

# Rapid deployment, scalability and lower total cost of ownership by using prefabricated modular datacenters

Vertiv – Adrian Barker







Vertiv designs, builds and maintains mission-critical technologies that enable essential applications for data centers, communication networks and commercial and industrial environments



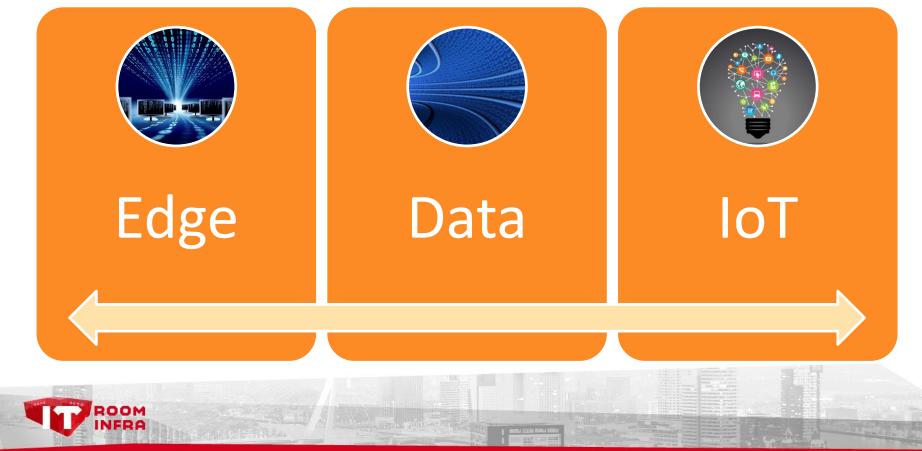
# Agenda







## Trends



#### EDGE ENABLES THE DIGITAL TRANSITION





# Mobile Internet Traffic by 2021

# Mobile traffic QUADRUPLES

...video streaming grows >5x

...online gaming grows >5x

2.5<sub>EB</sub>

IN 2014

...data grows nearly 3x





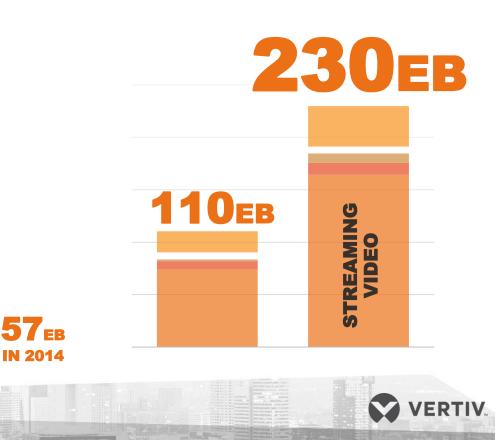


# Fixed Internet Traffic by 2021

# Fixed traffic DOUBLES

...video streaming grows >2.5x ...online gaming grows 6x

...data grows nearly doubles





## Connected Things (estimated by 2020)

2017 6.4







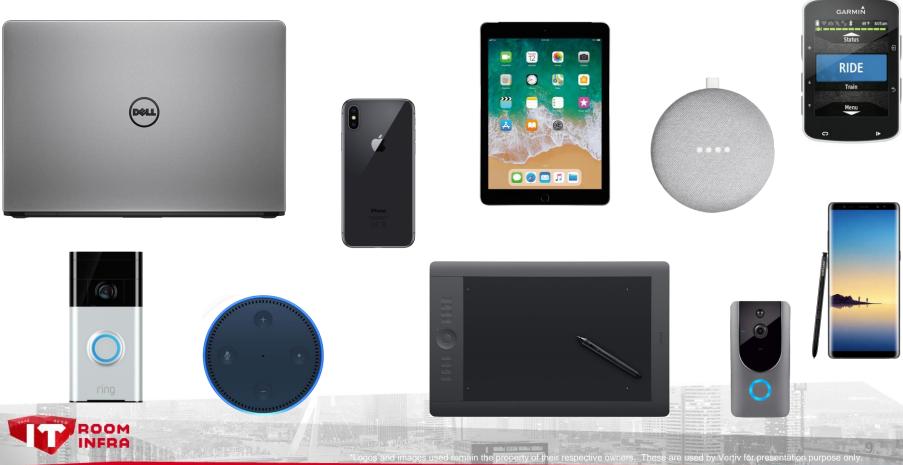








# All About Connectivity



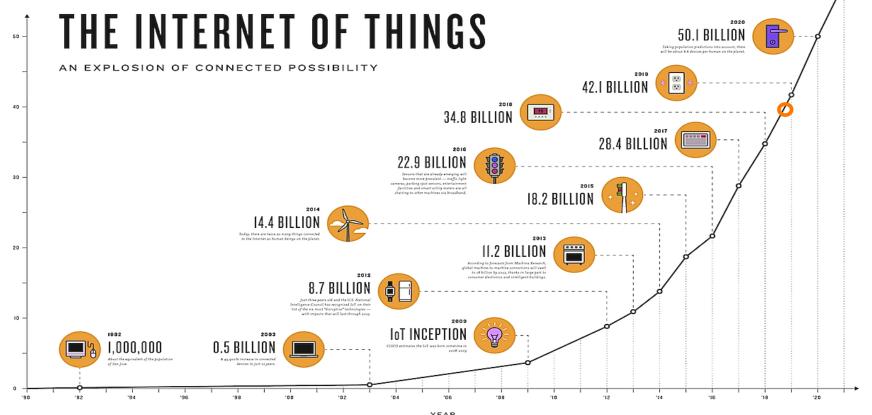


#### **BEYOND COMPUTE & PERSONAL DEVICES**

DEVICES

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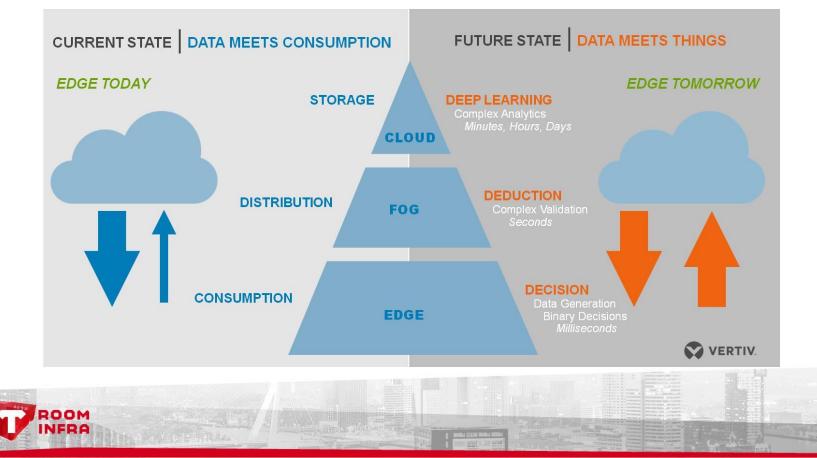
BILLIONS



YEAR



## Achieving the Future State, at Scale





#### Time

When considering the future datacentre market .....

# "whatever you're thinking – think 100x"

Christian Belady, General Manager at Microsoft.







### Talent









## One definition of a datacentre ...









#### Transactions







# Technology

- Modular [moj-uh-ler]
  - Composed of standardised units or sections for easy construction or flexible arrangement

- Prefabricate [pree-fab-ri-keyt]
  - To manufacture in standardised parts or sections ready for quick assembly and erection as buildings





# Automotive industry analogy

Volkswagen Group















#### **Global Solutions**

ROOM

# We manage the project, you focus on your core business.



#### **Configurable Solutions** Pre-Engineered, Rack to Room



#### **Architected Solutions Design, Integrate, Deploy**

**Building and Site-Level** Prefab Modular Options







#### Integration



#### Thermal Management



**Power Management** 



ROOM



#### Rapid Deployment

**Production in factory** 

ing



611 Index			neer rchase		Civil works / site preparation				Construction									Installation			New Build
1			2			6		1	'	'	'	'	13	1	'	 16	 17	18	19	20	Traditional – Stick Build
		Engineer & purchase		-+	Civil works / site preparation			0	8 9 10 11				TIME SAVED 33% - 50%					10	19	20	Containerized Solution

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Delivery Install

Pre-fabricated Design





#### **Global Solutions**

Engineering/Design/Planning

Manufacturing & Supply Chain

#### **Deployment / Commissioning**

**Quality throughout Vertiv Process** 

### 

DFX Lessons Learned Specification Quality Submittal Quality Design



Strategic suppliers Shop drawing review Detailed tender packages Supply Chain



Tightly Controlled Manufacturing

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Integrators



Strategic Partners Construction / Delivery





Domain Knowledge

**Schematic Design** 

**Design & Development** 

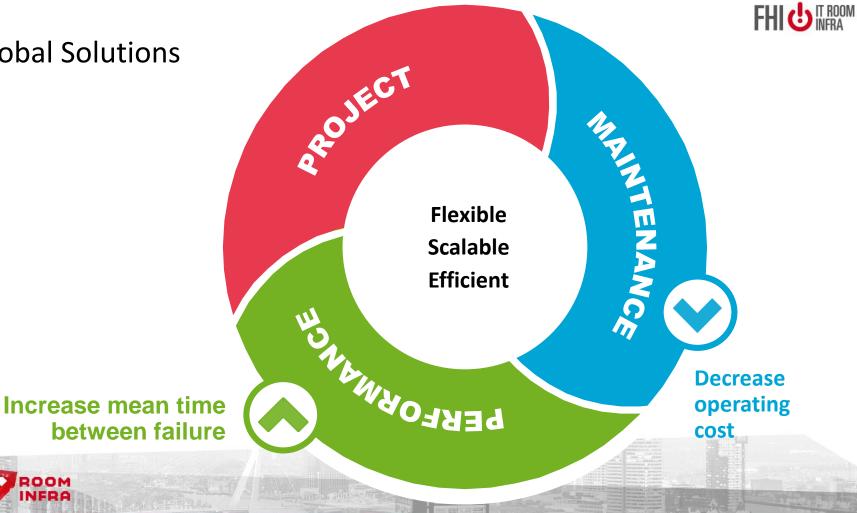
**Construction Documents** 

# **Complete Critical Infrastructure Solutions**



#### **Global Solutions**

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### **Global Solutions**

- **Skilled Labor**
- **ISO-9001 Processes**
- Prefabrication **Longstanding Partners**

**Fully Integrated Electrical** and Mechanical Enclosures Regration & Tespon **Factory Witness Test** 



**Approved Vendors** 

ROOM ERC

**Strategic Relationships** 

#### SmartMod

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- Designs optimized for cost and speed of manufacture without compromising quality
- Repeatable processes and simplified infrastructure reduce risk
- Configurations from 2-12 racks and from 40-90 kW



## Questions ?

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# Contactgegevens

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