intel®
experience
what's inside™

INTERNET OF THINGS

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AGENDA

- IOT & Intel Strategy
- Intel IoT Lab & Local IoT Solutions

IOT EVERYWHERE... WHY NOW?
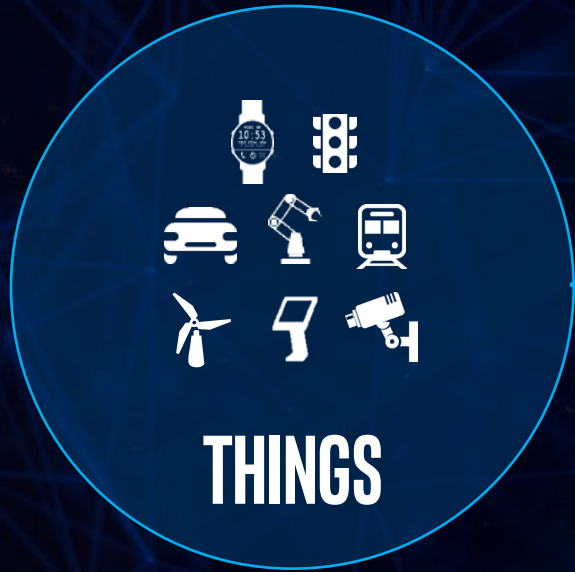
50B
DEVICES[1]

212B
SENSORS[1]

85%
UNCONNECTED[4]

44
ZETABYTES[2]

THINGS

NETWORK

CLOUD

Cost of Sensors[1]
Past 10 Years
2X ⬇

Cost of Bandwidth[2]
Past 10 Years
40X ⬇

Cost of Processing[3]
Past 10 Years
60X ⬇

1. IDC
2. MC/EDC: The Digital Universe of Opportunities
3. Goldman Sachs
4. IMS Research

INTEL'S VIRTUOUS CYCLE OF GROWTH

DATA CENTER CLOUD

SMART & CONNECTED

VIRTUOUS CYCLE

VIRTUOUS CYCLE

VIRTUOUS CYCLE

THINGS & PEOPLE

3 PHASES OF IOT

CONNECTED

SMART

AUTONOMOUS

CONNECT THE UNCONNECTED
MOVE THE DATA

Data Center / Cloud

Network Infrastructure

Simple Sensors

One Direction

SMART AND CONNECTED THINGS
MOVE THE DATA TO THE COMPUTE

Mobile

Home

Industrial

Smart & Connected

Network Infrastructure

Data Center / Cloud

Bi-Directional
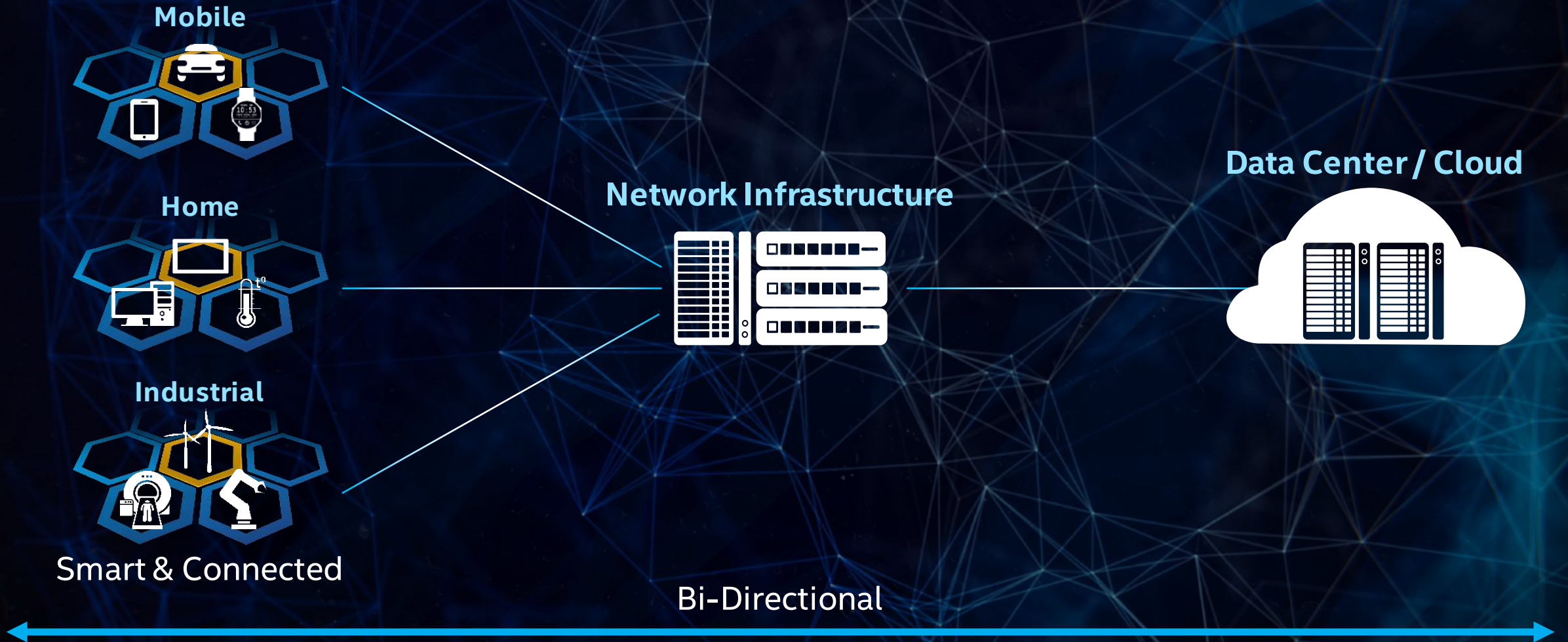
SOFTWARE-DEFINED AUTONOMOUS WORLD
MOVE THE COMPUTE TO THE DATA

Mobile

Home

Fog

Data Center / Cloud

Network Infrastructure

Industrial
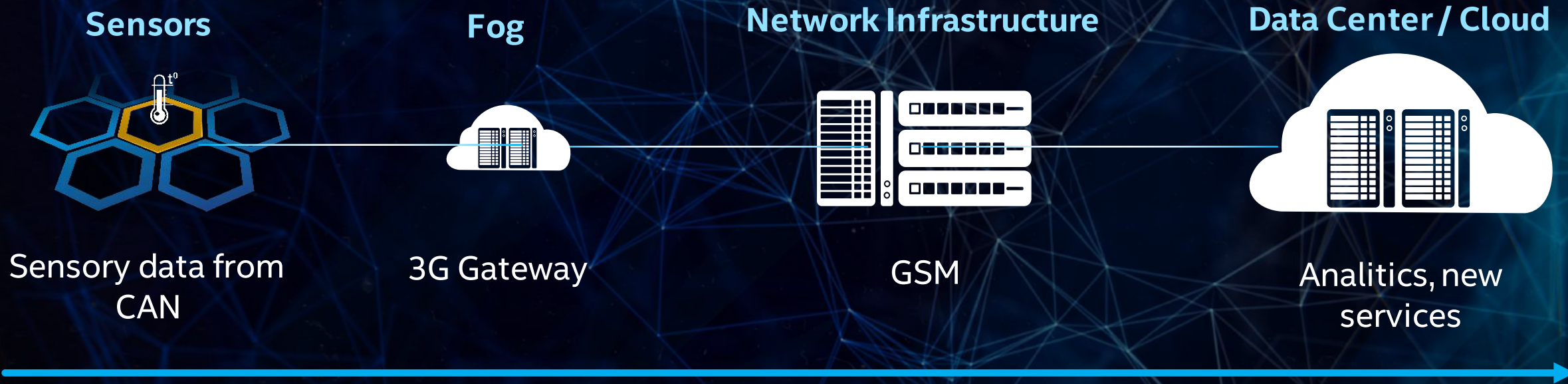
Real Time
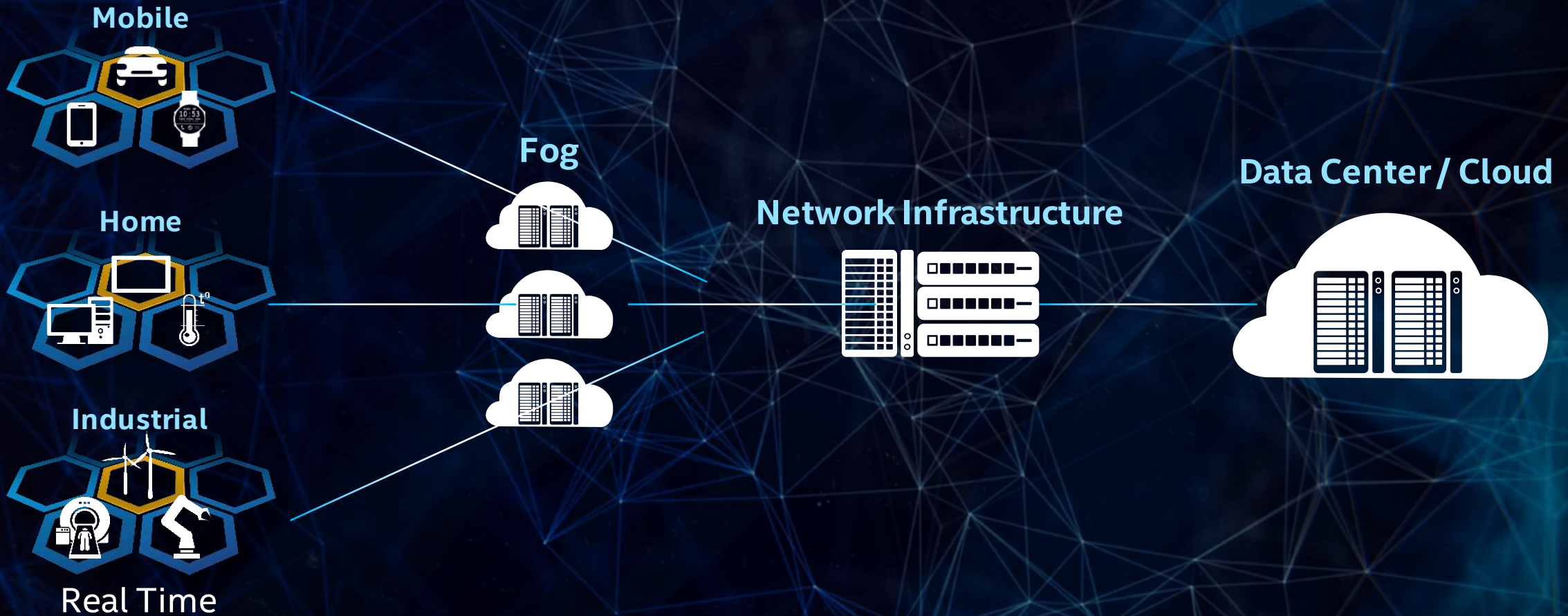
Virtualized, Reconfigurable, Software-Defined, Autonomous

BUSINESS
OPTIMISATION
(RETAIL VIDEO ANLITICS)

IMPACT OF IOT

NEW
BUSINESS MODELS
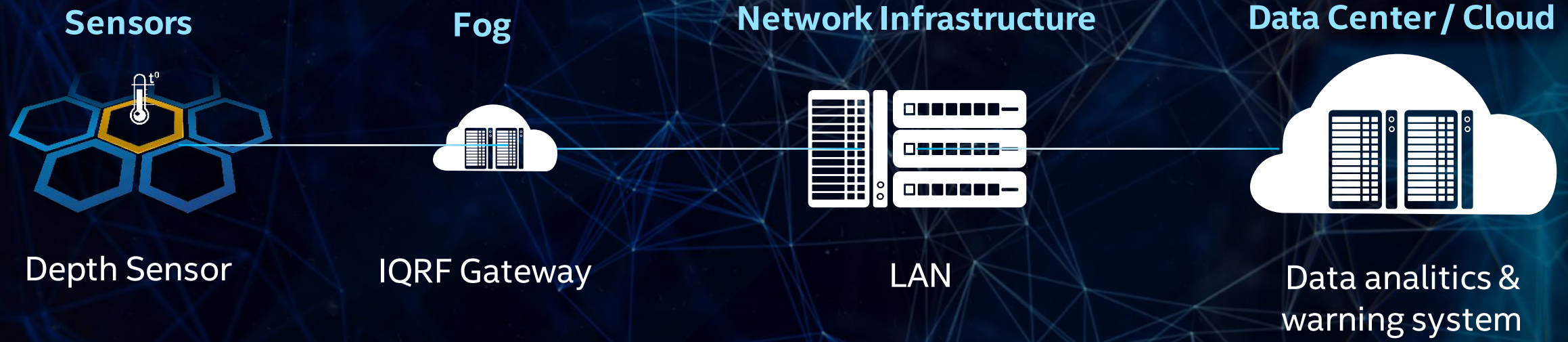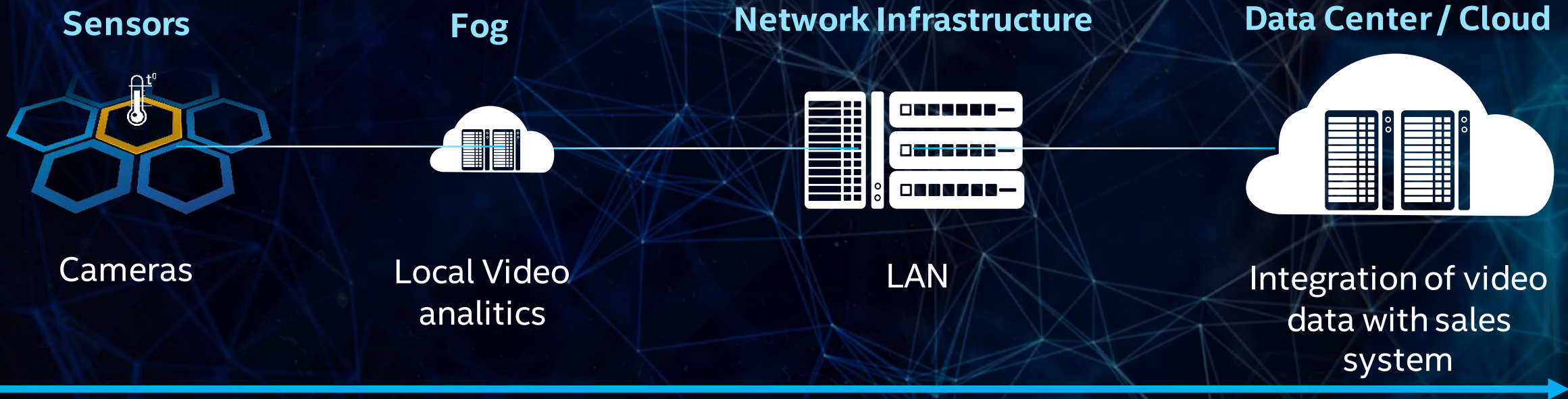(CRANE AS A SERVICE)

EFFICIENT
RESOURCE USAGE
(SMART WASTE MGM)

Smart Crane

Sensors

Fog

Network Infrastructure

Data Center / Cloud

Sensory data from CAN

3G Gateway

GSM

Analitics, new services

Flood Water Tracking

Sensors

Fog

Network Infrastructure

Data Center / Cloud

Depth Sensor

IQRF Gateway

LAN

Data analitics & warning system

Advanced Retail Video Analitics

Tracking Inter Camera Tracking

Interactive Search and Object Interseption

People Counting

Crowd Control

Face Detection Face Recognition

ANPR

Heat Map, People Counting in the Queue, Personnel Activity Control

People Counting in the Queue

Sensors

Fog

Network Infrastructure

Data Center / Cloud

Cameras

Local Video analitics

LAN

Integration of video data with sales system

CHALLENGES

TECHNICAL POV

- SECURITY AND TRUST
- INTEROPERABILITY
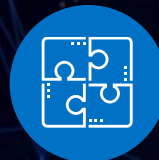- INTEGRATION OF OT/IT
- ADVANCED ANALYTICS

BUSINESS POV

- SOLUTION SCALABILITY
- COST/ROI
- SECURITY AND PRIVACY
- FRAGMENTED SOLUTIONS

INTEL'S IOT APPROACH: THINGS THROUGH CLOUD

THE INTEL® IOT PLATFORM
REFERENCE ARCHITECTURES PORTFOLIO OF PRODUCTS

THINGS → **NETWORK** → **CLOUD**

OUR APPROACH

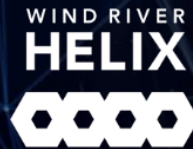CREATE VERTICAL SOLUTIONS + BUILD ON HORIZONTAL PLATFORM & PRODUCTS + BUILD STRONG ECOSYSTEM

INTEL IOT PLATFORM PRODUCT PORTFOLIO

WHY BUILD YOUR IOT SOLUTIONS WITH INTEL

COST SAVINGS WITH SCALABILITY

End-to-end interoperability to scale applications and services

STREAMLINED MANAGEABILITY AND ANALYTICS

Seamless data management and analytics from thing to network to cloud

MULTILAYERED, END-TO-END SECURITY

A chain of trust rooted in the hardware and linked throughout the software

WARSAW IOT IGNITION LAB

Warsaw IoT Ignition Lab

- Wide range of IoT solutions
  - Smart City – Cybercom: smart parking/smart waste management
  - Smart Transport - Passengera transport Infotainment
  - TeleMedicine – Comarch
  - Smart Retail - AstaLabs
  - Smart Retail – InfoCam: video analitics system for retail
  - Smart City - Flood Water monitoring system
  - Smart Manufacturing – Elmodis electric engines monitoric/predictive analisys

Intel® experience what's inside™