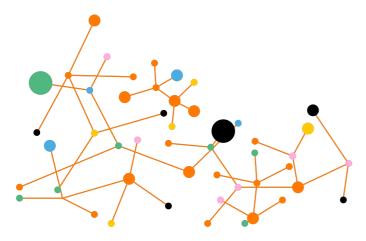


According to a recent survey published by Deloitte (Deloitte Survey 2021): 93% of the manufacturing companies believe AI will be a crucial technology to drive growth and innovation.

Most raised up use-cases when talking about Machine Learning and Artificial Intelligence in such a field are automation in inventory management, improvement of the workers' safety or the development of automatic quality inspection. To deploy ML & AI on the factory line numerous challenges must be addressed. Two examples are the lack of connectivity in the legacy machinery and the need to deploy a data management infrastructure.

Orange Business is using its expertise in numerous fields as IoT, cloud, connectivity or big data to address these challenges. One of the result is its offering: Computer Vision for quality inspection.



# **Computer Vision for quality inspection made by Orange Business**

Orange Business offers an asset-based Computer Vision service made for visual inspection. It includes a trained Machine Learning model (using customer's data), the deployment of the model in the customer's infrastructure as well as a frontend interface.

Using photos taken on a production line, the solution can in near real-time detect defaults and validate the quality of each product. It replaces manual inspection which is time consuming and an expensive process. Orange Business' Computer Vision solution is able to detect smallest defects reliably, not relying on defect-labelled training data and is able to adapt automatically to new defects that have not occurred before.

The AWS portfolio offers a great number of tools and components to develop a ready-to-deploy Computer Vision solution.

To unlock the power of these cloud native components a skilled team of experts is required. Orange Business Services is providing the expertise as well as the asset of a ready-to-deploy Computer Vision solution for quality inspection. Orange Business' AWS certified experts will implement and customize the solution to bring its customers successfully to the end of their data journey.





Kick-start the deployment of a Computer Vision solution with Orange Business instead of developing it from scratch.



### Low data requirement to train

Using the 0-shot learning technology, the model only needs a few pictures of good products to be trained and then deployed.



### **Automatically detect new defects**

The solution is able to adapt automatically to new defects that have not occurred before on the production line.



### Close to real-time analysis

The solution can analyse up to 10 frames per second which is score reliable for production line. Meaning analysing 10 products per second.



#### **Multi-environment solution**

The solution can be deployed on a multitude of environments from cloud infrastructures (private or public cloud) to edge.

As Orange Business we understand the complexity of deploying data driven services. Therefore we have created a delivery model which takes into accounts all your concerns and needs:

- Our experts will assess your current environment using data thinking methodology.
- We gather the data necessary to train the Computer Vision model and then we deploy it to your production line.
- We extend this first solution by deploying a frontend interface and developing tailor-made features.

# Our Computer Vision is part of a wider portfolio The Orange Al Accelerators

The usage and integration of Artificial Intelligence in current business ecosystems is unavoidable. It is therefore crucial to ensure that solutions can move quickly from a prototype to a viable product.

In order to overcome this challenge we designed solutions, that we named after their purpose to accelerate journeys to reach the goal of integrating AI solutions in current business processes: Orange AI Accelerators! This portfolio covers all layers of an AI platform, from AI infrastructure to AI & ML applications as well as business design and change management plan.

## **MLOps Pipeline**

To automate the retraining, the deployment and the quality control of your Machine Learning models.

Learn more about our offer on the AWS marketplace - LINK

### **Data Mesh Framework**

To enable a domain-driven data storage platform allowing your teams to be more business focused.

Learn more about our offer on the AWS marketplace - LINK

# **Computer Vision**

An image or video recognition data science service improving quality control for your business.

Learn more about our offer on the AWS marketplace - LINK

# **Orange Business expertise**



**15 years** of experience operating private, public and pan-European sovereign clouds



3,900 data and AI experts

2,600 cloud experts

2,500 Orange Cyberdefense experts700 IoT experts

660 business & innovation consultants



**Specific tools and technicians** skilled in connectivity, multicloud networking, and security



**Global reach** and local care capabilities in 220 countries and territories



**24 x 7** cloud support via 5 major service centers across the globe



Business practices with in-depth knowledge of big data and analytics, AI, ML, IoT



Extensive experience in designing, building, and running digital infrastructure and cloud solutions



Orange participates in the development of **European standards**, including GAIA-X, HLEG AI, 3IA, HLEG on AI



Orange Business is an **AWS Advanced Consulting Partner** with the AWS Direct
Connect Service Delivery and detains the
capacity to address AWS cloud
transformation needs on a global scale

We provide a modular approach to managing your multicloud estate, so you choose the services most relevant to your business needs. We can integrate, operate and support your cloud applications 24/7. To find more about how we can help you get more value from your cloud estate, contact us here <a href="https://cloud.orange-business.com/en/contact-ai-accelerators">https://cloud.orange-business.com/en/contact-ai-accelerators</a>.

