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ERICSSON x SENDATE

Elena Fersman
Head of Research Area Machine Intelligence
Ericsson Research

- **Elena Fersman**

- Head of Research Area Machine Intelligence, Ericsson Research
- Adjunct Professor in Cyber-Physical Systems specialized in Automation, Royal Institute of Technology, Sweden

- **Ericsson**

- Mobile Infrastructure, OSS/BSS, Managed Services
- 180 countries
- 105000 employees
- 42000 patents
- 40% of mobile traffic runs through networks built by us
- 1 bn subscribers on networks managed by us
- 2G, 3G, 4G and 5G were invented at Ericsson Research



SENSORS
EVERYWHERE



BROADBAND AND MEDIA
EVERYWHERE



SMART VEHICLES,
TRANSPORT



INFRASTRUCTURE, MONITOR
AND CONTROL



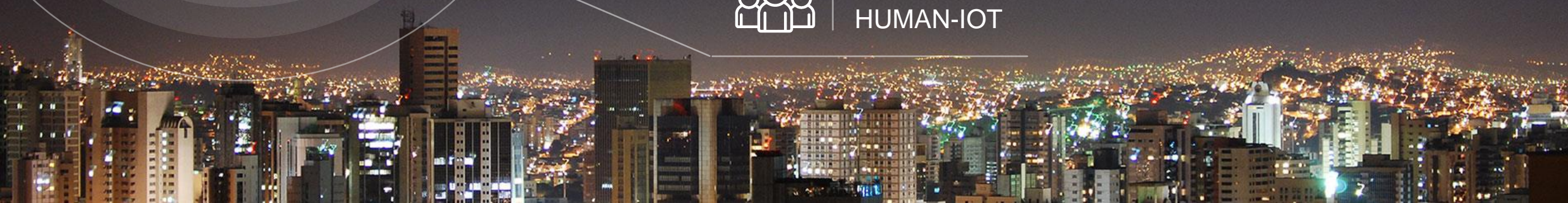
CRITICAL CONTROL
OF REMOTE DEVICES



INTERACTION
HUMAN-IOT

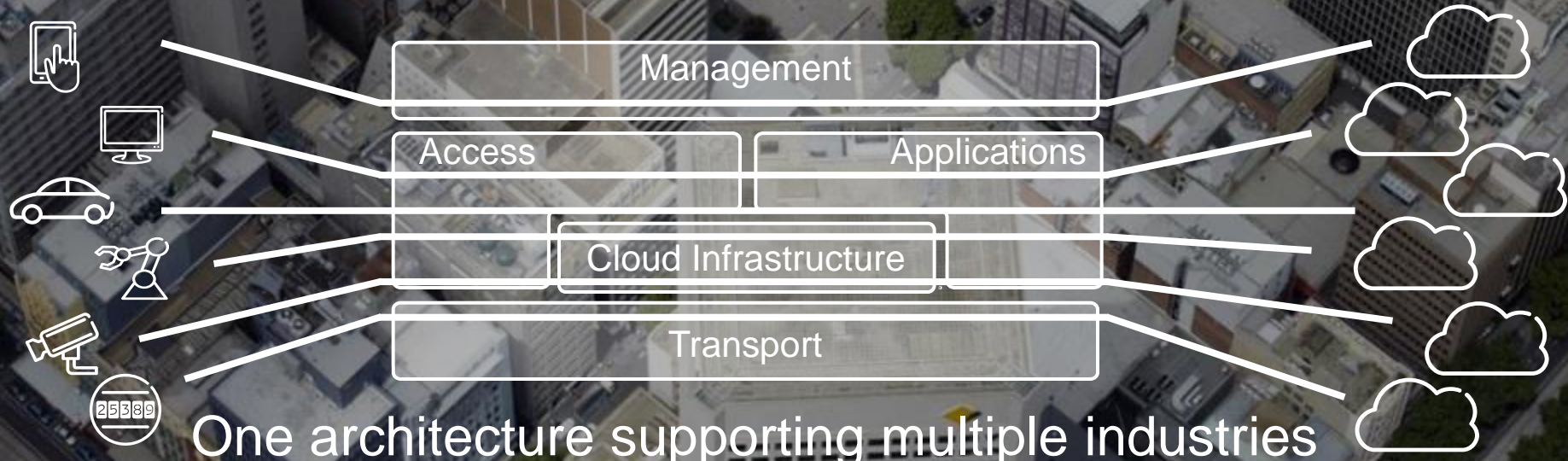
5g

USE CASES



What is 5G – what will it bring

A Network for the Networked Society



Research Areas & Programs



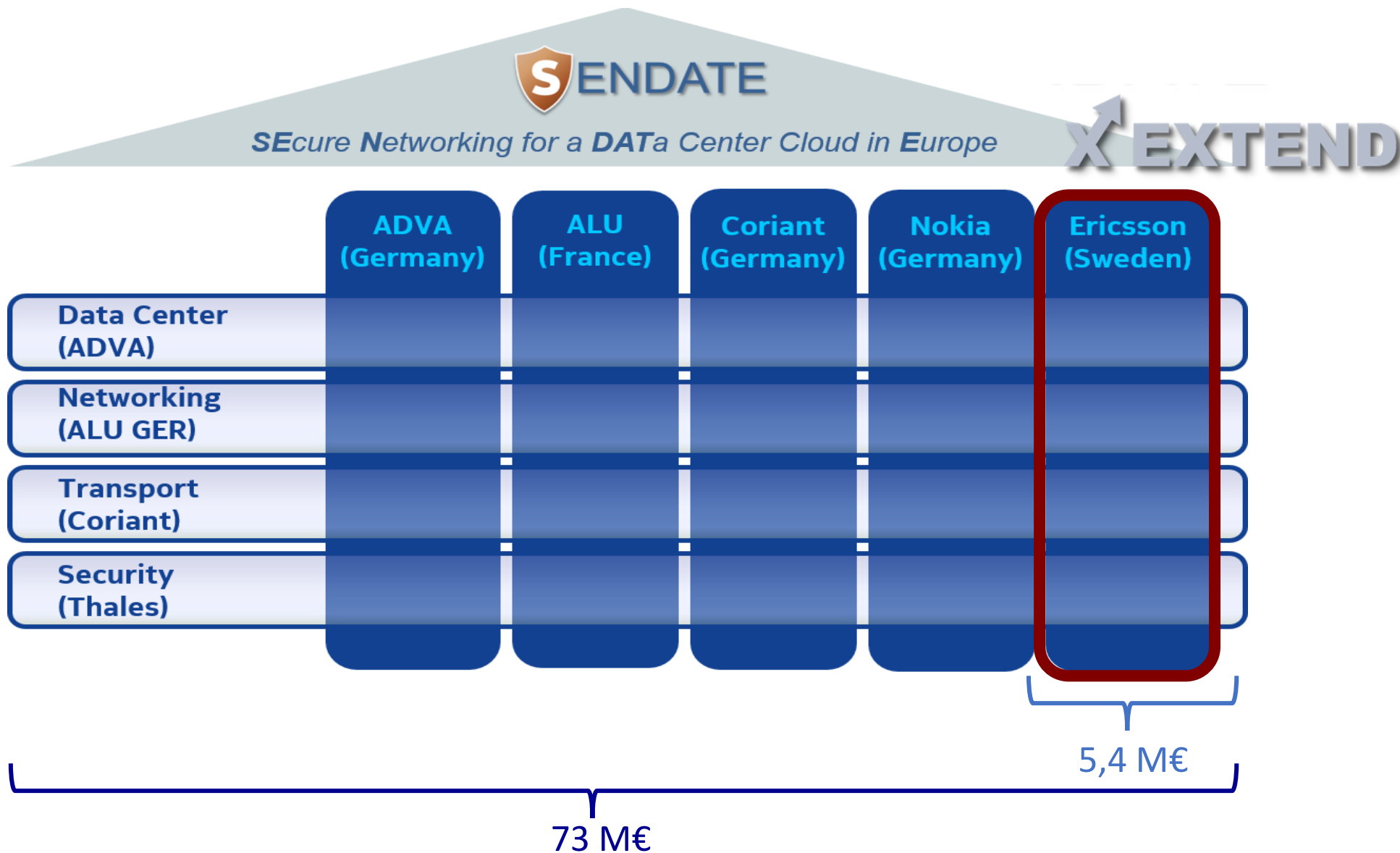
 <p>Radio</p>	 <p>Network Architecture and Protocols</p>
 <p>Digital Representation and Interaction</p>	 <p>Cloud System Software Technologies</p>
 <p>Hardware, Device and EMF</p>	 <p>Security</p>
 <p>Machine Intelligence and Automation</p>	 <p>Consumer and Industry Lab</p>

Research Areas



Programs

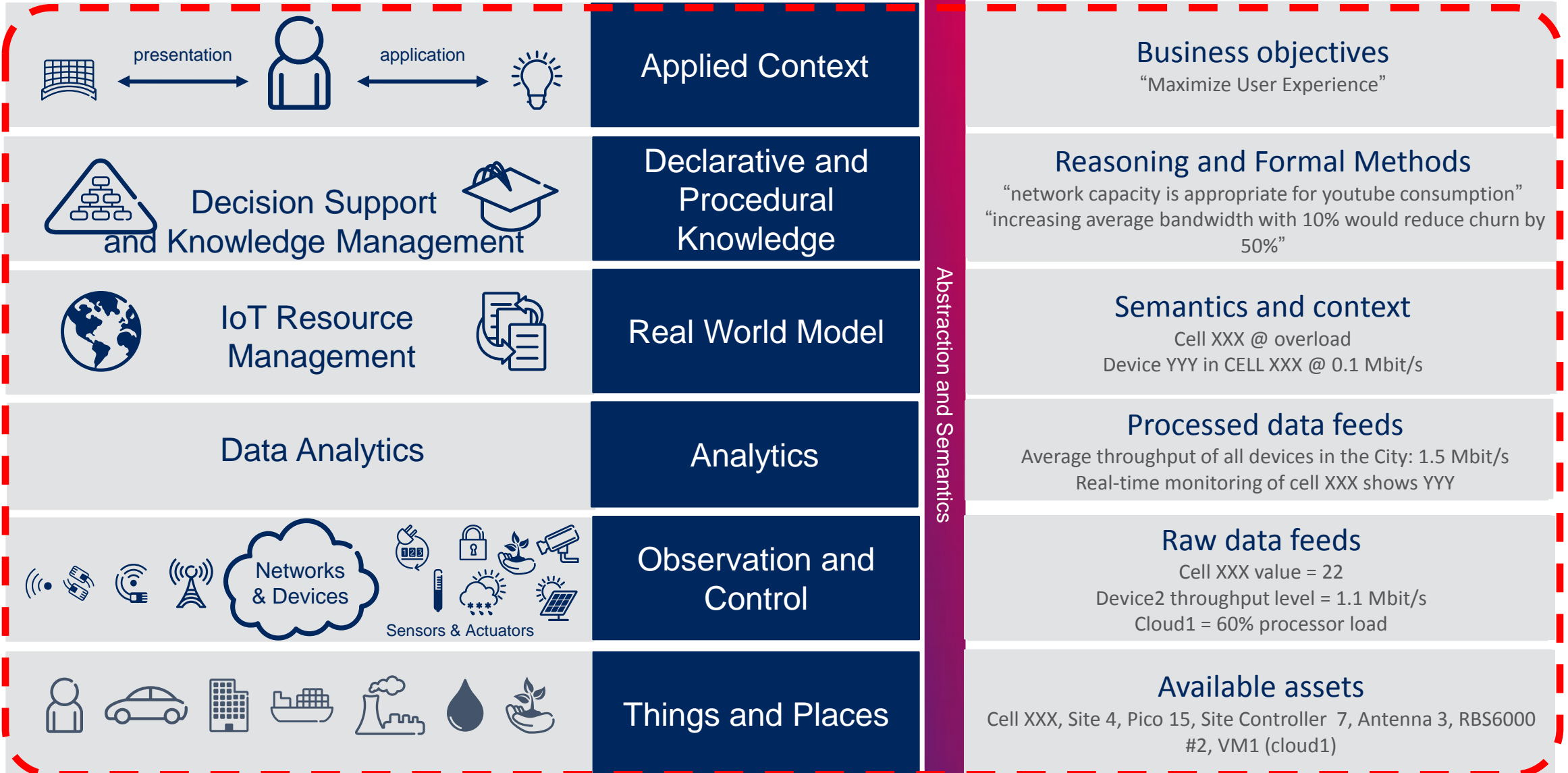
SENDATE



Management and Operations of A COMPLEX SYSTEM

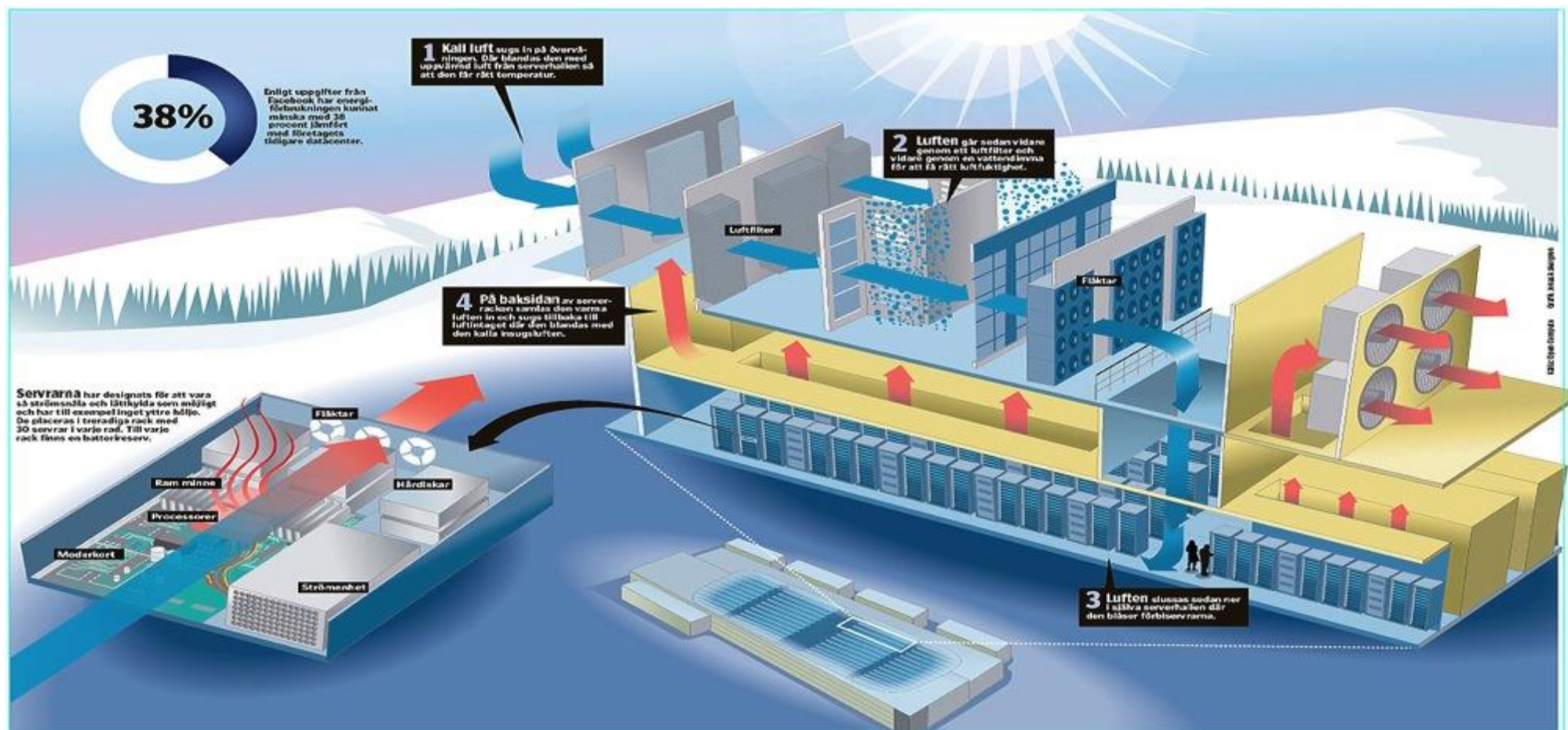
Technologies and Components

Examples of the data



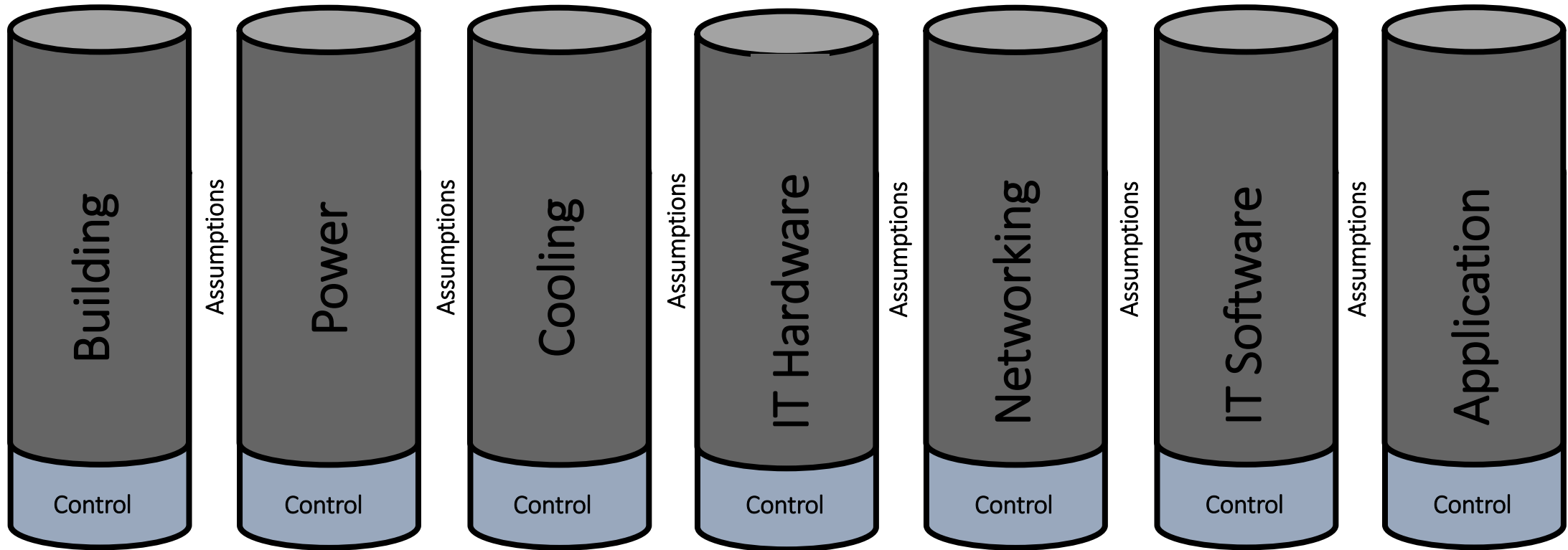
Abstraction and Semantics

Mega datacenter complexity

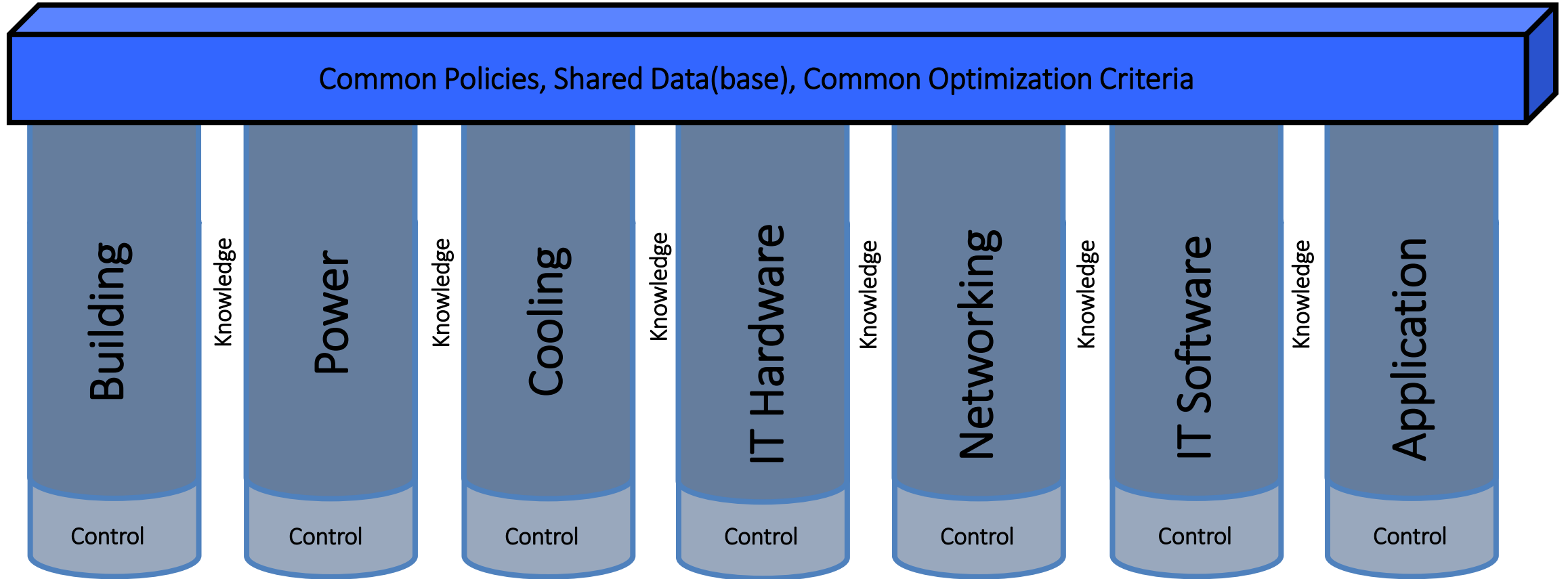


Source: Nyteknik 2012

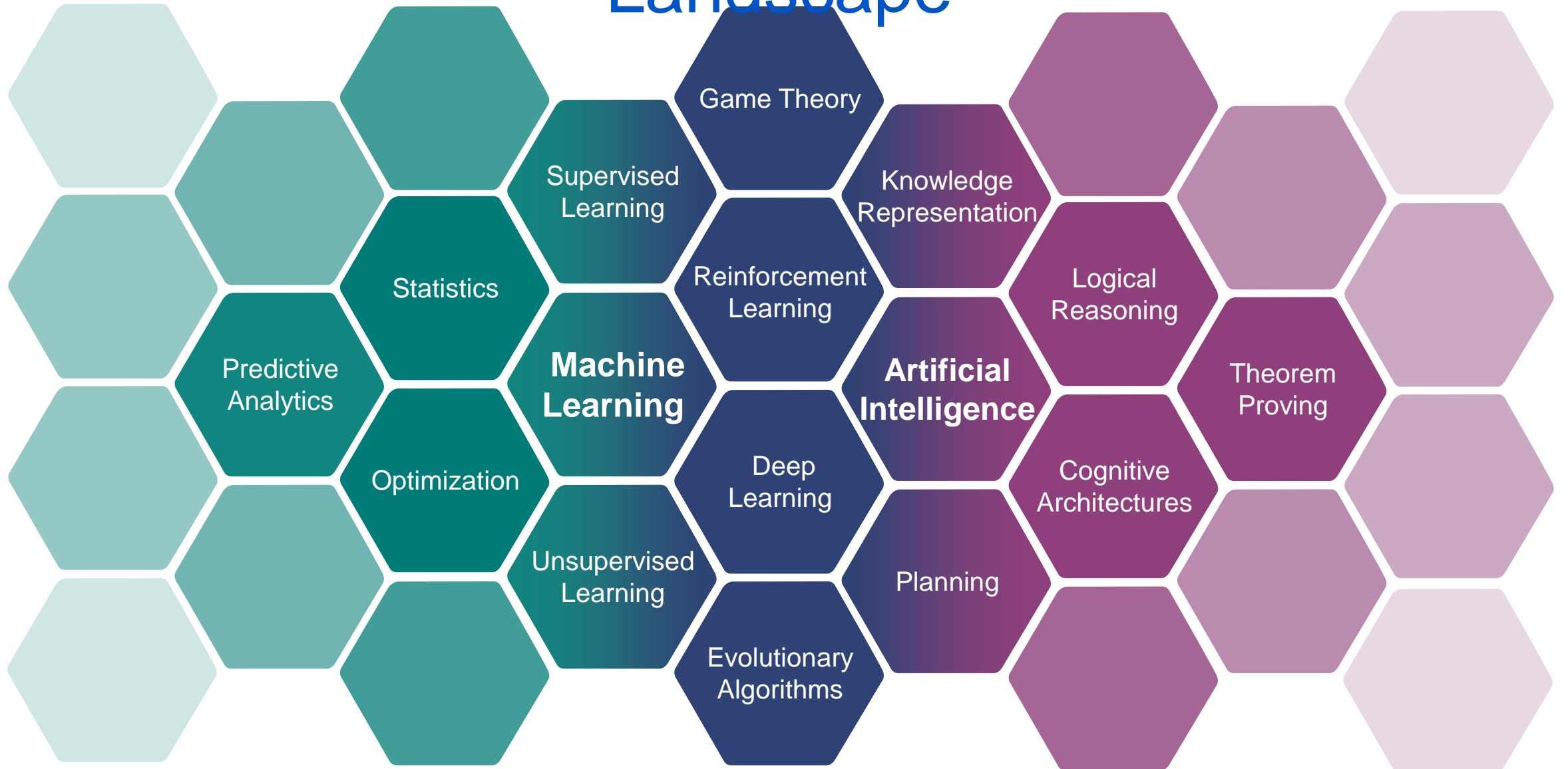
EXTEND – Holistic Datacenter Automation



EXTEND – Holistic Datacenter Automation



Machine Intelligence Technology Landscape





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