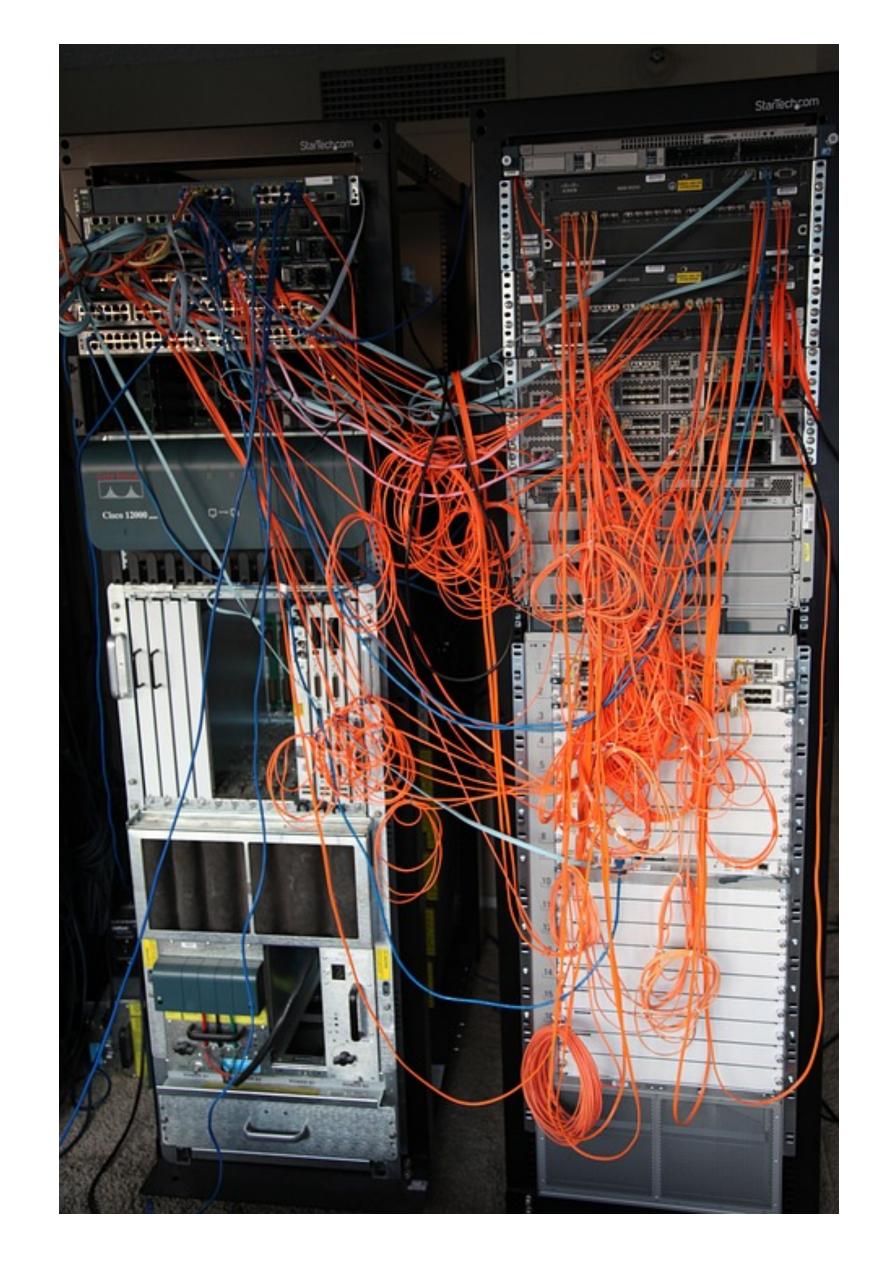








## Operating distributed dynamic infra is hard











## Time to introduce the fifth Open?









## Open Operations

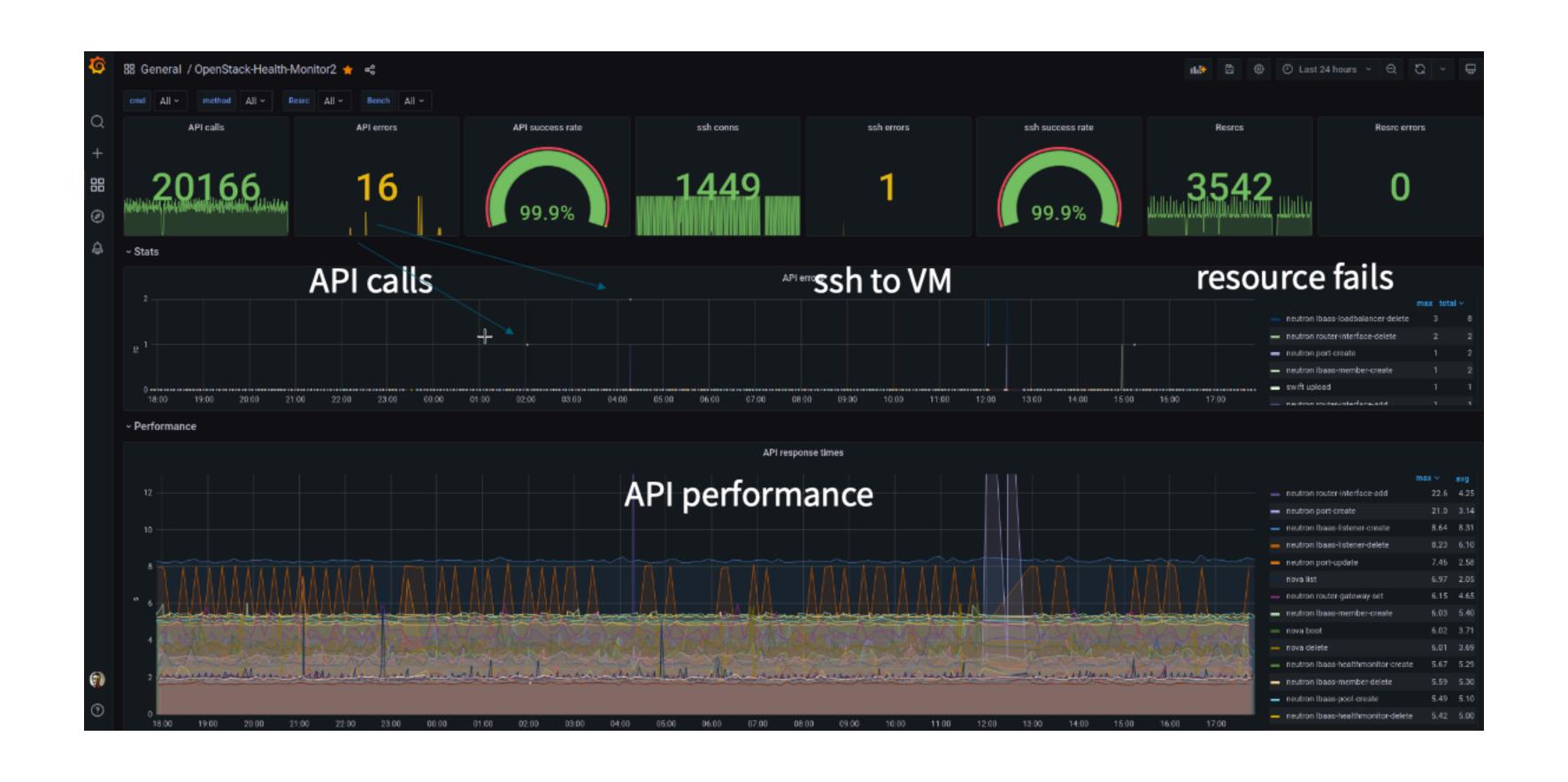


Gefördert durch:

















#### OpenStack Health Monitor / CloudMon

- Measure what you manage....
- ...and be transparent about it
- Behaviour-based monitoring through the eyes of the customer
- Next level CloudMon Collaboration within the community with OTC
  - https://github.com/stackmon









## Are Open Source Tools enough?



Gefördert durch:







"By sharing and documenting best practices for operating such cloud stacks, the difficulty to provide high quality cloud services internally or publicly is vastly reduced."

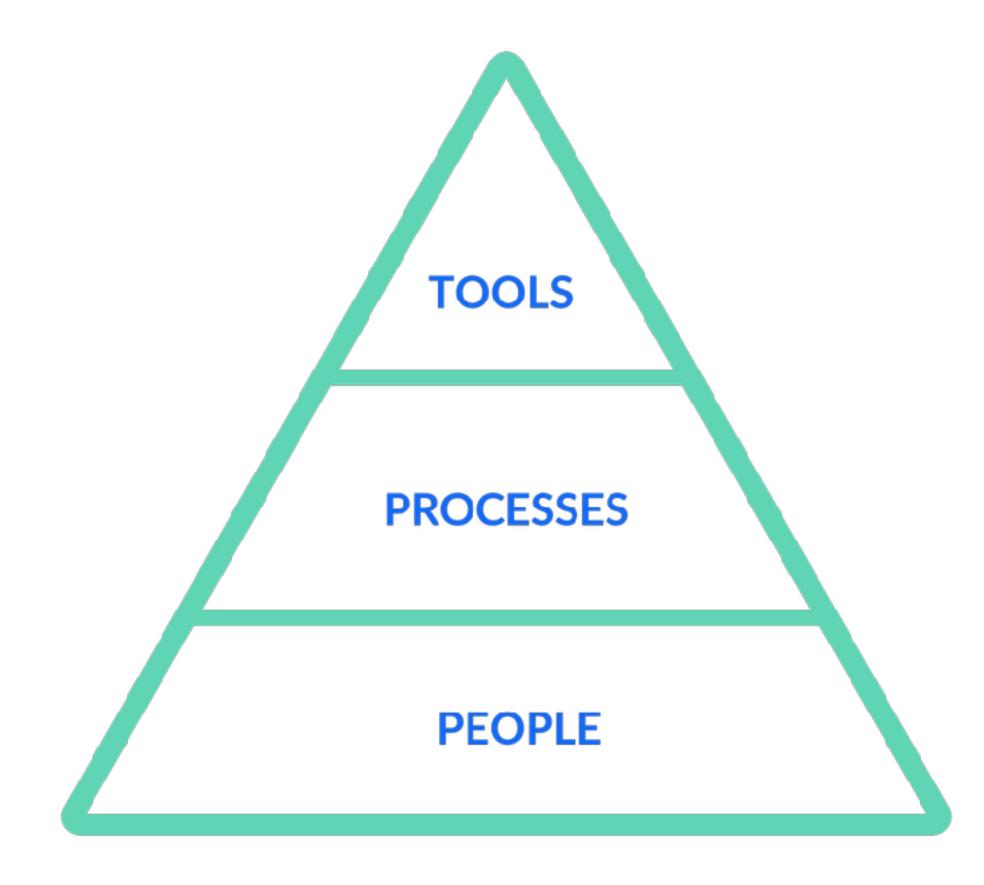
https://scs.community









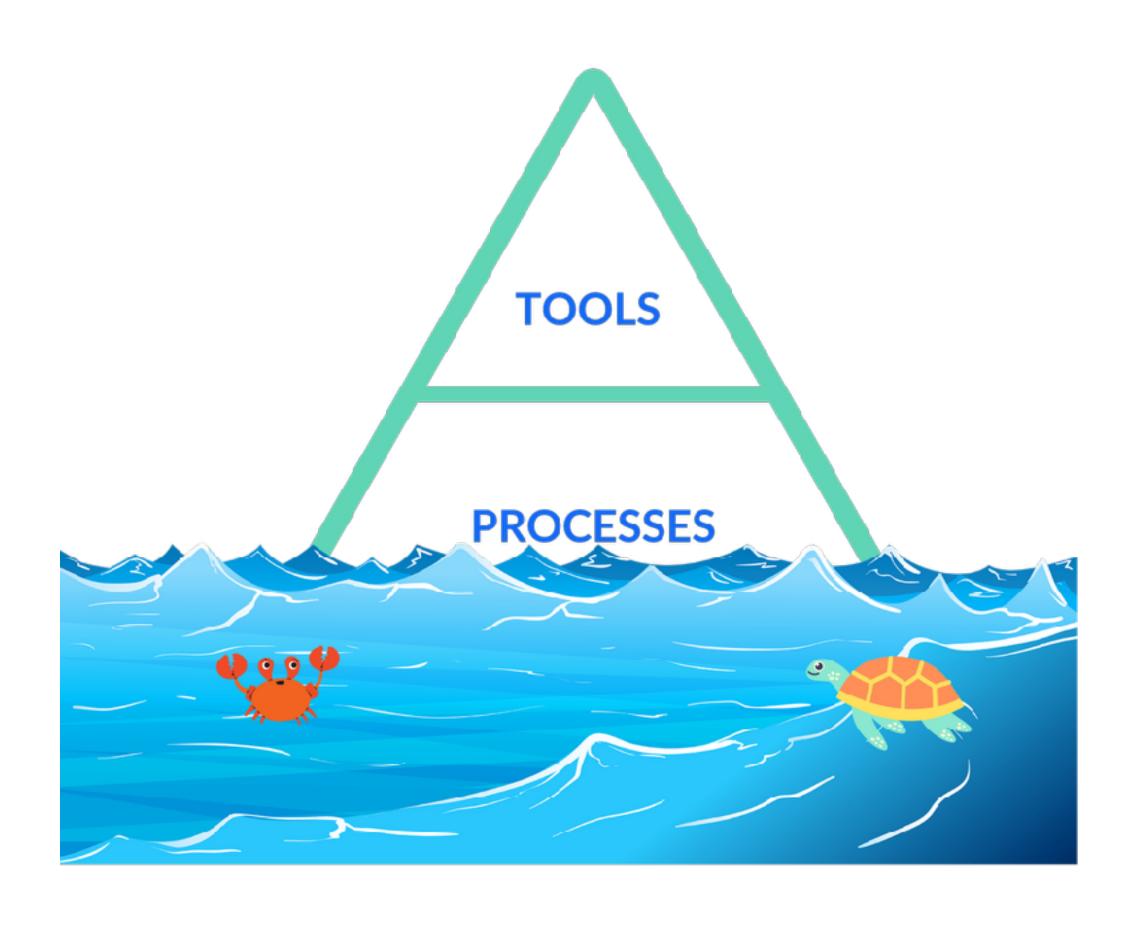










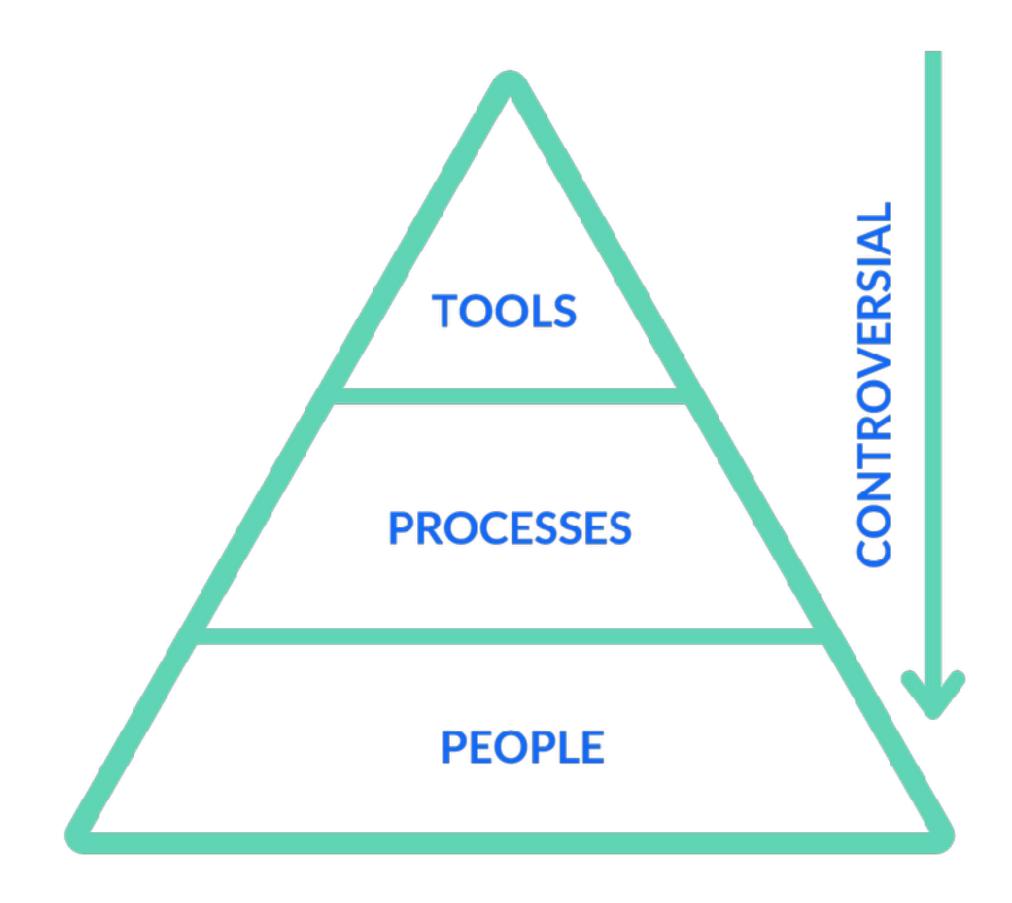




















### Psychological Safety

• The more errors a team reports, the more effective it is.

 Better teams don't make more mistakes, but they're more willing to report them



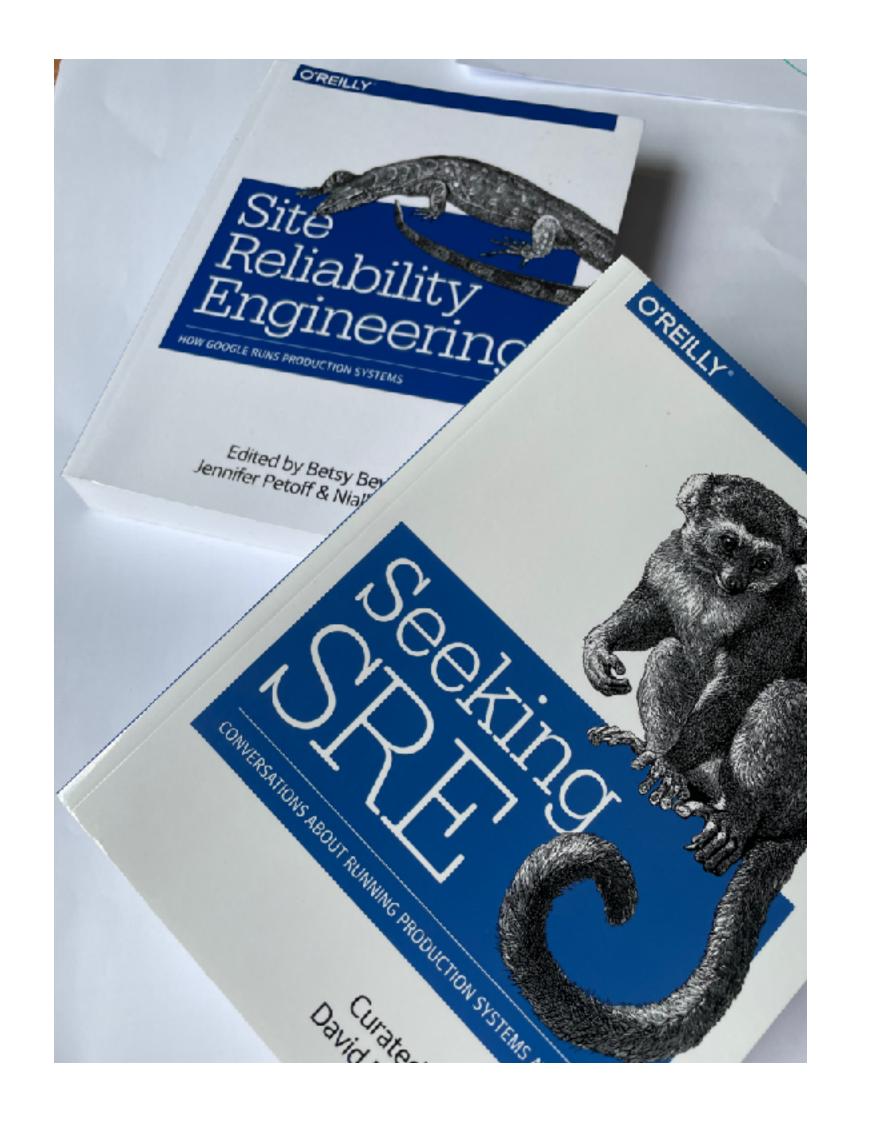










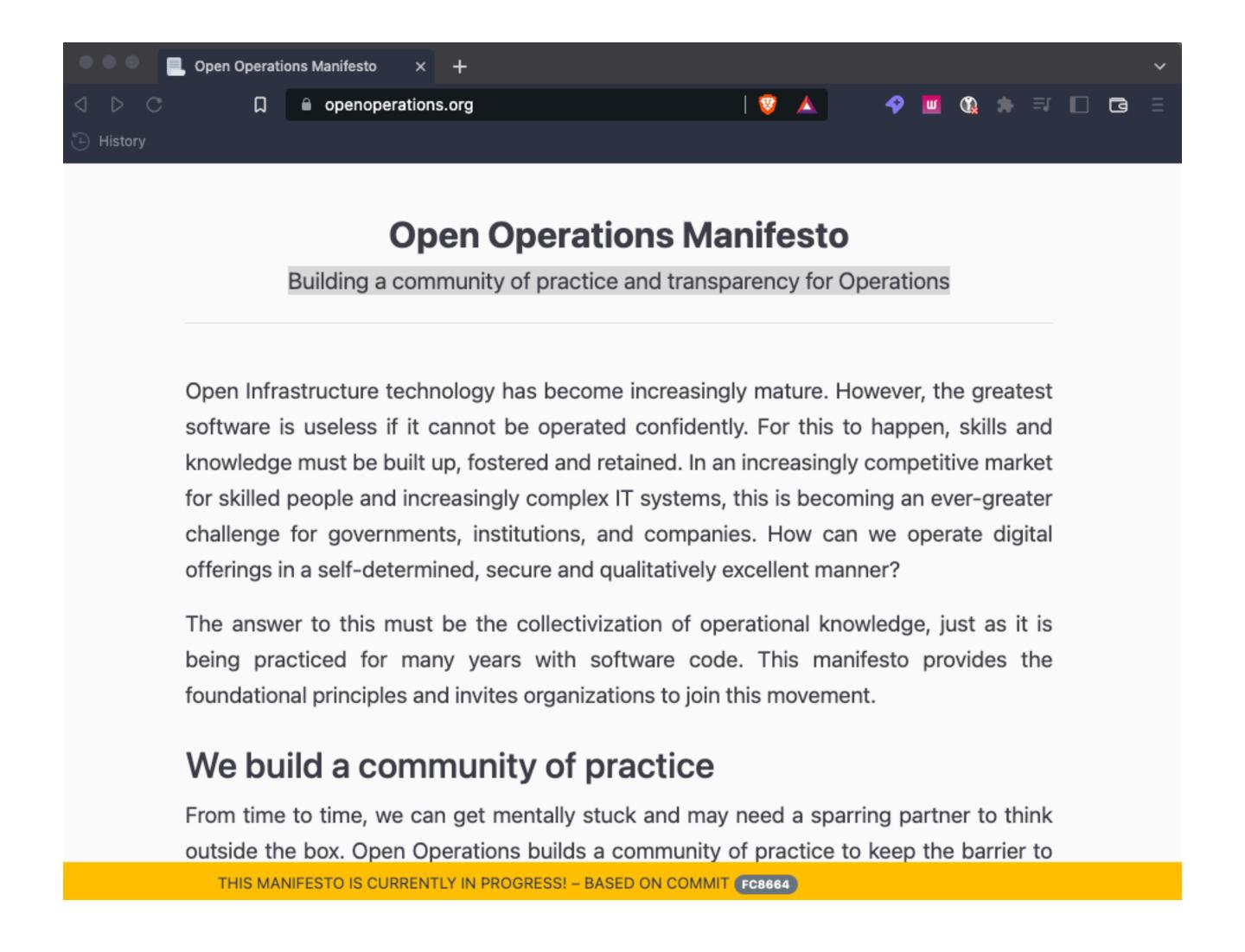




















# We build a community of practice









### We share knowledge



Gefördert durch:







### Collaboration over competion

- Lean SCS Operator Coffee
- Pairing in Hands-On Session together
  - Moving from R2 to R3
- Special Interest Groups
  - SIG Monitoring









## We believe that failures make us experts



Gefördert durch:







#### Psycholigical Safety

- See failures as chances to learn
- Blameless Postmortems
- Public RCA
  - Azure 2012-02-29
    - <a href="https://azure.microsoft.com/de-de/blog/summary-of-windows-azure-service-disruption-on-feb-29th-2012/">https://azure.microsoft.com/de-de/blog/summary-of-windows-azure-service-disruption-on-feb-29th-2012/</a>
  - OTC 2017-11-08
    - https://imagefactory.otc.t-systems.com/home/root-cause-analysis-and-improvements-on-otc-network-outage-2017-11-08





des Deutschen Bundestage





## We're transparent



Gefördert durch:







### We're transparent

- Open Processes
  - Great examples out there
    - https://about.gitlab.com/handbook
- Status Pages
  - Customers will value transparency earn trust



Gefördert durch:

Bundesminister
für Wirtschaft



und Klimaschutz





## https://openoperations.org









### Sovereign Cloud Stack Project

Sovereign Cloud Stack (SCS) is federated cloud technology built entirely with Open Source Software — putting users and providers in control.

https://scs.community/

https://github.com/SovereignCloudStack/



