

The Edge

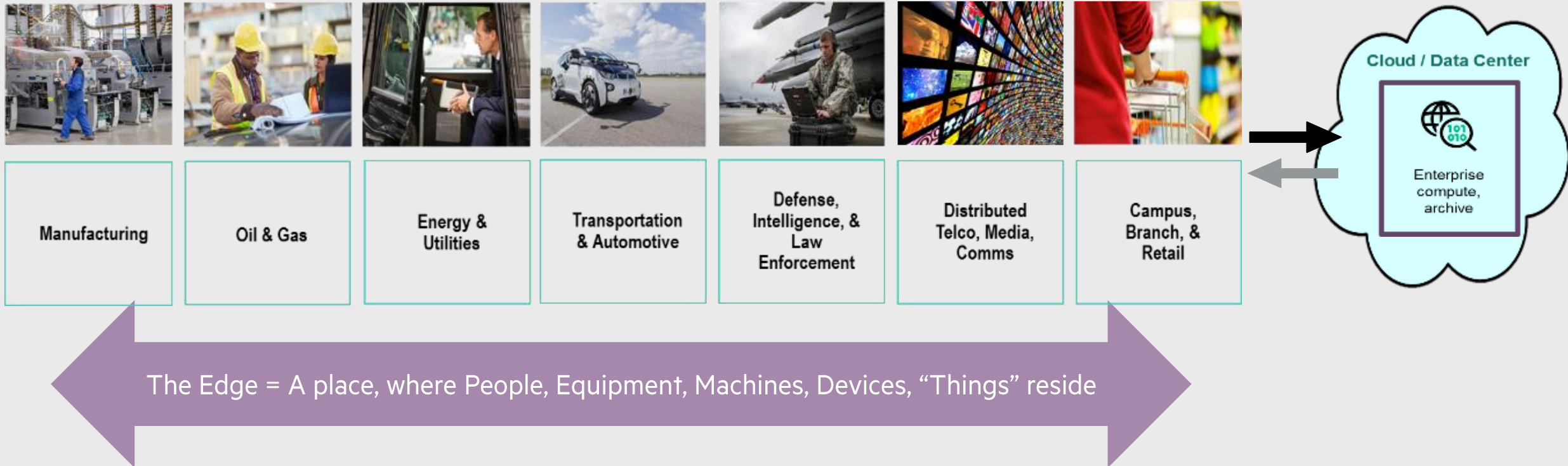
Perpetual Connectivity
Pervasive Computing
Precision Control

National Academies of Science, Engineering, & Medicine
Transformational Impact of 5G Summit
Washington DC, June 12, 2019

Tom Bradicich, PhD
VP & Hewlett Packard Fellow
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The annihilation of place and time dependencies:

Philosophical basis for the value of the edge
– engagement with remote locations

**Location
Independence**

*"Quadrant of
Highest Efficiency"*

*Seek to move to the upper right
quadrant for maximum efficiency*

Time Independence

“3 C’s”:

Perpetual
Connect

Pervasive
Compute

Precision
Control



Manufacturing

Oil & Gas

Energy &
Utilities

Transportation
& Automotive

Defense,
Intelligence, &
Law
Enforcement

Distributed
Telco, Media,
Comms

Campus,
Branch, &
Retail

The Edge = A place, where People, Equipment, Machines, Devices, “Things” reside

Cloud / Data Center



Enterprise
compute,
archive

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“3 Domains of Insight”: Business Insight, Engineering Insight, Scientific Insight

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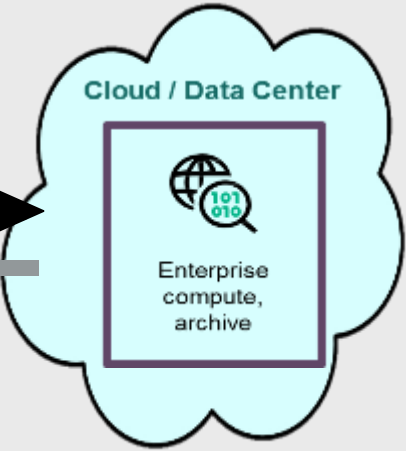
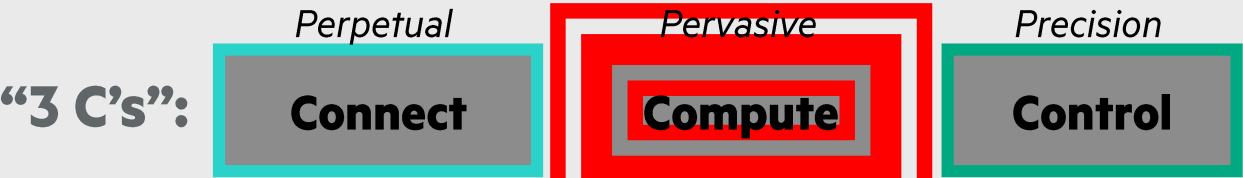
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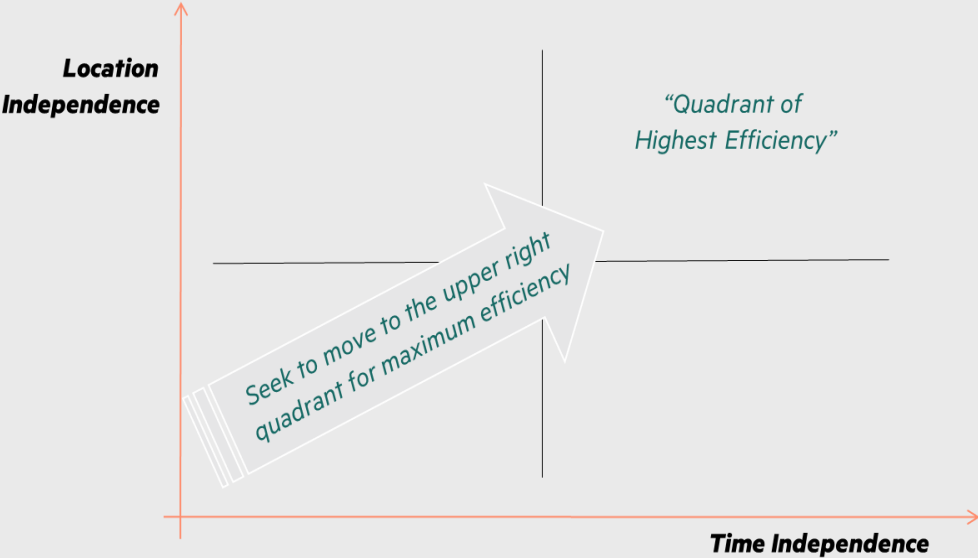
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“3 M’s”:

Monitor

Maintain

Monetize

“7 Reasons for
Compute at
the Edge”:


Data Contained for
Improved **Security**


Lower
Response Times


Lower Bandwidth
Utilization

Less IT Skill &
Storage **Duplication**


Improved
Reliability


Lower Bandwidth
Connectivity **Costs**

Data **Policy** &
Geofencing Compliance

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5G

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“7 Reasons for Compute at the Edge”:

5G



Lower Response Times



Lower Bandwidth Utilization



Lower Bandwidth Connectivity Costs



Data Contained for Improved Security



Less IT Skill & Storage Duplication



Improved Reliability



Data Policy & Geofencing Compliance

Cloud / Data Center



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