Internet of Things
Industry trends

Agenda

Workshop Agenda

STMicroelectronics

The IoT Movement

COVID-19 accelerated Adoption

Industry Projects

life.augmented

STMicroelectronics
We are creators and makers of technology

One of the world's largest semiconductor companies

48,000 employees of which **8,400** in R&D

$12.8 billion revenues in 2021

Over **80** sales & marketing offices serving over **200,000** customers across the globe

14 manufacturing sites

Signatory of the United Nations Global Compact (UNGC) Member of the Responsible Business Alliance (RBA)

Our strategy stems from key long-term enablers

Smart Mobility

Helping car manufacturers make driving safer, greener, and more connected for everyone

Power & Energy

Enabling industries to increase energy efficiency everywhere and the use of renewable energy

Internet of Things & Connectivity

Supporting the proliferation of smart, connected IoT devices with products, solutions & ecosystems

The IoT Movement

Why do we need intelligent smart systems?

Urbanization

Demographics

Environment

How is the industry addressing these challenges and opportunities?

An ecosystem of industries

Cloud industry

Lower barriers to **create new services**

Semiconductor industry

Lower barriers to **develop products**
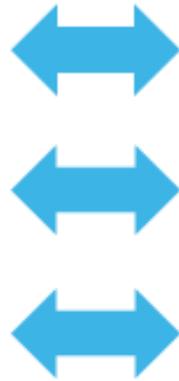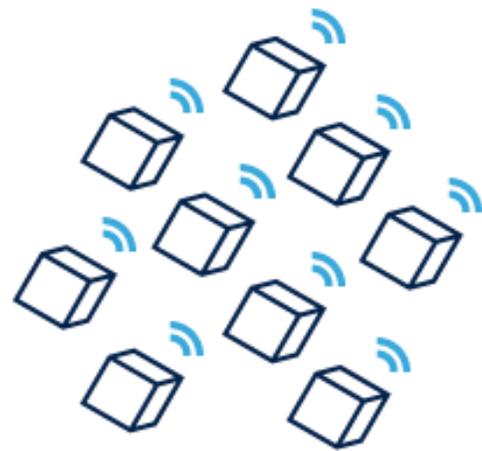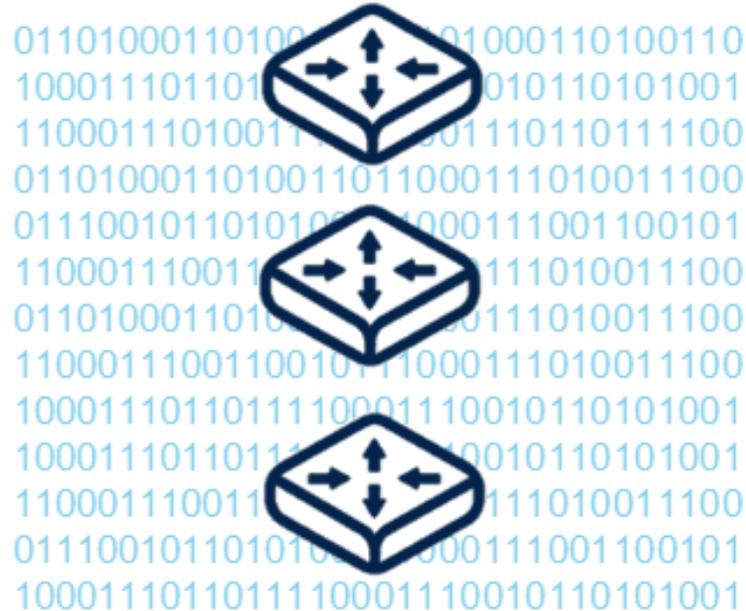
Telecom industry

Lower barriers to **be connected**

Collect and Send Data

Protocol Translation and Device Management

Big Data and Heavy computation

Constraints of Centralized Data Processing

Time-sensitive applications are limited by remote cloud connections

Mission Critical Functions

Bandwidth Limitations

Alarm 3 | Info 2 | Alarm 1

Privacy and Security Considerations

Power consumption
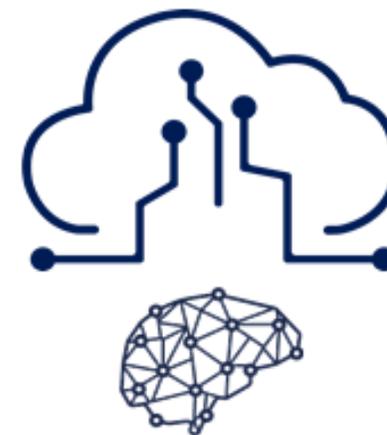
Time-sensitive applications should be locally processed

Collect, Process And Send Data

Local Processing of Data

Optimized computation and Advanced Analysis
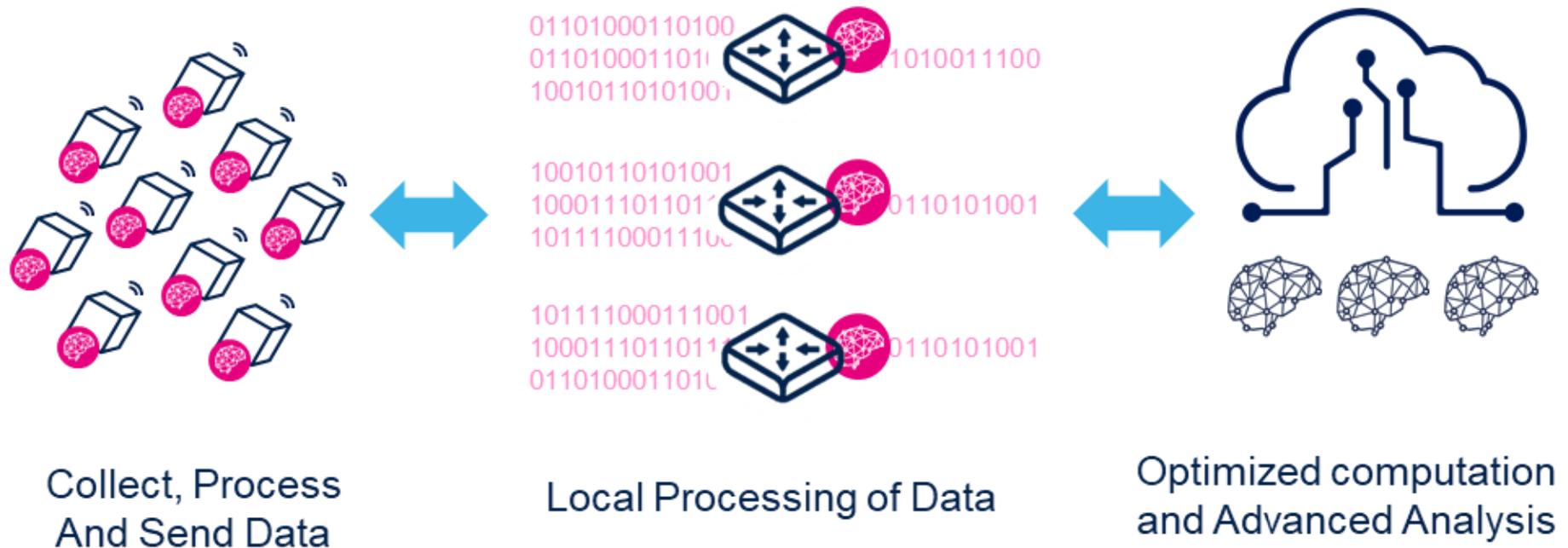
Opportunity: move computation down to Sensor Nodes with local processing for real-time elaboration and best power efficiency

11

Complete ecosystem offering by ST

All building blocks for IoT devices	Lower barriers for developers getting started	Lower barriers from prototyping to first product	Enable product & service commercialization

All building blocks for IoT devices:

- Microcontrollers
- Secure solutions
- Sensors & actuators
- Connectivity solutions
- Power management
- Motor control
- Analog components

Lower barriers for developers getting started:

Stackable boards & modular SW

STM32 Nucleo Development & Expansion Boards

Form-factor boards

Discovery Kit IoT Node

SensorTile Wireless Industrial Node

NFC Dynamic Tag Sensor Node

SensorTile.box

Lower barriers from prototyping to first product:

Pre-integrated software for vertical applications

- Smart Things
- Smart Home & City
- Smart Industry

Development ecosystem

- Code generators
- Prototyping software
- Development environments
- Artificial Intelligence toolbox
- Debug solutions
- Simulation and analysis tools
- On-line design tools

Enable product & service commercialization:

Integration of Cloud Provider SDKs

Partner Program and ST community

ST Partner Program

ST Community

Educational Platforms

Our technology starts with You

🌐 Find out more at www.st.com

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