

The background of the slide is a photograph of a sunset or sunrise over a calm sea or lake. The sky is filled with wispy, golden-yellow clouds against a blue gradient. The horizon line is visible in the distance, and the water in the foreground reflects the warm colors of the sky.

The fifth Open Paradigm

Open Operations

Christian Berendt, 26.10.2022, EclipseCon 2022, Ludwigsburg

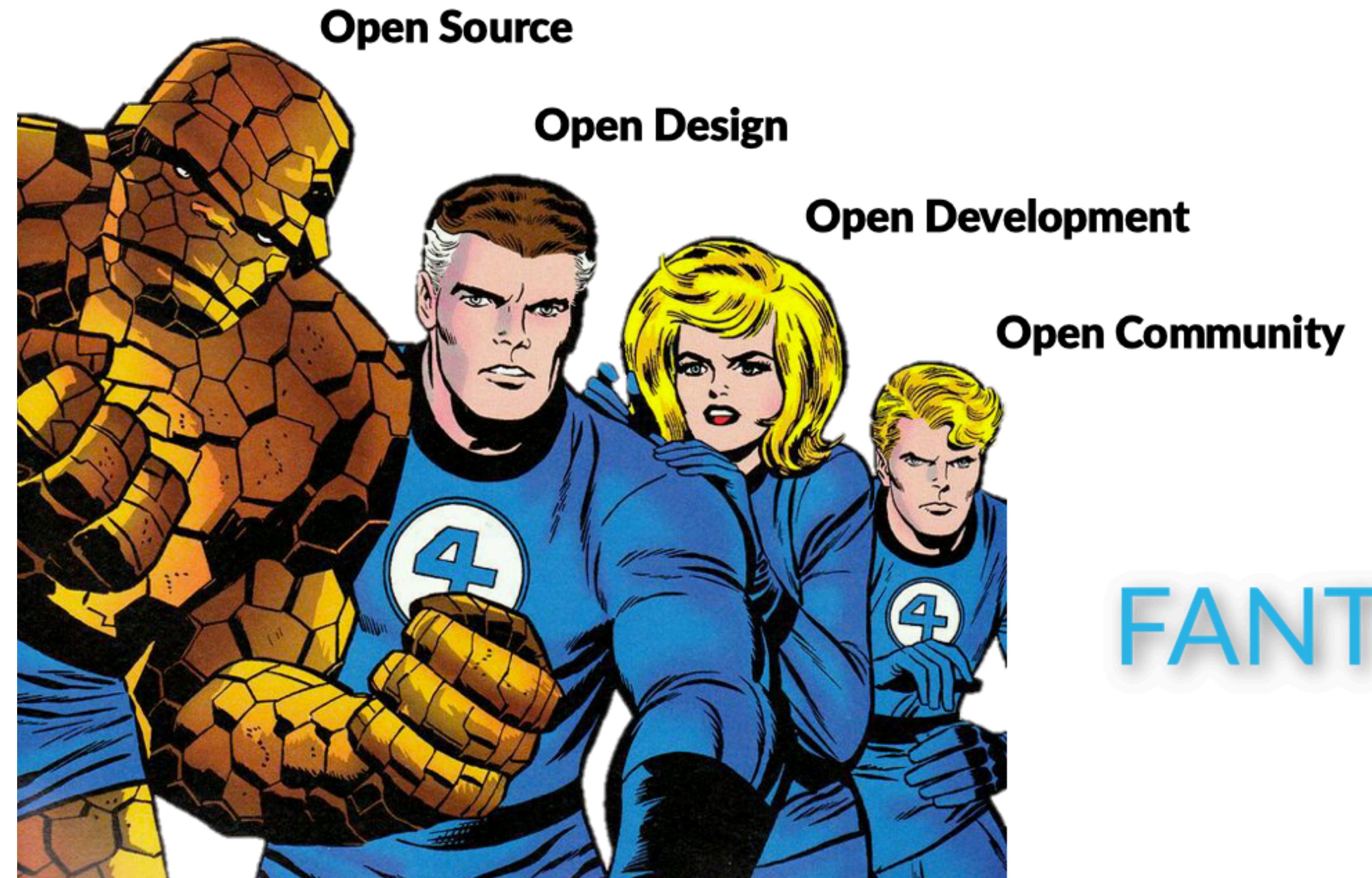
Intro Speaker?

23 | Technologies



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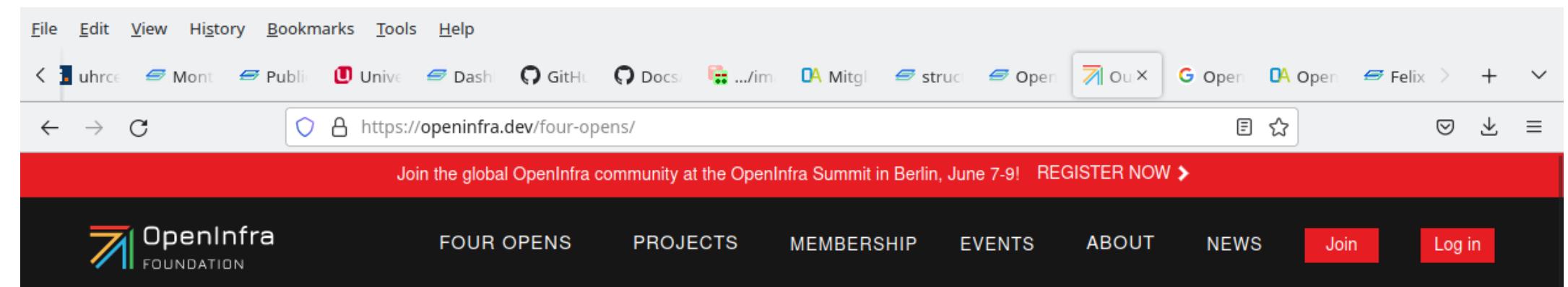




FANT  STIC

The Four Opens

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



The Four Opens
Our Philosophy on Open Source

The Four Opens are a set of principles guidelines that were created by the OpenStack community as a way to guarantee that the users get all the benefits associated with open source software, including the ability to engage with the community and influence future evolution of the software.

Under these guidelines, the OpenStack community grew from tens of contributors to thousands, creating one of the top three most active open source projects in the world behind the Linux Kernel and Chromium. The Four Opens were instrumental not only in this success but also in building a thriving, global community.

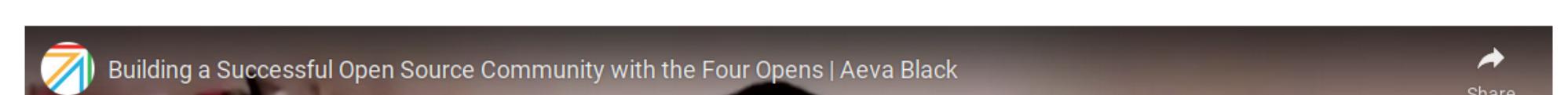
We at OpenInfra Foundation consider The Four Opens our guiding principles in everything we do.

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

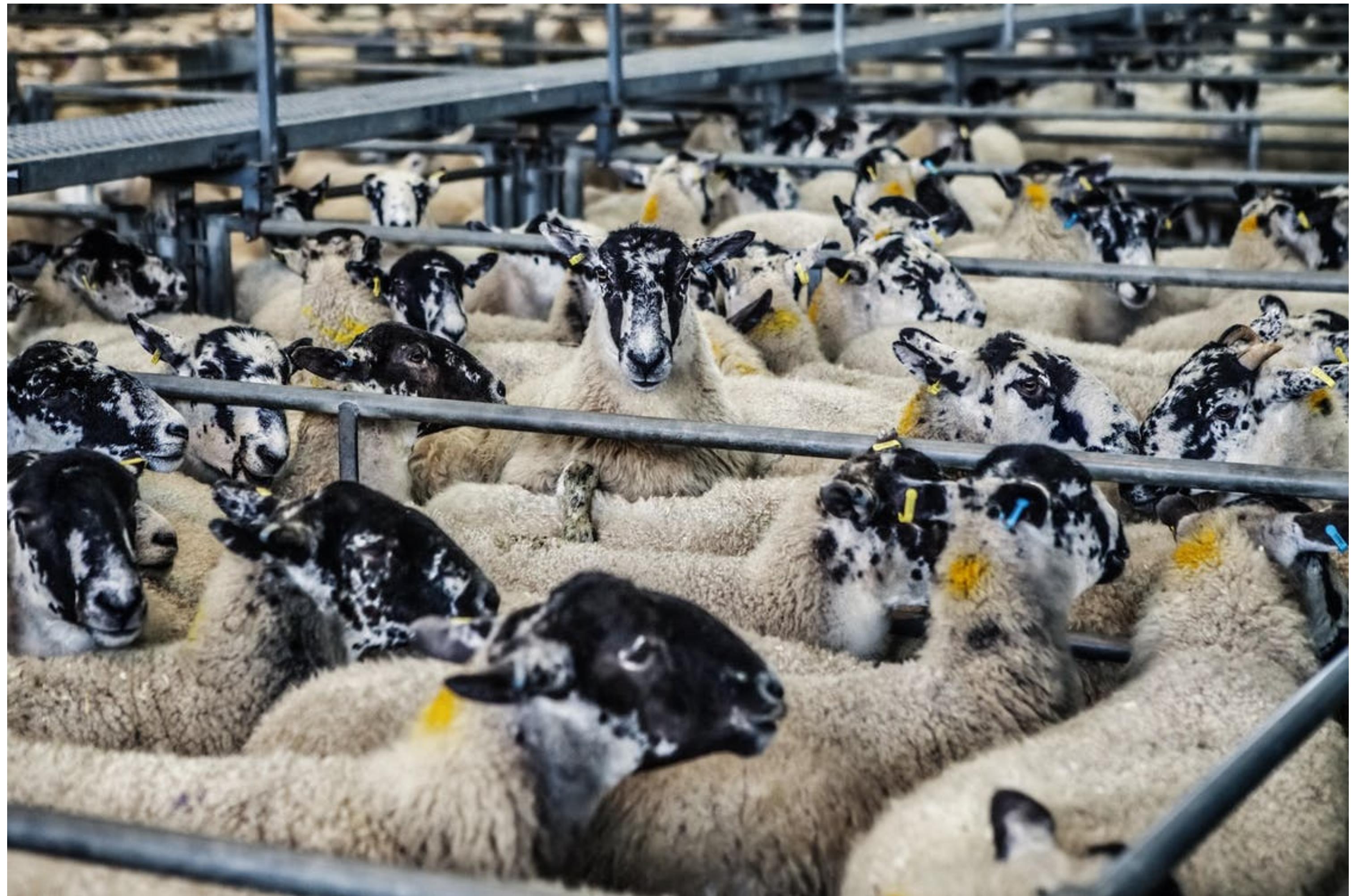
How we practiced the Four Opens has evolved over time and incorporates many practices: public code reviews, design summits, technical committee, and lazy consensus. Earlier this year, the Open Infrastructure Foundation started the Four Opens Book as a way to share these learnings and how the Four Opens were initially intended for upstream, and how they proved applicable to downstream activities such as user feedback gathering, marketing, or event management. As the Open Infrastructure Foundation grows to more generally support Open Infrastructure, the Four Opens will grow alongside it.

We welcome you to [read the book](#) or [contribute](#) and share your open source learnings as this book continues to evolve and reflect our values.

Learn more about the Four Opens, the value they bring, and the responsibility of the community that upholds them to be mentors for the next wave of new members with Aeva Black, Azure Office of the CTO at Microsoft, on the OpenInfra Live: Keynotes.

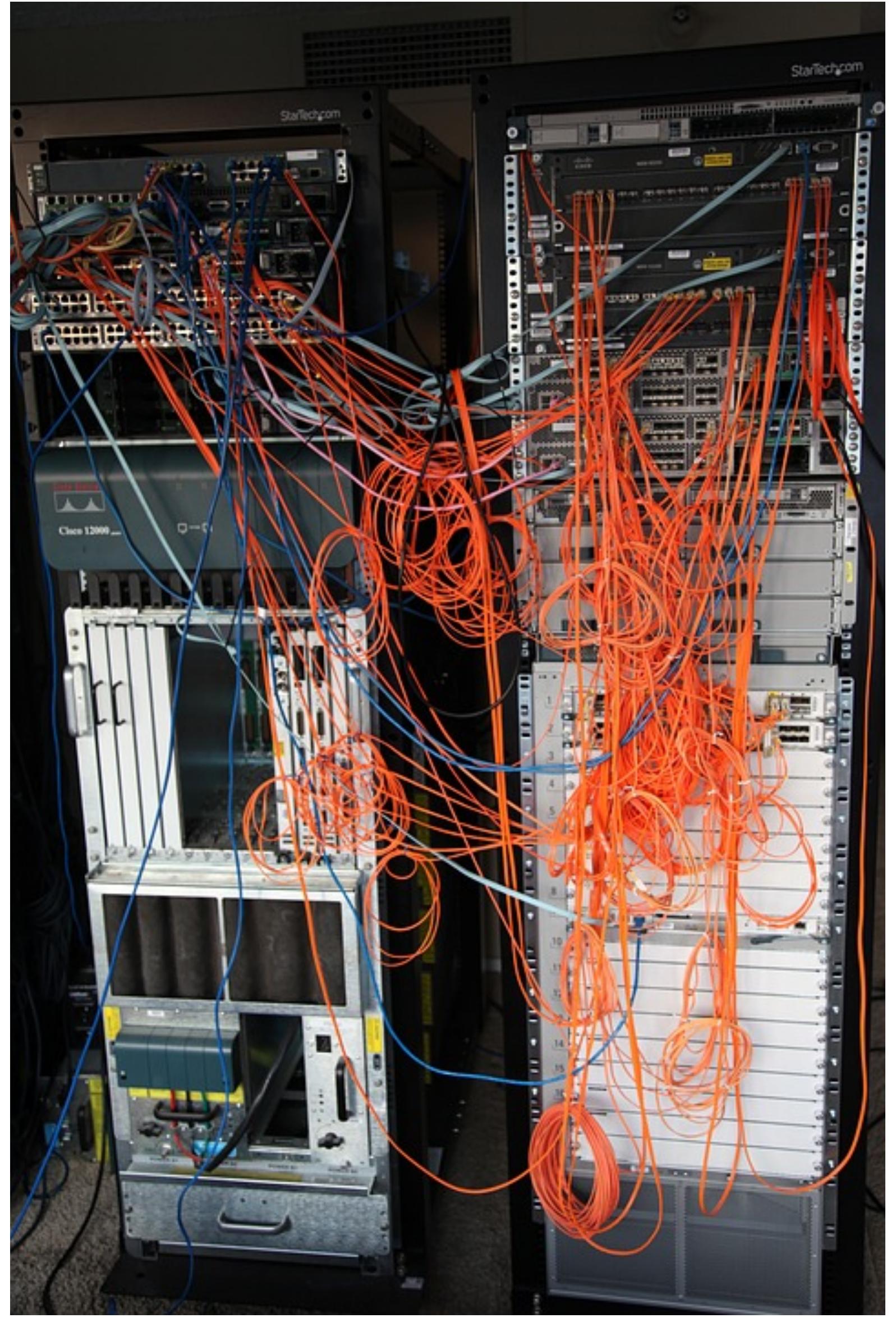


Gefördert durch:



Gefördert durch:

Operating distributed dynamic infra is hard



Gefördert durch:



aufgrund eines Beschlusses
des Deutschen Bundestages

Time to introduce the fifth Open?

Open Operations

Example: OpenStack Health Monitor / CloudMon



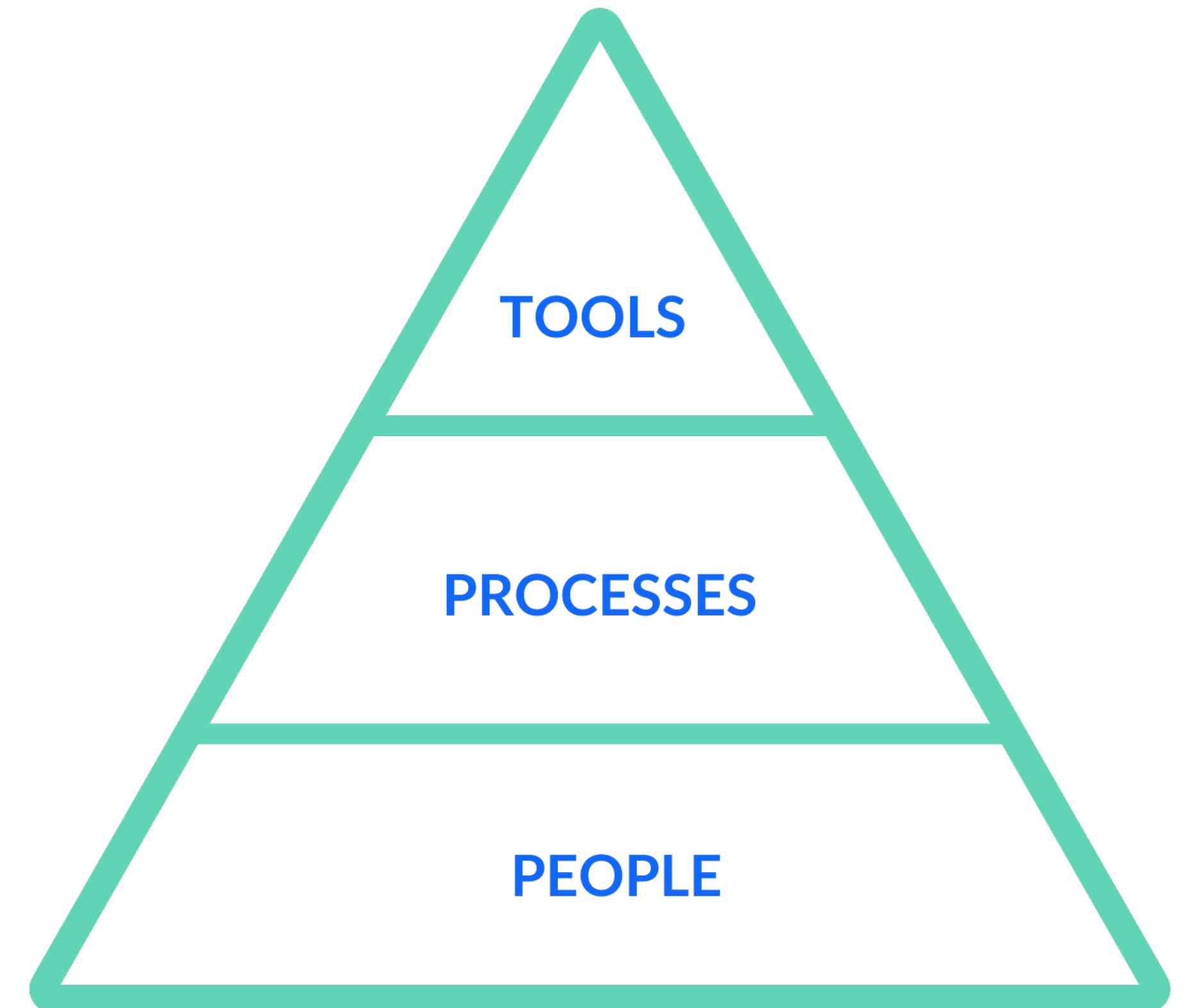
Example: OpenStack Health Monitor / CloudMon

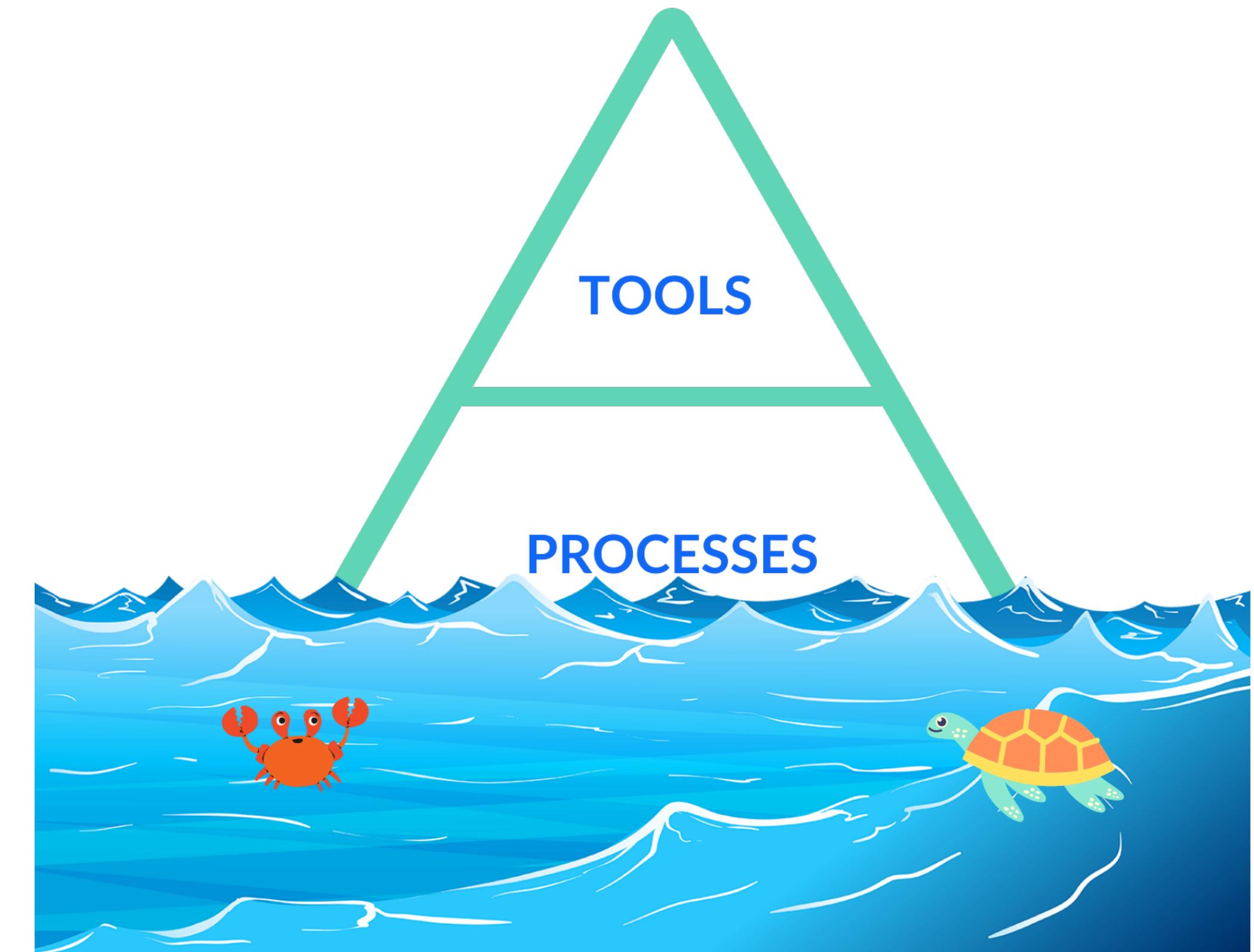
- Measure what you manage...
- ...and be transparent about it
- Behaviour-based monitoring through the eyes of the customer
- Next level - CloudMon - Collaboration within the community with OTC
 - <https://github.com/stackmon>

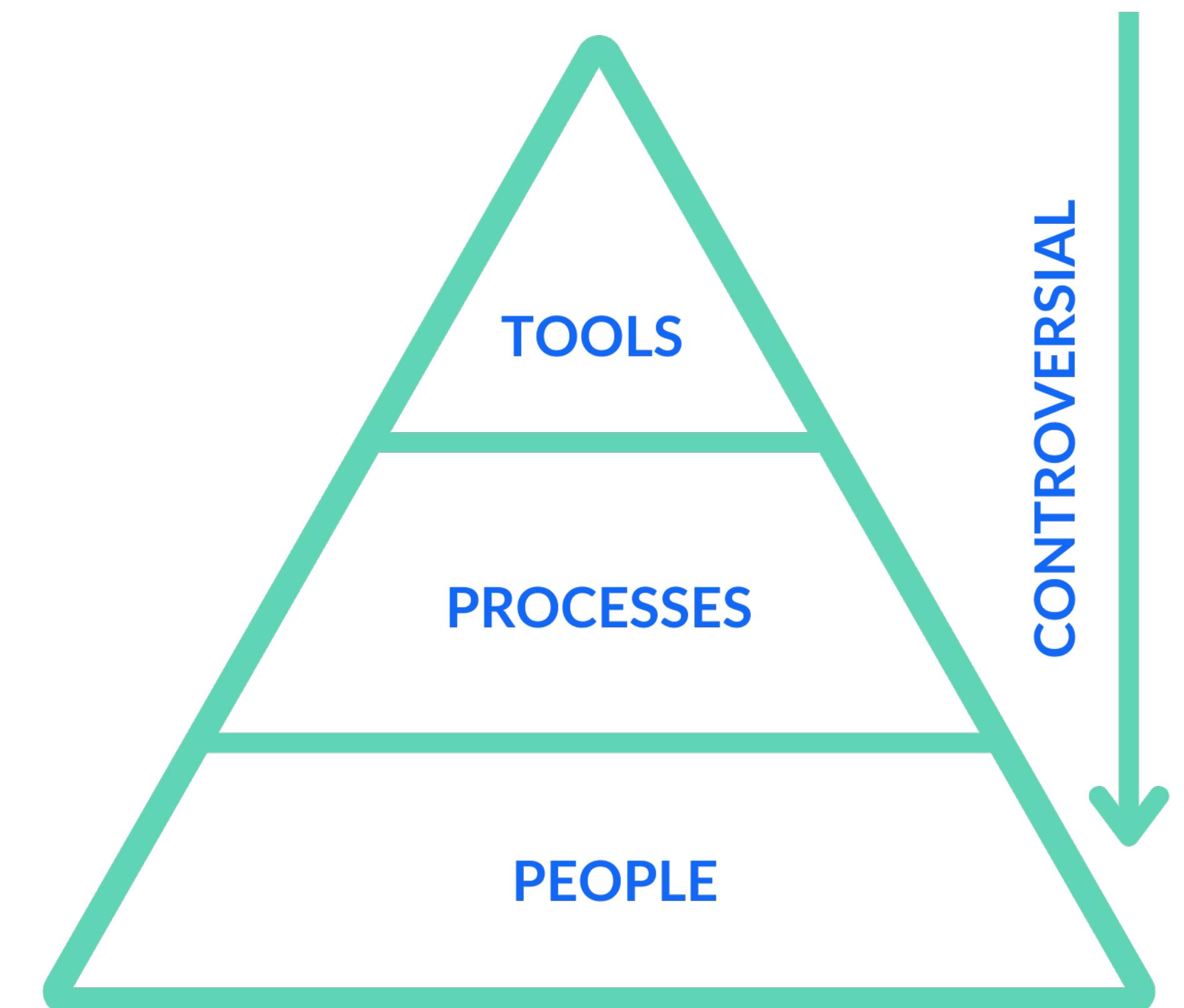
Are Open Source Tools enough?

“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





Step 1: FOSS Manifestos from the Industry

The Mercedes-Benz AG - FOSS Center of Competence and the CIO,

- RESOLVED to incorporate Free and Open Source Software in our daily software development to improve the quality of our software as well as the speed of delivery,
- DESIRING to be an active member in Open Source communities to benefit company, employee, and customer,
- CONFIRMING the will to pave the road for their realization,
- HAVE DECIDED to establish these FOSS guiding principles:

Company Principles

- I. Mercedes-Benz shall support and encourage its employees to use, contribute to, and create FOSS projects both in Open and Inner Source endeavors. [Encourage FOSS]
- II. Mercedes-Benz shall allow the appropriate time for its employees to participate in FOSS activities. [Facilitate FOSS Participation]
- III. Mercedes-Benz shall encourage and facilitate learning and advancement of its employees through FOSS activities. [Advancement through FOSS]
- IV. Mercedes-Benz shall promote visibility in Open Source communities. [FOSS Visibility]

Employee Principles

- I. An engineer shall look for Open and Inner Source alternatives before writing custom code or using proprietary alternatives. [Prefer FOSS]
- II. An engineer shall strive to be active in the Inner Source communities. [Active FOSS Citizen]
- III. An engineer shall contribute to Open Source projects within the scope of his or her day-to-day work. [Contribute FOSS]
- IV. Any employee shall always act responsibly in Open and Inner Source communities, with care and respect in both content and communication, in order to uphold a positive image for both himself / herself and the company. [Responsible FOSS Citizen]

Step 2: Open Operations Manifesto

Building a community of practice and transparency for Operations

Open Infrastructure technology has become increasingly mature. However, the greatest software is useless if it cannot be operated confidently. For this to happen, skills and knowledge must be built up, fostered and retained. In an increasingly competitive market for skilled people and increasingly complex IT systems, this is becoming an ever-greater challenge for governments, institutions, and companies. How can we operate digital offerings in a self-determined, secure and qualitatively excellent manner?

The answer to this must be the collectivization of operational knowledge, just as it is being practiced for many years with software code. This manifesto provides the foundational principles and invites organizations to join this movement.

We build a community of practice

From time to time, we can get mentally stuck and may need a sparring partner to think outside the box. Open Operations builds a community of practice to keep the barrier to

Example:

Sovereign Cloud Stack

We build a community of practice

We share knowledge

Collaboration over competition

Collaboration over competition

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

Gefördert durch:

We believe that failures make us experts

Psychological Safety

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

We're transparent

We're transparent

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

Gefördert durch:

<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/>