

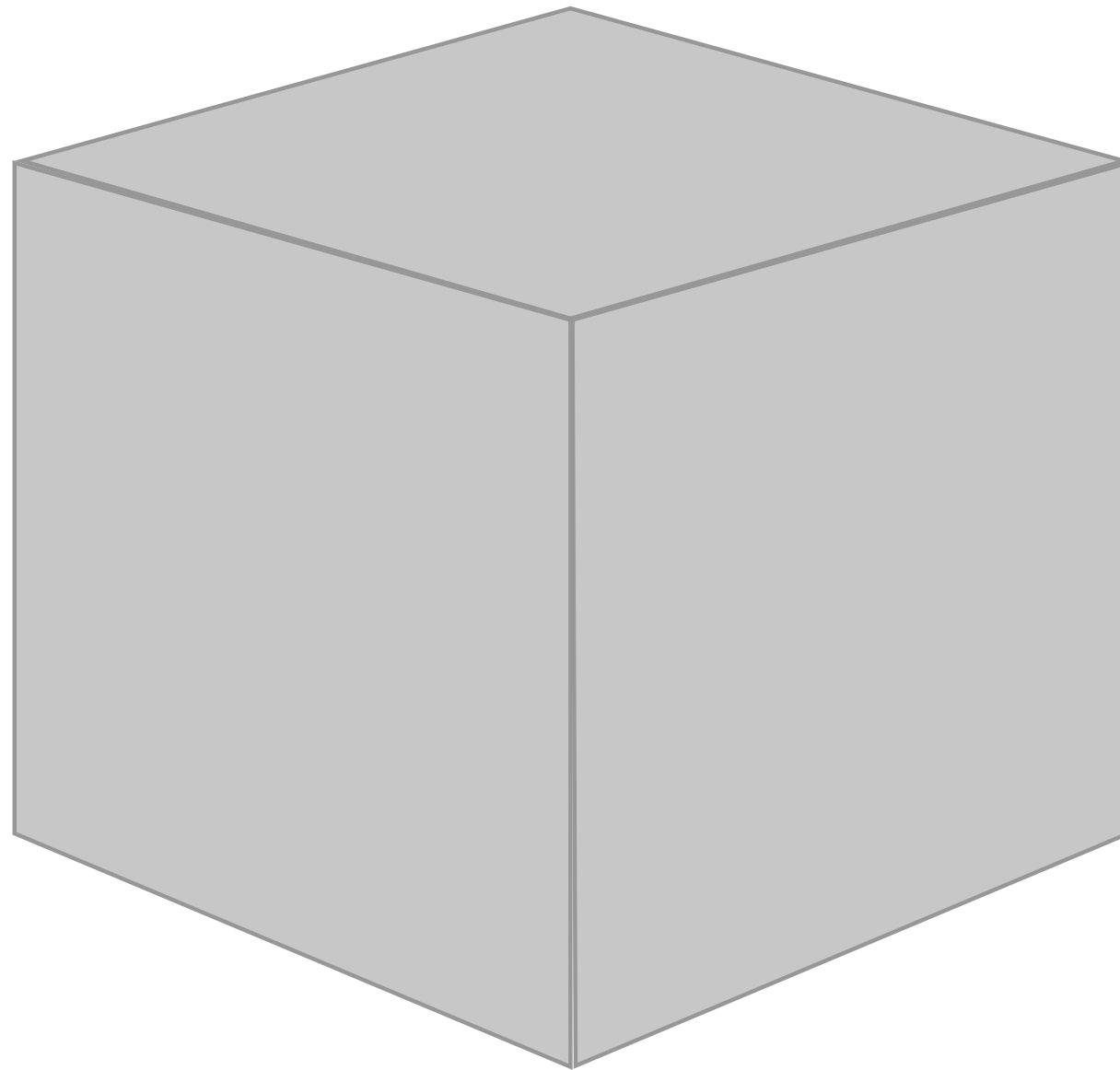
Microservices – Awesome, as long as they are neither “micro” nor “services”?

Stefan Tilkov, @stilkov
innoQ Deutschland GmbH



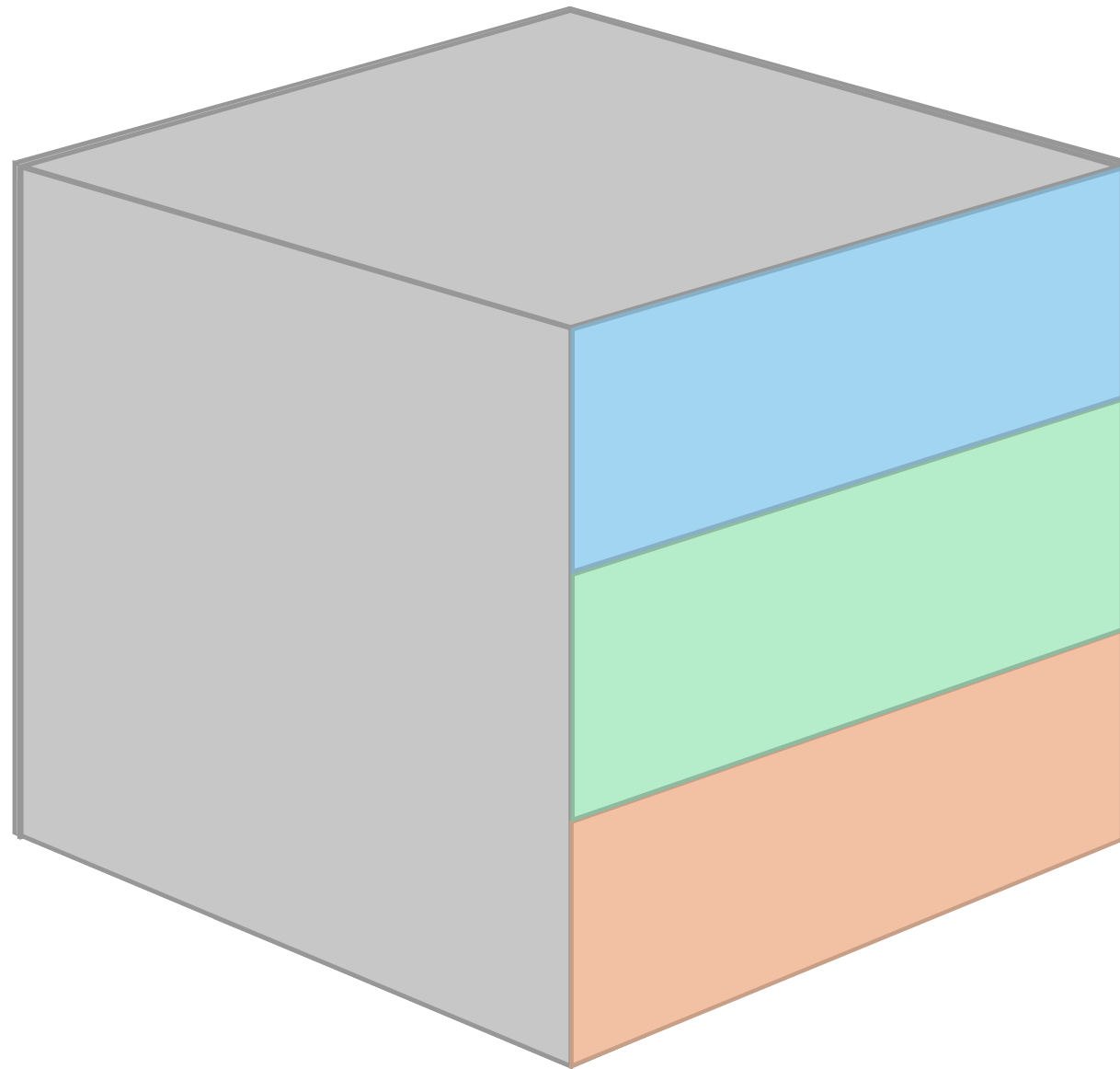
Yet another intro

A monolith ...

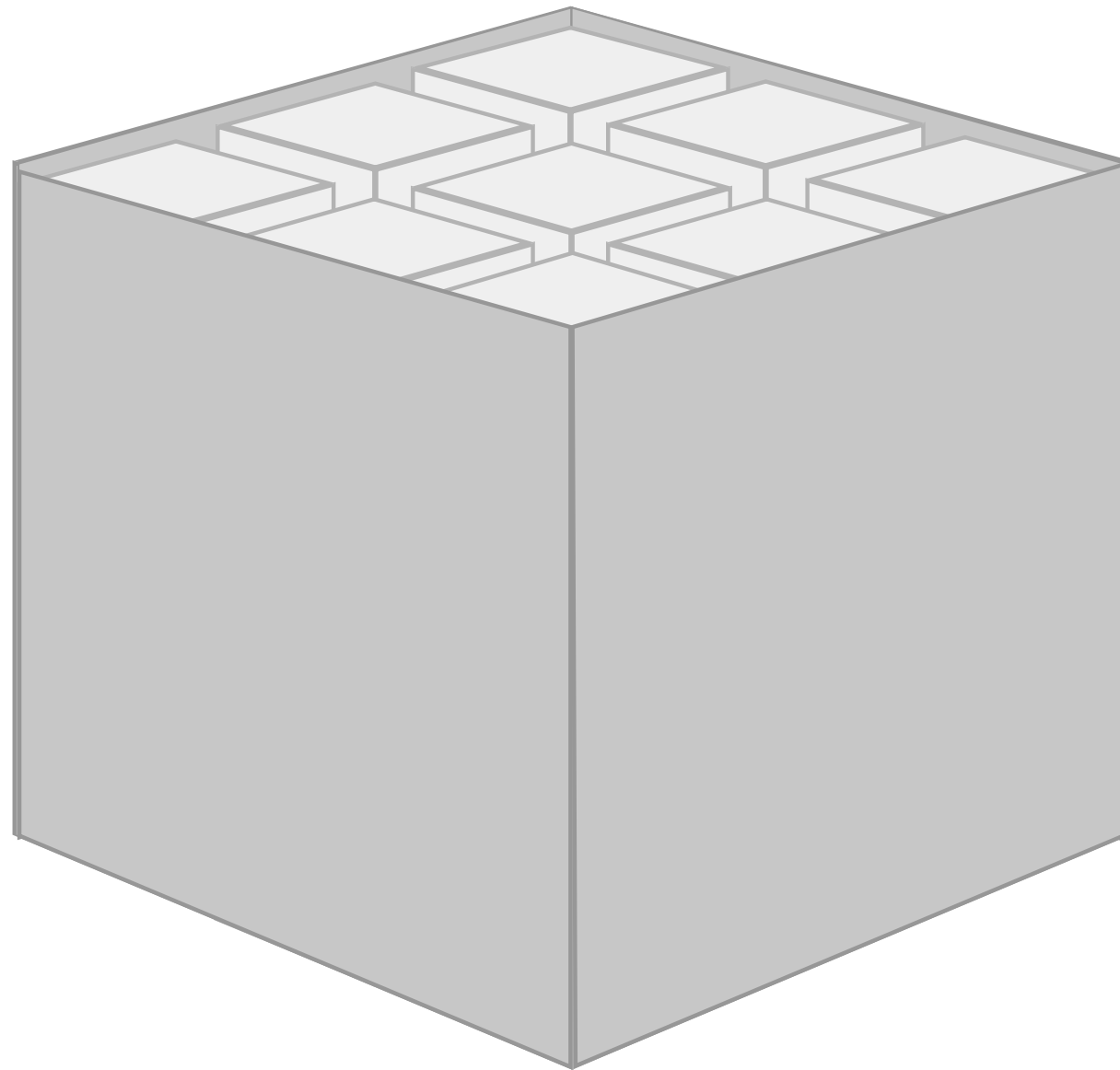


See <https://www.innoq.com/en/links/self-contained-systems-infodeck/>

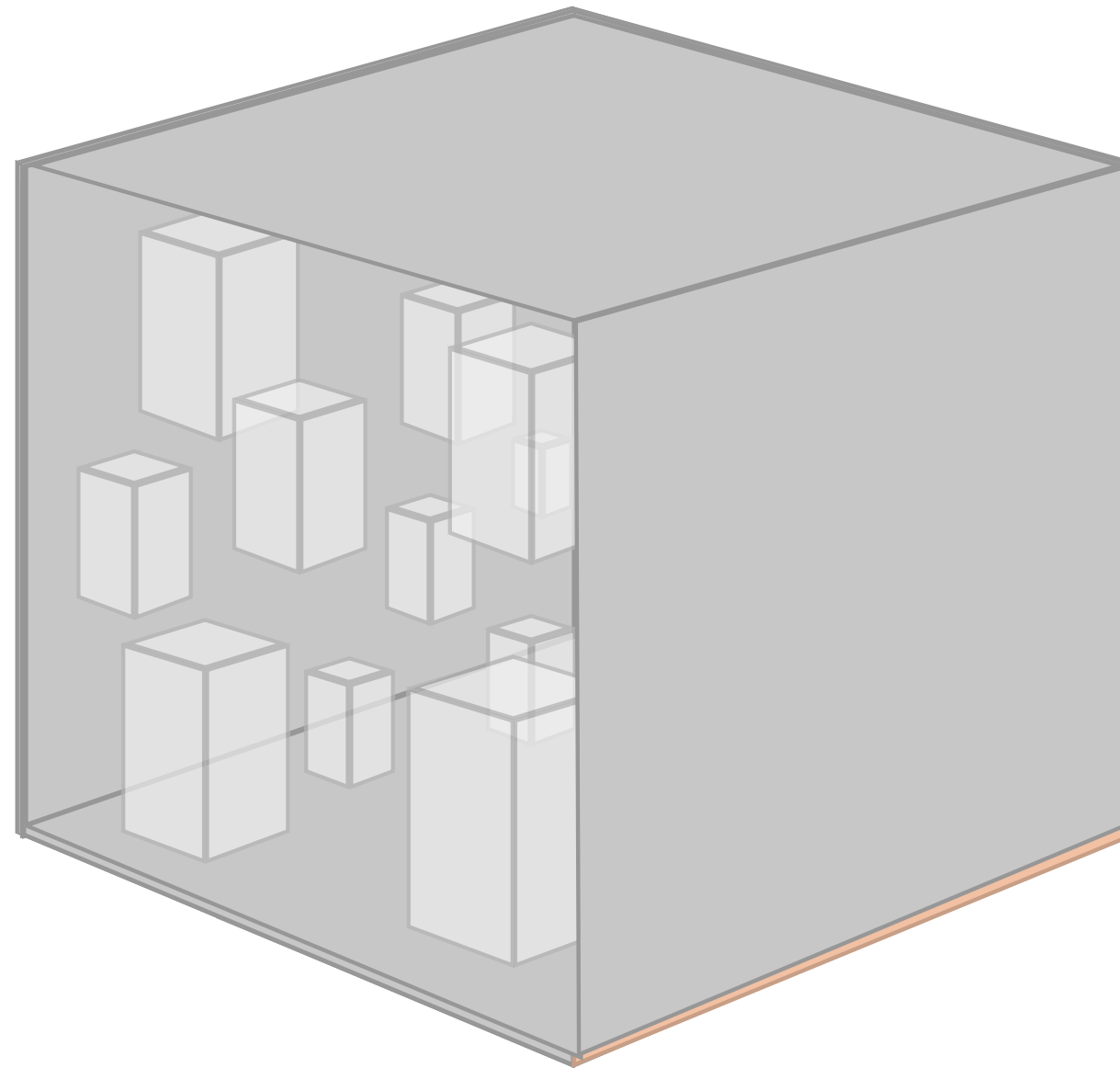
... including multiple layers ...



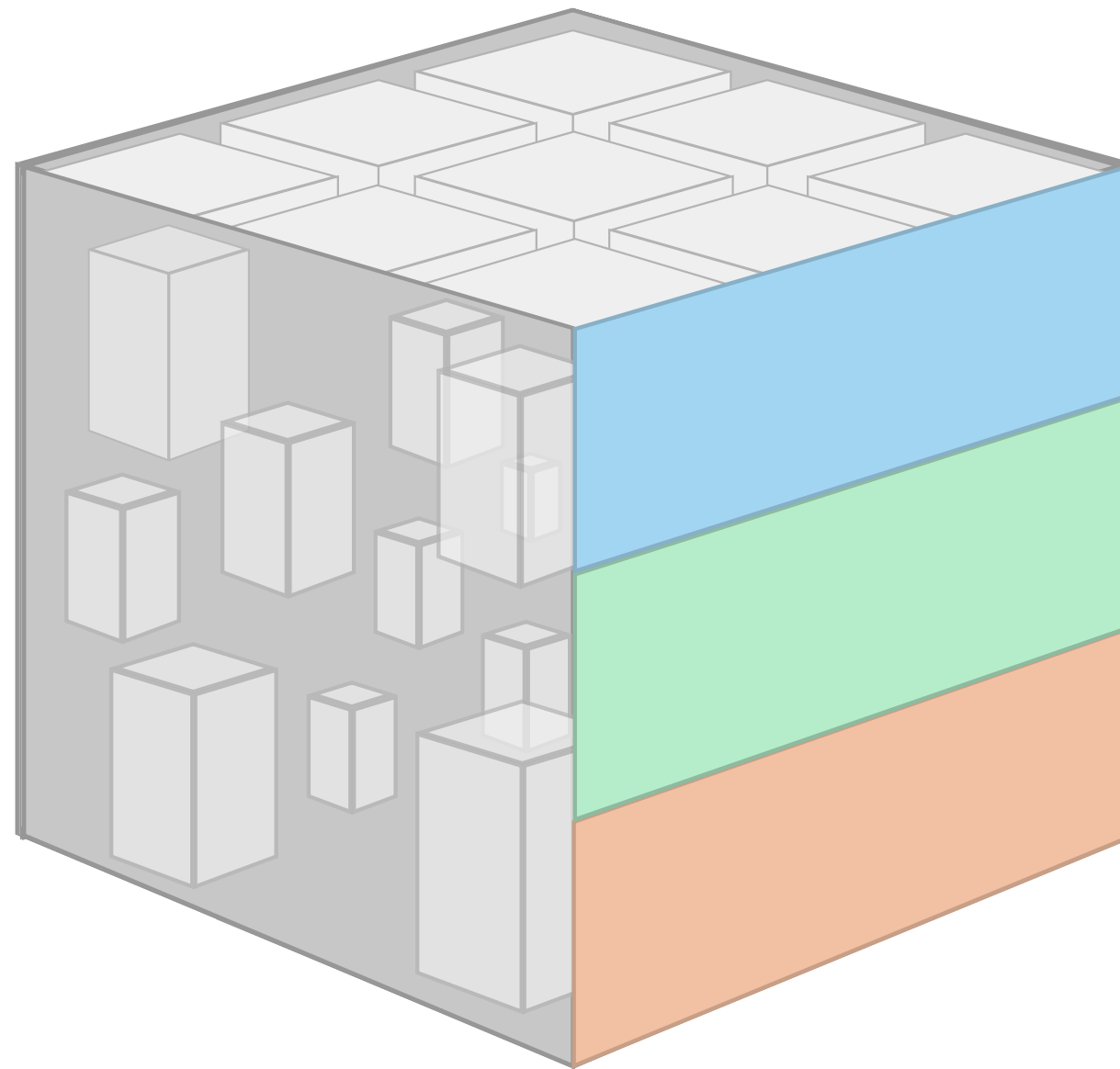
... including various contexts ...



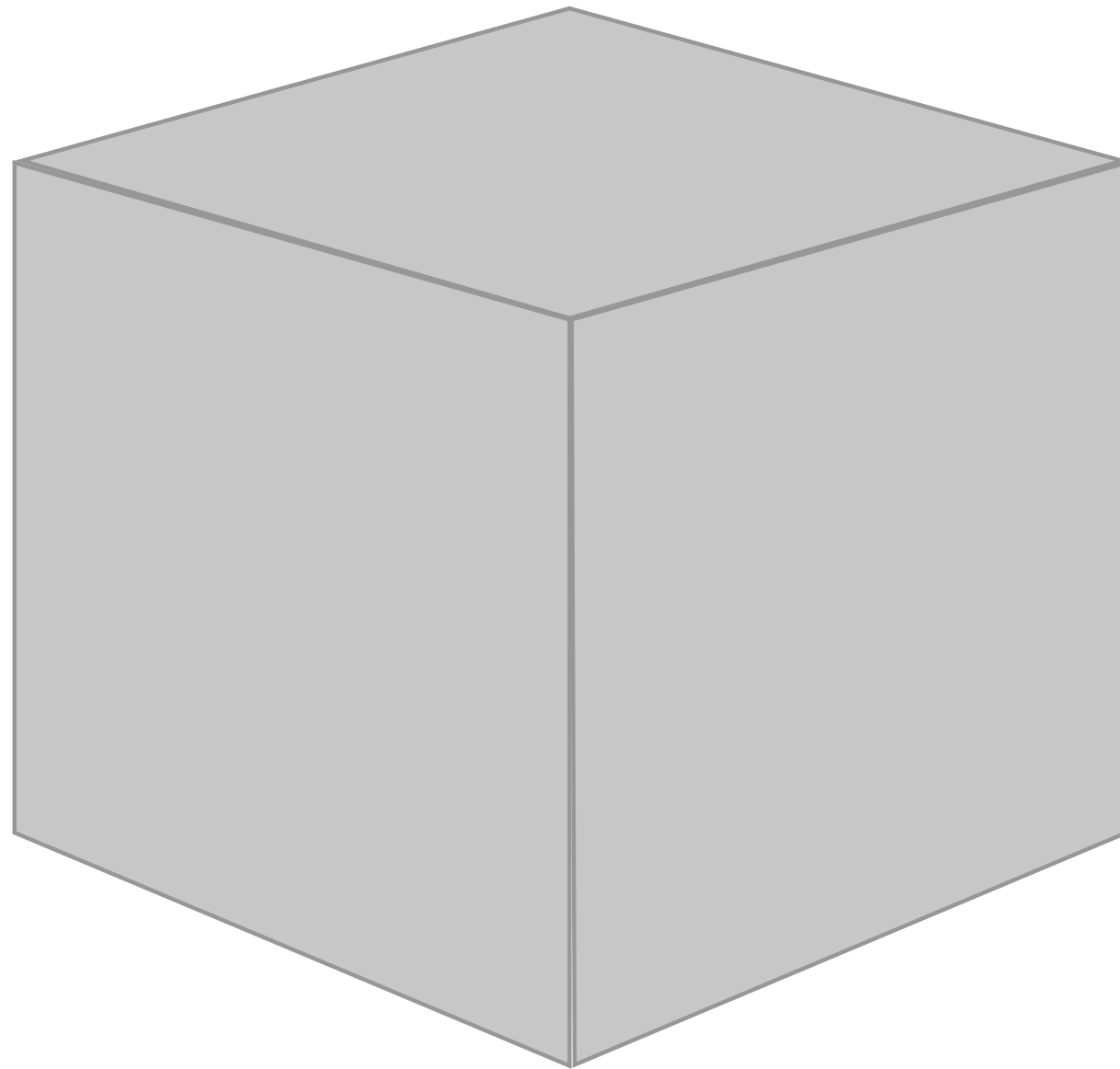
... a ton of internal components ...



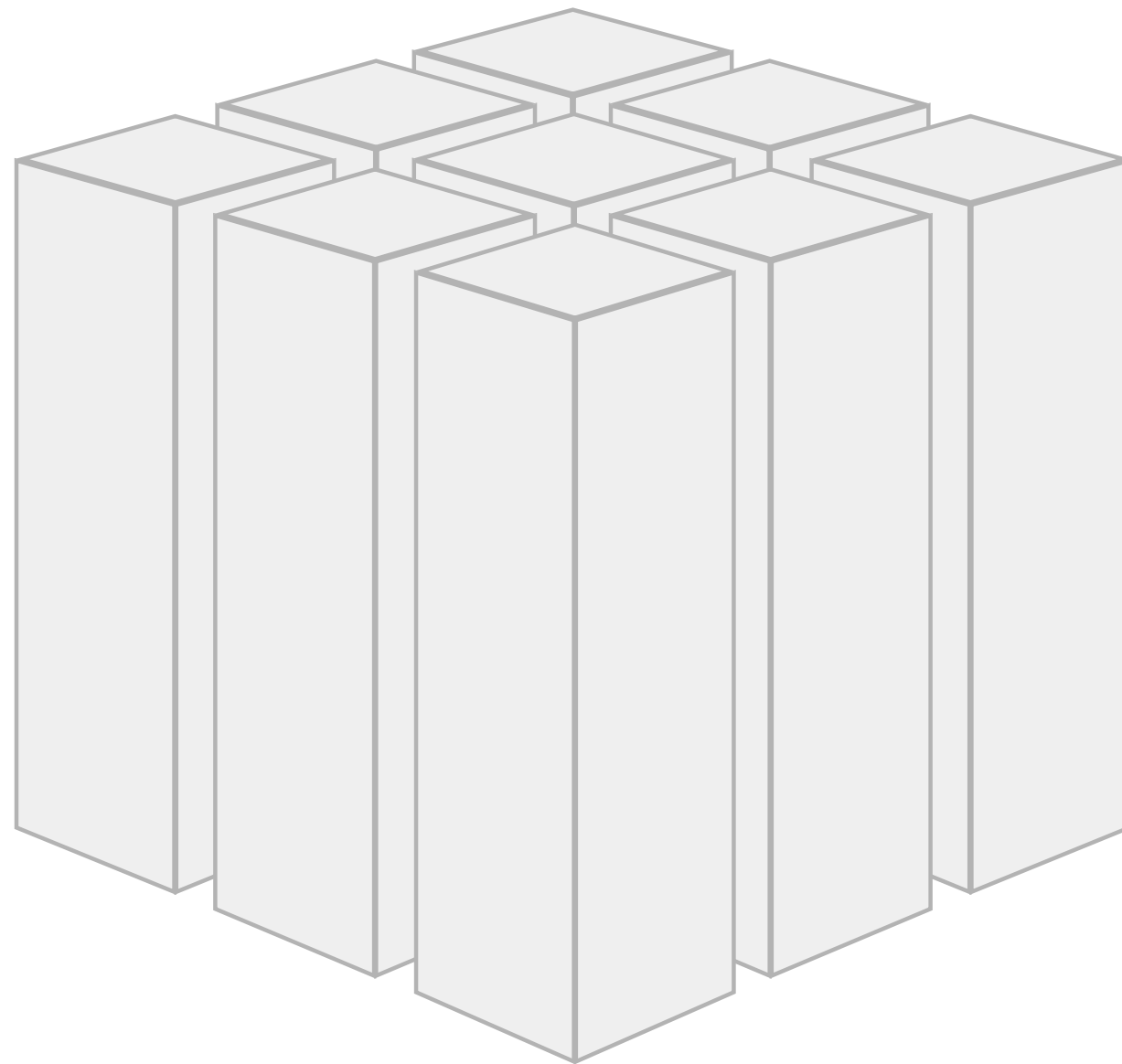
... is a bit of a mess.



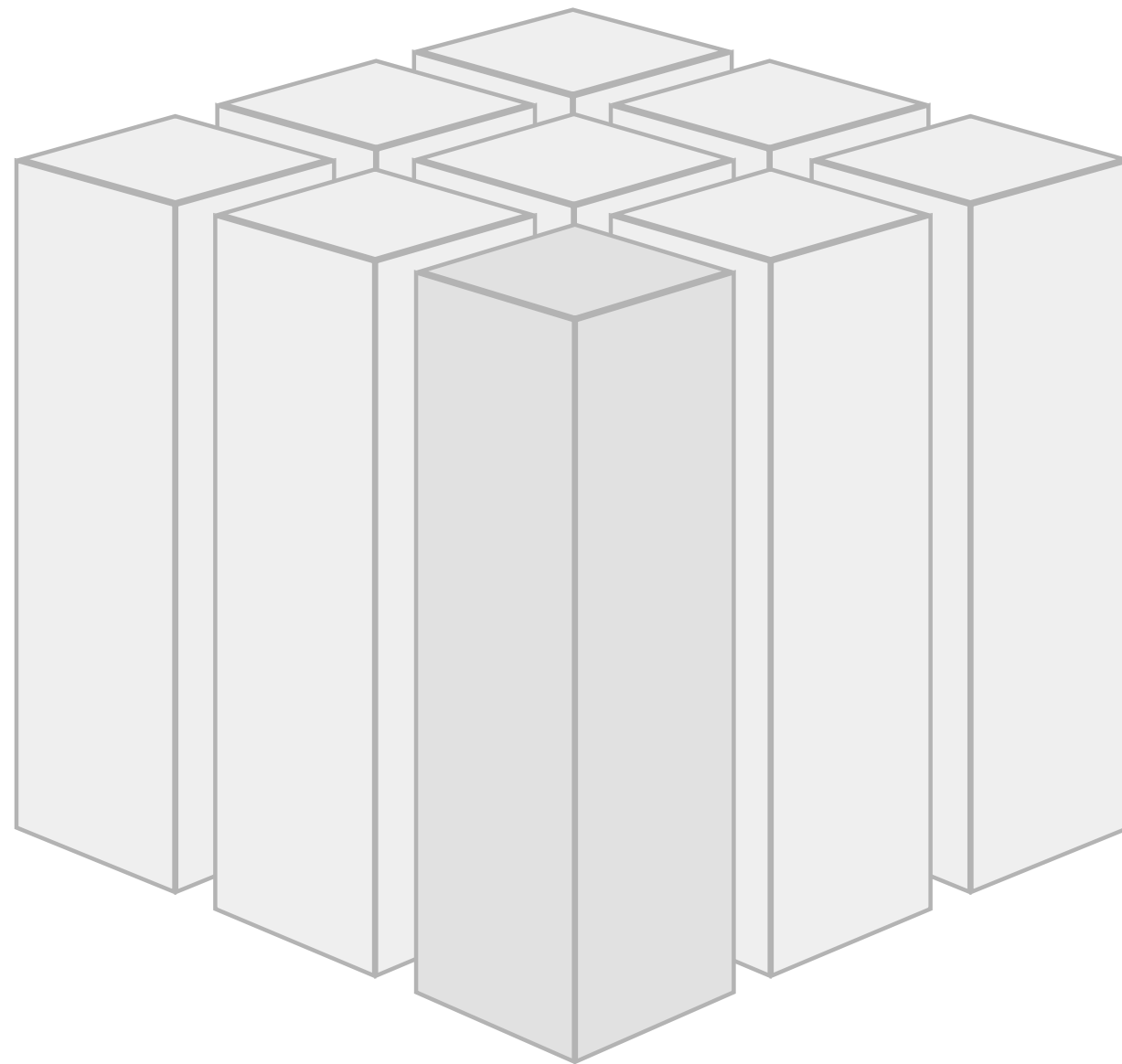
So let's start with this ...



... and cut it apart.

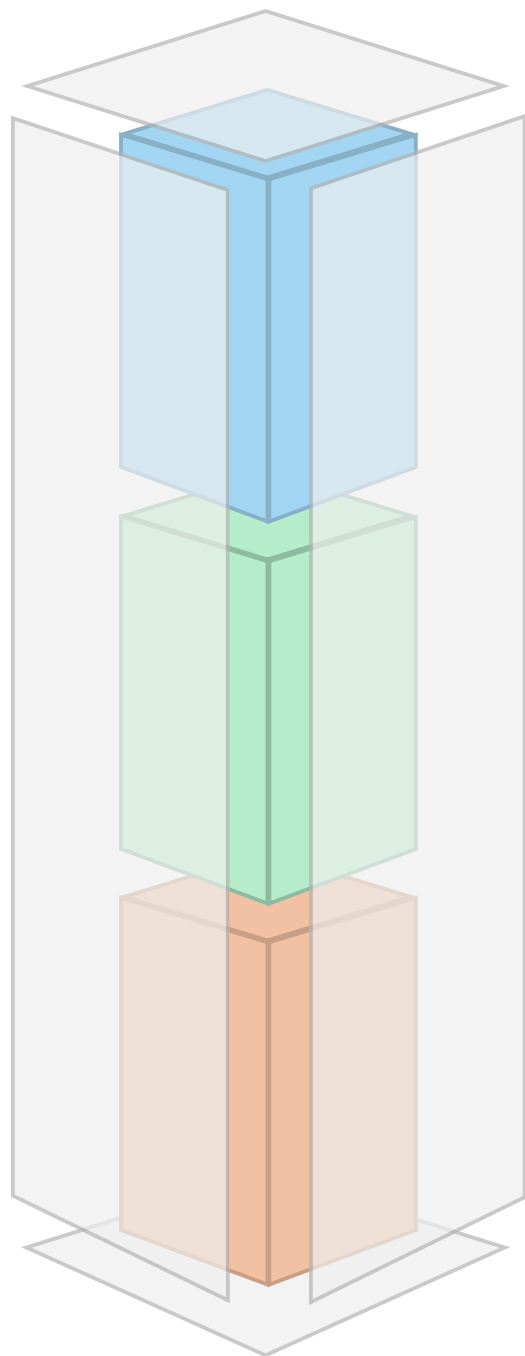


Voilà, Microservices!



Wait.

This raises questions.



- › Each service with its own UI?
- › Autonomous business logic?
- › Data ownership?

Benefits first.

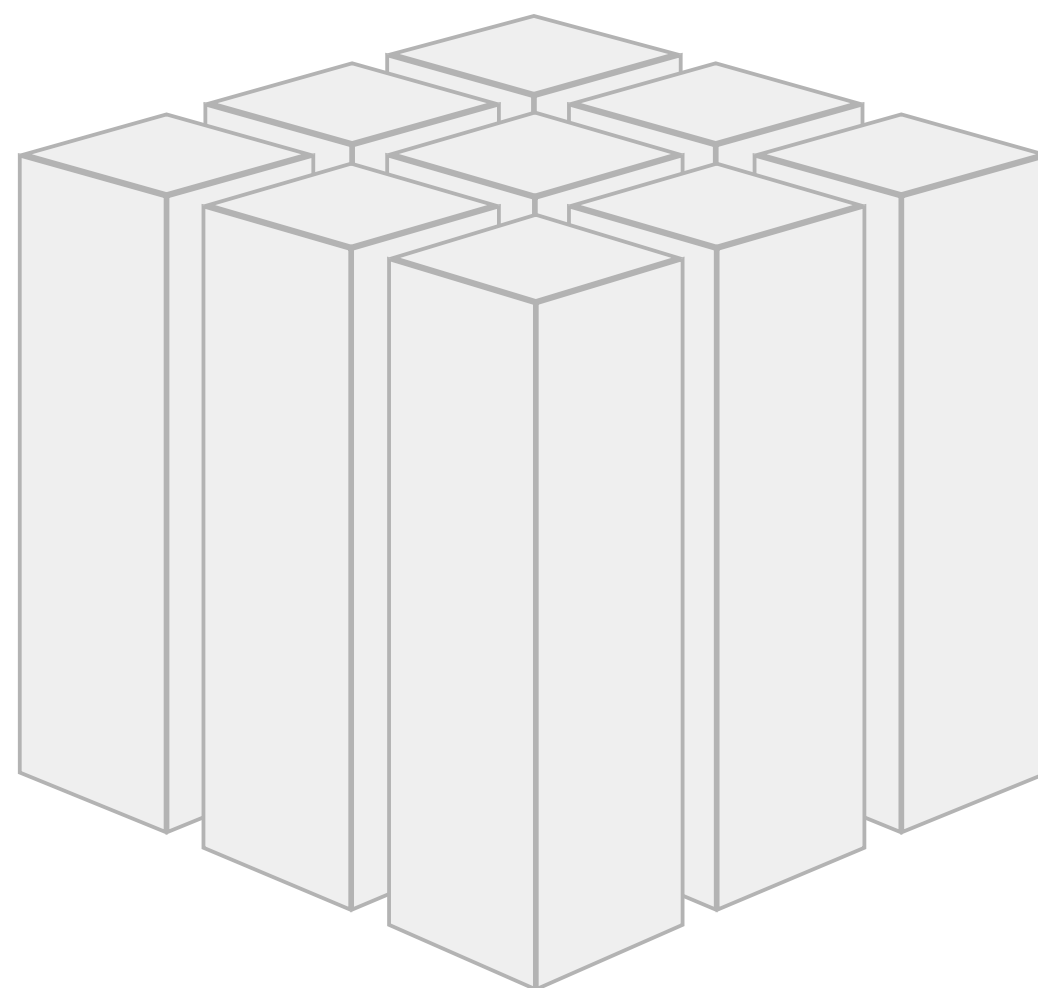
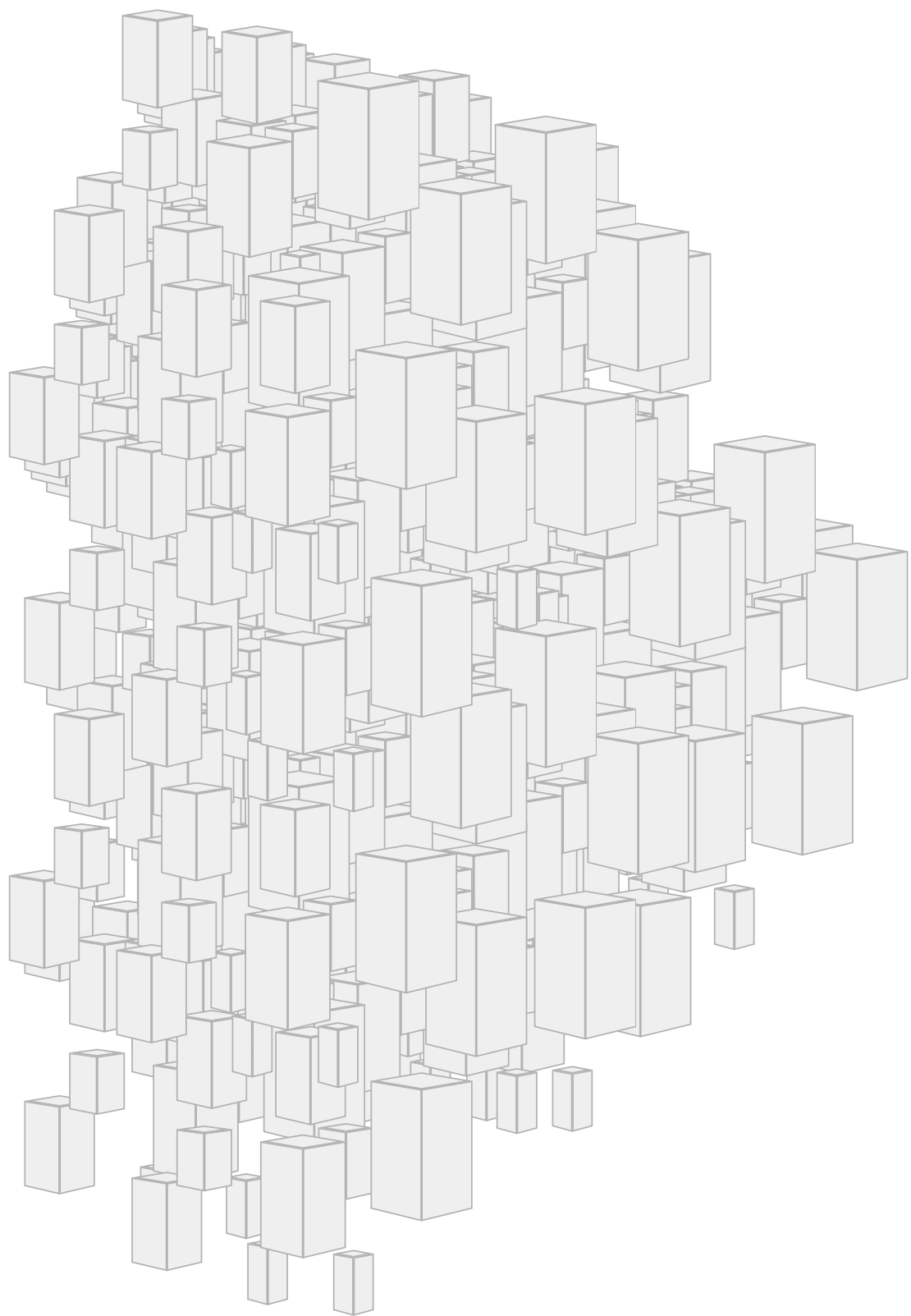
1. Isolation
2. Autonomy
3. Experimentation
4. Replacability
5. Rapid Feedback

Problems

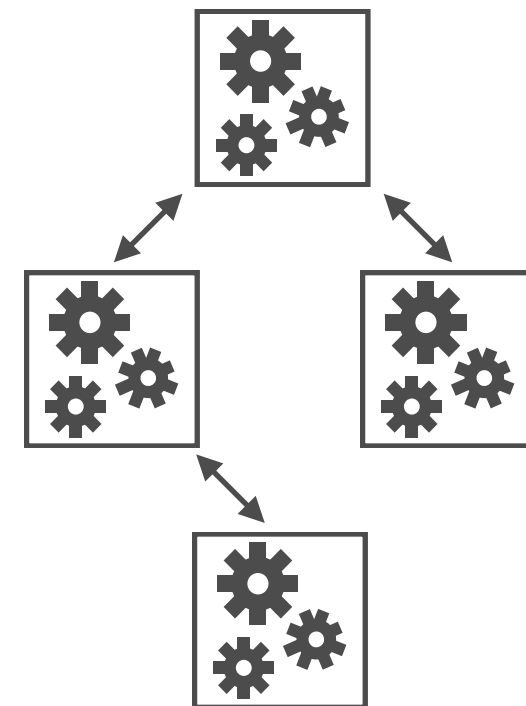
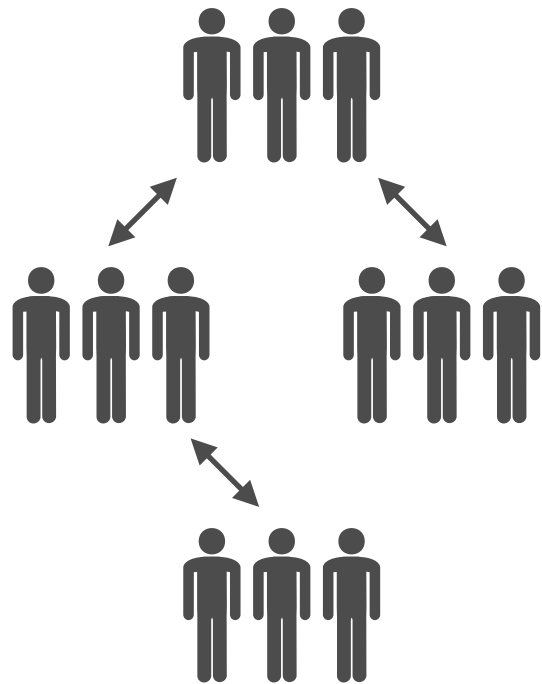
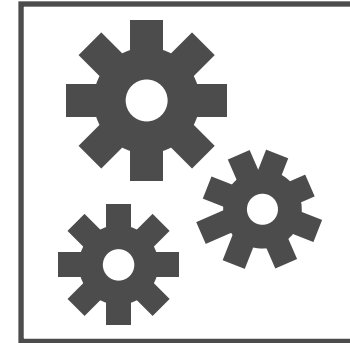
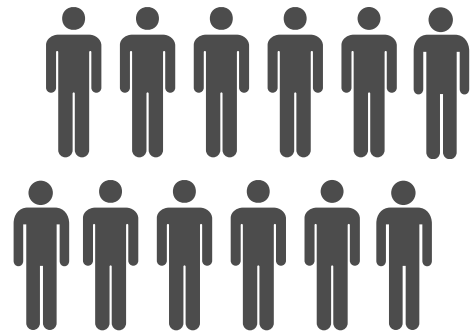
Challenges

1. Size
2. Orchestration & UI
3. Platform
4. Process
5. Hype

1. Size

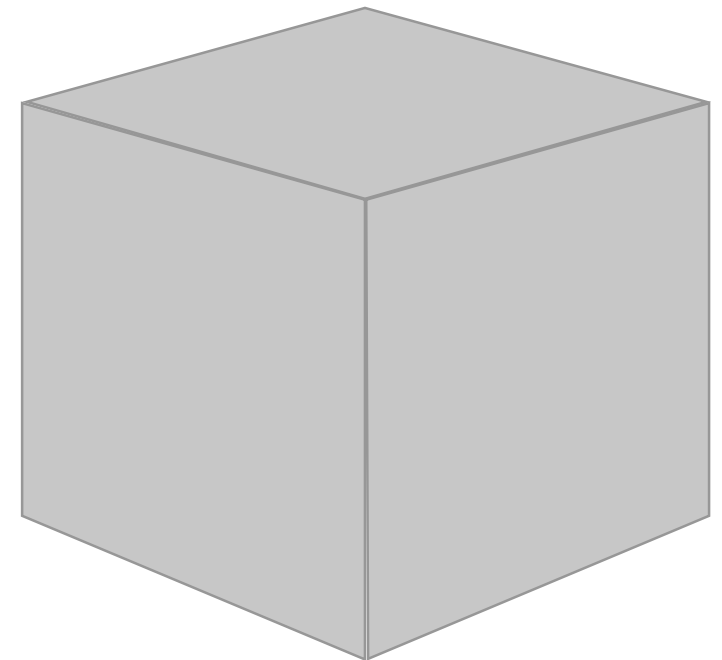
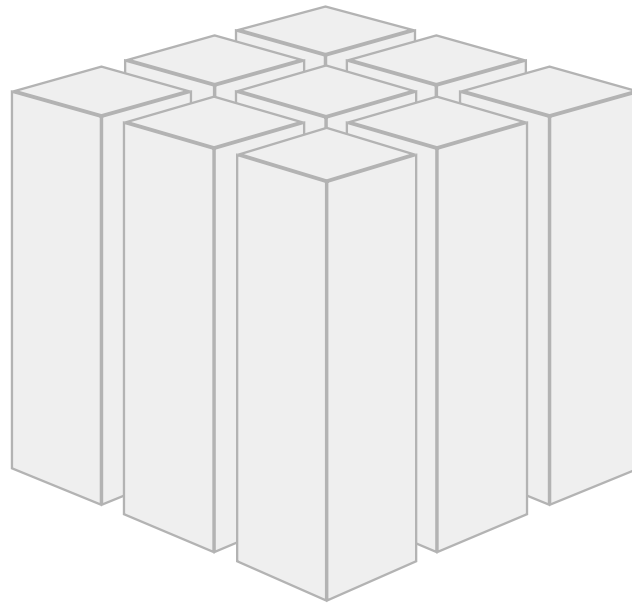
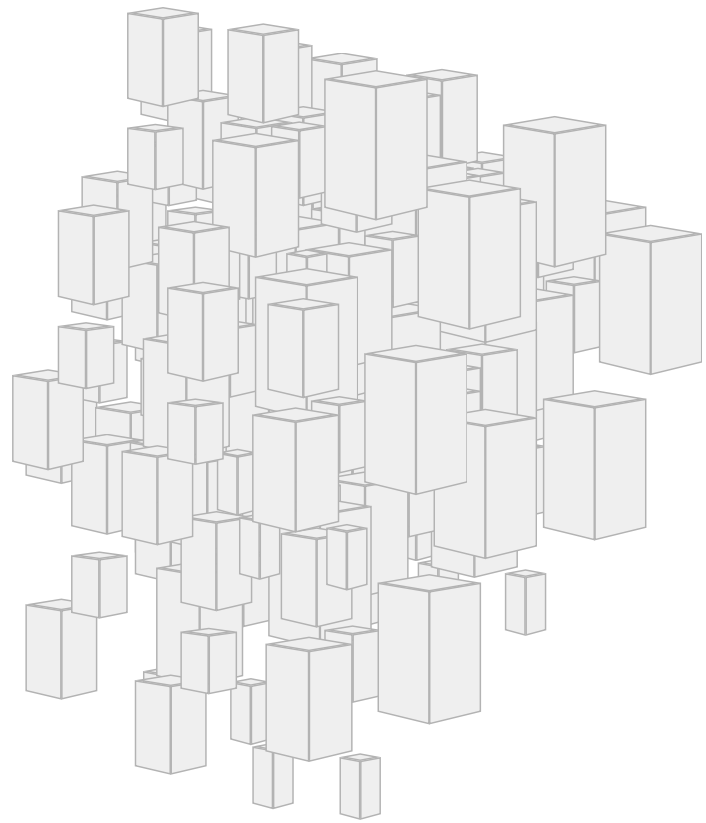


Yet another slide
about Conway's law

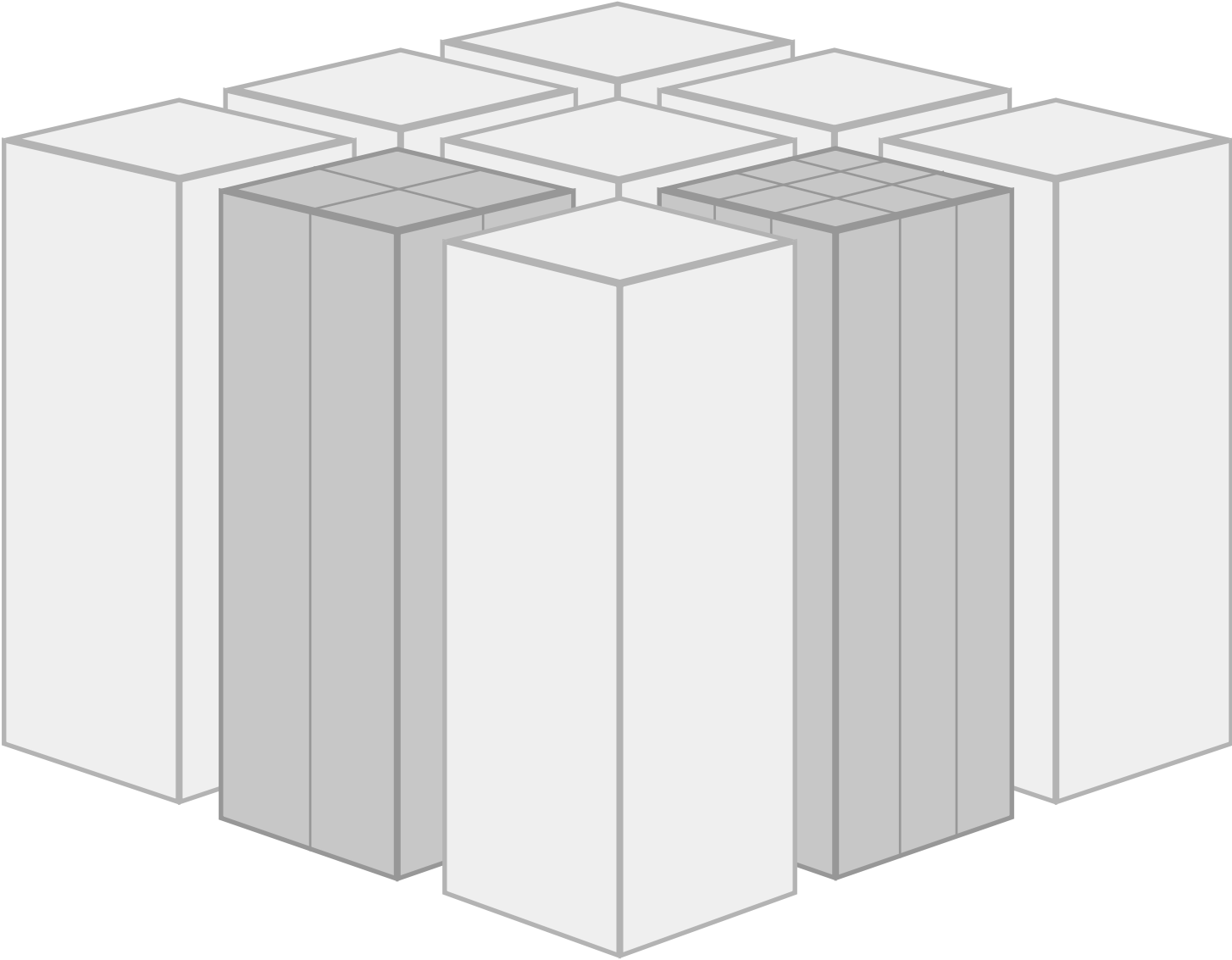


The smaller,
the better?

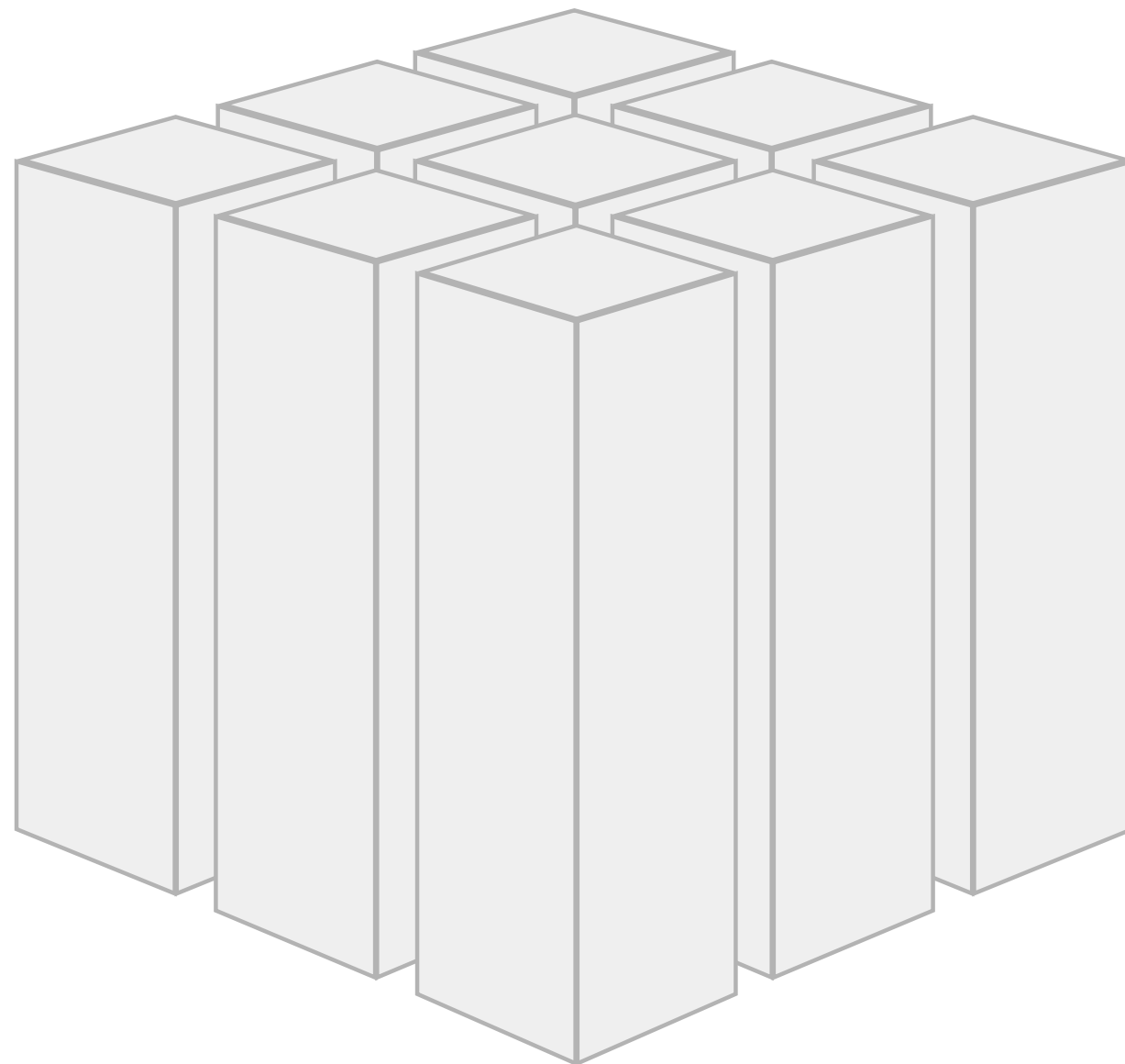
of meetings



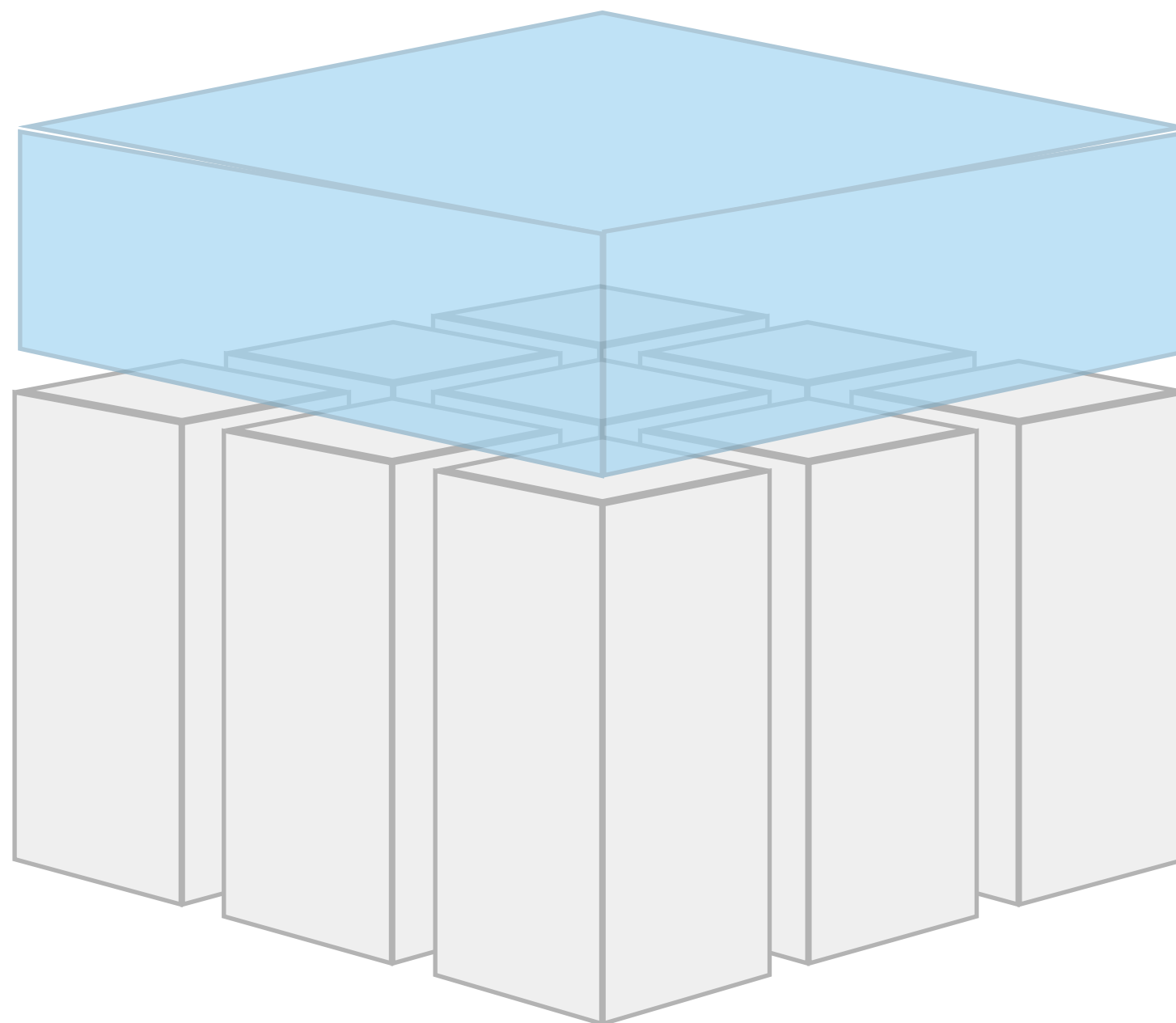
Size of team

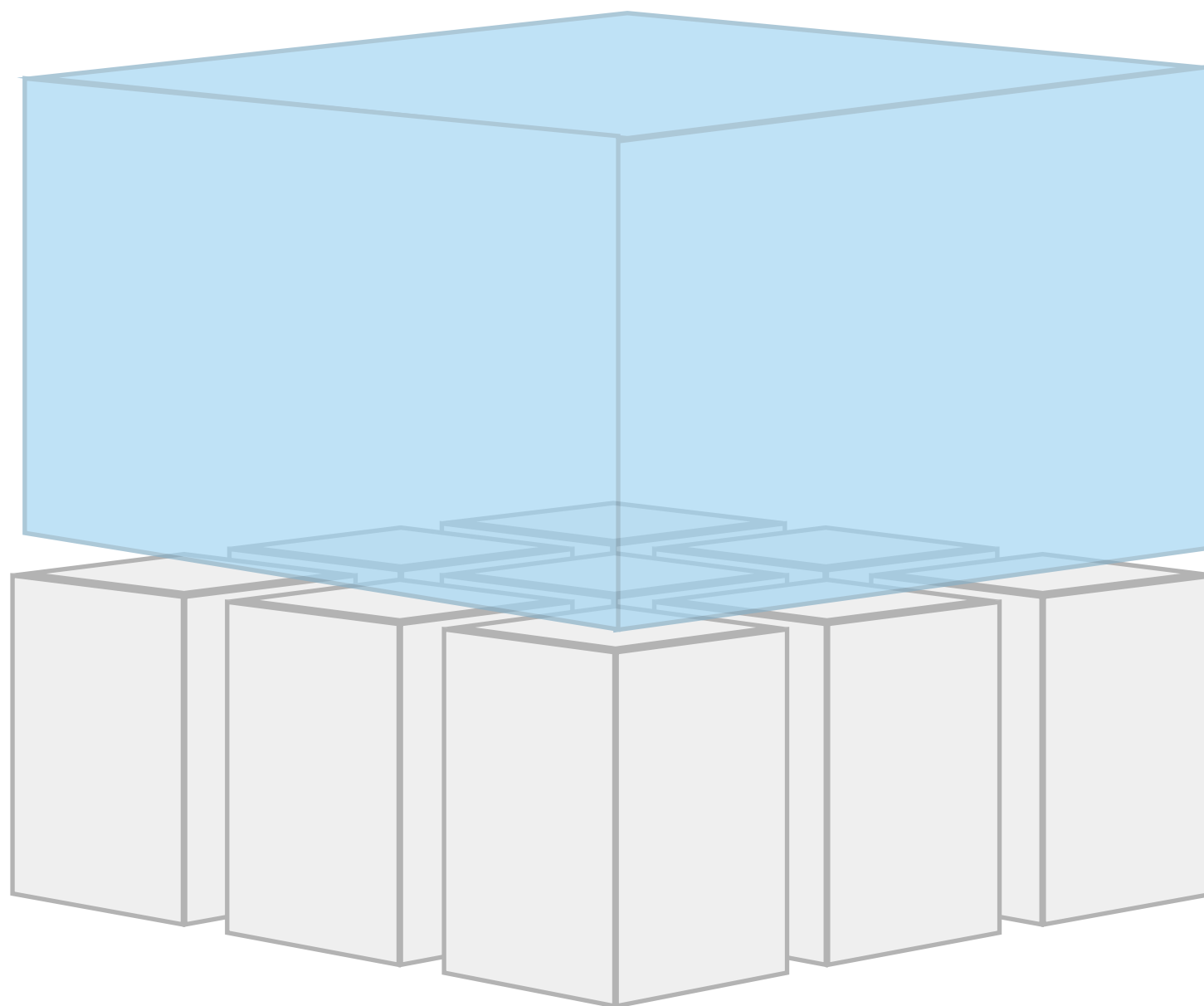


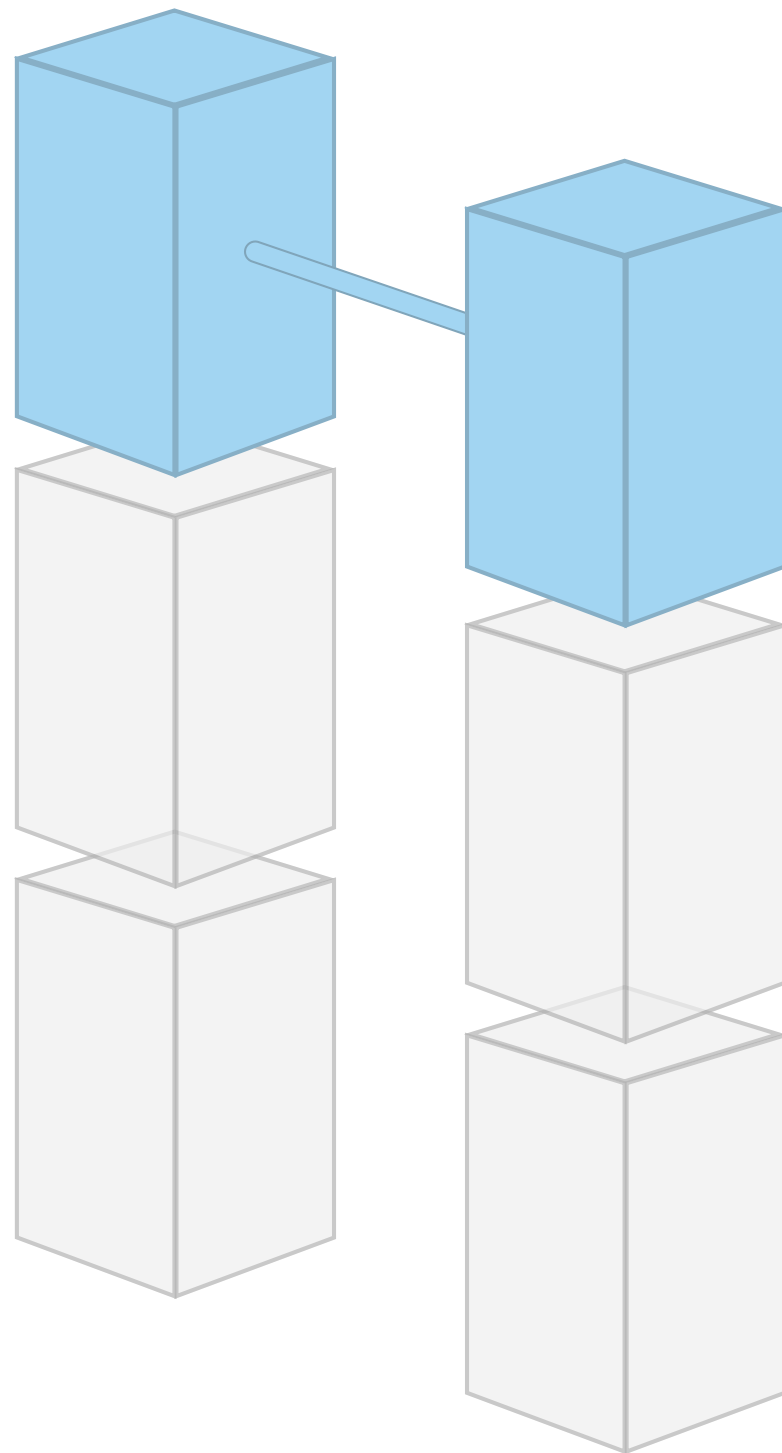
We love monoliths – so
let's build a lot of them

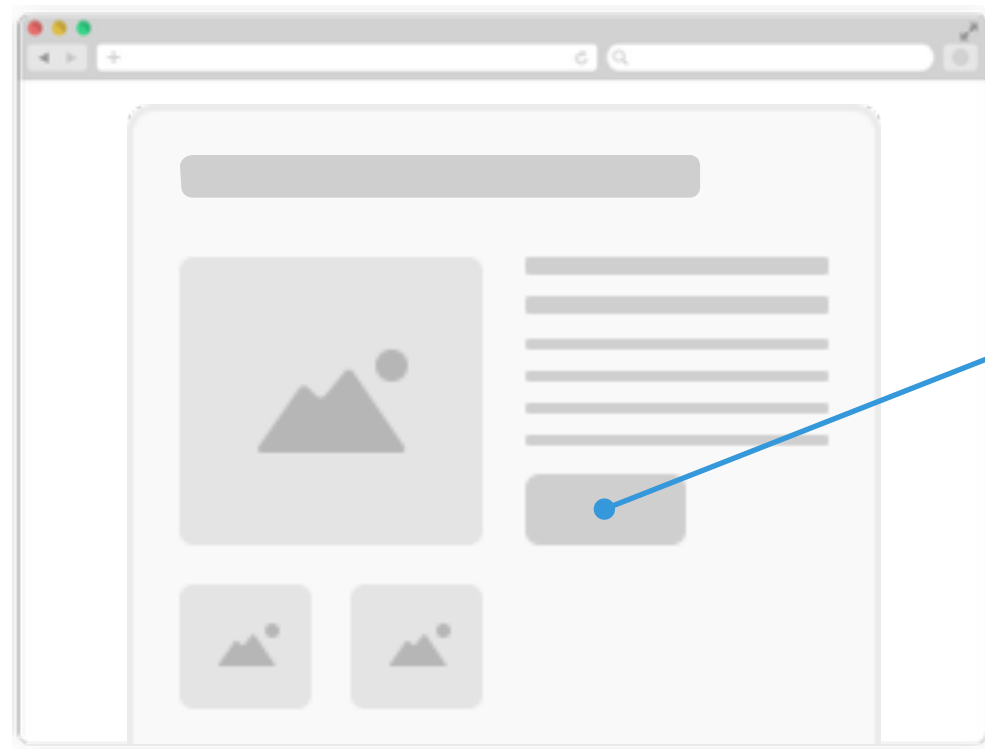


2. Orchestration & UI

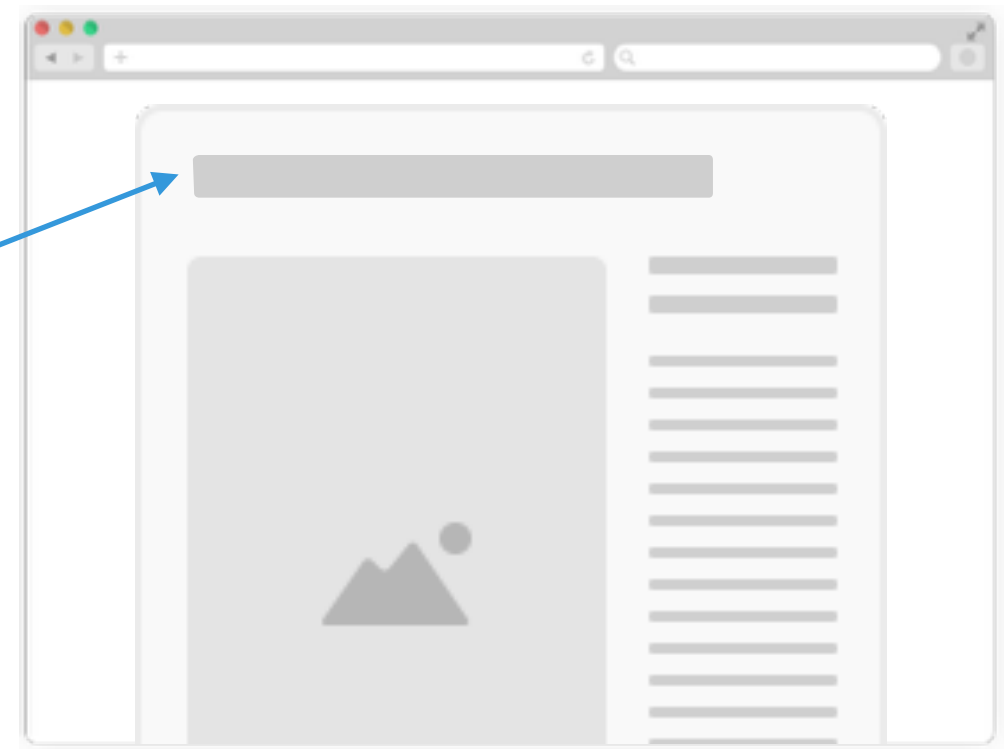




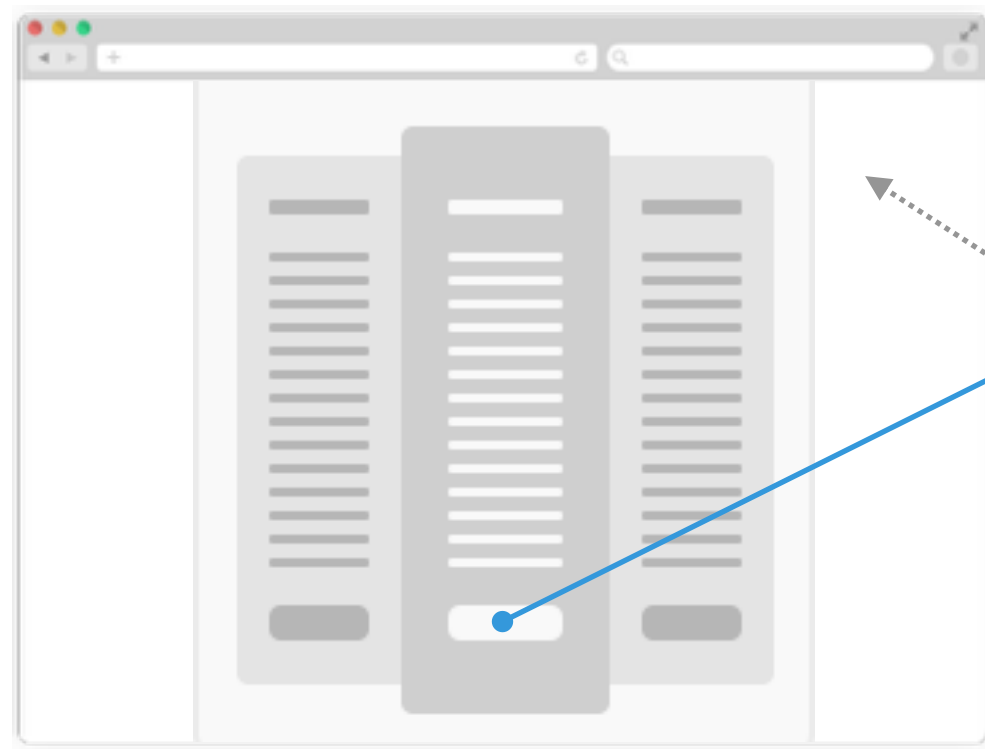




System 1



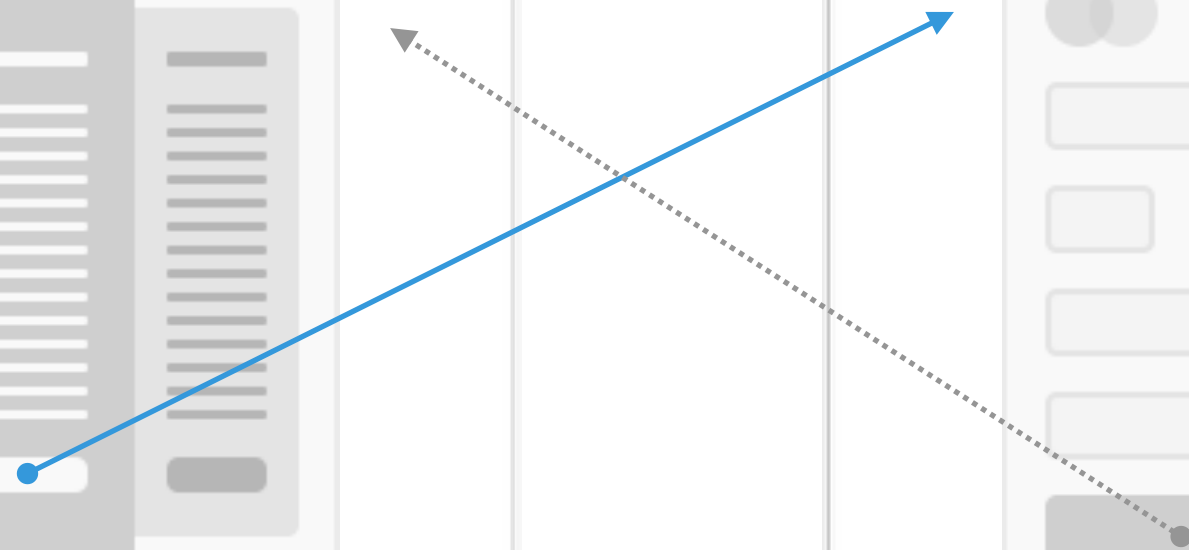
System 2

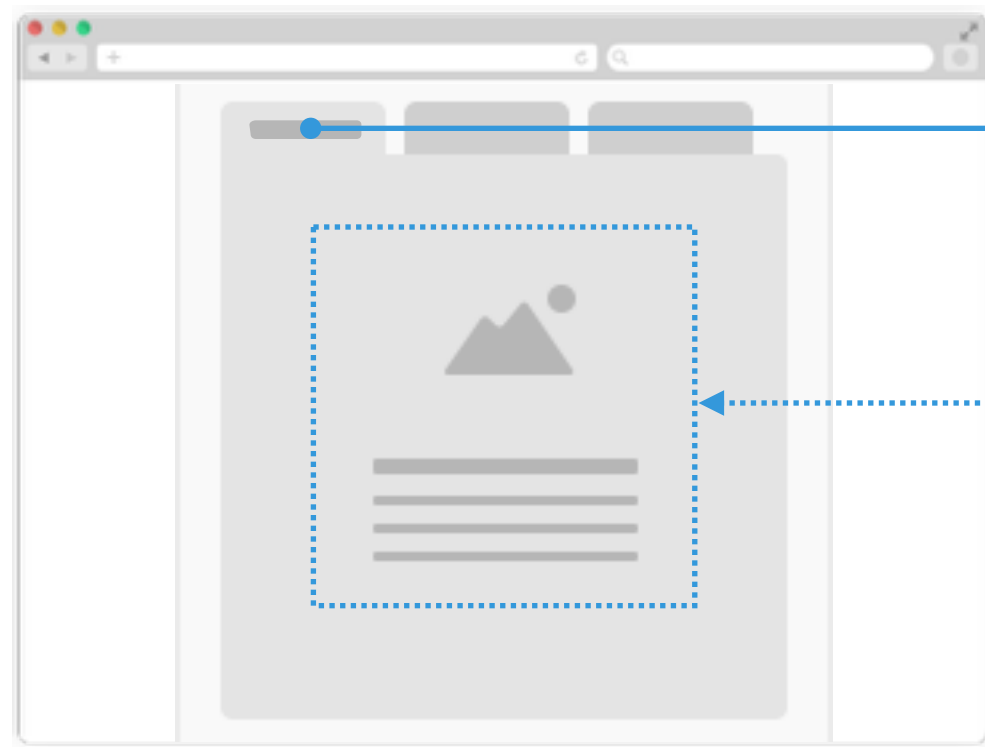


System 1

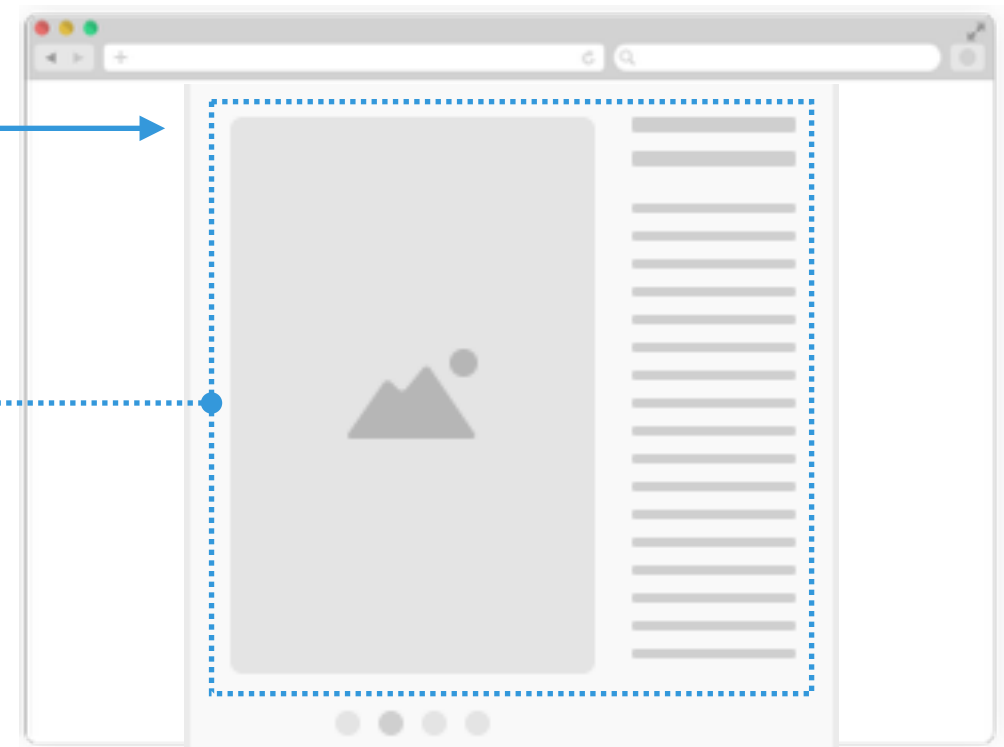


System 2

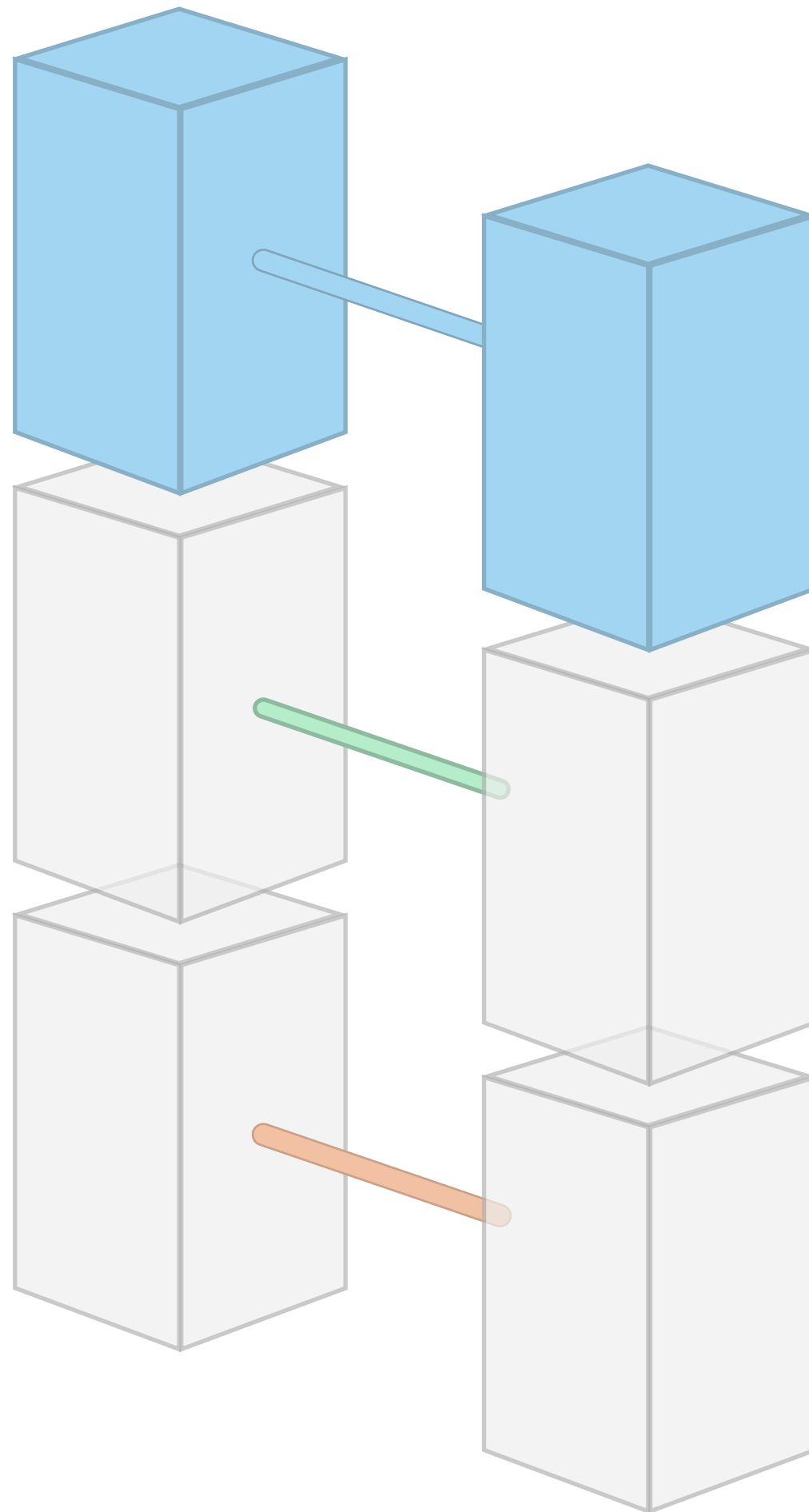




System 1



System 2



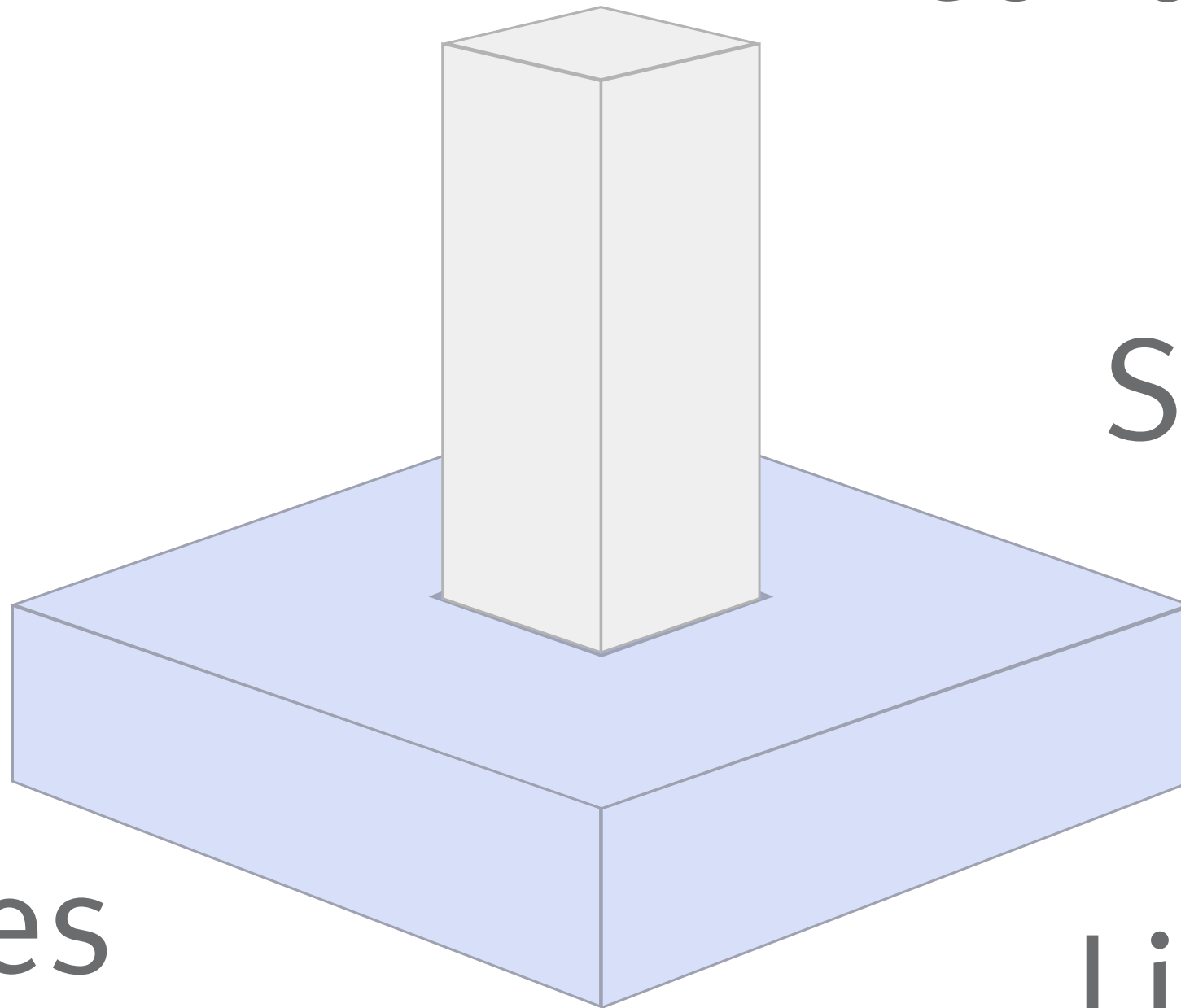
3. Platform

Modules

Containers

Jars

Systems

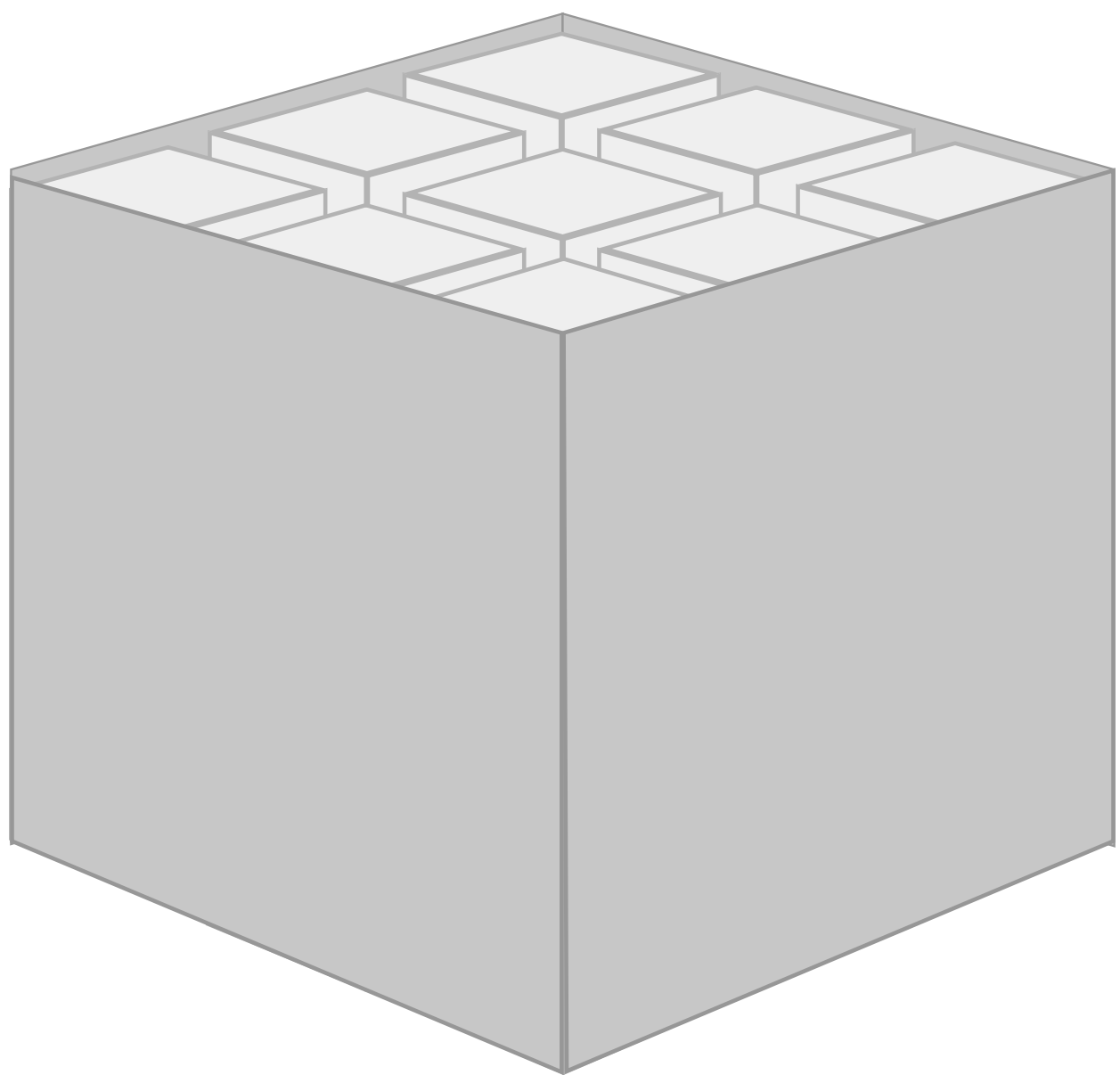


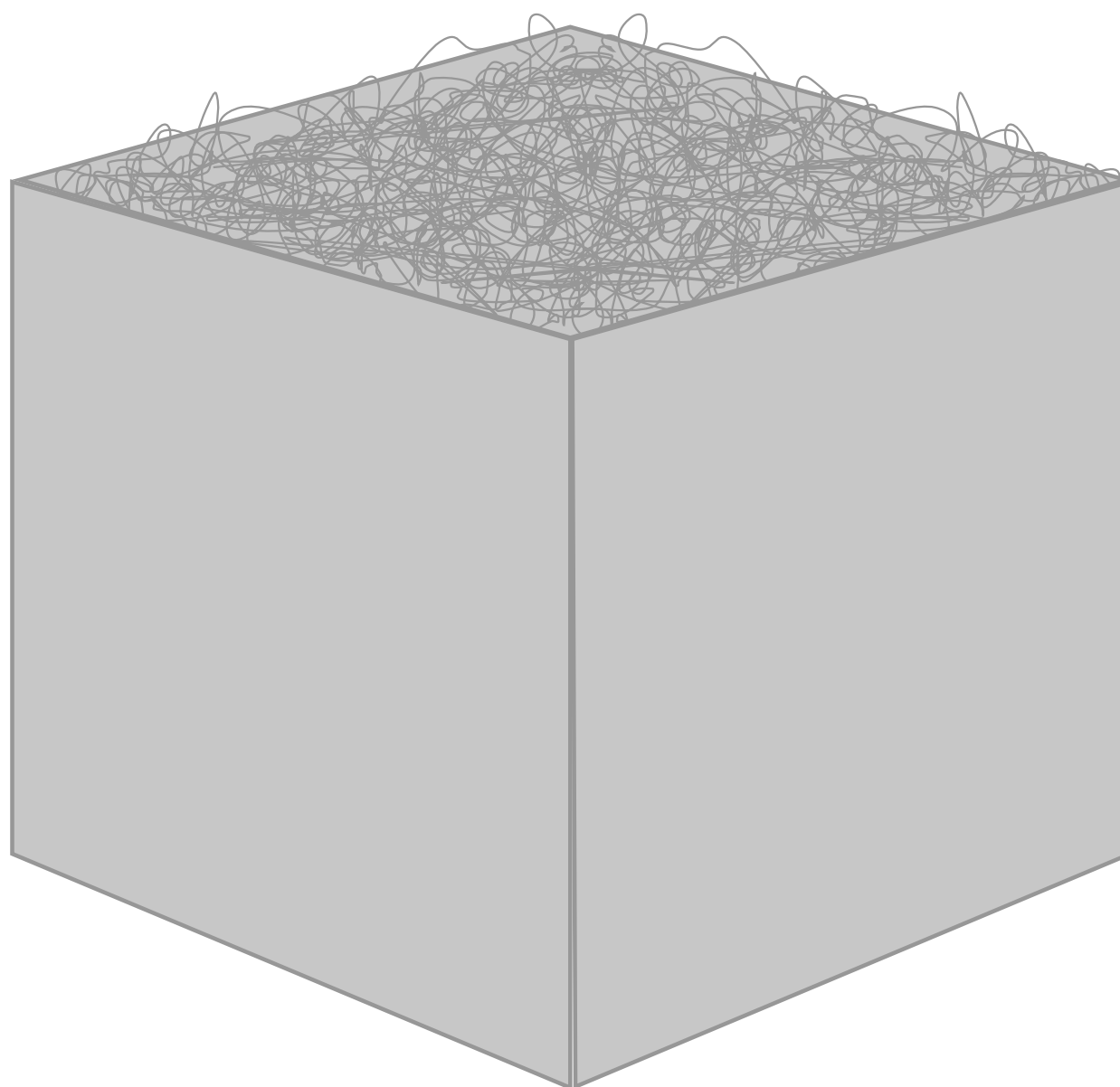
Services

Libraries

Bundles

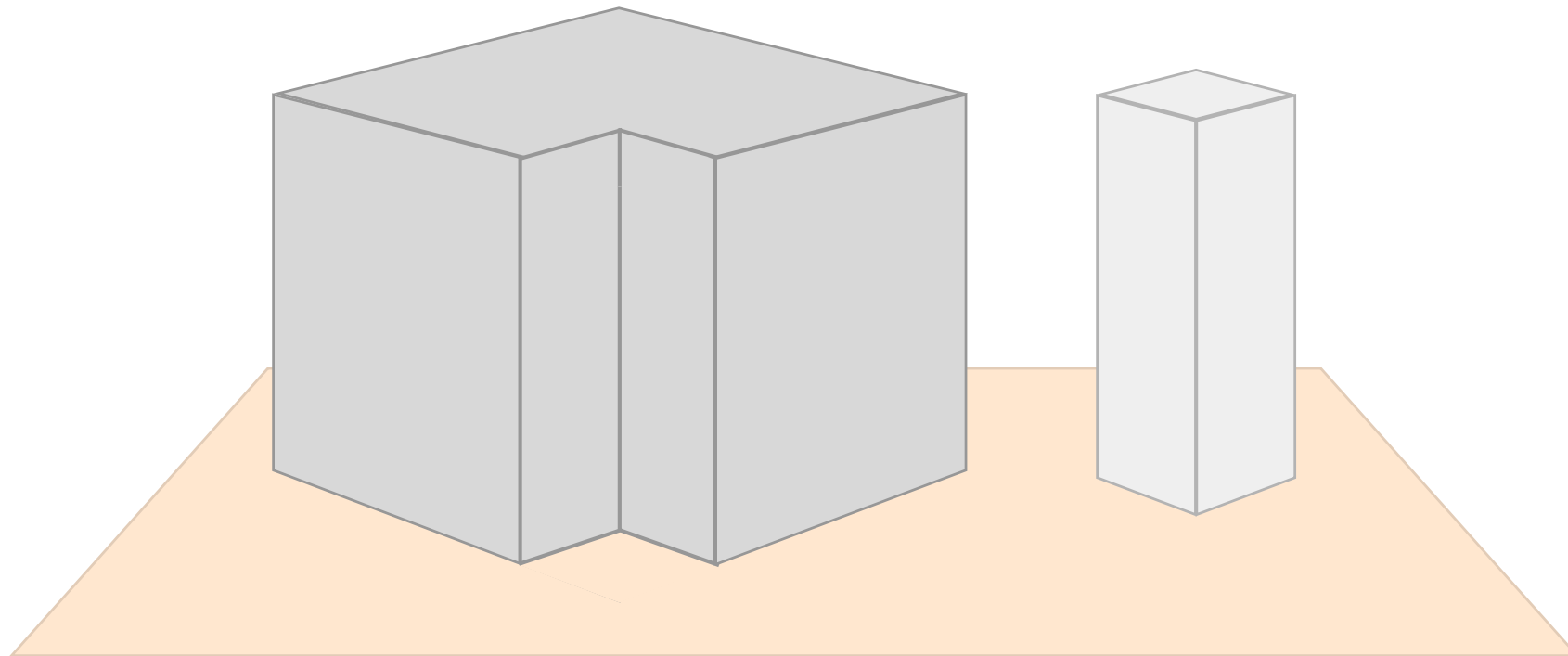
4. Process





Monolith first

<http://martinfowler.com/bliki/MonolithFirst.html>



Don't start with a monolith

<http://martinfowler.com/articles/dont-start-monolith.html>

System #2

5. Hype

Hype

“Every Unix command line tool qualifies as a microservice”

“The only modern architecture style there is”

“Always use microservices”

– no-one, ever

Anti-Hype

“If you can't build a monolith, what makes you think microservices are the answer?”

– Simon Brown

http://www.codingthearchitecture.com/2014/07/06/distributed_big_balls_of_mud.html

Summary

TANSTAAFL

Use sparingly

Prefer large(r) chunks

Consider UI integration

Profit

Thank you.

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<http://www.innoq.com/blog/st/>

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