

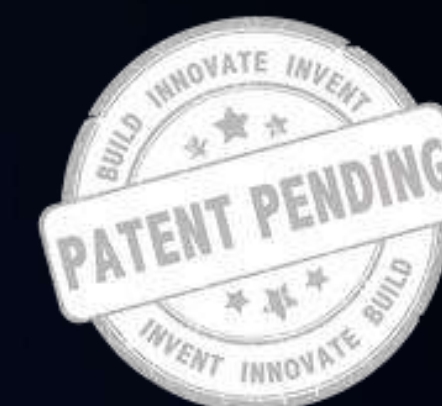
trinity

Engineered by
knowhedge
your edge to know how

UniGe **Dibris**



MYW.AI™
EDGE INTELLIGENCE FOR ALL



MYW.AI 4 ROBOTICS™

ROBOTS AS A SERVICE @THE VERY EDGE

Fabrizio Cardinali
CEO Knowhedge™ – MYW.AI™

 www.trinityrobotics.eu







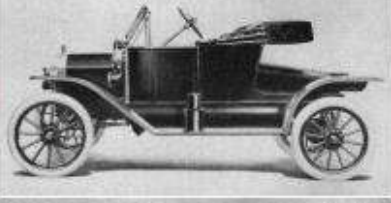




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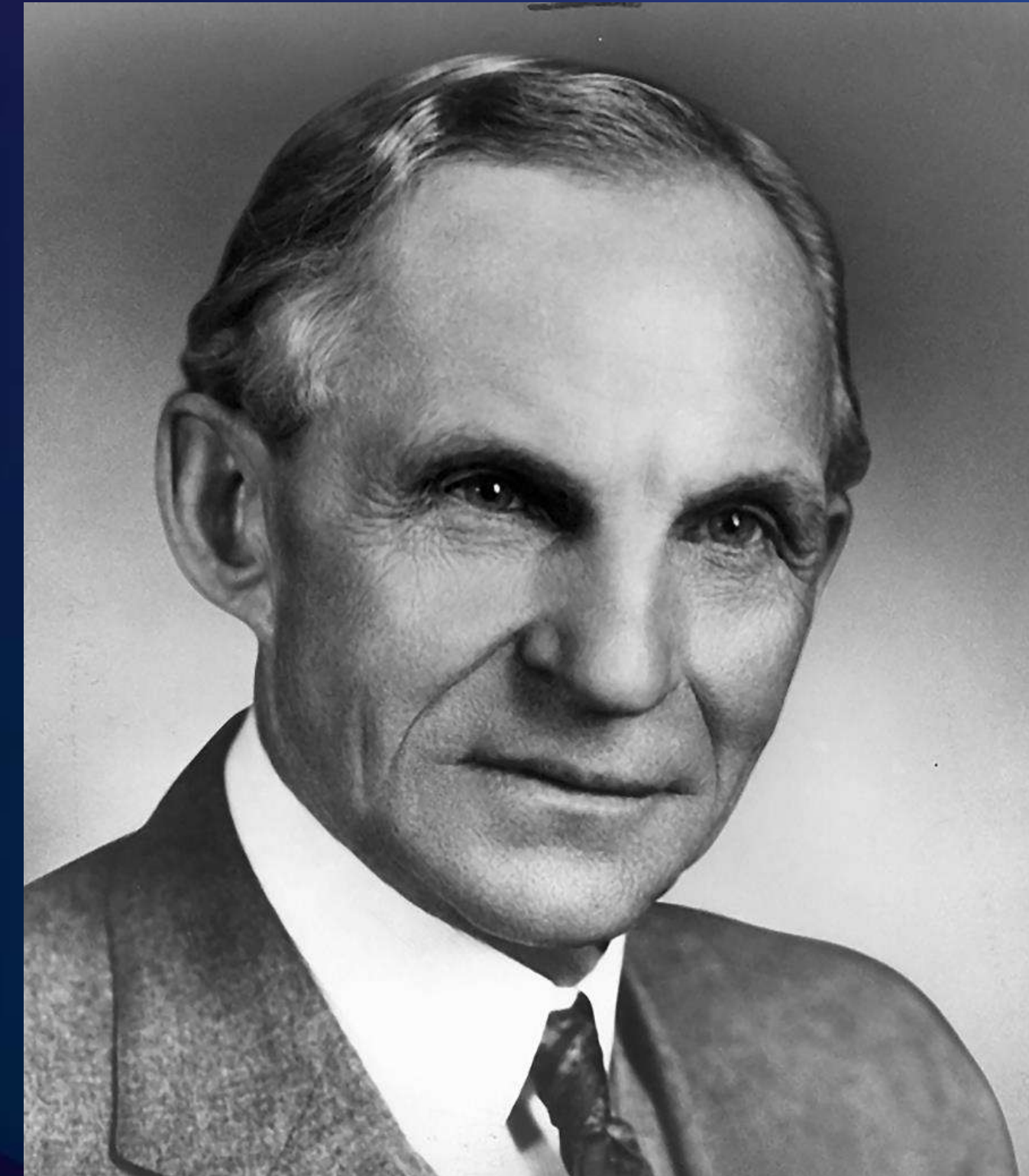
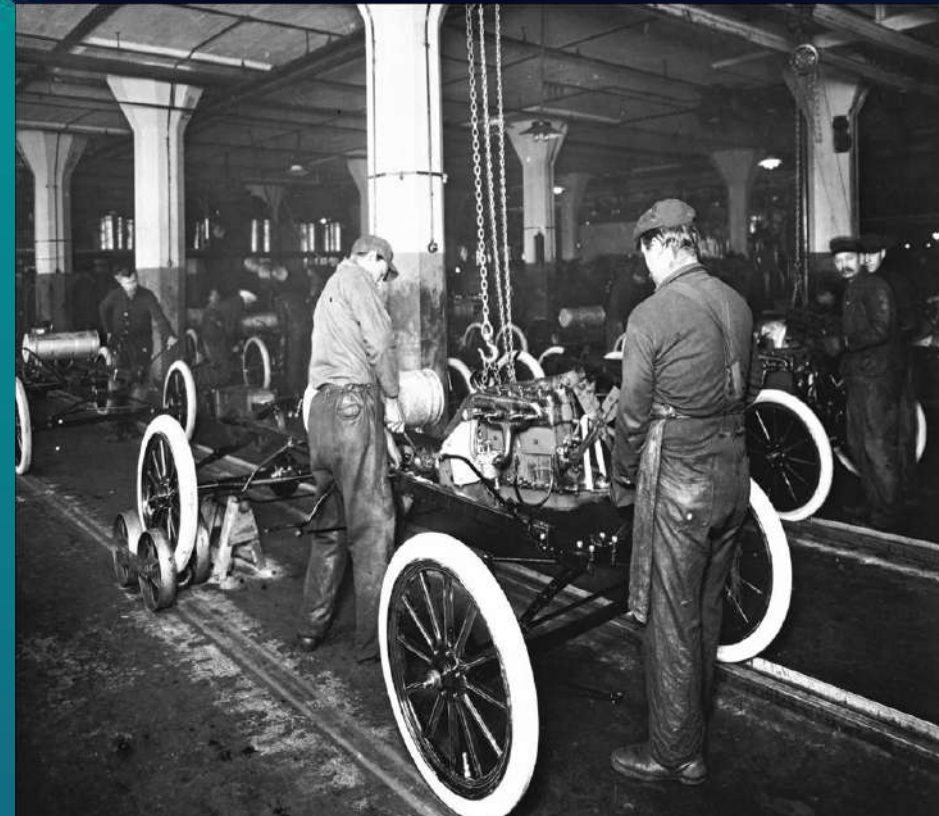
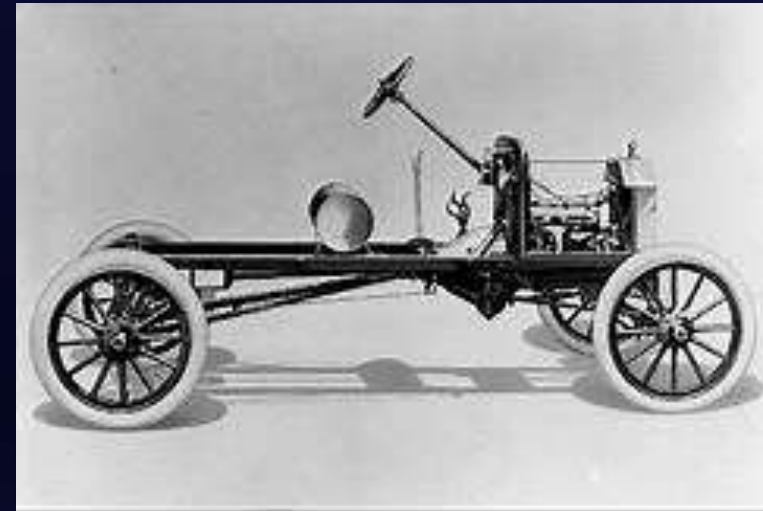


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The Fordian Nemesis 1/3

Products as a Service Platform

Model T - Type	Picture	Year of Production	Model T - Type	Picture	Year of Production
Touring		1909-1927	Sedan		1915-1923
Touring Fore-door		1912-1916	Sedan Fordor		1924-1927
Coupé		1909-1911, 1914-1927	Tudor		1925-1927
Runabout		1909-1927	Torpedo		1910-1912
Town		1909-1917	Coupélet		1915-1918
Tourster		1909			



“A business absolutely devoted to service will have only one worry about profits, they will be embarrassingly large!”
Henry Ford

The Fordian Nemesis 2/3

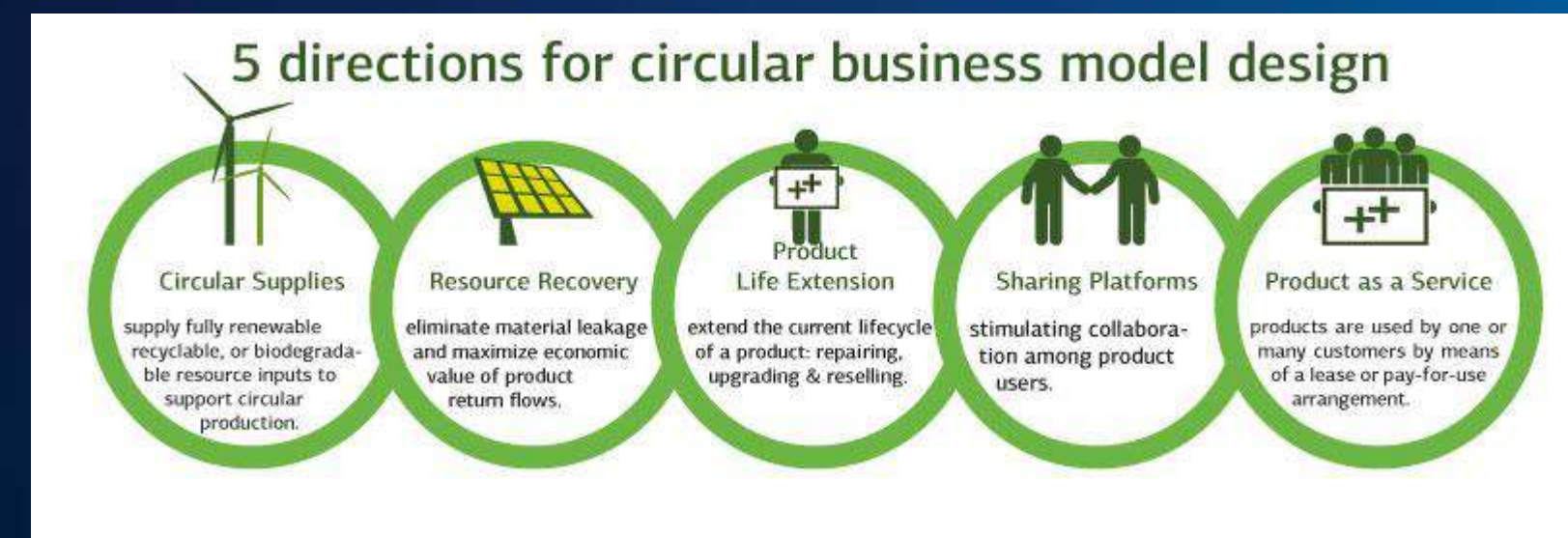
Towards a New Product Servitization Economy



From Making Products...



...to Offering After Market Services



The Fordian Nemesis 3/3

Where innovative service models are going to be KING!

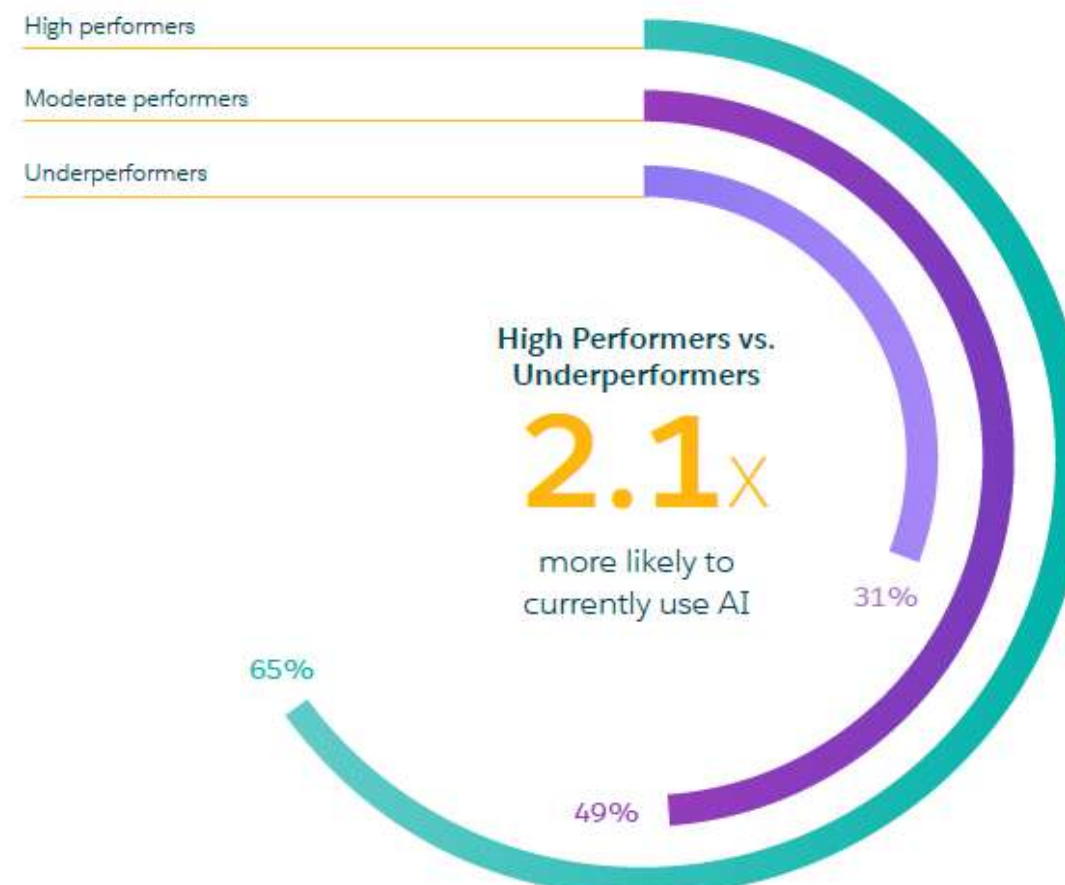
Personalized Service Influences Customer Loyalty

Demonstrating customer knowledge can impact allegiance, as 69% of consumers and 82% of business buyers say personalized customer care has a major or moderate influence on their loyalty to companies.



Top Manufacturers Make Service Smarter with AI

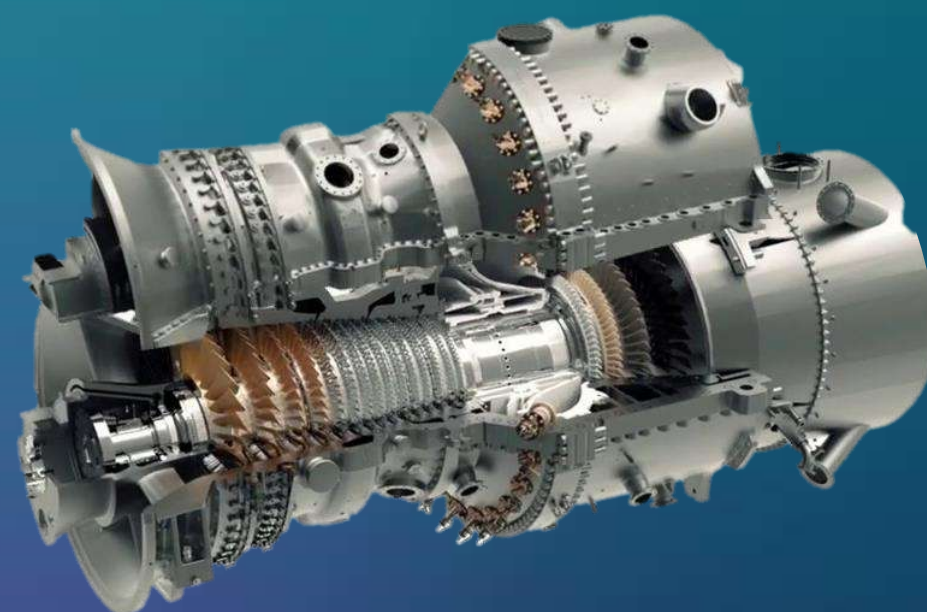
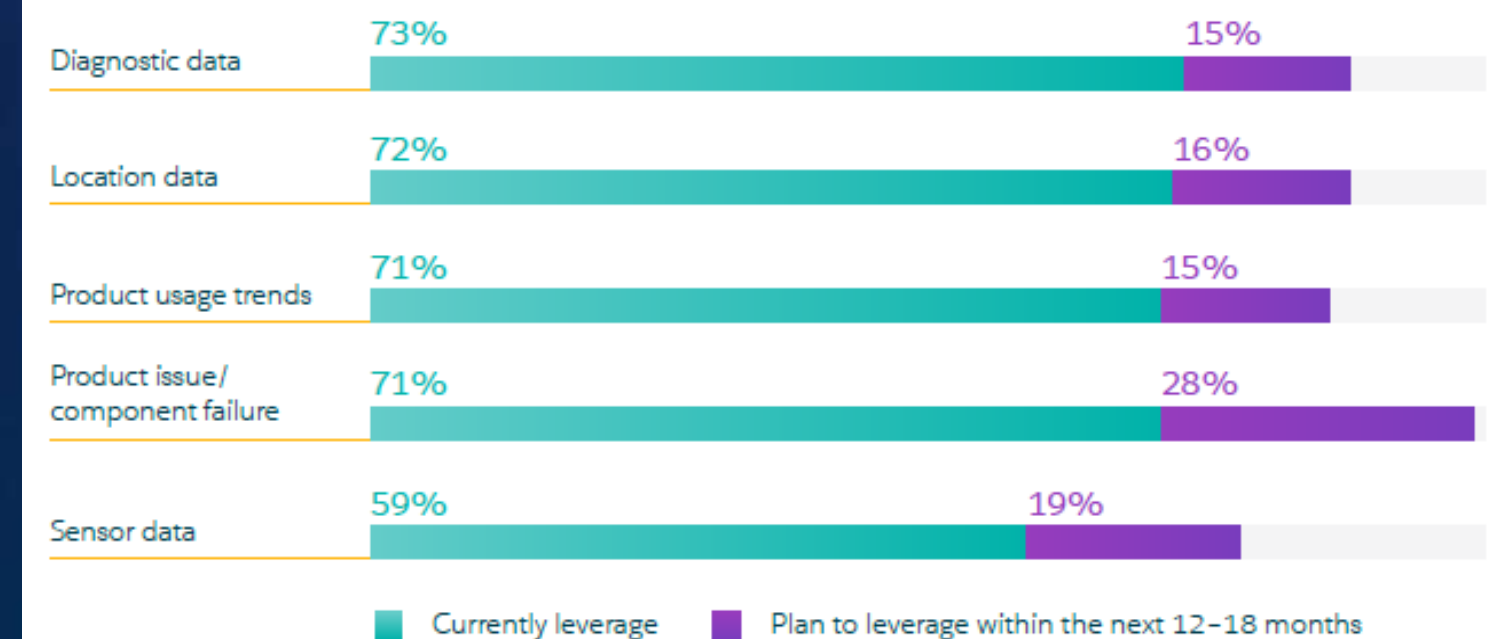
High-performing manufacturing service teams are 2.1x more likely than underperforming teams to currently use AI.



Manufacturers' Most Common Use for IoT is Diagnostic Data

Manufacturers are looking at ways to leverage the IoT to deliver smarter service, create happier customers, and grow their businesses. Here are the most common data types fueling the IoT for manufacturing service teams.

Percentage of Service Teams Using Internet of Things Data in the Following Ways



1. Operational Outcome
2. Financial Outcome
3. Customer Satisfaction Outcome

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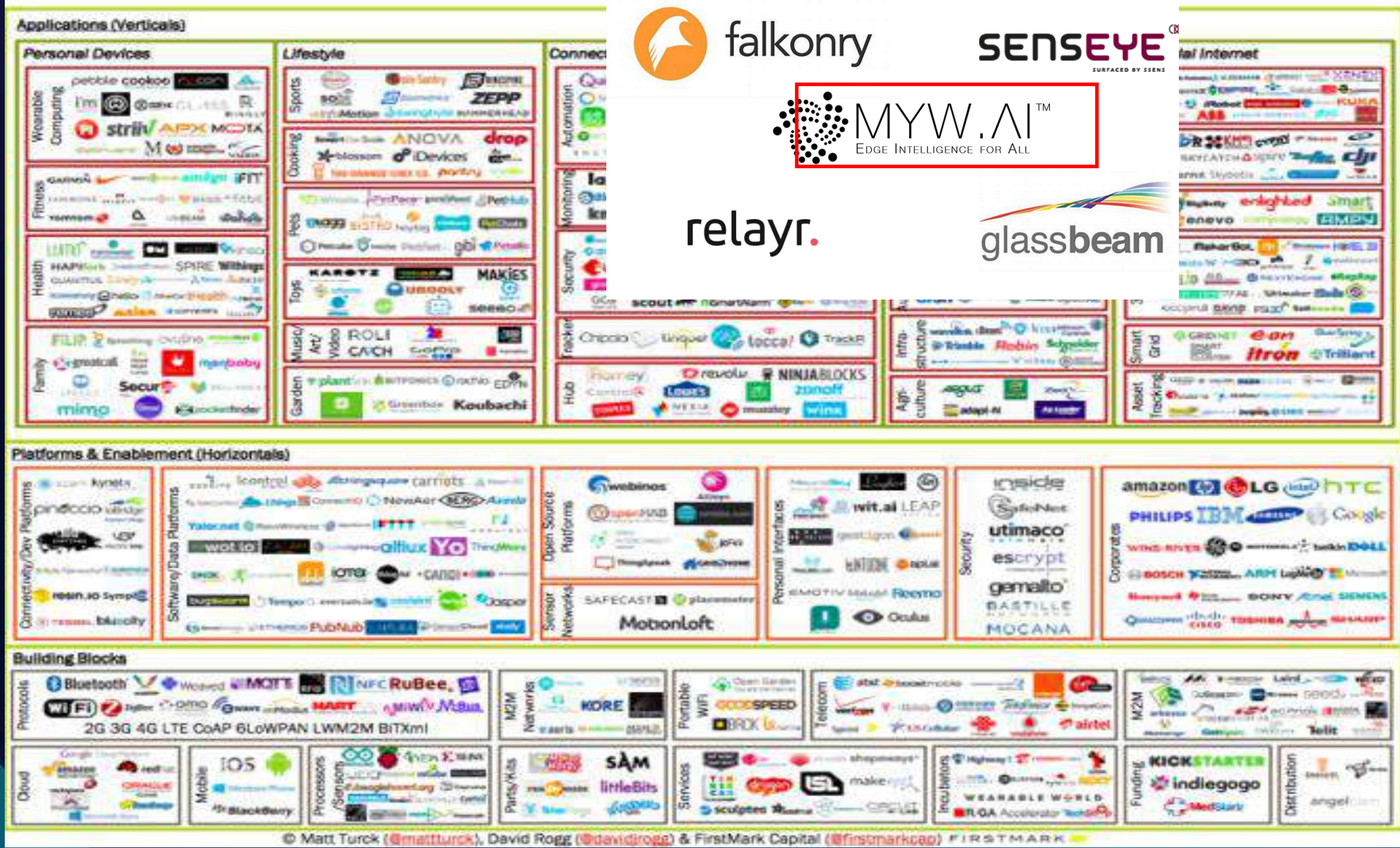
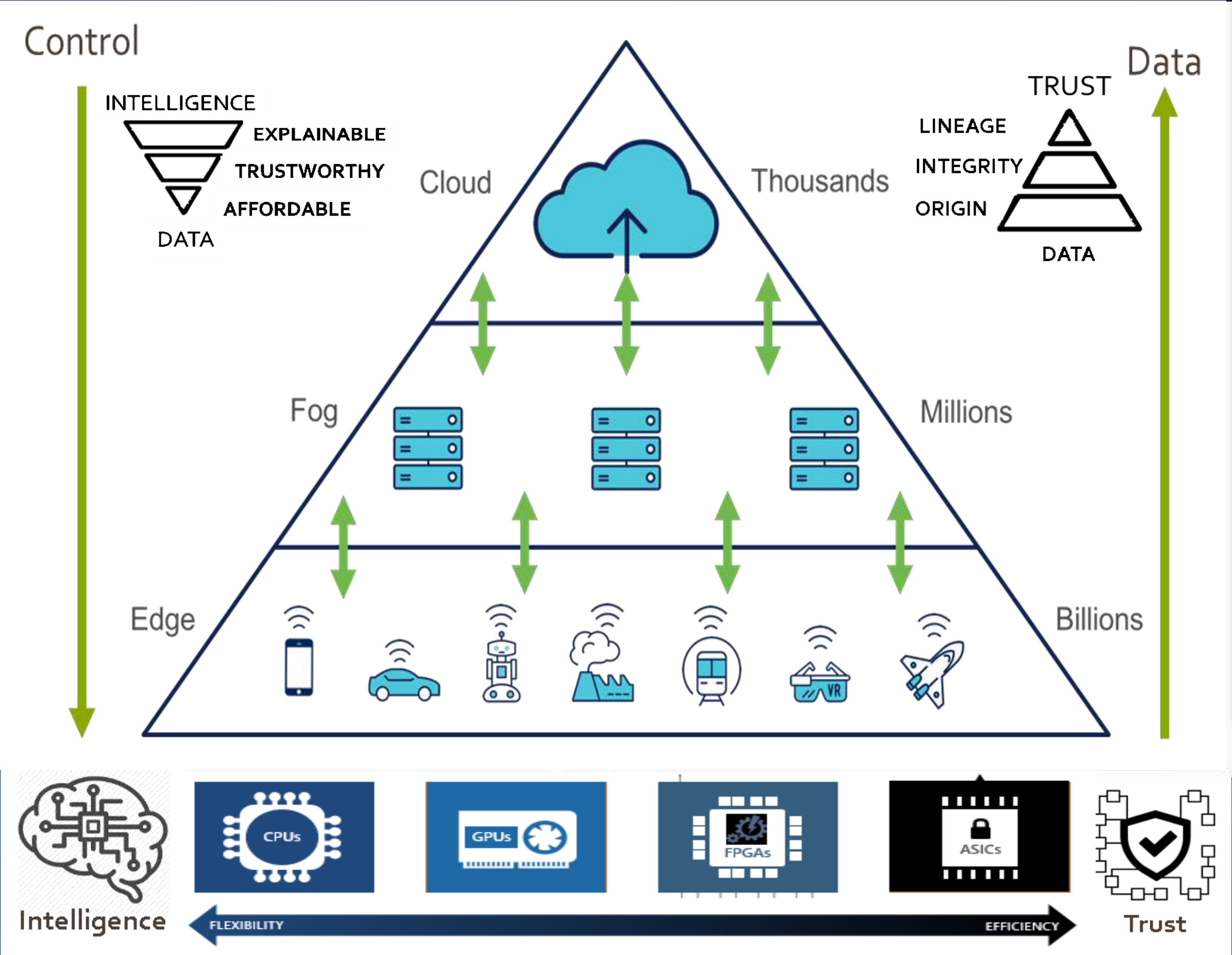
The Pandemic Game Changer

Pandemics has accelerated “servitization” starting from MedTech equipment to ensure:

- 1 Critical Uptime:** connected MedTech products may save lives
- 2 Social Distancing:** connected Medtech products may extend professional reach without physical presence
- 3 Privacy & Security by design:** connected MedTech products may increase Cybersecurity and protect Self Sovereign Identity and comply to GDPR... fully...



The Service of (Every) Thing



Latency



Bandwidth



Cost



Threats



Duplication



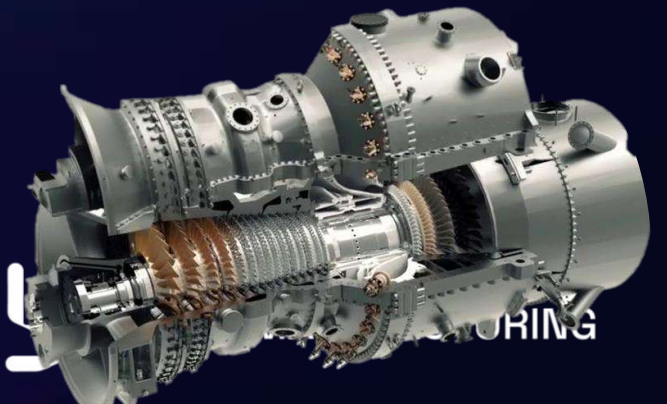
Reliability



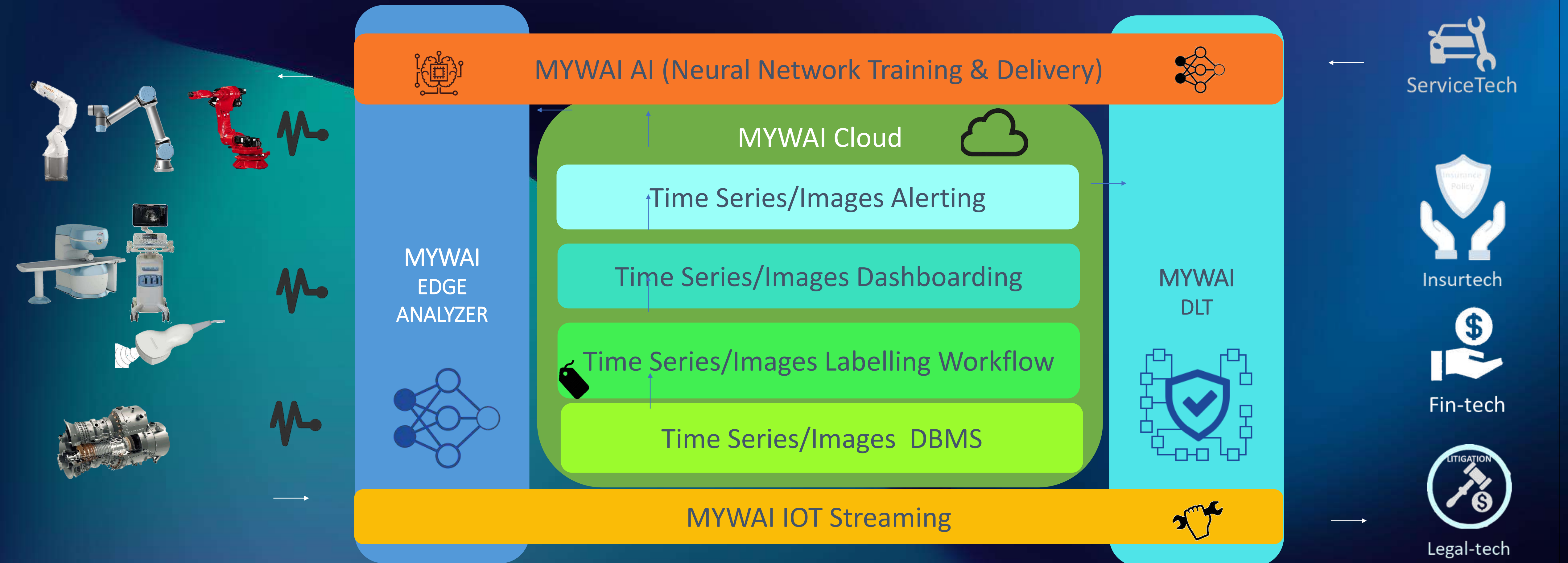
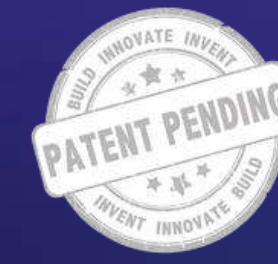
Compliance



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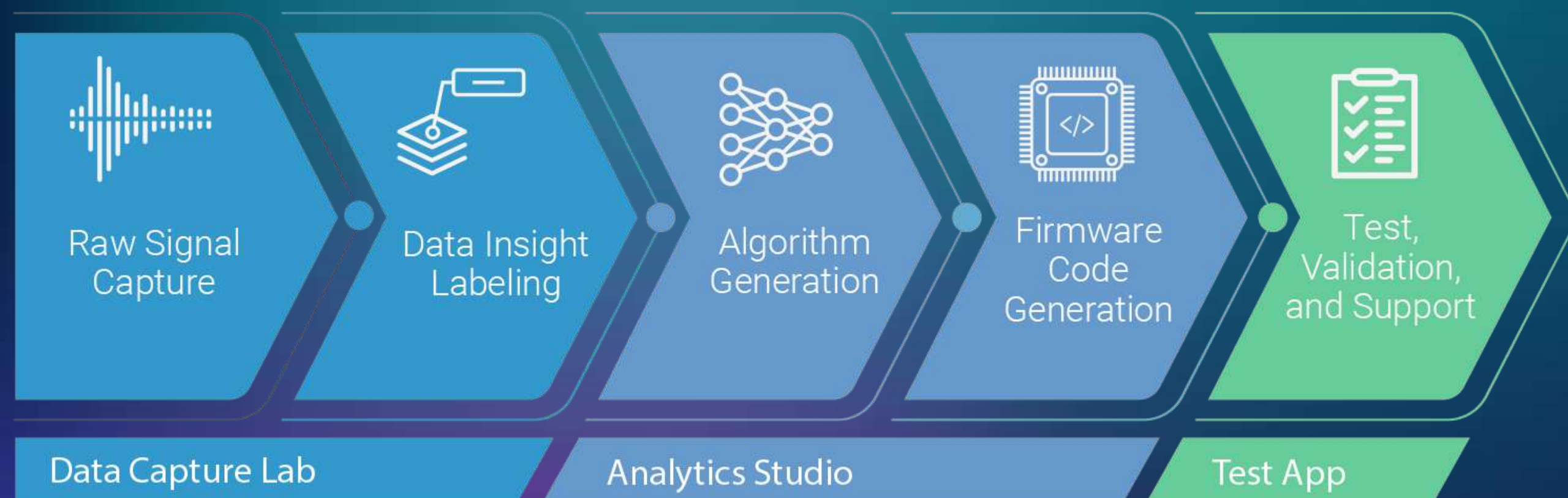
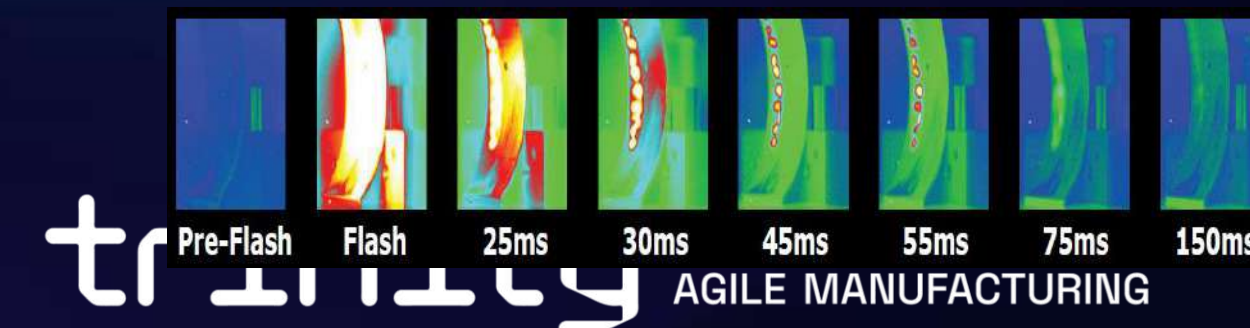
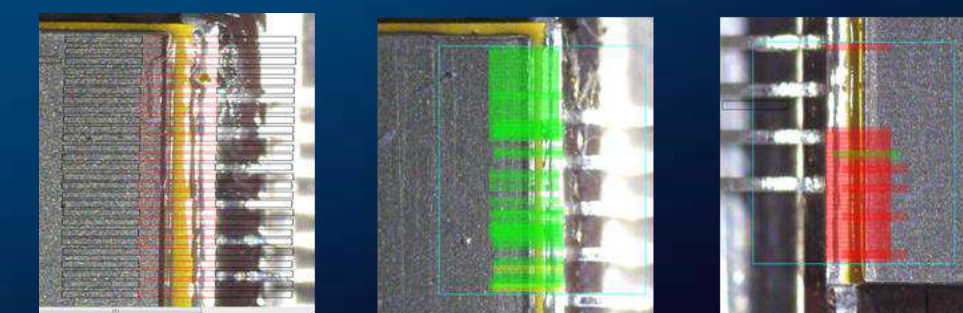
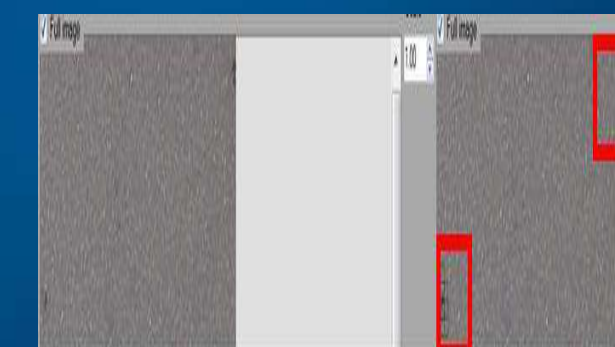
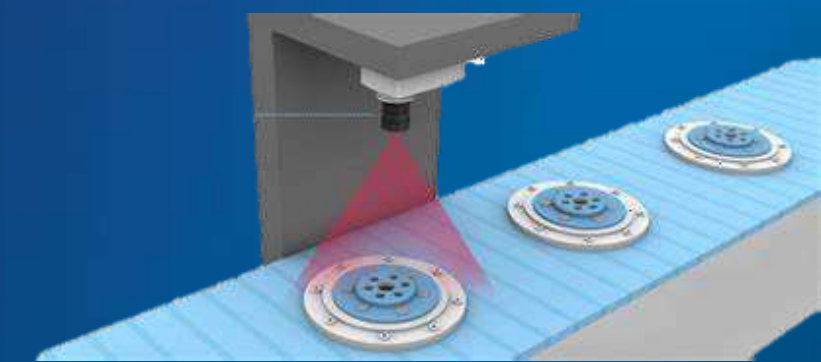
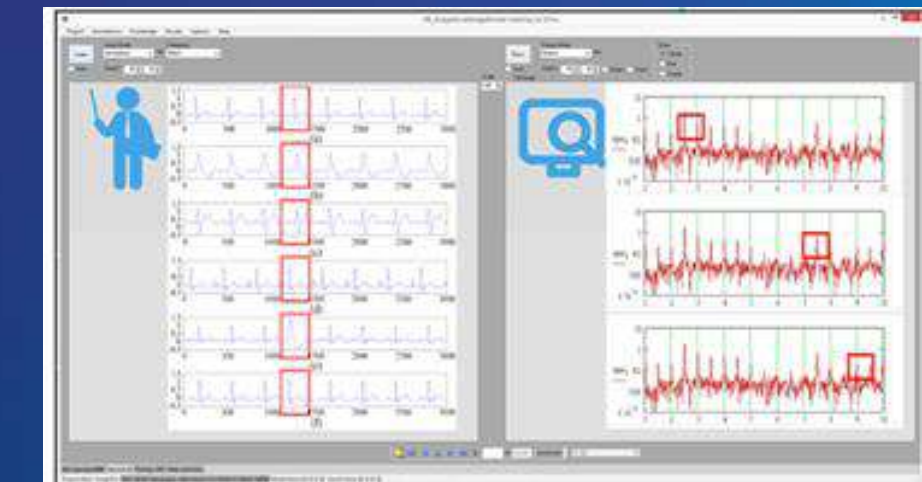
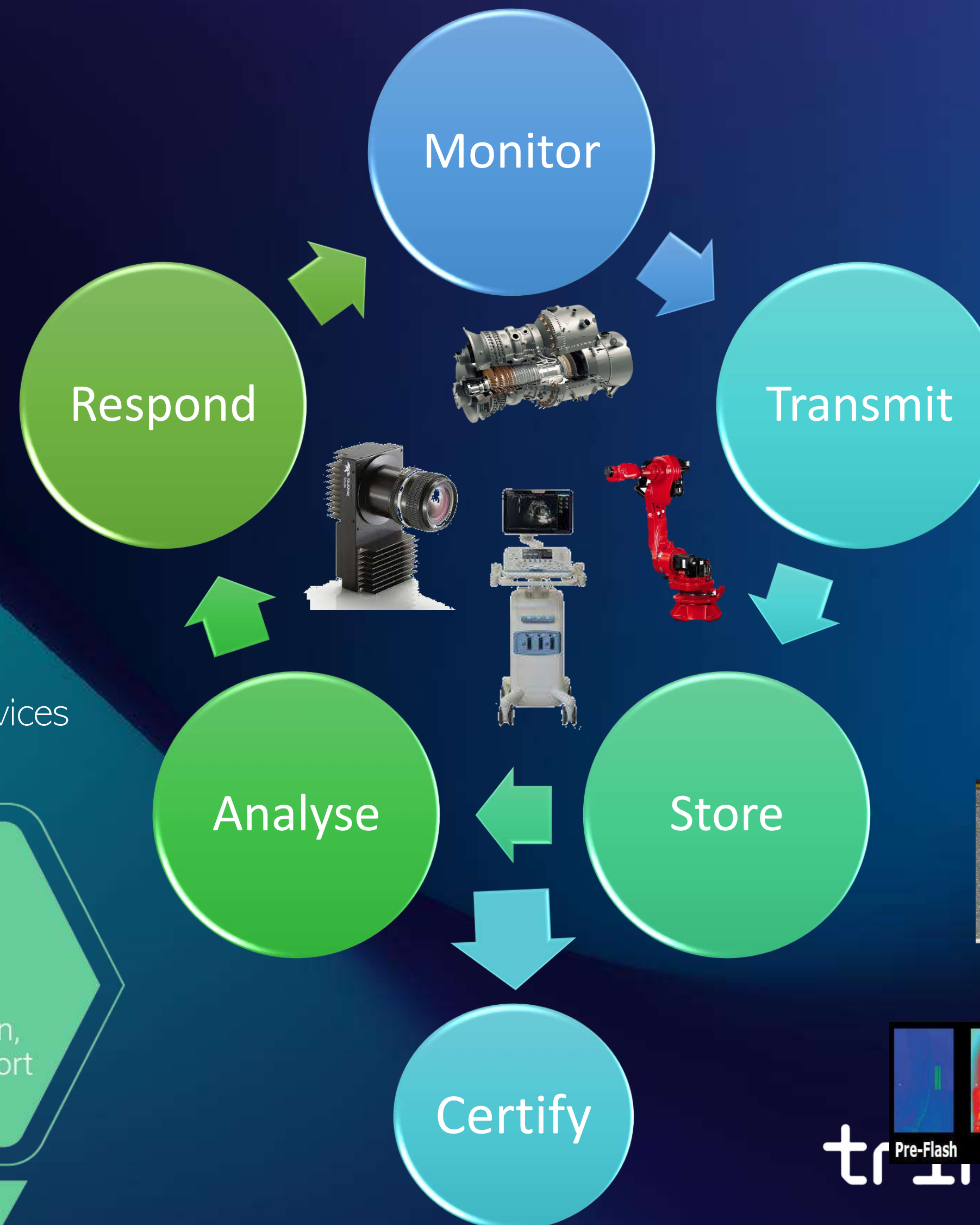
The MYW.AI EaaS Platform



The MYW.AI EaaS Workflow

The MYWAITM Prognostic Maintenance Service Solution will enable to:

- **Monitor** usage by connecting machines to the MYWAI cloud
- **Transmit** Time Series & Images Streams & Records
- **Store** Time Series and Images files to the cloud
- **Analyse** Time Series & Images using AI on edge, fog and/or cloud
- **Respond** to Next to Failure/Anomaly Alerts
- **Certify** actions for wholesale after market insurtech, legaltech, fintech services



The MYW.AI Edge

The Myw.ai platform delivers prognostic maintenance at the very edge using:

1.

Containerized Software Neurons running either on cloud or local CPU, GPU, MCU chips ideal for “digital native” IOT equipment

2.

Low cost Neural HW Expansion (USB/Arduino/Raspberry) adding HW based Artificial Neural Networks acceleration on digital equipment with limited resources

3.

Industry 4 grade M2 PCI-e MYWAI™ NeuroBoards (PCI Express bus on M2 ff). Expanding 3rd party IoT, Edge PCs & Servers using industry standard parallel neural computing boards

Complemented by Very Edge Intelligent Sensors



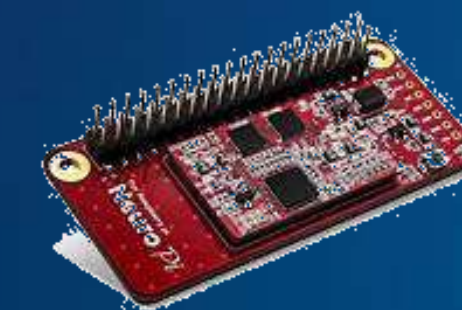
Up to 16 NM 500
Neurons = 9000
Neurons

3.

Up to Quadcore
Xylink FPGA



2.



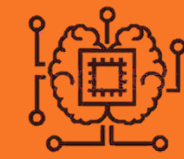
1.

docker

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The MYW.AI Edge Artificial Neural Networks



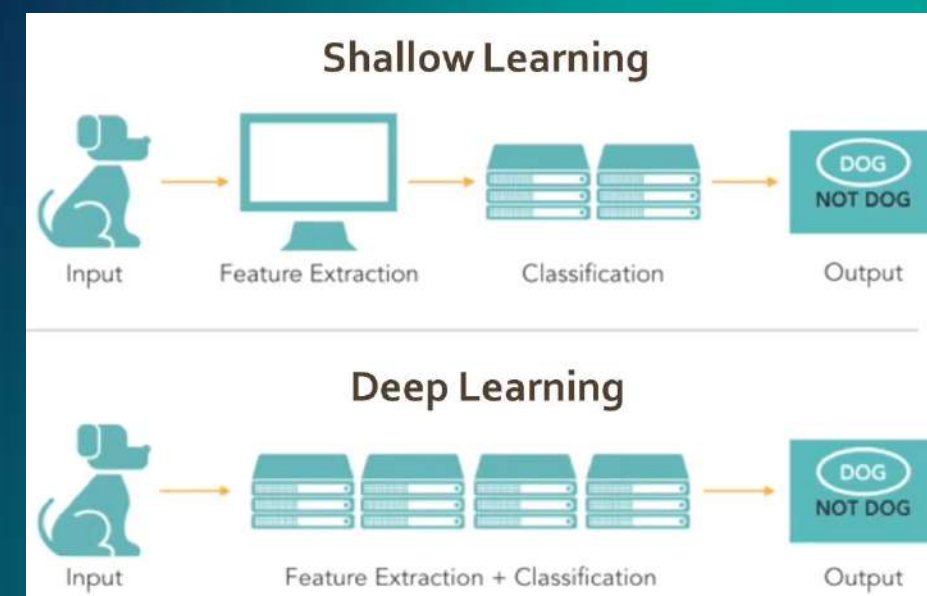
MYWAI AI (Neural Network Training & Delivery)



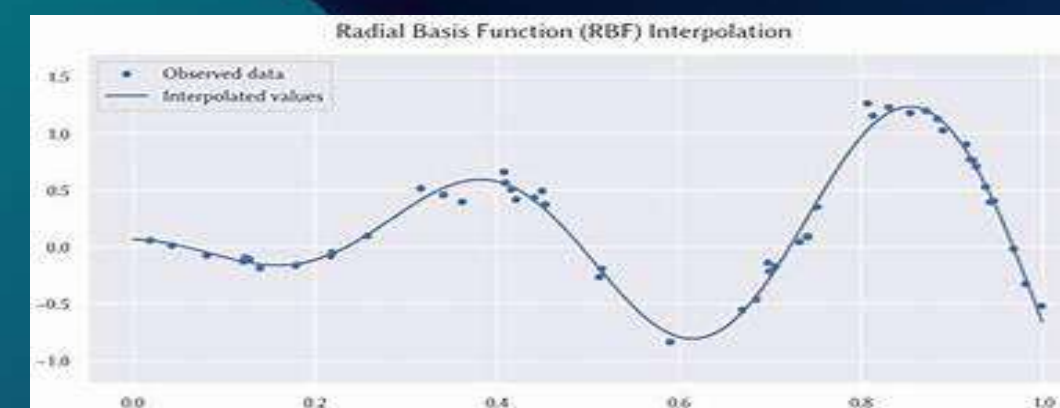
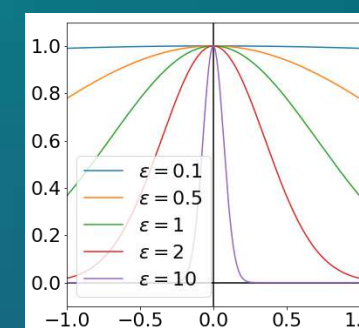
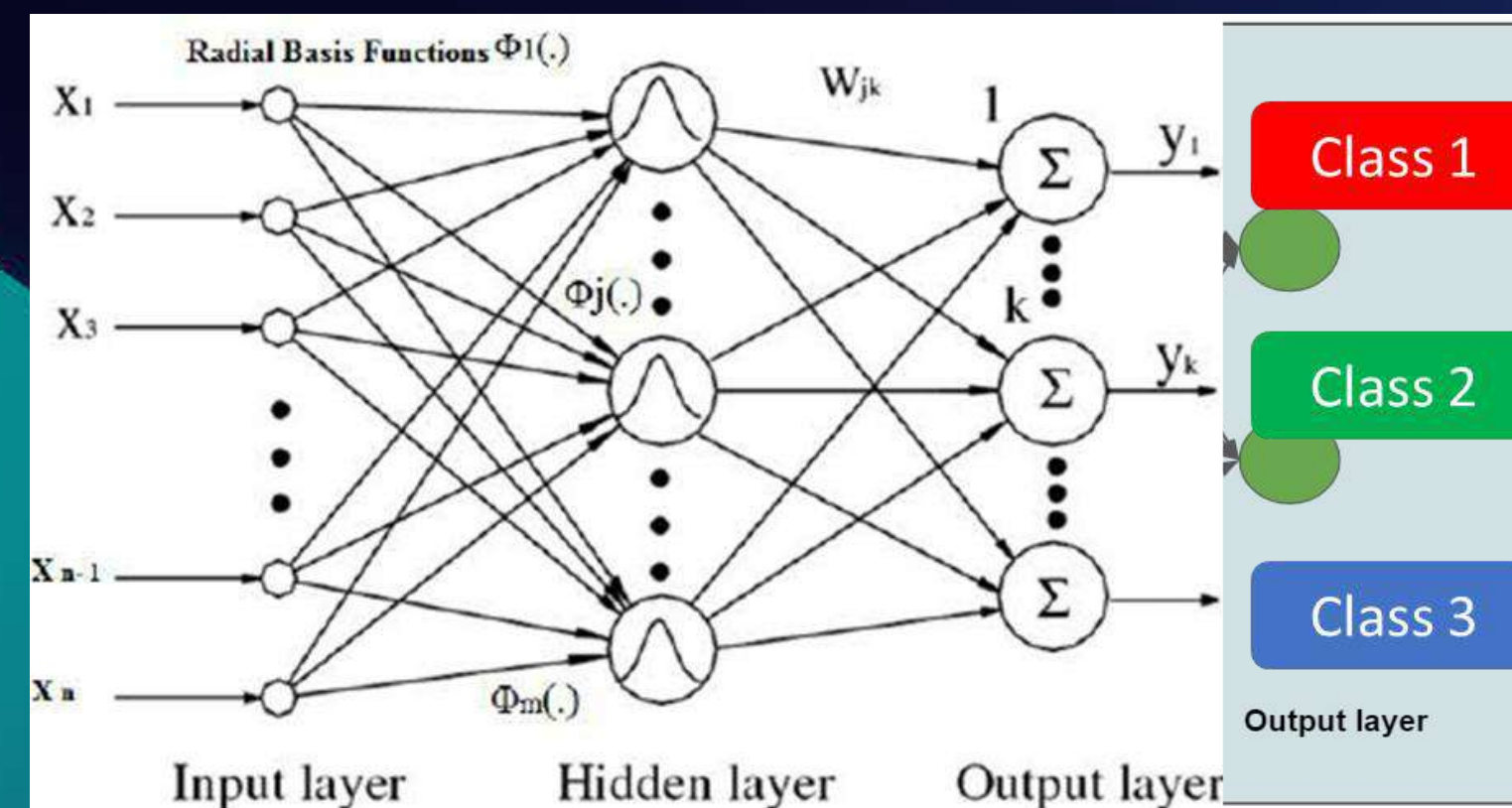
EXPLAINABLE
TRUSTABLE
AFFORDABLE



EDGE INTELLIGENCE



Shallow Learning Radial Based Function (RBF) CLASSIFICATION



Big vs Smart Data

Noisy vs Big Data

Trainable

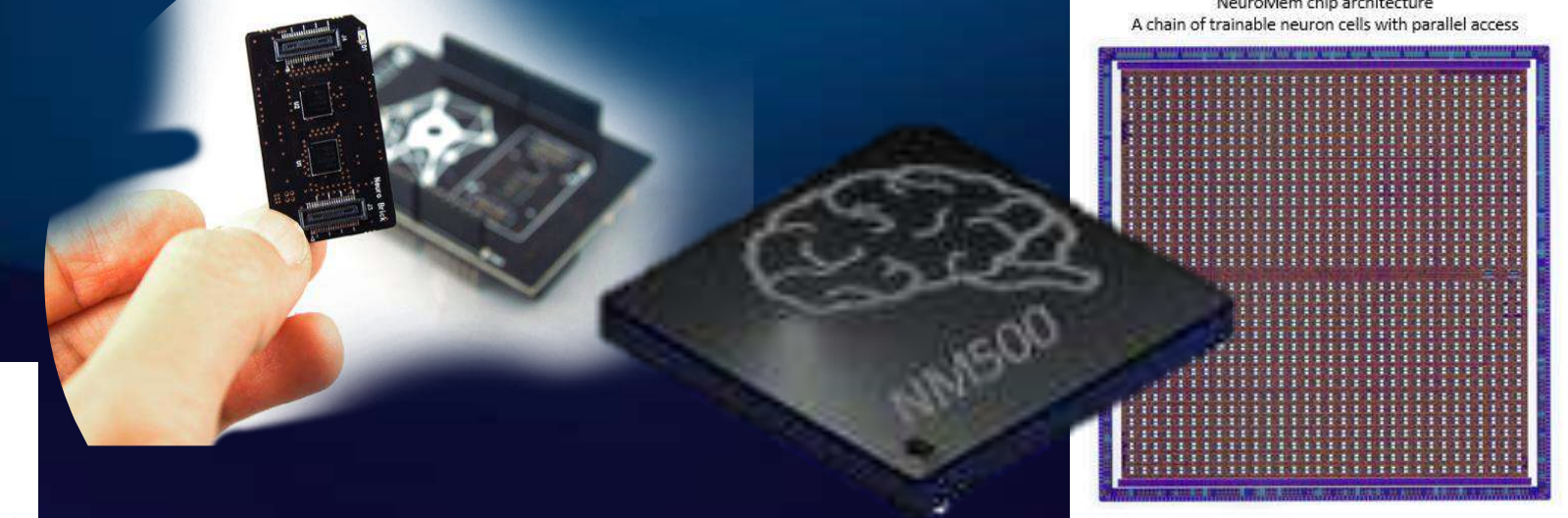
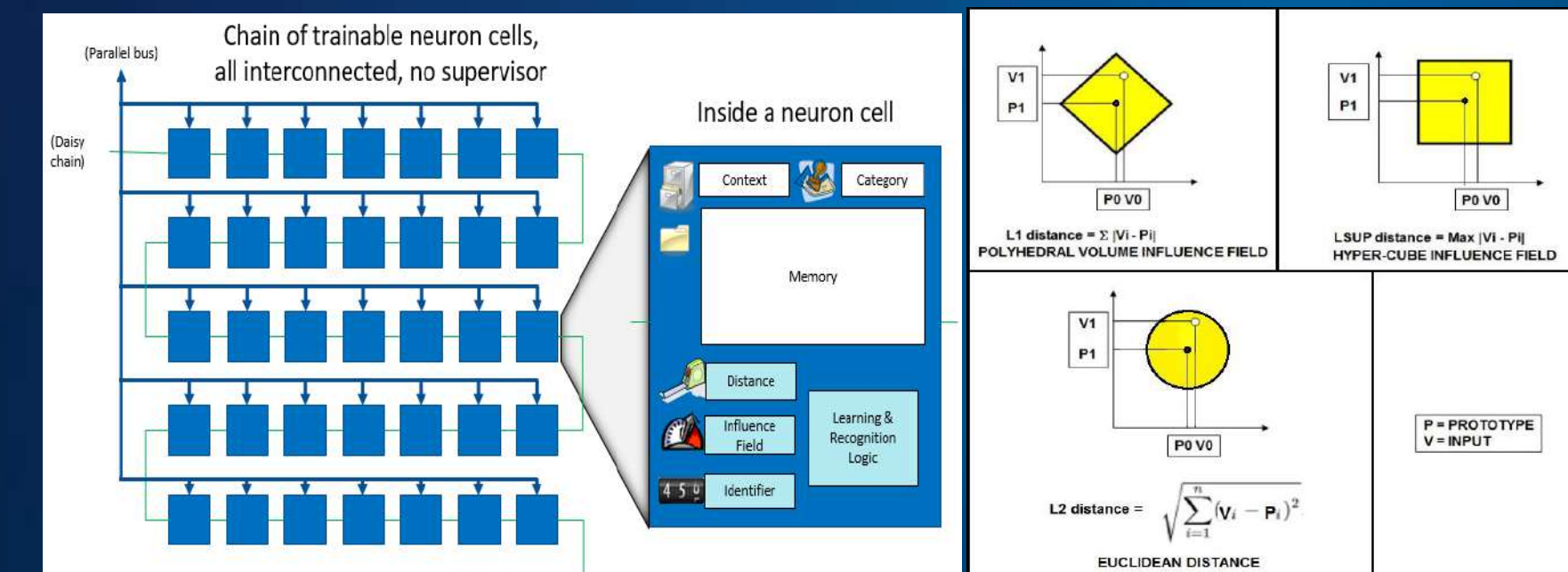
Dynamic learning on the chip. Real-time addition of new categories. Built-in excitation/inhibition.

Parallel

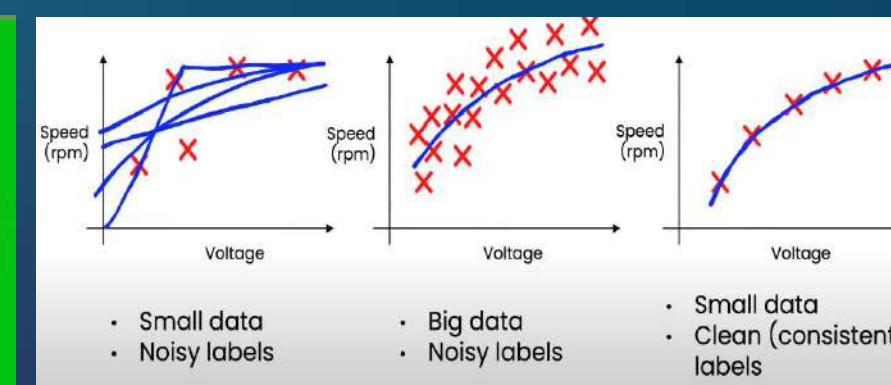
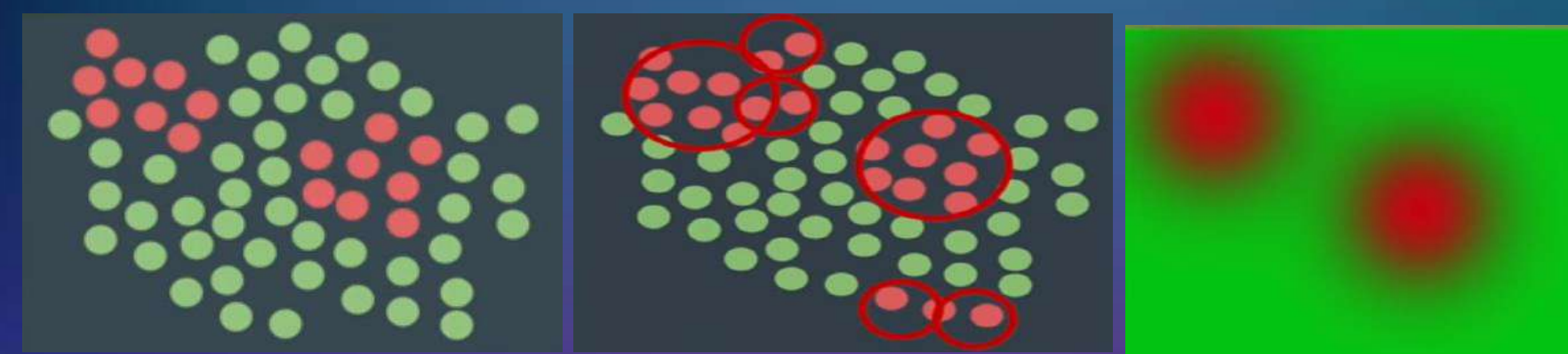
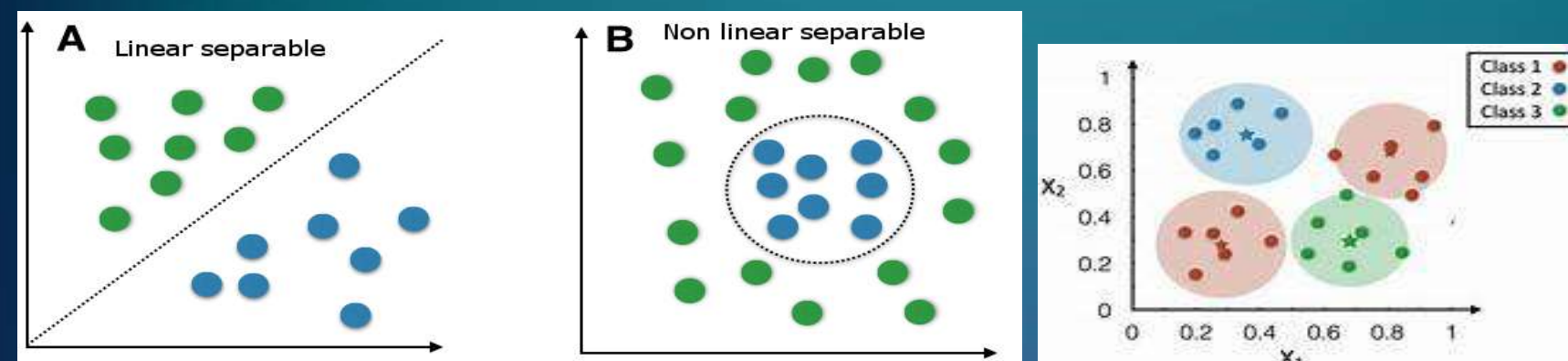
Recognize patterns in micro-seconds regardless of the number of models stored in the neurons.

Energy Efficient

>100K recognitions per second at 27Mhz. Less than 300 milliWatts per 1000 neurons.



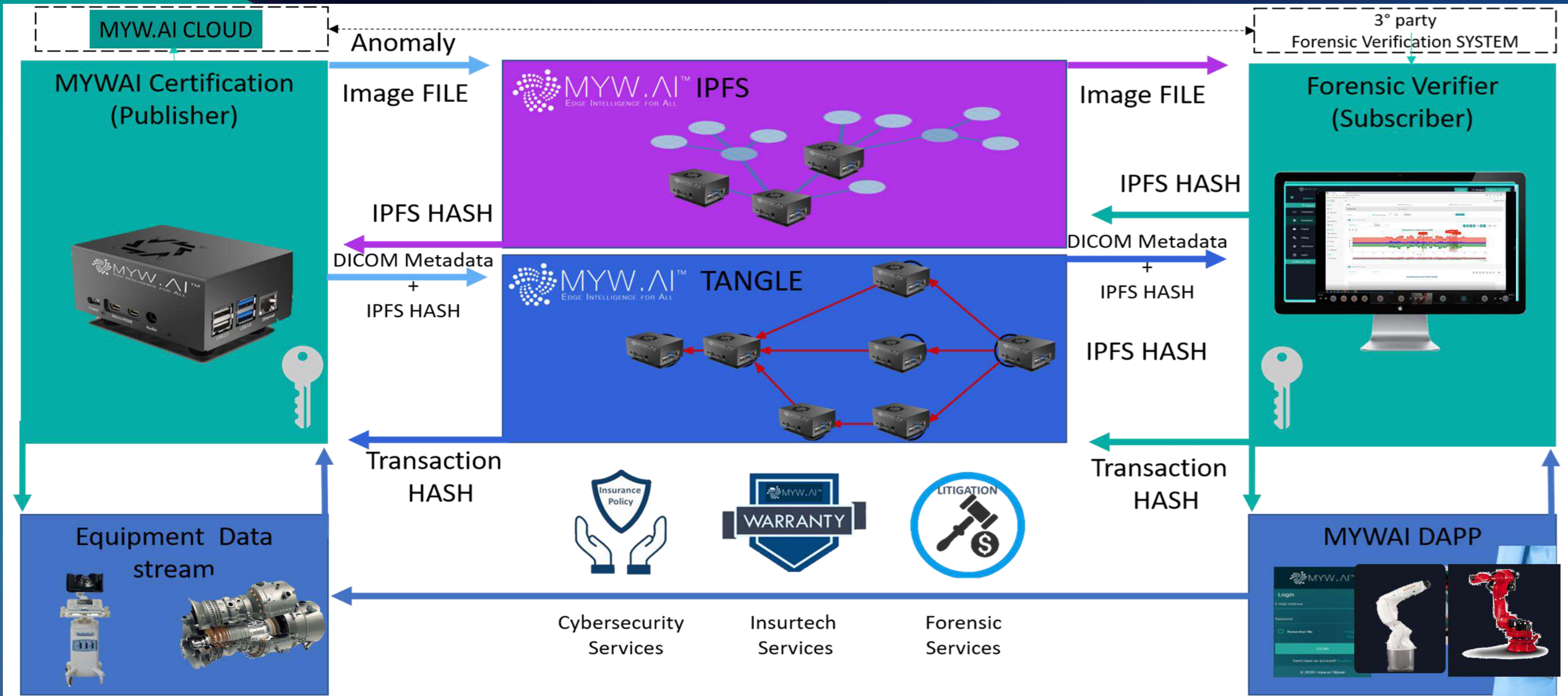
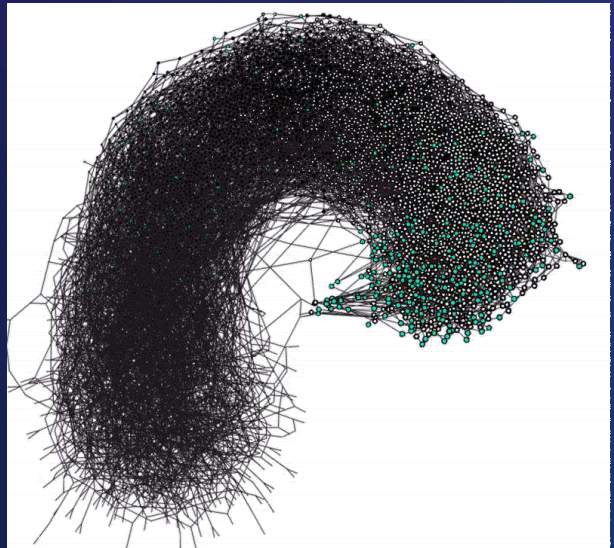
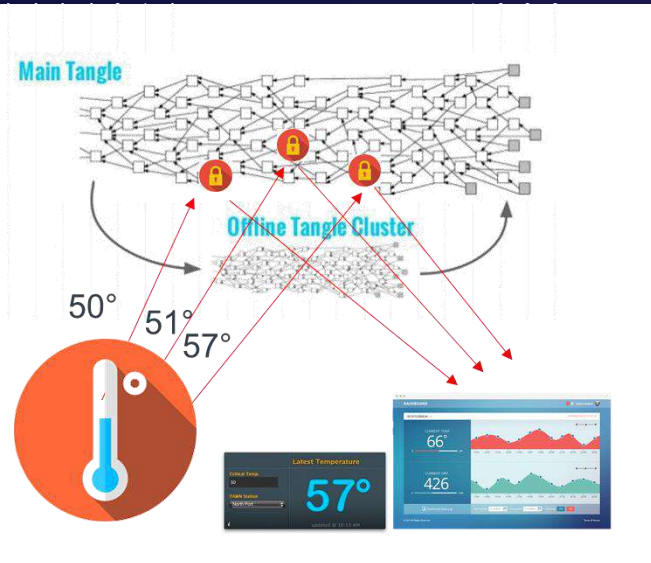
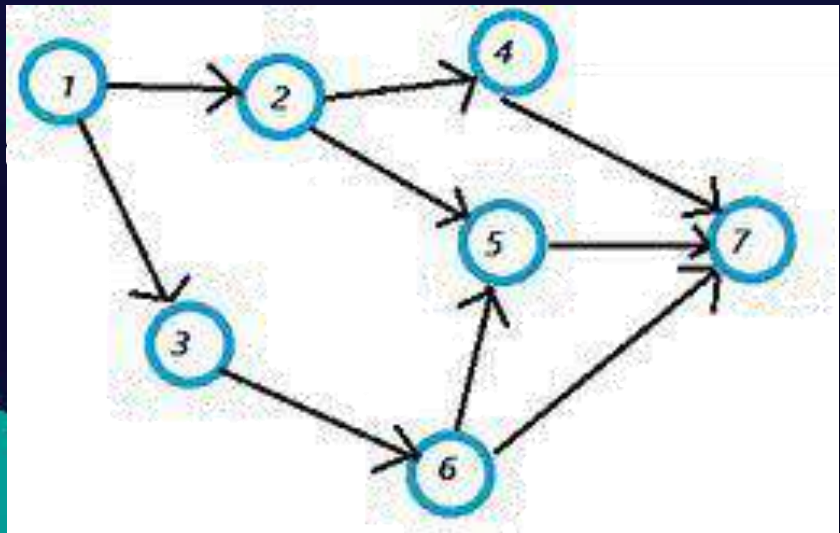
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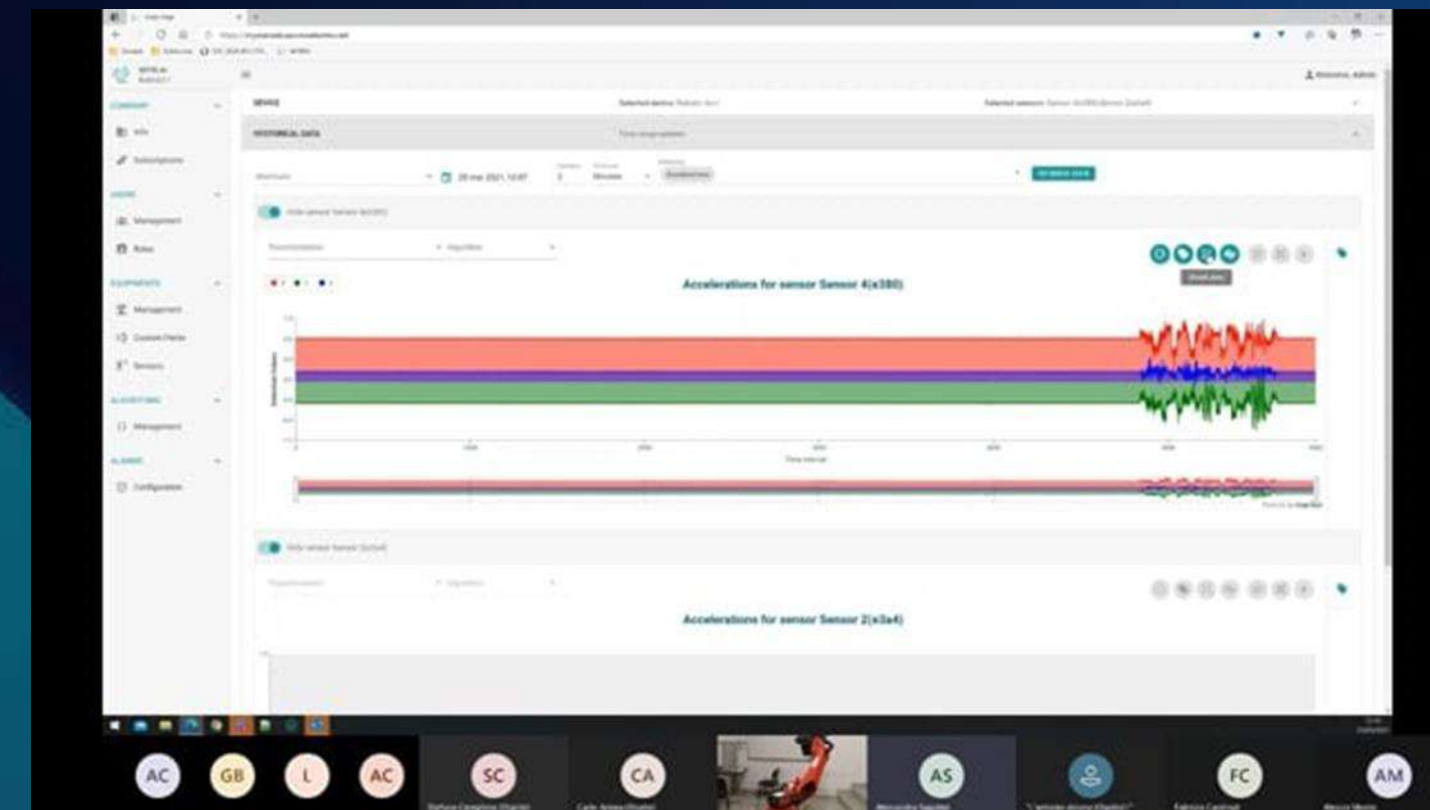
The MYW.AI Certification DLT



Tangle	Blockchain
IOTA	Bitcoin Ethereum



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Thank you!

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