

Gateway Edge Computing

Running AI in embedded devices

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About Myself



- Telecommunications Engineer
- 50% of my career working in corporations (Telefonica, Huawei...)
- The other 50% working in startups
- Founded 4 companies (1 “fail” + 1 exit + 2 ongoing)
- Forbes 100 most creative entrepreneurs
- Currently: Barbara’s CEO

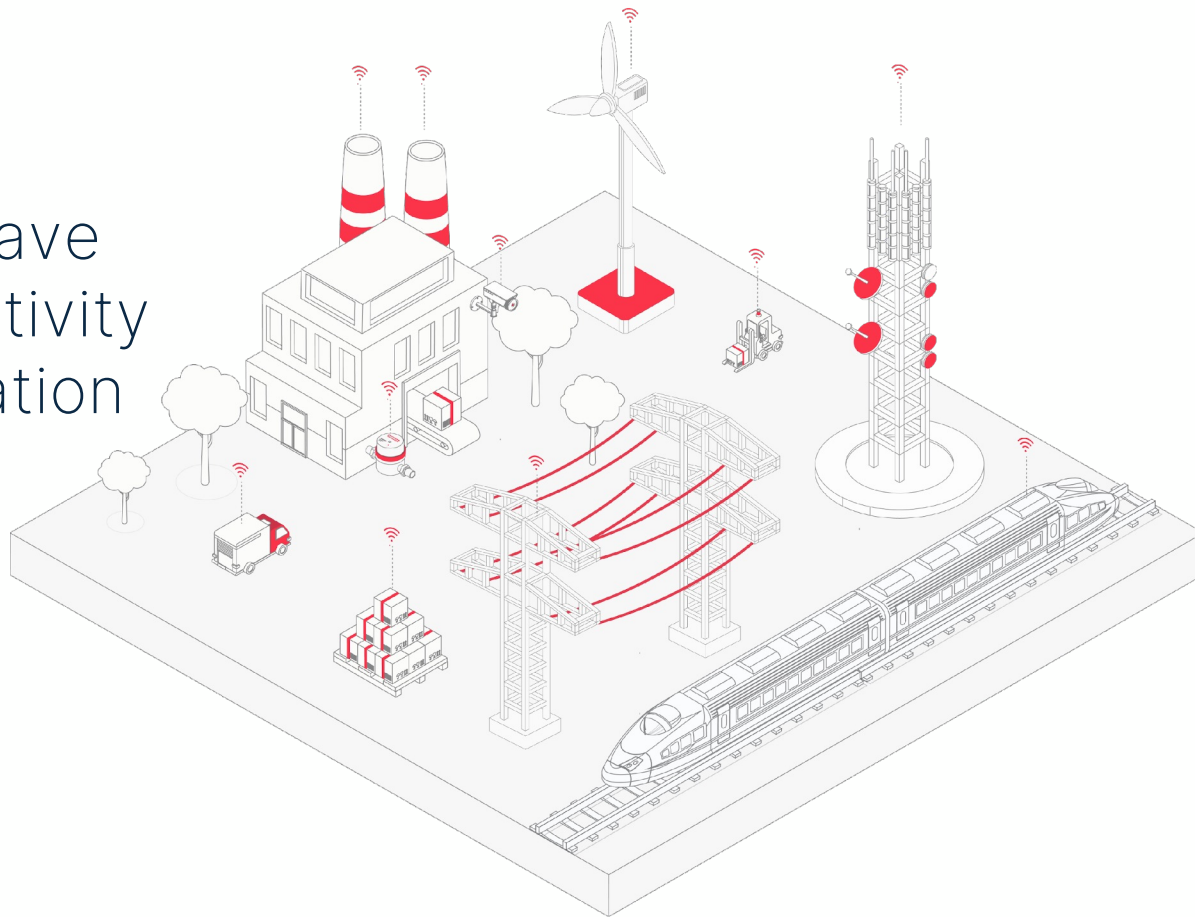


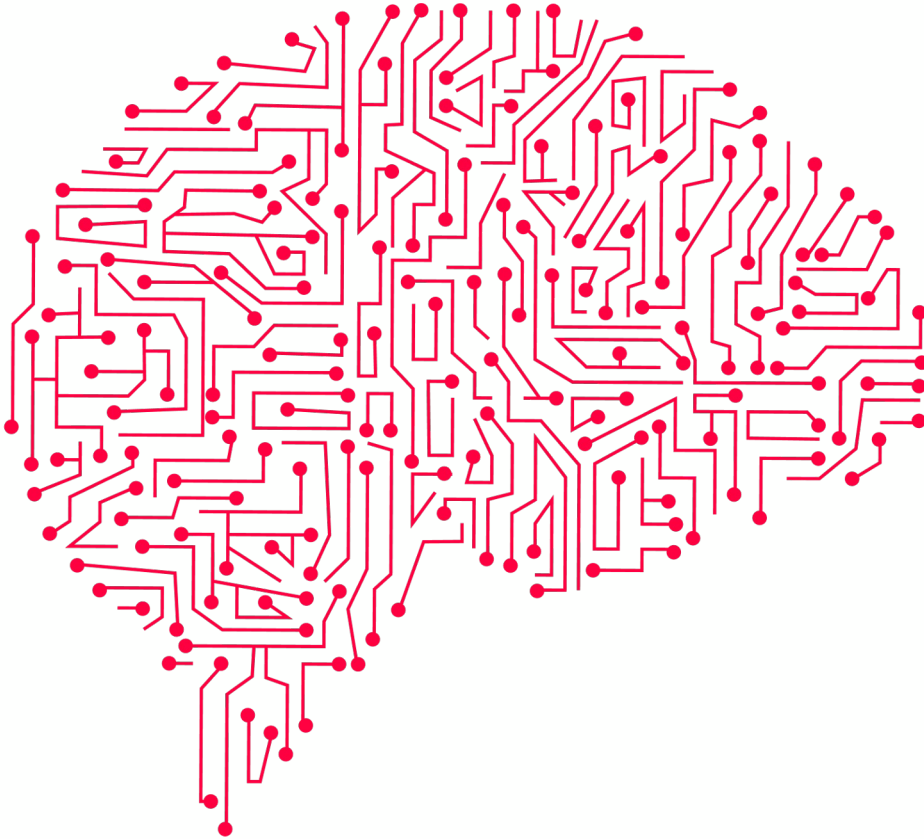
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1. WHAT IS EDGE-AI?
2. CHALLENGES WHEN WORKING WITH EDGE-AI?
3. INSPIRATION THROUGH REAL PROJECTS



2 in 3 devices have
network connectivity
and data generation
capabilities





An opportunity for AI

SOFTWARE VS. ARTIFICIAL INTELLIGENCE

TRADITIONAL SOFTWARE	AI SOFTWARE
Created to do a repetitive task	Created to learn repetitive task
It is programmed	It is trained
Its main artifact is a software binary	Its main artifact is a AI model

RULE-BASED CHATBOT VS. AI CHATBOT



AI types



GENERATIVE
(in general non-real-time)



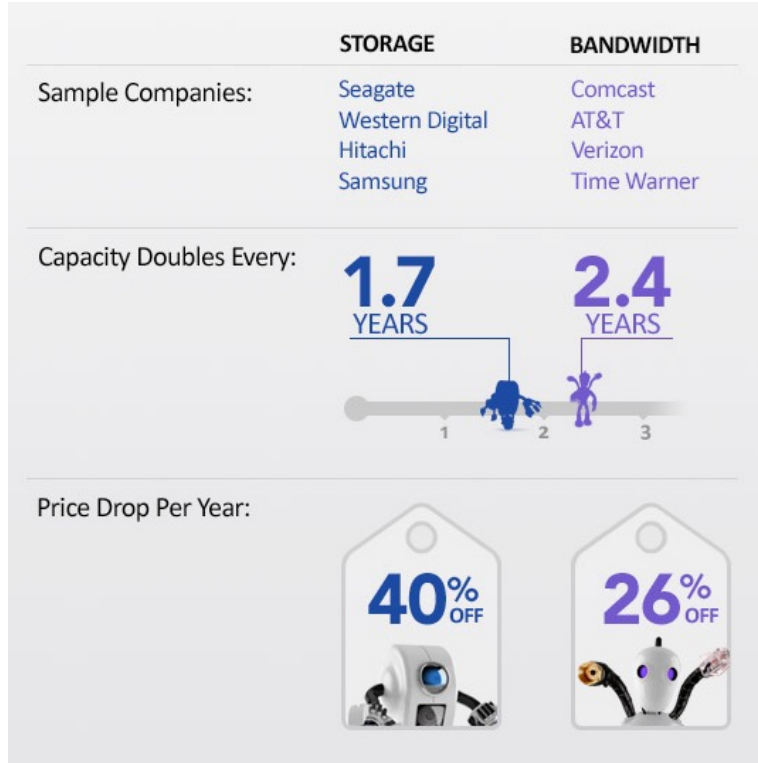
PREDICTIVE
(close to real-time)

DataOps is the new DevOps

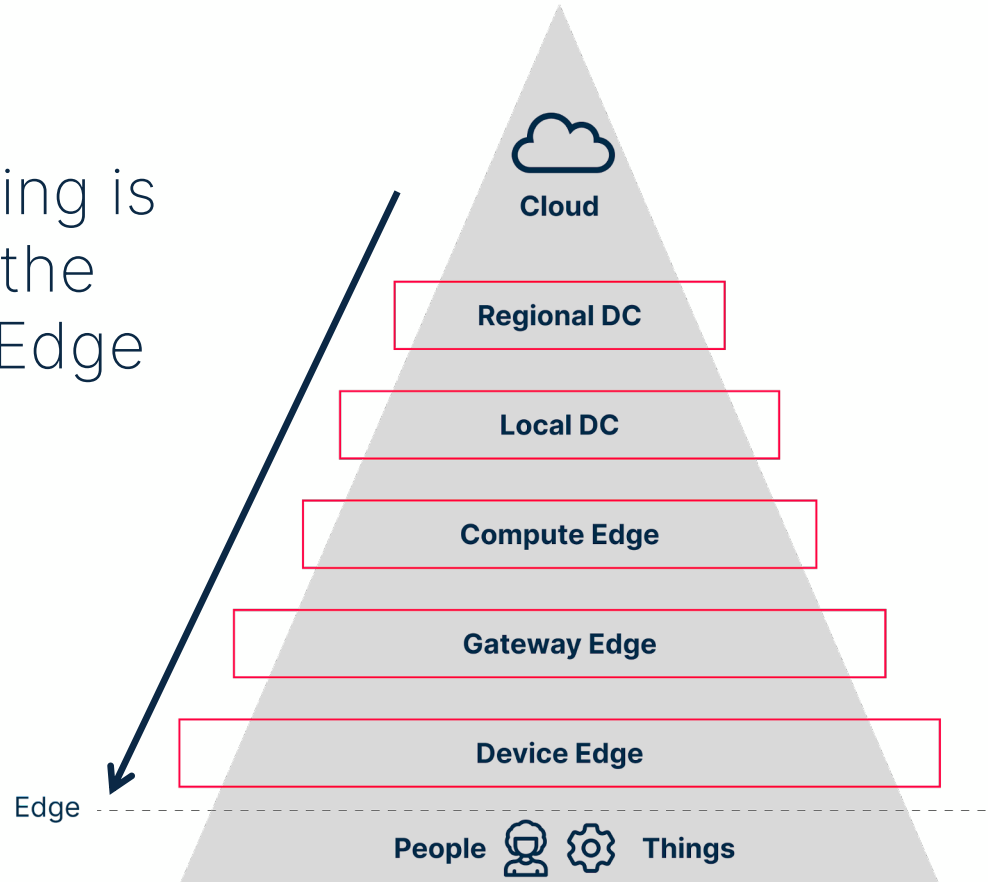
The data-driven company journey



Bandwidth is more expensive than hardware



Data processing is
moving from the
Cloud to the Edge



The Drivers of Edge

High Data Volumes



Latency



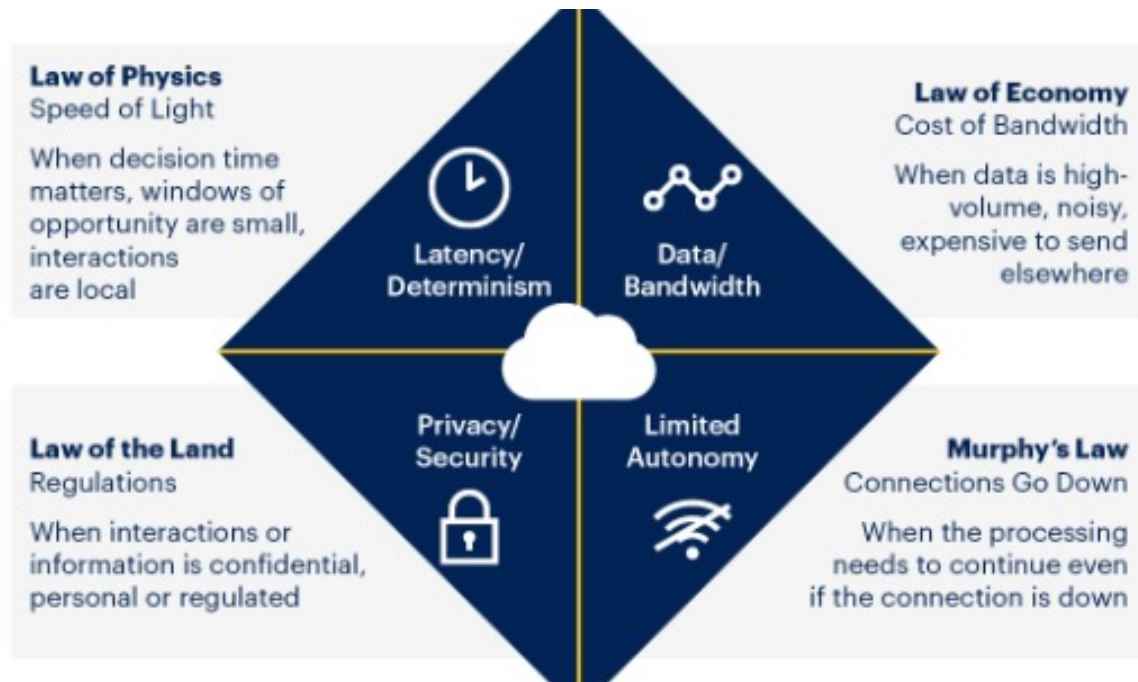
Security & Privacy

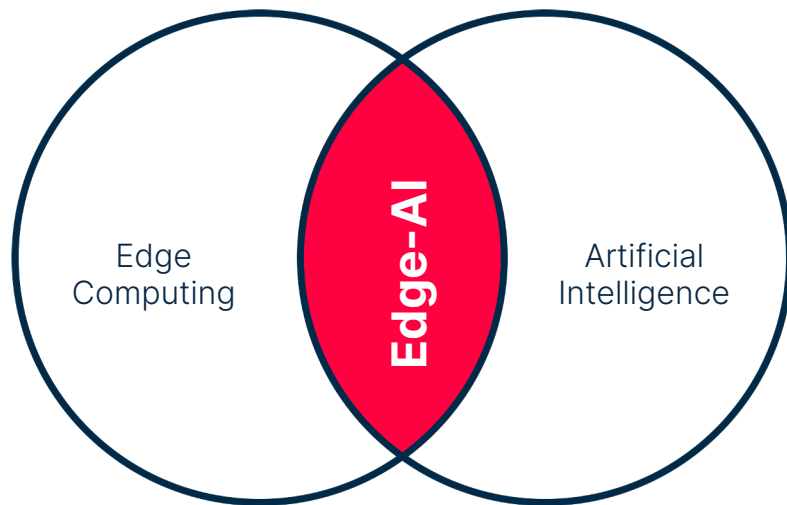


Autonomy



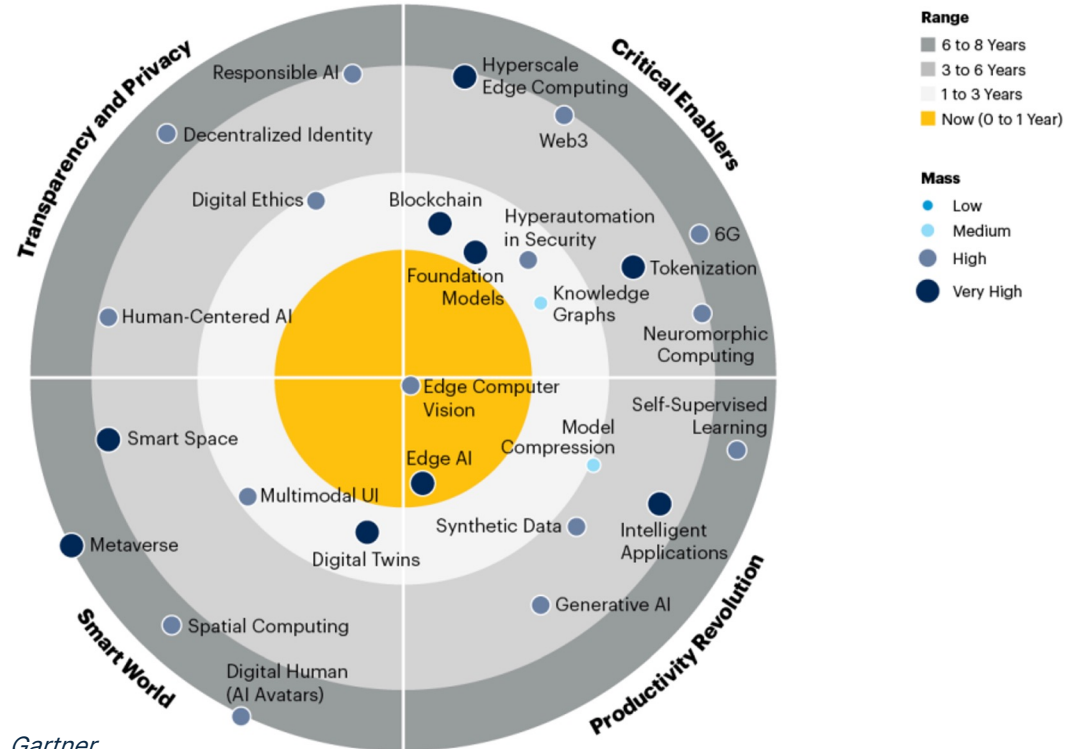
The Drivers of Edge





Edge AI, a game changer for Industry

Barbara is well positioned



*Emerging Tech Impact Radar 2023, Gartner

The challenges of the Edge AI

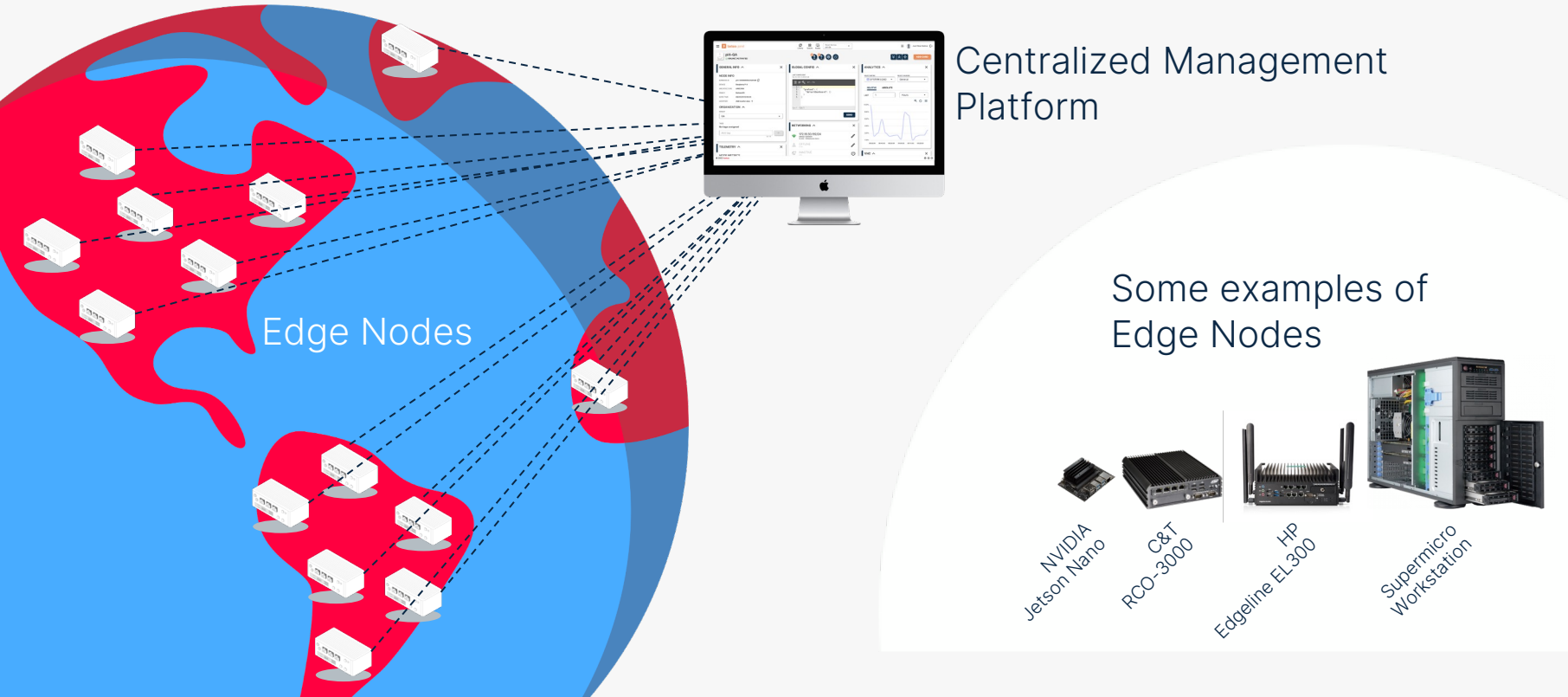


- ① Distributed Devices Management
- ② Hardware Interoperability
- ③ OT Protocol support
- ④ Container orchestration
- ⑤ Edge Security

Barbara's Technology

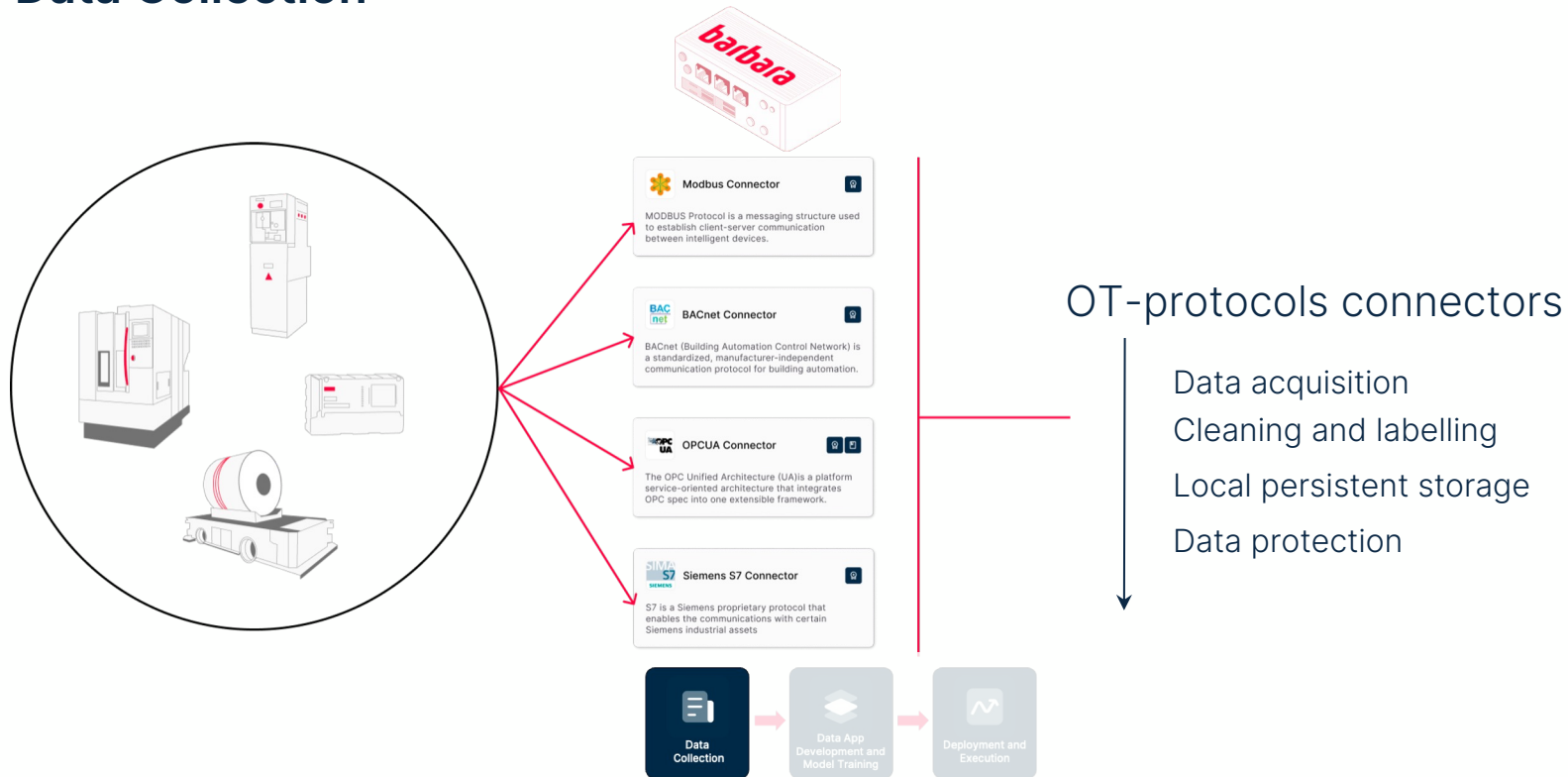
to overcome Edge-AI challenges

Barbara Cybersecure Industrial Edge platform



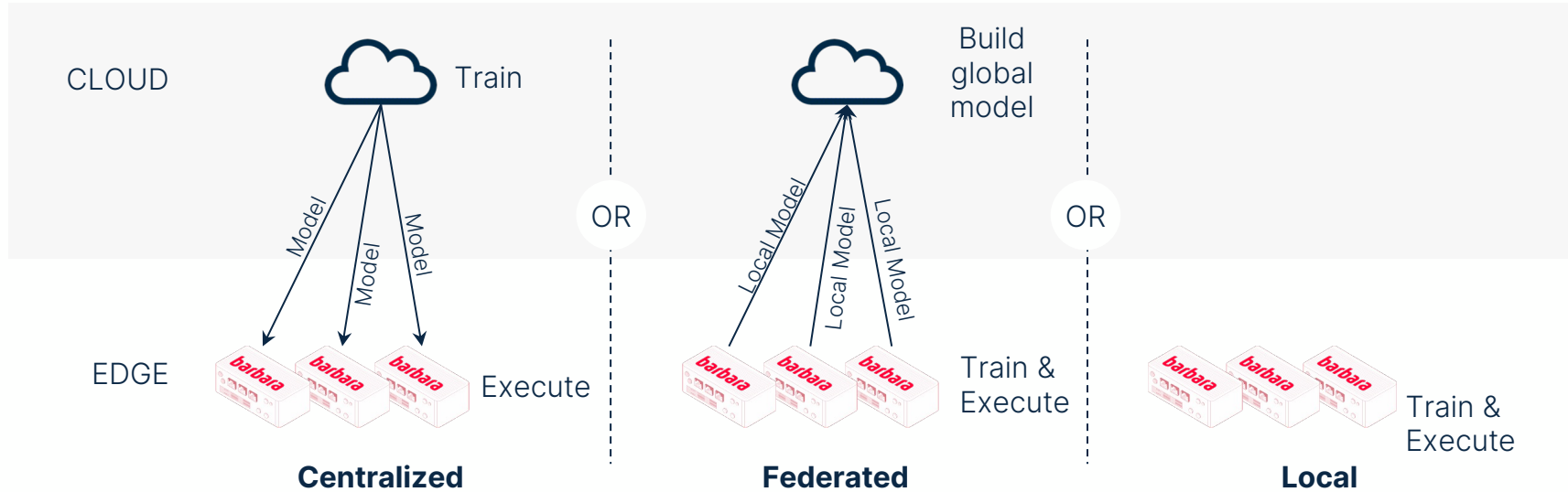
Barbara Cybersecure Industrial Edge platform

Data Collection



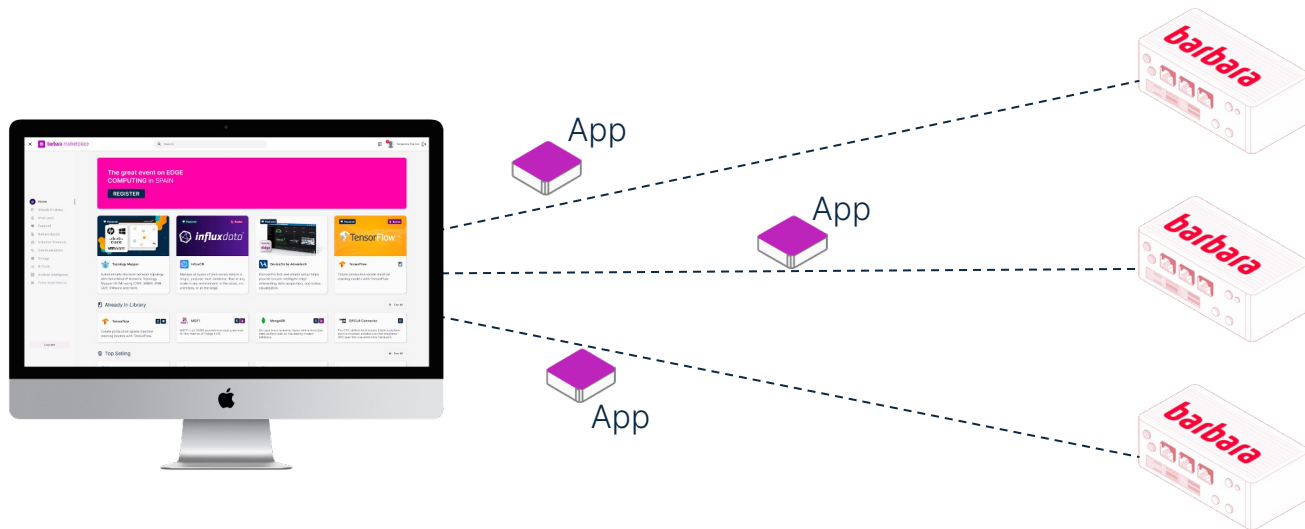
Barbara Cybersecure Industrial Edge platform

Data App development and Model Training



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Deployment and Execution



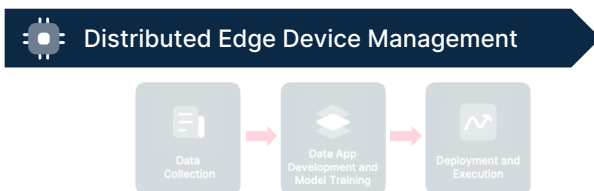
¿Qué hace a Barbara diferente?



DataOps is the new DevOps

Distributed Edge Device Management

- Zero-touch configuration
- Device Monitoring and Alarms
- Security Firmware updates
- Built-in VPN
- Audit logs
- Remote device operation
- RBAC
- REST API



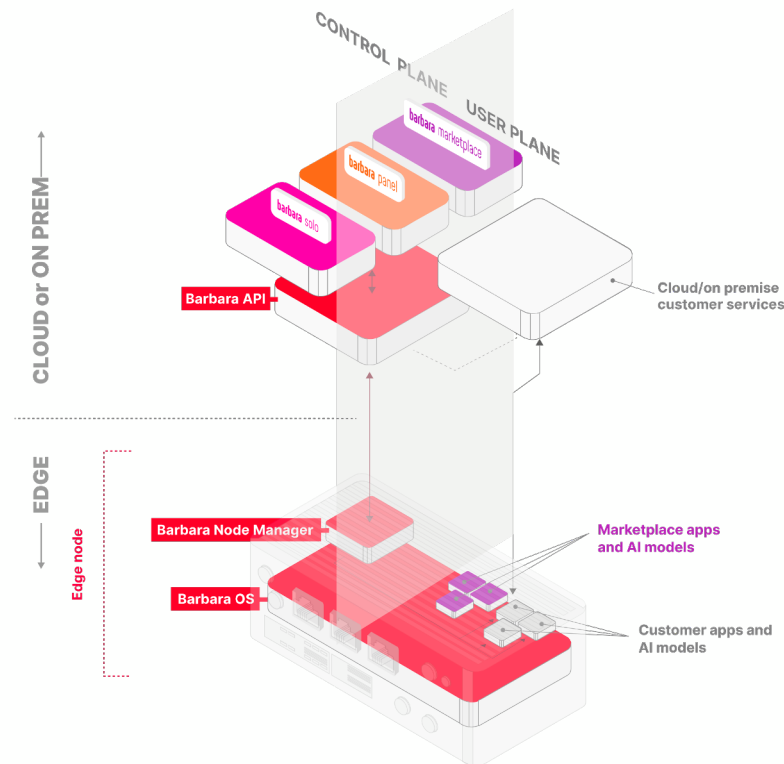
Barbara's Edge-AI software stack

A one-stop shop for AI developers and MLOps engineers

③ SaaS / On Prem. Edge management dashboard + app Marketplace

② Node Manager

① Cybersecure Operating System



Success Cases

SUCCESS STORY



SUCCESS STORY



SUCCESS STORY



barbara

The Cybersecure Industrial Edge Platform



Barbara IoT



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