



Welcome to the presentation:
“The cloud is not in the sky”

Starting soon....





The Cloud is not in the sky
The importance of the
digital infrastructure
for OUR society

Presented by:

Bastiaan Janssen

Managing Partner, EPI Europe

Why this presentation?

Our digital infrastructure drives
innovation and enables sustainability!



Agenda

EPI – The cloud is not in the sky

About EPI

Bastiaan Janssen
Managing Partner
EPI Europe

The digital society
Can we live without IT?

Datacenters: Complex Environments

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

Conclusions
Closing
Q&A





Bastiaan Janssen
Managing Partner
EPI Europe

About EPI



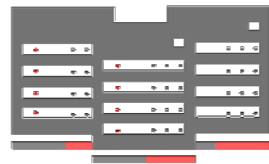
About EPI



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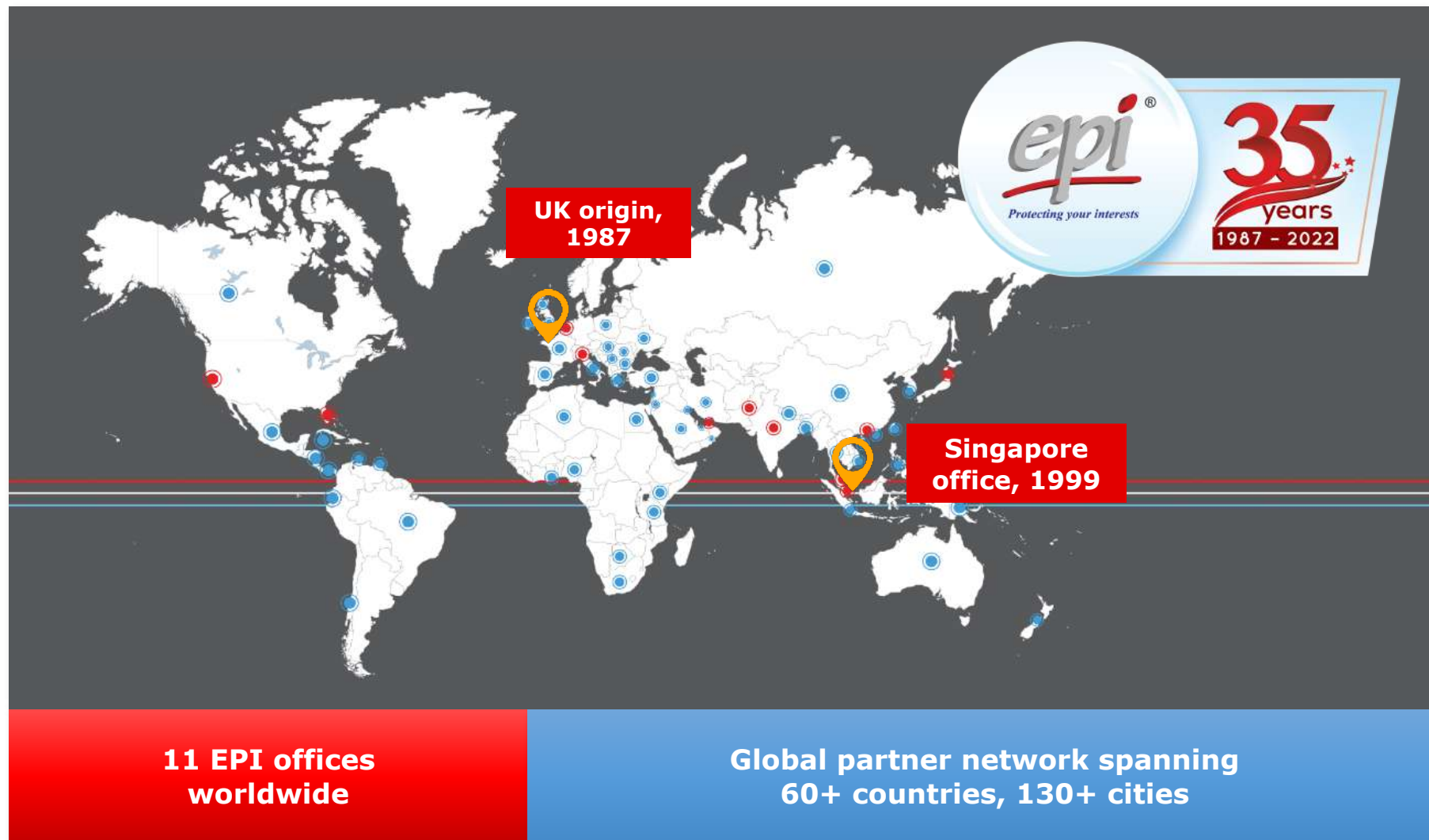
Bastiaan Janssen
Managing Partner
EPI Europe





History & Global Locations

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Data Center Expert

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Design &
Validation



Audit &
Certification



Training &
Certification



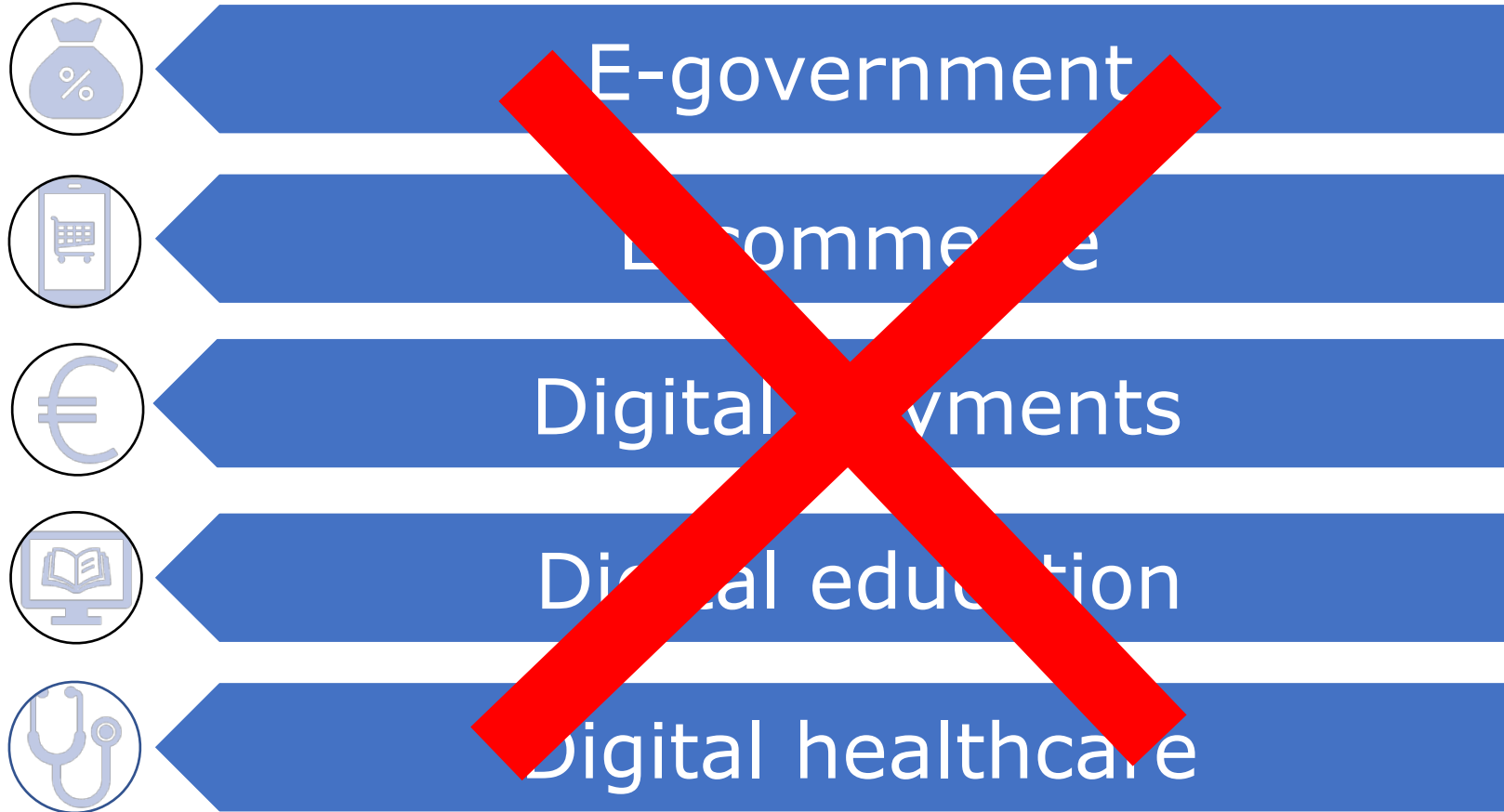
The digital society

Can we live without IT?



Society of today: always online (?)

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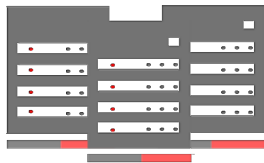
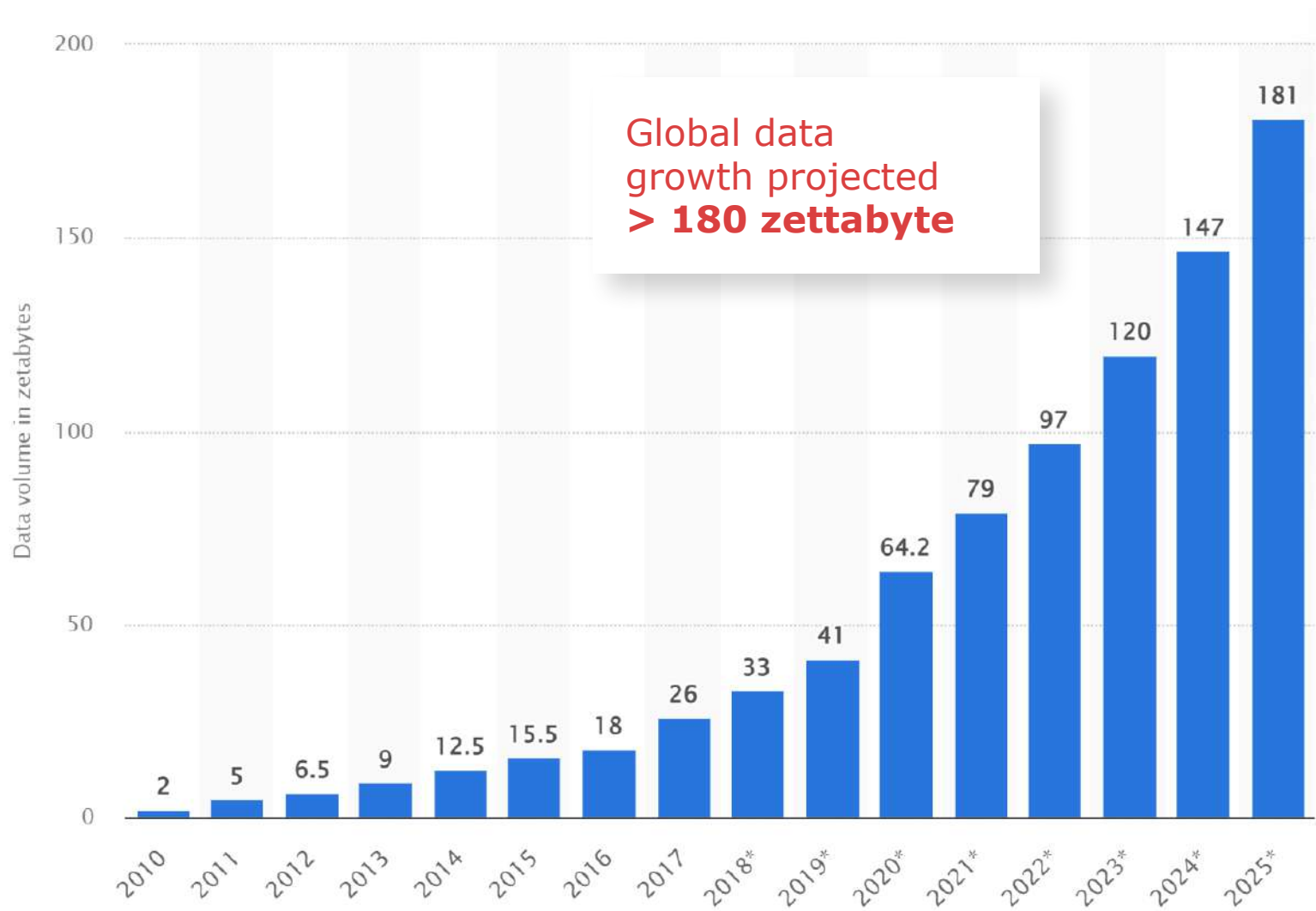
Thesis

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



Exponential Data Growth

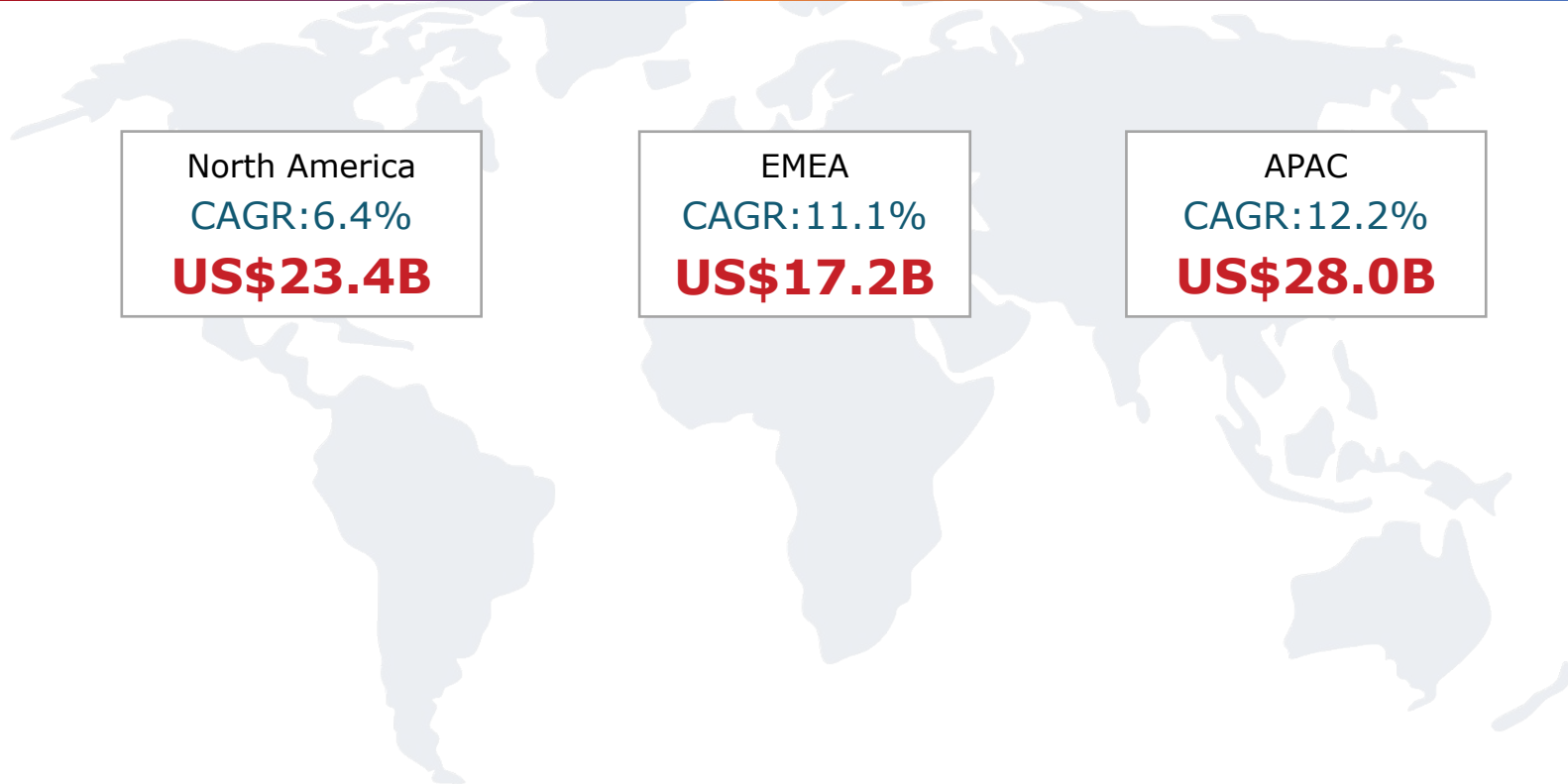
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The Data Centre Market

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





Denmark Colocation & Hyperscale Facts (1 May 2023)

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41
Facilities
Colocation

55 MW
IT Power available
Colocation

184 MW
IT Power under
construction/
planned
Colocation

320 MW
IT Power available
Hyperscale

22
Operators
Colocation

40.200 m²
White Space
Colocation

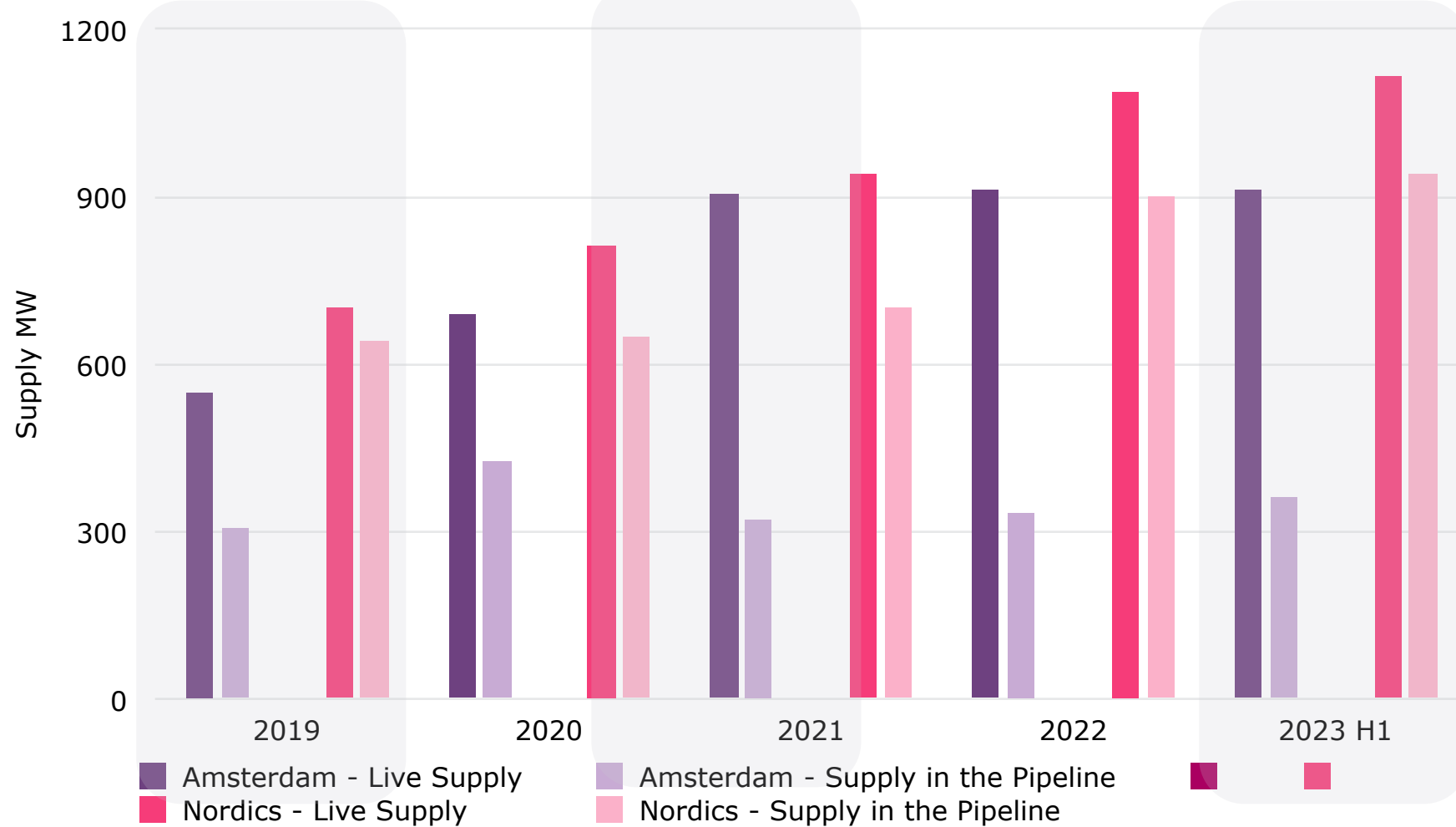
375 GWh
Residual heat
potential
Colocation

2540 GWh
Residual heat
potential
Hyperscale



Built Capacity Vs Supply in the Pipeline

Amsterdam comparison to Nordics



*Supply in the Pipeline Includes Under Construction and Committed capacity across self-built and colocation facilities.

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TIP: DC Byte presentation

15:15 - 15:45

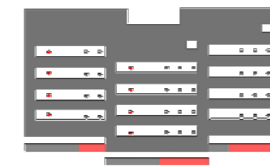


HALL 2

Jovita Januskeviciute, DC Byte, EMEA Research Manager

From Dublin to Denmark

For decades, Ireland has been trying to attract foreign direct investment into the country by offering a stable political climate and favorable tax schemes, which also influenced data center market development sooner than in the rest of Europe. To date, Dublin has emerged as one of the largest markets in Europe, with most of the market IT capacity coming from self-build hyperscale developments – just like Denmark. The presentation will explore the case study of the Irish data center market, compare the Danish and the Nordic data center markets' development, and the opportunities to be gleaned as well as the lessons to be learned from the Irish market.

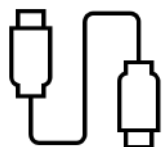


The Engine For Innovation And Growth

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

The digital infrastructure is:

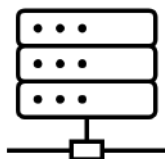
Sea cables
& Fiber



Telecom



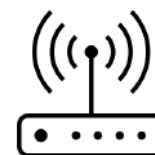
Datacenters



Hosting &
cloud providers



Internet
connections

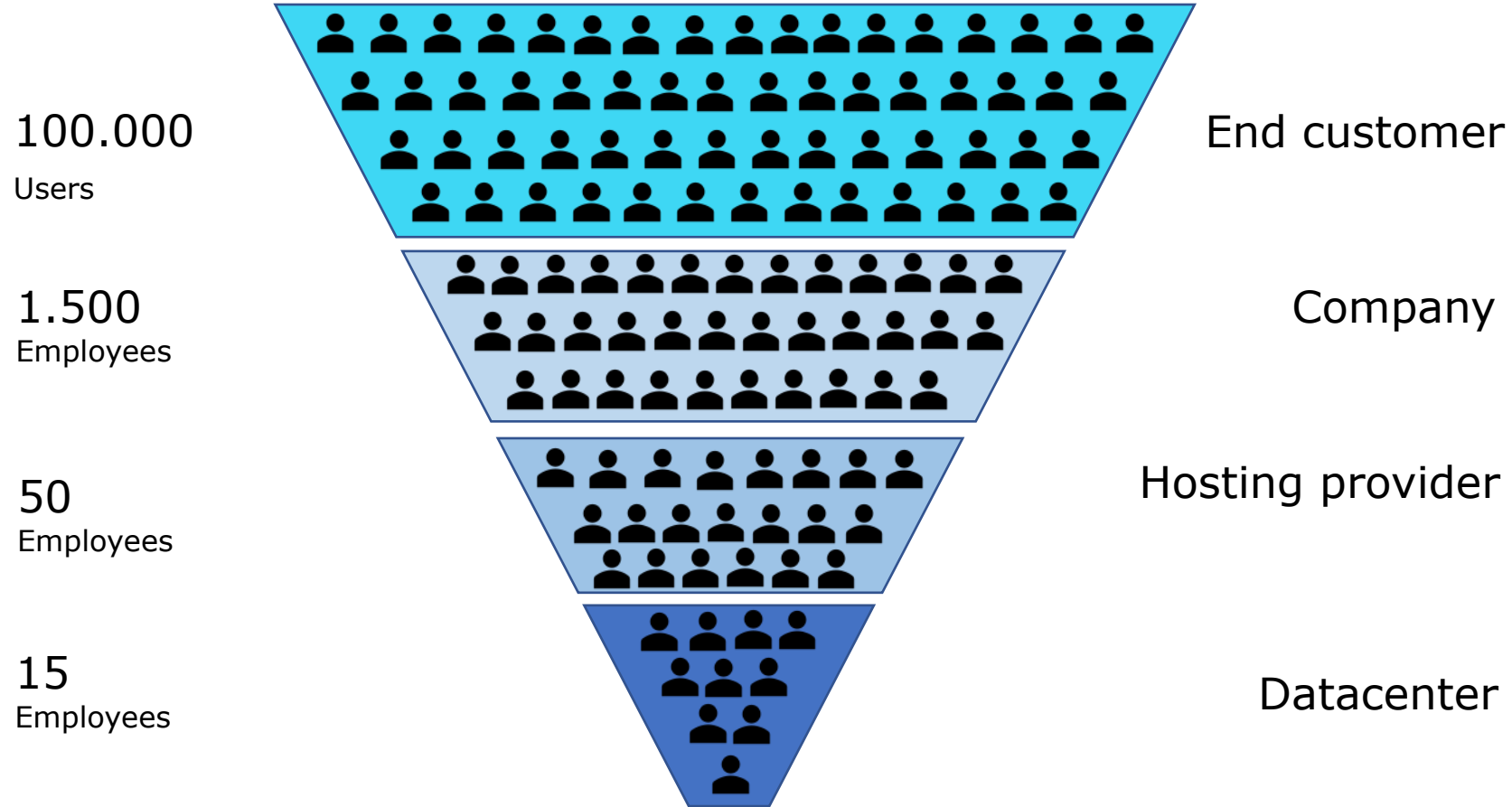


Devices



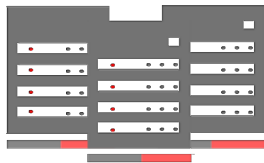
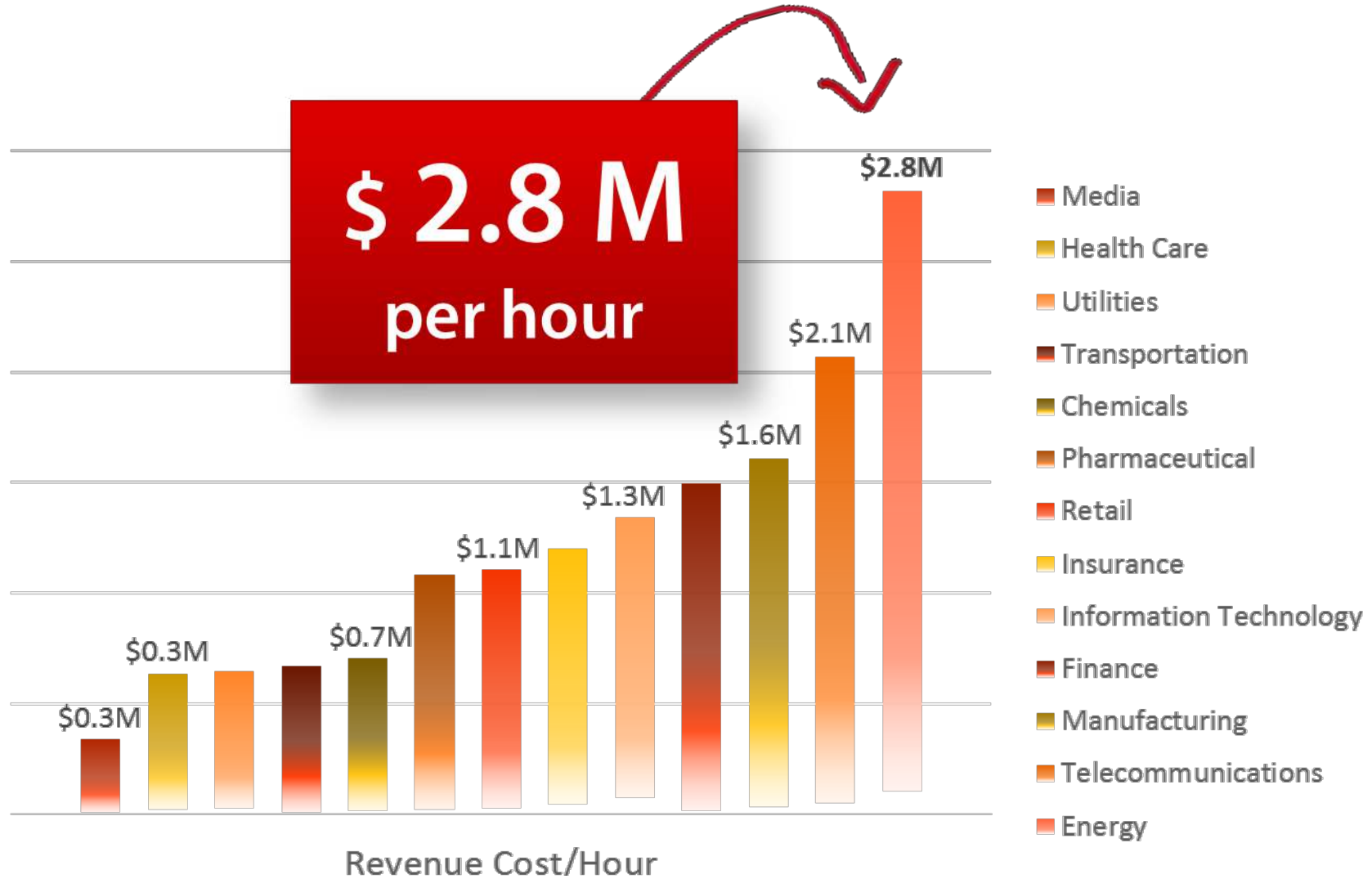
Digital infrastructure

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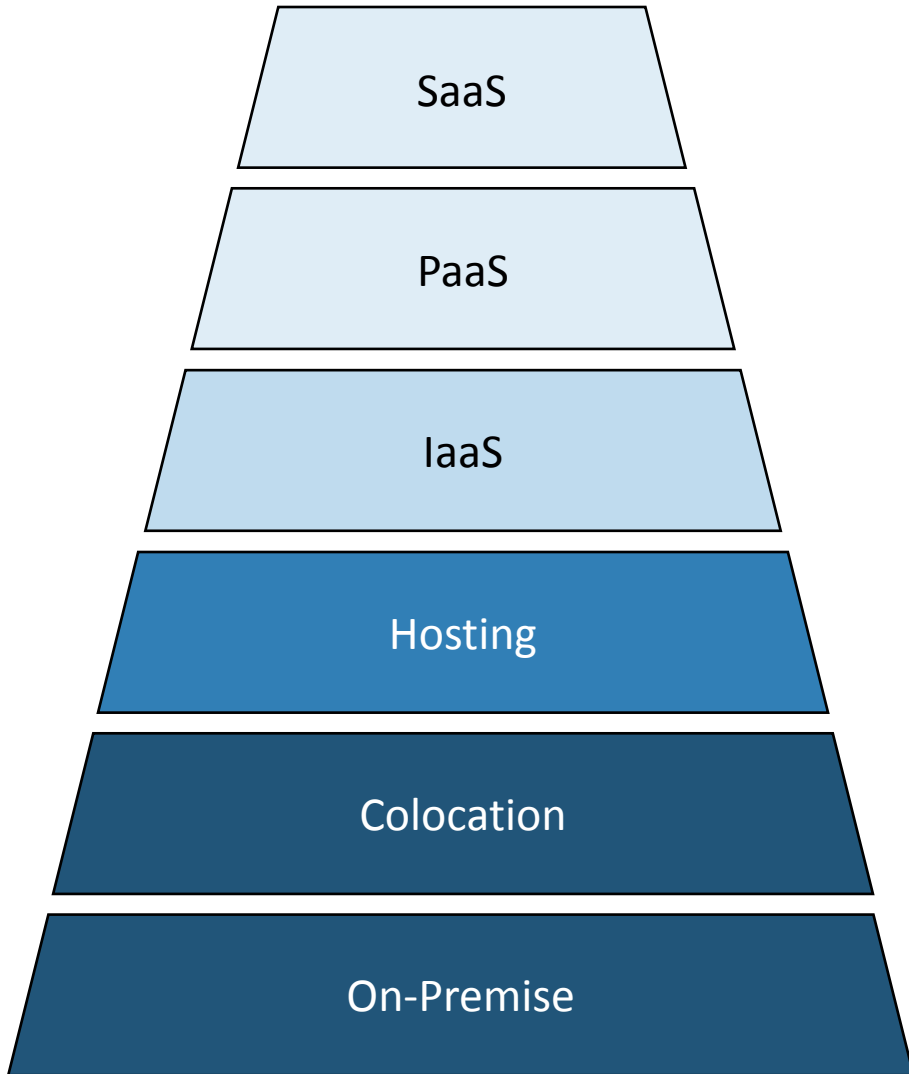
Downtime: Disruptive & Costly

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Explanation of some cloud definitions...

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Software 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

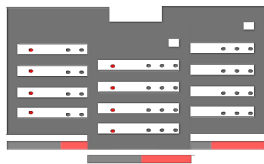
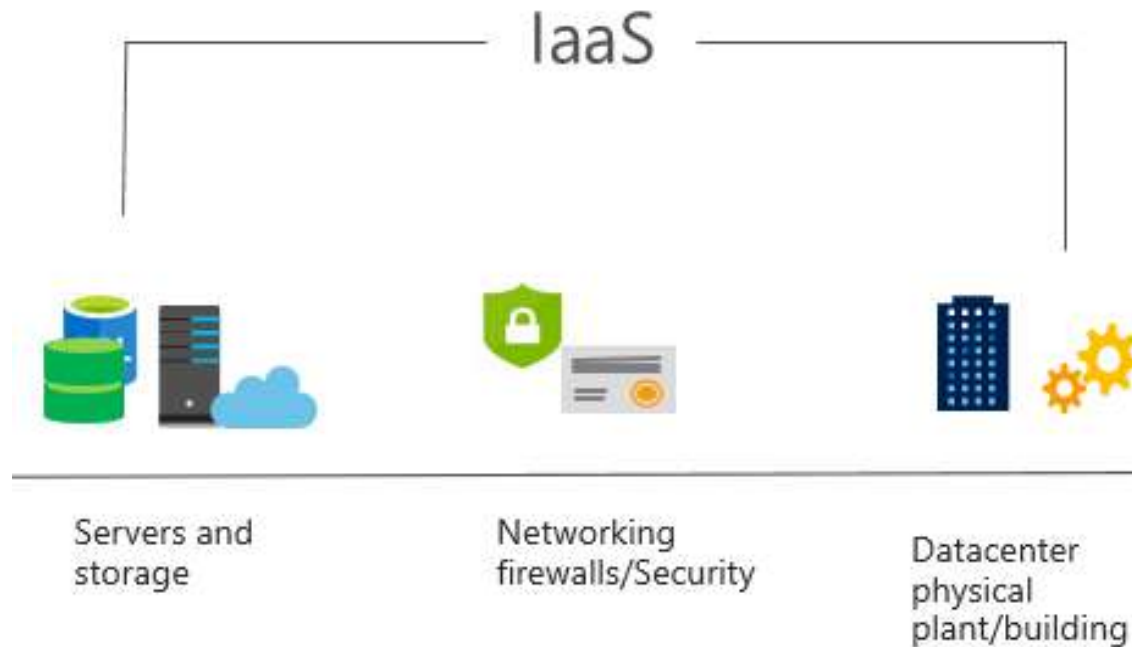
Colocation
Commercial datacenter

On Premise
Enterprise datacenter



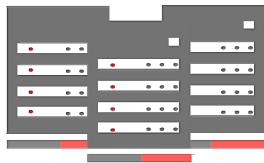
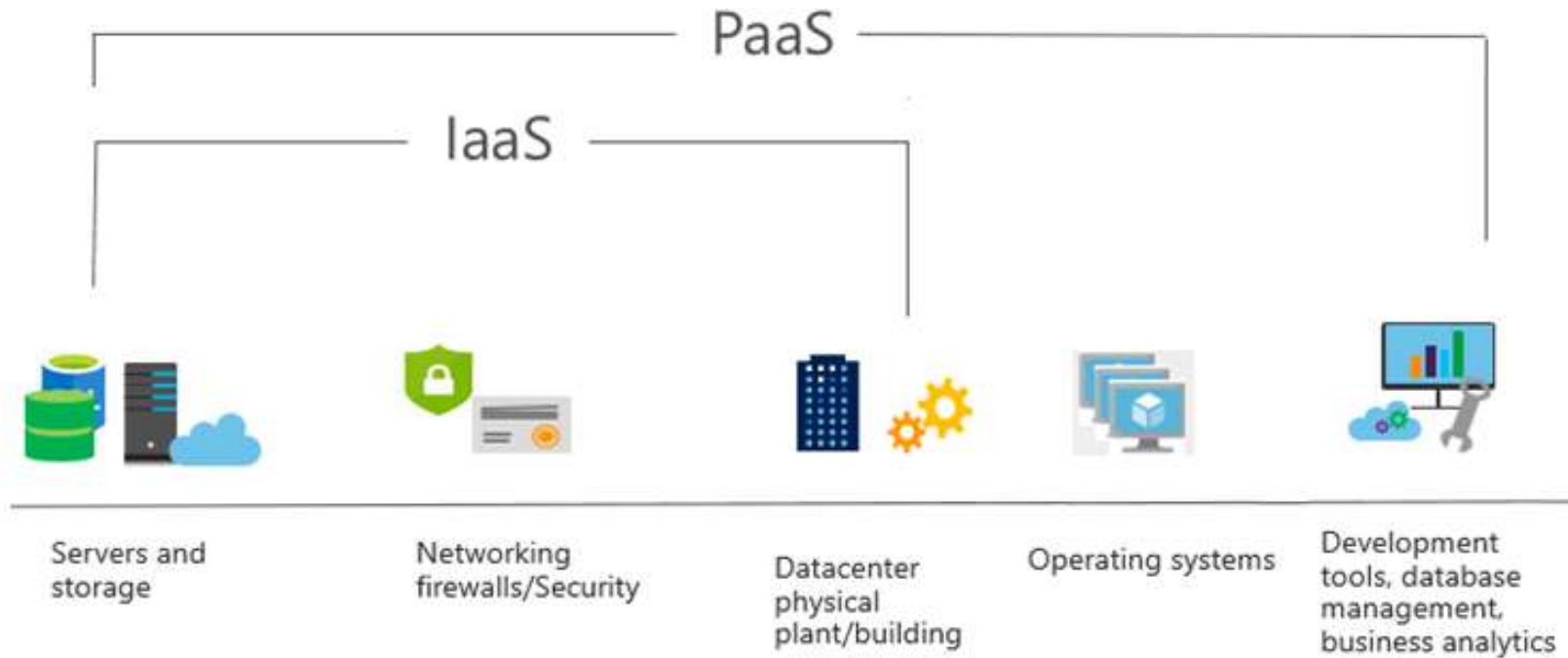
Infrastructure as a Service (IaaS)

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



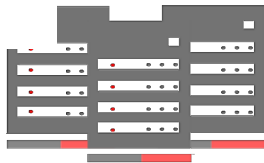
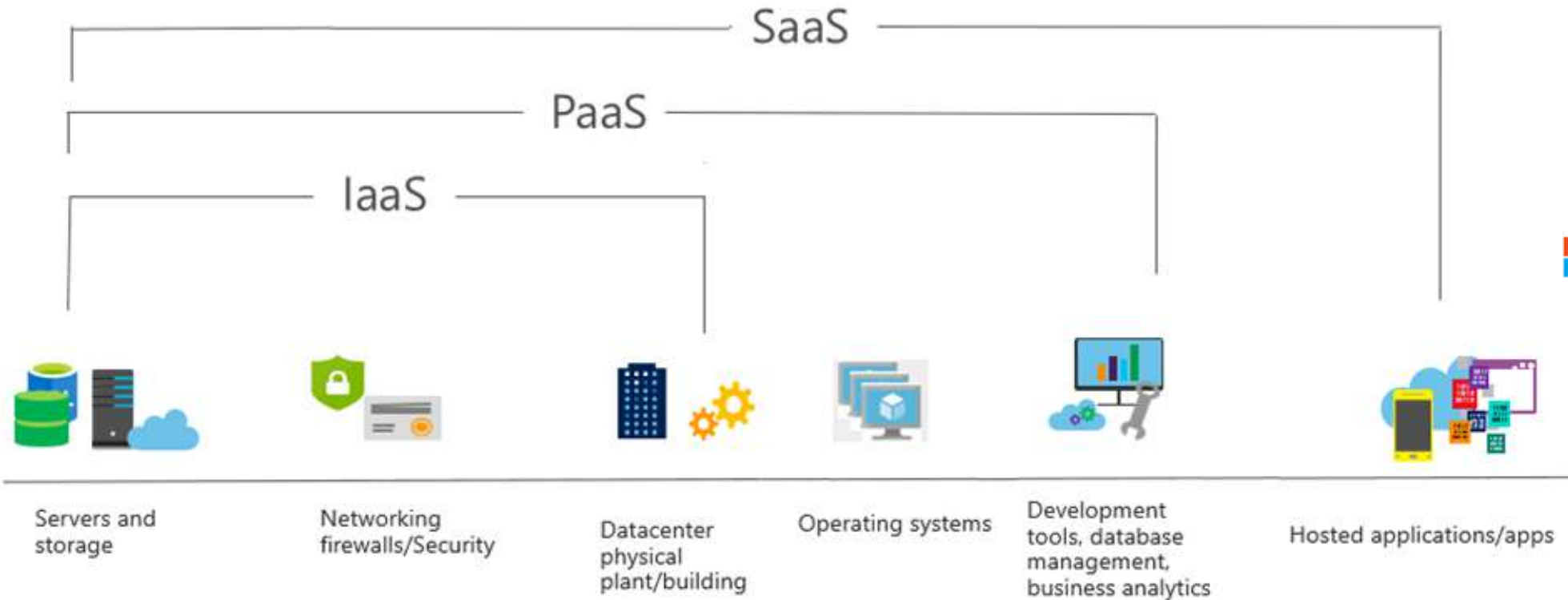
Platform as a Service (PaaS)

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



Software as a Service (SaaS)

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



Digital responsibility model

Responsibility per layer of the digital infrastructure.

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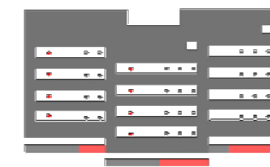
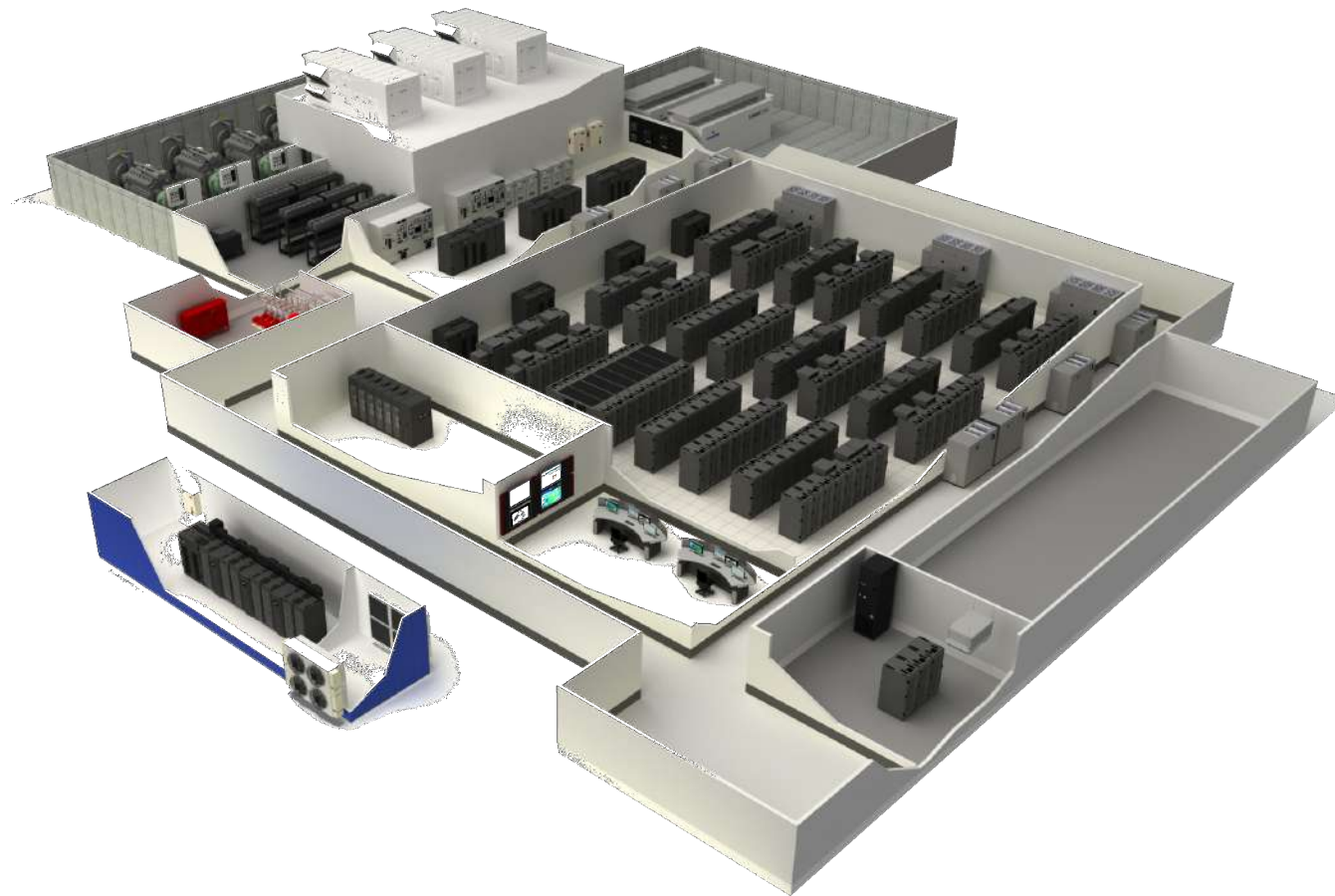
| | SaaS | PaaS | IaaS | Hosting | Co-location | On-Premise |
|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| User | Data | Data | Data | Data | Data | Data |
| SaaS | Application | Application | Application | Application | Application | Application |
| Hosting/Cloud | Databases | Databases | Databases | Databases | Databases | Databases |
| | Operating System | Operating System | Operating System | Operating System | Operating System | Operating System |
| | Virtualization | Virtualization | Virtualization | Virtualization | Virtualization | Virtualization |
| | Physical Servers | Physical Servers | Physical Servers | Physical Servers | Physical Servers | Physical Servers |
| | Network & Storage | Network & Storage | Network & Storage | Network & Storage | Network & Storage | Network & Storage |
| Datacenters | Datacenter facility | Datacenter facility | Datacenter facility | Datacenter facility | Datacenter facility | Datacenter facility |

Responsibility model digital infrastructure

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Datacenters: Complex Environments

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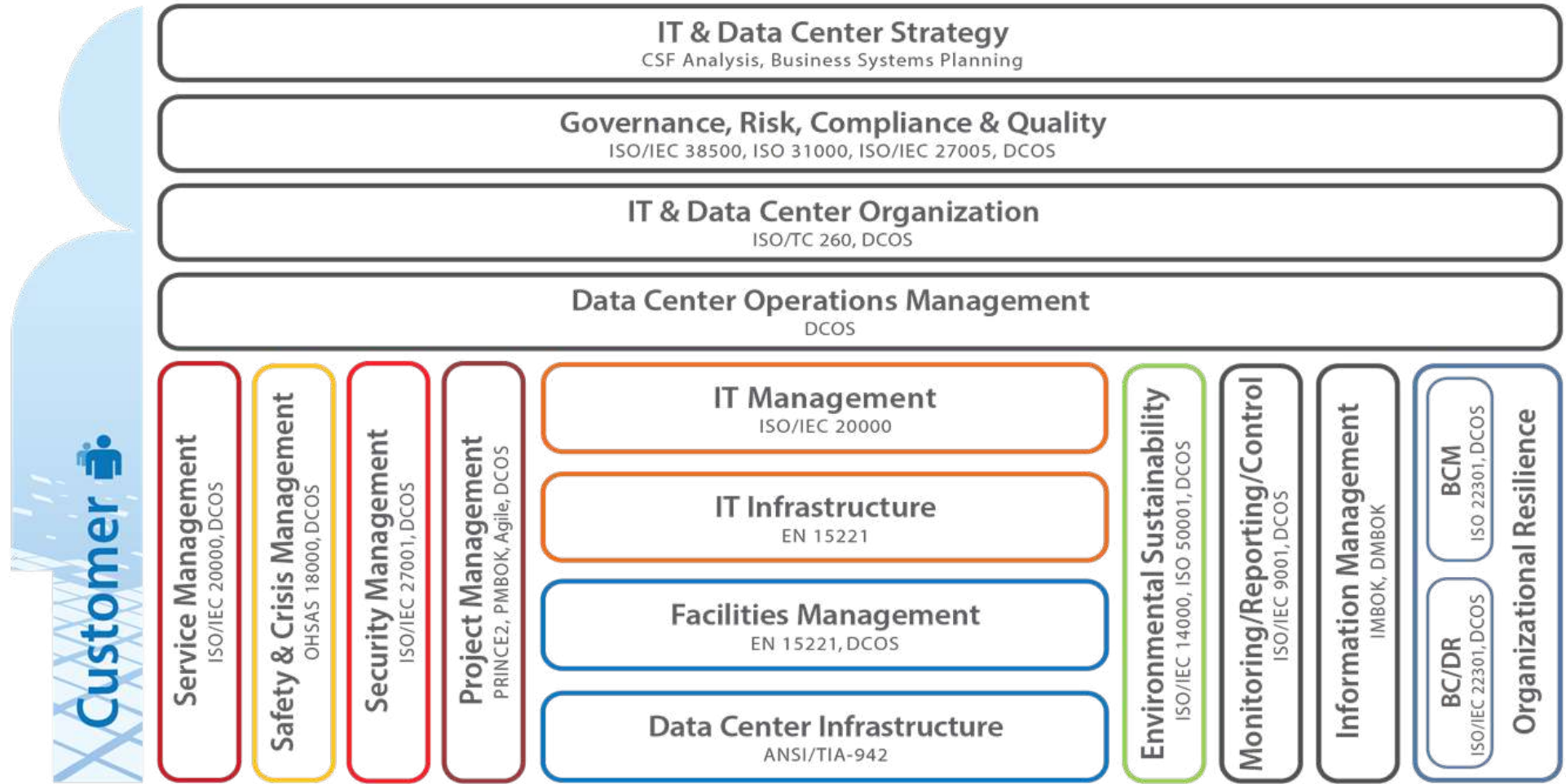
Datacenters: Complex Environments

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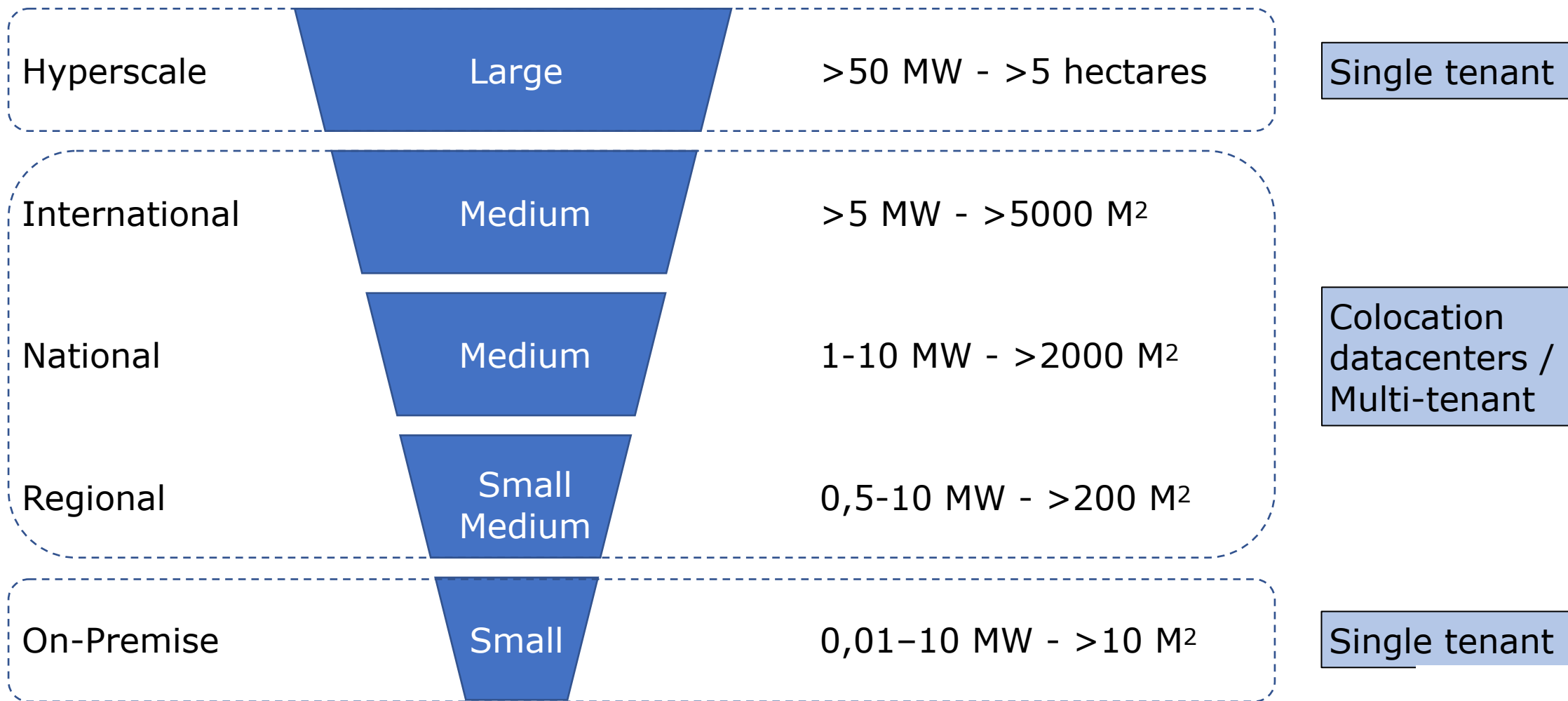


EPI - IT & Data Center Framework[©]



Types of datacenters

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Hyperscale datacenter

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Colocation datacenter

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On-Premise datacenter

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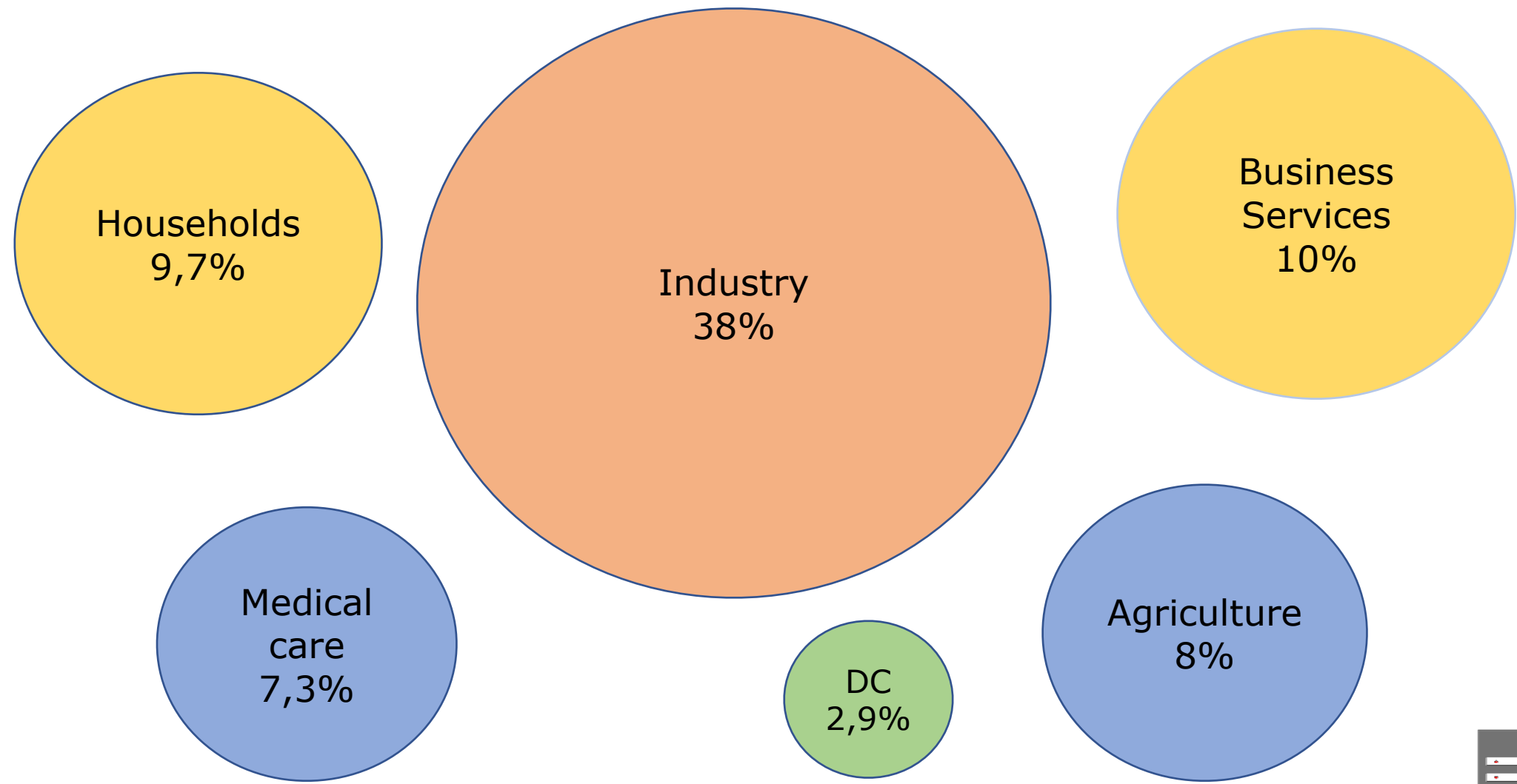
Trends in datacenters

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



Relative energy consumption

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The Nordics

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



Nordics increasingly popular for datacenters

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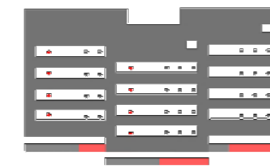
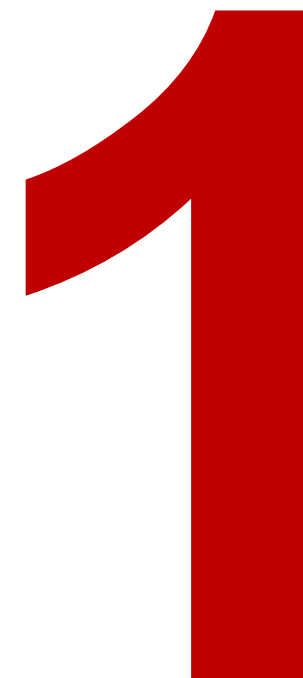
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Conclusions Closing Q&A



Datacenters

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



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



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



Would you like to know about datacenters?

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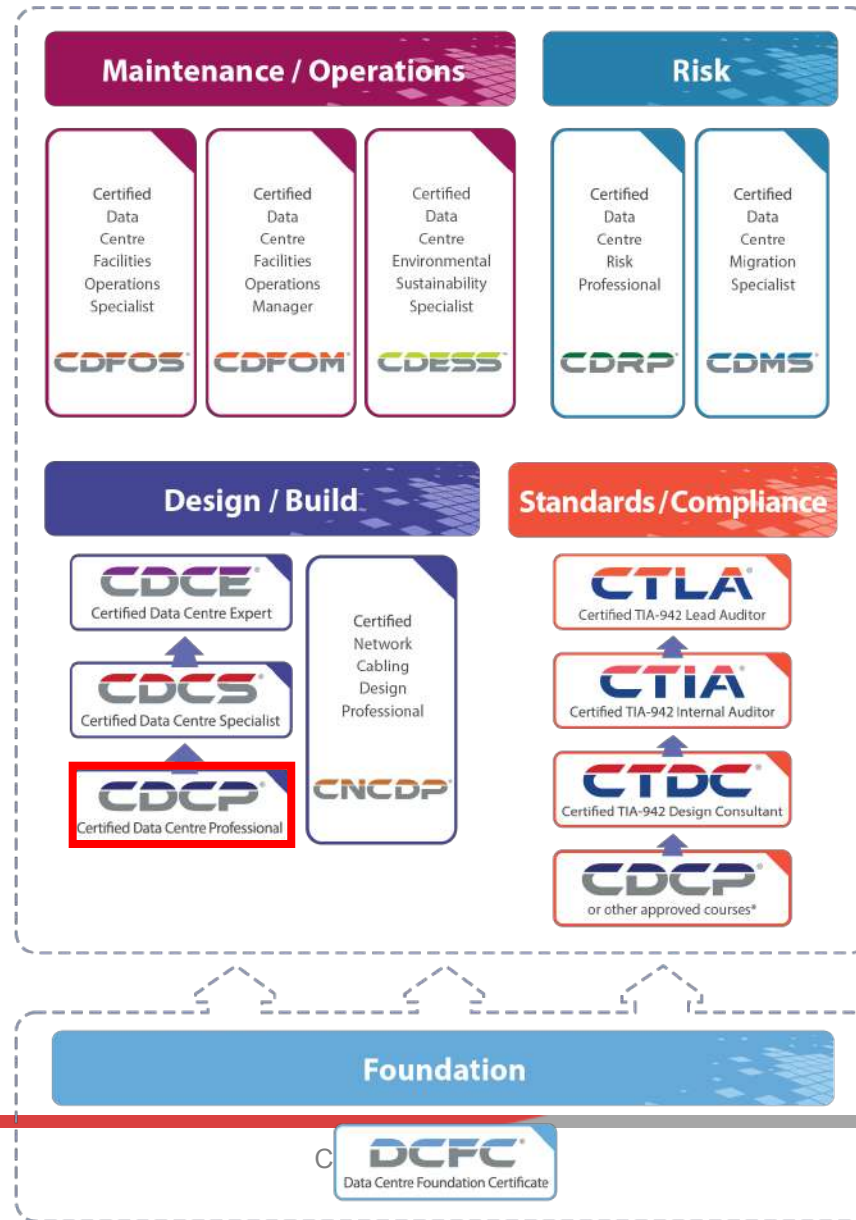
What is CDCP?

- 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**





EPI Data Centre Training Framework®



Course Delivery – 3 options

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ILT

Instructor Led
Training



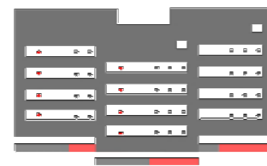
VILT

Virtual
Instructor Led
Training



TOD

Training On Demand





Jovita Januskeviciute

EMEA Research Manager
DC BYTE



"CDCP training is a must for everyone that works in the data center industry.

The course is very informative, providing key information on multiple subjects through a number of video recordings, presentation slides and notes provided to the student which will well accommodate all types of learners.

I would definitely recommend others to take this course"



CDCP[®]



EPI Training partners in Denmark

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Thank You!



Bastiaan Janssen



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Questions?

