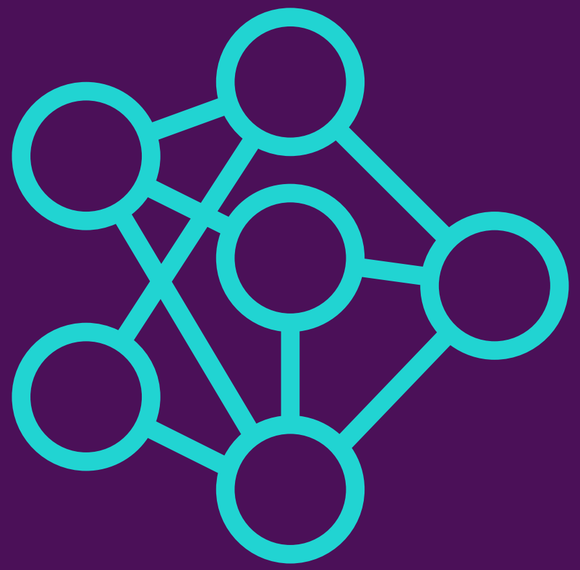


AITEM

ARTIFICIAL INTELLIGENCE SOLUTIONS

Who's AITEM...?

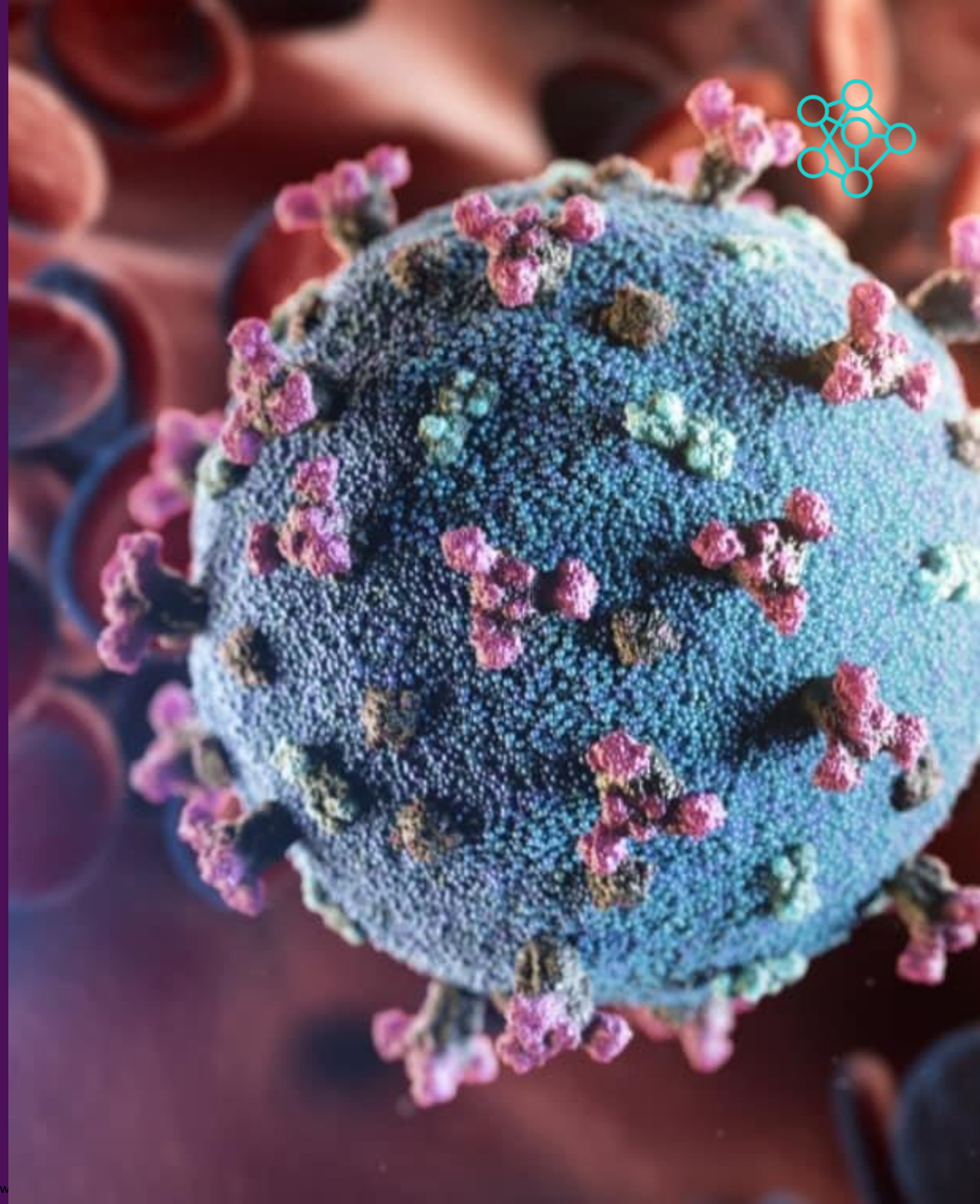
AITEM is a **DUMAREY Automotive Italia spin-off** born in 2020 **that develops AI software** with an experience maturated since 2013 on **Autonomous Vehicles**

The Power of AI

AITEM idea is born at the beginning of the Pandemic and was incorporated in Oct 2020

Moved by social responsibility we wanted to help Hospitals to tackle COVID-19 leveraging our technology, thus we deployed **AIPPO**, our Image based solution to detect COVID-19, in just 2 weeks

When PCRs took **4 hours** and Physicians had **60%** accuracy (University of Torino assessment) AIPPO could provide COVID19 detection in **seconds** with **90%** accuracy



What do we do?

Our **AI** products and services are designed to empower **businesses** with the tools they need to achieve **greater** levels of **productivity**

AITEM

Products

Veterinary

LAIKA
Laboratory analysis

Services

Industrial

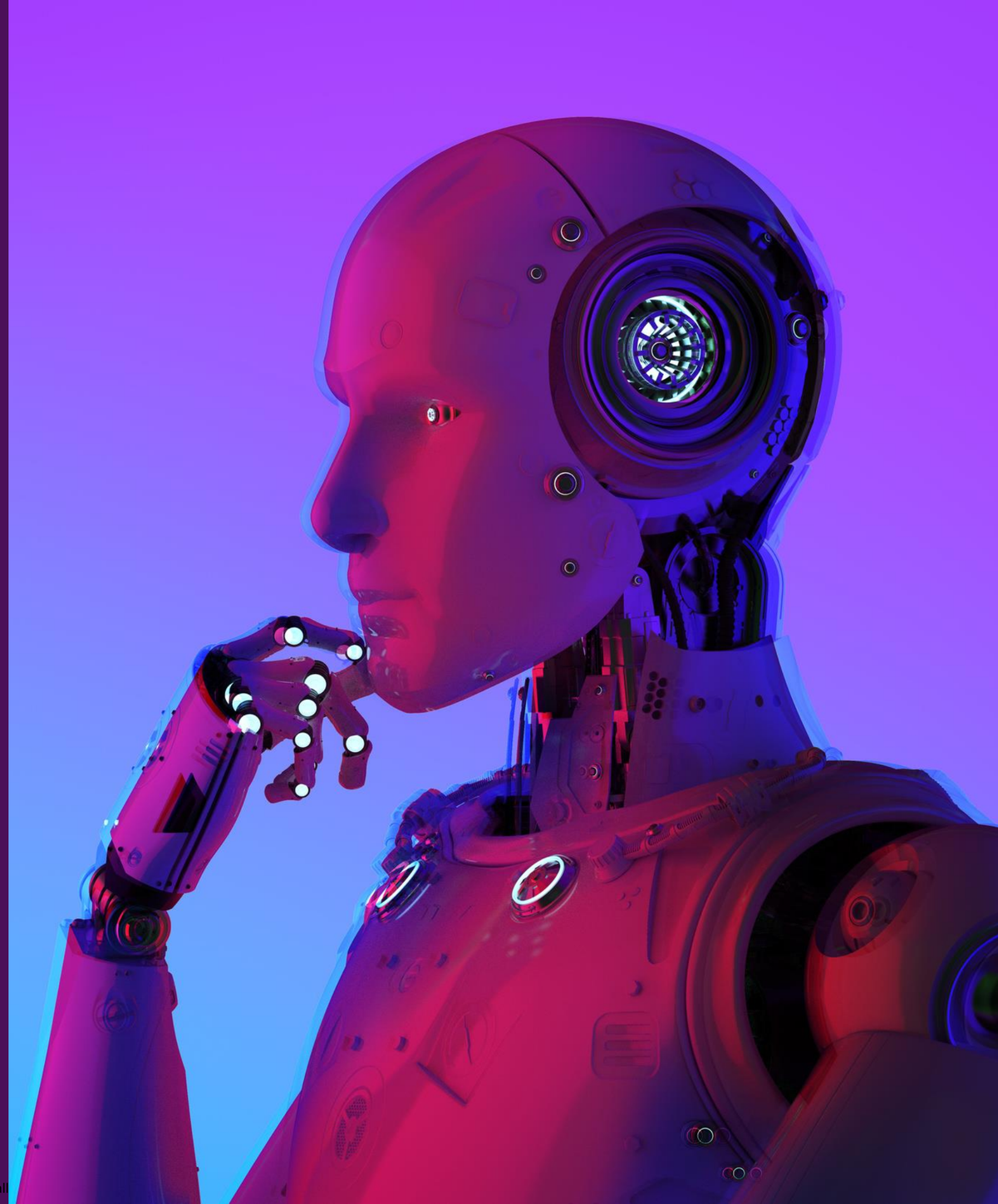
Product quality
Predictive maintenance
Defect analysis

Engineering

AI & ML leveraging automotive expertise

72%

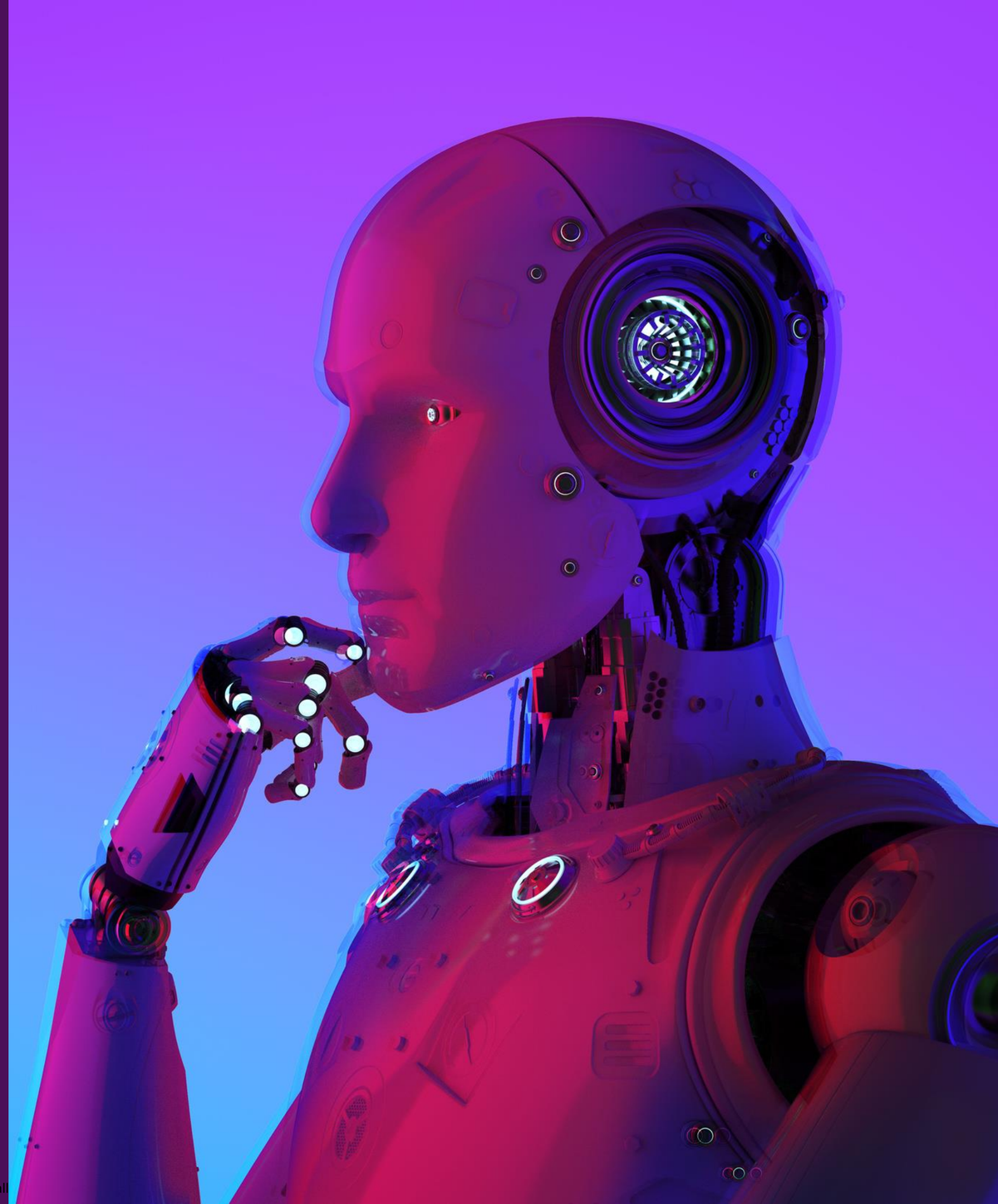
Of manufacturing companies are adopting I4.0 technologies



72%

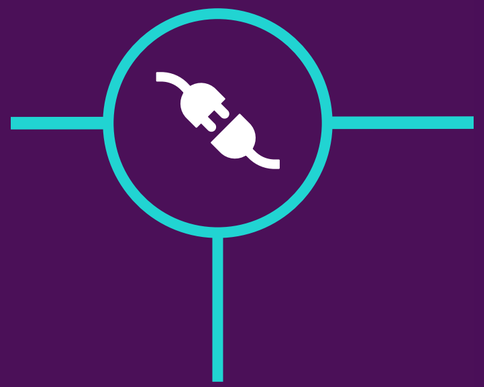
Of manufacturing companies are adopting I4.0 technologies

Only 33% of them are already using AI platforms to exploit the data!



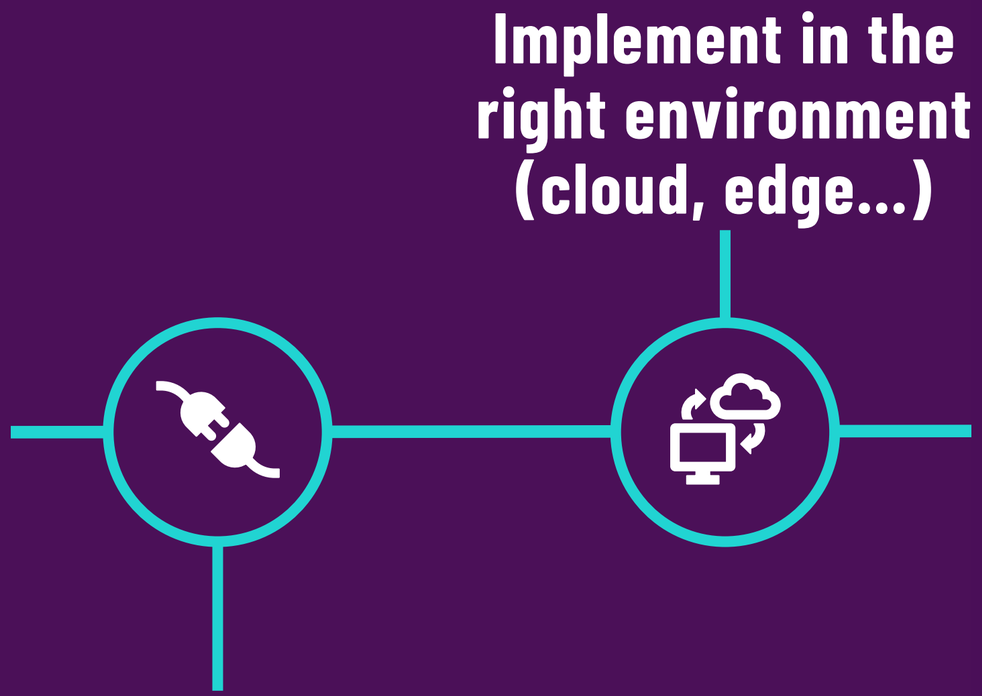
A **Strategic Approach** is needed when implementing AI in each specific field

STRATEGIC means

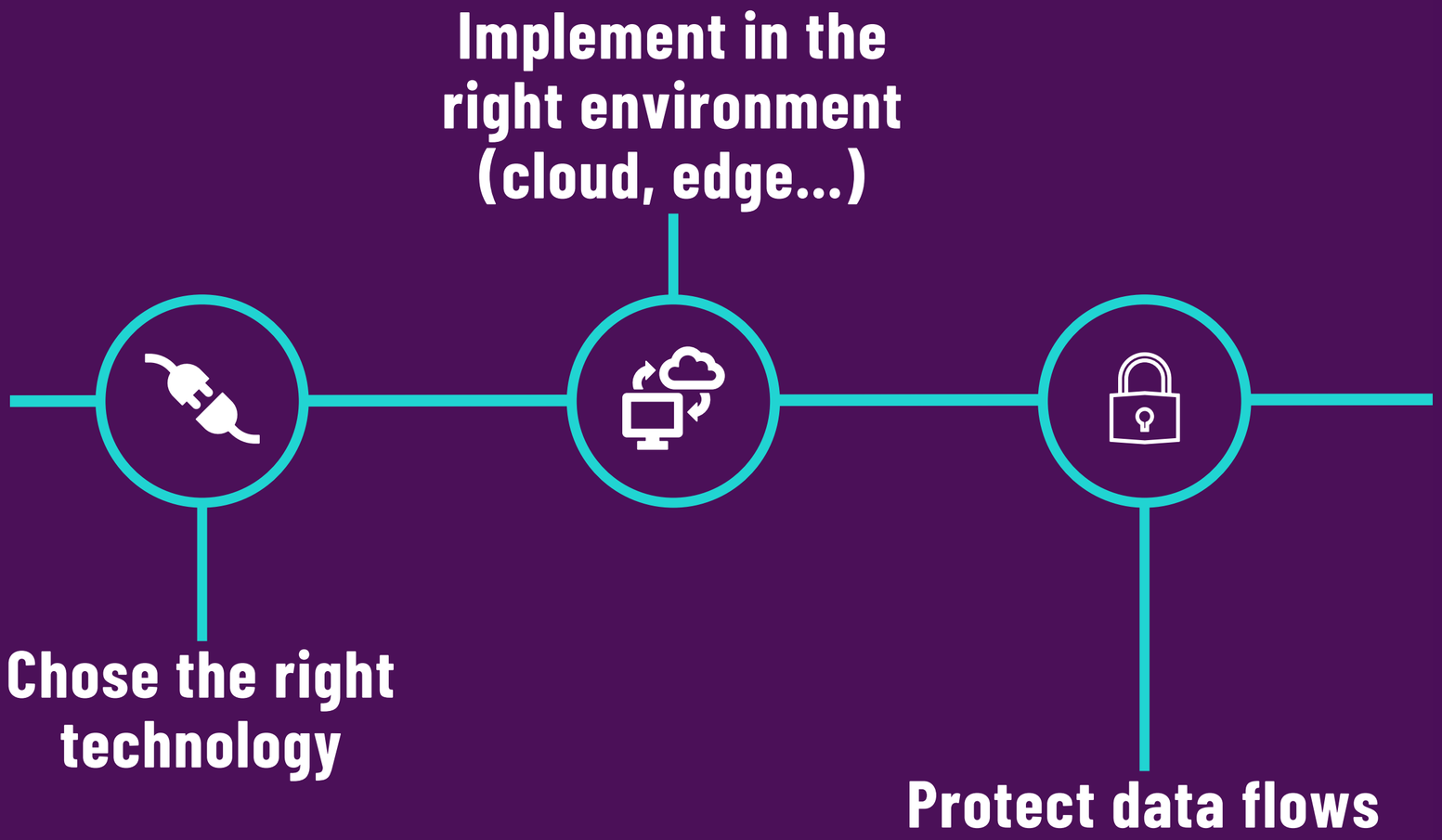


Chose the right technology

STRATEGIC means

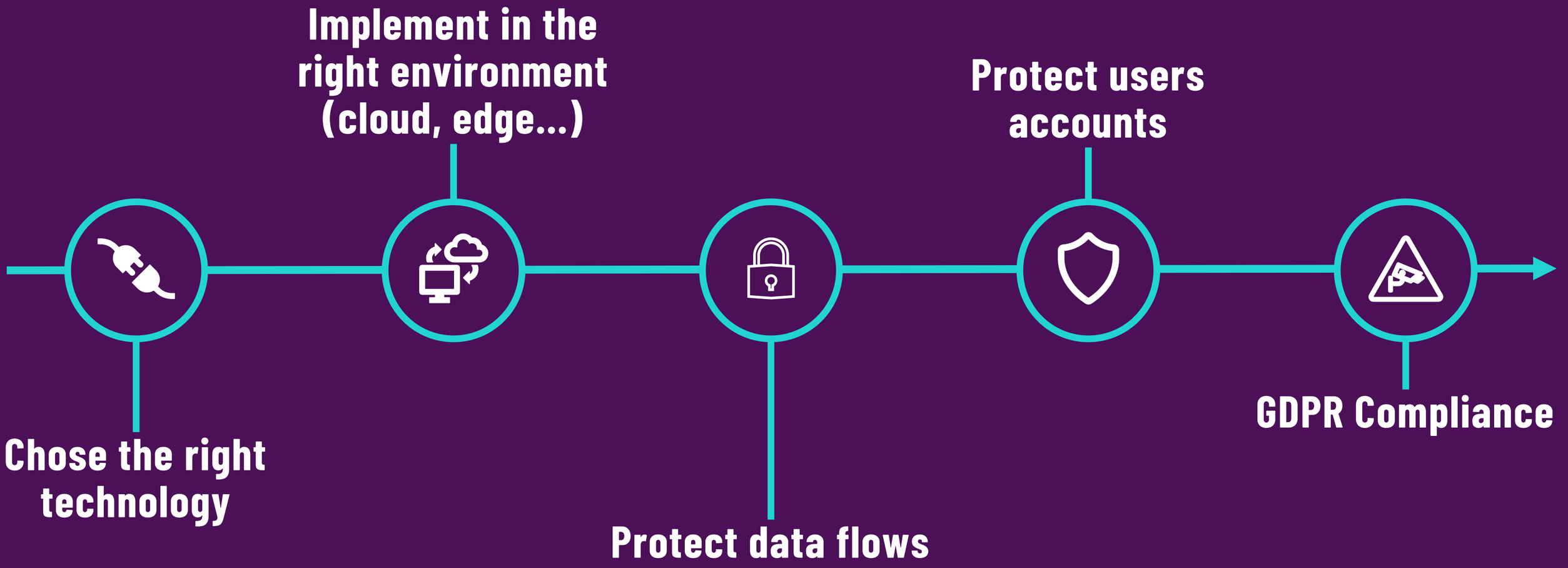


STRATEGIC means



STRATEGIC means

STRATEGIC means



Our core technologies

Image Analysis and Computer Vision

Need **10x less** images/videos than competitors

Generative AI and LLM

We master the discipline and we leverage our **patented parsing** technology

Deep Learning & Data Analytics

Managed **10M vehicles fleet**

Let's dig into some practical examples

AIPPO COVID-19 detection system

AIPPO

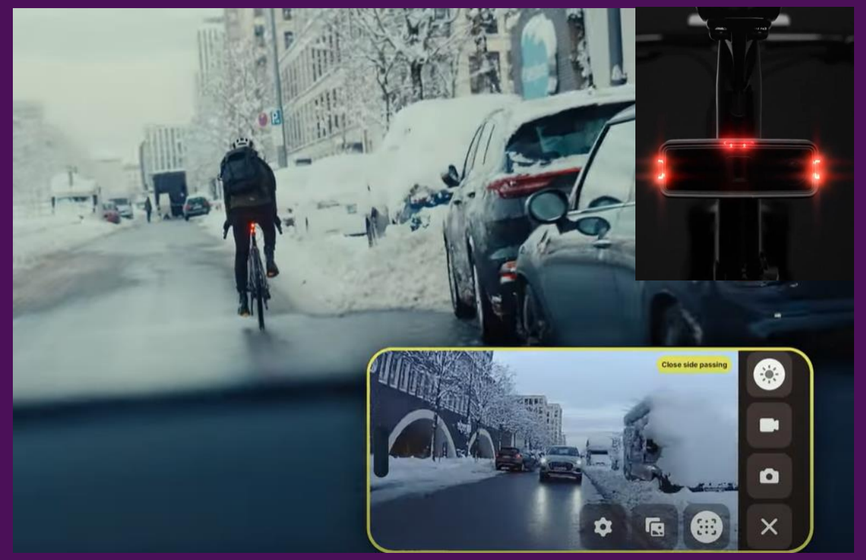
Hospital workflow integration

LAIKA Veterinary Copilot

LAIKA

Fast response LLM for differential diagnosis

Mobility collision alert



Safety critical anticollision system

COVID Detection

Key Challenges:

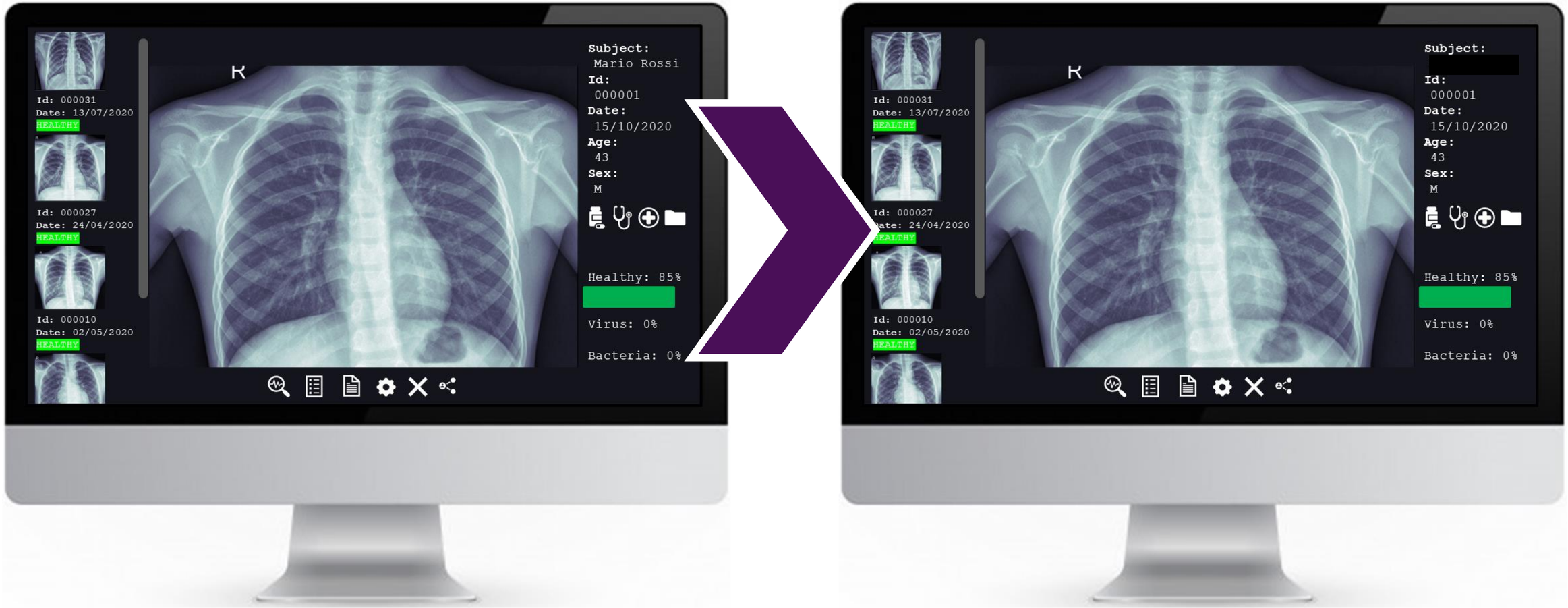
- Accuracy & Cognitive workload
- Data anonymization
- Data Privacy and Property

Accuracy and Cognitive Workload

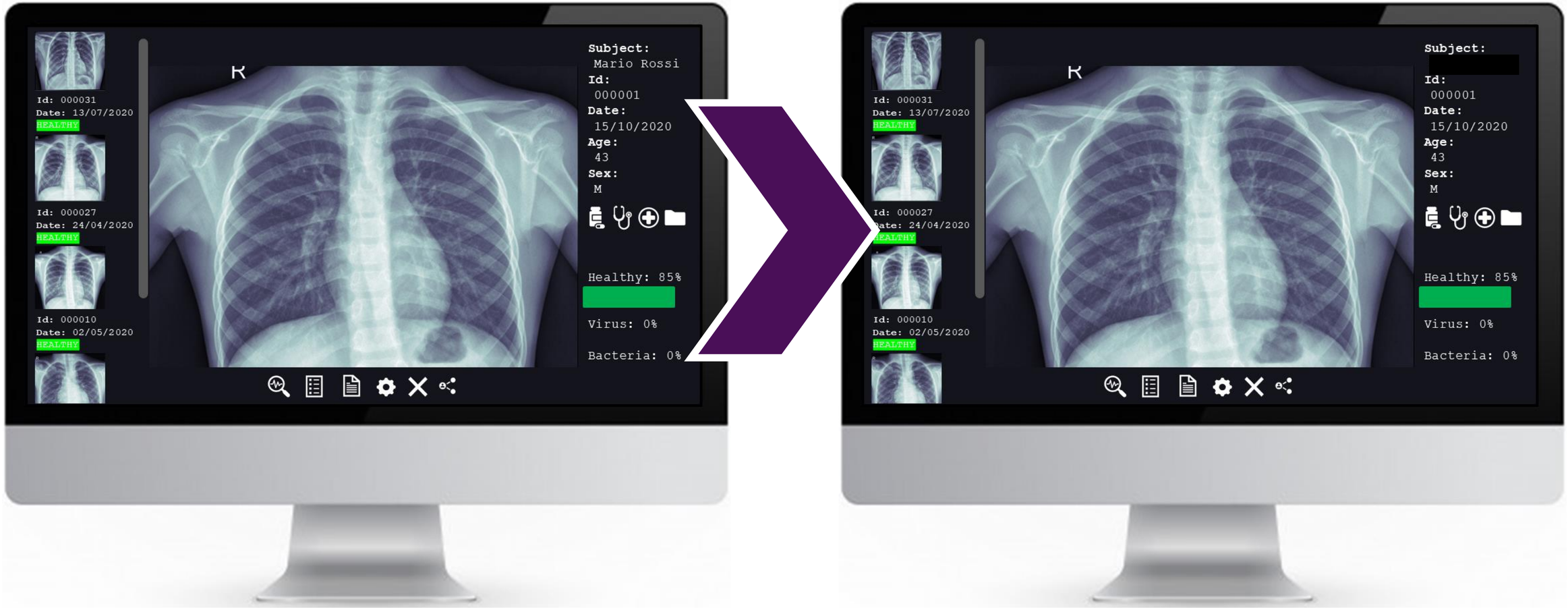
Integration into RIS/PACS system ensuring that **security protocols** are respected

Validation of results to gain **trust** among radiologists

Anonymization?

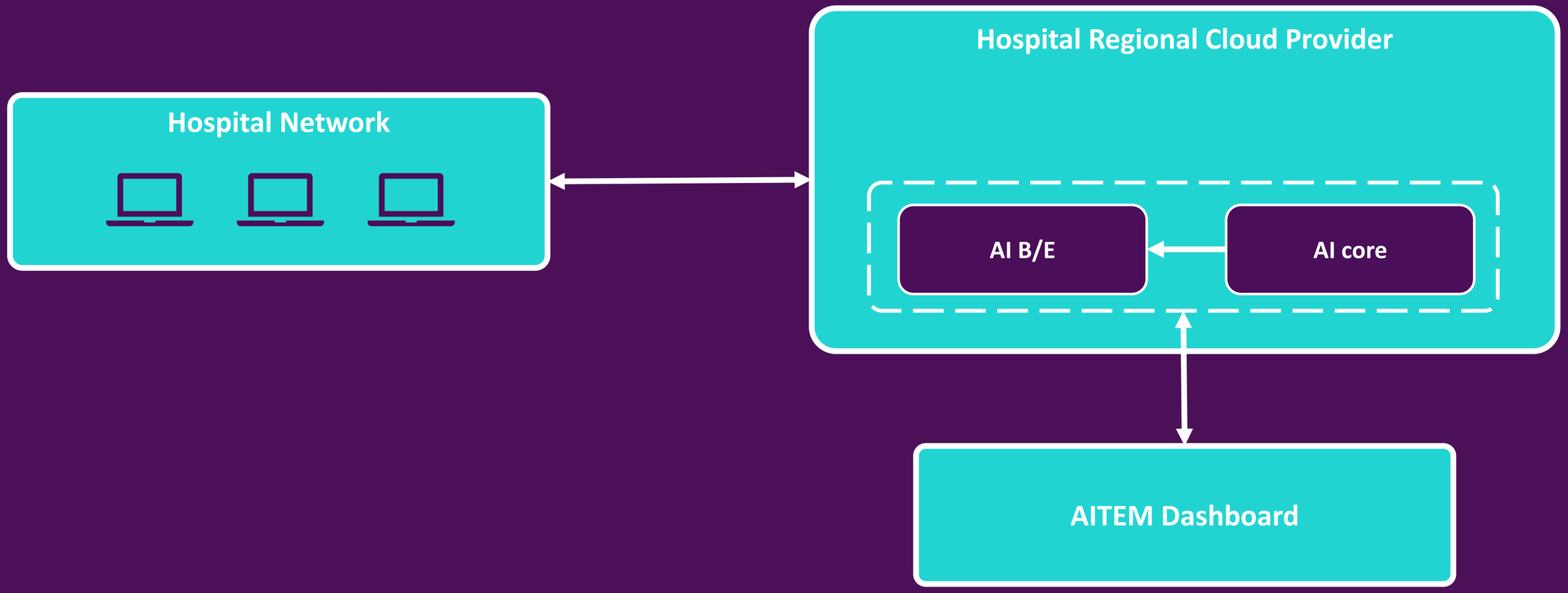


Anonymization vs Pseudonymization

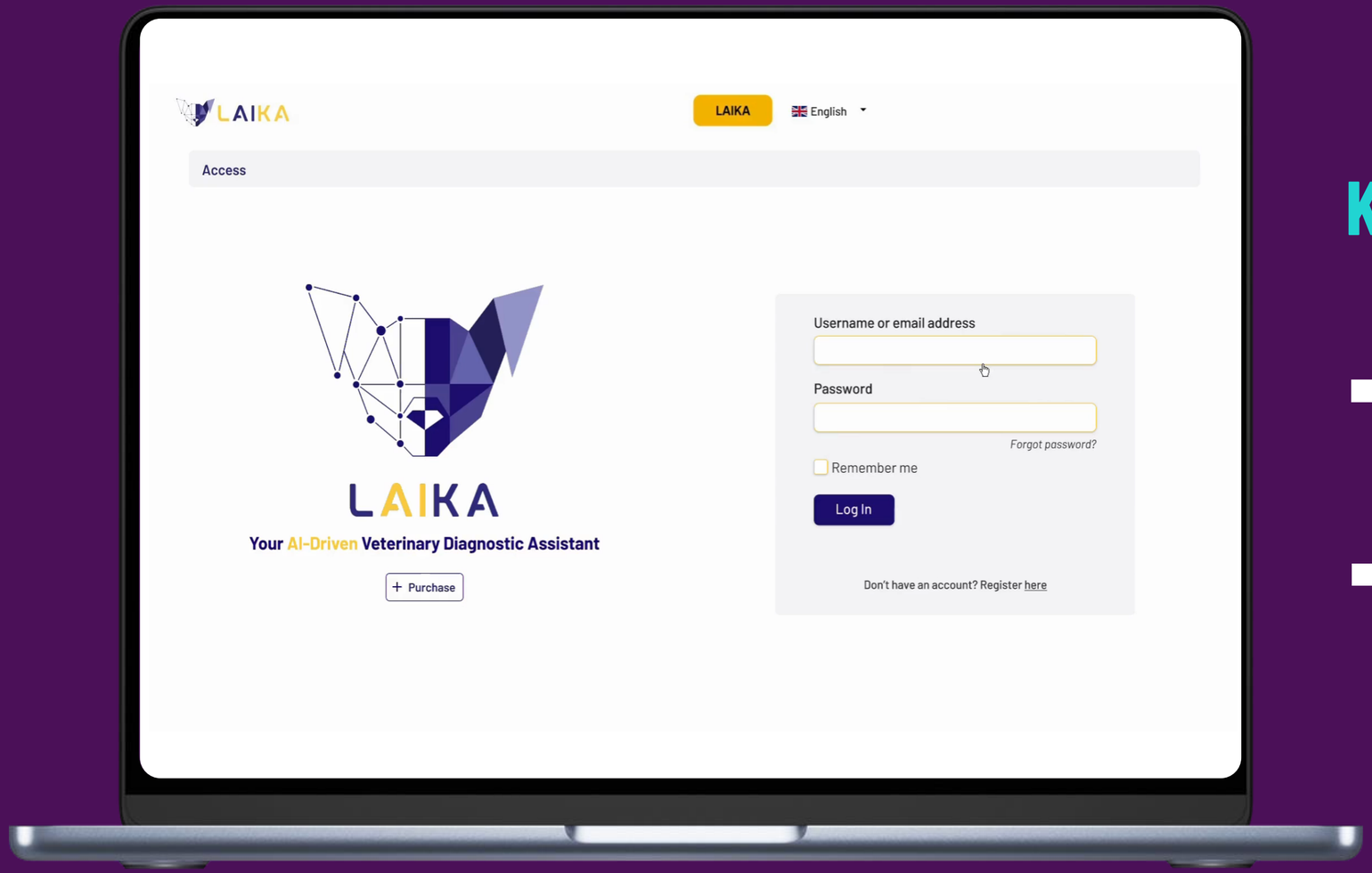


Data must fulfill pseudonymization rules ensuring GDPR compliance

Data Privacy and Property



LAIKA Veterinary Copilot

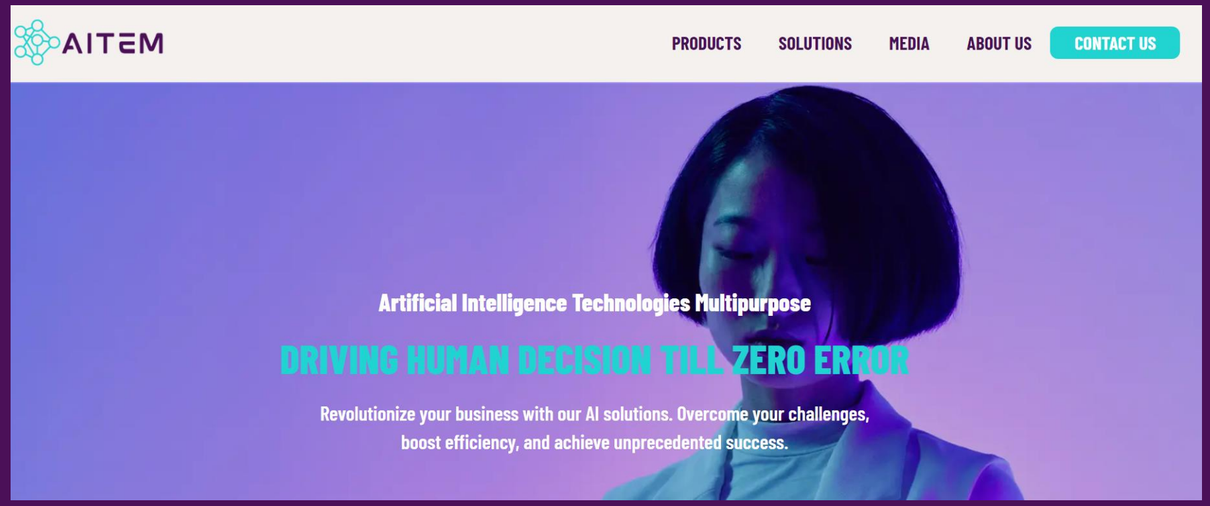


Key Challenges:

- Cybersecurity: Customer data and Payment system
- Liability & Data property

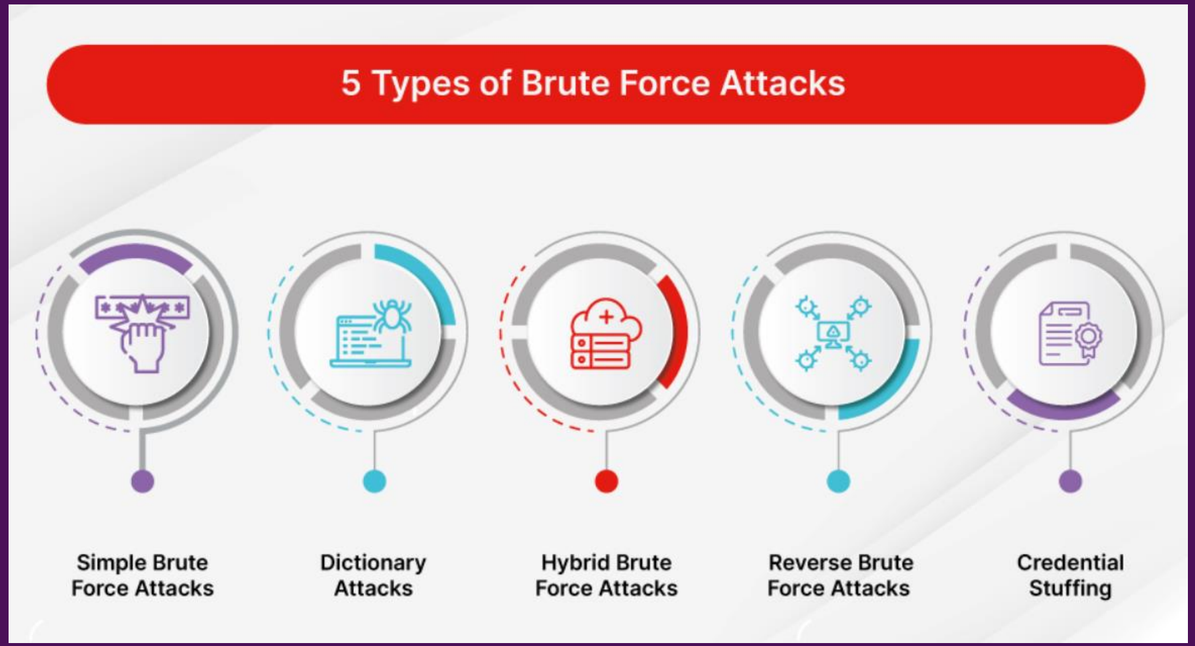
Cybersecurity: Issues examples

Website Defacing



Work in progress site update, MFA not yet activated

Credential stolen without MFA



Partner service from EU, MFA not implemented by provided, 100€ credits stolen

Cybersecurity: Best Practices

Payment services: Certified Gateways (e.g. Stripe)

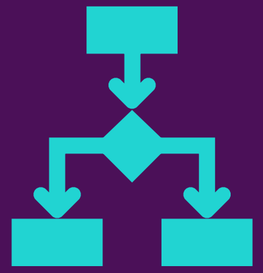
Datacenter: EU based w/ state of the art security such AWS

MFA everywhere

Policies: MOG 231 with detailed issue handling procedures

Liability and Data Property

Second opinion system and Diagnosis **support** system



Terms of Use and **Data processing** agreement

Data storage and protection

Collision Alert system

Key Challenges:

- Dependability and Accuracy
- System integration and breaches
- Data Privacy and Anonymization

Dependability, Breaches, Privacy

Automated and Real life testing

Real life testing in traffic with augmented simulated testing to increase **coverage**

SW & Data Encryption

To avoid sensitive **data leaks** (video recordings)

IAST & Peer testing

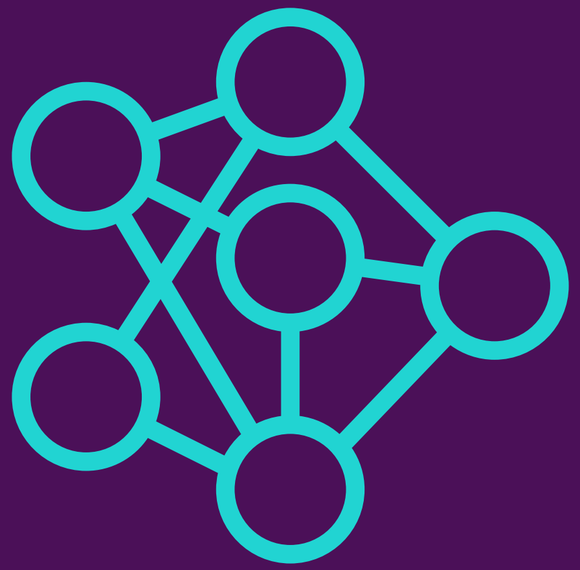
Wide breach test patterns with third parties to ensure **cybersecurity**

Key Takeaways

While developing SW content, **privacy** and **security** shall be taken in consideration with a **“by design approach”**

Stay **focused** and monitor your systems keeping a **conscious alert**

MOG 231 is a tool to ensure the adoption of proper rules and countermeasures, it’s not the **TOOL** but a preventive **INCENTIVE**



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