



JOURNEY TO THE SOFTWARE DEFINED INFRASTRUCTURE

EDDIE TOH

REGIONAL DIRECTOR, DATACENTER PLATFORM MARKETING

13 OCTOBER 2016

**CLOUD EXPO ASIA 2016
MARINA BAY SANDS, SINGAPORE**

CLOUD

THE BIGGEST
DISRUPTER



CLOUD GROWTH DRIVERS: DIGITAL SERVICES ECONOMY

A VIRTUOUS BUSINESS/COMPUTING CYCLE



↪ New Services Driving Explosion of Devices ↪
↪ New Devices Driving Demand for Servers ↪

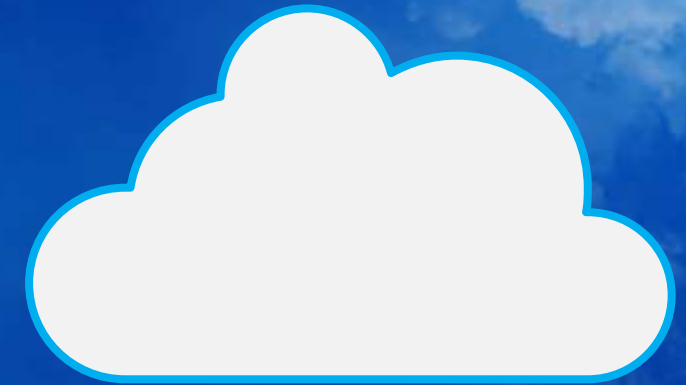
A TALE OF TWO CLOUDS



PRIVATE CLOUD

Perception:

Legacy Applications,
Bureaucratic, Inflexible,
Expensive

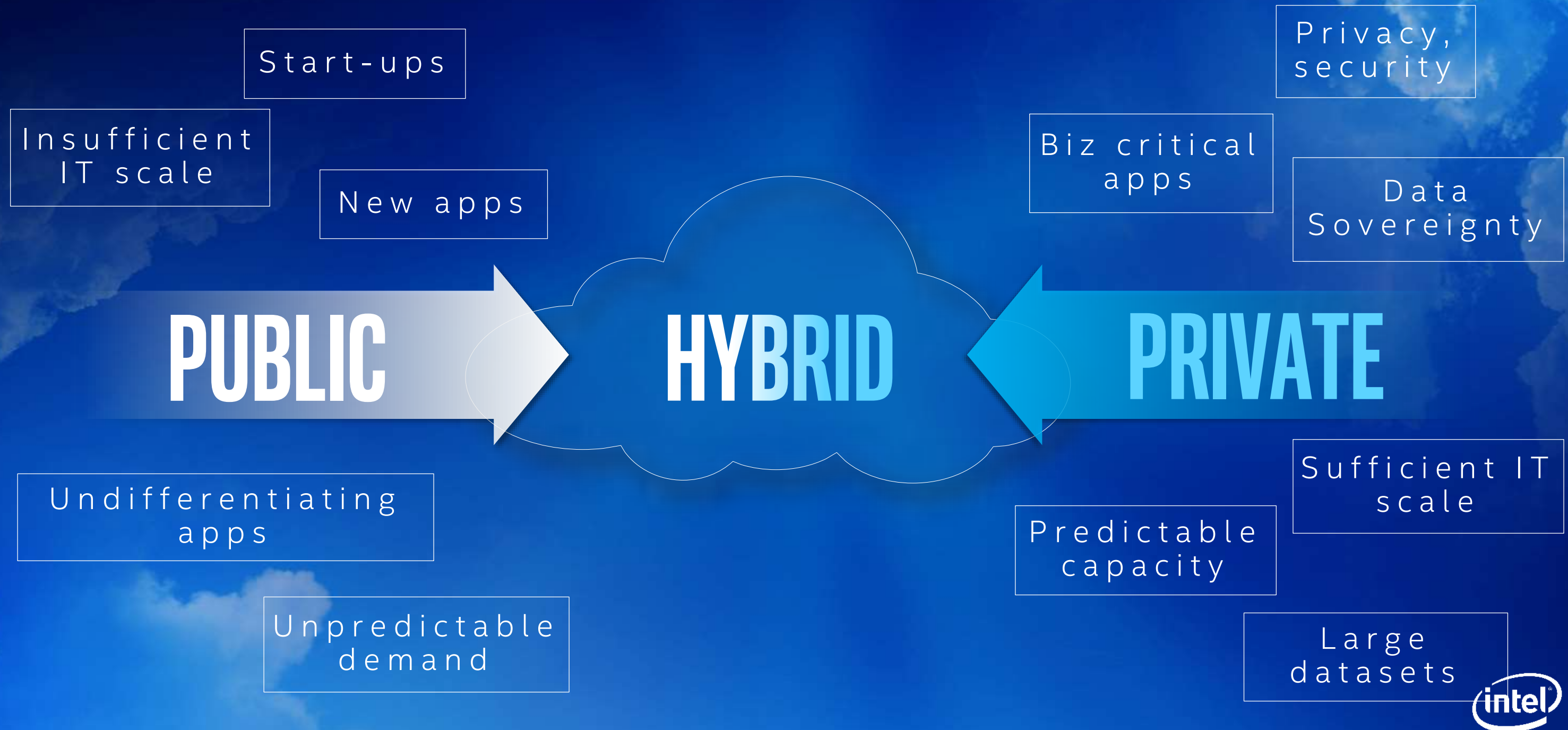


PUBLIC CLOUD

Perception:

New/Modern Applications,
On-Demand Access,
Broad Choice, Cheap/PAYG

THE CLOUD IS FOR EVERYONE



TODAY'S INFRASTRUCTURE

Service Orchestration

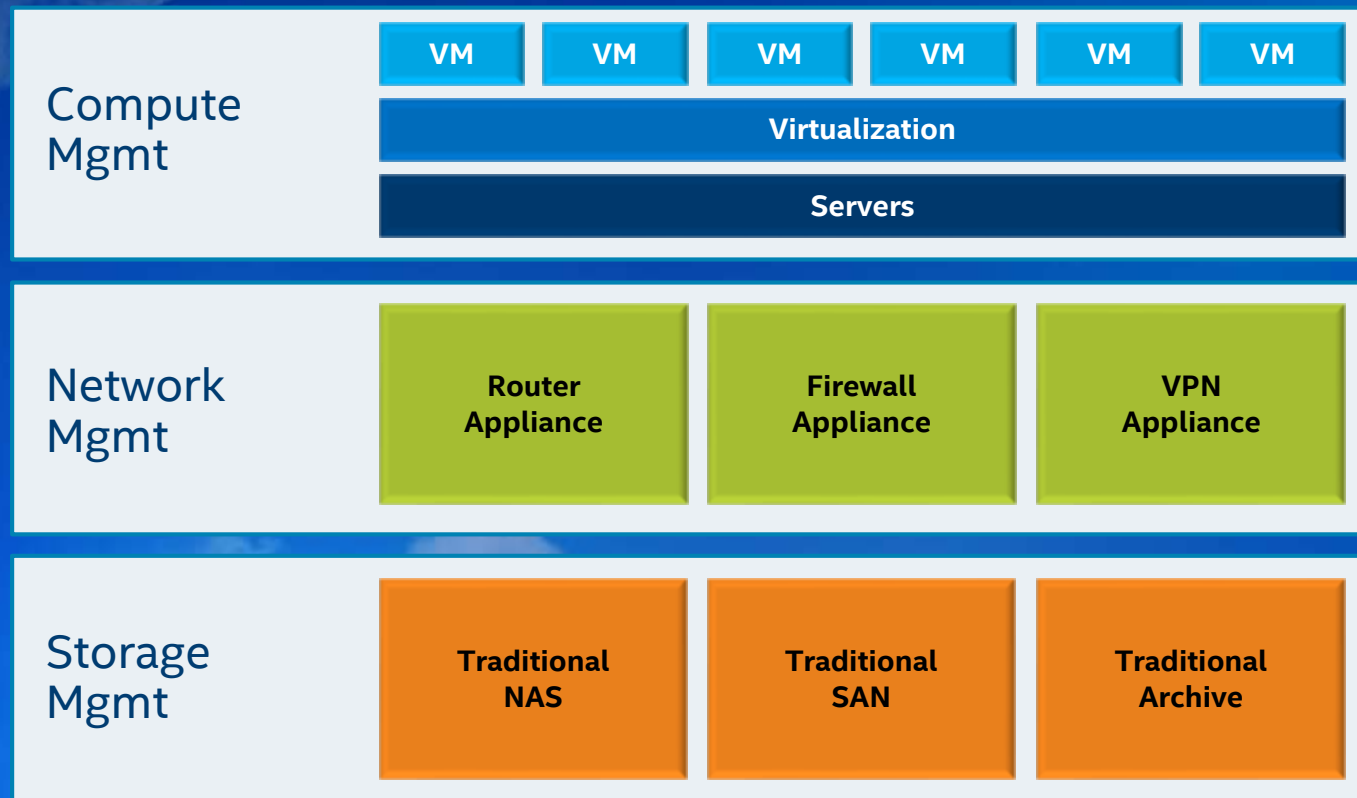
Manual orchestration

Islands of Management

Resource Silos

Many Proprietary Enclaves

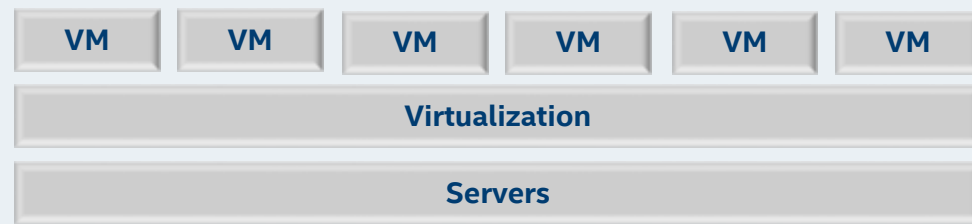
Vendor Lock-in



TODAY'S INFRASTRUCTURE → SDI

Service Orchestration

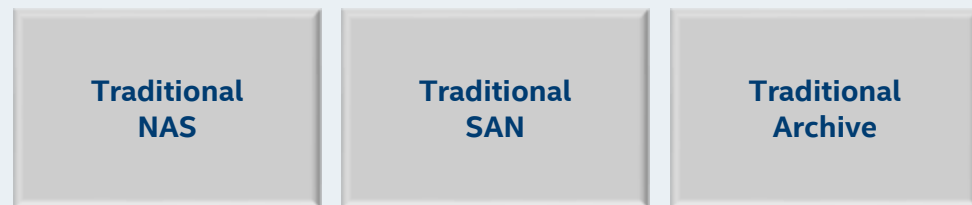
Compute Mgmt



Network Mgmt



Storage Mgmt



Service Orchestration



Self-Service Portal

Policy-Based Automation

Compute Controller

Network Controller

Storage Controller

Security Controller

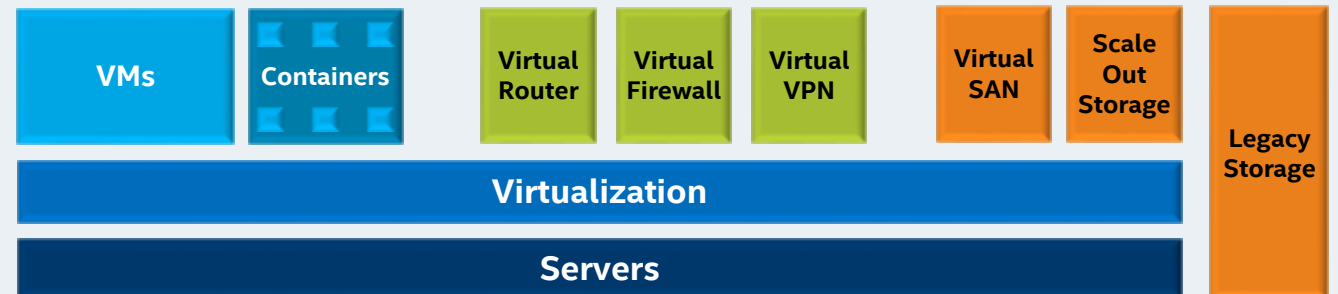
Infrastructure Attributes



Compute Pool

Network Pool

Storage Pool



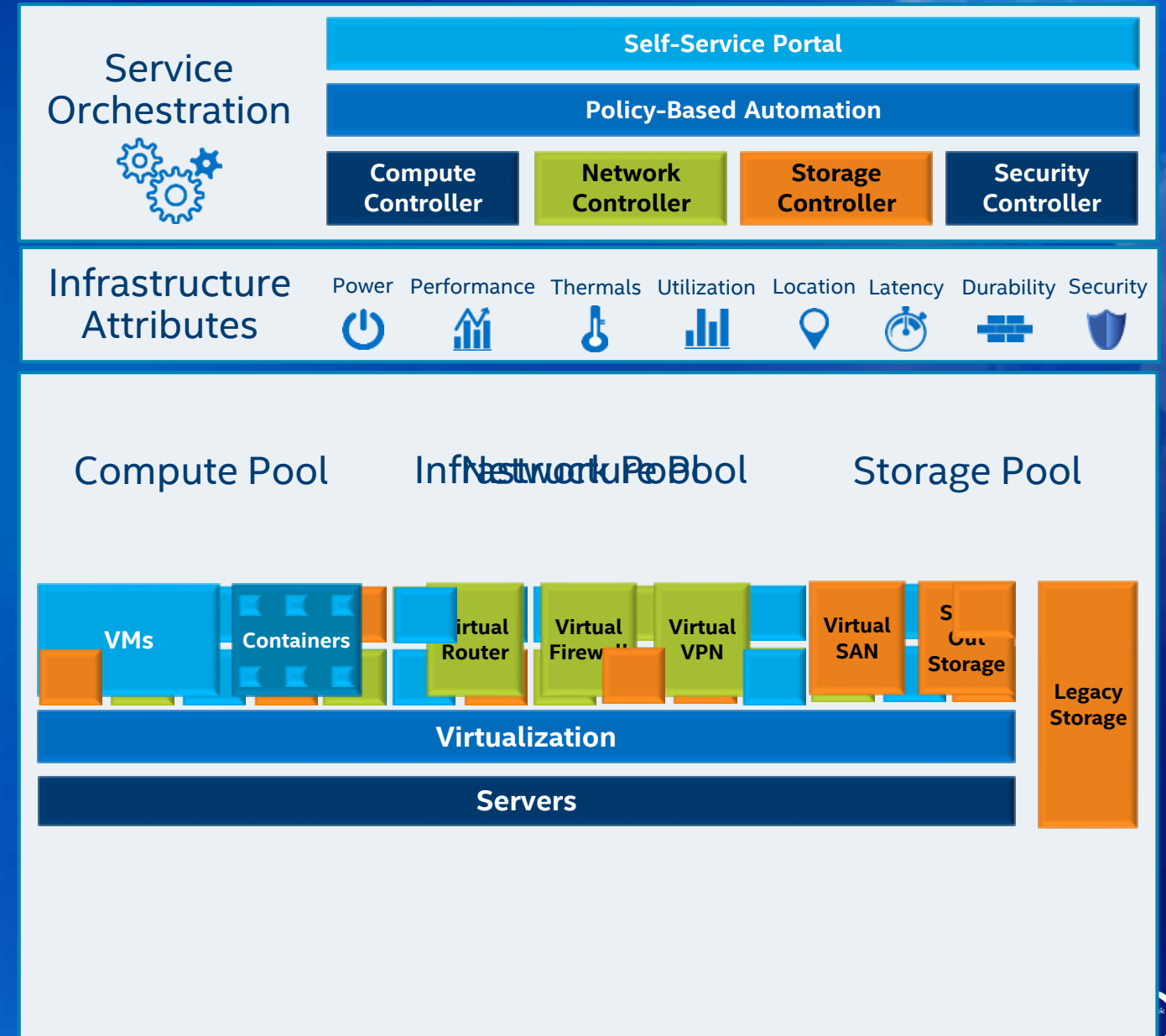
SOFTWARE DEFINED INFRASTRUCTURE (SDI)

Centralized & Automated

Platform Aware

Pooled, Virtualized Resources

Accommodates Legacy



THE BUSINESS CASE FOR SDI...

Months



IDEA



SCOPE



BALANCE



BUDGET



PROCURE



INSTALL



CONFIG



GO LIVE

Minutes



IDEA



PROVISION



GO LIVE

- Reduce time to service deployment
- Remove barriers to innovation
- Decouple infrastructure investment from services demand cadence

DESIRED STATE: TIME TO PROVISION NEW SERVICE MEASURED IN MINUTES

SDI DRIVES TCO SAVINGS

Improve workforce efficiency:
20-60%

Software savings: $\leq 70\%$

Reduced Infrastructure/ Facility cost:
10-20%

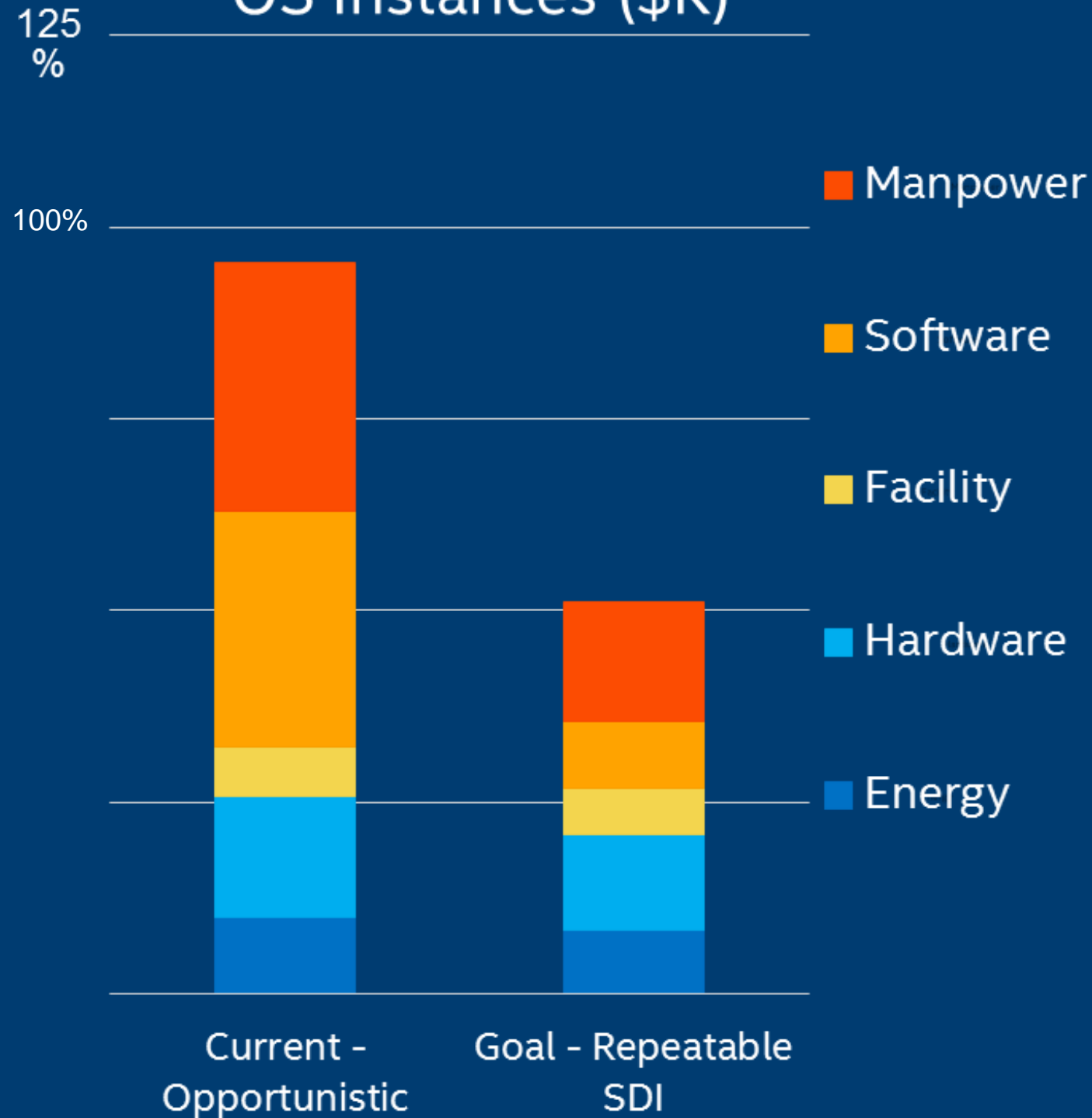
Improved hardware utilization:
10-20%

Open SDI offers TCO reductions of 50%+
through automation of manual support and
increased resource utilization.

Source: Intel IT TCO tools. Cost reduction scenarios described are intended as examples of how a given Intel-based product, in the specified circumstances and configurations, may affect future costs and provide cost savings. Circumstances will vary. Intel does not guarantee any costs or cost reduction.



Sample 5 Year TCO of 10,000 OS Instances (\$K)





DEPLOYING CLOUDS FOR THE ENTERPRISE IS COMPLEX

INTEL® CLOUD FOR ALL

UNLEASH TENS OF THOUSANDS OF NEW CLOUDS

INVEST

Improve software
defined
infrastructure
efficiency and ease
deployment

OPTIMIZE

Optimize cloud
infrastructure across
a full range of
workloads

ALIGN

Align the industry to
accelerate cloud
deployments



REMOVING BARRIERS TO ADOPTION

INVEST, OPTIMIZE, ALIGN

UNIFIED SOLUTION STACKS

Assembled the largest OpenStack developer team
Opened San Antonio OpenStack innovation center

INTEGRATED KEY FEATURES

Launched global OpenStack bug smashing series
Addressed top targeted enterprise features gaps

EASE IN DEPLOYING SOLUTIONS

Delivered optimized software across SDI stacks
Published 20 solution reference architectures
Converted >65% of end user POCs into commercial deployments





INTEL® CLOUD BUILDERS

Accelerating optimized software-defined infrastructure deployments



INTEL® STORAGE BUILDERS

Accelerating the next generation of storage innovation



INTEL® NETWORK BUILDERS

Fostering a vibrant ecosystem to lead the network transformation of tomorrow

INTEL® BUILDERS PROGRAMS

BRINGING TOGETHER A BROAD
ECOSYSTEM TO LOWER TECHNICAL
BARRIERS TO INNOVATE, BUILD, AND
EASE DEPLOYMENT OF CLOUD AND
SDI SOLUTIONS

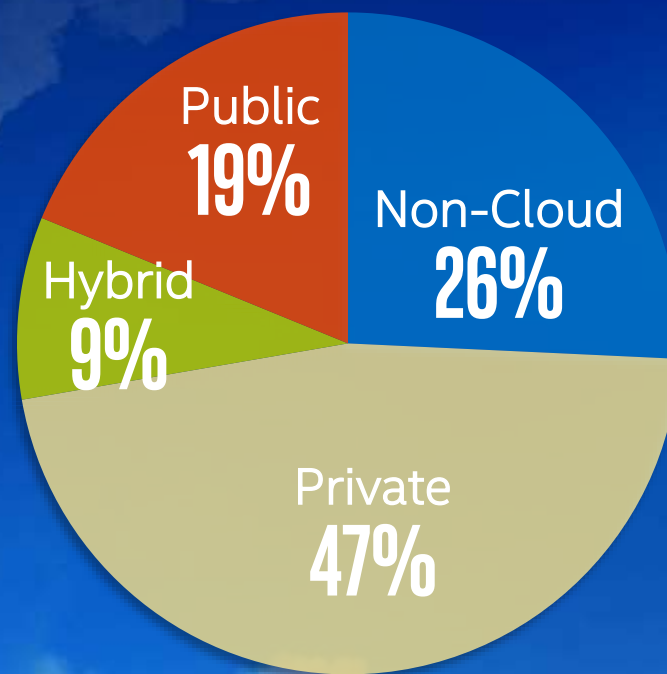
<VIDEO>



PRIVATE CLOUD WILL DRIVE NEW ENTERPRISE GROWTH

PRIVATE CLOUD INVESTMENTS

Expected workload destination¹
2015-2016



ENABLING NEW BUSINESSES



Delivering an **end-to-end connected car** lifestyle through BMW Connected Drive



Making industrial analytics applications easier to deploy with Predix Cloud

Honeywell

Improving **first responder safety** through cloud connected devices



JOHN DEERE

Enabling **precision farming** through cloud-based analytics



*Other names and brands may be claimed as the property of others.

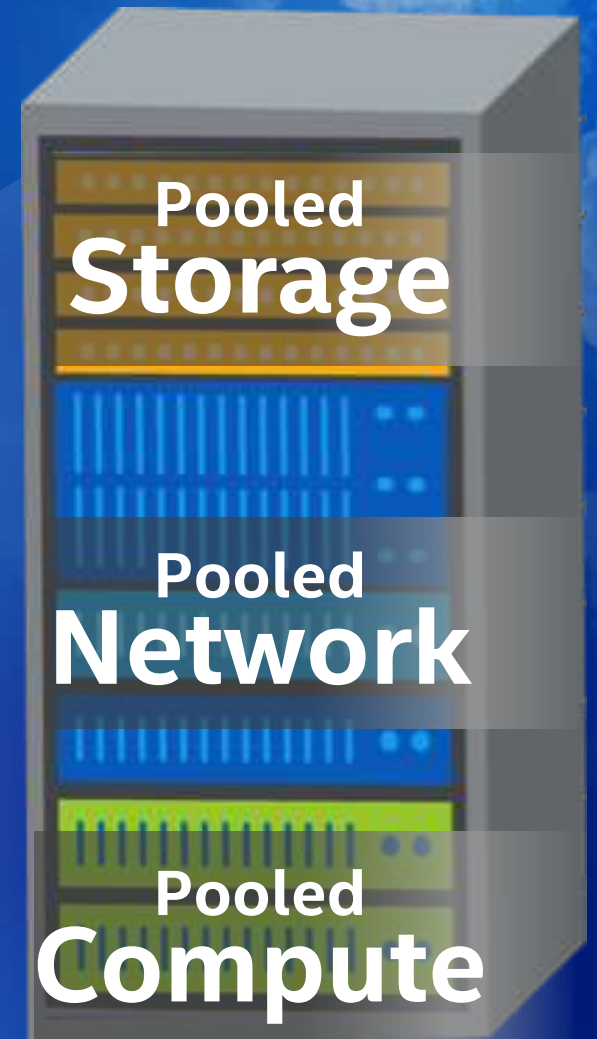
SDI INFRASTRUCTURE

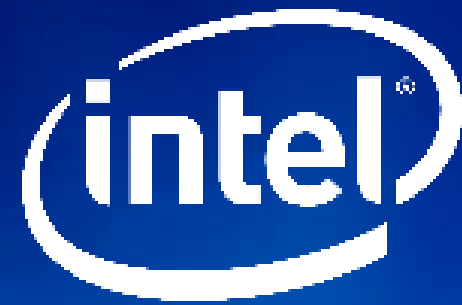
APPLICATIONS

DEFINE THE RESOURCES NEEDED

INFRASTRUCTURE

ASSURES EFFICIENCY & SERVICE LEVELS





THANK YOU

www.intel.com/itcenter

BUSINESS TRANSFORMATION REQUIRED



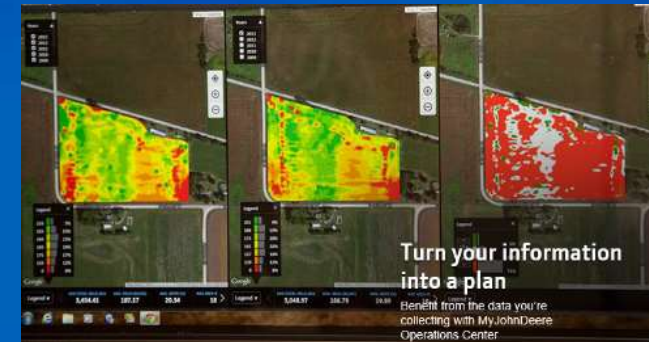
5 years ago...

A Tractor Company



Today...

A Farming Services Company



BUILT ON IOT, ANALYTICS AND CLOUD SERVICES

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