



Digital Transformation

Nikhil Madan



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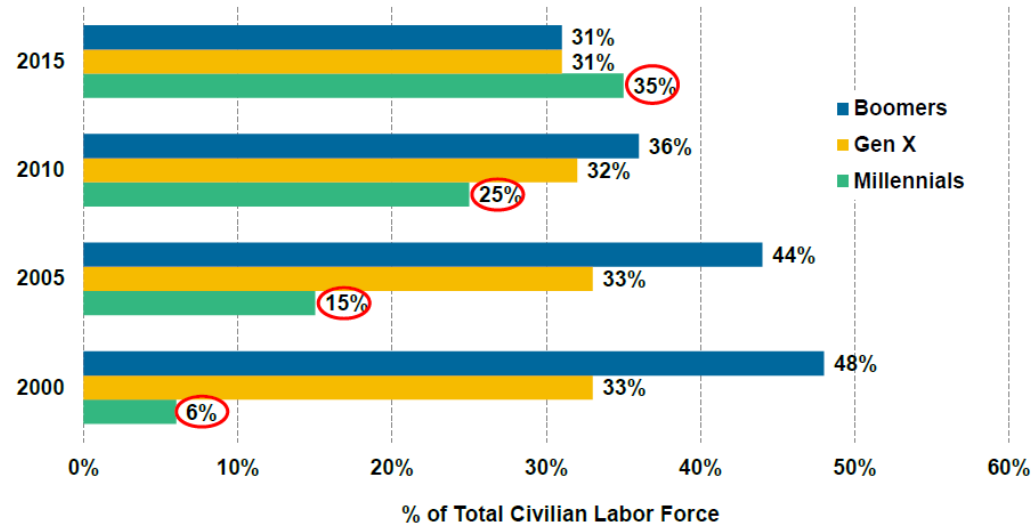
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Changing of the guard

Millennials (Age 15-35) =
Largest Generation in Workforce This Year

Civilian Labor Force by Generation, USA, 2000 – 2015



Source: Bureau of Labor Statistics, Current Population Survey, 4/15. BLS begins counting Civilian Labor Force at age 16.
Millennials defined as those born between 1980 and 2000. In 2015, they are ages 15-35.
GenX defined as those born between 1965 and 1979. In 2015, they are ages 36-50.
Boomers defined as those born between 1946-1964. In 2015, they are ages 51-70.
Note that there may be different opinions on which years each generation begins and ends. Sums do not add up to 100% owing to exclusion of Silent Generation.



109



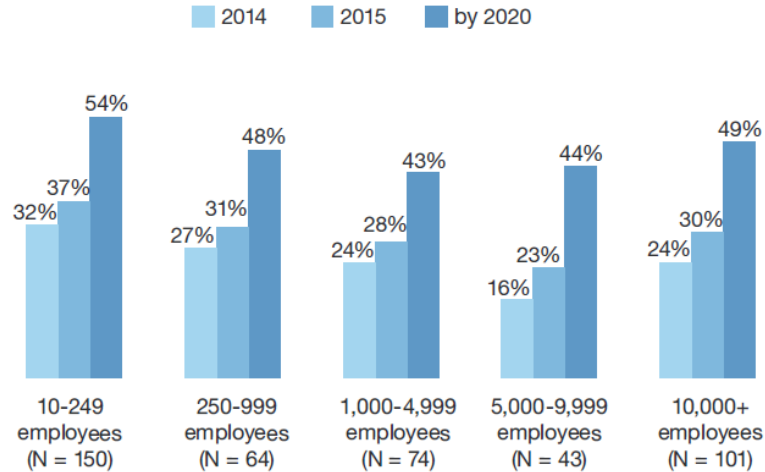
Millennial Impact

*Consumers' Expectation
That They Can Get What They Want
With Ease & Speed Will Continue to Rise...*

*This Changes Fundamental
Underpinnings of Business & Can
Create Rising Demand for Flexible Workers*

Why new business models are needed!

“Using your best estimate, what percentage of your total sales does your business generate through digital products/services or products sold online?”
(e.g., eCommerce, digital advertising, digital media, digital subscriptions, digital services, app sales, data sales)



Base: 432 executives

Source: Forrester/Odgers Berndtson Q3 2015 Global Digital Business Online Survey



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BORDERS

amazon

The emergence of
**The Digital
Enterprise**

NETFLIX

BLOCKBUSTER

TAXI

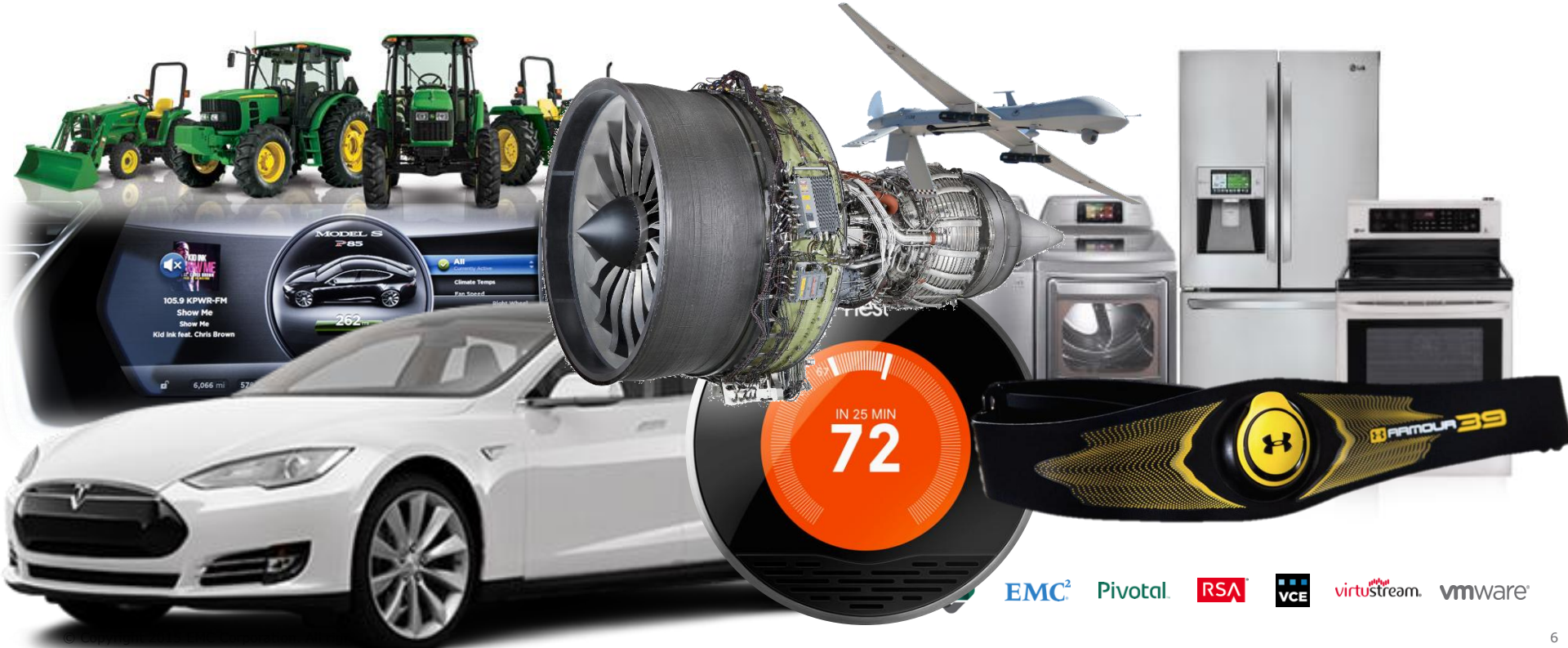


UBER

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Every Industry Is Being Digitally Transformed

- Product Companies Are Creating “Smart Devices”



Every Industry Is Being Digitally Transformed

- Service Companies Creating Consumer Experiences



We Believe All Companies Will Have...

- 1000X More Data
- A Desire To Increasingly Operate In Real Time
- Analytics That Make Product & Service Smarter
- More Personalized Products & Services Over Time



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Competitive View: Substitution ahead



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IT Infrastructure : The Next 15 Years



Develop Consumer Grade
Mobile Apps & Embedded
Software To Transform
The Business...
While Lowering Costs &
Improving The Agility Of
Existing Apps



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A Heretical Thought ? Bi-Modal IT.



Mode



Mode

Attributes Of Bi-Modal IT

Agility

Innovation

Continuous Delivery

DevOps Processes

Business-Centric

Mode

Reliability

Efficiency

Waterfall Delivery

ITIL Processes

IT-Centric

Mode

A New Iterative Development Model

Speed = Competitive Advantage

Applications

Transform
Business



Data Generated By New Applications



Speed

Analytic Insights Drive
New Functionality,
Which Drives New Data



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A UNIQUE FEDERATION OF COMPANIES

STRATEGICALLY ALIGNED, BUT OFFERING CUSTOMER CHOICE!

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BIG DATA SUITE
AGILE APPLICATION DEVELOPMENT

Off-Premise

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HYBRID CLOUD
SOFTWARE-DEFINED DATA CENTER
MOBILE COMPUTING

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INFORMATION STORAGE & PROTECTION



CONVERGED
INFRASTRUCTURE

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IDENTITY,
SECURITY
ANALYTICS,
GRC

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CLOUD
SERVICES



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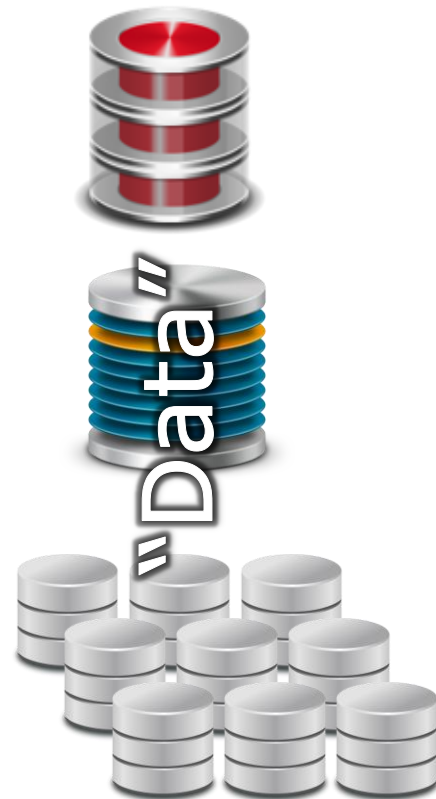
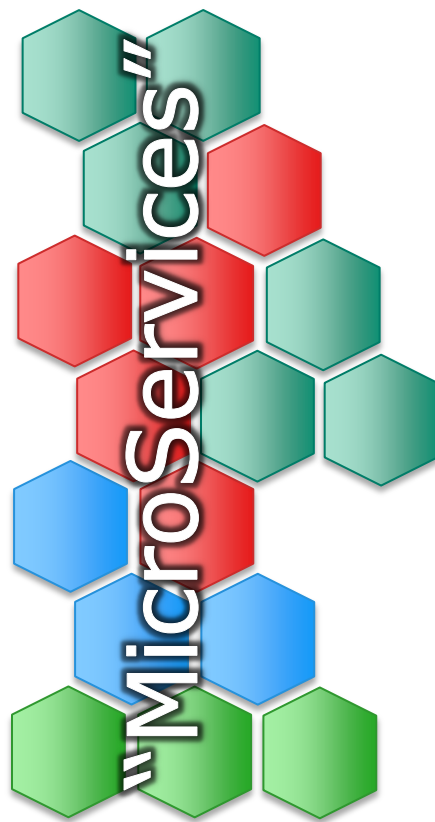
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A New "Cloud-Native" Application Architecture



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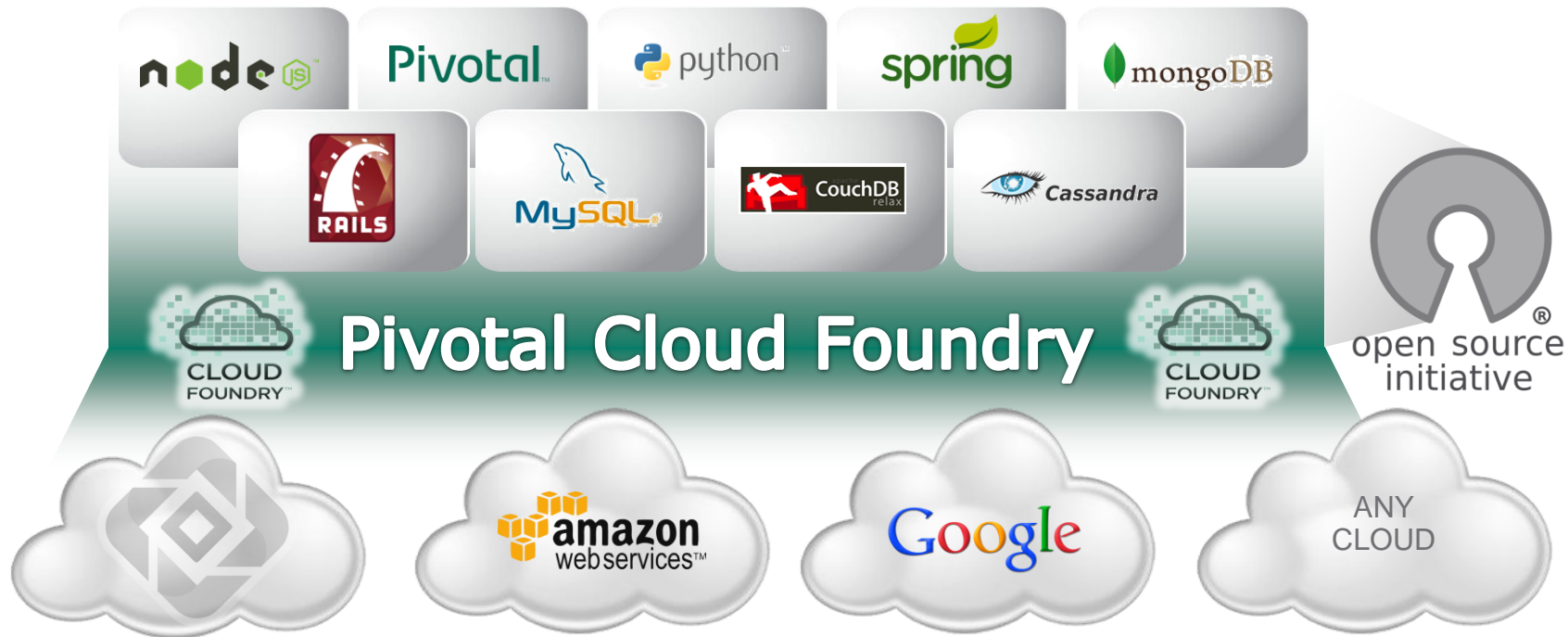
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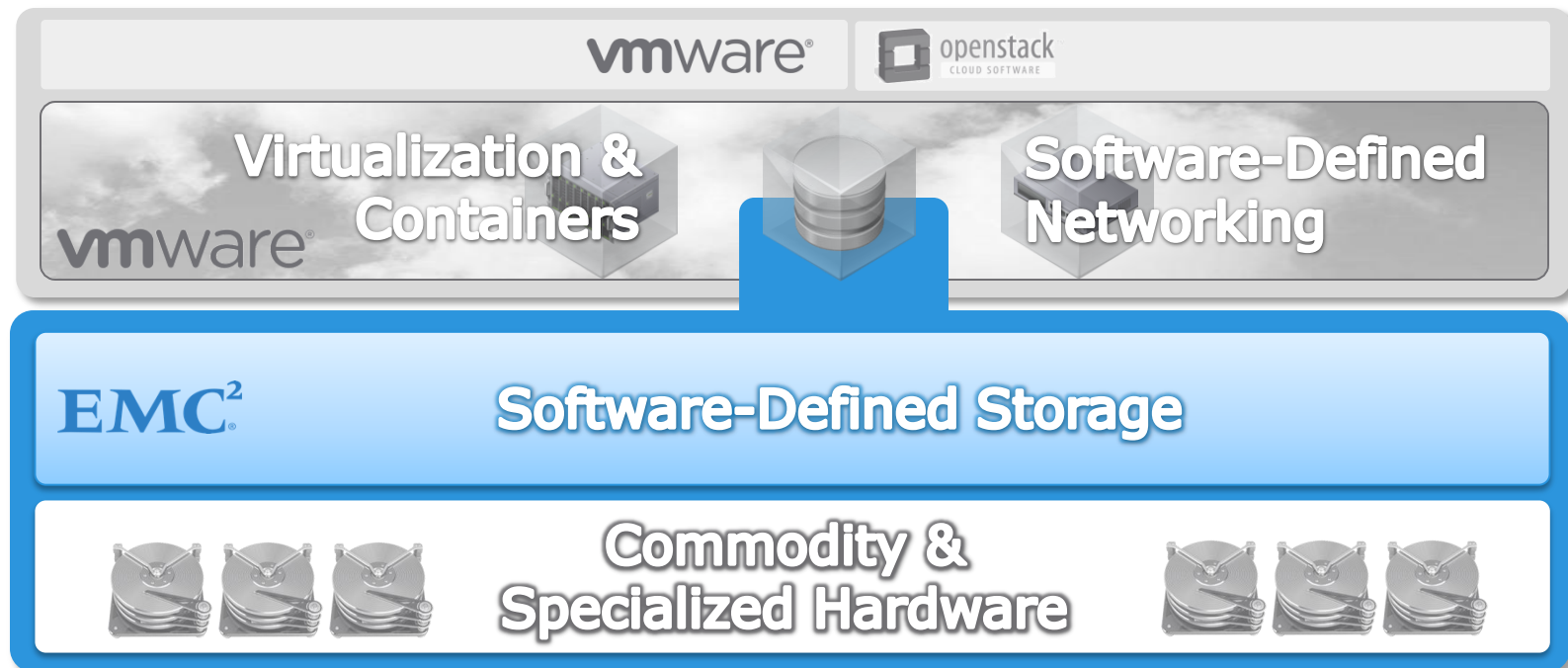
Requiring A New, Open, "Cloud Native" Platform

Open Source Community Development, Cloud Independent Deployment



A New "Cloud-Native" Infrastructure

Based On A Software-Defined Architecture



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“Mode 1” IT Requires Transformation Too



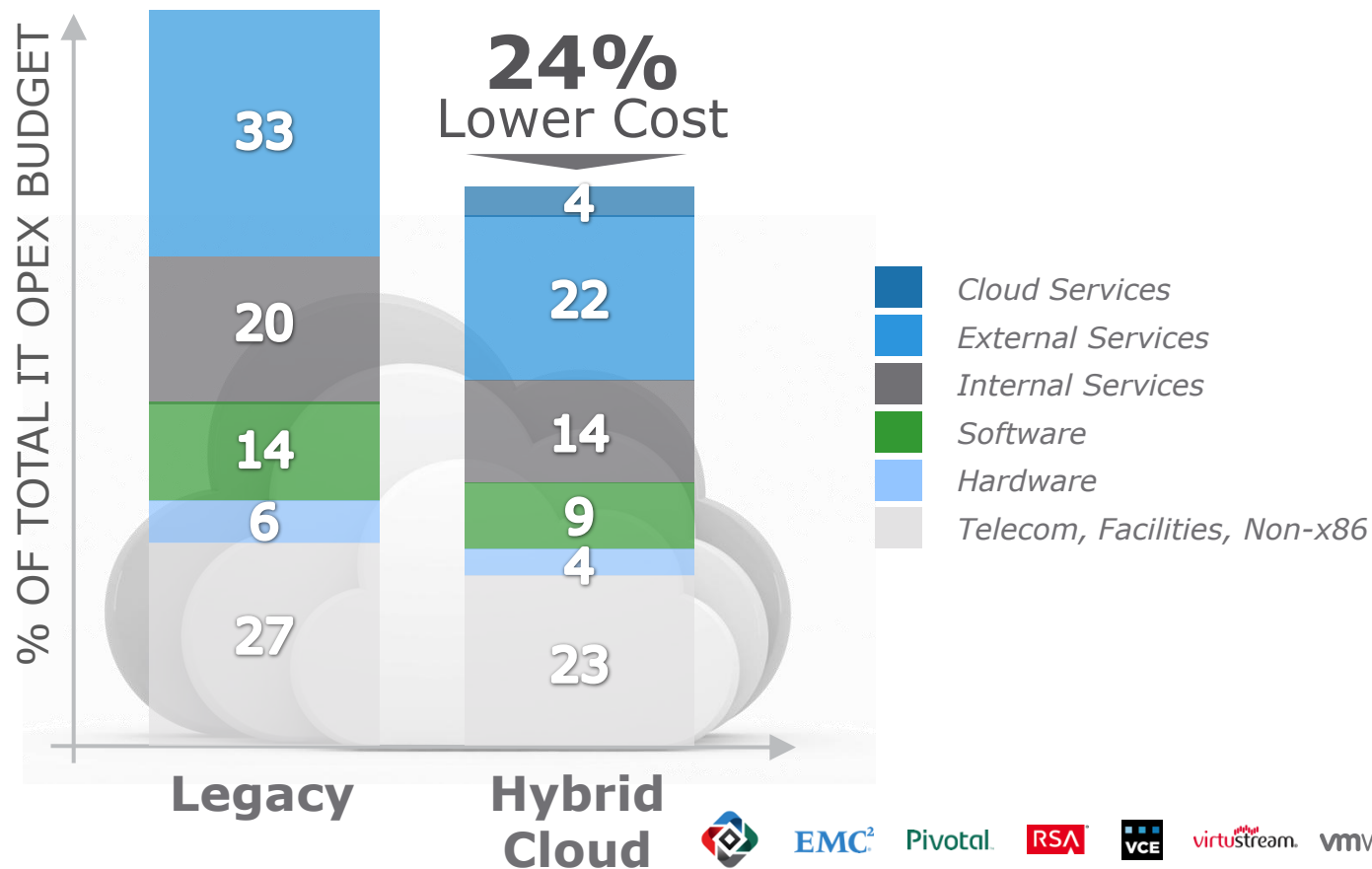
Mode



Mode



A Hybrid Cloud Can Reduce IT OpEx By 24%



Source : McKinsey



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FEDERATION HYBRID CLOUD

UP & RUNNING IN AS LITTLE AS 28 DAYS



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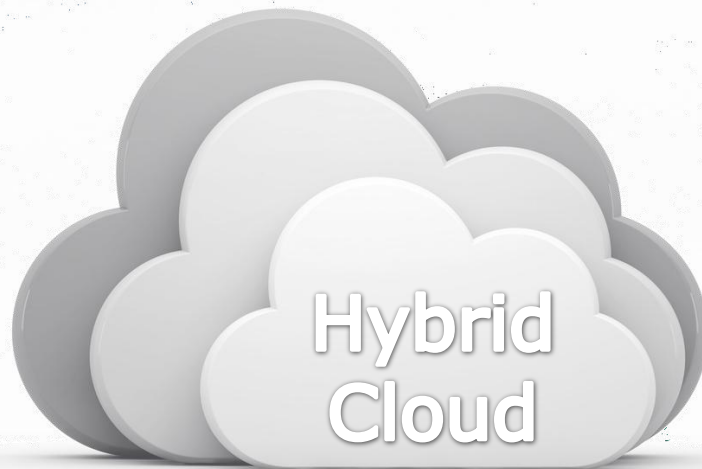
What's In A Hybrid Cloud ?



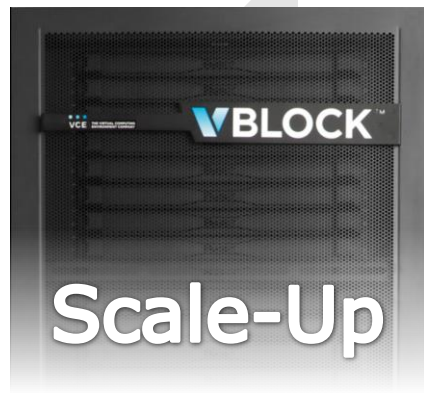
Mission Critical
Applications
(10's)



Tier 2+
Applications
(100-1000's)

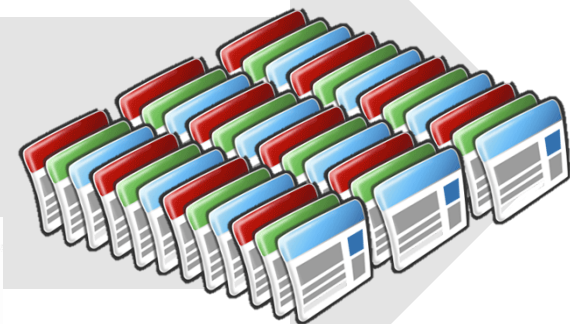
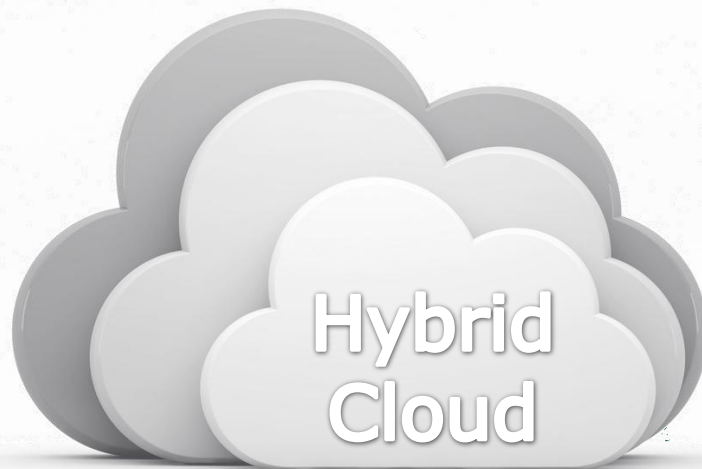


Hybrid Cloud Architecture



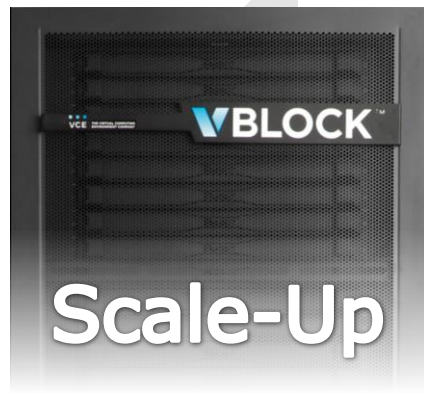
- ✓ Branded Components
- ✓ High Resiliency
- ✓ Low Latency

Mission Critical
Applications
(10's)



Tier 2+
Applications
(100-1000's)

Hybrid Cloud Architecture



Scale-Up

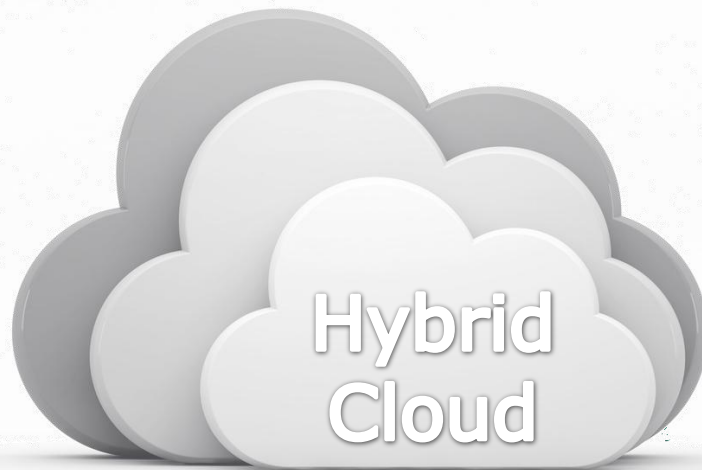
Mission Critical
Applications
(10's)

- ✓ Software-Defined
- ✓ Commodity Components
- ✓ High Efficiency



Scale-Out

Tier 2+
Applications
(100-1000's)



Hybrid
Cloud

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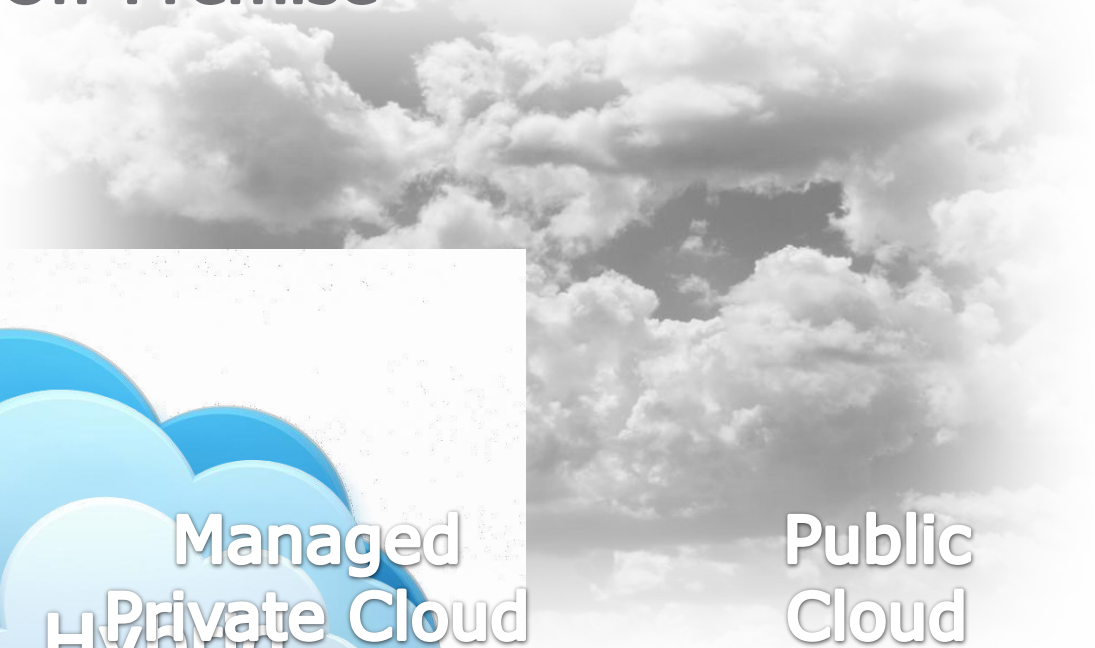
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Hybrid Cloud : Deployment Options

Private Cloud, Managed Private Cloud Or Public Cloud ... On Or Off-Premise

On-Premise **Off-Premise**



Private
Cloud

Managed
Private Cloud
**Hybrid
Cloud**

Public
Cloud



Hybrid Cloud : Management Options

You Manage On-Premise, Federation Manages Off-Premise ... Or On-Premise

On-Premise **Off-Premise**



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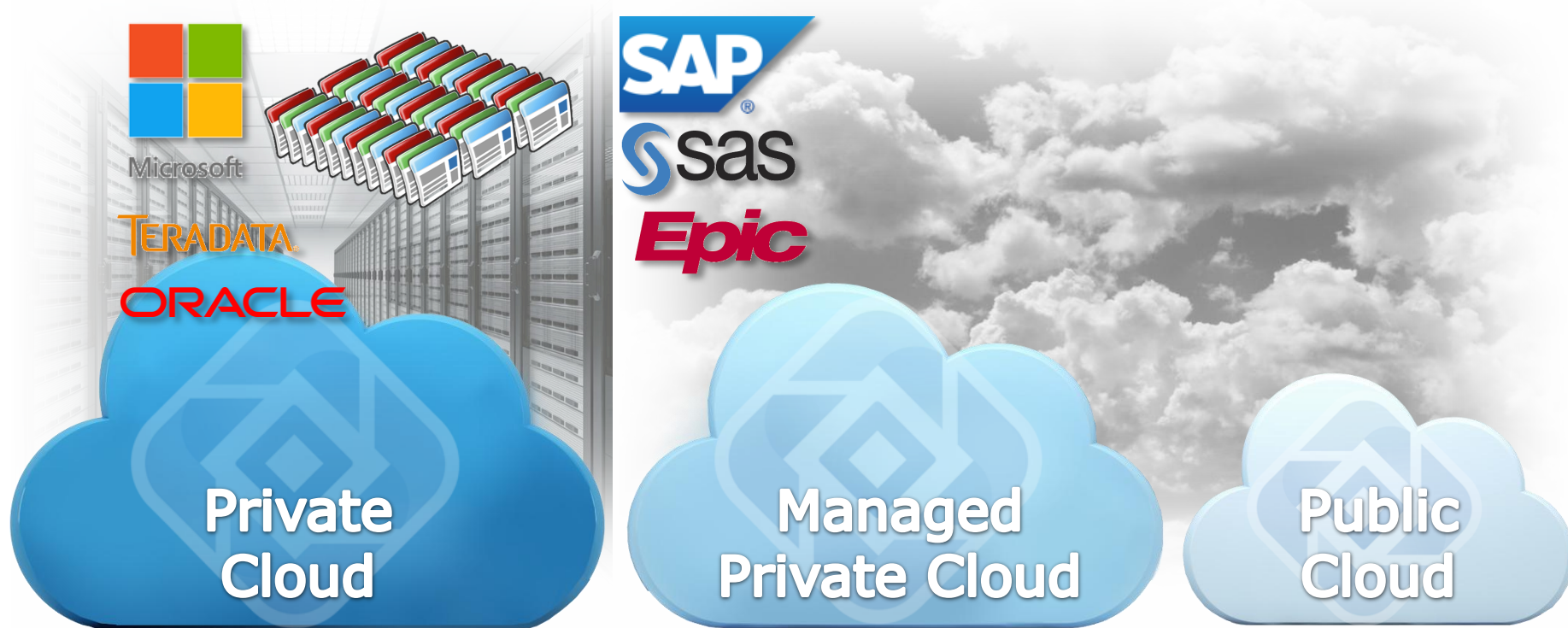
Choose Where To Run Mission Critical Apps

On Or Off-Premise With Service Level Guarantees



Choose Where To Run Your Tier 2+ Applications

On Or Off-Premise With Service Level Guarantees



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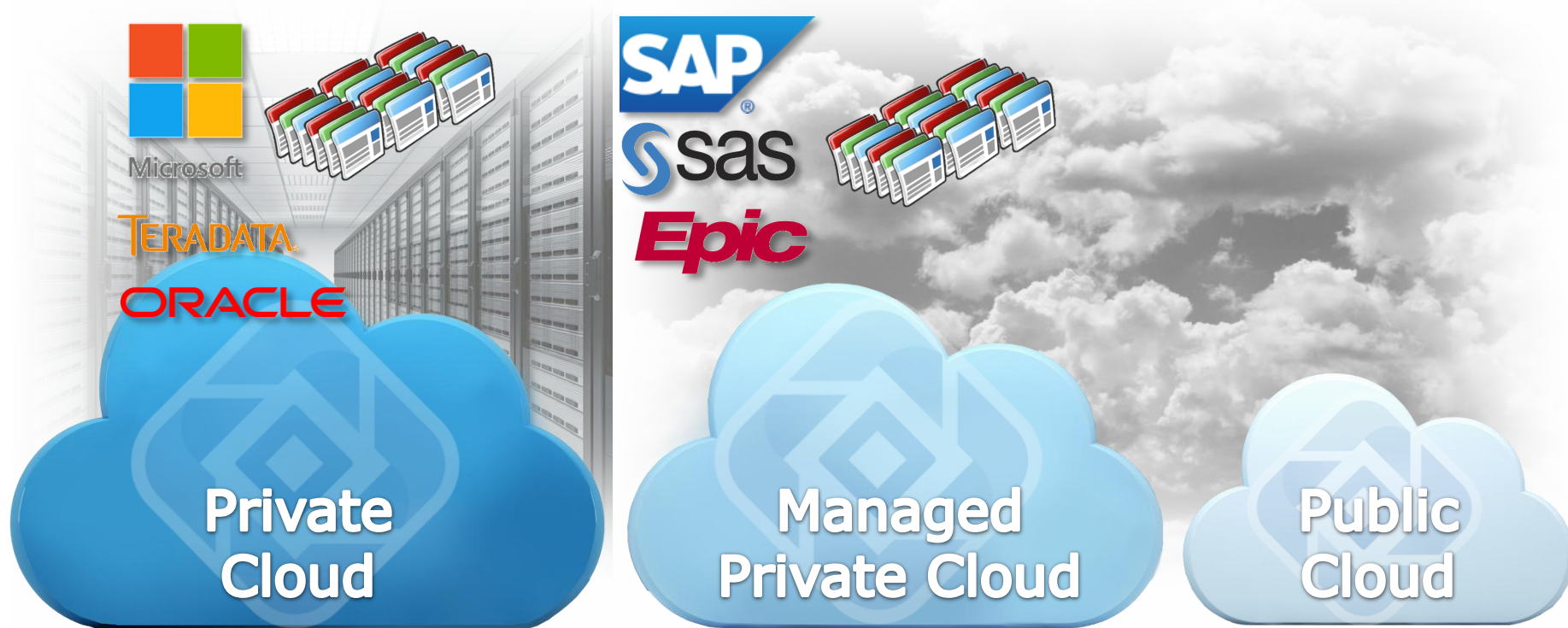
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Choose Where To Run Your Tier 2+ Applications

Move To A Public Cloud



Choose Where To Run Your Cloud Native Apps

Built On A Cloud-Native Infrastructure

Microsoft
TERADATA
ORACLE

Private Cloud

This section illustrates a Private Cloud environment. It features logos for Microsoft, Teradata, and Oracle. A white Tesla car is shown on a blue cloud-shaped base. Above the car is a large jet engine. To the right, a stack of colorful document icons is shown. The background is a stylized cityscape with tall buildings.

SAP
sas
Epic

Managed Private Cloud

This section illustrates a Managed Private Cloud environment. It features logos for SAP, SAS, and Epic. A smartphone displays a 'Vehicle Damage' app interface. Below the phone is a black and yellow Under Armour speed strap. The background is a cloudy sky. A stack of colorful document icons is shown to the right of the phone.

Public Cloud

This section illustrates a Public Cloud environment. It features logos for Uber and Airbnb. A smartphone displays the Uber app interface, showing a map and a price of \$15. Another smartphone displays the Airbnb app interface. The background is a cloudy sky. A stack of colorful document icons is shown above the phones.



Choice Enabled By Common Services

Common Support

Common Networking

Common Management

Private
Cloud

Managed
Private Cloud

Public
Cloud



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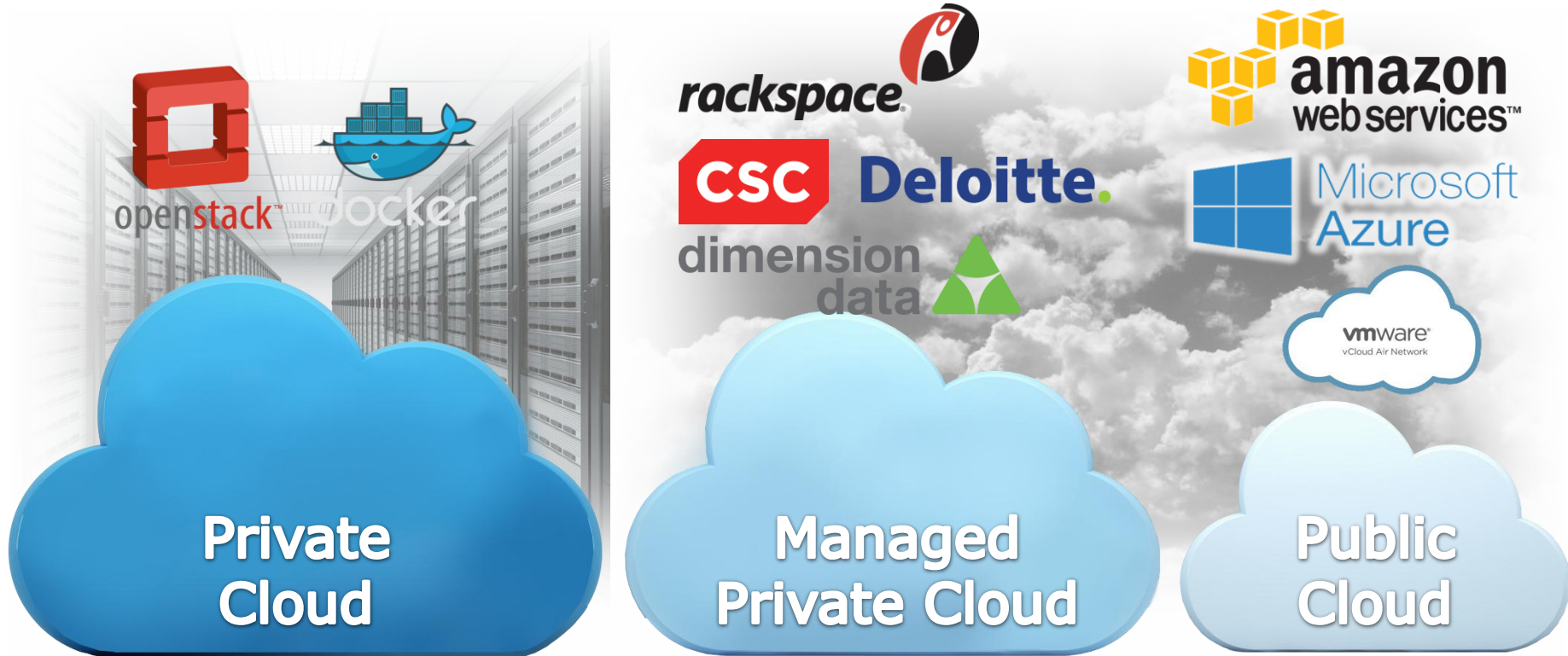
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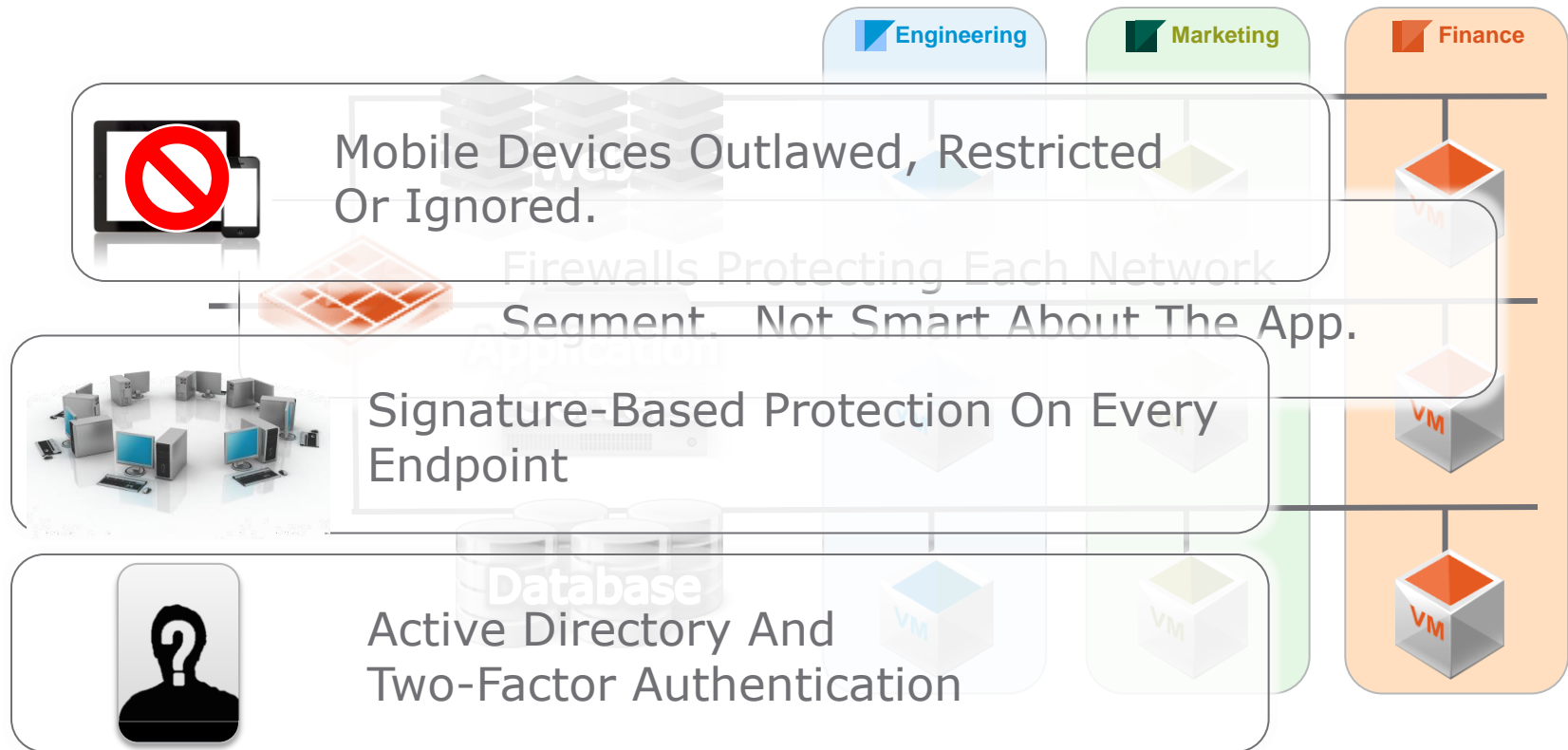
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Choice – Our Federation Promise



Enterprise Security, The Old Way



Giving Rise To More Breaches Than Ever...



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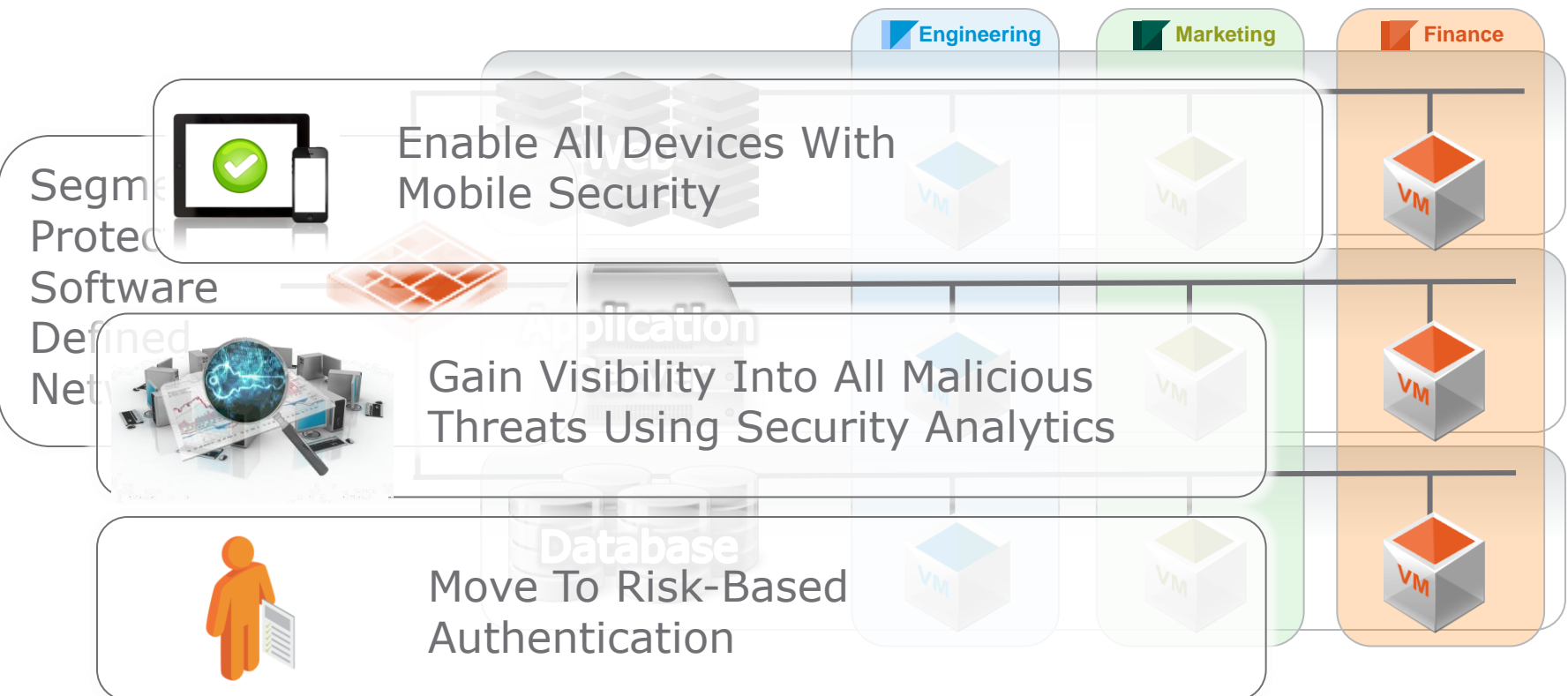
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