Bring AI Computation to Decentralized Data

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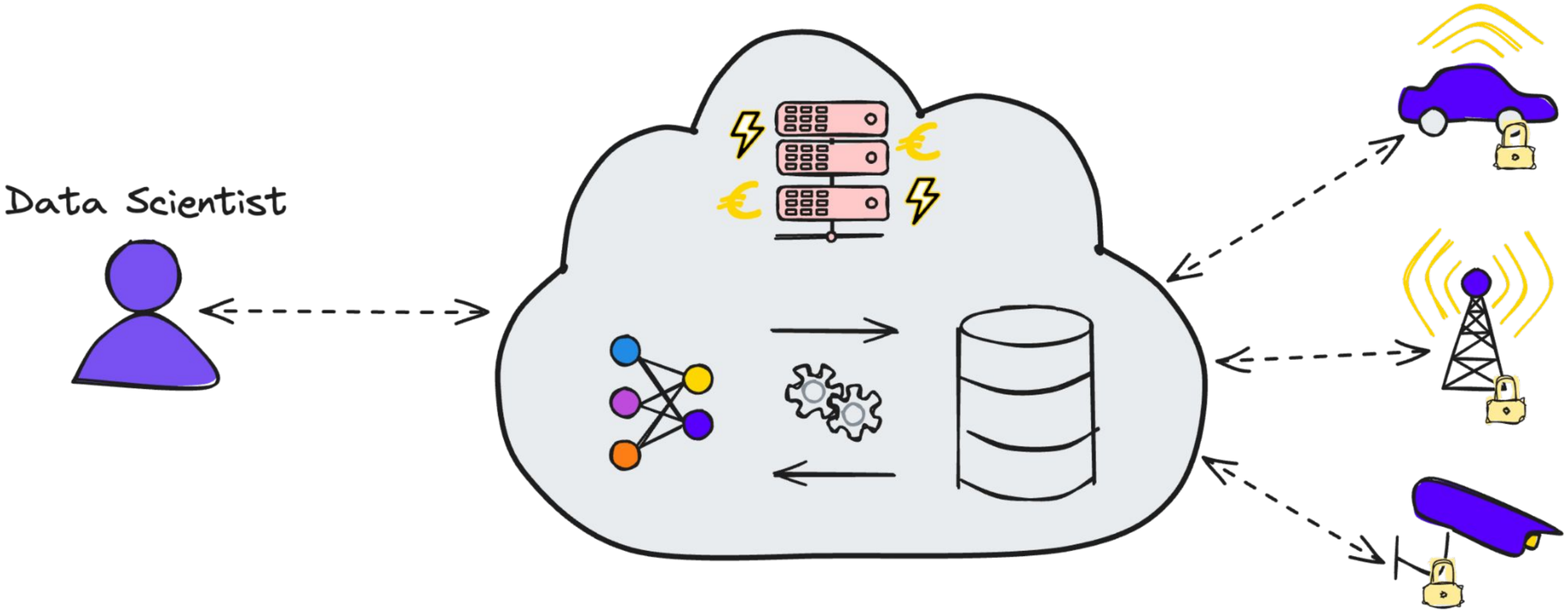
THE DATA SCIENCE LANDSCAPE: CLOUD-DRIVEN VALUE



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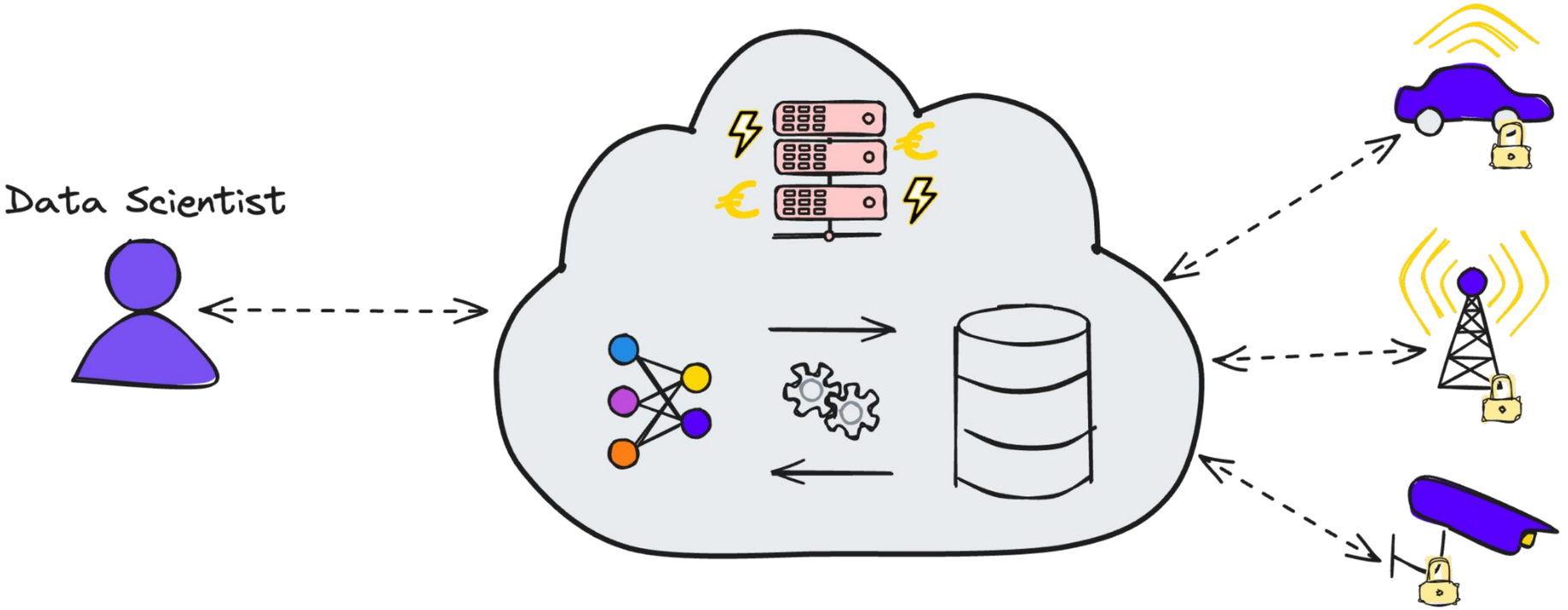

Data-To-Compute

Data Security

- Companies' **Sovereignty**
- User **Privacy** (GDPR)

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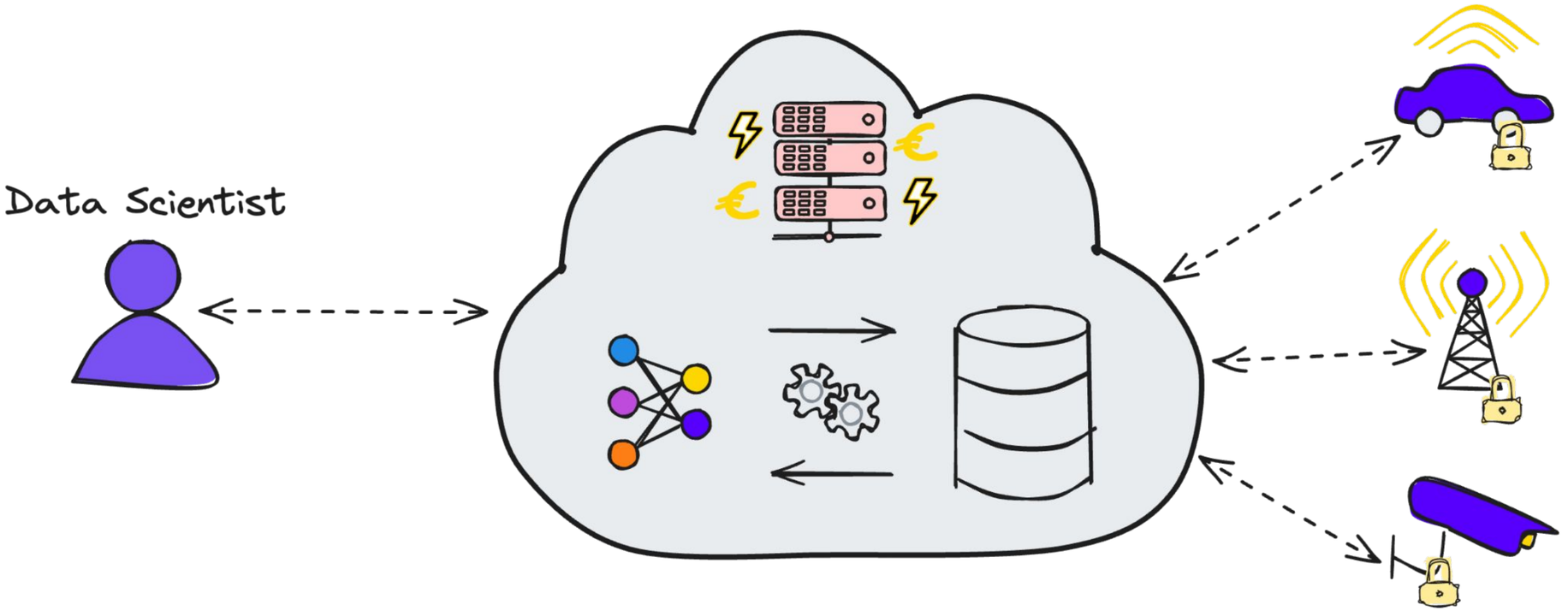


Process Cost

- **Financial** Cost
- **Environmental** Cost
- **Latency**

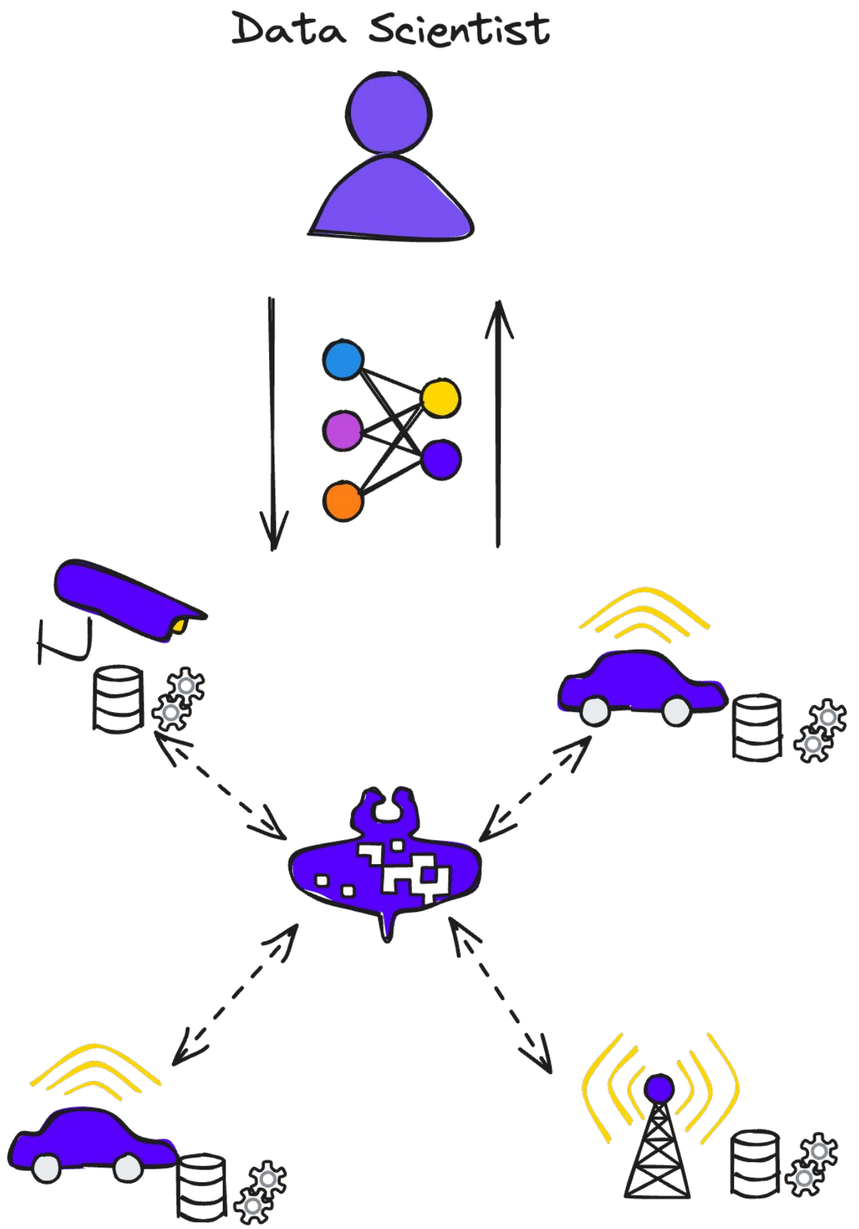
Data-To-Compute

Data Security

- Companies' **Sovereignty**
- User **Privacy** (GDPR)

REVOLUTIONIZING AI WITH COMPUTE-TO-DATA

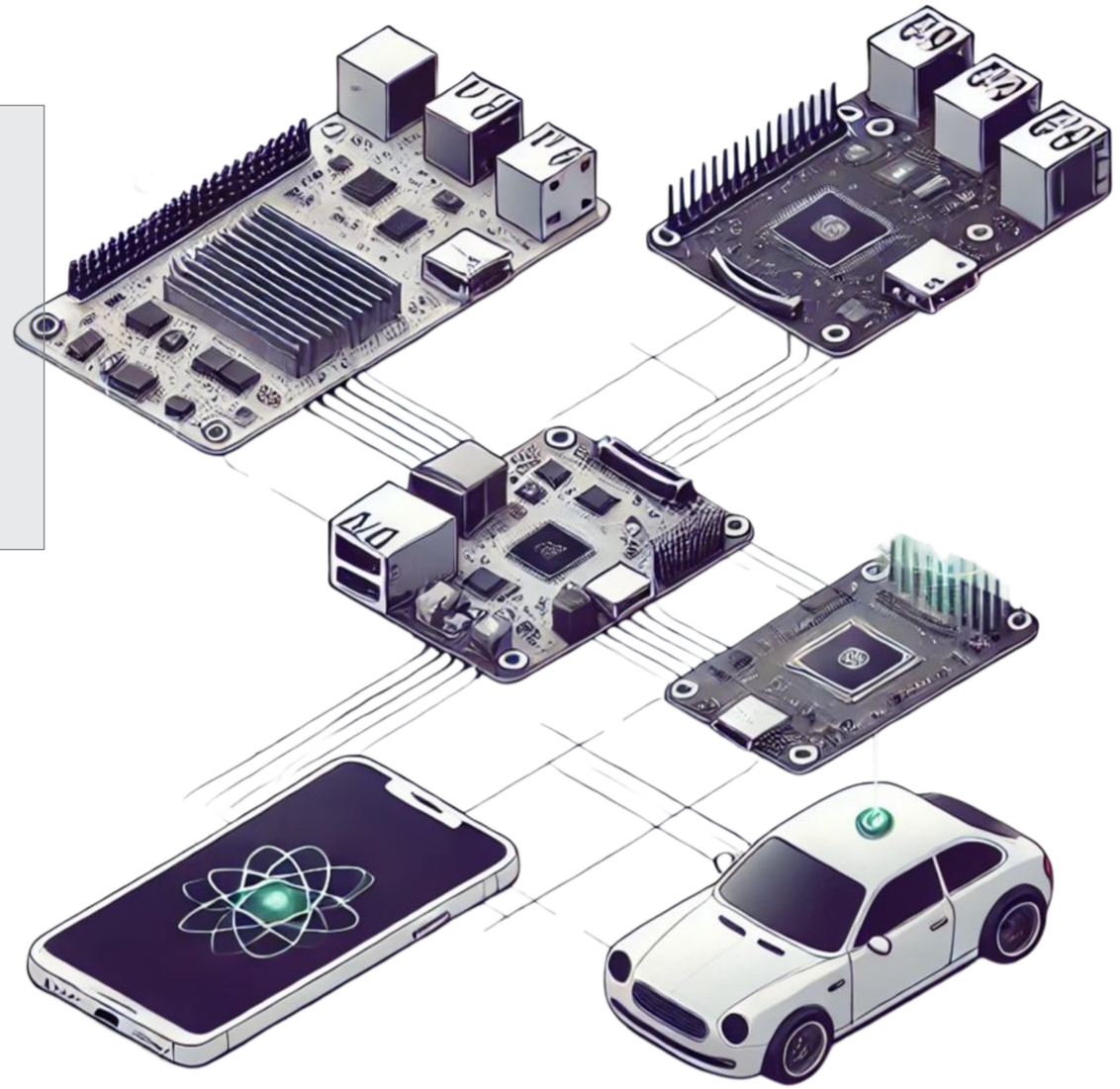
- Local Processing



REVOLUTIONIZING AI WITH COMPUTE-TO-DATA

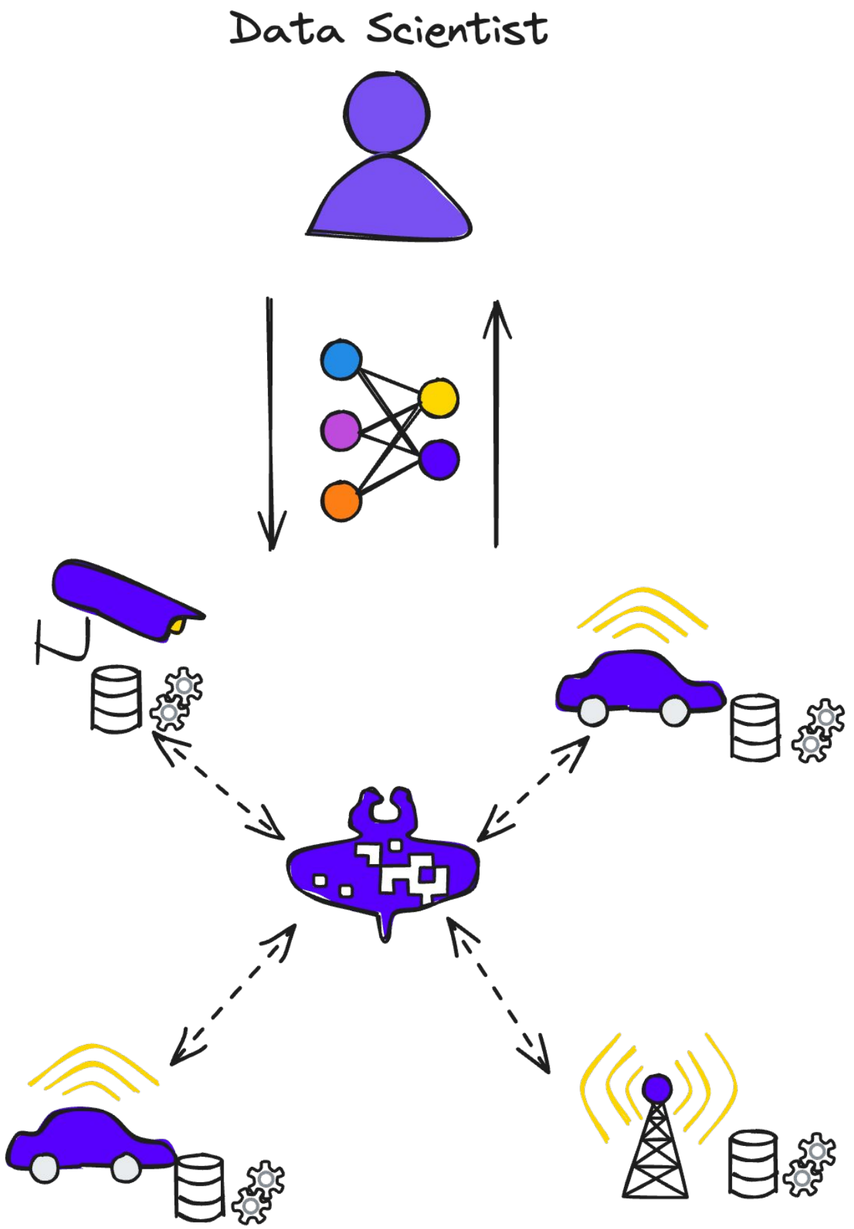
- **Local Processing**

- **Empowered Embedded Devices:** Modern autonomous systems, including vehicles, leverage **enhanced onboard computing power**.



REVOLUTIONIZING AI WITH COMPUTE-TO-DATA

- **Local Processing**
- **Empowered Embedded Devices:** Modern autonomous systems, including vehicles, leverage **enhanced onboard computing power**.
- **Collaborative Algorithms:** Harnessing **decentralized** and **federated learning** to enable real-time collaboration across devices.

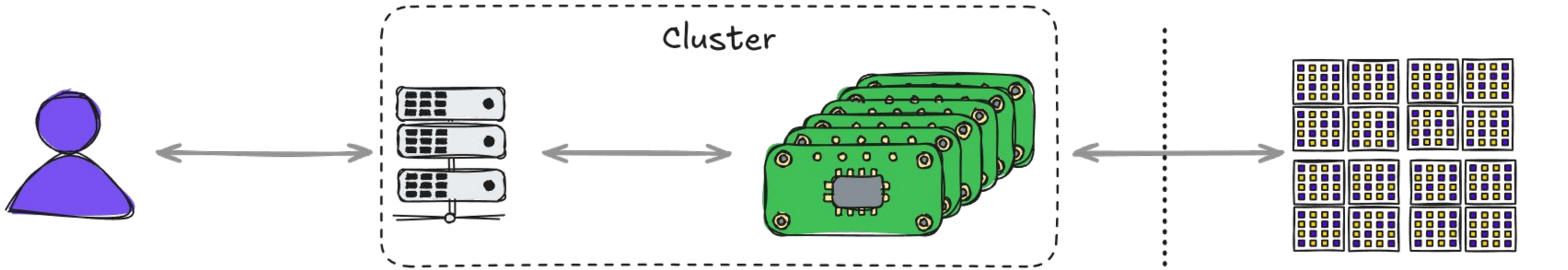


DEPLOY SOVEREIGN, SECURE, AND COST-EFFECTIVE AI SOLUTIONS

Built-In Security

Data Sovereignty

Cost Optimization



Data Scientist

Deploy and Monitor your algorithms

Manager

Orchestrates user's algorithm and nodes

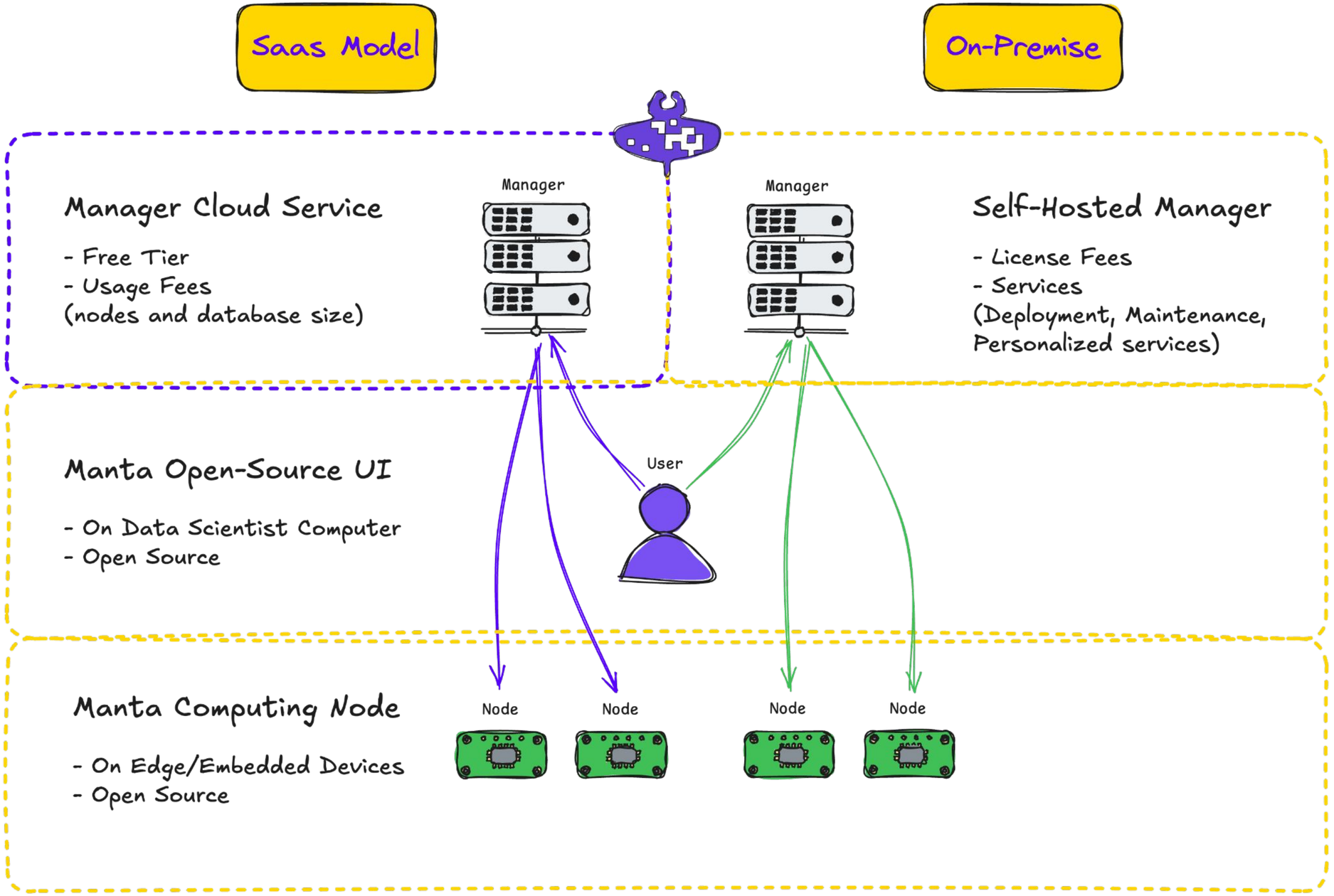
Nodes

Deploy local task and give access to data

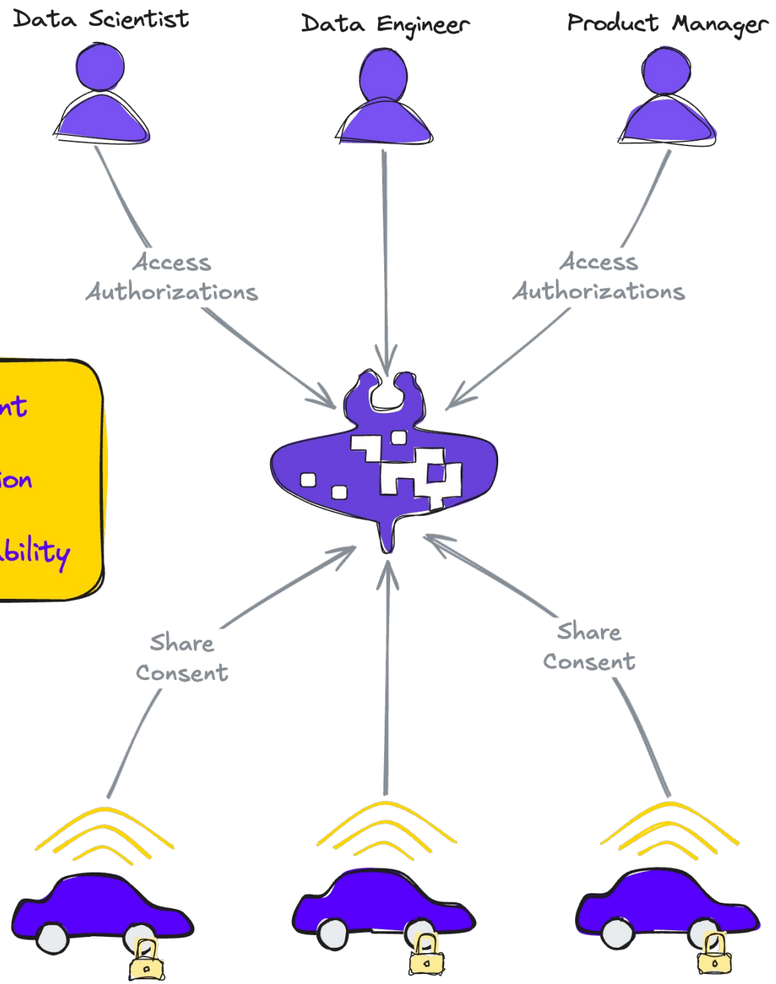
Local Data

Local Data are processed locally

MANTA: A HYBRID AND SCALABLE BUSINESS MODEL



AUTONOMOUS MOBILITY: A RAPIDLY EVOLVING MARKET



Access Management

Data Orchestration

Security and Traceability

- **Emerging Standards**
- **Clean and Smart Cities:**
  Autonomous mobility integrates with **city infrastructure** for a more sustainable future
- **Technological Transformation:**
  From sensor-driven decision-making to **collaborative AI**
- Diverse use-cases:
  - **Embedded cybersecurity** and **predictive maintenance**
  - **Autonomous driving** and **ADAS**
  - **Personalized User Experience**

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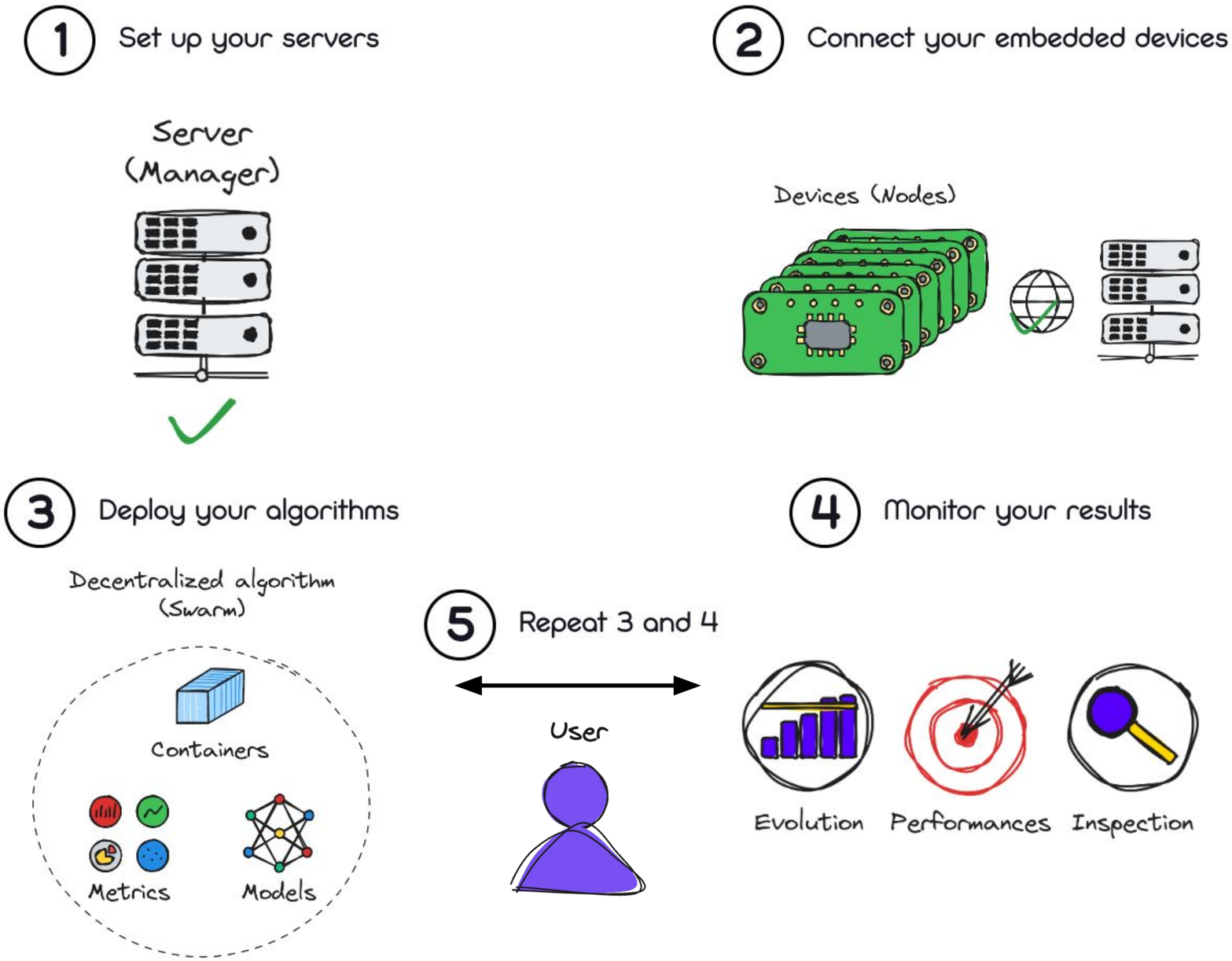
THANKS FOR YOUR ATTENTION

MANTA: SEAMLESS AI LIFECYCLE FROM PROTOTYPE TO PRODUCTION

- **Optimize every stage of the AI lifecycle**
- **Reduced Latency** for real-time data processing
- **Data Traceability**
- **Unmatched Flexibility**



AUTONOMOUS MOBILITY: A RAPIDLY EVOLVING MARKET

Autonomous Vehicles Europe

CAGR 41,1 %* **76 billion US$**

Autonomous Vehicles Worldwide

CAGR 13,5 %* **2 trillion US$**

- **Emerging Standards**:
  The shift towards autonomous and connected vehicles requires **new industry standards**.
- **Clean and Smart Cities:**
  Aligned with global efforts to create **greener and smarter cities**, autonomous mobility integrates with city infrastructure for a more sustainable future.
- **Technological Transformation:**
  From sensor-driven decision-making to **collaborative AI across vehicles, infrastructure, and smart cities**, the market is embracing transformative innovation.

CAGR : Compound Annual Growth Rate *by 2030 Sources: [1] [2]

INDUSTRY 4.0: SEIZING THE OPPORTUNITY WITH DECENTRALIZED AI SOLUTIONS

Industry 4.0 Europe

CAGR 19.2 %* **36 billion US$**

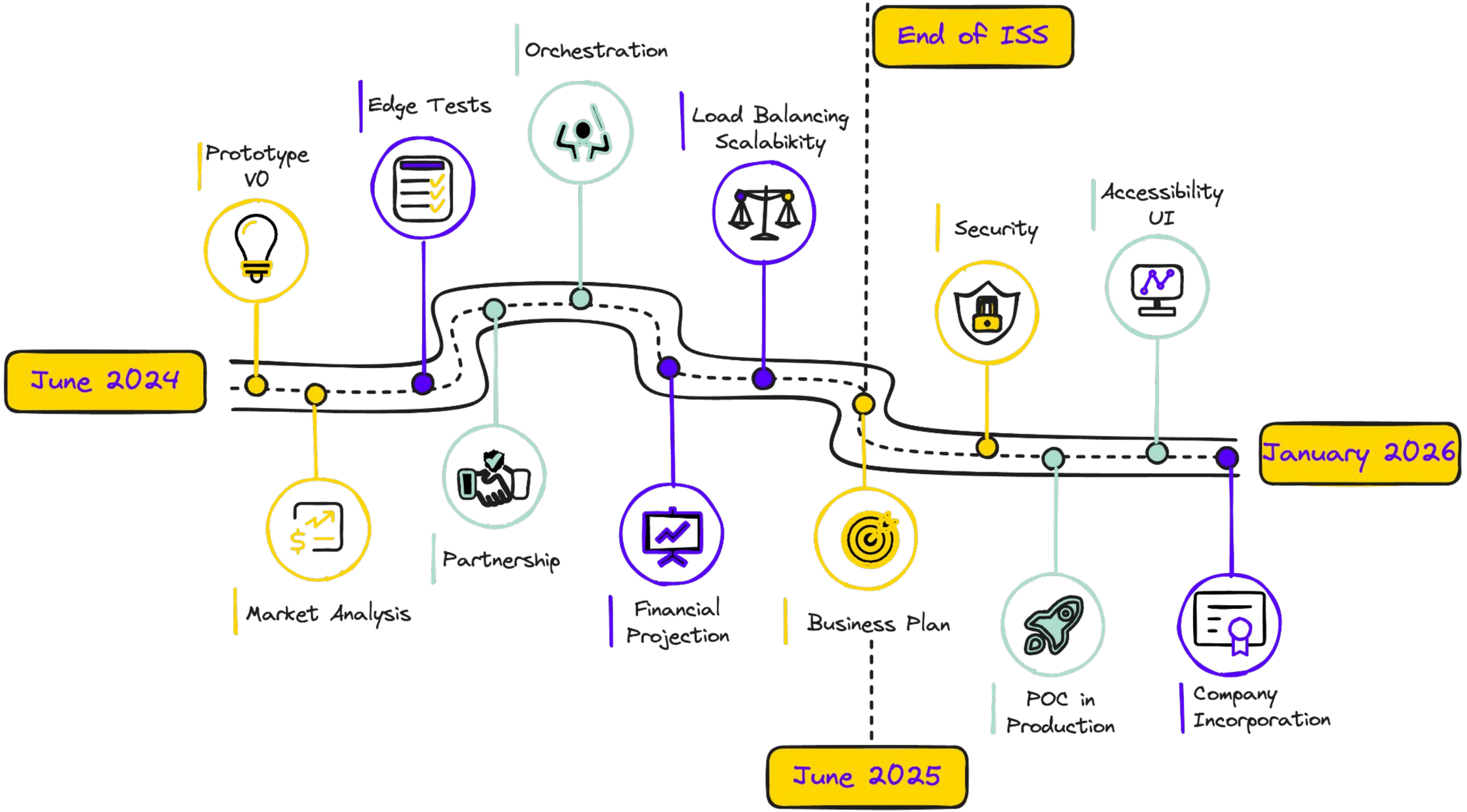
Industry 4.0 Worldwide

CAGR 20,7 %* **94 billion US$**

- **Decentralized Data Management**
  Decentralized processing solutions reduce **bandwidth costs** and **improve latency**.
- **Predictive Maintenance**
  Manta facilitates the deployment of predictive maintenance solutions, **reducing downtime** and **operational costs**.
- **Emerging Applications in Automation**
  Embedded AI technologies enable the **automation** and **optimization of production lines**.
- **Data Security and Sovereignty**
  Manta's solutions ensure **secure data management**, addressing the growing concerns around **cybersecurity** and **sovereignty**.

CAGR : Compound Annual Growth Rate *by 2030 Sources: [1] [2]

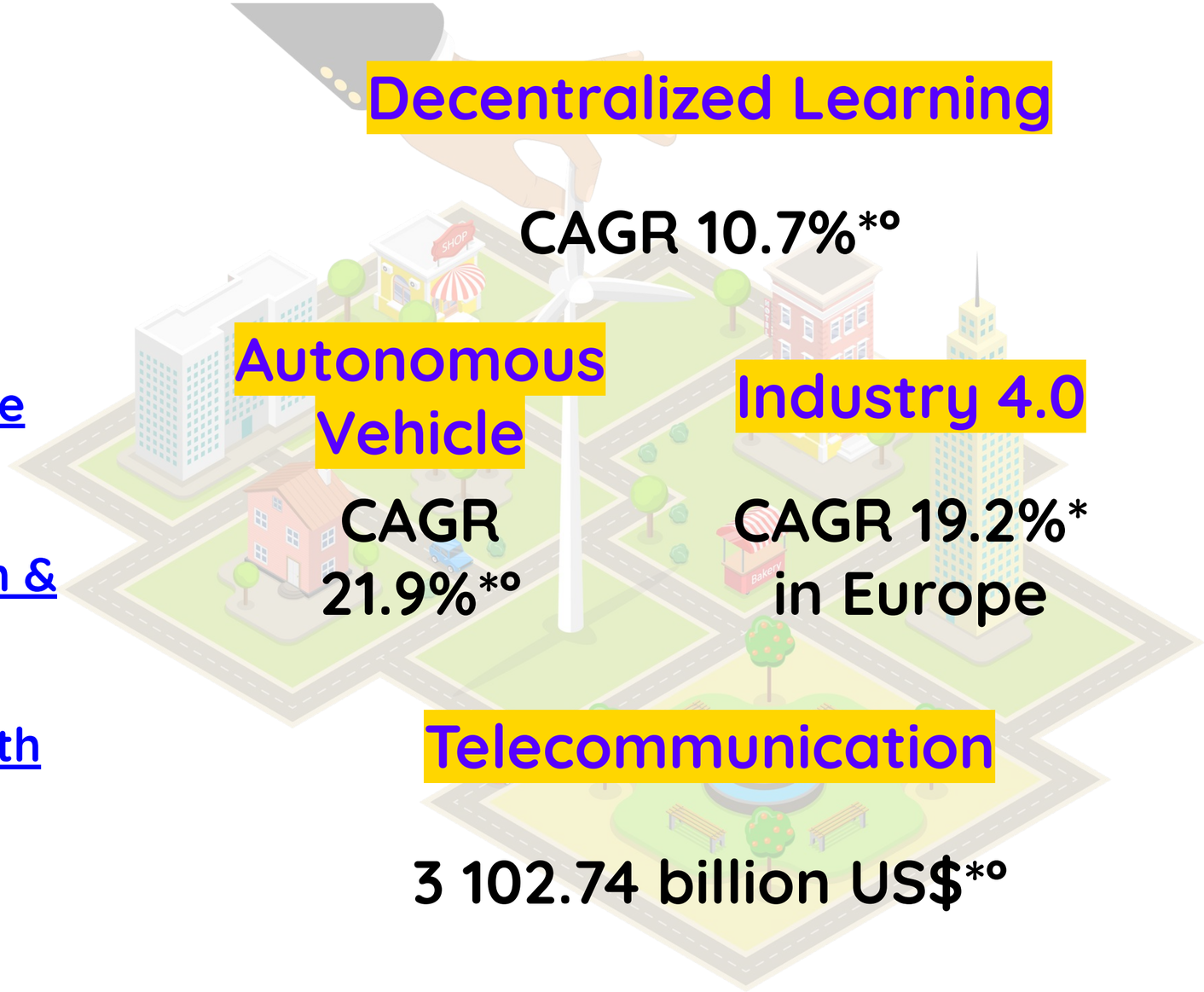
MANTA ROADMAP: FROM INNOVATION TO MARKET IMPACT



MARKET: NAVIGATING COMPETITIVE WATERS

SOURCES

- Federated Learning Market Size Global Report, 2022 - 2030
- Autonomous Vehicle Market - Share, Size and Industry Analysis
- Europe Industry 4.0 Market Size, Growth & Future by 2028
- Telecommunication Market Size & Growth Analysis - Industry Forecast 2023-2030



Decentralized Learning

CAGR 10.7%*°

Autonomous Vehicle

CAGR 21.9%*°

Industry 4.0

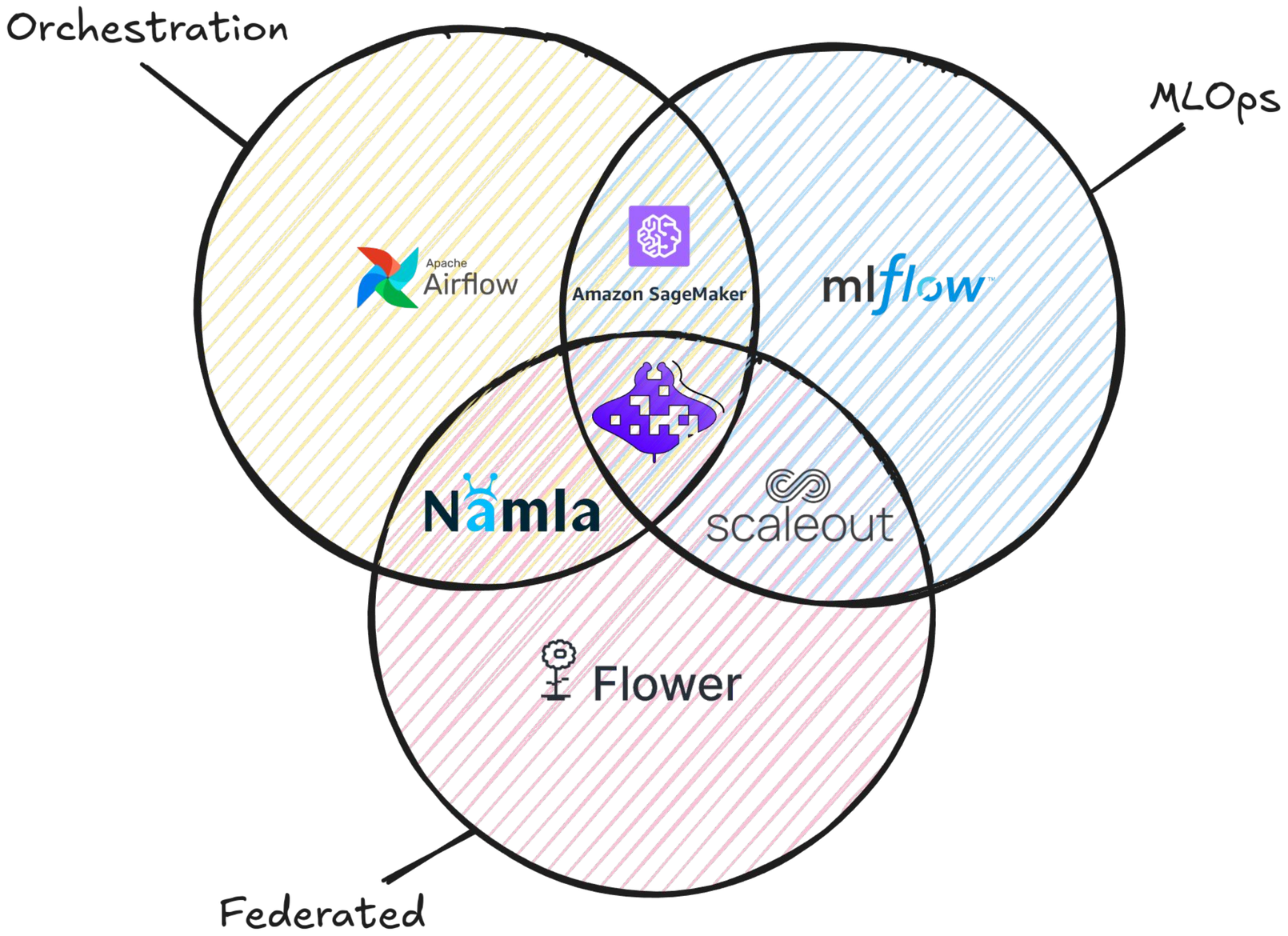
CAGR 19.2%* in Europe

Telecommunication

3 102.74 billion US$*°

CAGR : Compound Annual Growth Rate °worldwide *by 2030

MARKET: NAVIGATING COMPETITIVE WATERS



Hugo Miralles

CEO

Combines a scientific background in Federated Learning with a passion for ethical AI and team building.

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TEAM MANTA

Benjamin Bourbon

CTO

A detail-oriented technologist. Benjamin's expertise lies in computer science, AI, and distributed computing.

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