



Kogence

Democratizing Digital Engineering

Platform Introduction
Aug 2018



Microsoft



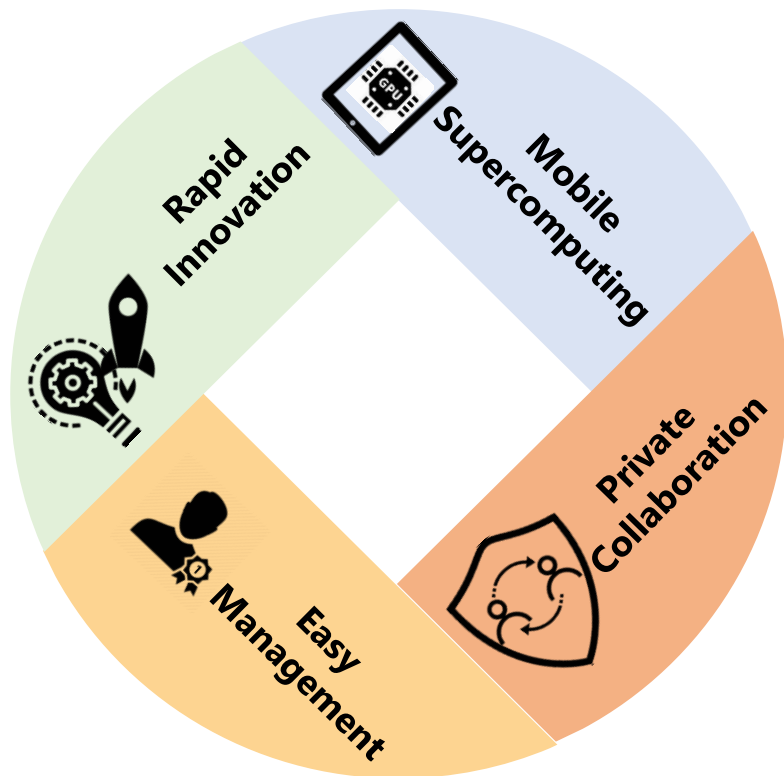
amazon
web services



DASSAULT
SYSTEMES

SIEMENS

Mission: Democratizing Access to Digital Engineering



1

Truly on-demand, cost effective, personal super computing.

2

Easy to manage and provision. No security concerns. No dependencies.

3

Use any scientific simulation software with few clicks.

4

Searchable enterprise IP repository. Easy to fork and execute with few clicks. Private collaboration.

On-premise HPC Solution is a Financial Commitment



Total yearly cost in excess of \$1 Million

**High
CapEx**

Small 1,600 cores setup:

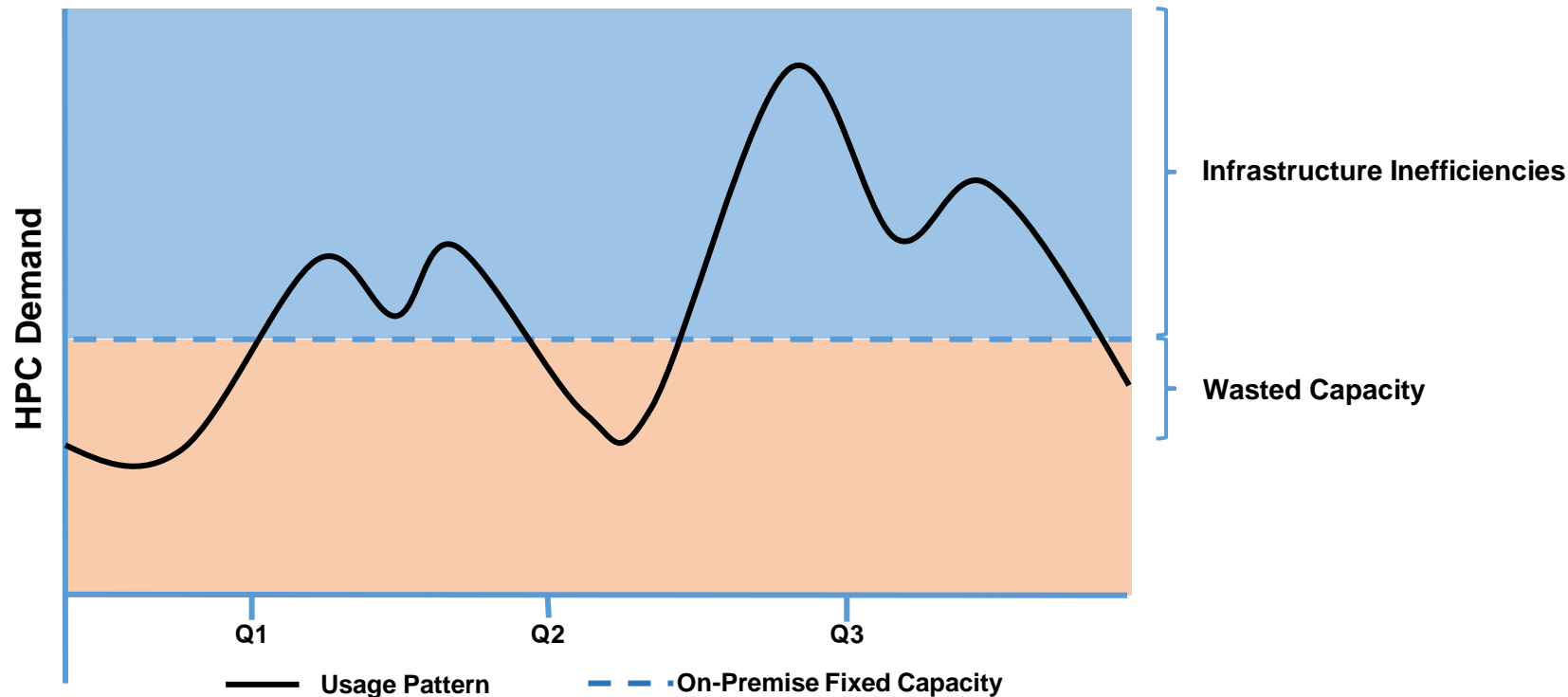
\$1-1.5M

**High
OpEx**

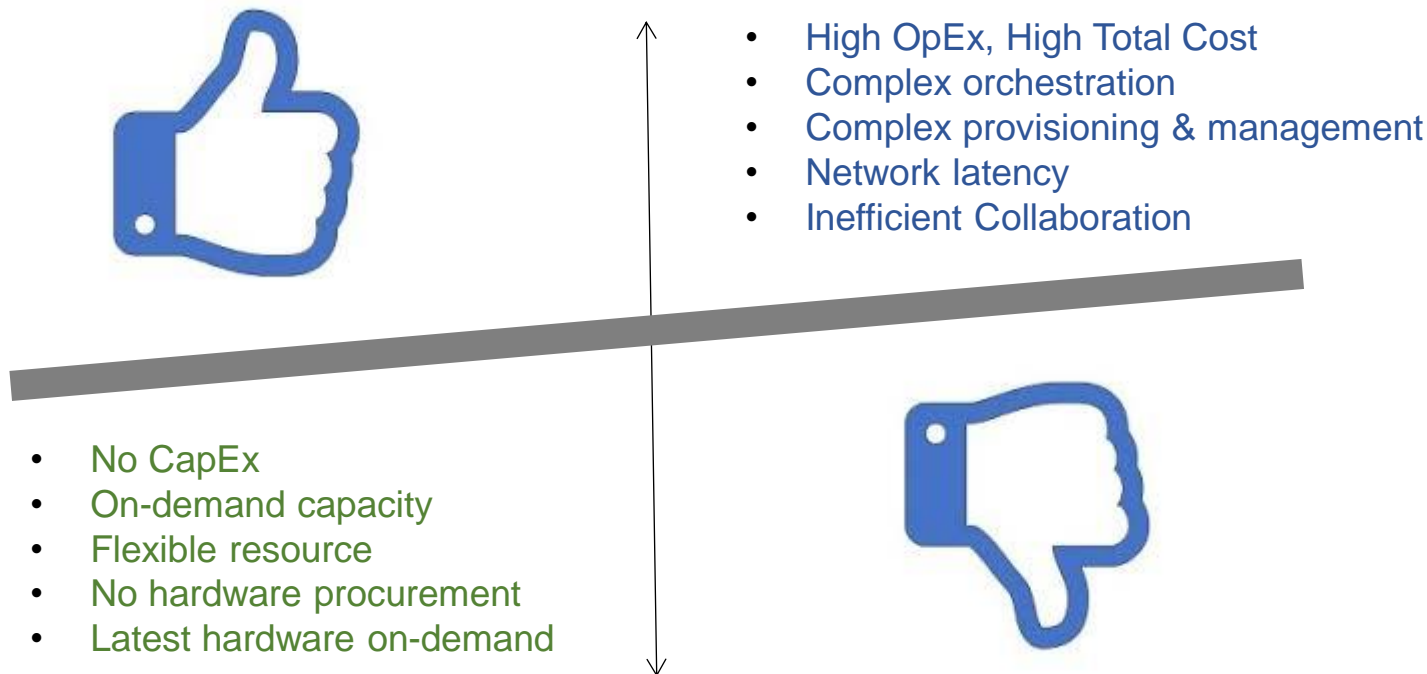
Small 1,600 cores setup:

\$500-750K/year

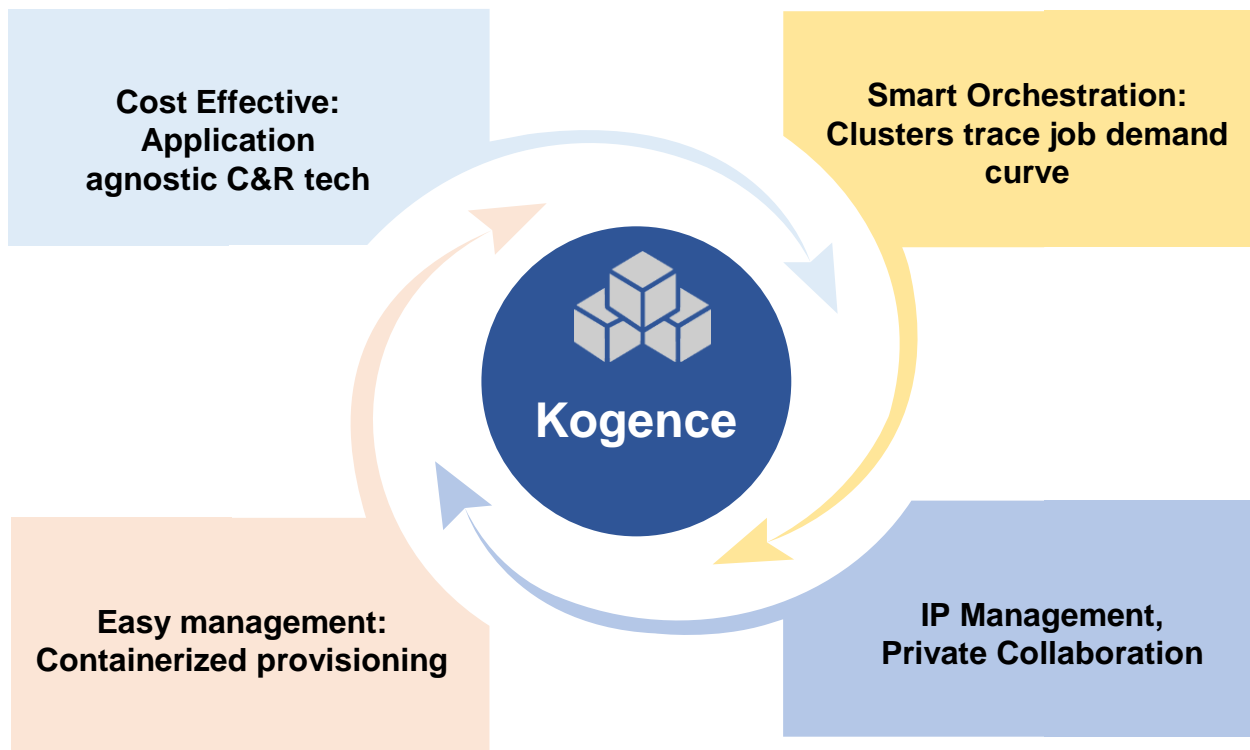
On-premise HPC Solution Introduces Inefficiencies



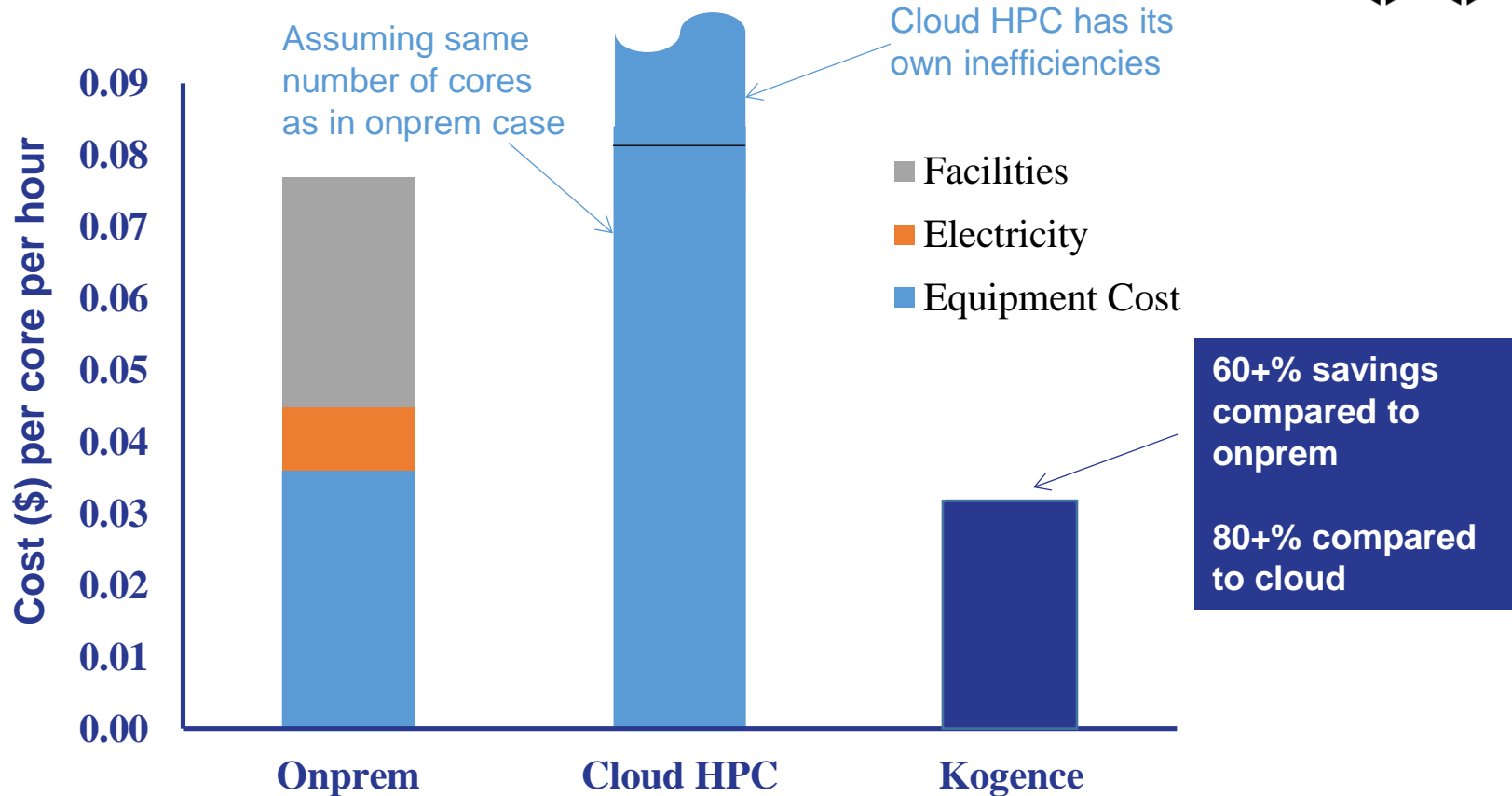
The Cloud HPC is a Conundrum



Kogence is Cloud HPC, Evolved



Kogence Technology Enables 60+% Savings



Onprem Vs Cloud Vs Kogence



Onprem Datacenter

1600 Core Cluster

100% Utilization

60%: \$0.14

\$0.036

/core/hr



\$0.044

facilitization



\$0.080

AWS or Azure Ondemand

2vCPU=1Core

Compute Optimized

Ondemand

\$0.084

/core/hr



0

facilitization



\$0.084

Kogence

2vCPU=1Core

Compute Optimized

Ondemand

\$0.032

/core/hr



0

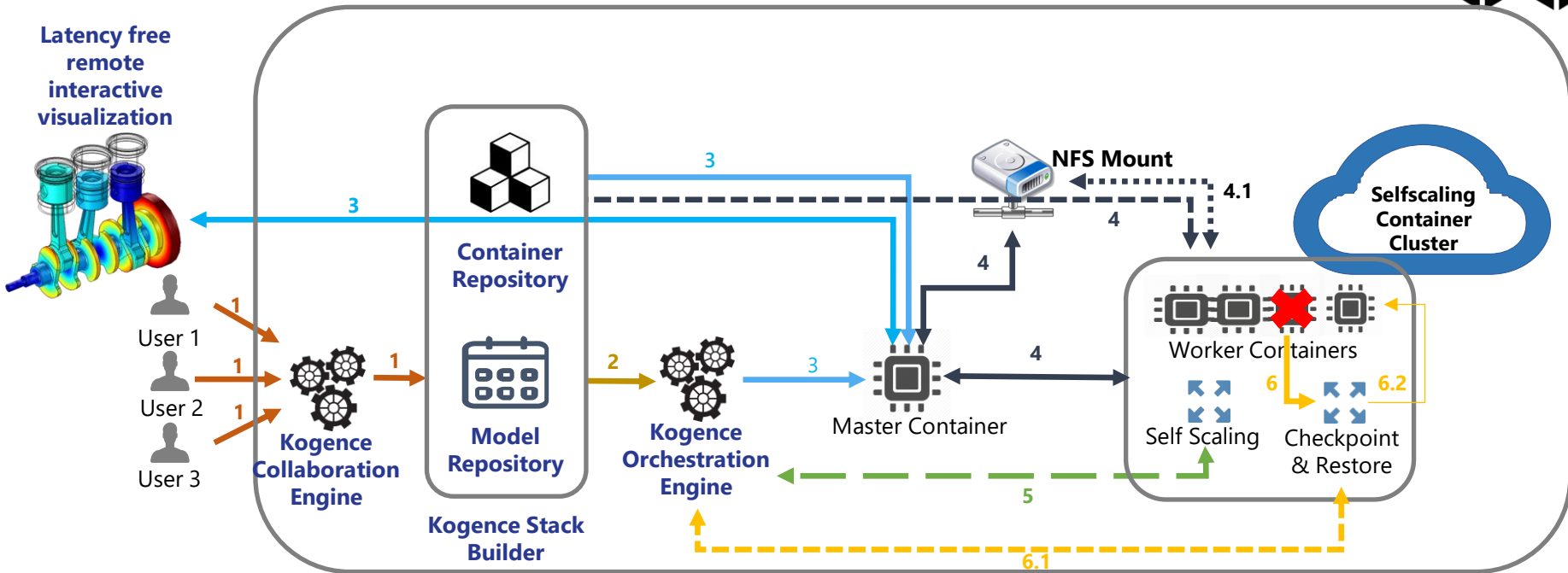
facilitization



\$0.032

No Capex. 60+% Lower Cost.

Kogence HPC Container Cloud Platform



Suppose a node is lost or preempted

Ready to Use Simulators on Kogence



Technology Integration Partners

SIEMENS



All products available

FEA, CFD, Multiphysics



STAR-CCM+

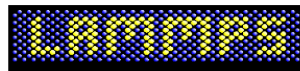
ANSYS

COMSOL

OpenFOAM®



Atomistic, Molecular Modeling



NAMD & VMD
Molecular Dynamics Packages

Visualization, Data Analytics, ML/DL

ParaView



MATLAB



Caffe



What Does That Mean To User?



Lower Cost

CapEx

✗ 100 node cluster: \$1.3M

Total Cost

60% ↓ 100 node cluster: \$90k/mo

Risk Barrier

✗ Long term planning

Easy Management

Fast Provisioning

✗ Dependencies

✗ Security

Fast Accommodation

✓ New users

✓ Exploratory projects

Long Lived IP

Remote Pre/Post Processing

✓ Global collaboration

✓ Global central repository

Long Life Span

✓ Upgrades don't kill old models

✓ Searchability

Kogence is a privately deployed platform for each customer



SECURITY AND PRIVACY



Privately deployment platform. Privately hosted, searchable model and container repositories.

Advanced access control. Keep repositories private among collaborators or publish it across enterprise.

Enterprise class layers of security, VPN, firewall config, administrative quotas, controls and solutions.

PRIVATE SETUP

**BEHIND ENTERPRISE
FIREWALL**

**PRIVATE ENCRYPTION
KEYS**

**CLIENT SIDE
AUTHENTICATION**



Thank You!



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<https://kogence.com/app>

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