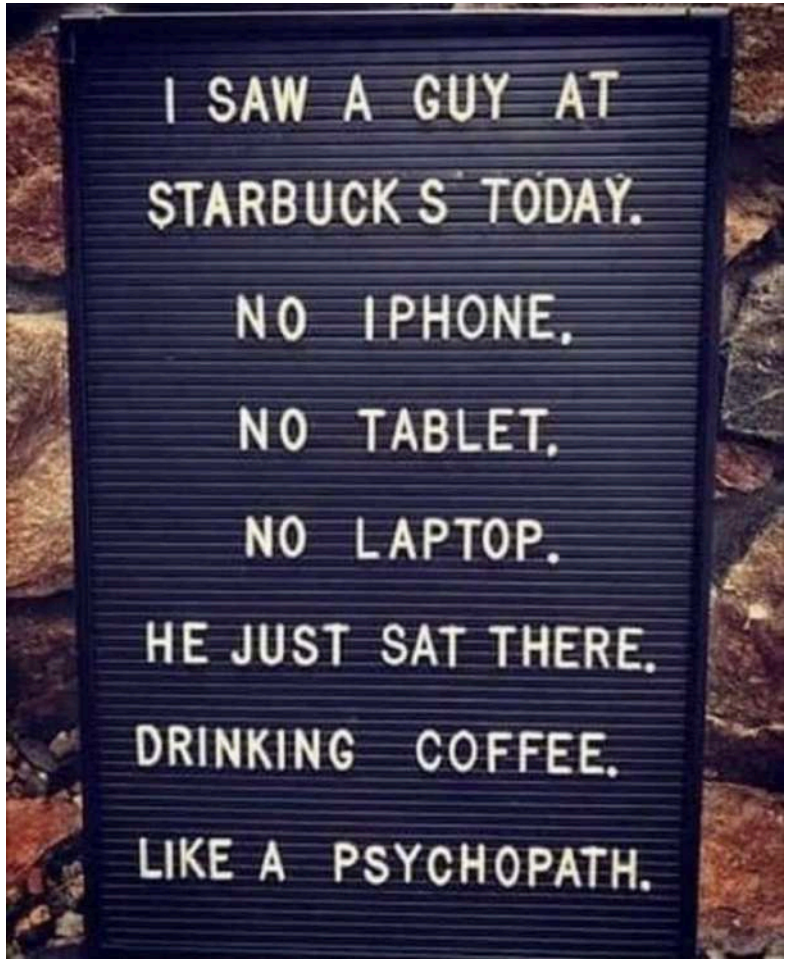
Welcome to the presentation:

"The cloud is not in the sky"

Starting soon….



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The Cloud is not in the sky

The importance of the digital infrastructure for OUR society

Presented by:
Bastiaan Janssen
Managing Partner, EPI Europe

EPI – The cloud is not in the sky

Why this presentation?

Our digital infrastructure drives innovation and enables sustainability!

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Agenda

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About EPI

Bastiaan Janssen
EPI

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History & Global Locations

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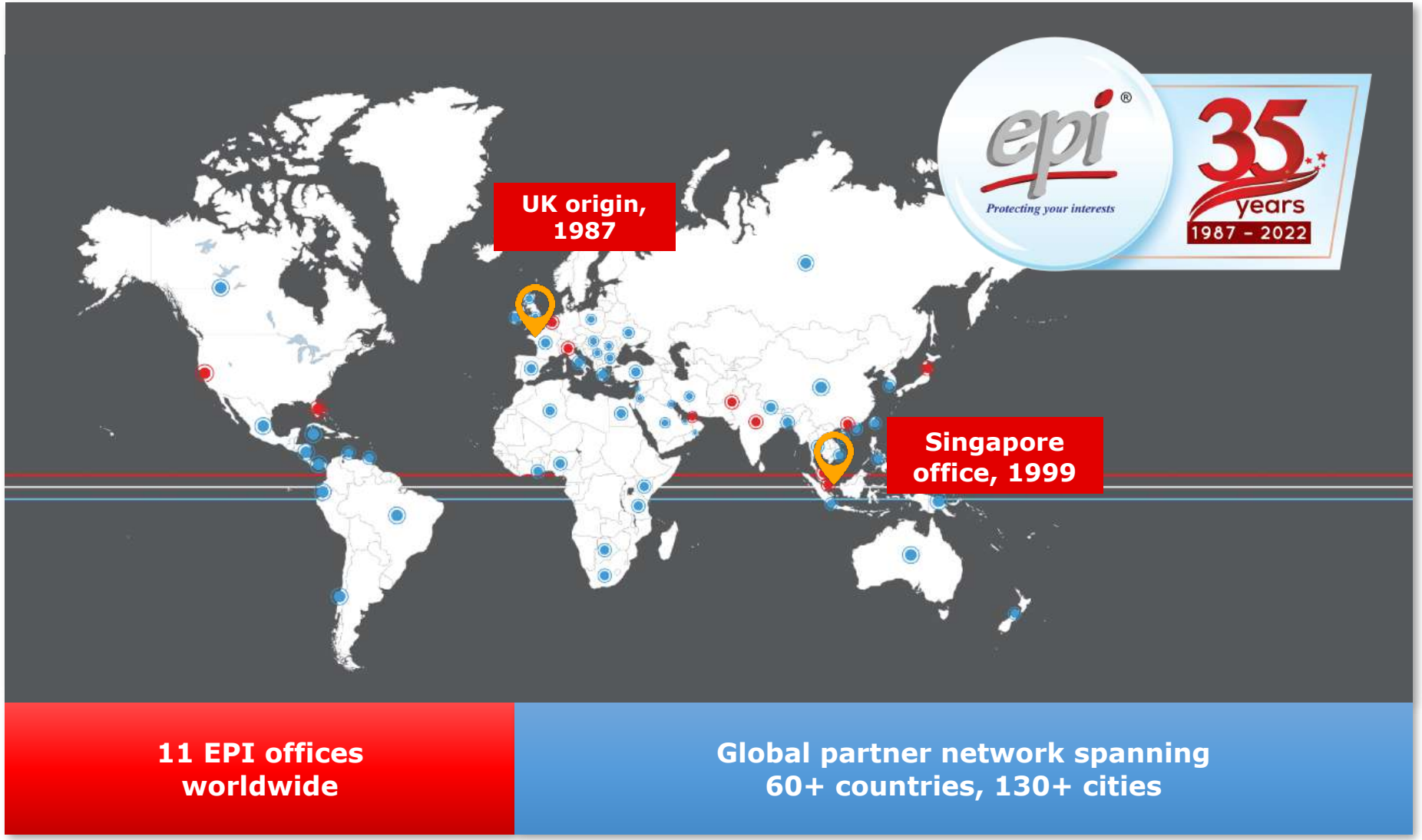

11 EPI offices worldwide

Global partner network spanning 60+ countries, 130+ cities

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Data Center Expert

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The digital society
Can we live without IT?

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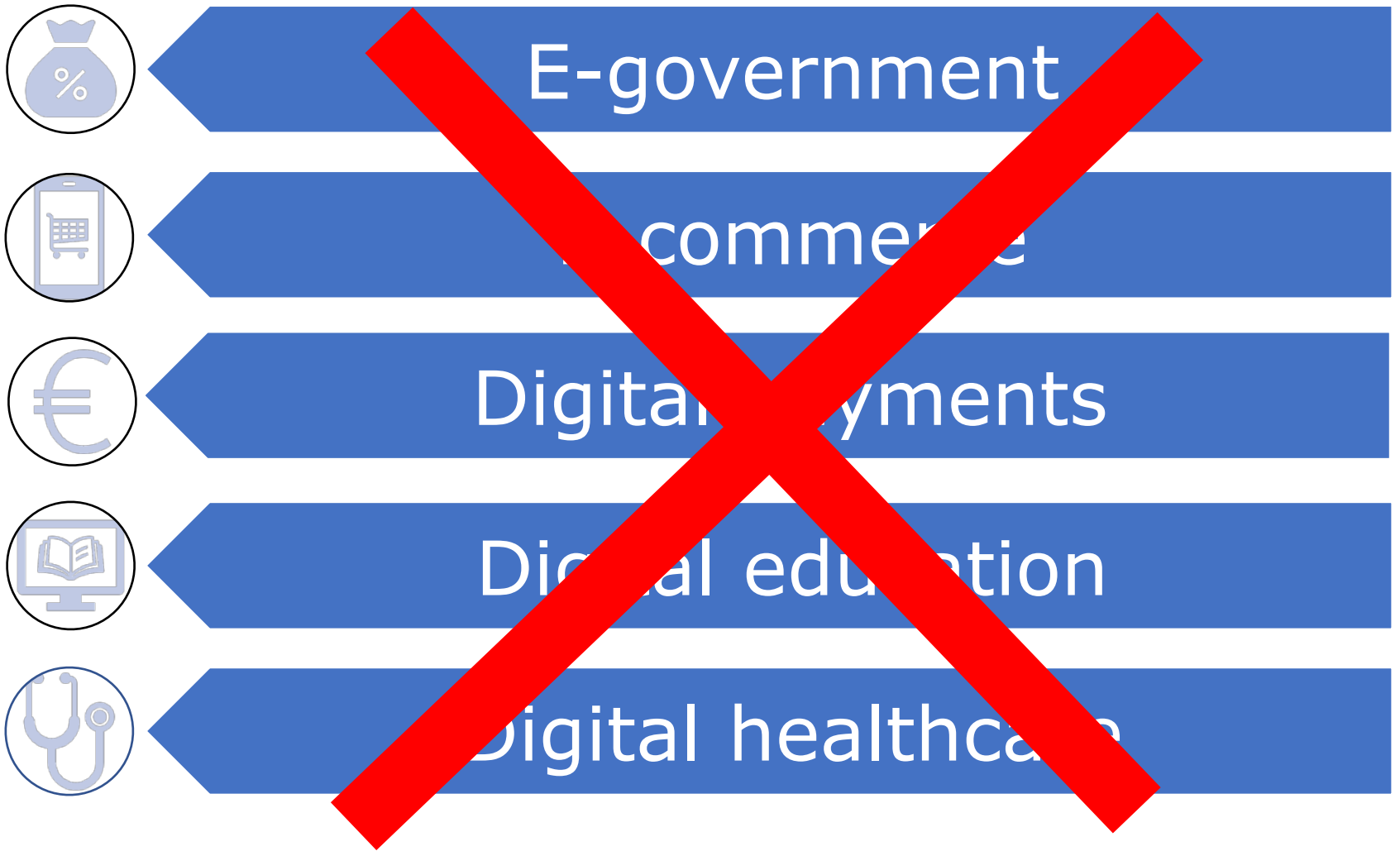
Society of today: always online (?)



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Thesis

Without a good digital infrastructure there is no (modern) society

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Exponential Data Growth

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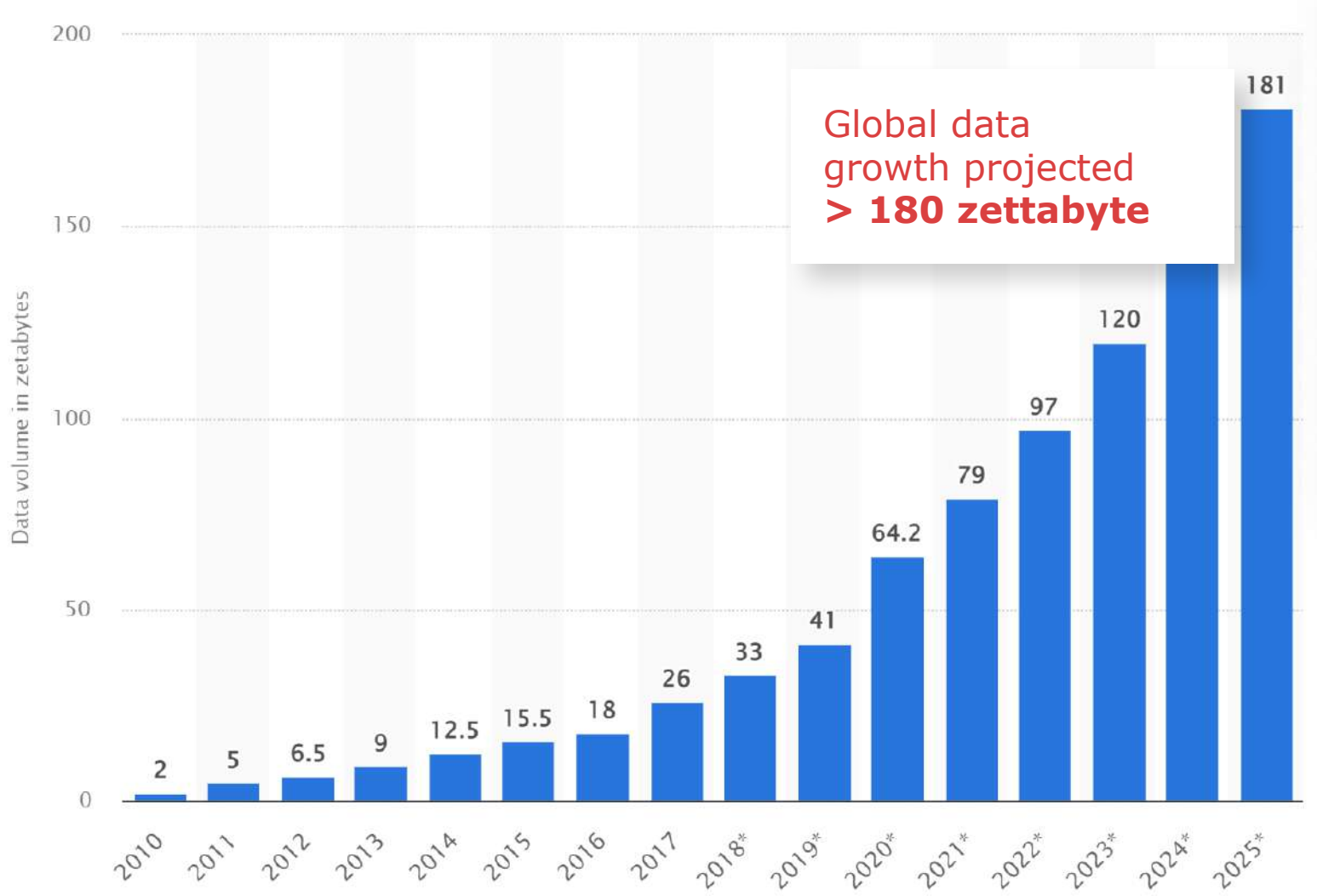

Global data growth projected **> 180 zettabyte**

Source: Statista 2022

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The Data Centre Market

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Data Centre Growth and Co-location Market Size by Region in 2024

North America
CAGR:6.4%
US$23.4B

EMEA
CAGR:11.1%
US$17.2B

APAC
CAGR:12.2%
US$28.0B

Source: Structure Research, Cushman & Wakefield

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Finland Colocation & Hyperscale Facts (1 May 2023)

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39
Facilities
Colocation

78 MW
IT Power available
Colocation

56 MW
IT Power under construction/ planned
Colocation

180 MW
IT Power available
Hyperscale

23
Operators
Colocation

62.000 m2
White Space
Colocation

530 GWh
Residual heat potential
Colocation

1430 GWh
Residual heat potential
Hyperscale

Source: Pb7 Research, 2023

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DCByte / Datacenter Forum report

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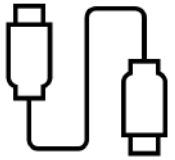
The engine for innovation and growth

- In the last 2 decades society has digitalized strongly
- Digitalization changes the way we work and live
- Data grows exponentionally and demands more innovation
- Generative AI could become a big game changer as well

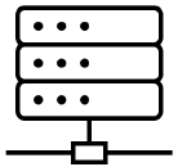
The digital infrastructure is:

Sea cables & Fiber



Telecom

Datacenters



Hosting & cloud providers

Internet connections

Devices

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Digital infrastructure

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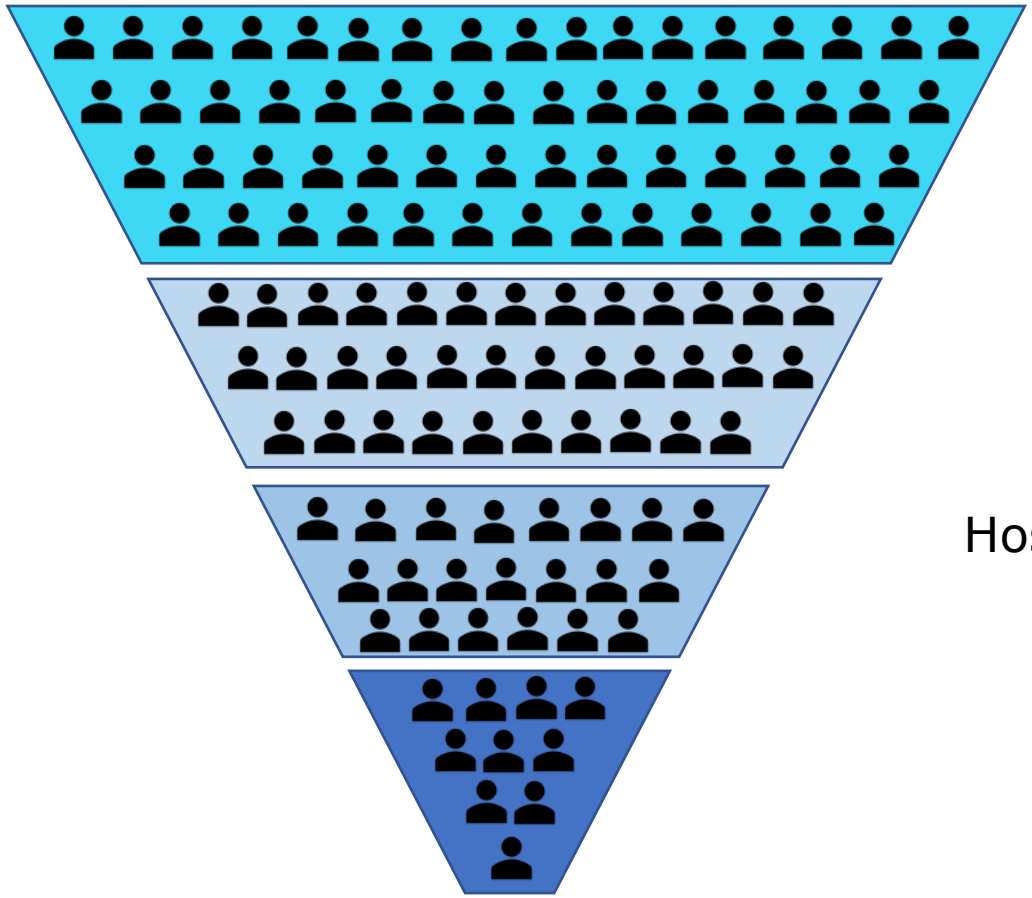
100.000
Users

End customer



1500
Employees

Company

50
Employees

Hosting provider

15
Employees

Datacenter

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Downtime: Disruptive & Costly

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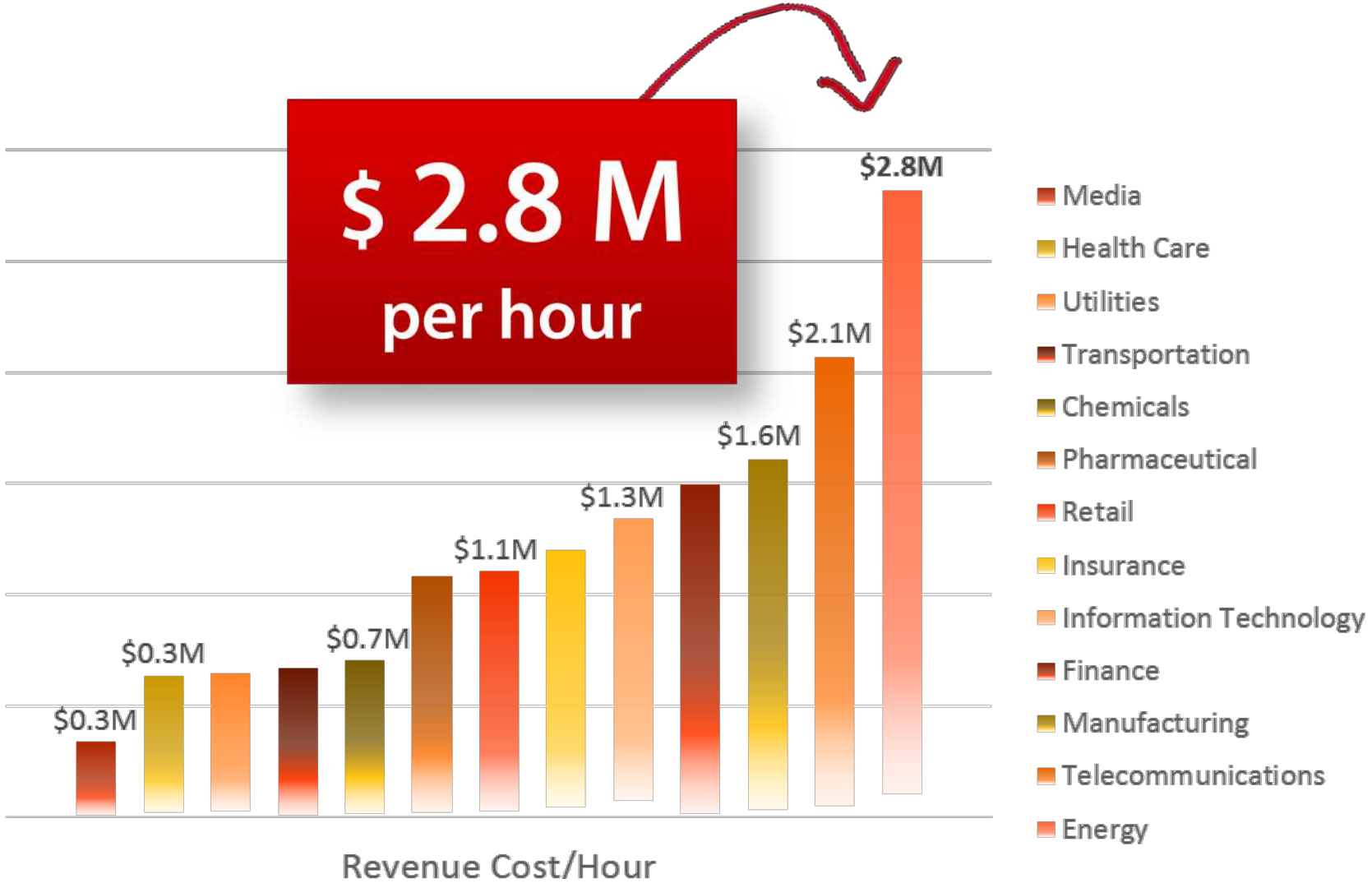

Source: META Group

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Explanation of some cloud definitions..

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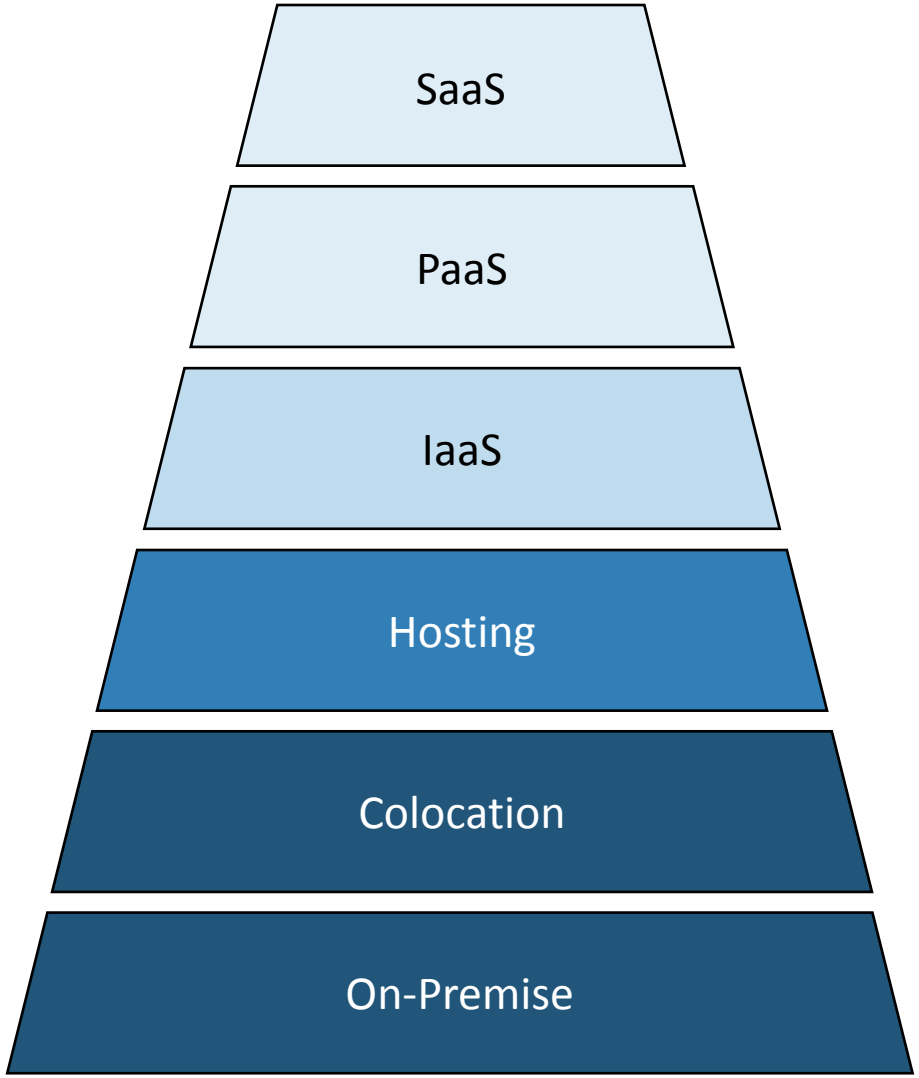

Sofware as a service
Gmail, Hotmail, Facebook etc

Platform as a service
SAP cloud, RedHat openshift

Infrastructure as a service
Amazon Web Services, Azure

Hosting / hosting provider
Website / application hosting

Colocation
Commercial datacenter

On Premise
Enterprise datacenter

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Infrastructure as a Service (IaaS)

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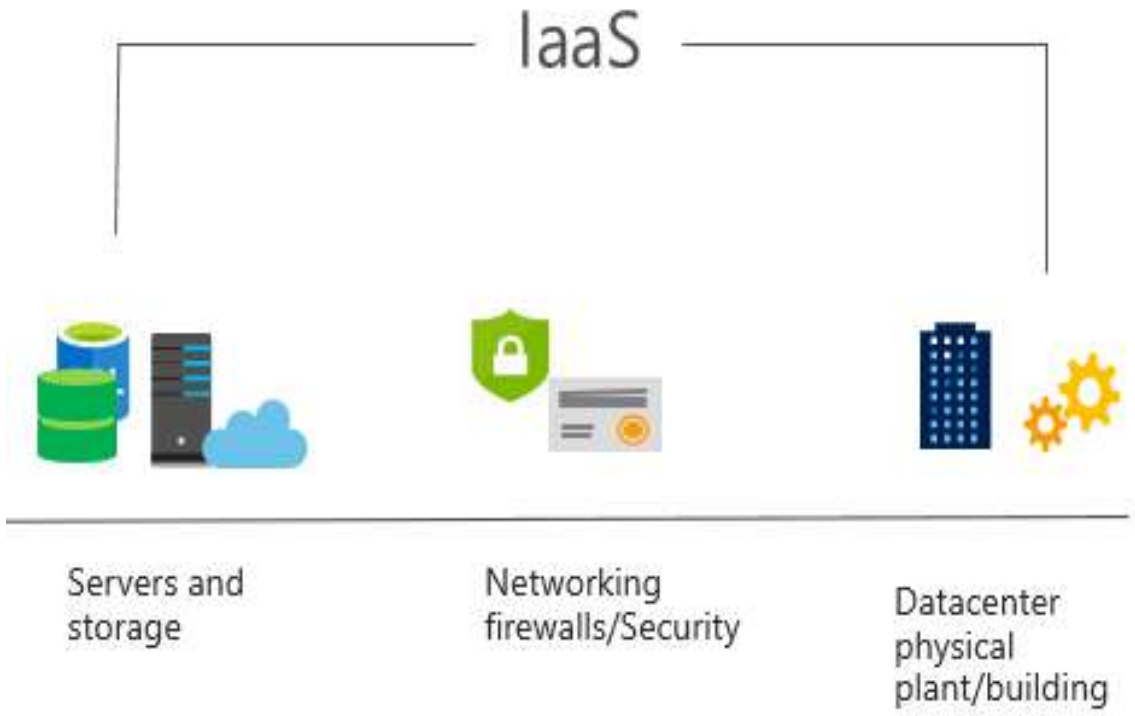
Build pay-as-you-go IT infrastructure by renting servers, virtual machines, storage, networks, and operating systems from a cloud provider.



Microsoft

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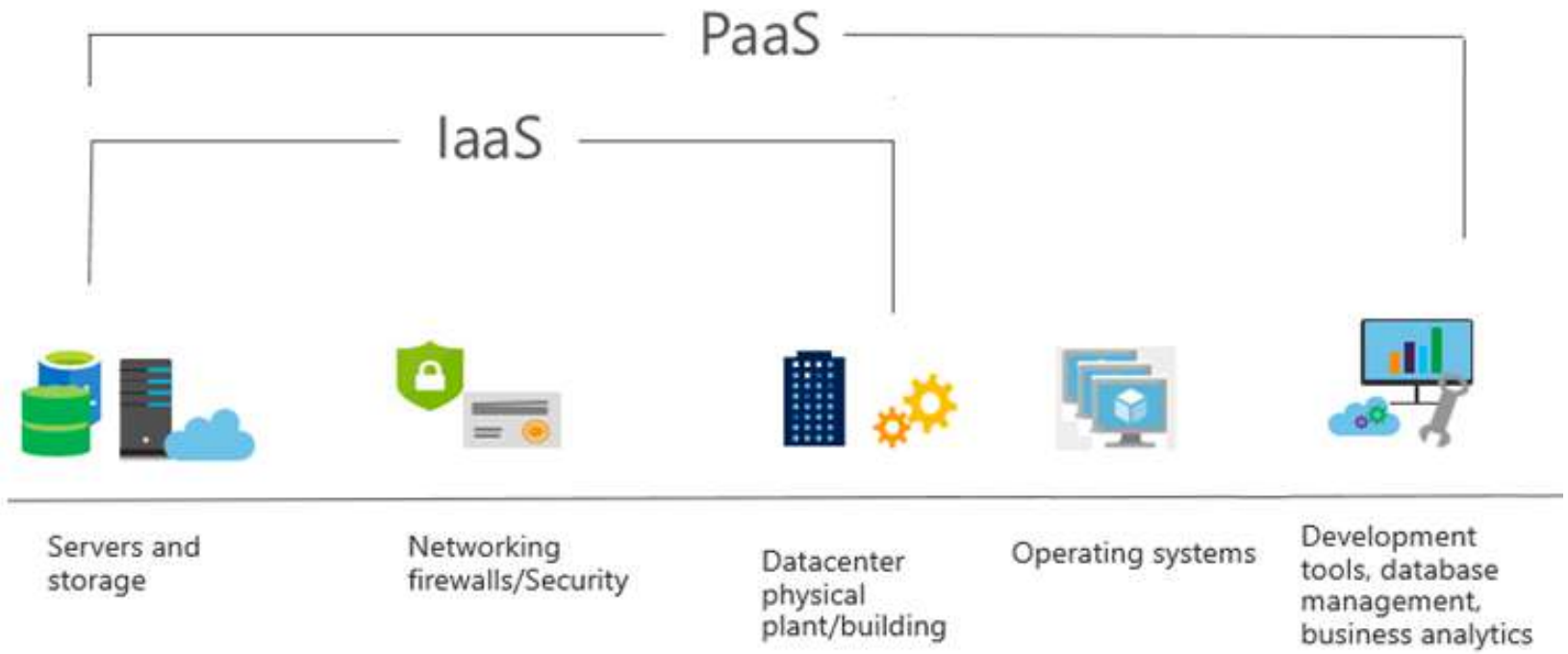
Platform as a Service (PaaS)

Provides environment for building, testing, and deploying software applications; without focusing on managing underlying infrastructure.



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Software as a Service (SaaS)

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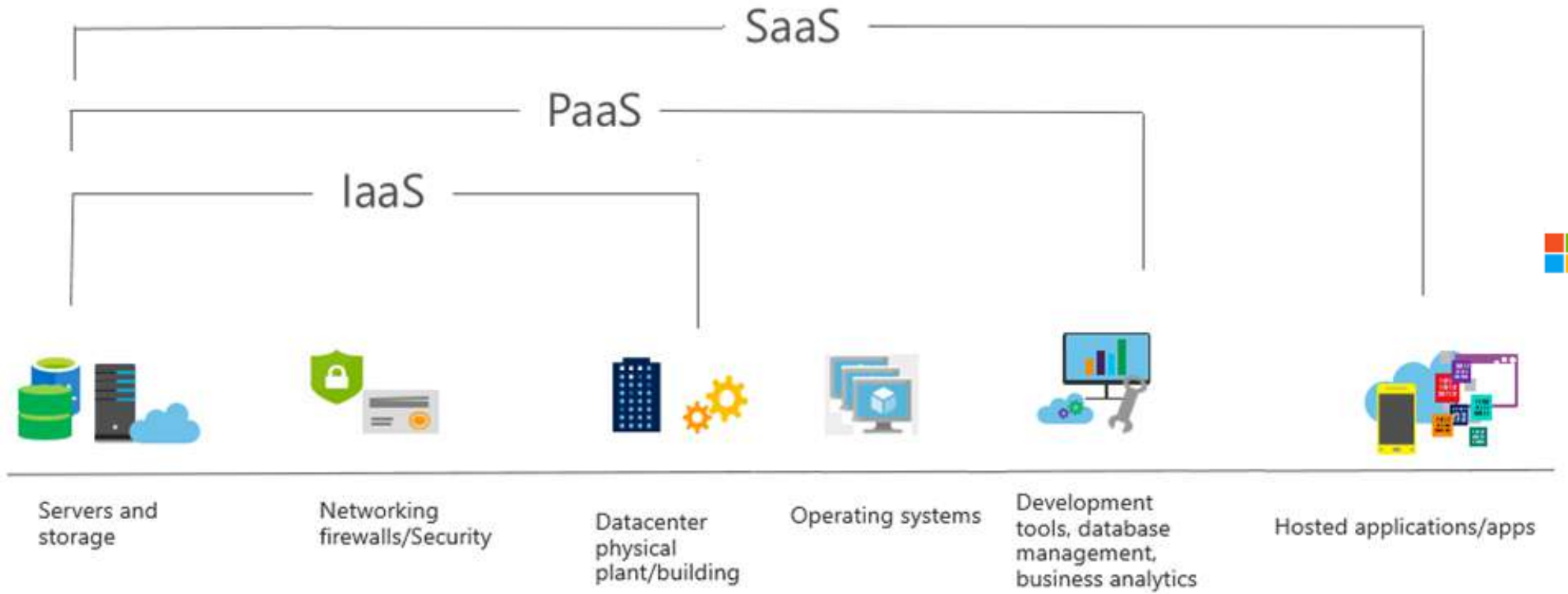
Users connect to and use cloud-based apps over the internet: for example, Microsoft Office 365, email, and calendars.



Microsoft

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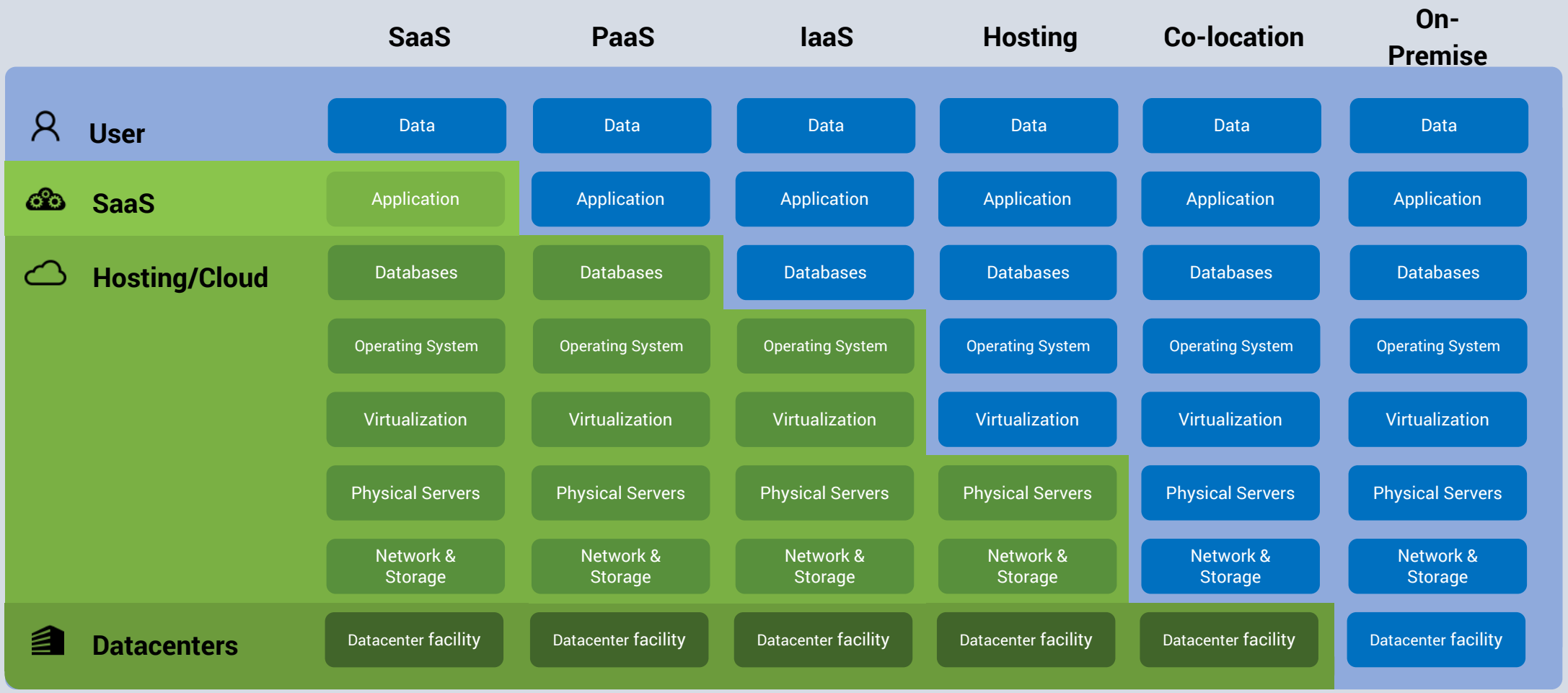
Digital responsibility model

Responsibility per layer of the digital infrastructure



Responsibility model digital infrastructure

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Datacenters: Complex Environments

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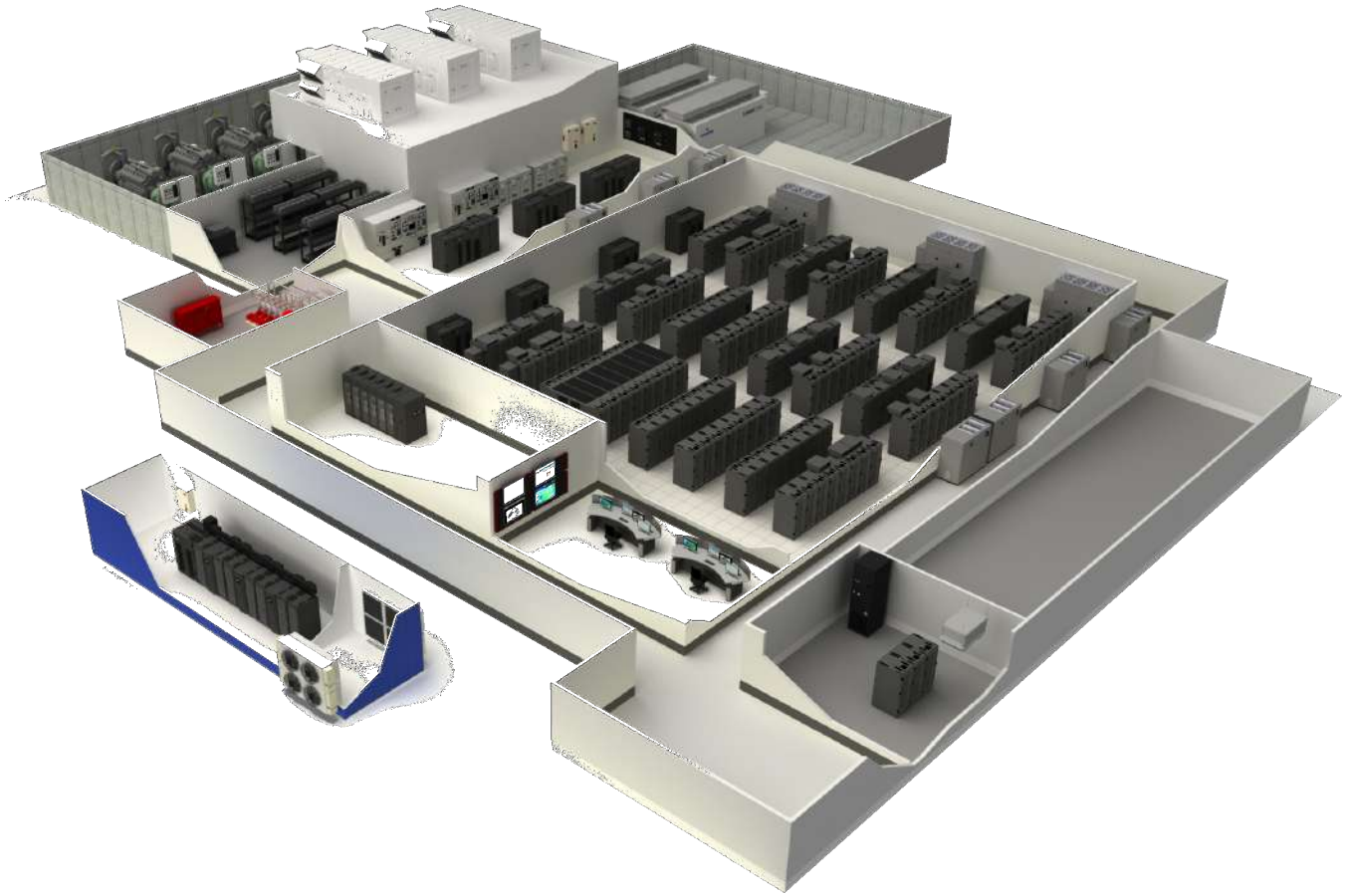

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Datacenters: Complex Environments

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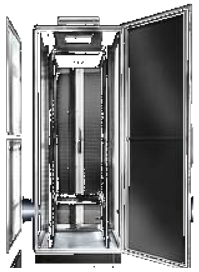

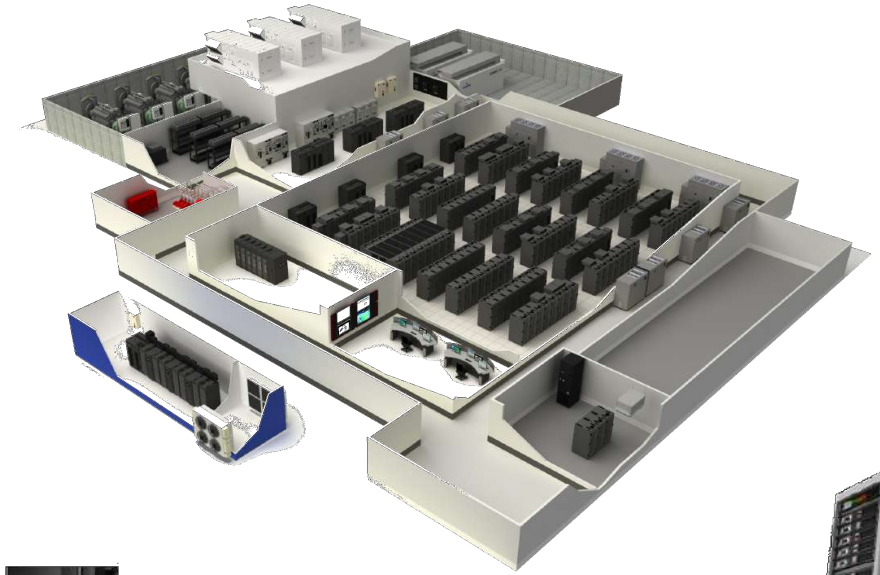

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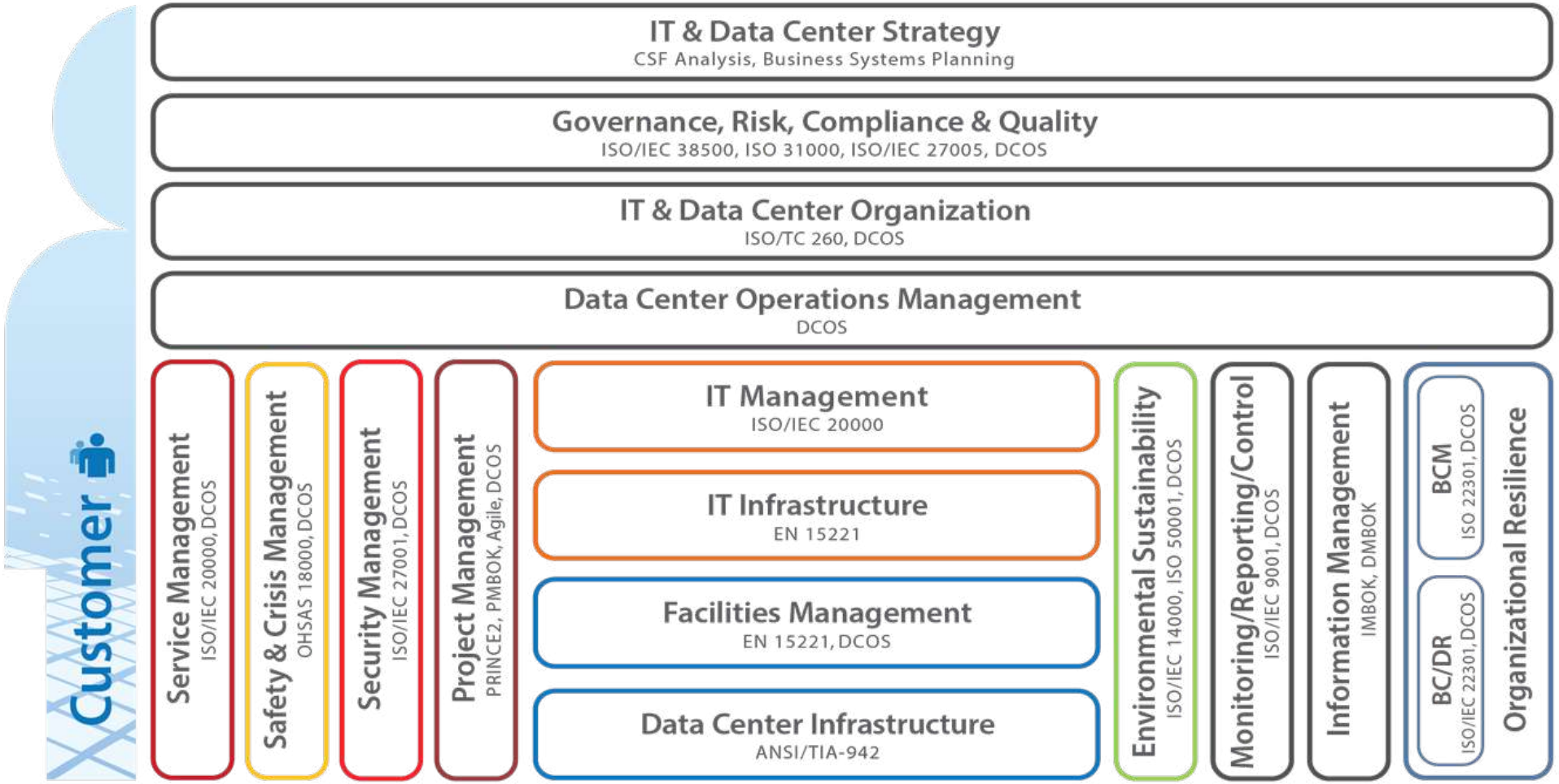

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Types of datacenters

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Hyperscale	Large	>50 MW - >5 hectares	Single tenant
International	Medium	>5 MW - >5000 M²	Colocation datacenters / Multi tenant
National	Medium	1-10 MW - >2000 M²	
Regional	Small Medium	0,5-10 MW - >200 M²	
On-Premise	Small	0,01–10 MW - >10 M²	Single tenant

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Hyperscale datacenter

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Colocation datacenter

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On-Premise datacenter

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Trends in datacenters

1. Moving into hyperscale datacenters
2. Smaller on premise datacenters
3. Environmental sustainability
4. Adoption of AI and machine learning
5. Shortage of skilled labour force

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Relative energy consumption

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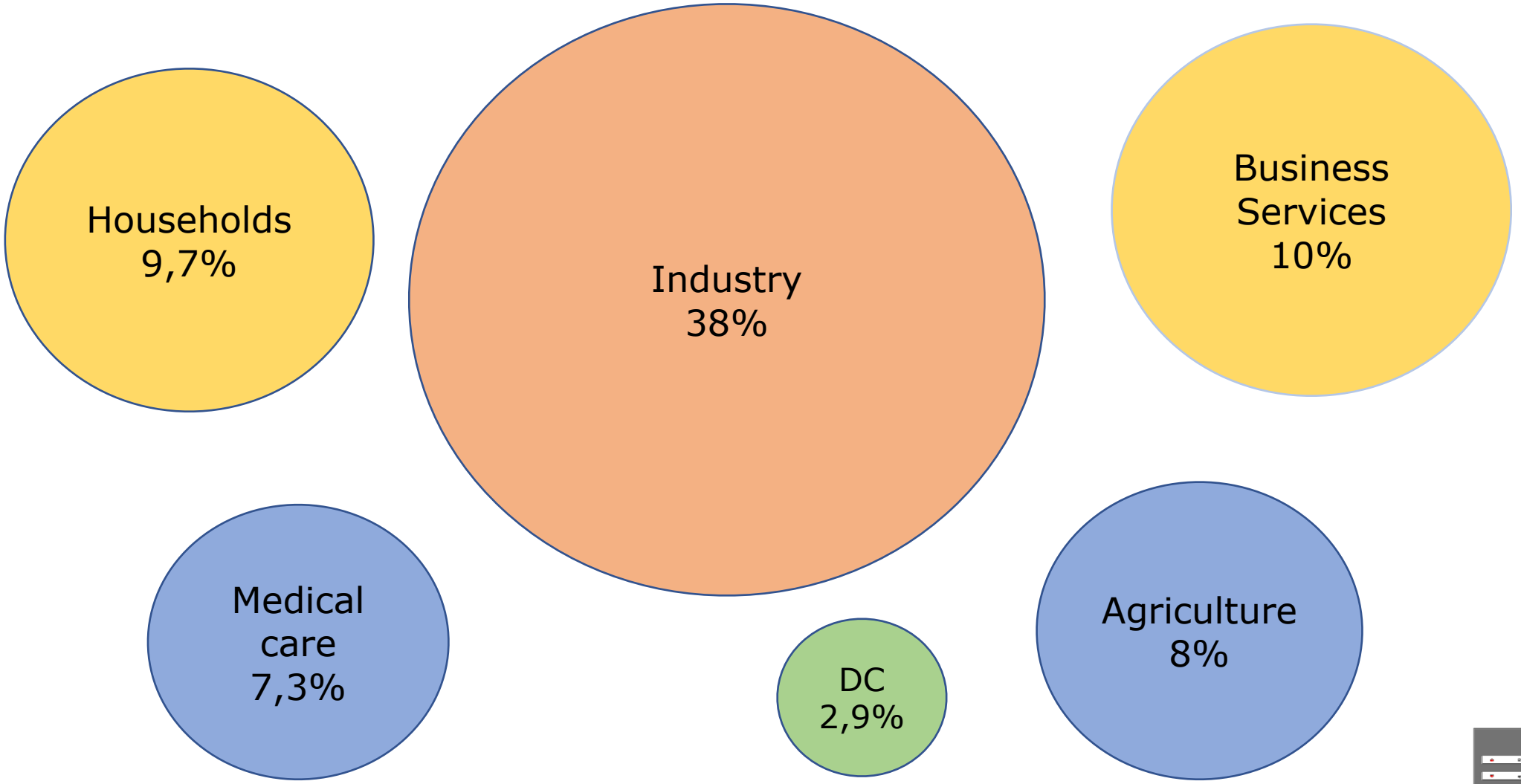

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Source: CBS 2021

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The Nordics

Why are the Nordics a good and sustainable place for datacenters?

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Nordics increasingly popular for datacenters

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Cool climate

Environmental sustainability

Political and economic stability

Connectivity

Skilled workforce

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Conclusions
Closing
Q&A

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Datacenters

1

Datacenters are the only **efficient** and **sustainable** way to facilitate all the computer power that we need for the **digital infrastructure** of society of tomorrow

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Nordics

The Nordics are an attractive region for datacenters because:

1. Cool climate
2. Sustainable energy
3. Political and economical stability
4. Connectivity
5. Skilled workforce

2

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Nordics: Stay ahead!

- Technological developments are only increasing in speed
- The Nordics are leading the way in the digital field
- It is important for the Nordics to maintain and build on this position in order to provide maximum support to the sustainable digital society

3

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Would you like to know about datacenters?

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Hottest selling course

(2-day course)

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What is CDCP?

- 2-Day course exposing candidates to all the **fundamental knowledge related to design, build and optimize data centres**
- Course address Standards and all the technical matters
- Explains **design requirements** as well as various **technologies**
- A lot of practical experience from experts in the data centre industry
- Exam; 1 hour, 40 questions, closed book, 27 correct to pass
- **Prerequisite: None**

CDCP®
Certified Data Centre Professional

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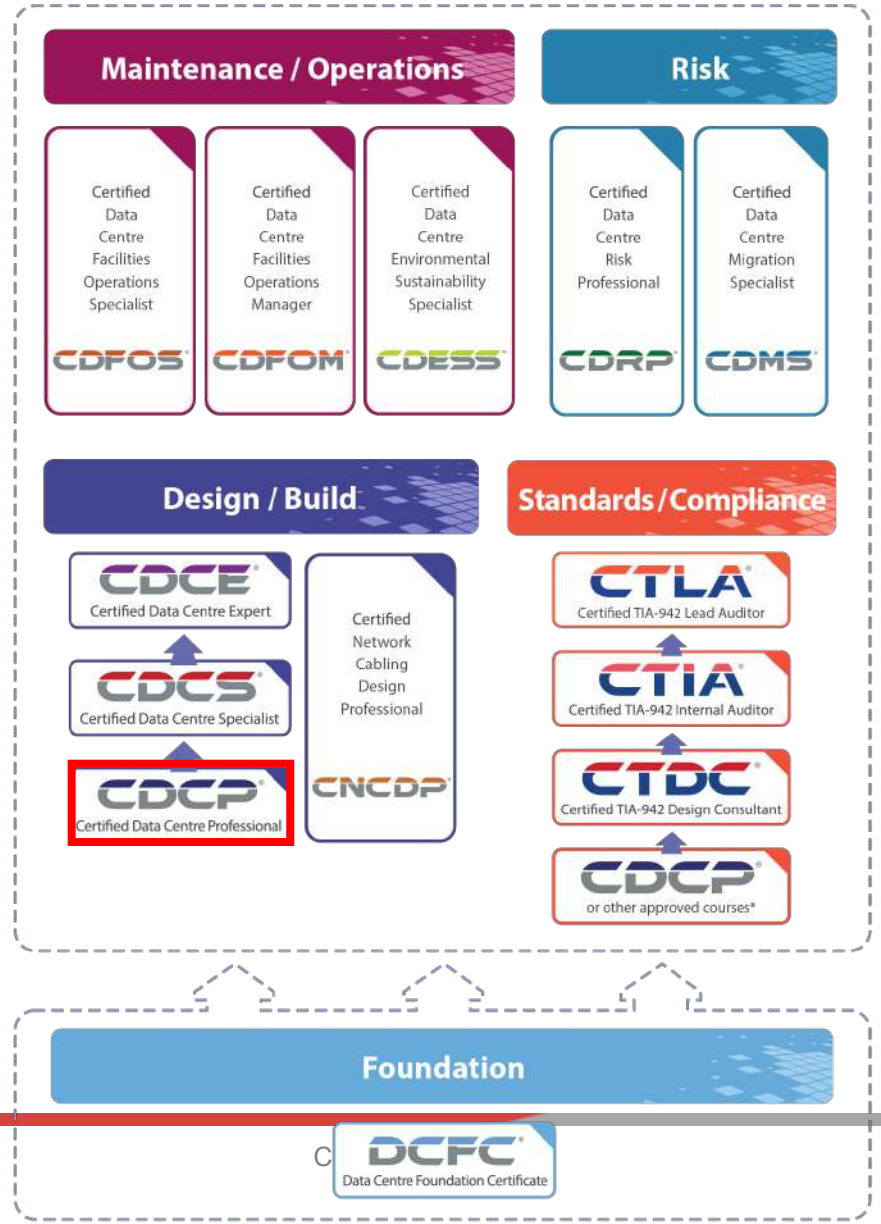
EPI Data Centre Training Framework©



Thank You!

Bastiaan Janssen

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bastiaan@epi-ap.com

Questions?