

WELCOME
TO THE
DATA AGE

Hadoop Architecture Metamorphosis

Alex Campos, Digital Data Strategist
ac@cloudera.com | @campossalex



**Download
Presentation**



<http://github.com/campossalex>

Let's think about analytics
15 years ago...

Needs



Batch

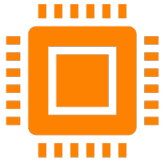


Deterministic



Analog

Tech



Hardware



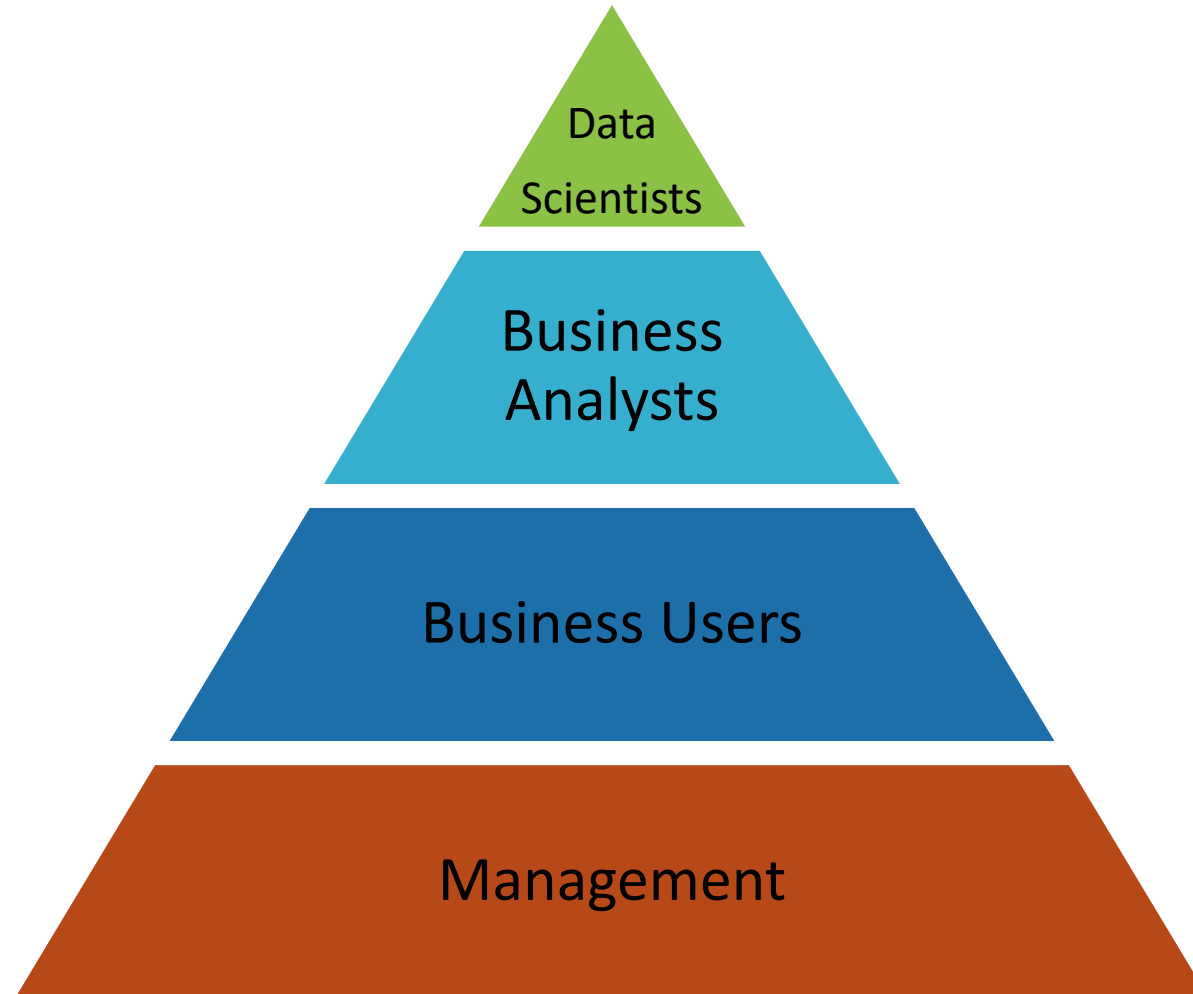
Network



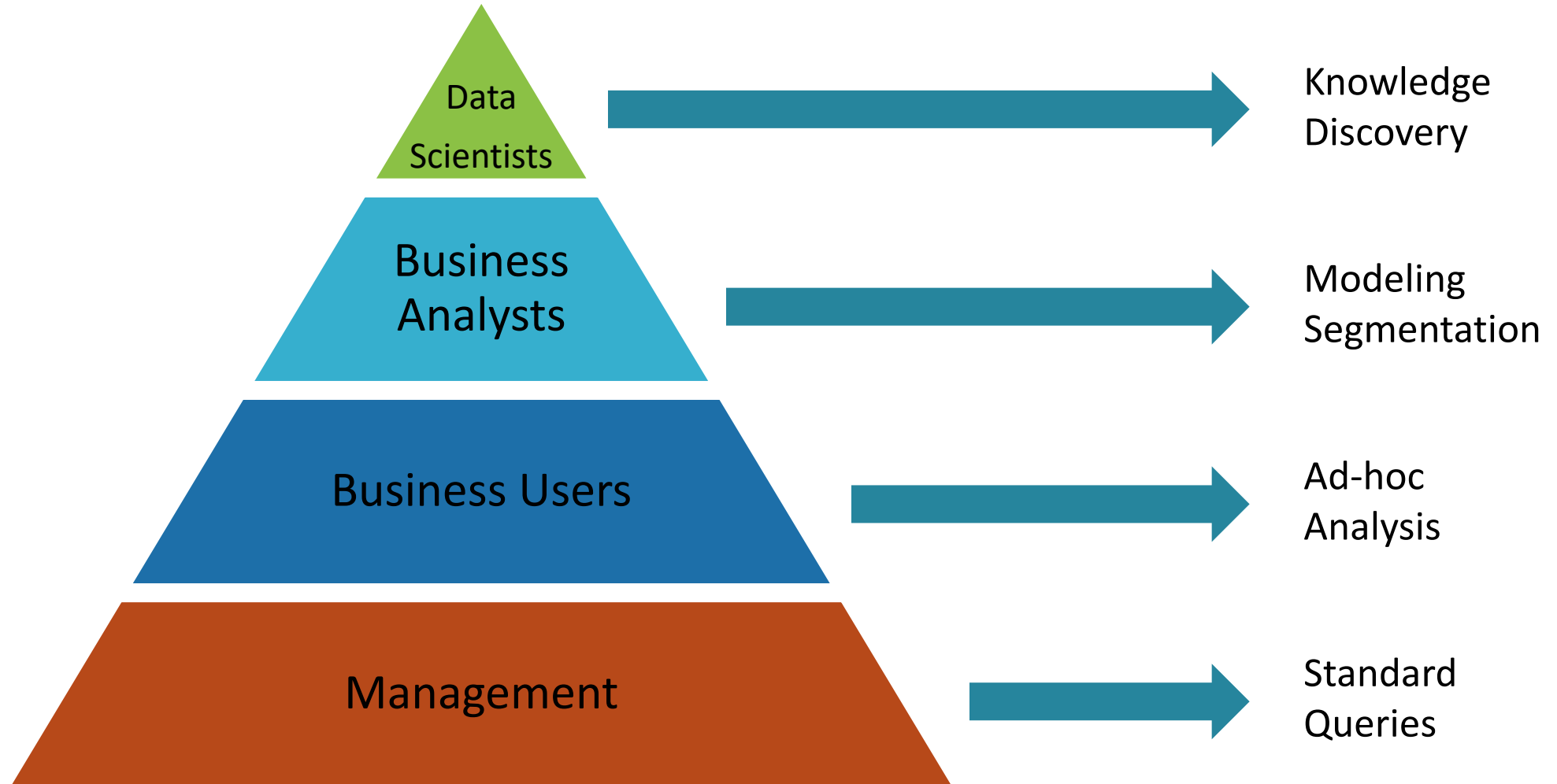
Cost

How analytic looks
like today?

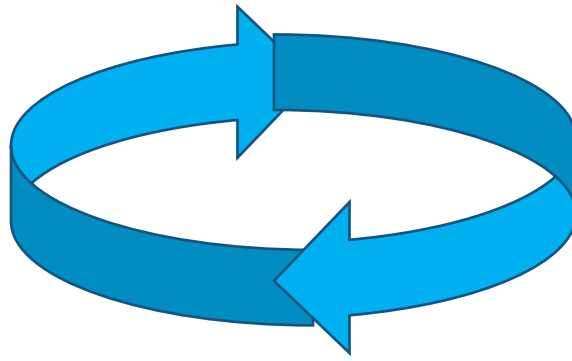
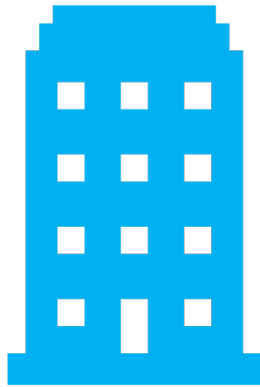
Data Audience



Multi-functional Analytics



We live in a hybrid world



Technology Evolution

CLOUD EXPERIENCE



Easy to use,
self-service, on-demand,
elastic, consumption

COMPUTE & STORAGE



Separation in public and
private clouds for
increased performance

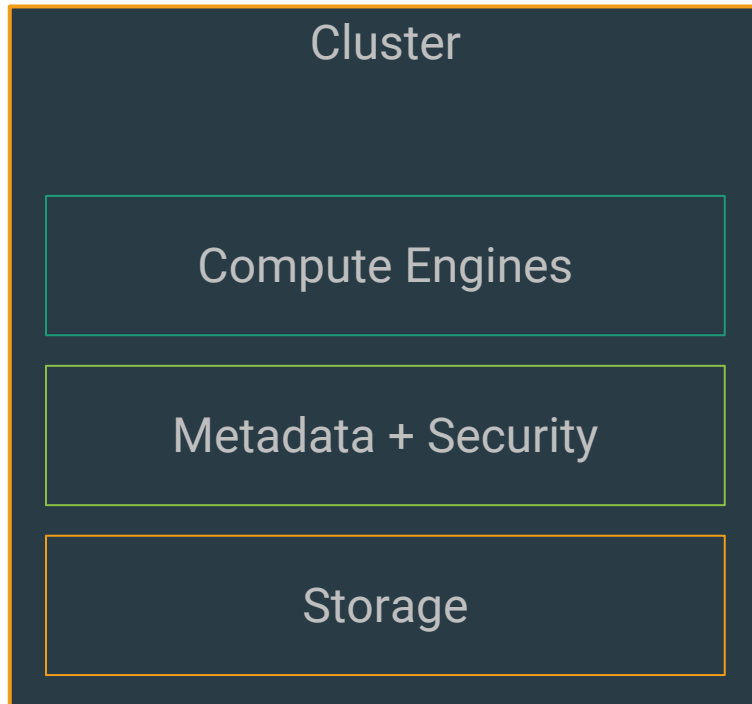
KUBERNETES & CONTAINERS



Adoption as standard
operating environment for
flexibility and agility

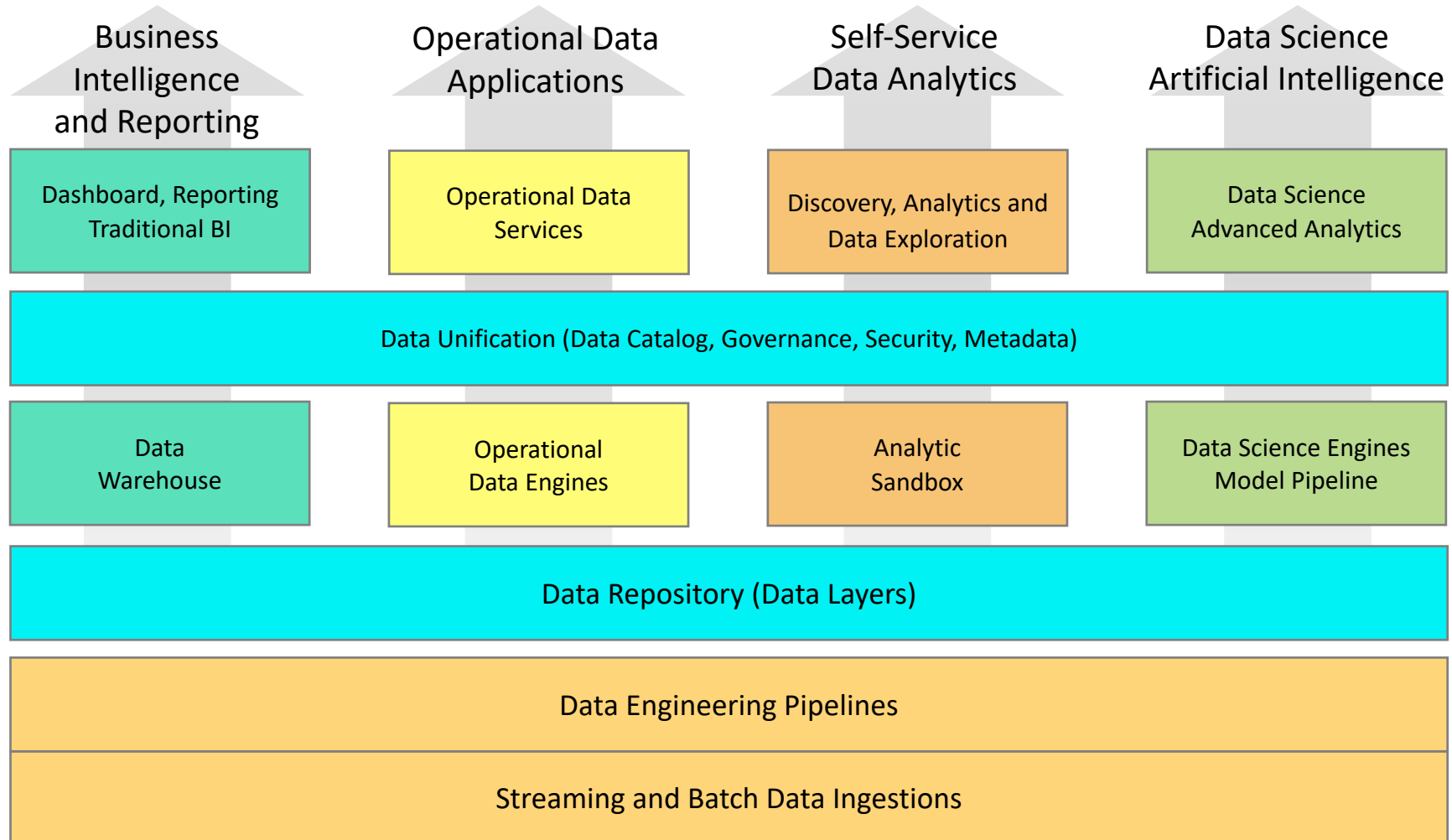
Decoupling the coupled

Monolithic Environments

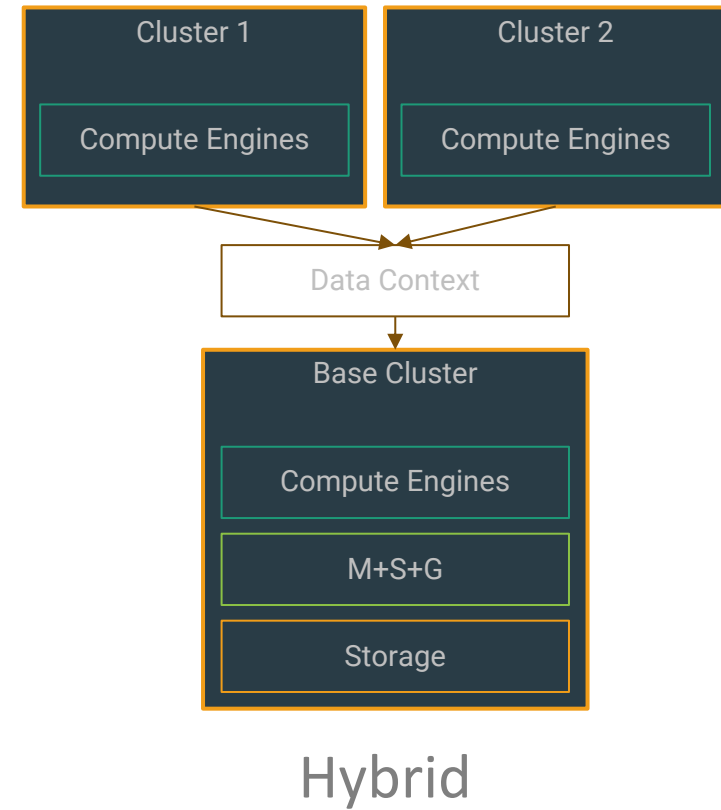
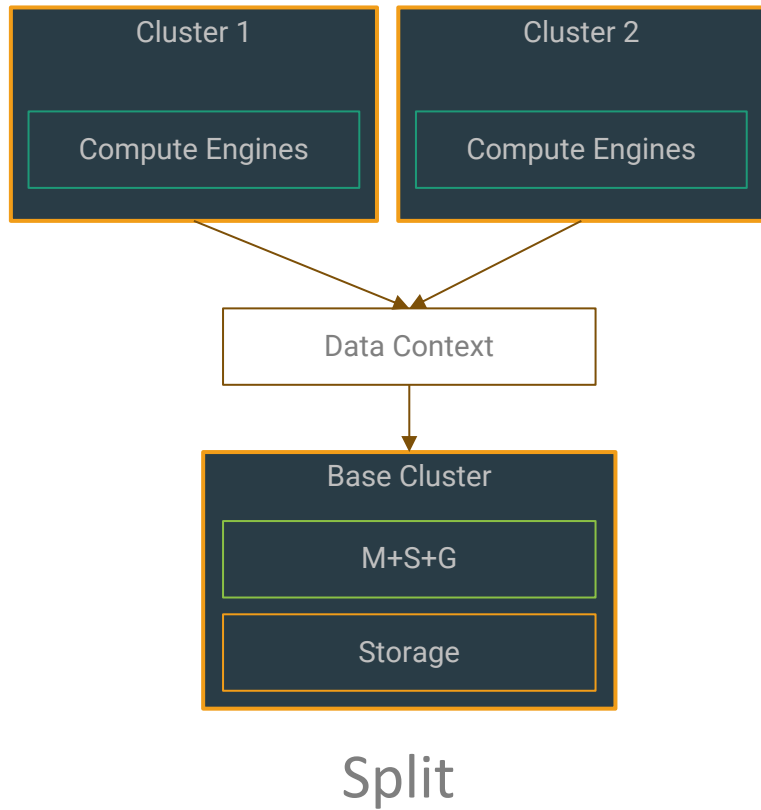


- Scaling out (horizontal)
- Data locality
- Storage and compute together
- Inflexible

Architecture Shift



Multi-cluster



* M+S+G = Metadata + Security + Governance

Choose the Right Infra

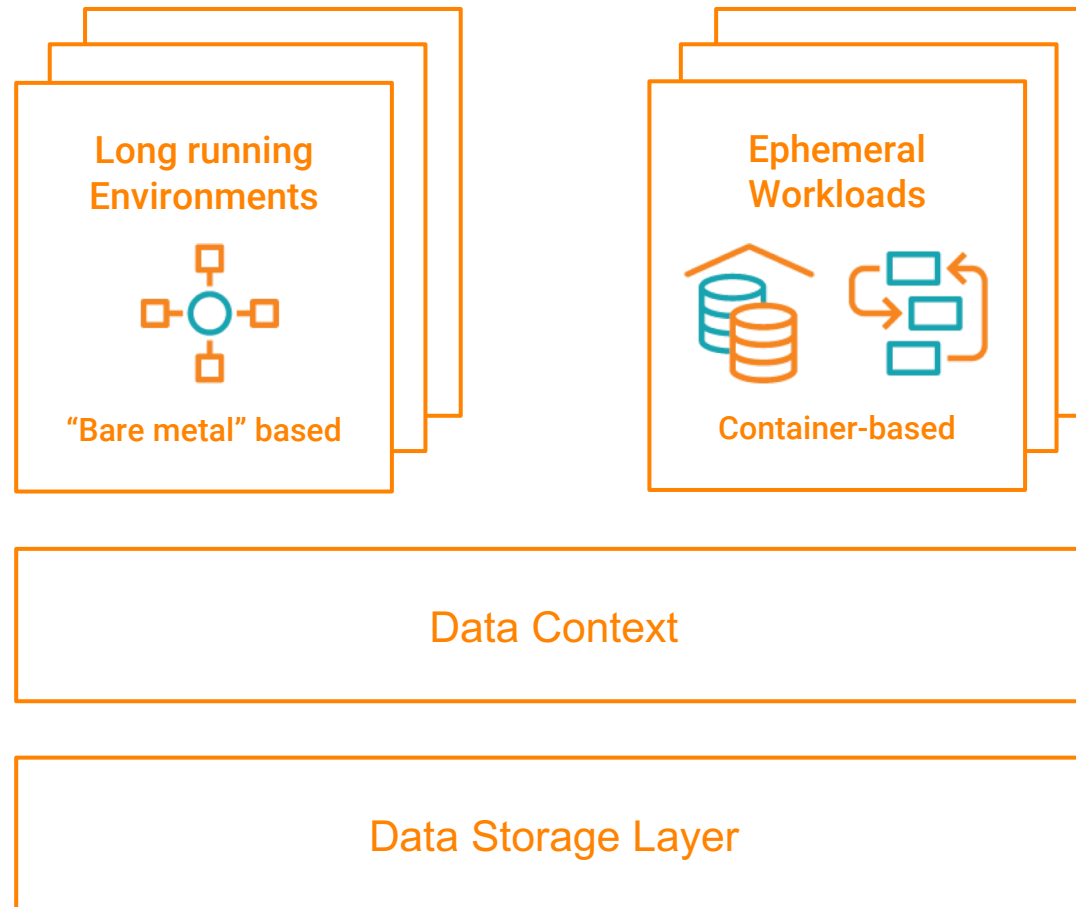
Long running Environments

- Static resource allocation
- “Bare metal” based
- Traditional workloads
- More options for tuning

Ephemeral Workloads

- Dynamic resource allocation
- Container-based
- Auto scaling
- Specific workloads

Right Infra



Multi-tenancy Strategy

Organizational

- Map human beings (user, team, department)
- Manage internal chargeback (billing)
- Isolation based on user or group experience

Analytics Nature

- Type of workload (ad-hoc, ML, query)
- Optimize resource/infrastructure efficiency
- Isolation based on noisy neighbor

SLA-oriented

- Isolation based on workload priorities
- Trades strong SLA versus low-priority workloads

Cloudera Data Platform

Cloudera Data Platform



From the Edge to AI

CDP, the first Enterprise Data Cloud



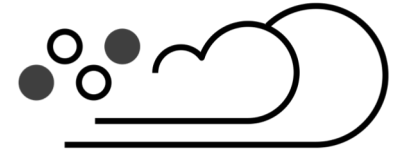
Hybrid,
Multi-Cloud



Multi-Function
& Open

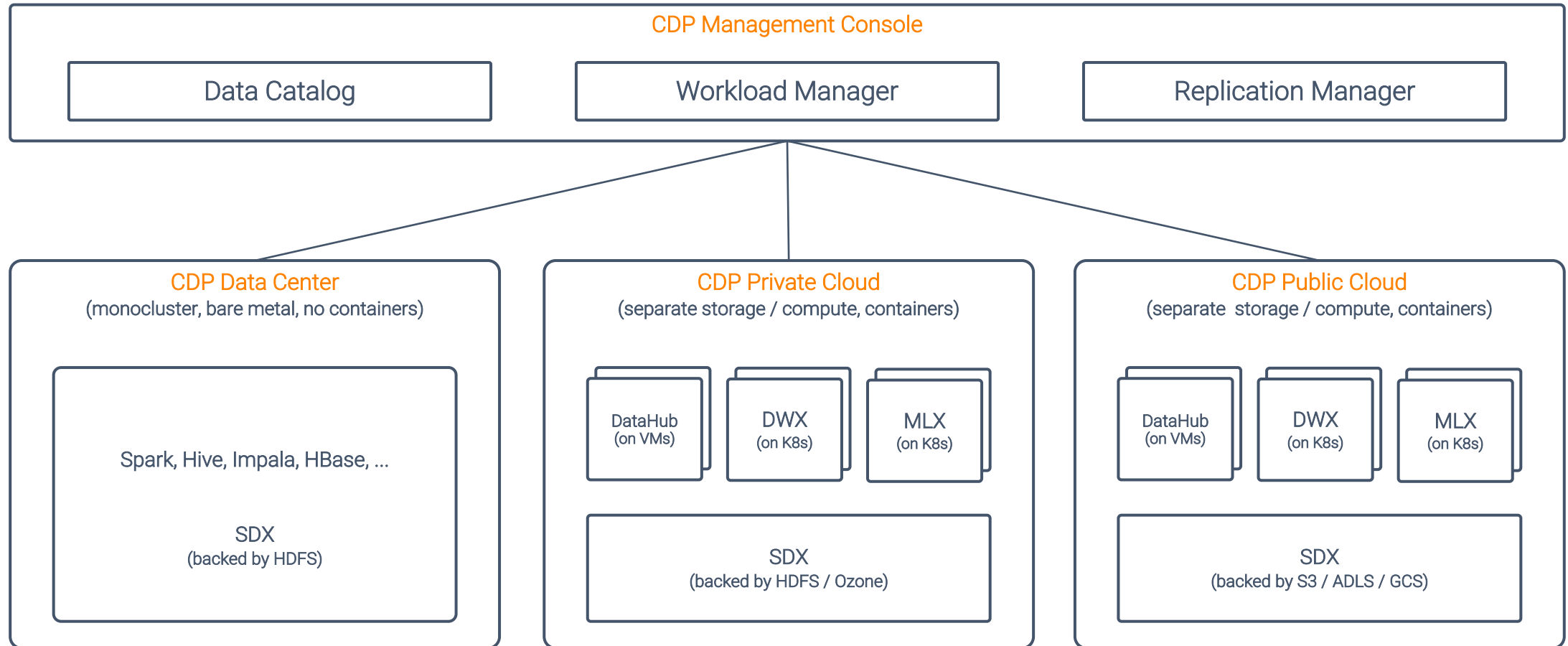


Secure &
Governed



Cloud
Experience

Hybrid Multi-Cloud Architecture



**Download
Presentation**



<http://github.com/campossalex>

Thanks!!!

Alex Campos | ac@cloudera.com

<https://www.linkedin.com/in/campossalex/>
[@campossalex](#)