



Alliance for IoT
and Edge Computing
Innovation

AIOTI
DAYS 2024

Continuum, digital twins
and virtual worlds

24-25 Sep
BRUSSELS

Session: Cloud-Edge-IoT technologies at the service of European sustainable Manufacturing Industries

Cloud-Edge-IoT technologies at the service of European sustainable Manufacturing Industries



Event Sponsors

Golboo Pourabdollahian, IDC





10.00-10.10 - OPENING AND INTRODUCTION Golboo Pourabdollahian, IDC

10:10- 10:30 USE-CASES PRESENTATIONS

- **CODECO project**, Rute Sofia, FORTISS
- **NEMO project**, Theodors Zahariadis, Synelixis
- **AIREDGIO5.0 project**, **Alissa Zaccaria**, Intellimech
- **DIMPOFAC project**, Harald Sehrschoen, FILL

10.30 – 10.55: PANEL DISCUSSION

Moderator: Sergio Gusmeroli, Politecnico di Milano

- Rute Sofia, FORTISS
 - Theodors Zahariadis, Synelixis
 - Intellimech
 - Harald Sehrschoen, FILL
 - Maria Eugenia Xenia Beltran, UPM
-
- **10.55-11.00: Q&A**



EUCloudEdgeIoT.eu

OVERVIEW OF CEI MARKET TRENDS IN MANUFACTURING

Golboo Pourabdollahian, IDC

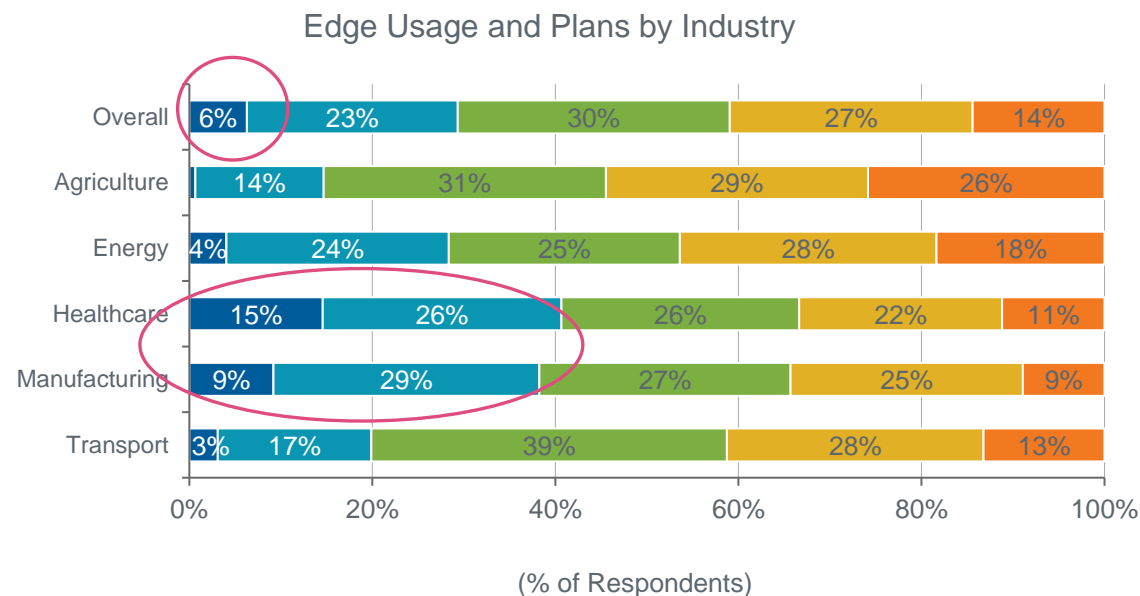
25 September 2024

CLOUD-EDGE-IOT MARKET AND ADOPTION



Cloud	Edge	IoT
Spending in 2024 EUR 136 bn	Spending in 2024 EUR 40 bn	Spending in 2024 EUR 209 bn
CAGR to 2028 20.8%	CAGR to 2028 14.1%	CAGR to 2028 10.8%

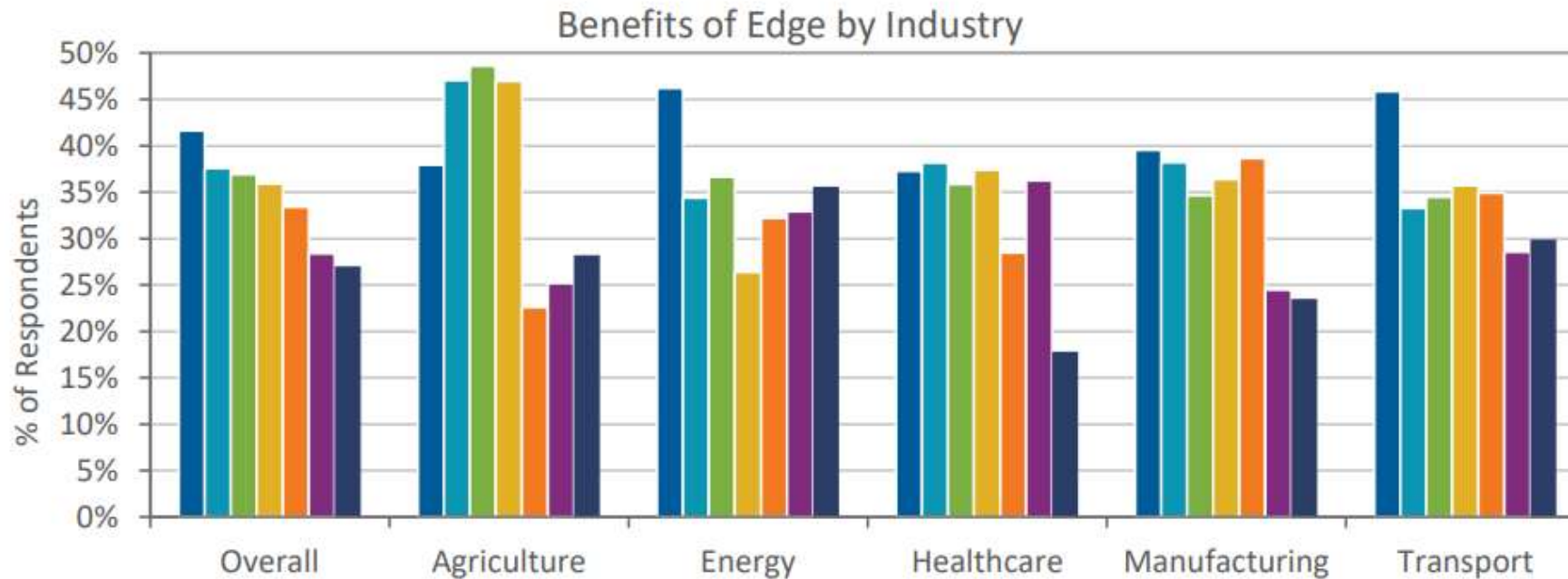
European Cloud, Edge and IoT Market Size (Source: IDC Spending Guides and Trackers, May 2024)



- Already using extensively
- Already using to a limited extent
- Plan to start using in the next 24 months
- Educational/awareness/research phase only
- Not using and no plans

(Source: UNLOCK-CEI Survey, March 2023)

DRIVERS FOR MOVING TOWARDS EDGE



- Improves security and compliance, as data is not travelling
- Reduces volumes of data sent across networks
- Overcomes unreliable connectivity
- Very low latency
- Allows deployment of AI analytics models close to the device
- Reduces costs (including of network connectivity)
- Allows deployment of resource-constrained IoT devices

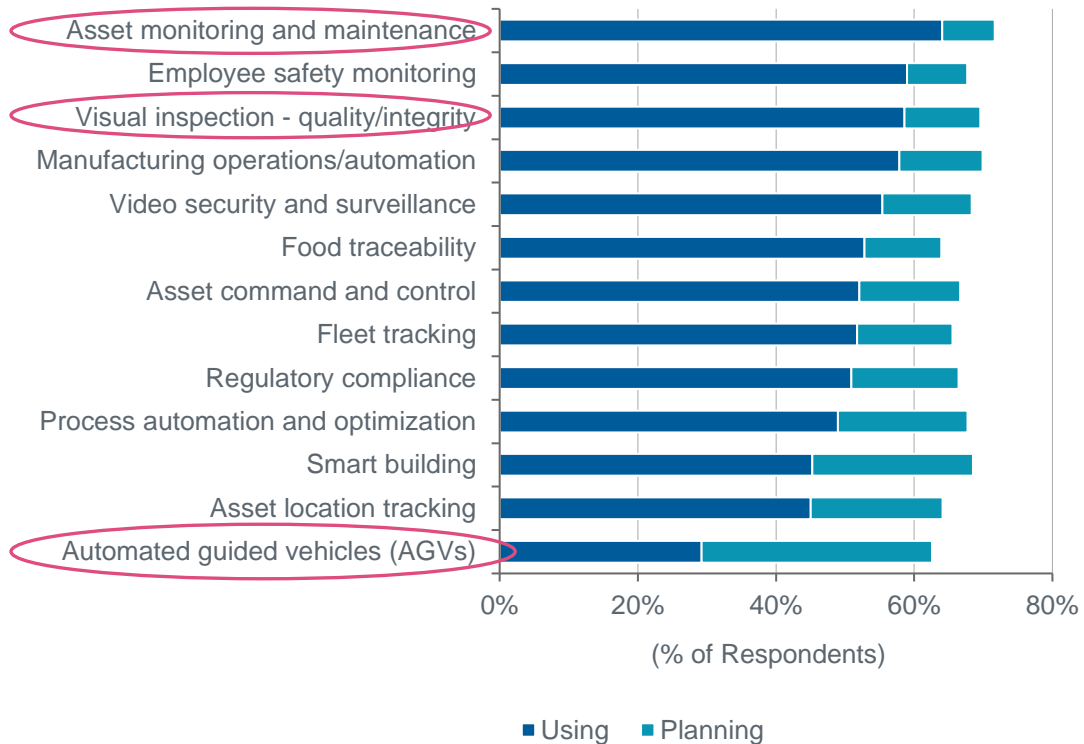
Question: Which benefits of Edge computing are most important for your projects?

N=500 (Base: Edge users or planners)

STRONG INTEREST ACROSS USE CASES








Manufacturing Use Cases



Manufacturing Use Case Adoption (Source: UNLOCK-CEI Survey, March 2023)

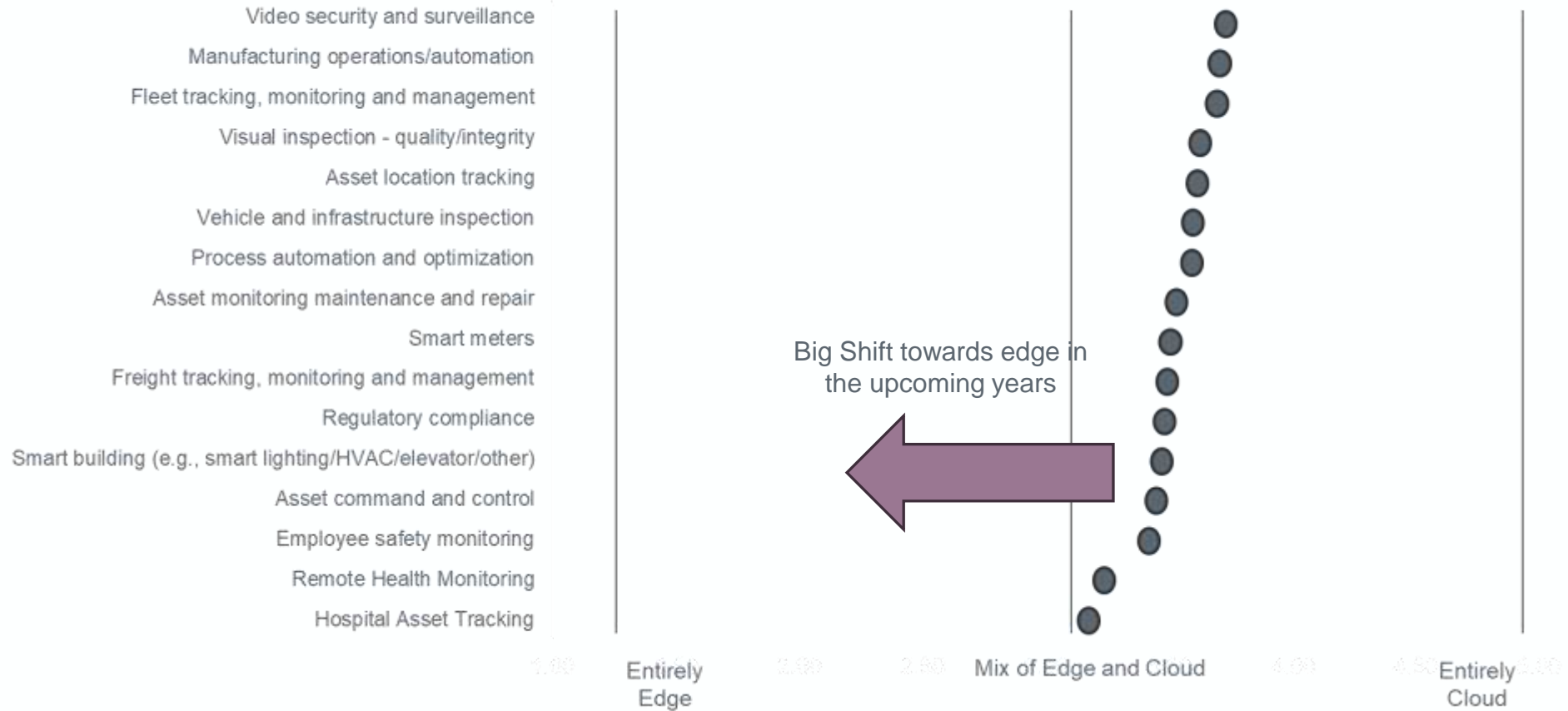
Spotlight Use Cases

 <p>Agriculture</p>	<ul style="list-style-type: none"> Asset tracking/monitoring (e.g. animal tagging) Equipment automation Precision agriculture
 <p>Energy (Utilities, Oil and Gas)</p>	<ul style="list-style-type: none"> Smart grid Drone-based observation EV chargers
 <p>Healthcare</p>	<ul style="list-style-type: none"> Hospital asset tracking Bedside telemetry AI-assisted diagnosis and treatment
 <p>Manufacturing</p>	<ul style="list-style-type: none"> Asset monitoring and maintenance Autonomously guided vehicles (AGVs) and robots Visual inspection and quality control
 <p>Transportation</p>	<ul style="list-style-type: none"> Port and warehouse automation Fleet tracking and freight monitoring Autonomous vehicles and infrastructure

EDGE-CLOUD COMPUTE REQUIREMENTS ACROSS USE-CASES



Edge and Cloud Infrastructure Usage for Selected Use Cases



Edge and Cloud Infrastructure Usage by Use Case (Source: UNLOCK-CEI Survey, March 2023)



- **Edge orchestration tool:** There is a need for **enhancement in terms of interoperability, security** and automation for effective management of distributed solutions.
- **Edge standards :** needs for **simplification and harmonization** of edge standards
- **Connectivity and 5G networks:** Public 5G network coverage remains incomplete, and **advanced 5G services are slow to arrive.**
- **Skills:** There is a need for **upskilling and reskilling** in terms of CEI technologies and in relations with complementary technologies such as AI.
- **Industry-specific use-cases:** Because the continuum is fragmented across hundreds of use cases, much work is needed to enable European organizations to **leverage these technologies for their unique purposes.**
- **Commercialization and scale:** European companies will need to **scale aggressively** in a fiercely competitive global market through large scale industry policy.
- **Concrete business cases:** Companies need justified business cases to adopt edge and **ROI is yet unclear.**

CEI DEMAND REPORTS & TOOLS



Access our results!



<https://eucloudedgeiot.eu/>



EUCloudEdgeIoT.eu

THANK YOU!

Golboo Pourabollahian
gpourabdollahian@idc.com



EUCloudEdgeIoT.eu is supported by the Open Continuum and Unlock CEI and both received funding from the European Union's Horizon Europe Research and Innovation Programme under the Grant Agreement numbers 101070030 and 101070571.