



OSISM

Intent-based holistic (*data center*) infrastructure management

OpenInfra Summit Berlin 2022

Christian Berendt, 8. June 2022

Who am I?

- Christian Berendt
- OpenStack for over 10 years

Who are we?

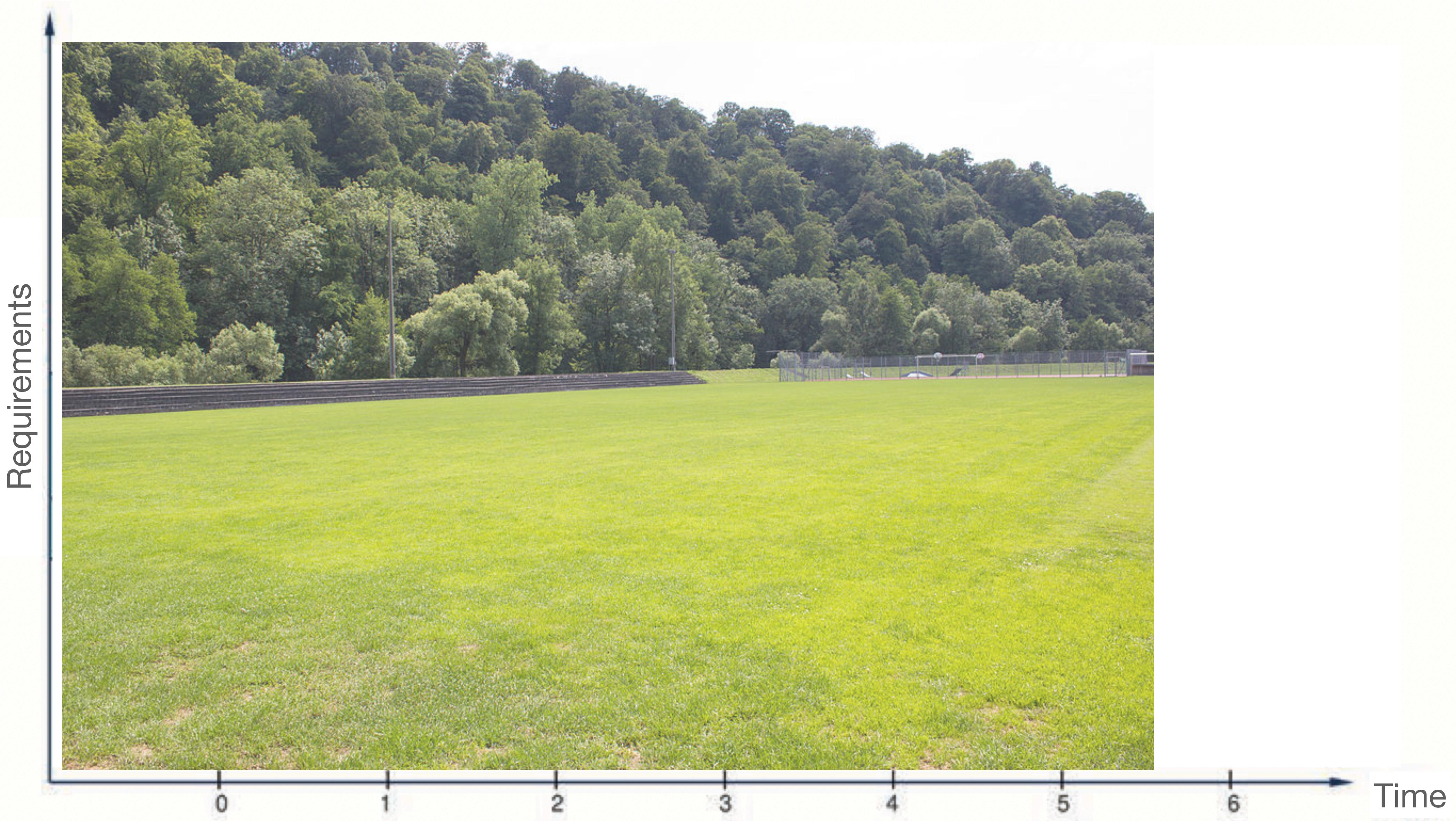
- OSISM
- OpenStack experts from Germany
- In business for over 5 years
- Here to establish the Sovereign Cloud Stack in Europe

What's the problem?

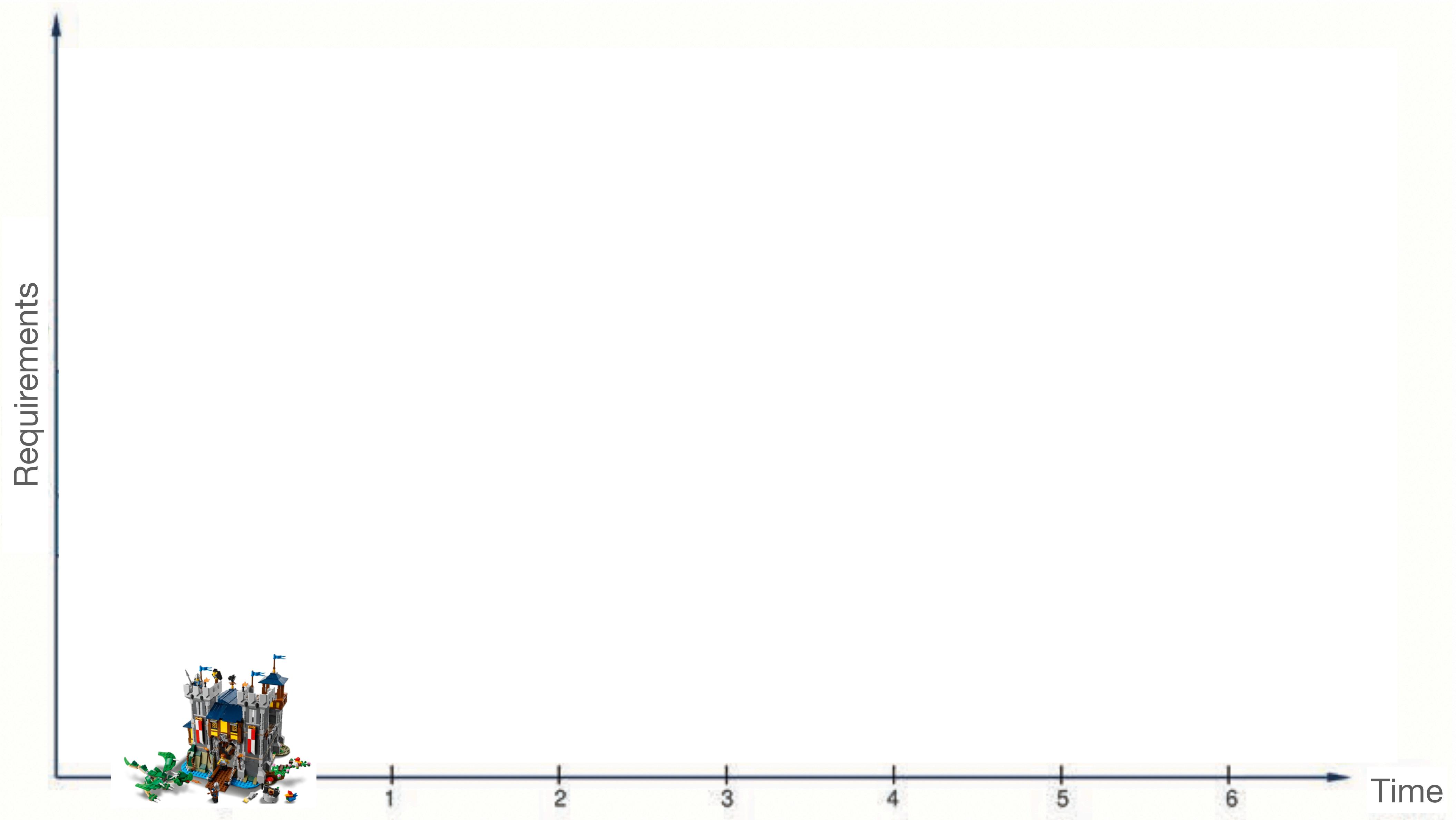
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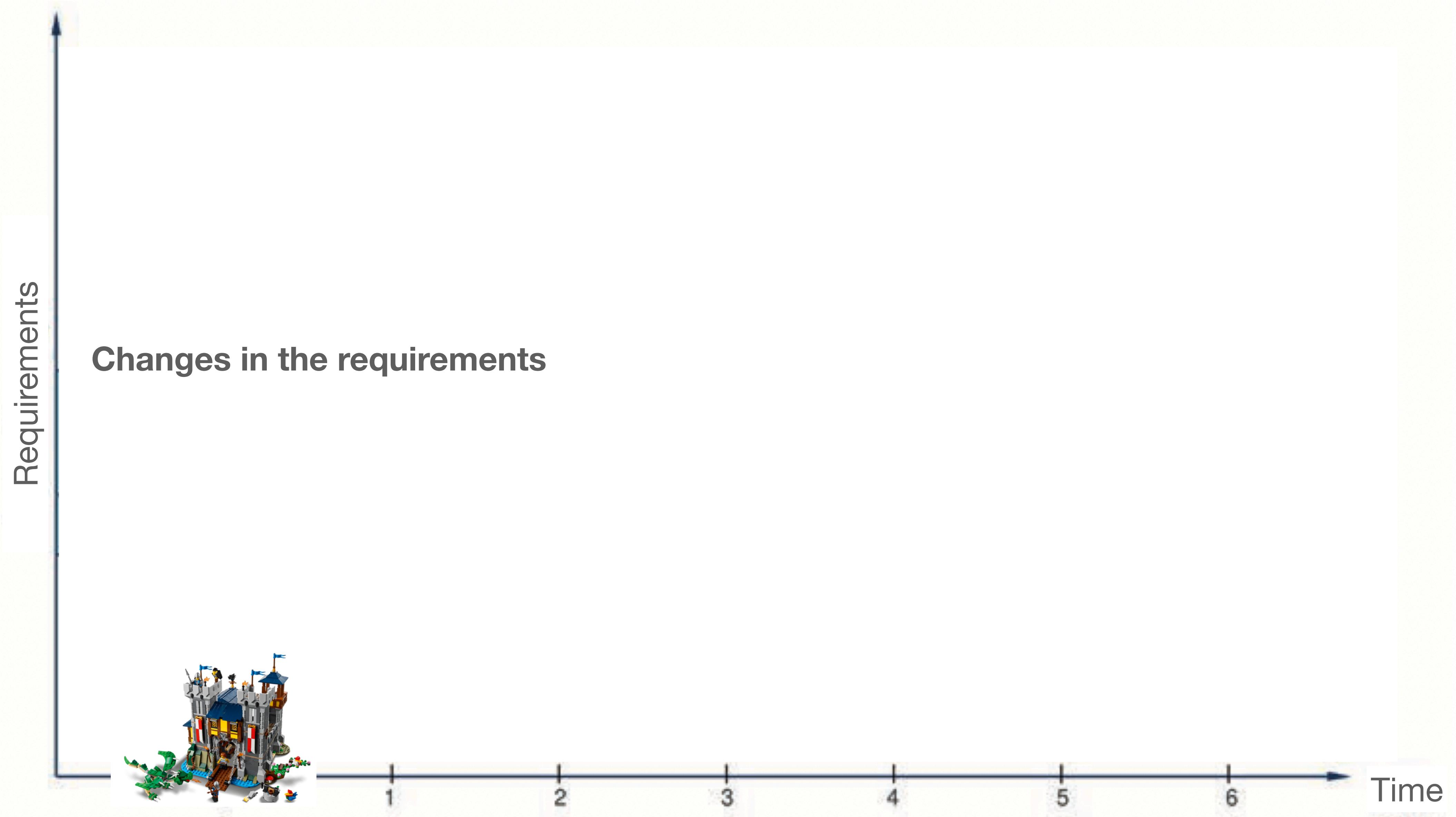
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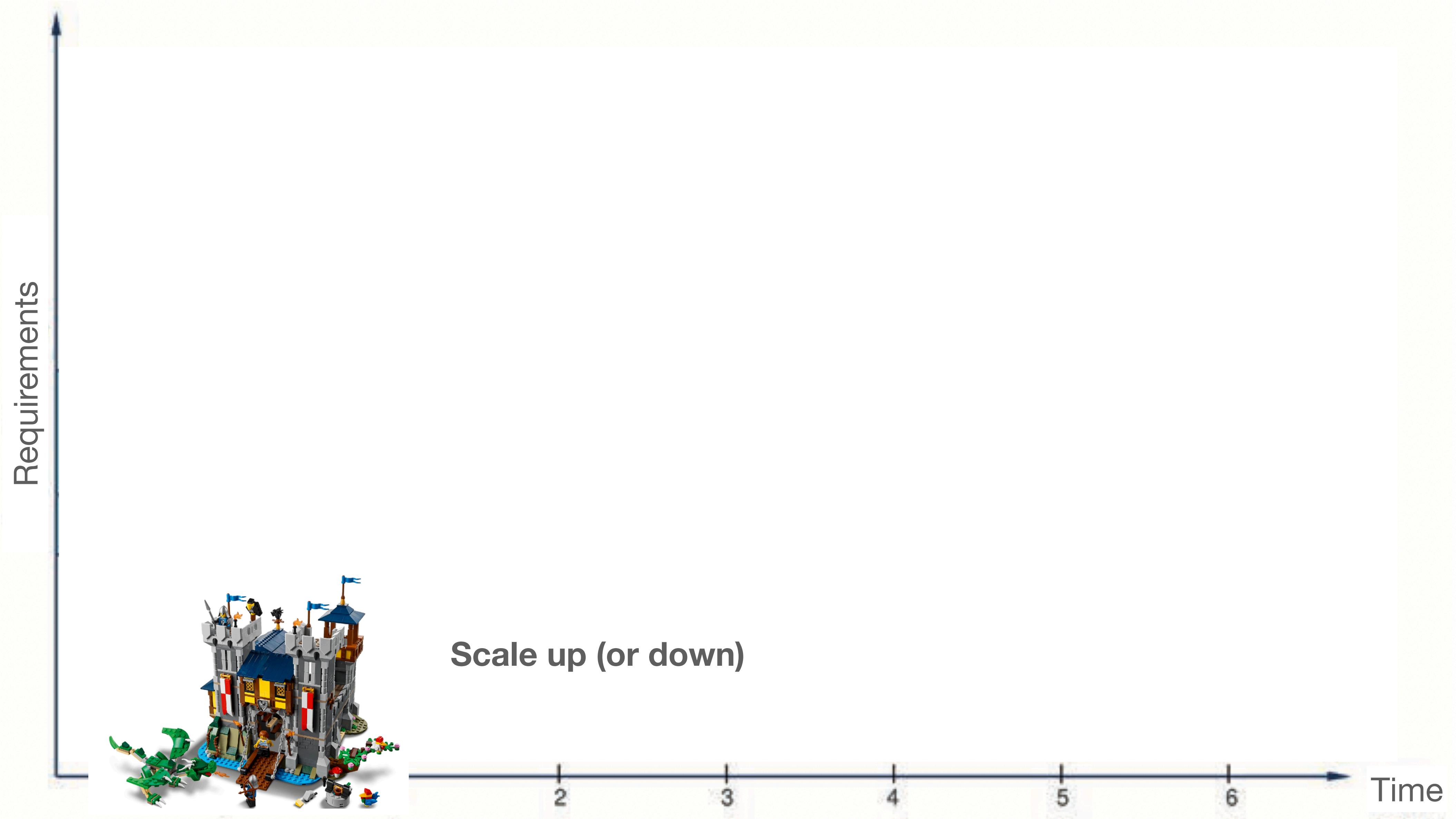
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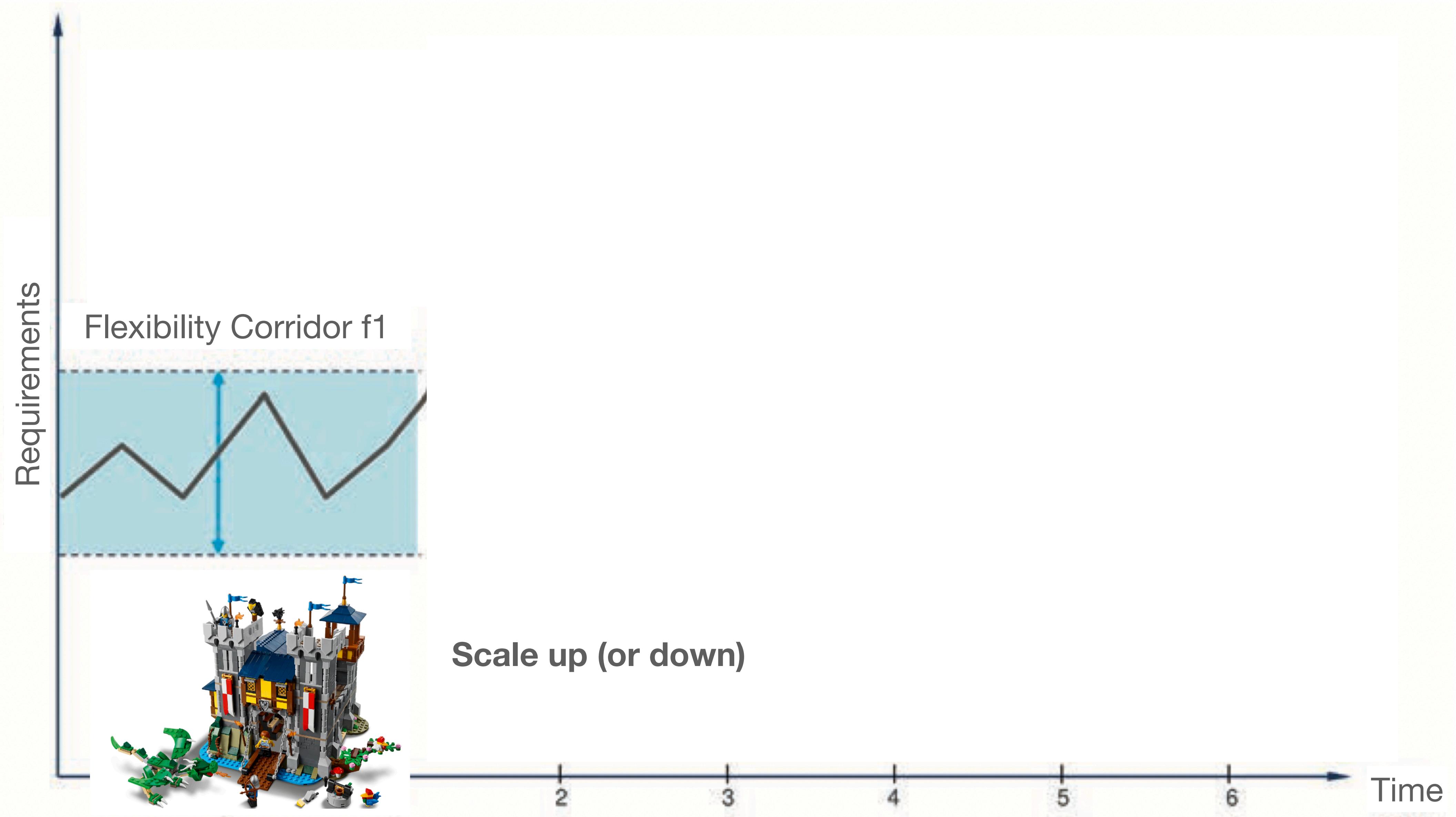
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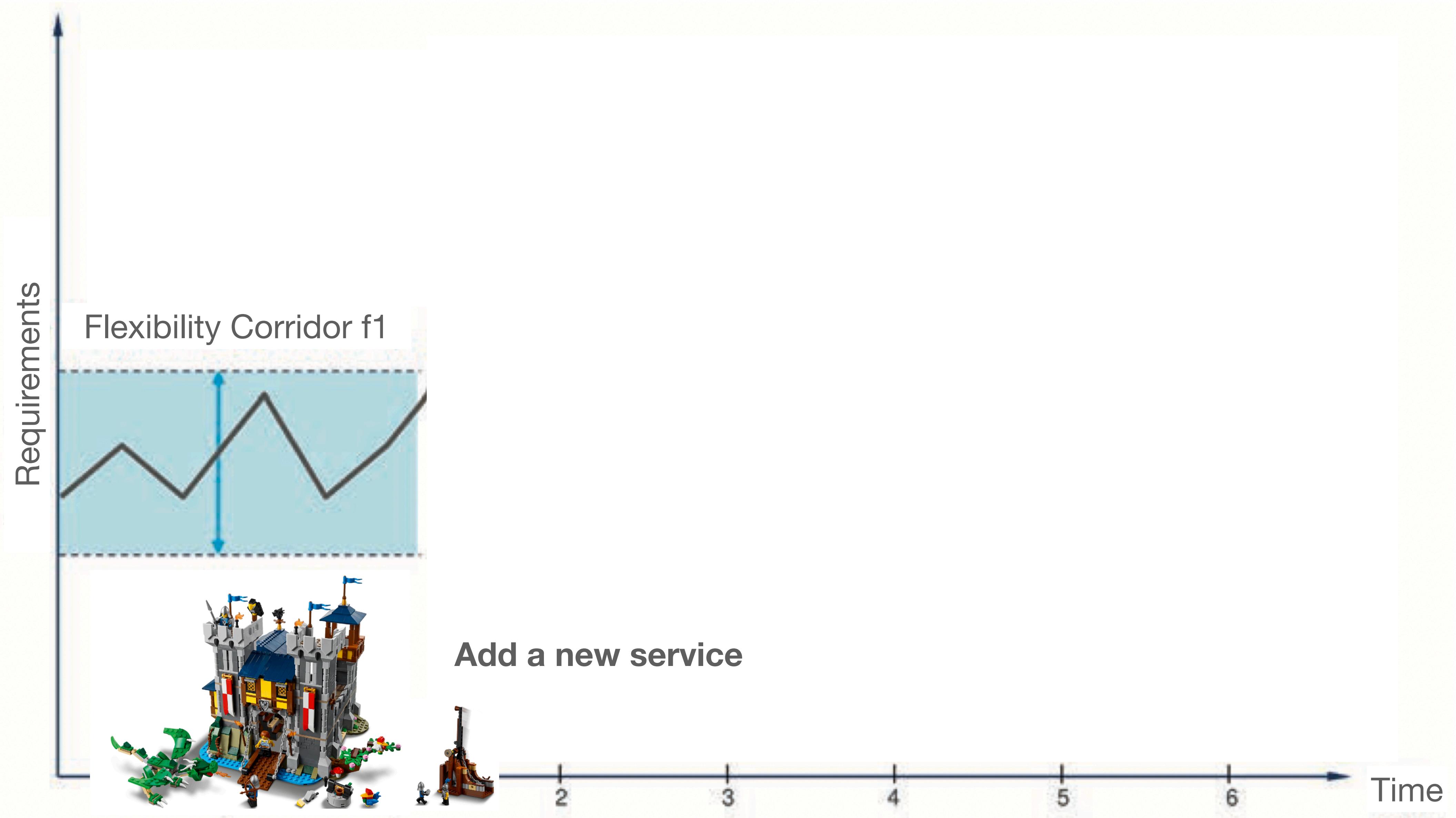
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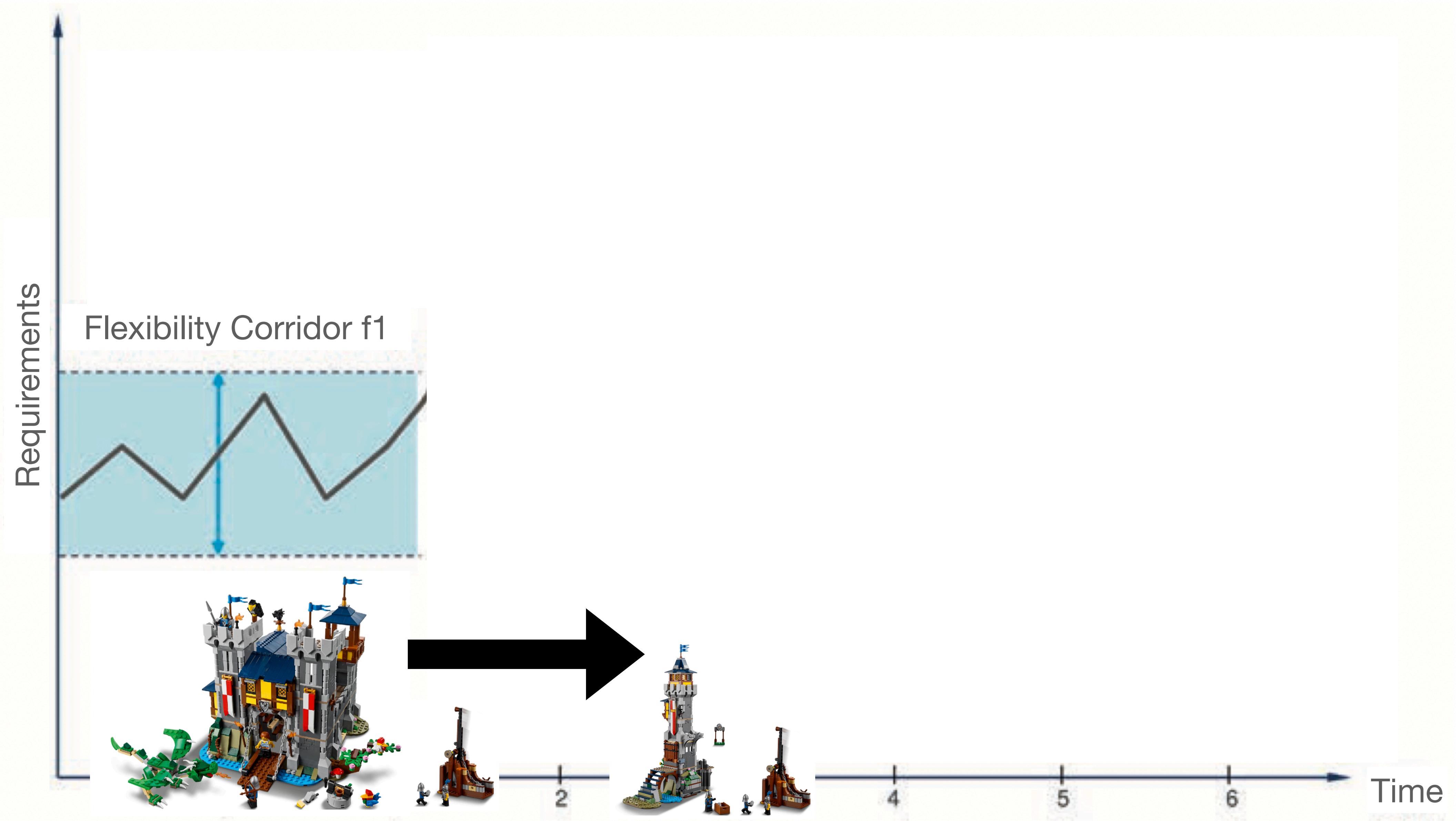
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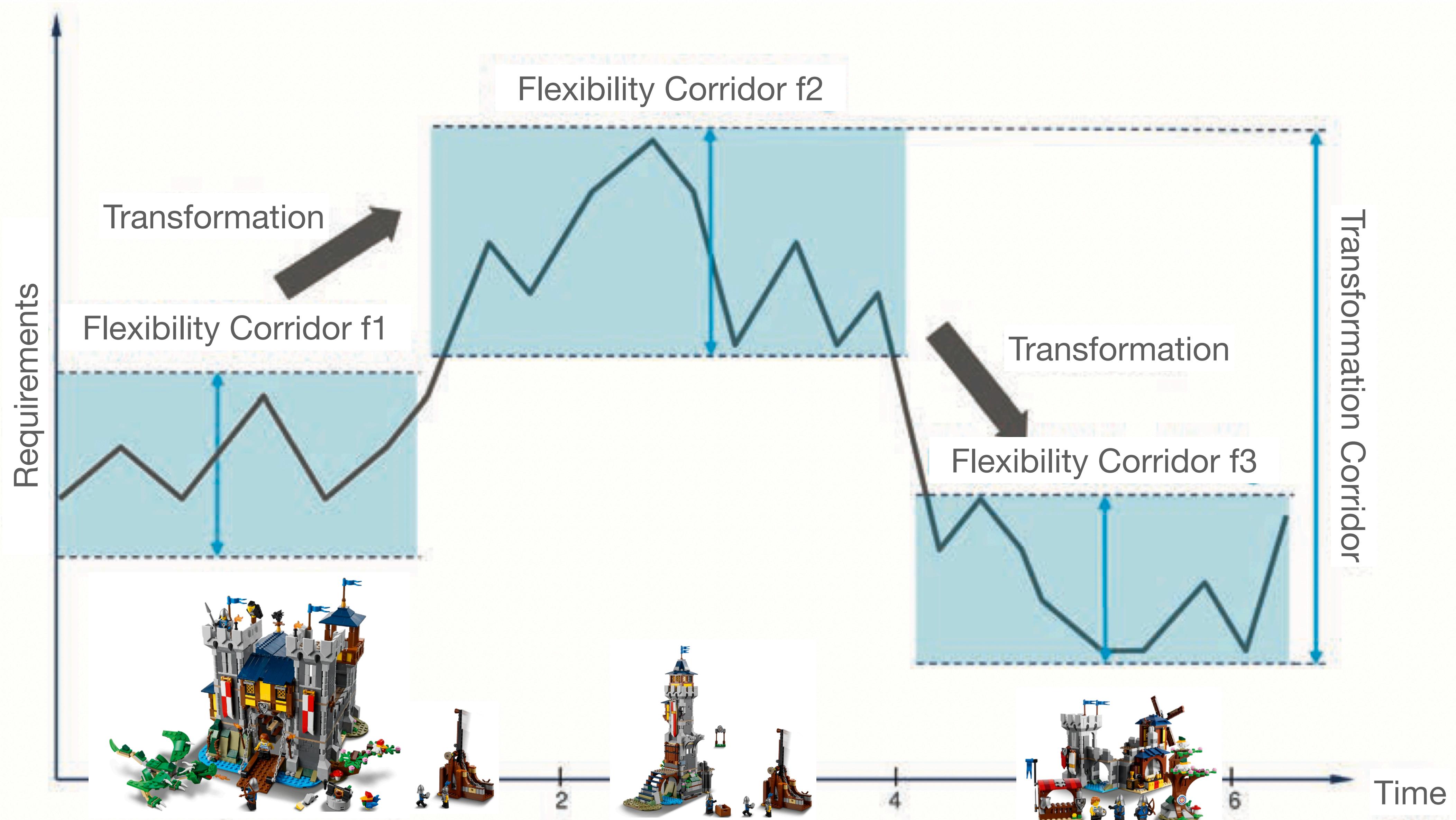
What's the problem?



What's the problem?



What's the problem?



What's the solution?

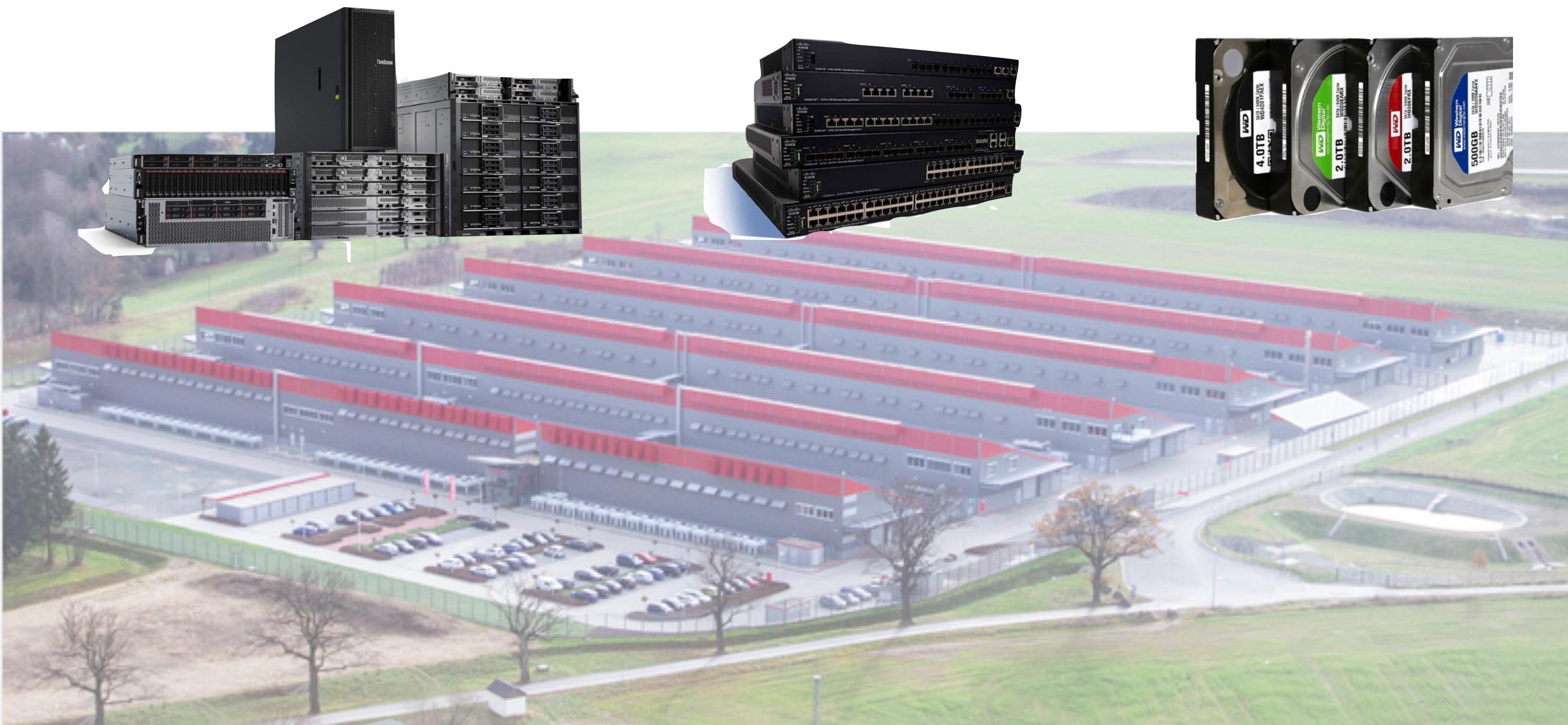
**Mastery of scale, flexibility and
transformation**

What is the precondition for this?

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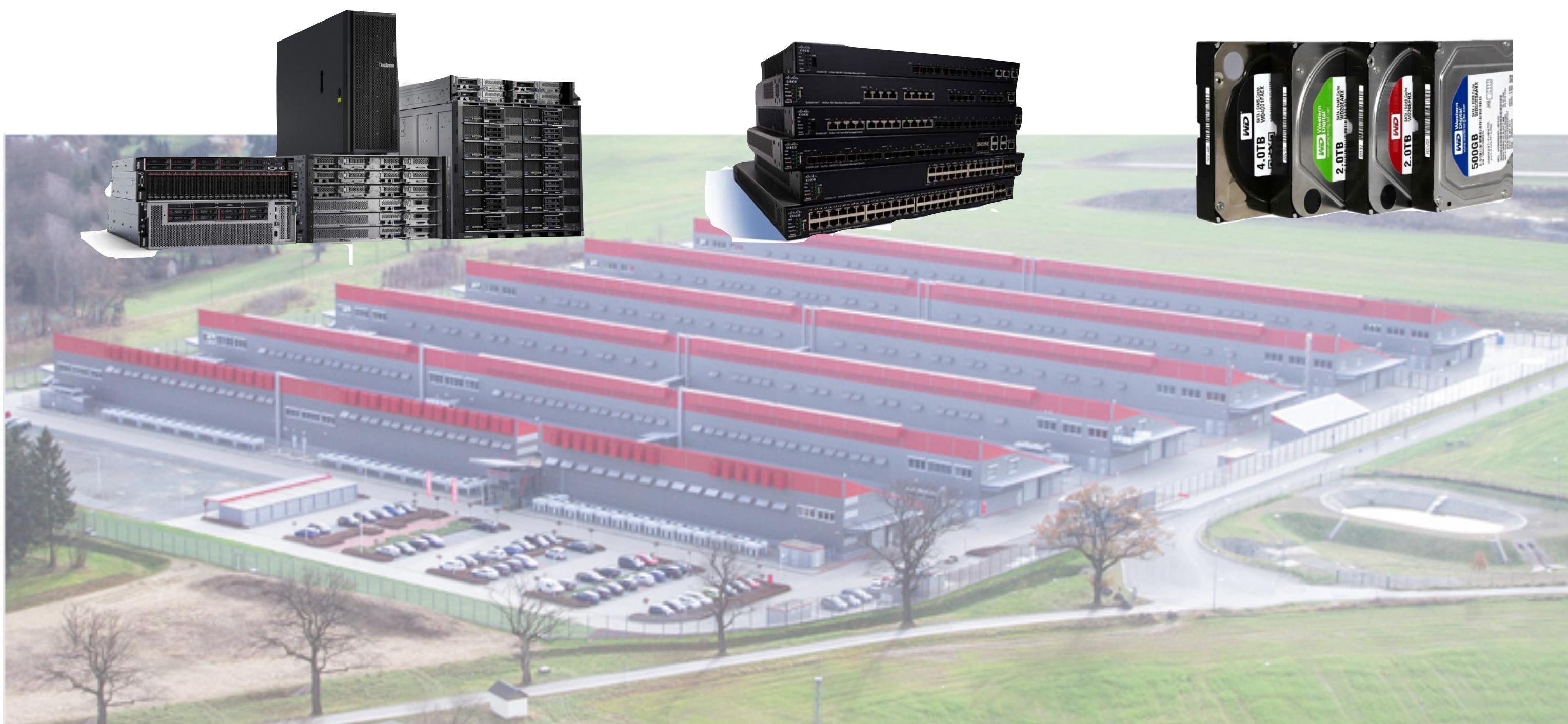


What is the precondition for this?



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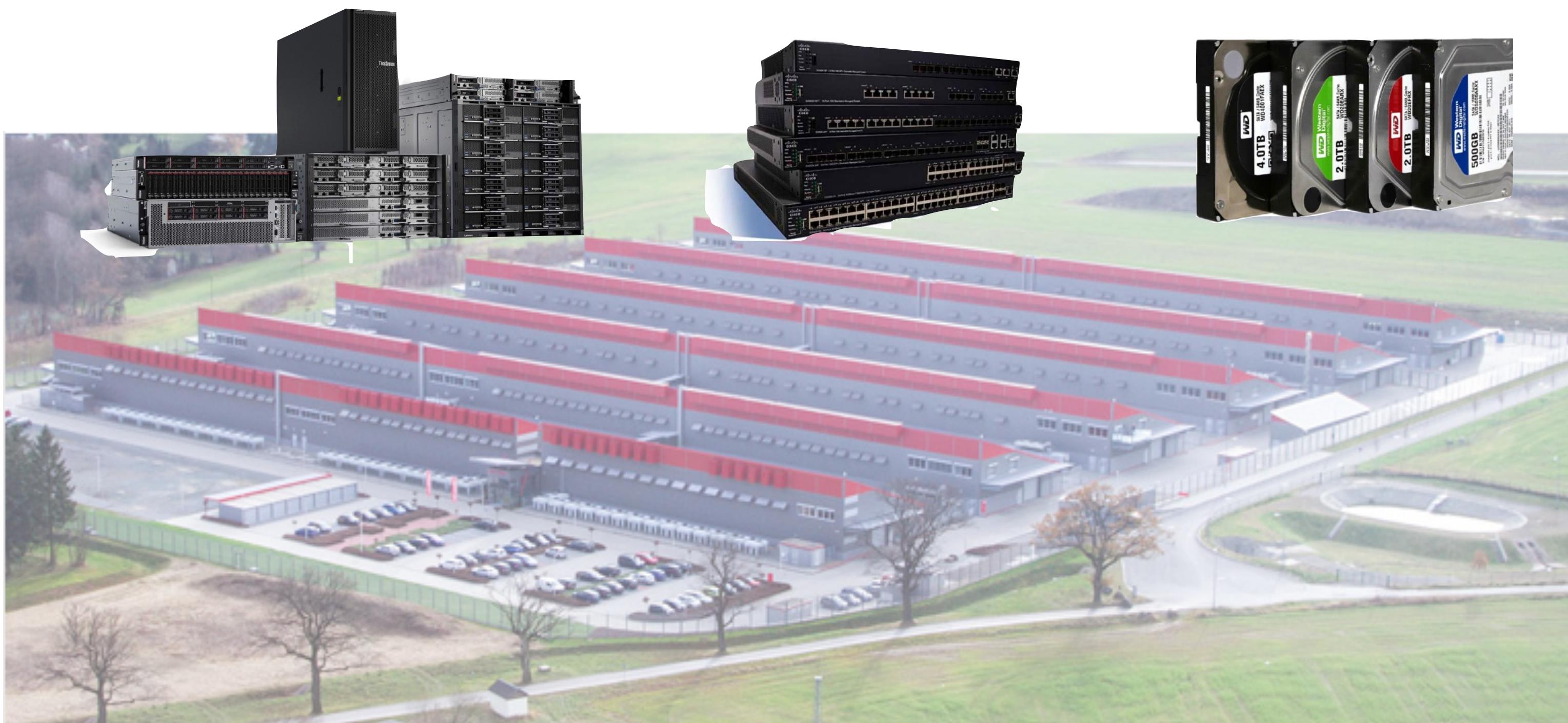
Infrastructure as a Service



What is the precondition for this?

Kubernetes as a Service

Infrastructure as a Service

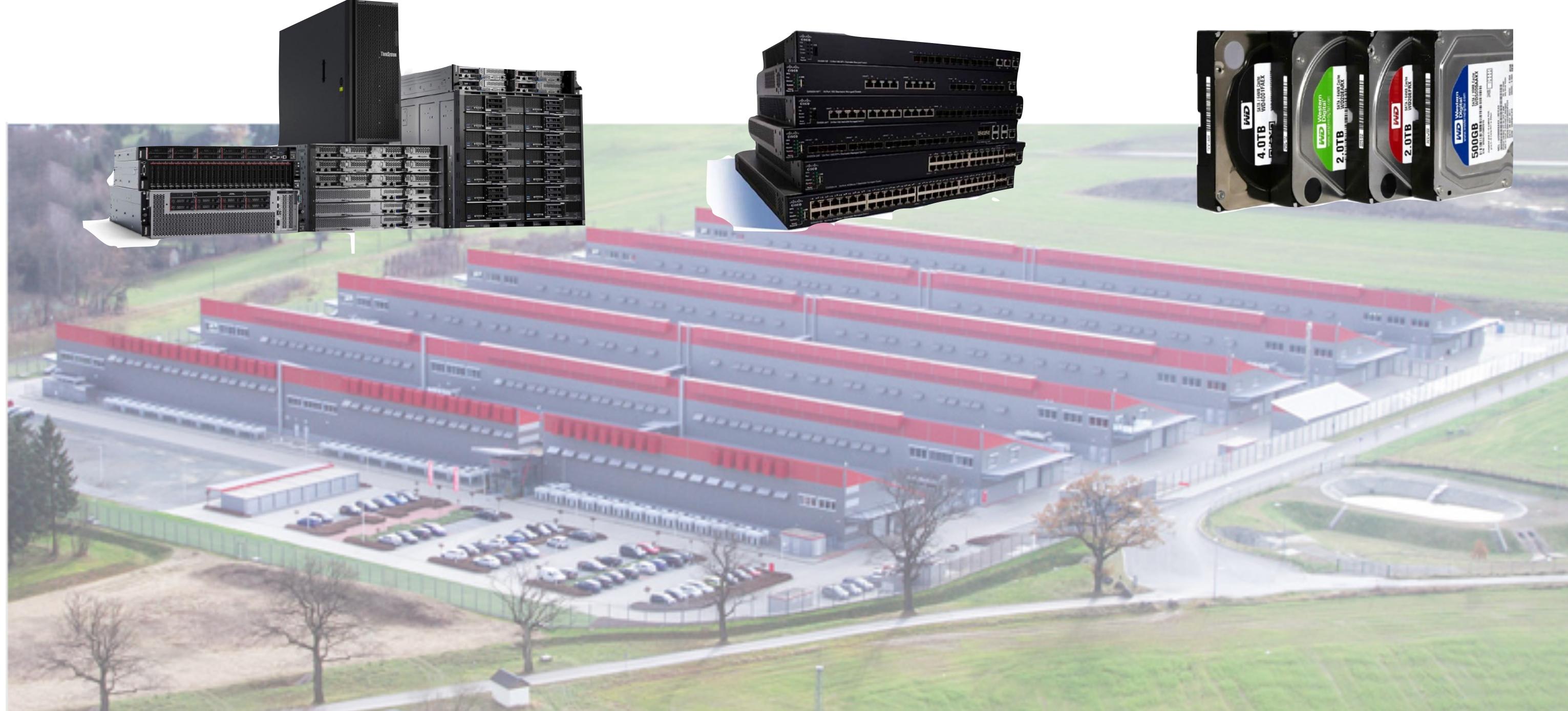


What is the precondition for this?

Kubernetes as a Service

X as a Service

Infrastructure as a Service



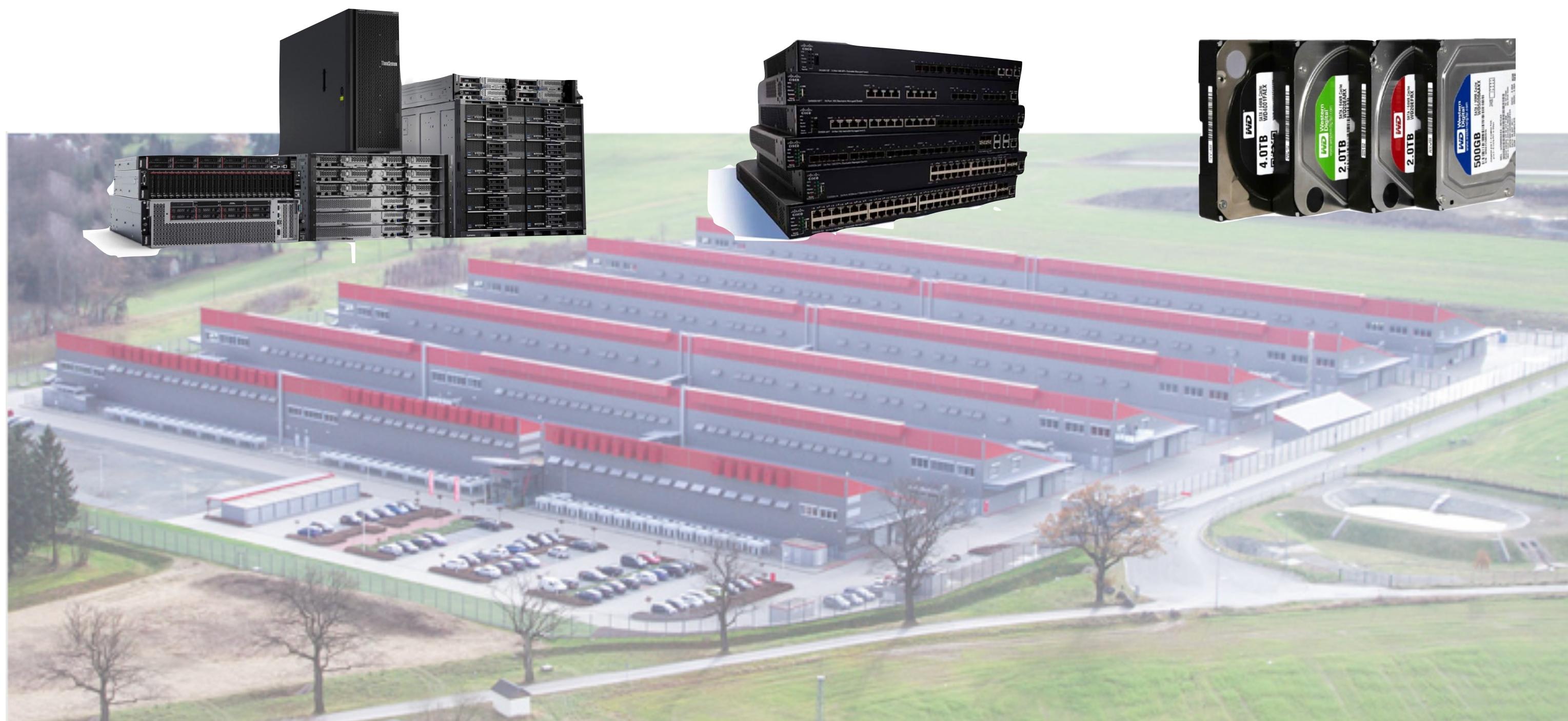
What is the precondition for this?

Cloud Native Workload

Kubernetes as a Service

X as a Service

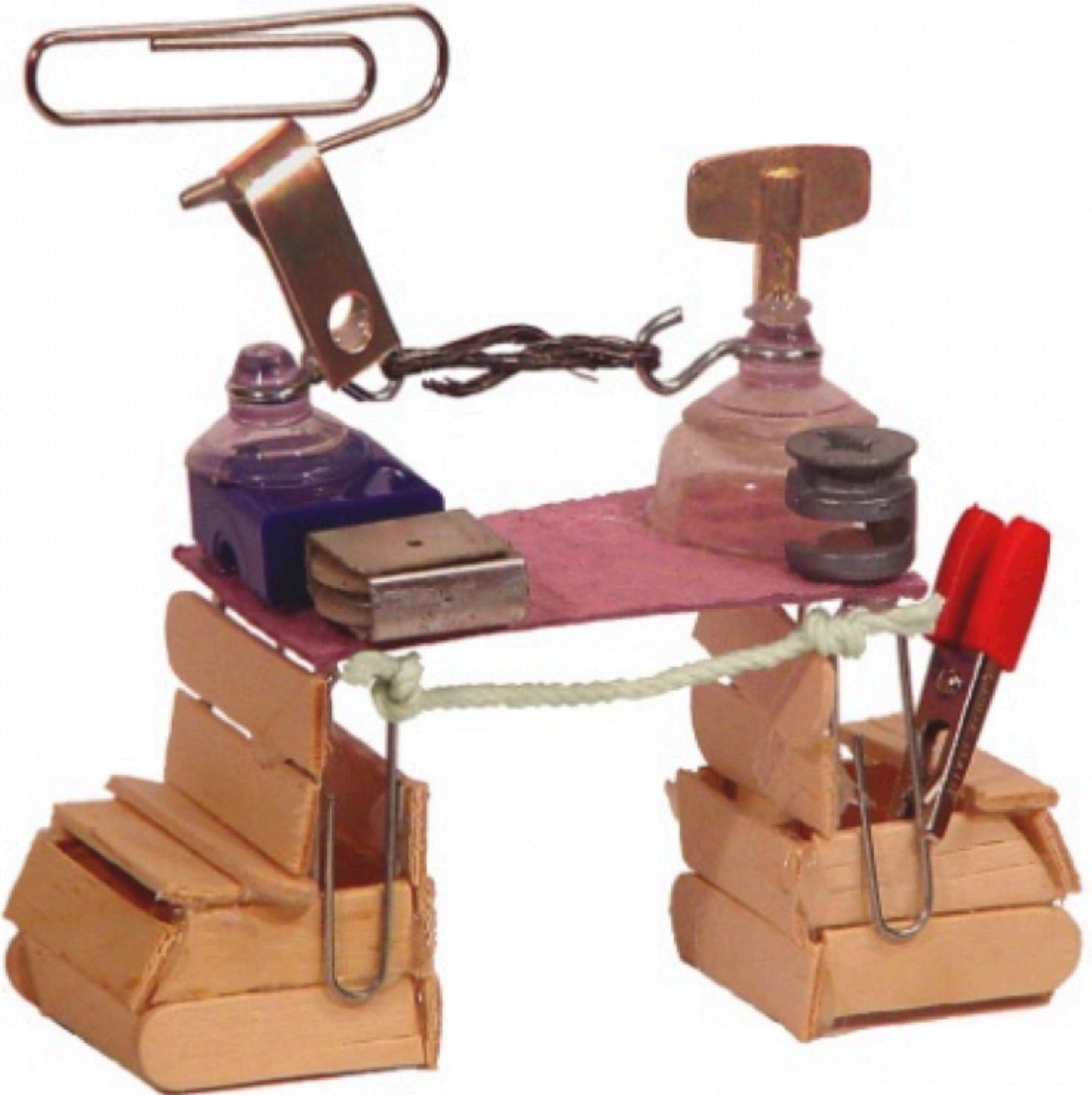
Infrastructure as a Service



In order to enable high dynamics (scale, flexibility, transformation) and high quality in the workload, high sustainability, long-term reliability and high quality are required in the lowest layer.

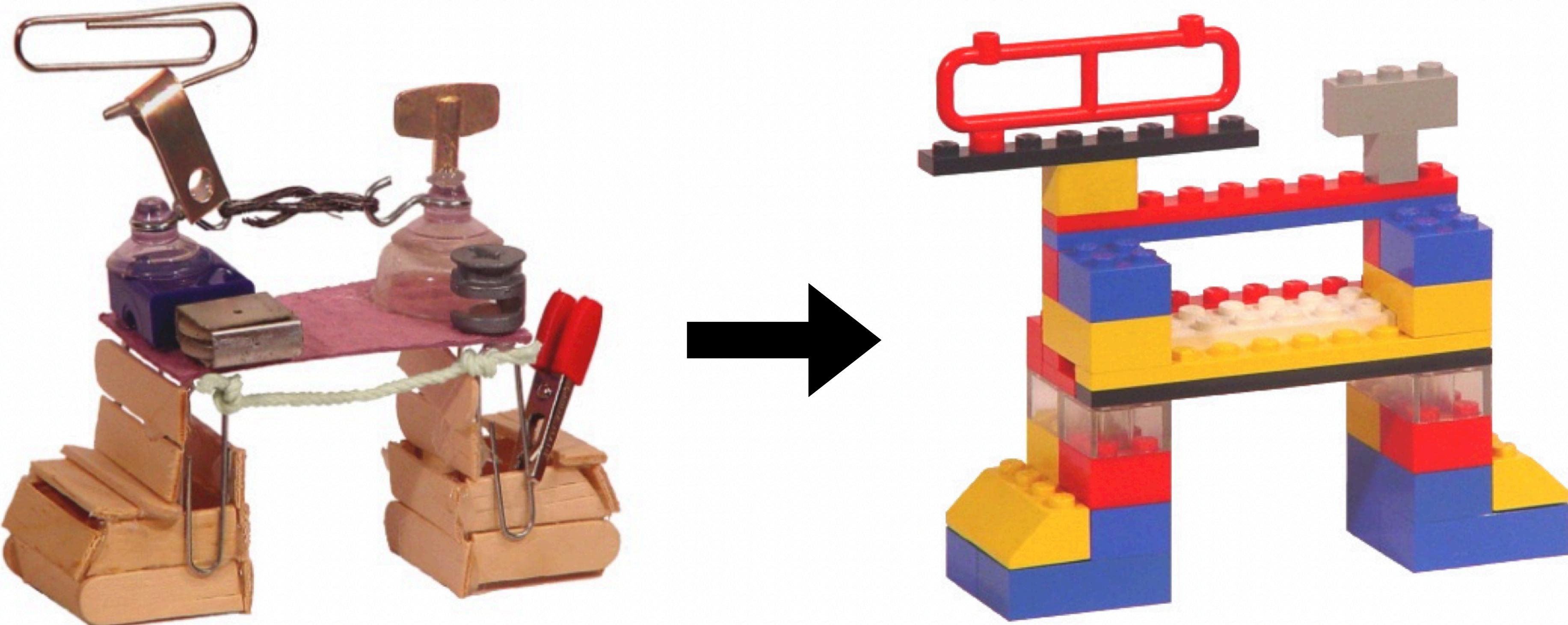
What does a possible implementation looks like?

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Unique one-time engineering
Good for art, bad for infrastructure

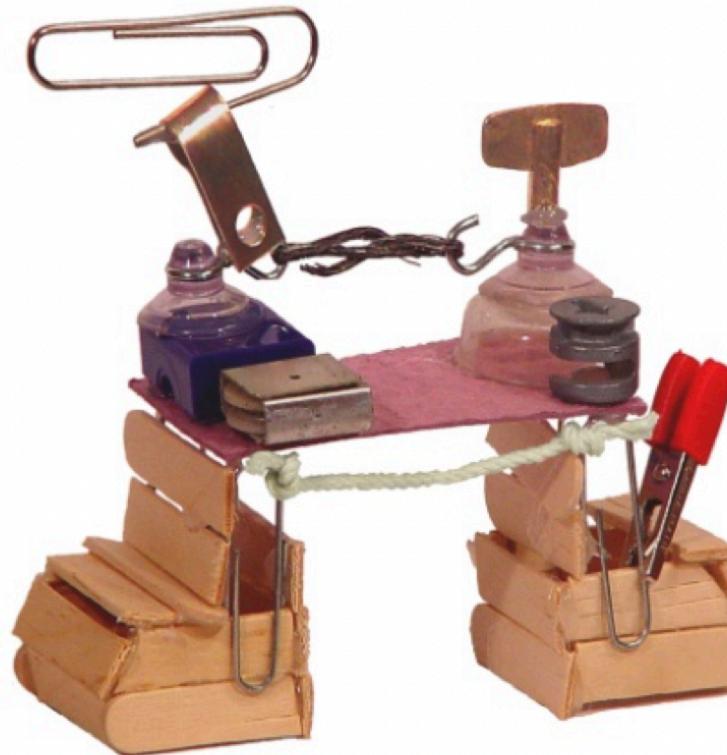
What does a possible implementation looks like?



Unique one-time engineering
Good for art, bad for infrastructure

Standardized modular components
Changeable, scalable, repeatable, understandable, integrated

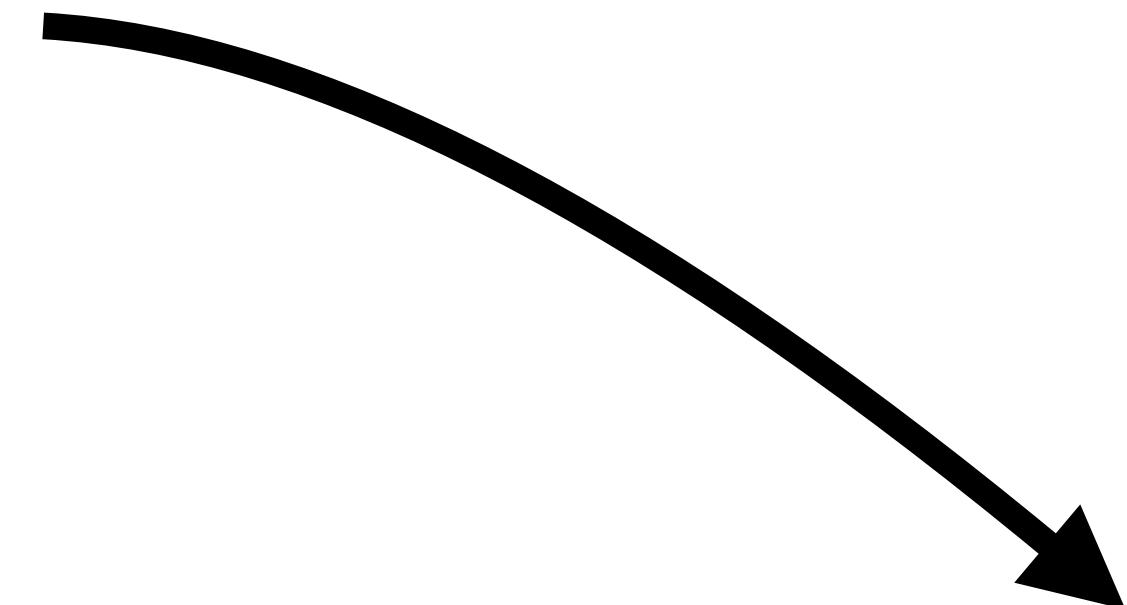
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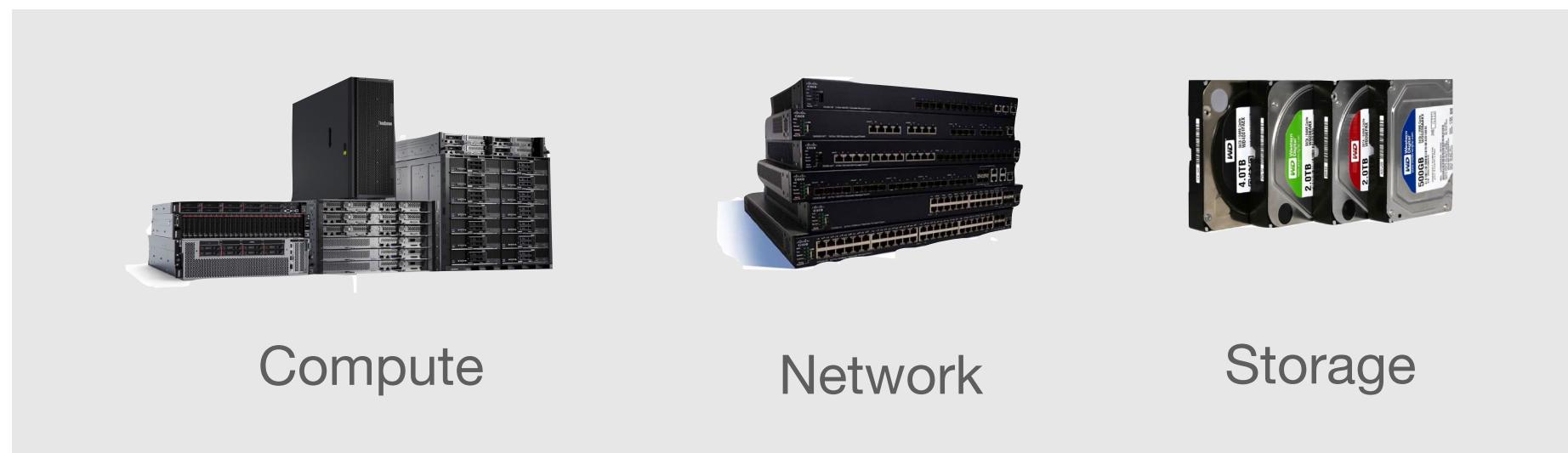


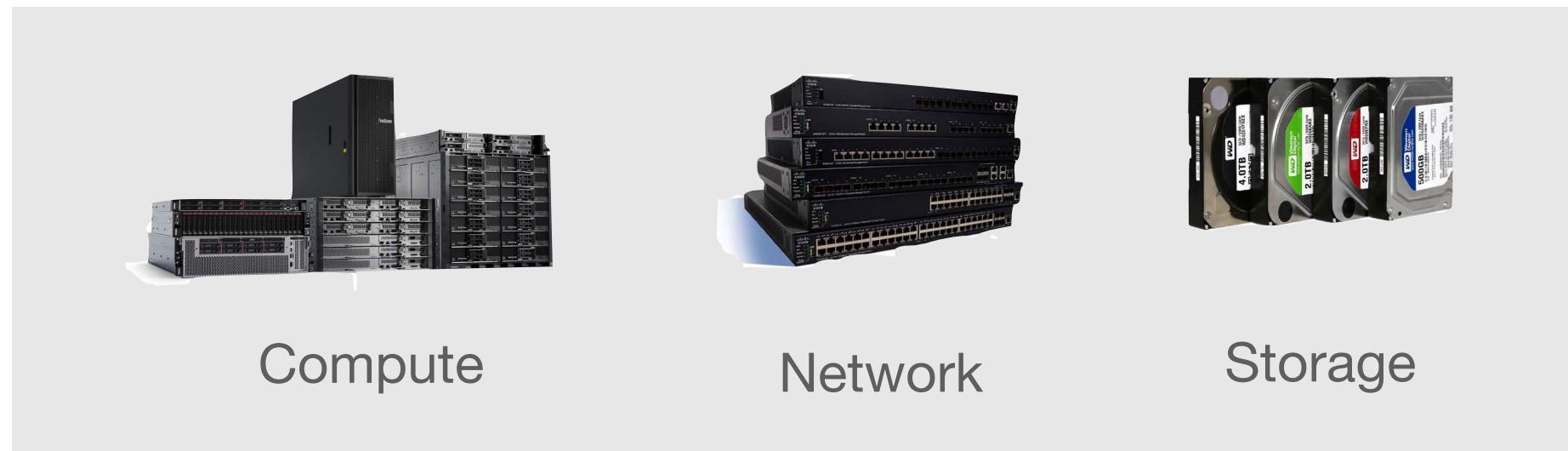
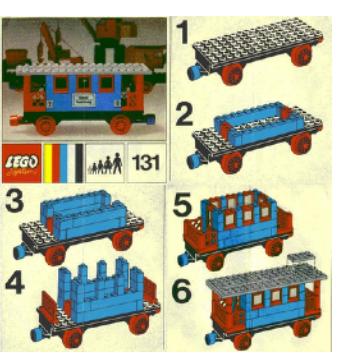
Unique one-time engineering
Good for art, bad for infrastructure

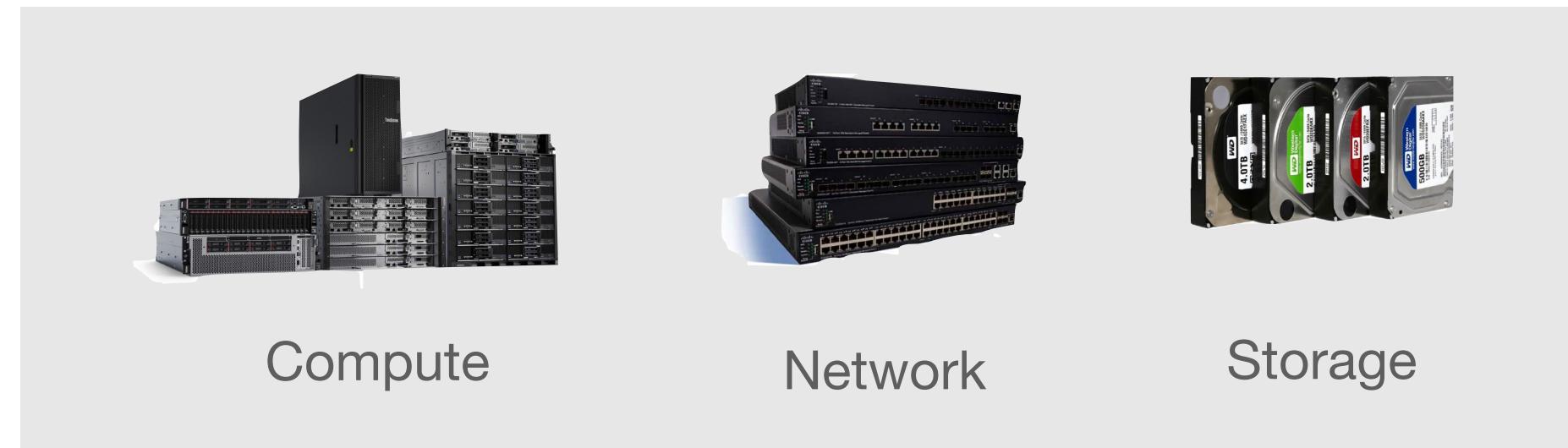
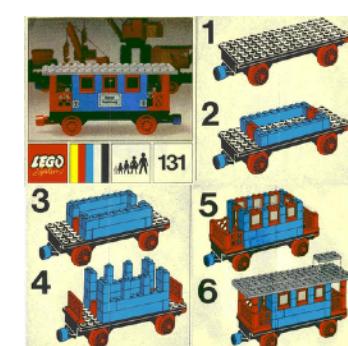


Standardized modular components
Changeable, scalable, repeatable, understandable, integrated





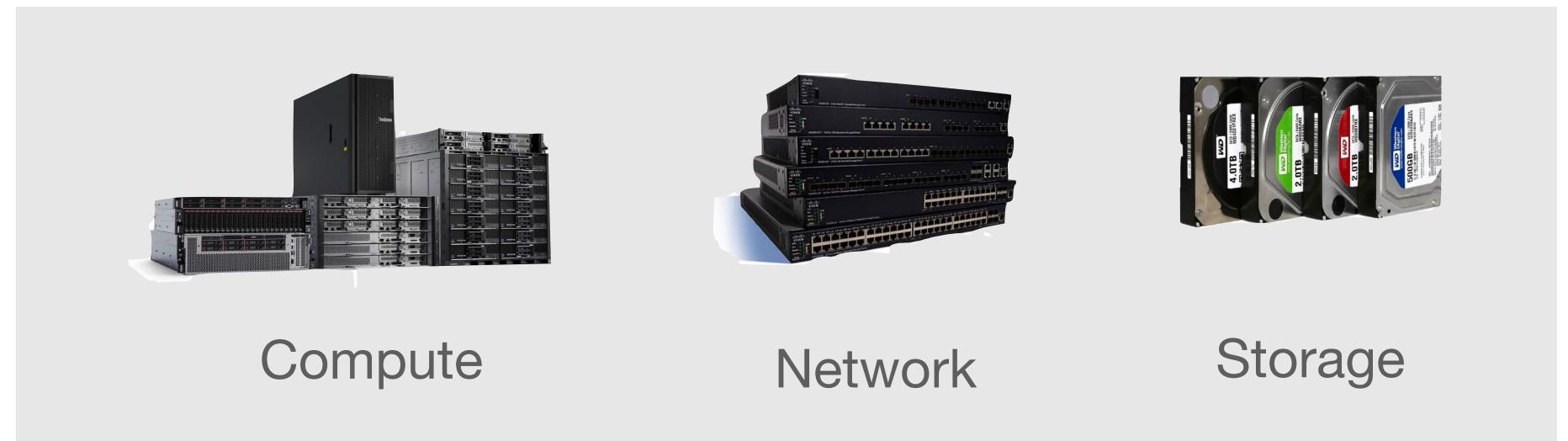
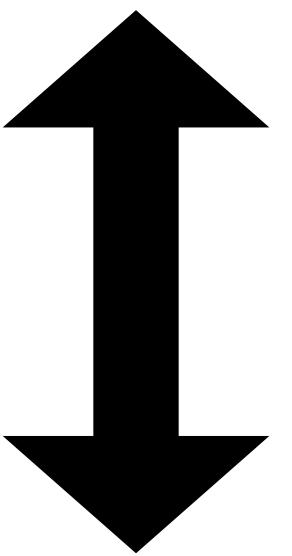


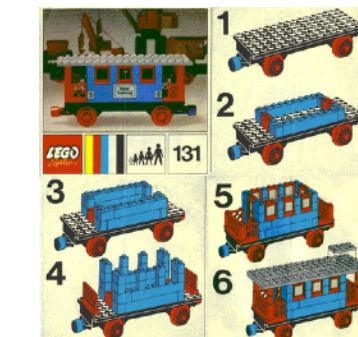


Compute

Network

Storage

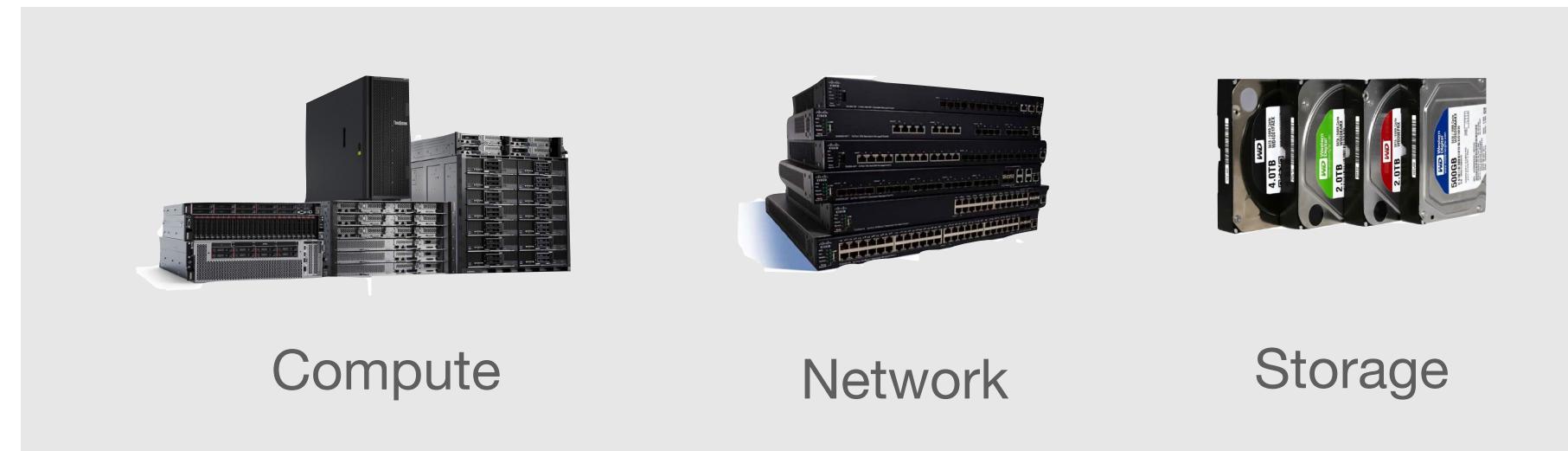
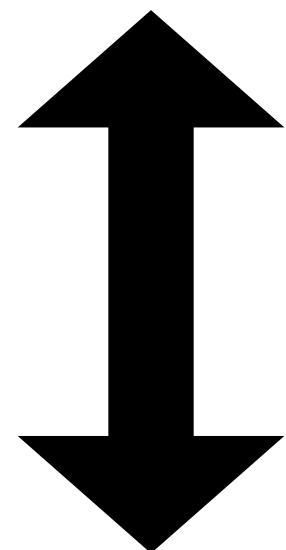




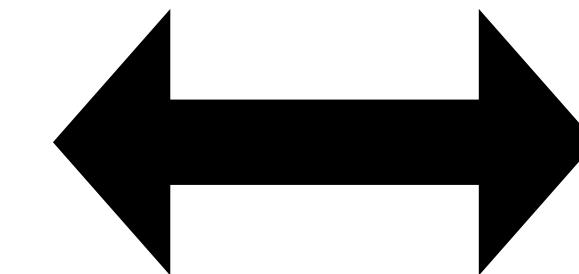
Single Point of Truth (SPOT)



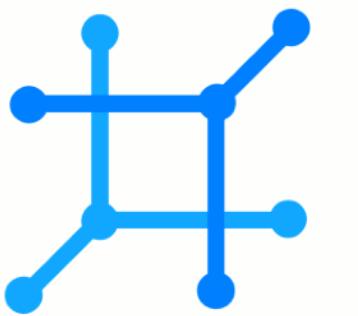
States



Single Source of Truth (SSOT)



Single Point of Truth (SPOT)



netbox

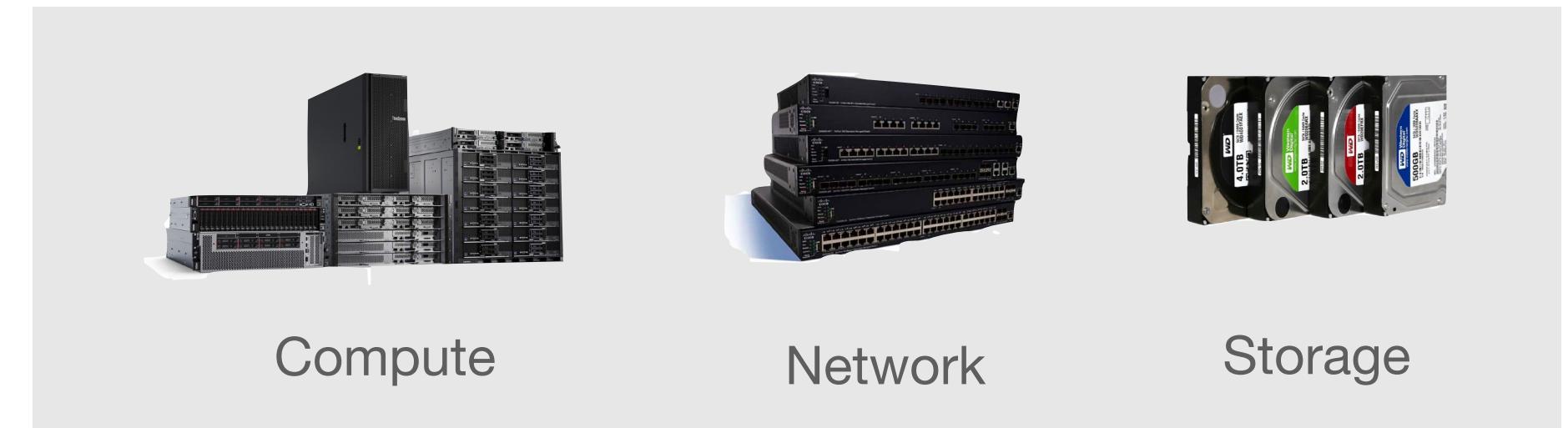
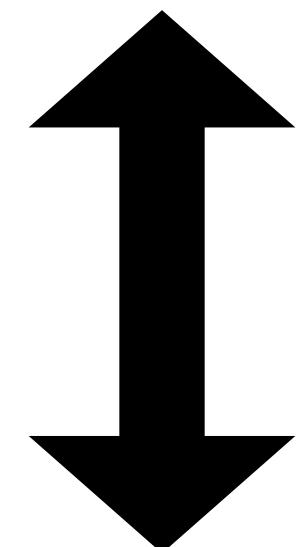
States



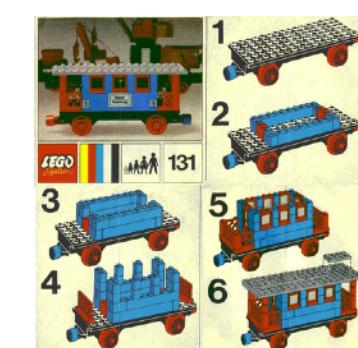
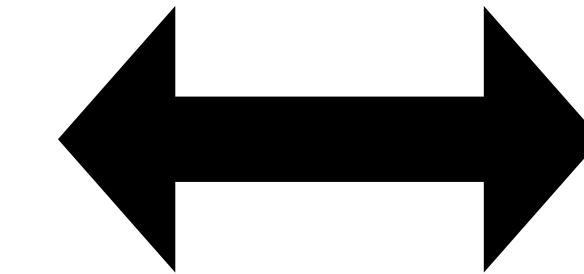
Configurations

Descriptions

Environments



Single Source of Truth (SSOT)



Single Point of Truth (SPOT)



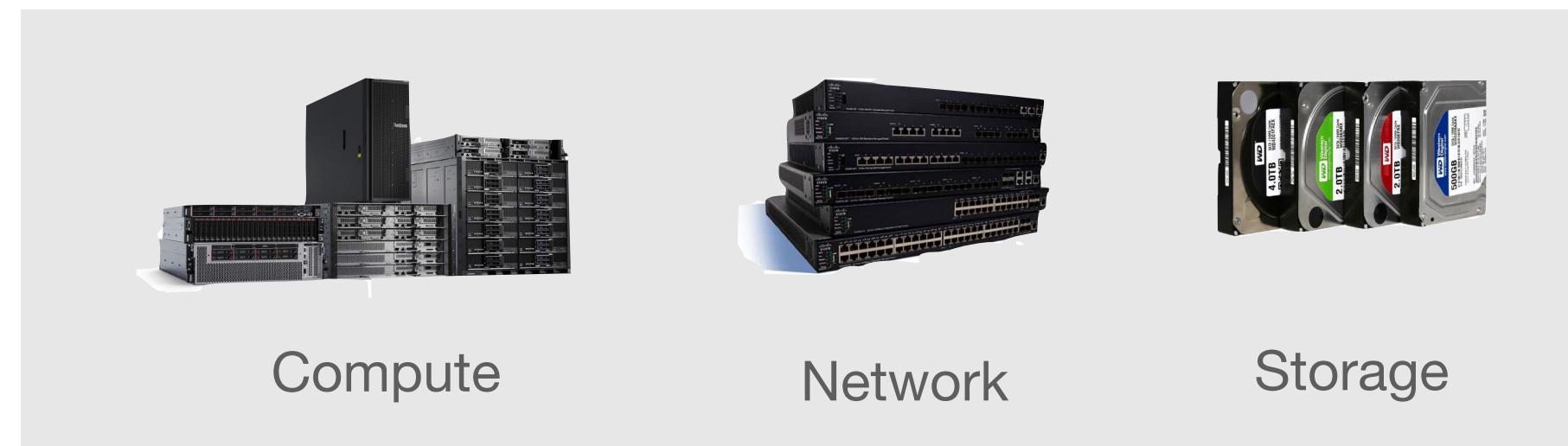
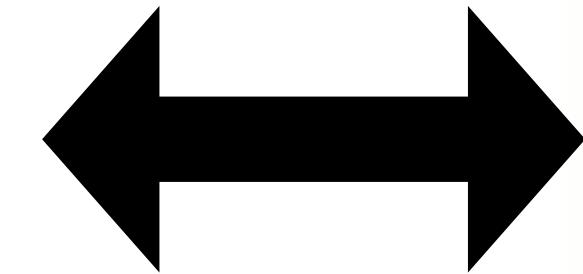
States



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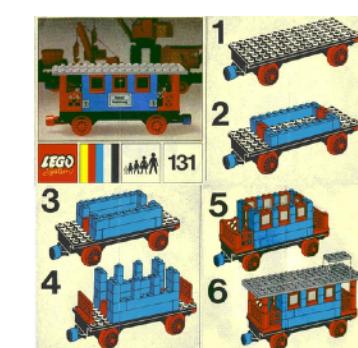
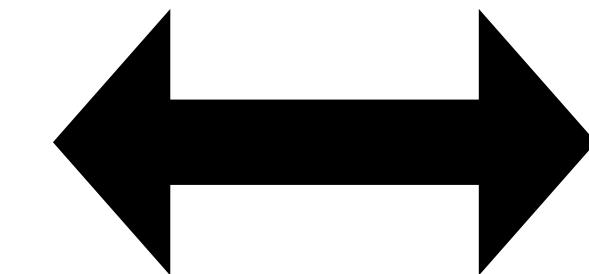




Transformability is key!



Single Source of Truth (SSOT)



Single Point of Truth (SPOT)



Configurations

Descriptions

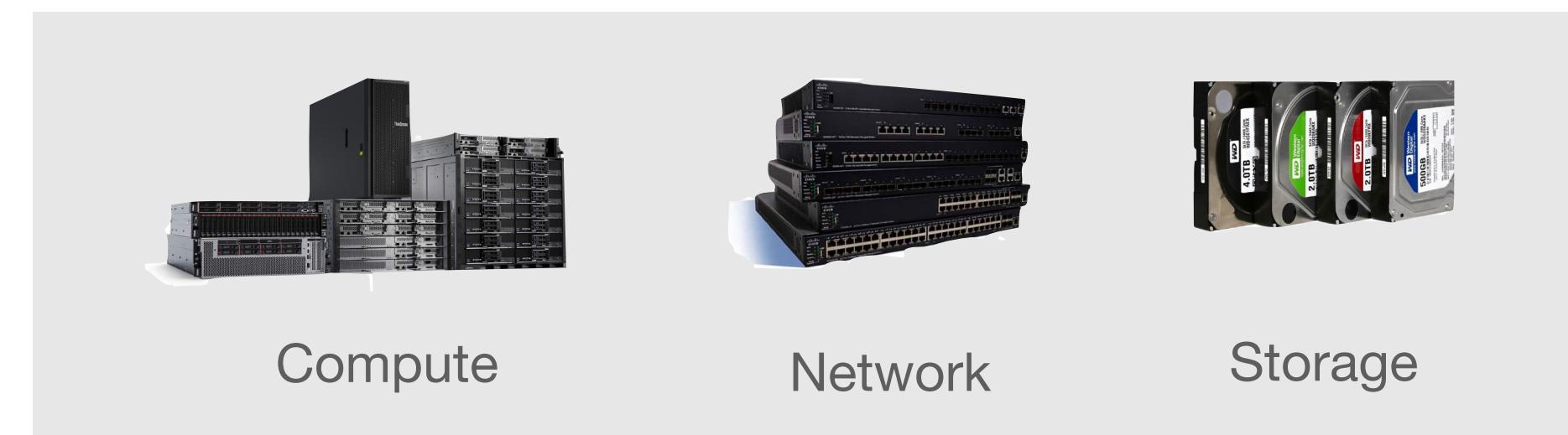
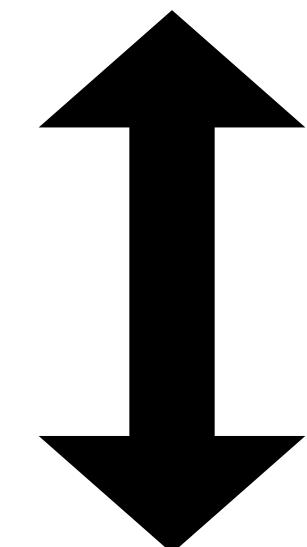
Environments



OSISM



States



Compute

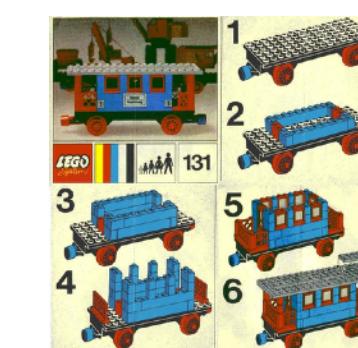
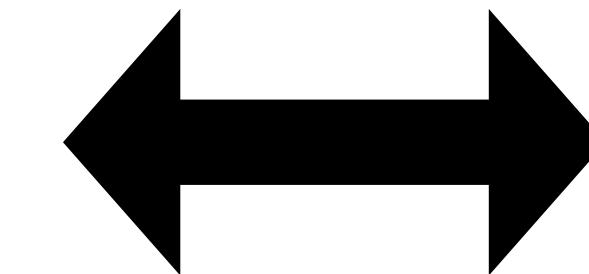
Network

Storage

Transform

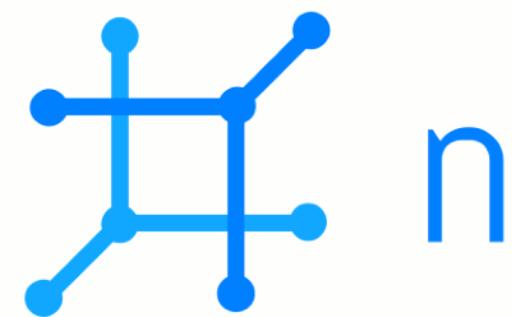


Single Source of Truth (SSOT)



OSISM

Single Point of Truth (SPOT)



netbox

States



Configurations

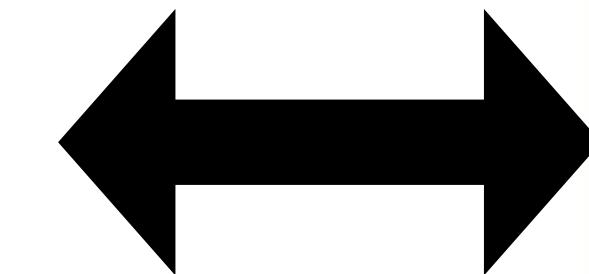
Descriptions

Environments

1



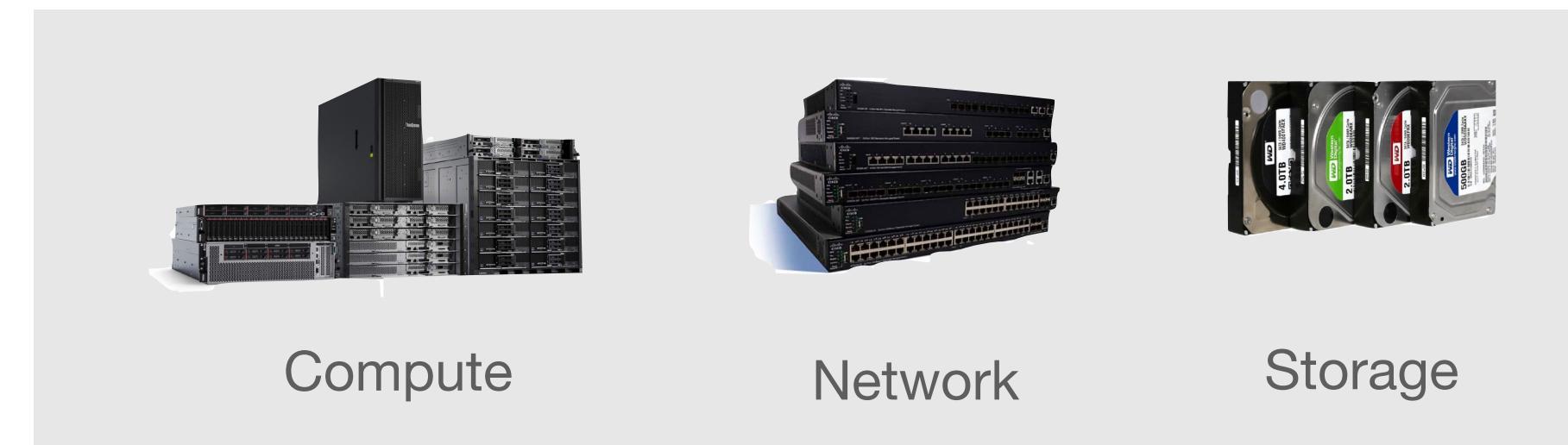
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Compute

Network



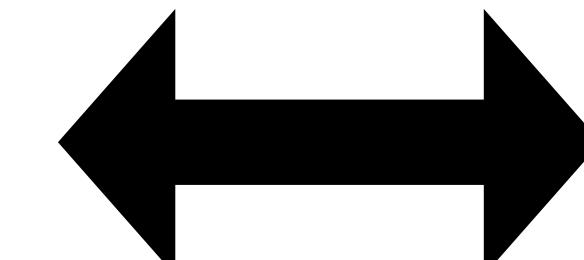
Storage



Transform



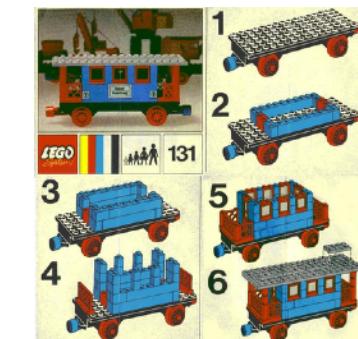
Single Source of Truth (SSOT)



Configurations

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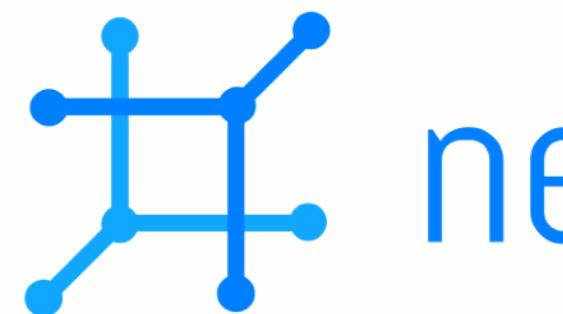


OSISM



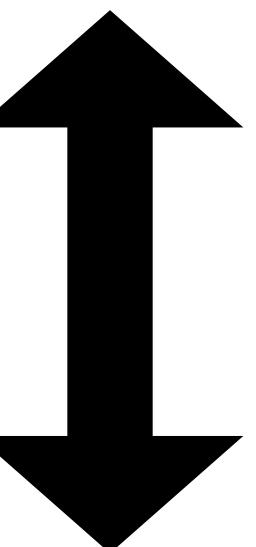
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Single Point of Truth (SPOT)



States

netbox



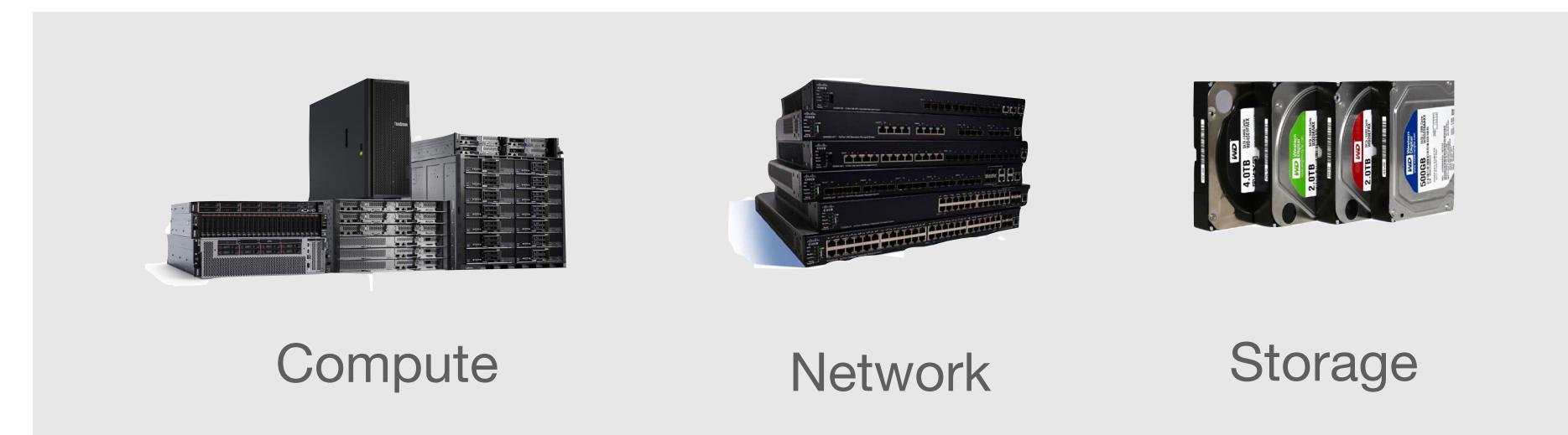
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Compute

Network

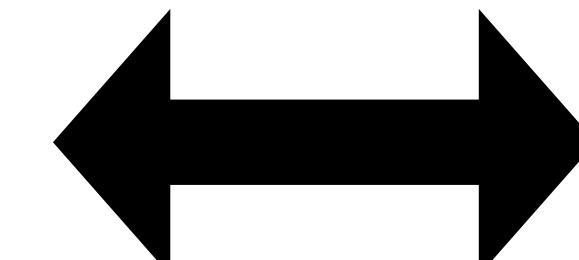
Storage



Transform



Single Source of Truth (SSOT)

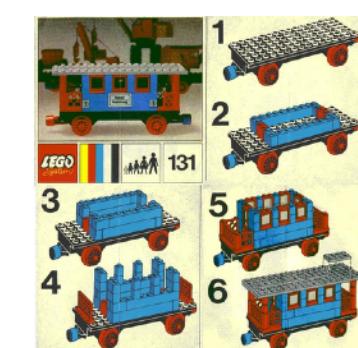


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Configurations

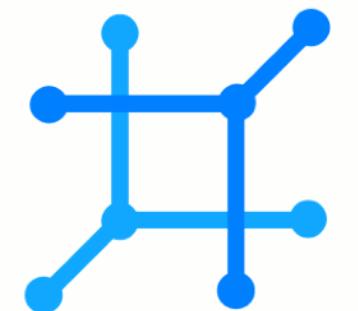
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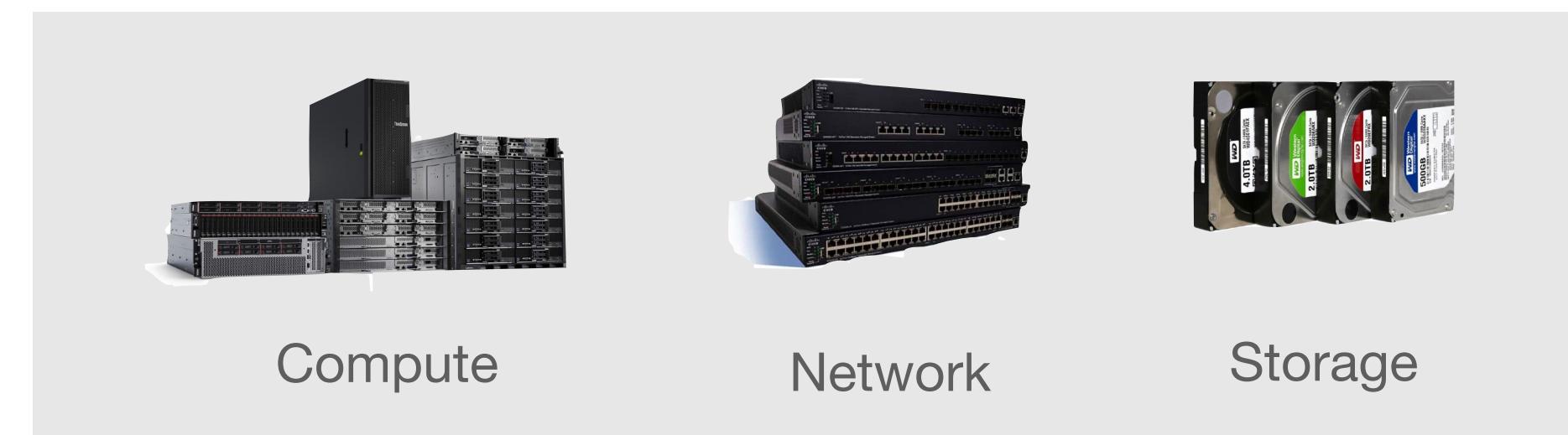
OSISM

Single Point of Truth (SPOT)



3

States



Transform



Single Source of Truth (SSOT)



2

Configurations

Descriptions

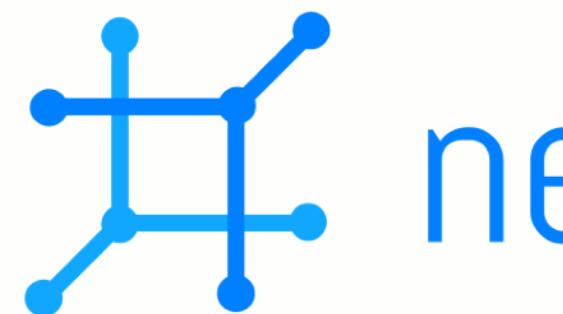
Environments

1



OSISM

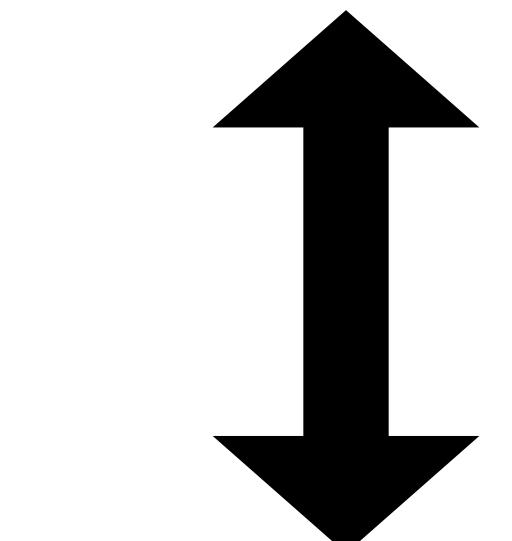
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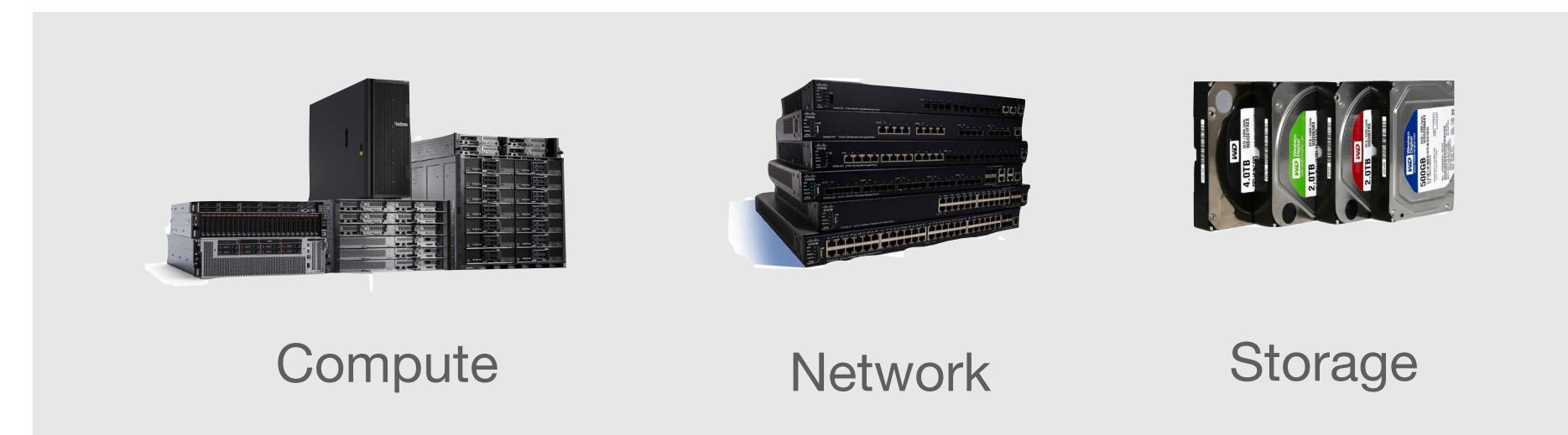
States



3



4



Compute

Network

Storage



Transform



Single Source of Truth (SSOT)



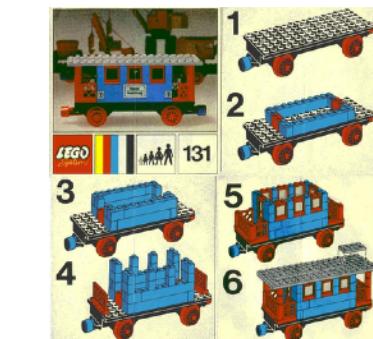
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Configurations

Descriptions

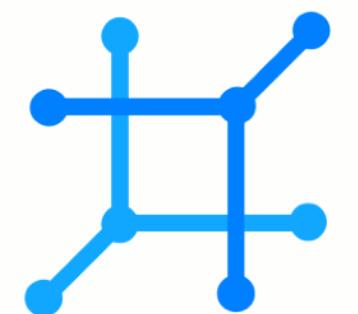
Environments

1

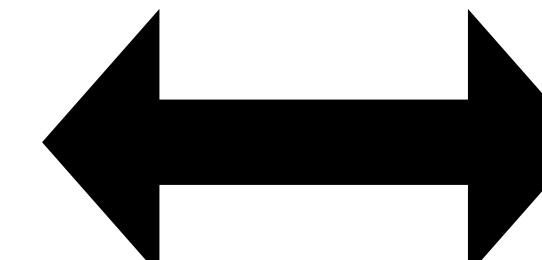


OSISM

Single Point of Truth (SPOT)



netbox

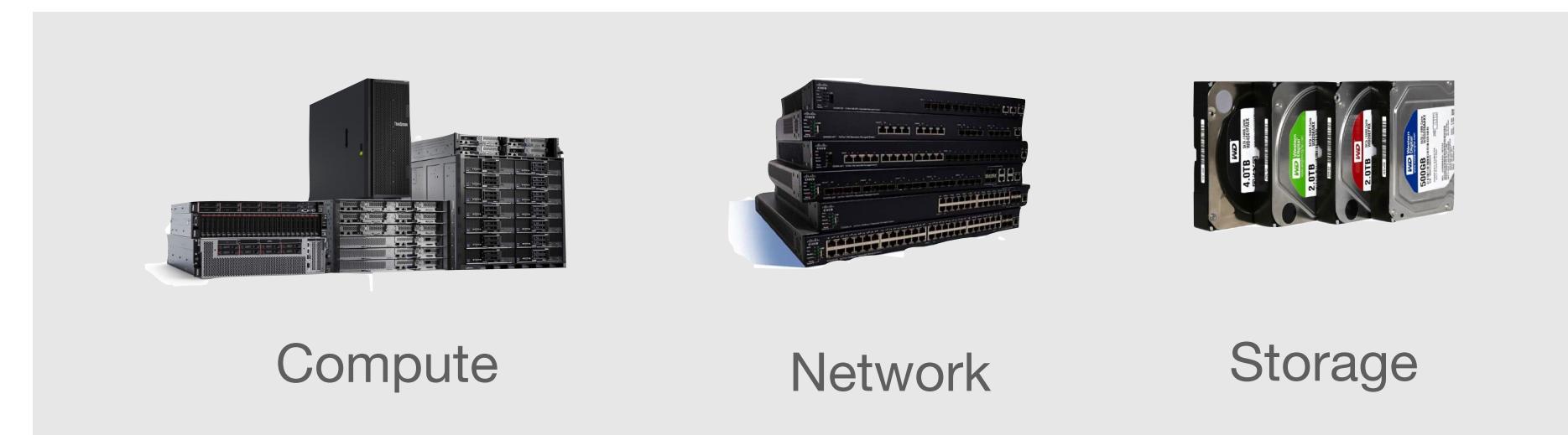


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States

4

5



Compute

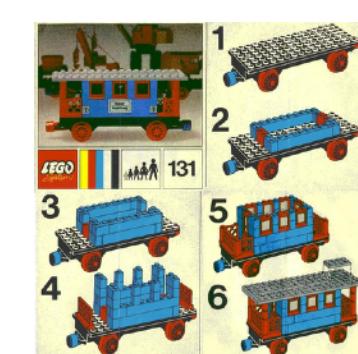
Network

Storage



Transform

Single Source of Truth (SSOT)



Configurations

Descriptions

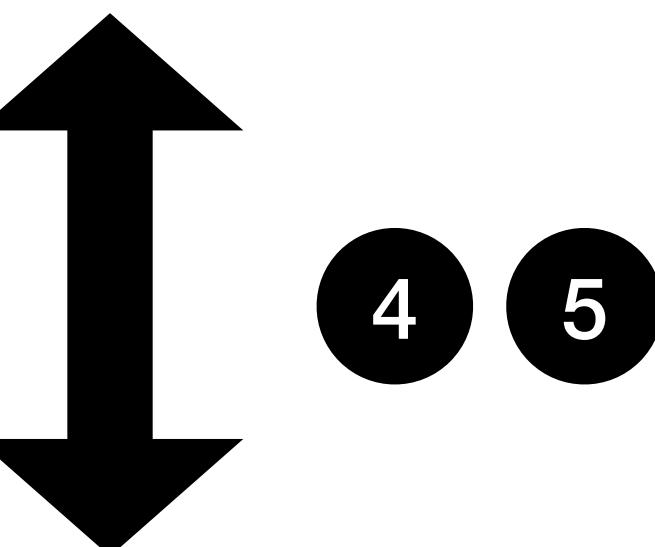
Environments

1

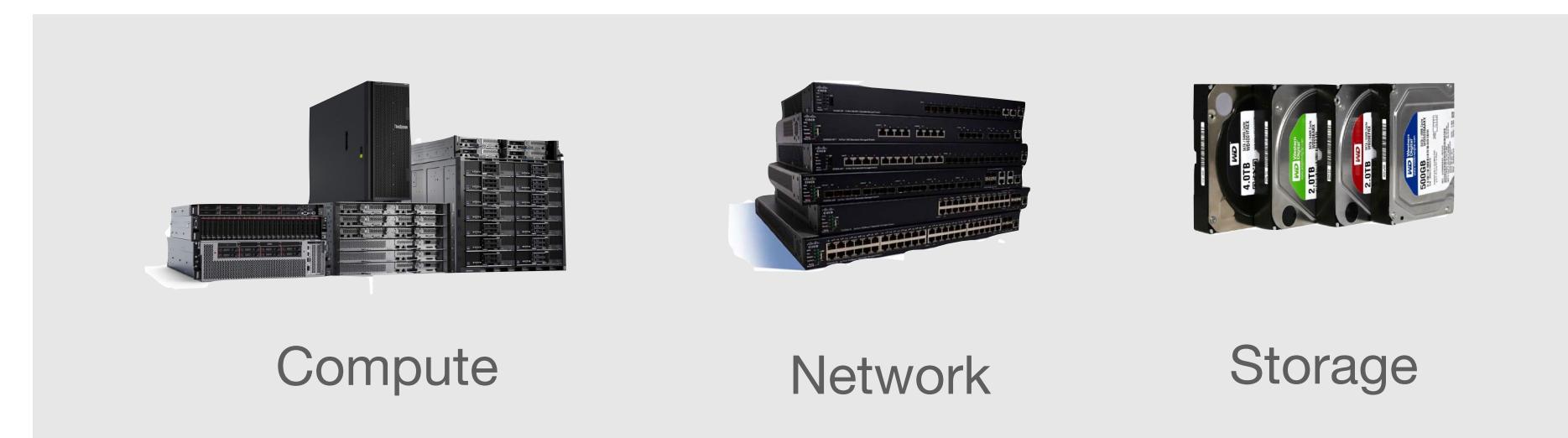


States

3 6



4 5



Compute

Network

Storage



Transform



Single Source of Truth (SSOT)



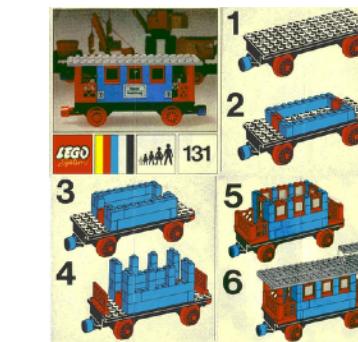
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Configurations

Descriptions

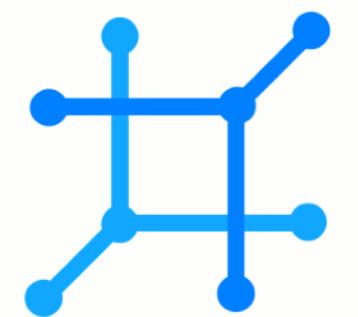
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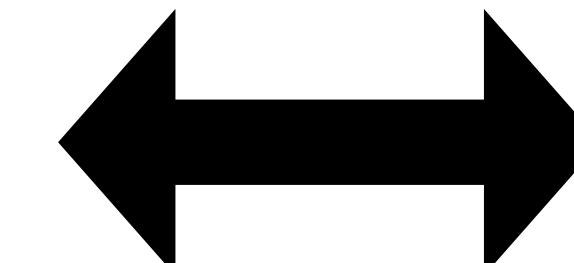


OSISM

Single Point of Truth (SPOT)



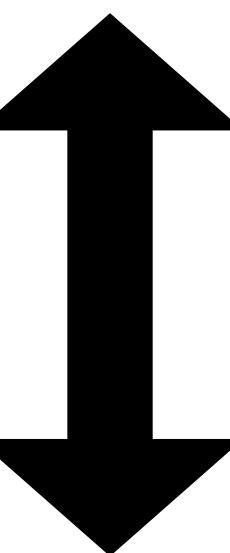
netbox



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States



4

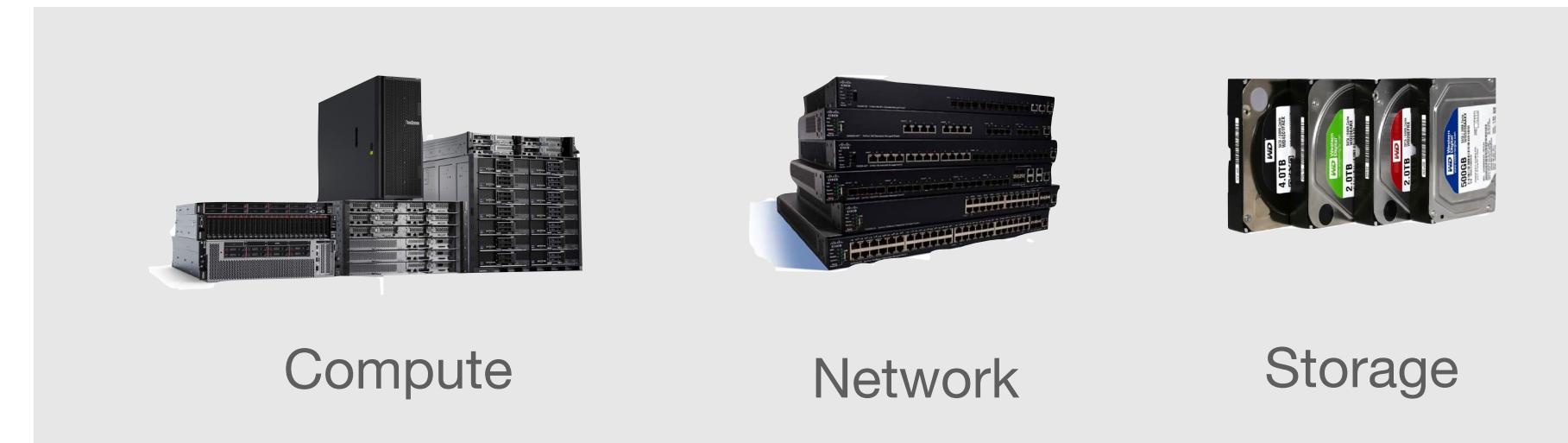
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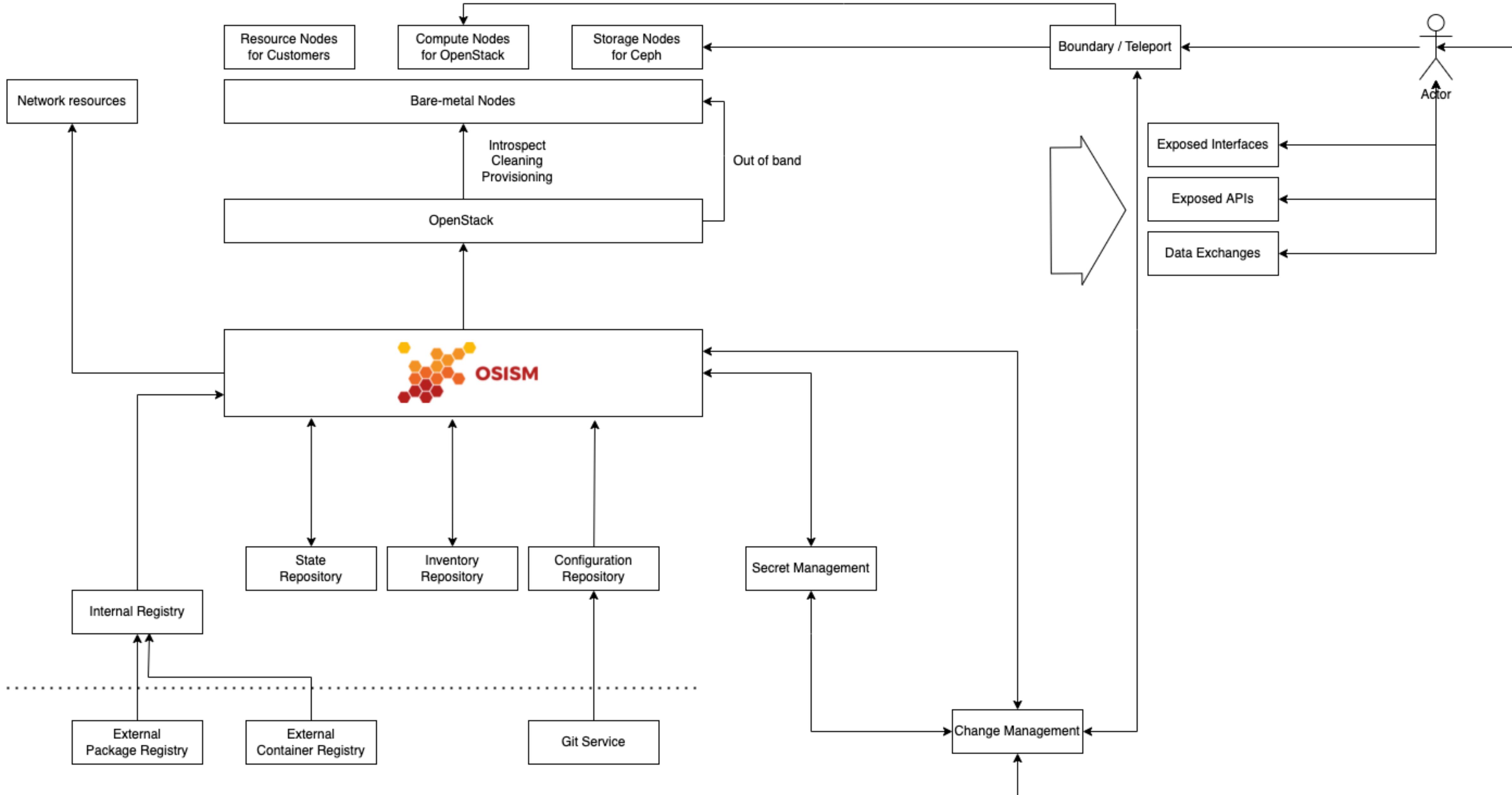
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How does it look too much in detail?



**WE
ARE
HIRING!**



How to get in contact with us?



<https://github.com/osism>



@osismtech

<https://osism.tech>

info@osism.tech

Thank you!