



# ASMGi

## Future-Ready Datacenter, Future-Ready Managed Services

*The Five Things You Need to Know Right Now*

*Webinar Presented by ASMGi and Flexential*

April 11, 2019

# Today's Presenters

**Steve Roesing**

*President, CEO, ASMGi*



**Ken Makoid**

*Northeast Regional VP, Flexential*



# ASMGi is ...

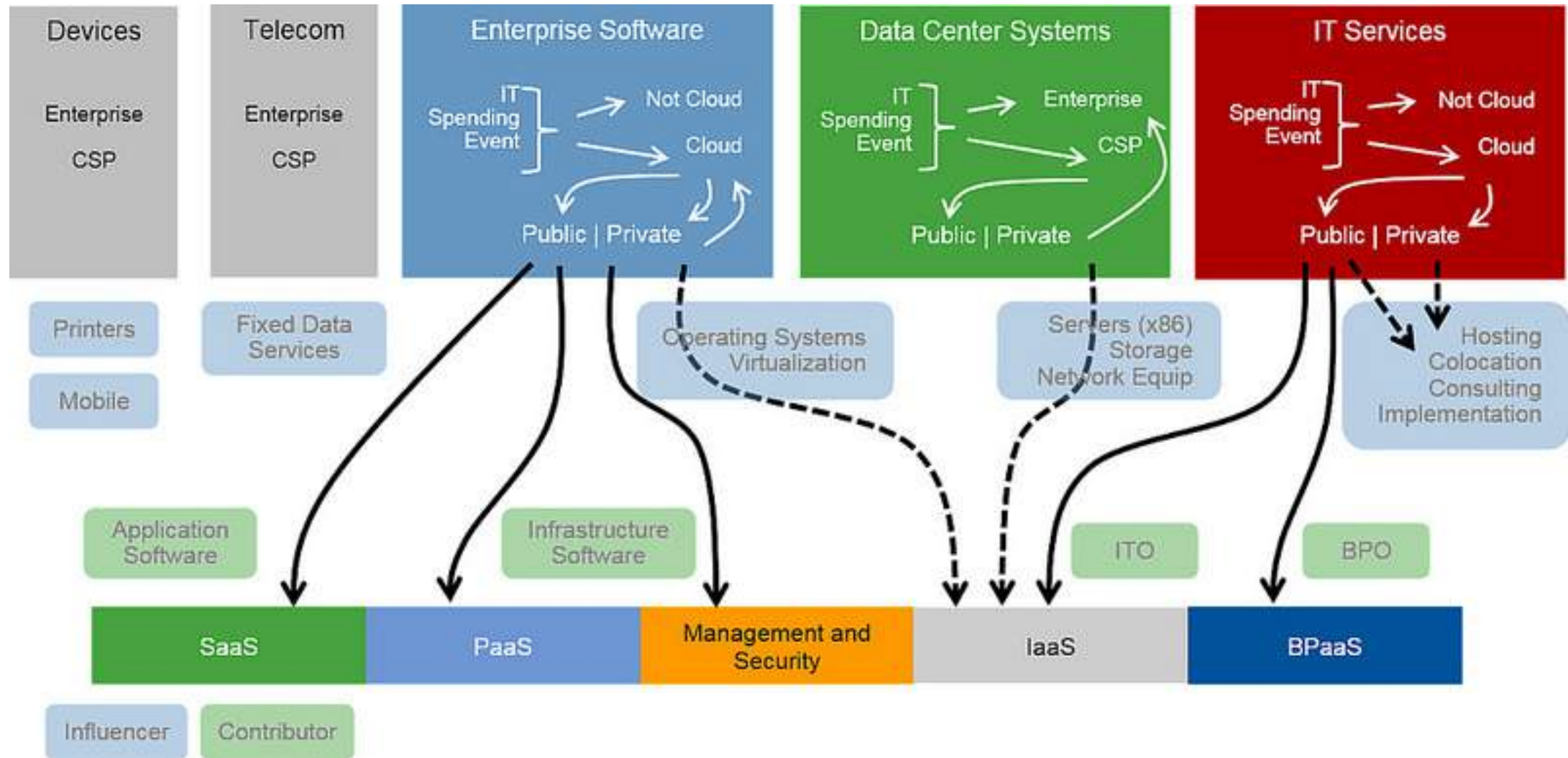
Global Technology Services and Consulting company focused on **Total Solutions** that provide positive impact to your business

**Total Solutions = People + Process + Technology**

We deliver IT, Software and Cyber Security solutions from our headquarters in Cleveland, OH by helping our customers Plan, Manage and Execute:

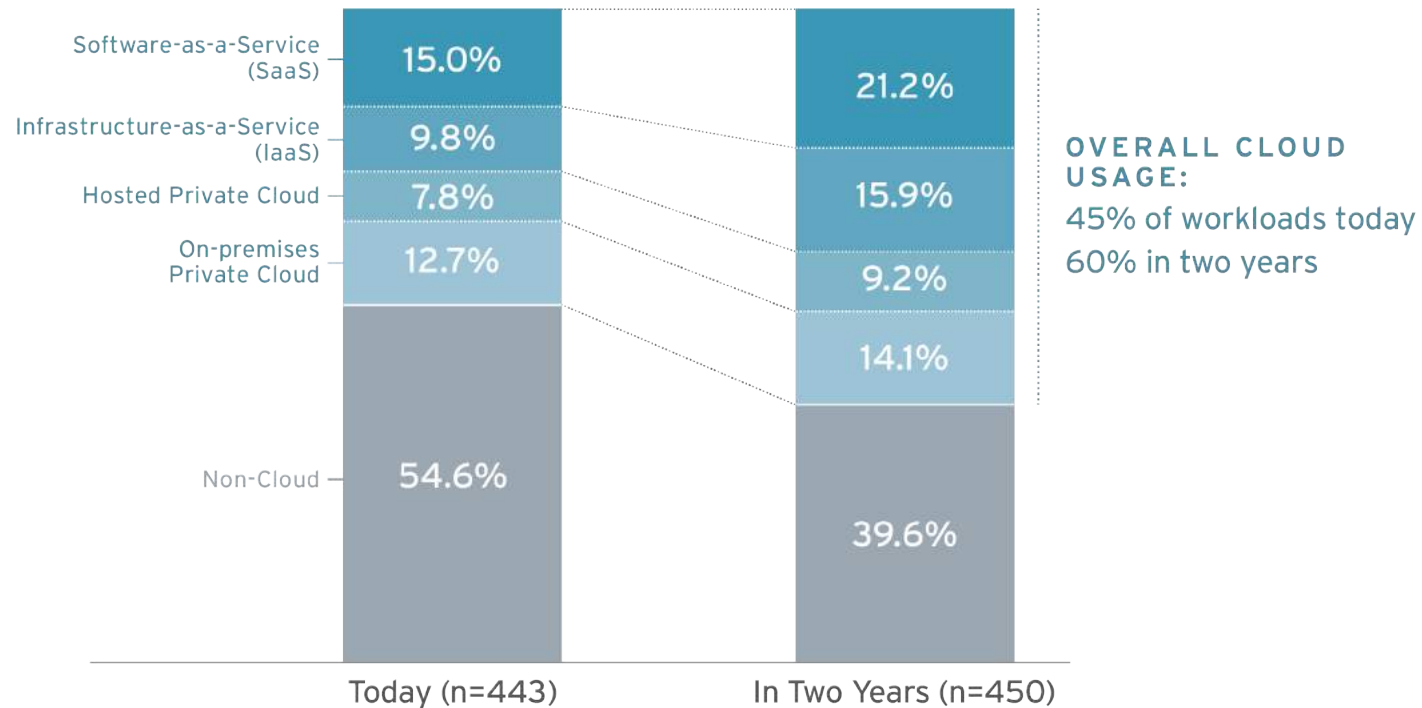
- Strong programs as a foundation to meet compliance requirements as well as foster best practices across the enterprise
- Best-in-Class platforms and tools to drive value thru adoption and shorter time to value
- An eco-system model to ensure tools work together
- Achieve Results:
  - ONEteam “XaaS” capabilities to ensure you maximize adoption – *Benefits without the Burden!*
  - “Fill the gap” approach to leverage your existing resources and complement/supplement where needed
  - Action = Results -> Orchestrated Action = Great Results!

# Gartner Cloud Shift



# In Two Years, More than Half of Workloads Will Run in Cloud

451 RESEARCH'S VOICE OF THE ENTERPRISE:  
CLOUD TRANSFORMATION, WORKLOADS AND KEY PROJECTS 2017



By 2025, 80% of enterprises will have shut down their traditional data center, versus 10% today, according to Gartner's report Prepare for the Death of the Data Center as We Know It.

Why?

1. Strategic = Focus on core competencies
2. Move compute closer to the data



## Colocation: A Strategic Alternative to a Cloud-first Mandate

According to Gartner's report:

*“Infrastructure and operations leaders planning for the future of infrastructure delivery should: Move legacy workloads into colocation or hosting models in order to retire on-premises data centers.”*

## **Colocation offers three main advantages – cost, compliance and control.**

- Cost – Colocation offers economies of scale and predictable cost models on-premise data centers can't match without the 10 year+ leases and depreciating data center infrastructure.
- Compliance – Colocation providers assume much of the compliance burden, and offer improved uptime and availability, freeing enterprises to focus on their core business operations.
- Control – Colocation gives enterprises the control and autonomy of dedicated infrastructure previously only available in their own data centers.

# Top 10 Strategic Technology Trends for 2019



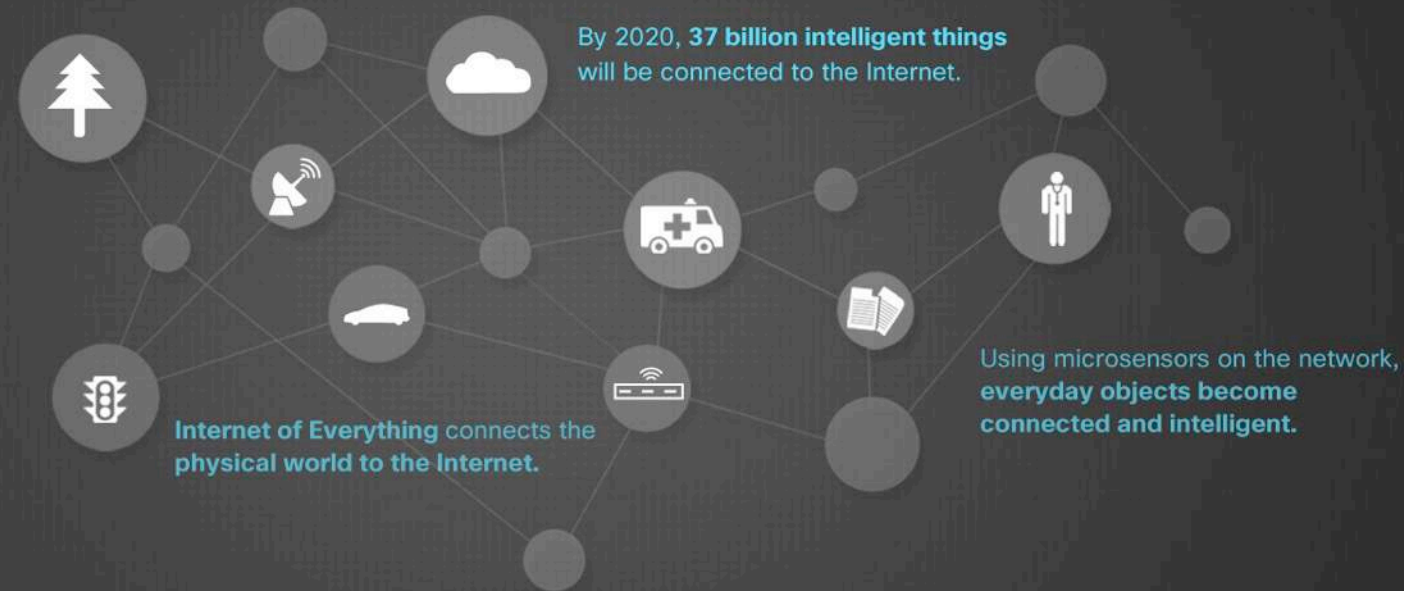
[gartner.com/SmarterWithGartner](https://gartner.com/SmarterWithGartner)

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**Gartner**

Today, more than **99% of things** in the physical world **are still not connected to the Internet.**

But a phenomenon called “The Internet of Everything” will wake up **everything you can imagine.**



The Internet of  
EVERYTHING

#InternetofEverything  
#IoE

**CISCO**

# Big Data or Big Mistake?



Data  
Science



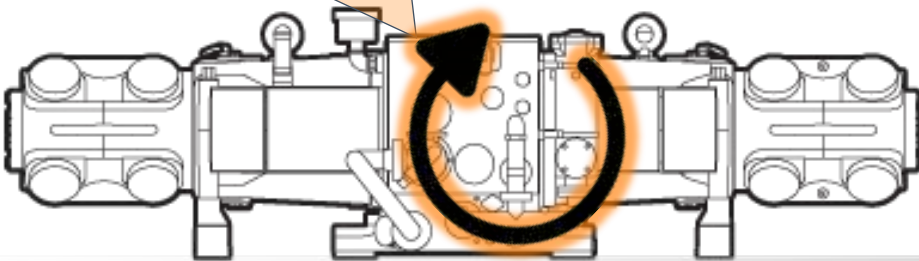
+



mongoDB



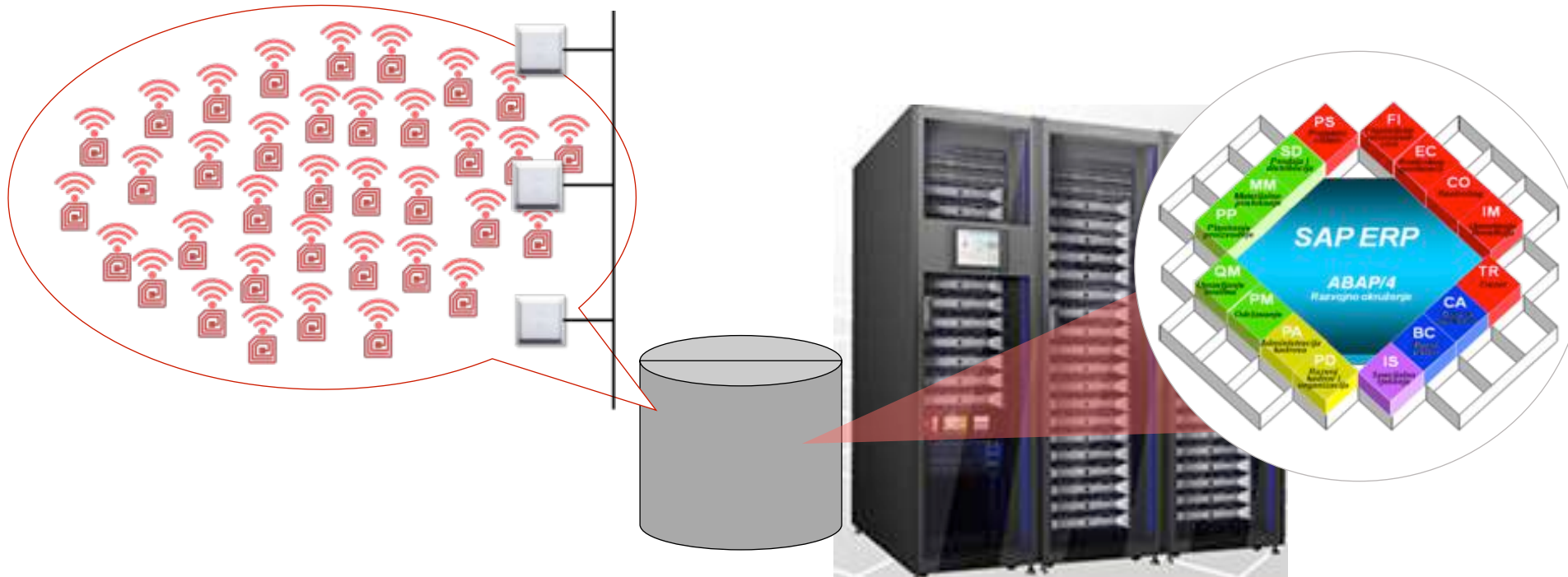
- 70 samples per ° x 360° x 1000 RPM
- For 360 days/year
- > 1,000 PB / year
- x 40 Compressors







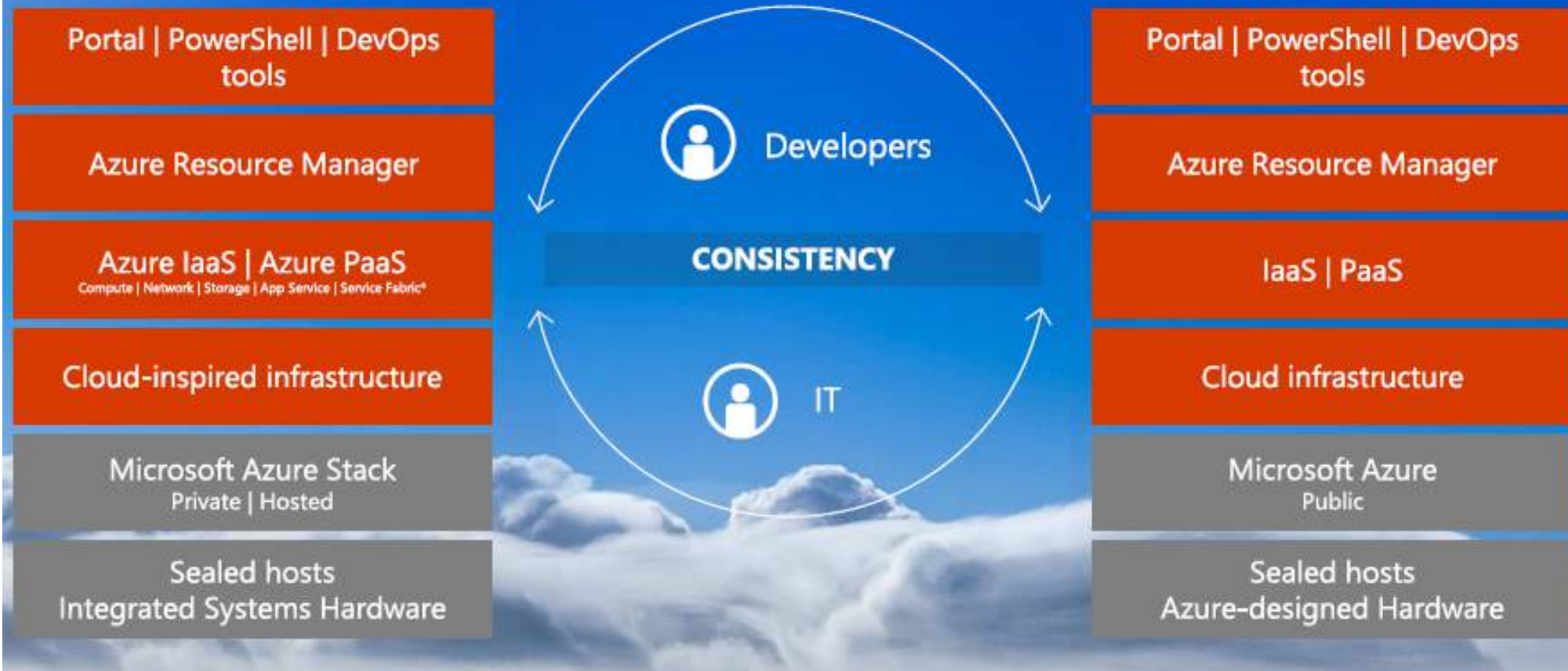




- 2,000 readers so ~10,000 reads / sec
- Hundreds of thousands of tagged assets
- Each asset gets “seen” by multiple readers
- Tag read database of terabytes
- Computationally intense to process

# Azure and Azure Stack

Truly consistent hybrid cloud platform



**How do you prepare for the future?**

**Plan, Manage and Execute**



# Planning

- Optimal mix of Cloud, Colo, Edge and On-Premise
- Relocation Services
  - How do we move what we have?

## **Execute:**

- Data Center Relocation
- Operations
  - Data Center as a Service
  - NOC/SOC as a Service
  - DR as a Service



# From the Edge to the Core

Delivering services from the edge to the core activates untapped business intelligence

**FLEX**  
**ANYWHERE**

**FLEXENTIAL**

# The 5 things you need to know

1. Edge enables Digital Transformation
2. Latency Kills! – actionable data closer to the user
3. Develop Edge and Distributed strategies now
4. Improve the connectivity from the edge to the core
5. Improve capacity from the edge to the core



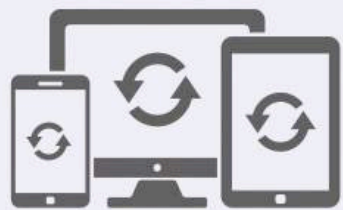




INTERNET  
TRAFFIC

HAS  
INCREASED **5x** in the  
past 5 years

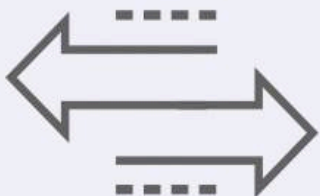
EXPECTED TO  
GROW **2.3ZB** by 2020<sup>1</sup>



**21B** BILLION!

ACTIVE DEVICES POWERING PEOPLE, MACHINES  
AND THE INTERNET OF THINGS WILL GENERATE  
APPROXIMATELY

**600ZB**  
OF DATA BY 2020



MOBILE DEMAND  
WILL INCREASE

**51%**

OF MILLENNIALS CAN'T GO  
MORE THAN 3 HOURS WITHOUT  
CHECKING THEIR PHONES

**55%**

OF MILLENNIALS WATCH  
STREAMING VIDEO SEVERAL  
TIMES A DAY, ON VARIOUS  
DEVICES<sup>3</sup>

MOBILE VIDEO STREAMING  
ACCOUNTED FOR

**60%**

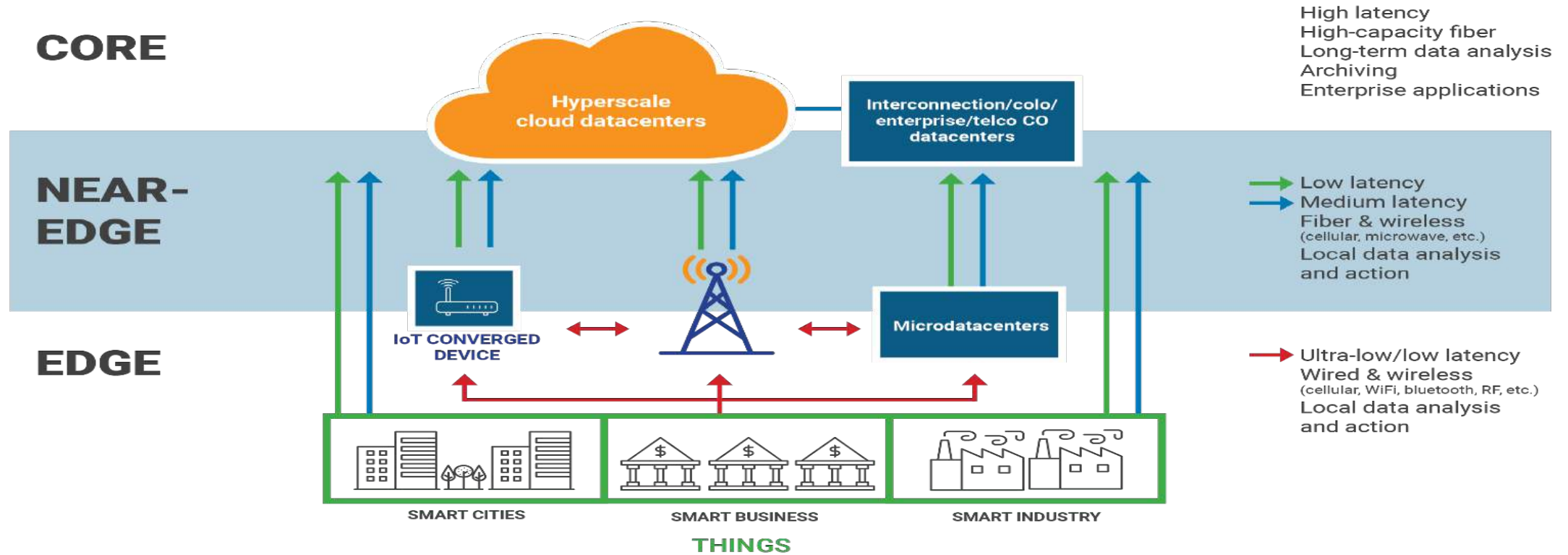


OF ALL MOBILE  
DEVICE TRAFFIC

IN 2016

EXPECTED  
TO RISE **78%** IN  
2020<sup>4</sup>

# Defining the Infrastructure



# Edge enables the digital transformation

Consider the impacts of the next 1 Billion users

More IoT and AI deployments and success stories: IoT and AI begin to deliver value in agriculture & aquaculture

Tier 1 banks embrace AI & blockchain for various applications

Smart Cities:  
Government awards funding for SC projects

Increased use of autonomous vehicles in mining and agriculture

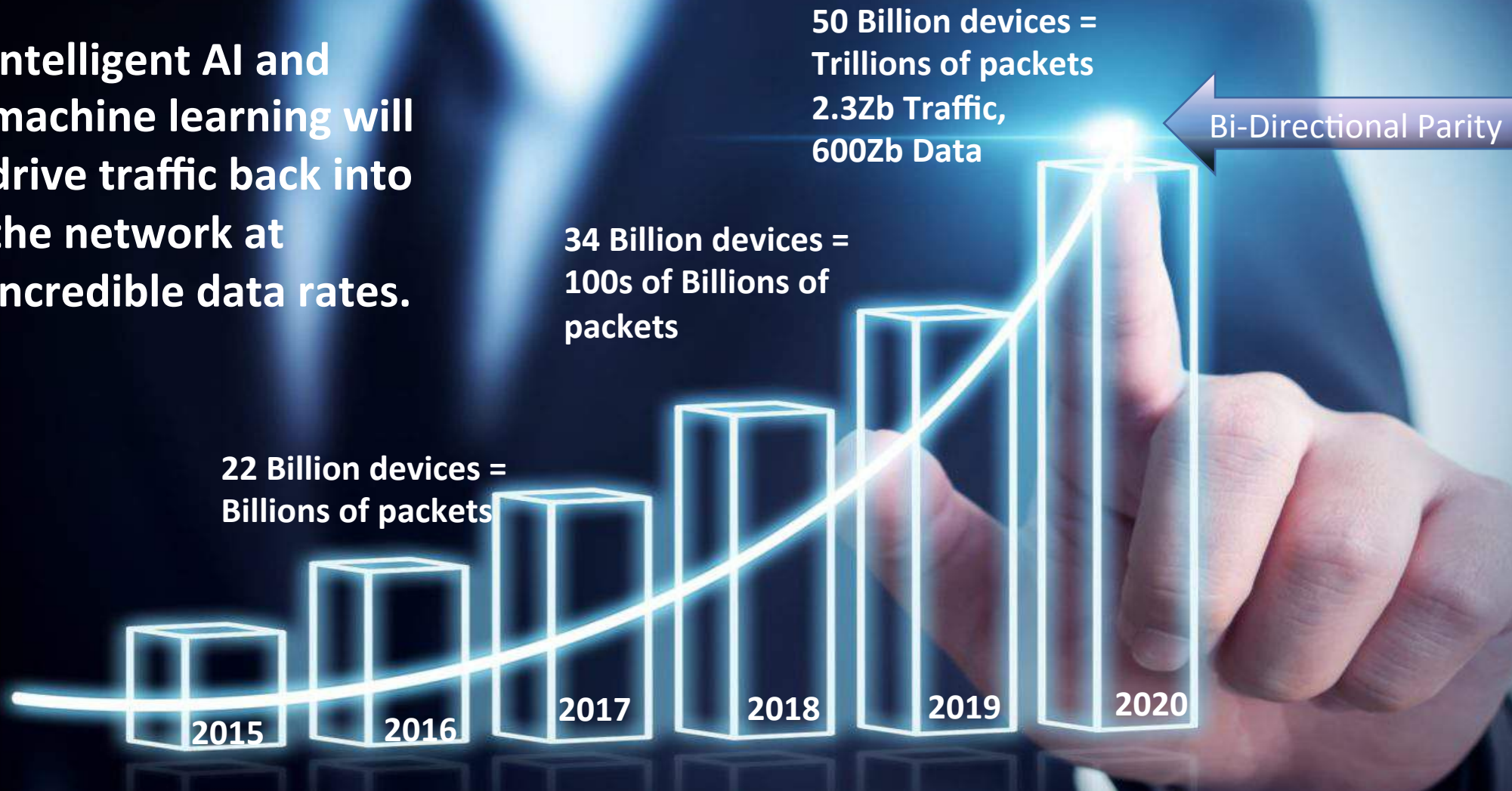
5G Network  
Mobile & IoT:  
Journey towards excellent customer experience

Oceania & Asia:  
Highest growth in 2017 in colocation data center





**Intelligent AI and  
machine learning will  
drive traffic back into  
the network at  
incredible data rates.**

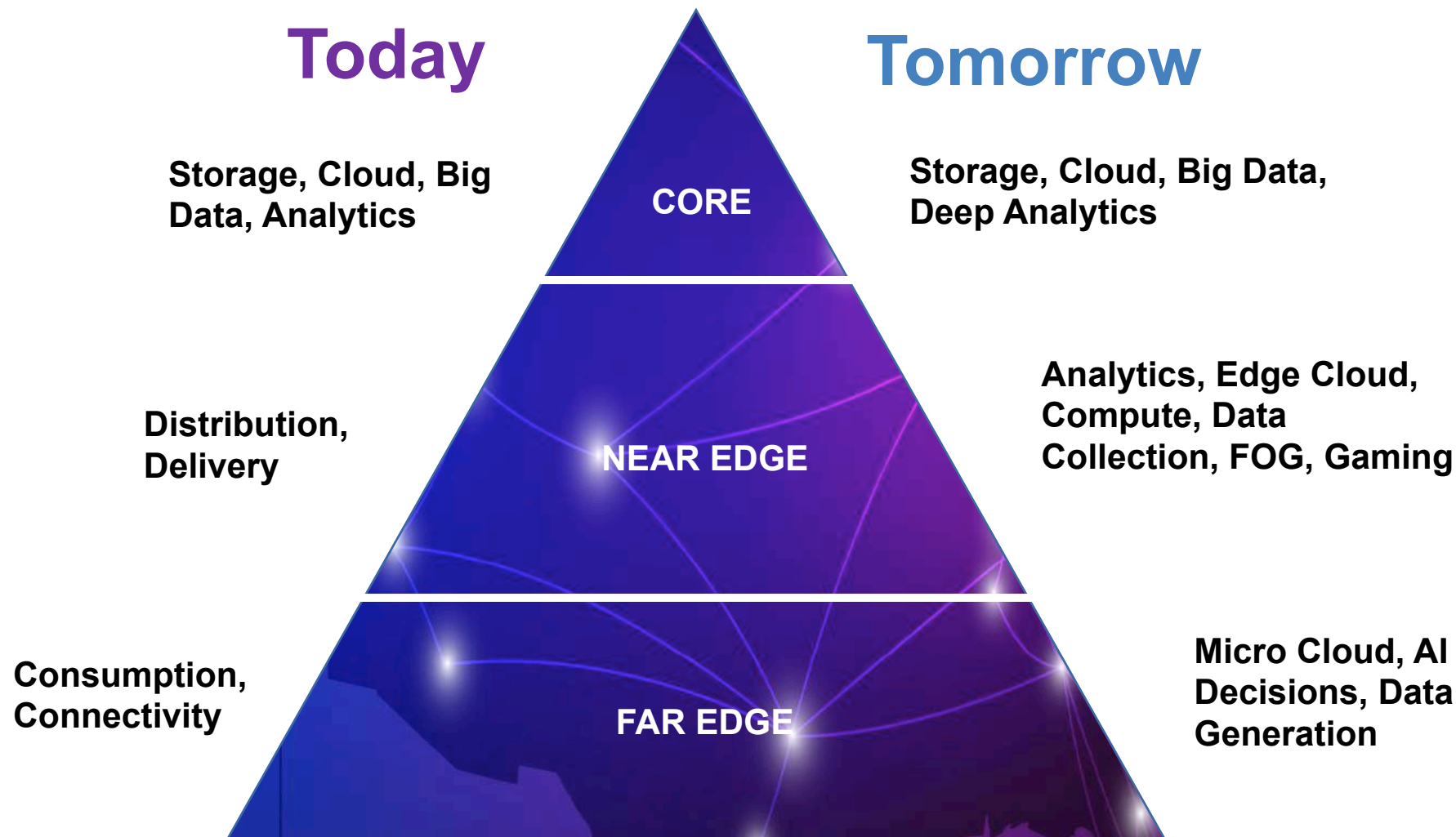




Data services are exploding, and traffic patterns are changing.

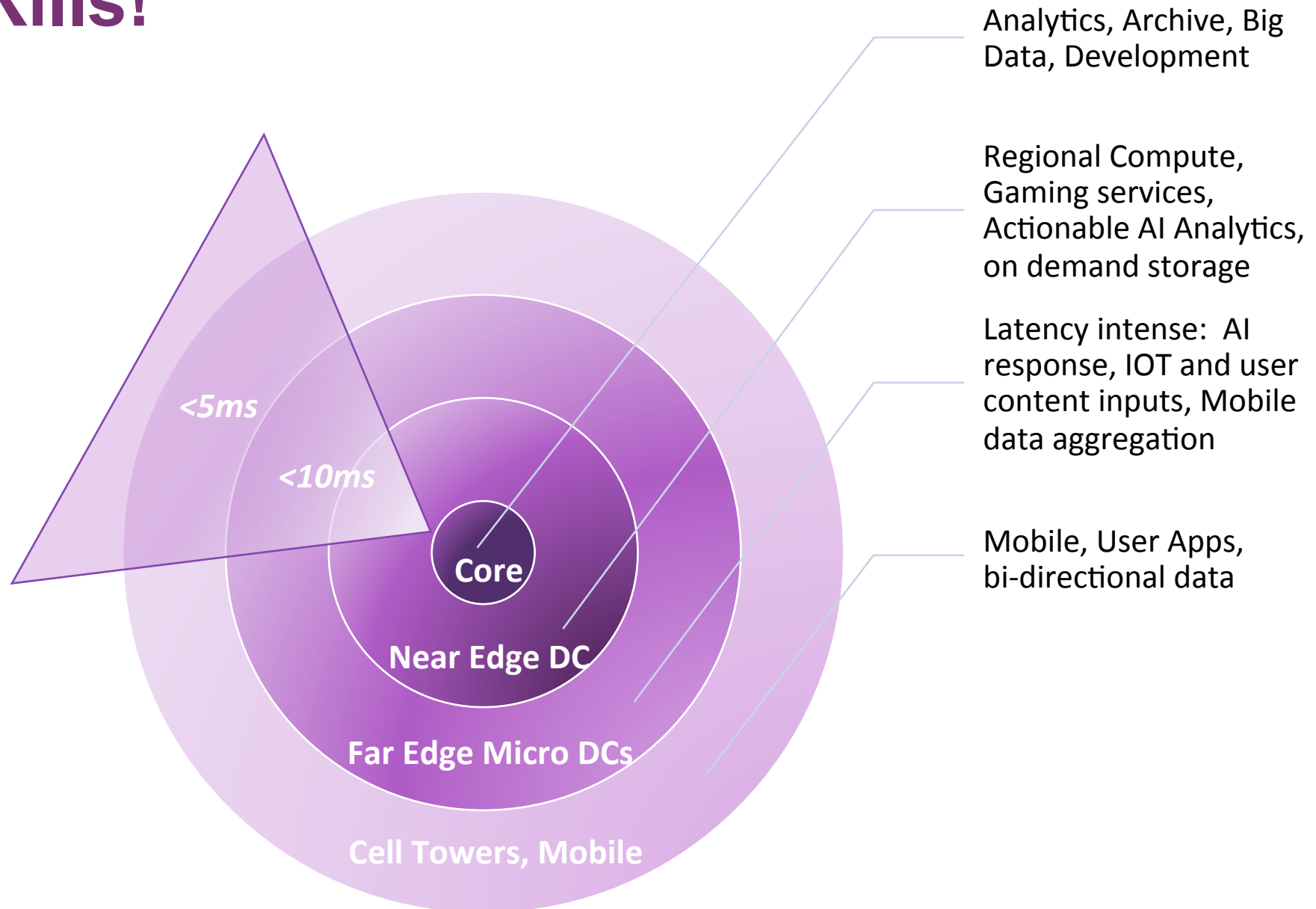
**Today**

**Tomorrow**



# Latency Kills!

**Health Care**  
**A.I.**  
**Safety**  
**Gaming**  
**Retail**



## ▼ THE SOLUTION

DATA NEEDS TO BE  
PROCESSED CLOSER

TO USERS



Unlike centralized data centers, edge data centers push processing physically closer to data sources.





# Near Edge Data Centers are the hub for far edge deployments



**Smart Cities,  
Manufacturing**



**Health Monitors,  
remote surgery**



**Autonomous  
vehicles, Drones**



**Gaming, retail  
Virtual Reality**

# ***Call To Action***



Develop your edge and distributed strategies now.  
Develop service offerings to support edge deployments



Utilize more near edge data center deployments to manage data, traffic, etc.



Improve the connectivity and capacity from Edge to Core. Plan to tether the far edge.



Deploy more services to the Edge, within 10ms.  
Define what data needs to be managed at the edge.

# Interconnection is the Key:

Define how to move data efficiently between Edge and Core

Make decisions on what is managed at the edge and what is delivered to the core.

- ✓ Drop and Dump non critical data at the edge
- ✓ Take action for critical data, utilize FOG
- ✓ Deliver to the core **only** data that needs deep analytics, long term storage, and high security (PCI, etc.)
  - *These are very costly to distribute, thus Core will still have relevance*





# Flexential

*Network Enabled Colocation*



21

Domestic and  
international  
markets



41

Data  
centers



4,200

Customers



169

MW critical load  
UPS capacity



1,000

Employees



100Gb

Network  
backbone



3.1M<sub>Sq Ft</sub>

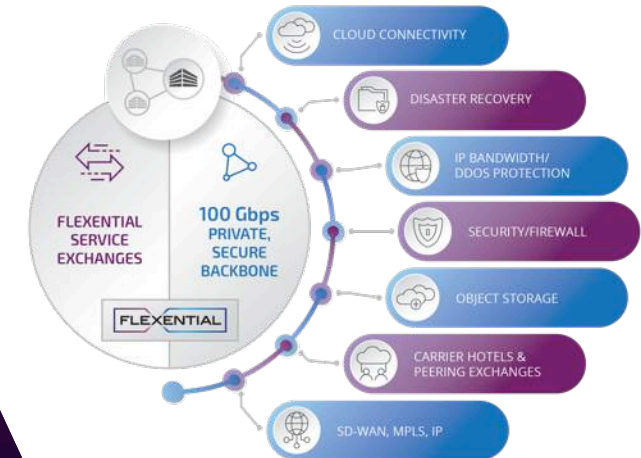
Data center  
footprint



31+

Industries

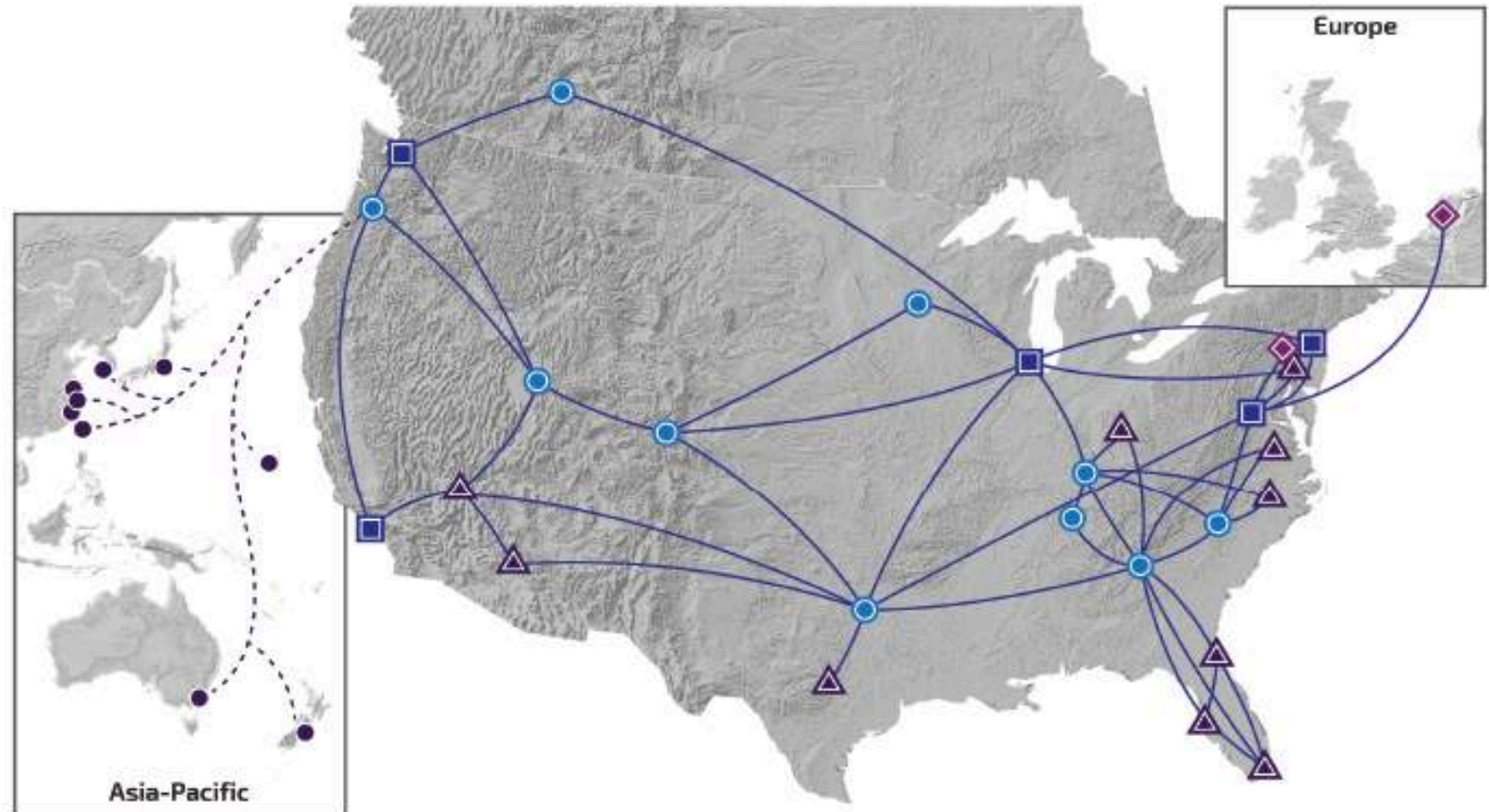
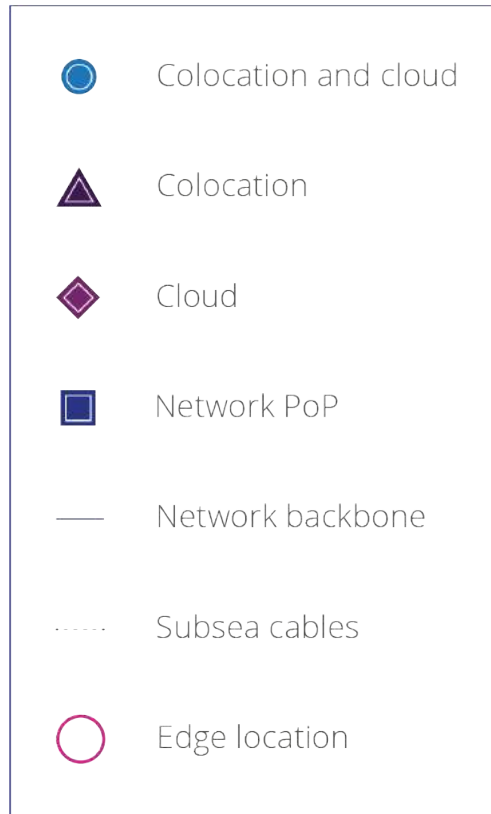
## FLEX ANYWHERE



**FLEXENTIAL**

# Our Network

Our 100Gb core fiber network ensures maximum performance and reliability and supports edge computing strategies.



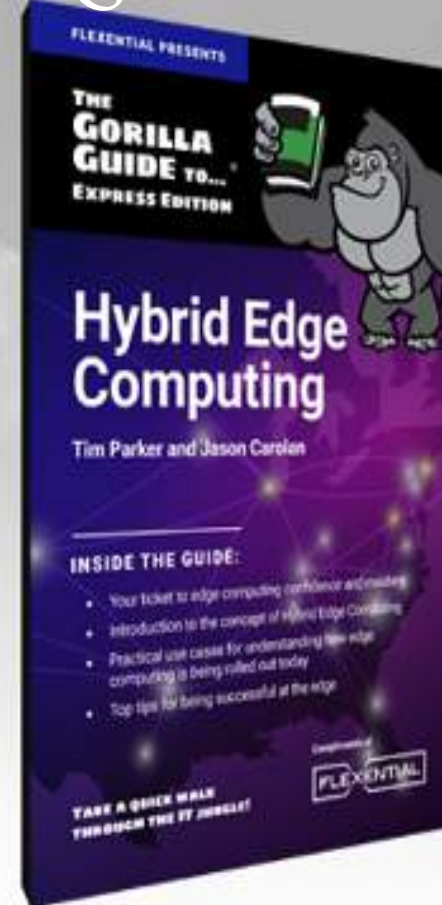


# The Gorilla Guide [Express Edition] to **Hybrid Edge Computing**

by Tim Parker and Jason Carolan

*The foundational principle of edge computing is that latency sensitive applications need to be as close to the consumer as possible. The edge is simply a location that is close to the user or customer.*

*Read the Book!*



# Interconnection is the Key

## Connect the Dots



# Upcoming Events

## ASMGi and Flexential Wine and Learn *Datacenter & Managed Services for the Future*

**Date:** Wednesday April 17, 2019

**Time:** 230 PM ET

**Location:** Flexential Collegeville Data Center, 1000 Black Rock Road,  
Collegeville, PA 19460

**REGISTER:** [https://lp.flexential.com/ASMGi-Wine-Learn\\_Registration-Page.html](https://lp.flexential.com/ASMGi-Wine-Learn_Registration-Page.html)

## Flexential's Philly Colo and Cloud Center *2nd Annual Block Party*

**Date:** Thursday, May 9, 2019

**Time** 3:30pm - 6:30pm

**Location:** Flexential Collegeville Data Center, 1000 Black Rock Road,  
Collegeville, PA 19460

**REGISTER:** [https://lp.flexential.com/PA-Collegeville-Block-Party-2019\\_Registration.html?](https://lp.flexential.com/PA-Collegeville-Block-Party-2019_Registration.html?)



# ASMGi has strong strategic partnerships to help create your future ...

