

The background features a bokeh effect of colorful lights in shades of blue, green, yellow, and pink. A thick, solid blue diagonal stripe runs from the top-left corner towards the bottom-right, crossing the white text area.

# WISEO

— DIGITAL MAKERS —

**OFFER SMART FACTORY AI CLOUD SOLUTIONS**

Customer Presentation

September 2020

# WE ARE DIGITAL MAKERS

WISEO uses technology as a powerful lever of transformation and innovation for you to become even more performant

## Independent and strong company



**220 M€**

2019 turnover



**2 200**

Employees 2019

## In depth with digital strategies



### **DIGITALISER POUR OPTIMISER**

Make your business plus resilient and open to digital competition



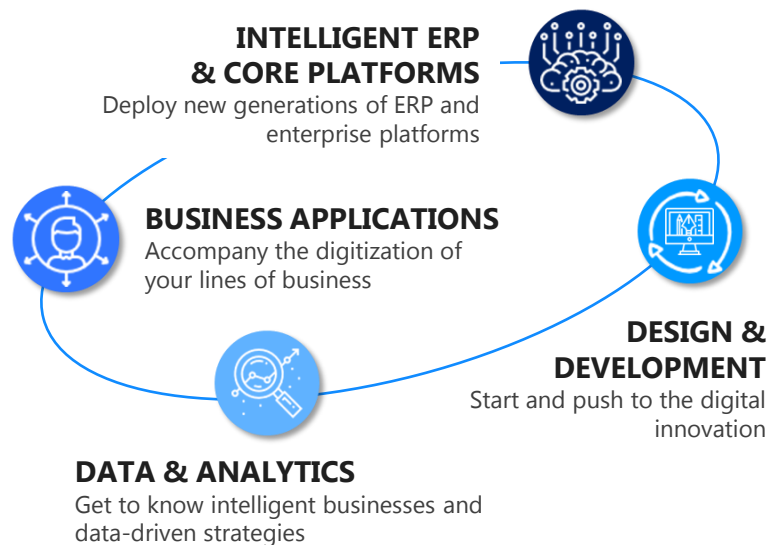
### **DIGITALISER POUR TRANSFORMER**

Reinvent your customer experience, your distribution, your offer or your economic model to respond to new customer needs

## Global presence



## Global expertise



## Global partners to support the digital transformation



## End to end support



### **IMAGINE**

Consulting  
Design thinking  
Architecture



### **BUILD**

Design &  
Conception  
Development  
Integration



### **PERFORM**

Deployment  
Change  
management  
Maintenance &  
supervision

# THE CLOUD EXPERTS IN SERVICE FOR BUSINESS

We help you reinvent your business with the power of Azure



Technical and business expertise to the point to imagine and build useful solutions...

... which address strategic business needs of our customers in 3 selected sectors



Cloud advisory services



Digital business & transformation consulting

Around **100 consultants** in agile transformation (coaching, implementation of agile at scale), change management, experience design and design thinking (UX/UI, coaching and implementation), business (retail, industry, transport)



SaaS implementation services



PaaS-based development services

including edge computing and IoT, cloud migration & implementation, cloud-native application development & DevOps, development of enterprise platform foundations, application refactoring - **around 500 consultants between France, Spain, and Asia.**



Integration services

API & event-based architectures, iPaaS & integration suites



Cloud-based AI / ML and data & analytics services

**200 consultants** working on business intelligence solutions around Microsoft suite, including PowerBI, SSRS, SSIS, Informatica Cloud, Talend on Azure, ...

A cluster of **50 consultants** (datascientist, data/ML engineer, business consultant) dedicated on AI projects (vision, language, structured data, sounds) which brings together all the expertise necessary to incubate and industrialize AI projects



Monitoring & AMS

A 24/7 service team available that help you manage, protect, and secure your workloads.

VISEO



CPG, RETAIL & LUXURY



MANUFACTURING



TRANSPORT & MOBILITY



# WE HAVE A LOT OF MICROSOFT BADGES

A strong and senior relationship we are definitely proud of!



## CERTIFICATIONS & HONORS



Partenaire de l'année 2019  
Intelligent Cloud  
France



3 experts recognized by Microsoft for their technical expertise and influence in the Azure and AI community

Gold Cloud Platform

Gold Data Analytics Gold Enterprise Resource Planning

Gold Application Development

Silver Cloud Business Apps



## EXPERTISES





# INTELLIGENT AUTOMATED SERVICES TEAM

Our AI division at the service of business

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## A POLYPHONIC AND HYBRID TEAM

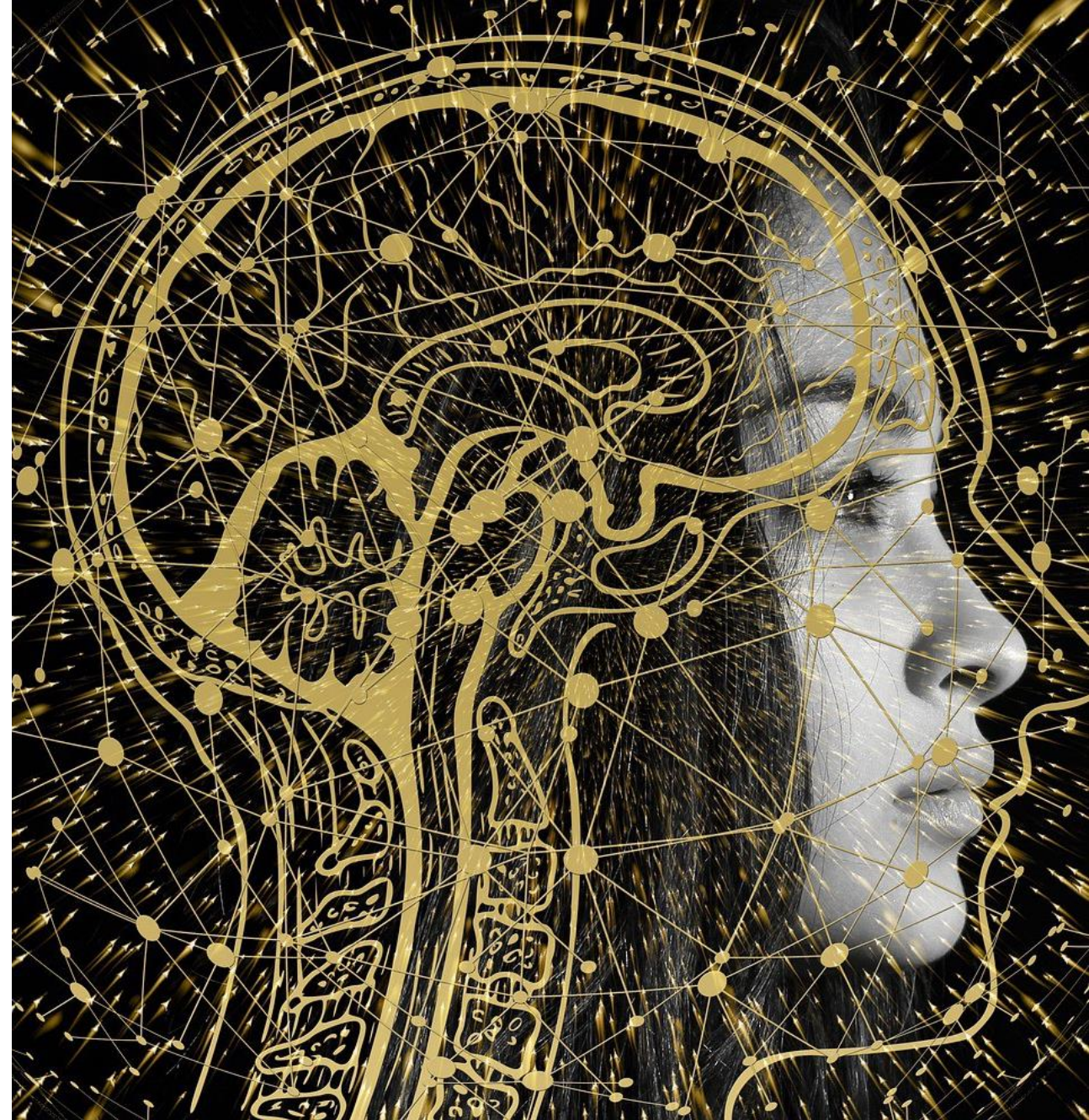
A center of **50 people** (Paris, Grenoble, Toulouse, Lyon) dedicated to the initiation and acceleration of AI projects which brings together all the necessary expertise (hardware, DataScience, UX, business, product design, data engineering, software engineers, DevOps).

More than **50 AI projects** carried out over the past 3 years.

## SOLID EXPERTISE

Our researchers and engineers have tested the various technologies, platforms, APIs, etc. for more than 20 years, and have developed expertise in the various disciplines of AI (language, voice, vision, structured data, big time series) while remaining open to all market solutions.

**We intervene from the identification of business potential to the implementation of industrial AI solutions taking into account real life: humans, technology, hardware, processes, business ...**





## OUR OBJECTIVE

Automate cognitive tasks and actions at scale using massive data (with or without ML)

«**Artificial intelligence (AI)** is a set of techniques that allow machines to perform tasks and solve problems normally reserved for humans and certain animals»

Yann LeCun,  
Facebook AI Research Director



Language



Images &  
videos



Structured  
data



Time series



Sound

WISEO

Structured data  
analysis

Computer vision

Speech-to-text and  
text-to-speech  
recognition

Sound analysis

Natural Language  
Processing

Natural Language  
Generation

*The portrait is created with AI algorithms  
(computer vision, GAN) trained on  
Rembrandt artworks*

# BUILDING "SMART" AUTOMATION ...

...which can take different forms and collaborate in different ways with human/organization/process



## PREDICT AND DETECT TO HELP DECISION-MAKING

Produce information, personalize, make recommendations or predict events by **exploring / detecting patterns in masses of data**

- Fraud detection
- Churn clients
- Predictive maintenance
- Credit risk
- Sentiment analysis
- Recommendation and personalization engines
- Dynamic pricing and more.



## AUTOMATE PROCESSES

Decision automation systems use AI to **automate tasks** or **optimize business processes**.

- Automatic processing of forms and images
- Text to speech / speech to text
- Routing automation, workflow
- Dematerialization of invoices



## SMART AGENTS

Chatbots communicate in **natural language** with users in text or voice form.

They generate precise inputs for decision systems.

- Call center smart agent
- Technical support
- ...



## SMART PRODUCTS

They observe their users and preferences to create hyperpersonalized interactions and improve their usefulness. Among them, mechanical robots with integrated AI.

- Buildings
- Elevator
- Cameras
- Appliances
- Thermostats
- Drones
- Autonomous vehicles
- Factory robots
- ...

# ... BY BUILDING ON AREAS OF SCIENTIFIC EXPERTISE

Four areas of expertise at the heart of sector issues



## NATURAL LANGUAGE PROCESSING

**Text data:** document, chatbot, voice assistants

- Lexical, syntactic and semantic analysis (disambiguation)
- Sentiment analysis
- Categorization and clustering: approach by distance or by neural network
- Search for themes (LDA method)



## ARTIFICIAL VISION, IMAGE ANALYSIS

**Image data:** 2D ou 3D (lidar...)

**Video data:**

- Pretreatment / sampling
- Segmentation
- Classification and pattern recognition (entropy model, deep learning, etc.)



## STRUCTURED DATA ANALYSIS

**Quantitative or qualitative data:** CRM, HR, sales data, etc.

- Segmentation
- Correlation
- Risk factor
- Statistical / regression modeling
- ML - Deep learning
- Optimization, linear or not



## TEMPORAL DATA ANALYSIS

**Big Time series :** constant frequency measurements (sensors, Traffic, sounds, etc.)

**Sequence of events:** variable frequency measurements (breakdowns, site navigation, call center, etc.)

- Innovative visual exploration
- Atypism detection
- Segmentation
- Time series forecast
- Contribution model (Markov chain, game theory)



# RECENT BEAUTIFUL BUSINESS STORIES WITH AI INSIDE

We have used Azure AI technologies to accelerate the development of services that impact our customers' business



## RETAIL & CPG



Pernod Ricard

Development of an **AI service at scale to optimize the spirit production plan** (the mix of casks) that spreads over more than 20 years, up to 70 years for some premium spirits. The future.



**Massive Chatbot factory** (from conversation design to implementation) to address industrially implementation of all bots worldwide on a very **large scope of uses cases** (external & internal). Chatbots promise at scale!



Scoping and implementation of **Sephora's conversational strategy since 2017** / chatbot & Google voice app which automates customer service while creating a more natural and intuitive touchpoints with customers.

VEEO



## MANUFACTURING



**Automate and optimize parts quality control of parts** thanks to an AI service that uses computer vision & Azure Logic apps.



**Improve factory working conditions** thanks to an AI service based on computer vision & Kinect DK.



**Automatically detect completion of process steps in the assembly line of a shopfloor** through an AI service using sound recognition/analysis.



## TRANSPORT & MOBILITY

KEOLIS

Development of an **AI Service to predict bus occupancy** at arrival at every stop and for every timetable.



Framing and implementation of **predictive maintenance services at scale** to optimize operational costs

LATÉCOÈRE


Improve the **flight safety and work efficiency of Cabin Crew Members** thank to an AI service using computer vision (automated counting, baggage detection, occupancy plan).



The ***smart factory*** is a factory that takes advantage of new technologies to **significantly improve** its productivity, the quality of its **products**, its **flexibility**, and **its services**.

It is based on 3 key digital technologies:

- **Connectivity;**
- **Intelligent automation;**
- **Cloud scalable data management.**



Today, **70%** of companies have adopted innovative **solutions to make their factories smart.**

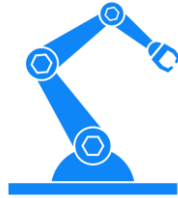


# SMART FACTORY

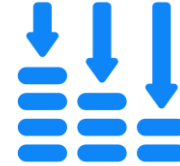
Business impacts at different levels



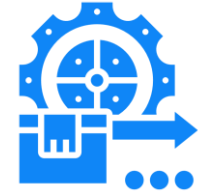
**INCREASED  
PRODUCTIVITY**



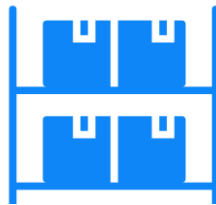
**ELIMINATION OF  
REPETITIVE TASKS**



**REDUCTION OF FIXED  
COSTS**



**LOWER PRODUCTION  
RISKS**



**DECREASE IN STOCKS**

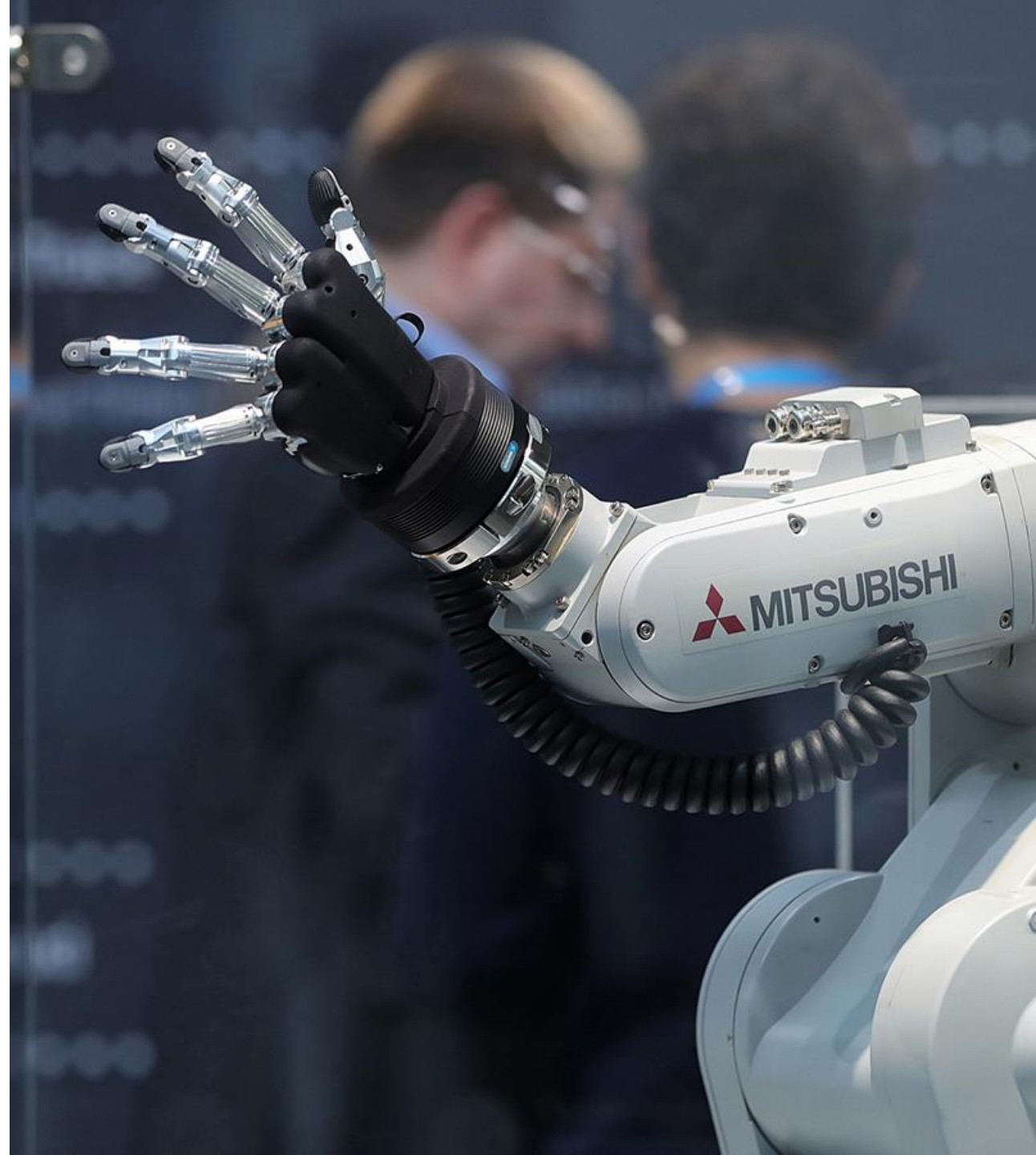
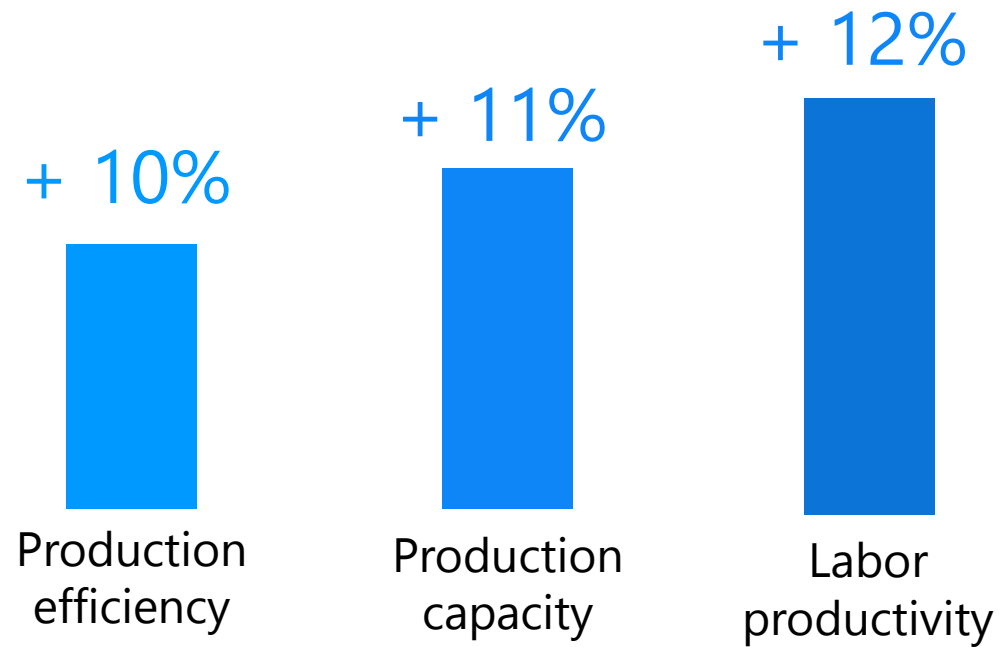


**QUALITY  
IMPROVEMENT**



**REDUCED DOWNTIME**

Between **2015 and 2018**, the Smart Factory initiatives had significant impacts :



# USE CASES CREATING VALUE AT ALL STAGES

We support you from identifying potential to implementing AI solutions



Anticipate the need for machine maintenance

Detection of the wearing of personal protective equipment and its compliance

Daily maintenance

Accident prevention

Acoustic control system



Proximity control

**Maintenance**

**Prévention des risques**

Implementation of robots to perform repetitive tasks

Anticipate fluctuations in shipping volumes

Predict variations in demand for a product

Sizing of fleets and vehicle fleets

Optimization of workstations

Optimisation des circuits de livraison, des tournées et du taux de remplissage



**Logistique**



**Production**

Cobotic tools for performing tasks

Processing of invoices

Traceability of the components of a product

Identification of departments needing to be restocked

Detection of the completion of process steps

Manage order recording, supply, demand and stocks

Digital twin development



**Gestion des stocks**



**Contrôle Qualité**

Detection of product and process conformity

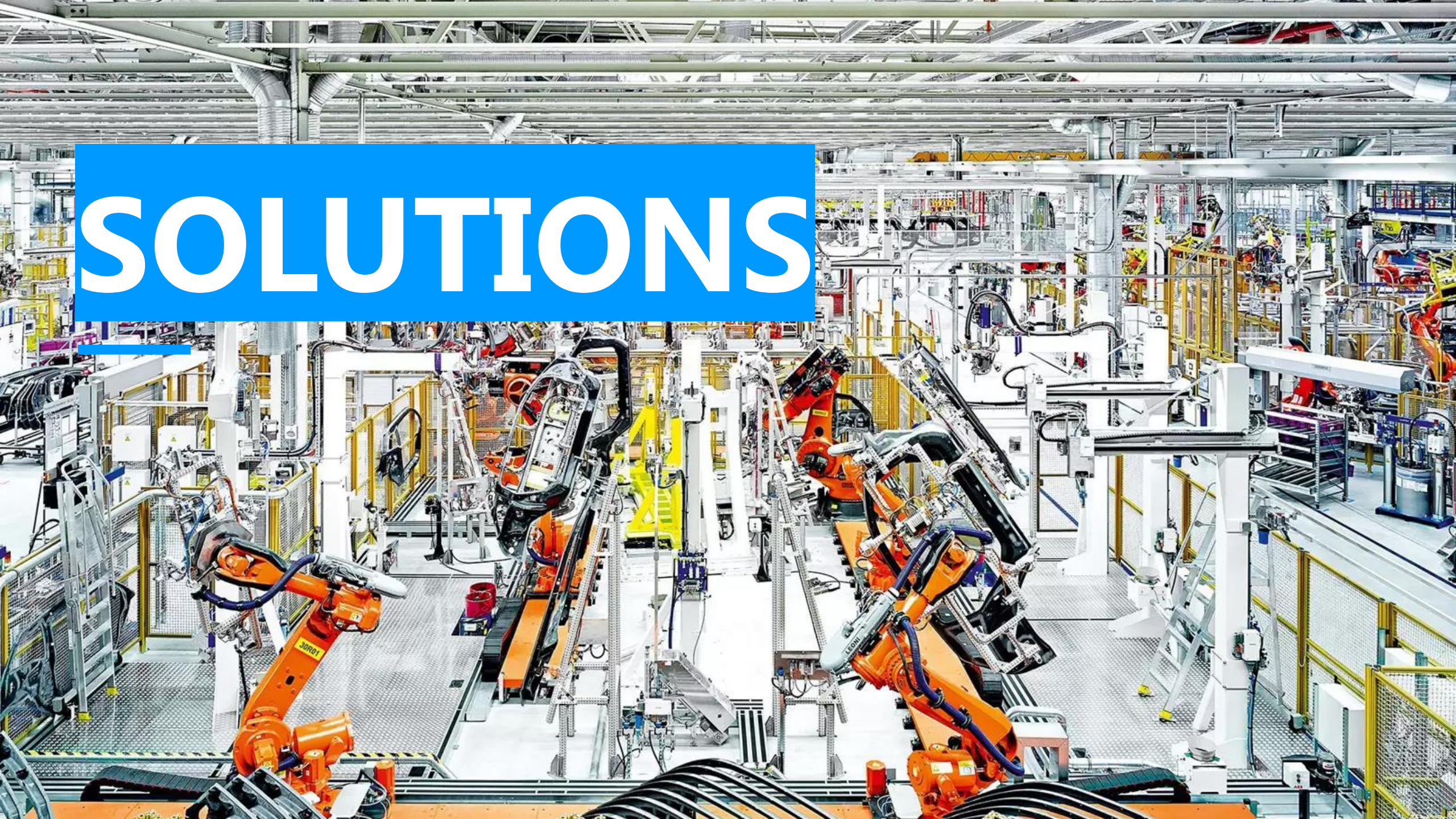
Real-time inventory status view

Product defect detection

Optimization of warehouse and logistics flows by tracking products



# SOLUTIONS





# PRODUCT DEFECT DETECTION

AUTOMATICALLY identify product defects on a production line

## SOLUTION

Upstream industrial solution for detecting non-quality through visual recognition and Big Data analysis to improve the efficiency and speed of operations while optimizing product quality.

### PROCESS



#### PoV

Immersion and environmental study.  
Scope and KPIs framing,  
Agile development, Tests and assessment



#### MVP

Minimum product version  
Industrialization framework



#### INDUSTRIALISATION

### BENEFITS

- ✓ **Optimize product** quality
- ✓ **Better operational efficiency**
- ✓ **Increase the production rate**

### PRICE



10 - 30 k€



30 - 50 k€



> 100 k€

### REFERENCES



### TECHNOLOGIES



Azure Machine Learning



Azure Computer Vision



Sound analysis

### DURATION

3 ► 8 months



edge computing

# DETECTION OF THE WEARING OF PERSONAL PROTECTIVE EQUIPMENT

Ensure compliance with the strict monitoring of health and safety policies in factories and companies

## SOLUTION



"Smart" gantry to automatically detect compliance with barrier gestures (wearing a mask, hand washing) when entering buildings, and ensuring that PPE is worn.

## PROCESS



### PoV

Immersion and environmental study.  
Scope and KPIs framing,  
Agile development, Tests and  
assessment



### MVP

Version minimale produit  
Cadrage industrialisation



### INDUSTRIALISATION

## BENEFITS

- ✓ **Reassure employees** about the safety of the premises
- ✓ **Facilitate the control work of agents** at the entrance to buildings

## PRICE



10 - 30 k€



30 - 50 k€



> 100 k€

## REFERENCES



**faurecia**  
inspiring mobility

**LATÉCOÈRE**



## TECHNOLOGIES



Azure Machine Learning



Azure Computer Vision



Azure IOT Edge

## DURATION

2 ► 6 months



# INVENTORY MANAGEMENT OPTIMIZATION

Optimize stocks and production according to the vagaries of the market

## SOLUTION

Simulation tool & platform to optimize the production plan from different parameters (stock, sales forecasts, formulas, ...)

### PROCESS



#### PoV

Immersion and environmental study.  
Scope and KPIs framing,  
Agile development, Tests and  
assessment



#### MVP

Minimum product version  
Industrialization framework



#### INDUSTRIALISATION

### BENEFITS

- ✓ **Ensure** production for the next 30 years
- ✓ **Anticipate** decreases and increases in market demand
- ✓ **Adapt** formulas according to remaining stocks
- ✓ **Drastically optimize** the time taken to create the production plan

### PRICE



10 - 50k€



100 - 400 k€



> 400 k€

### REFERENCES



Pernod Ricard



CHIVAS



Irish Distillers  
Pernod Ricard

### TECHNOLOGIES



Azure Machine  
Learning



Power BI

### DURATION

3 ► 18 mois

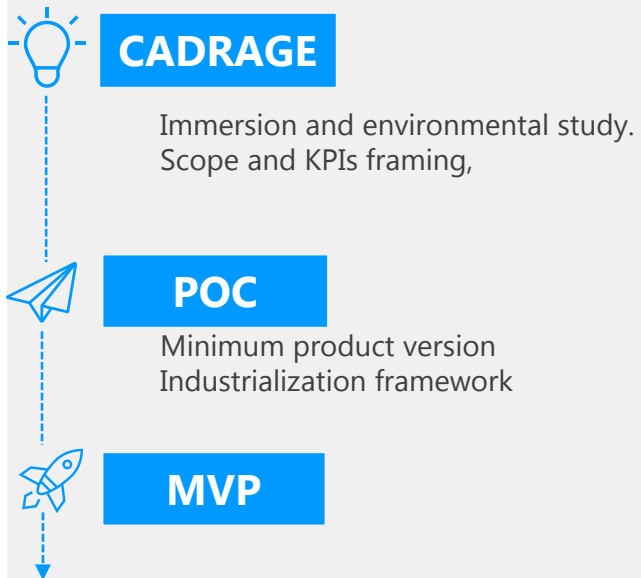
# TRACEABILITY OF THE COMPONENTS OF A PRODUCT

Trace the composition of a product throughout its production chain

## SOLUTION

Implementation of a product manufacturing traceability tool using blockchain

### PROCESS



### BENEFITS

- ✓ **Ensure the transparency** and non-falsification of information related to the composition of products
- ✓ **Strengthen the links and trust** of B2B and B2C customers

### PRICE

-  30 - 40K €
-  50 - 100 k€
-  > 100 - 200 k€

### REFERENCES

**SEQENS**

**E.Leclerc** 

### TECHNOLOGIES



Azure Blockchain Service & Workbench

### DURATION

3 ► 18 mois

# OPTIMISATION DE L'ERGONOMIE DES POSTES DE TRAVAIL

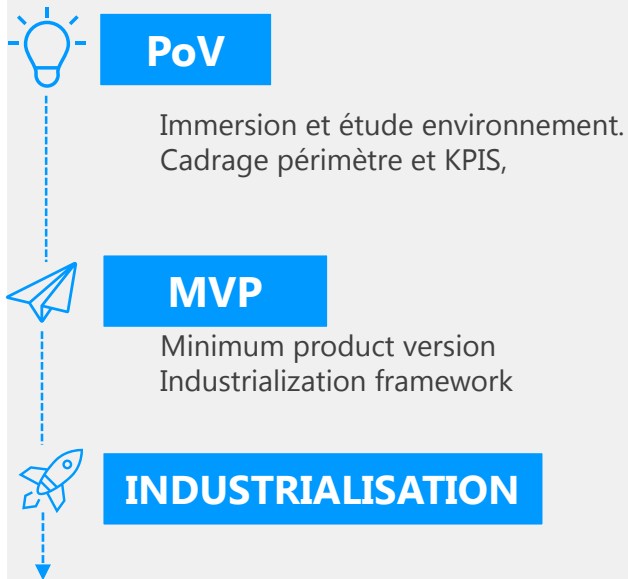
Analyse de posture pour améliorer et optimiser les conditions de travail des employés en usine



## SOLUTION

Dispositif d'analyse d'images en temps réel de la posture des employés afin d'améliorer les conditions de travail permettant de mesurer la dépense d'énergie, la pénibilité de la posture et d'optimiser les déplacements

### PROCESS



### BENEFITS

- ✓ **Optimisation** de l'efficacité des cycles de fabrication avec la prise en compte des spécificités liées aux différents postes de travail
- ✓ **Simplification des processus** existants avec feedback immédiat

### PRICE

- 💡 10 - 40 K€
- 📄 80 - 200 k€
- 🚀 > 200 k€

### REFERENCES



### TECHNOLOGIES



### DURATION

3 ► 12 mois



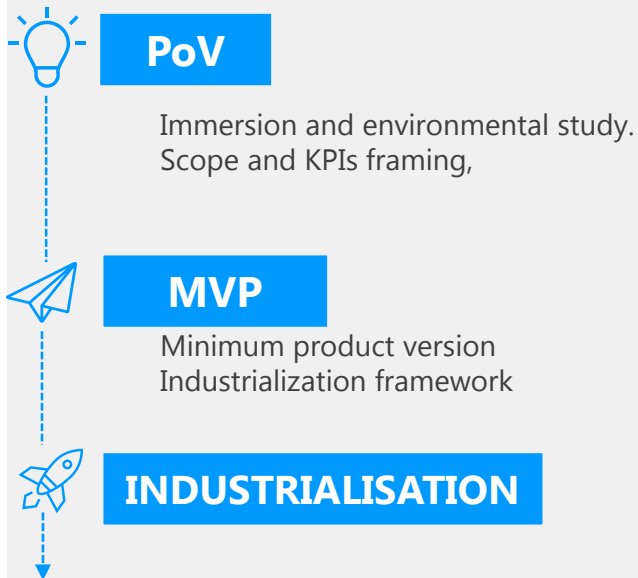
# MAINTENANCE PRÉDICTIVE

Collecter et analyser les données de capteurs pour prévoir les dysfonctionnements avant qu'ils ne surviennent

## SOLUTION

Définir et mettre en place une architecture Cloud capable d'absorber des très grandes quantités de données associée à un modèle algorithmique de prédiction multi-facteurs des dysfonctionnements

### PROCESS



### BENEFITS

- ✓ **Diminuer les coûts de maintenance** en évitant les pannes de matériel plus sévères pour l'infrastructure
- ✓ **Identifier les facteurs de risque** conduisant à des dysfonctionnements du matériel grâce à la remontée de données des capteurs
- ✓ **Valoriser un historique de données** (patrimoine des données) et acquisition de nouvelles données

### PRICE

-  30 - 50 k€
-  60 - 100 k€
-  > 100 k€

### REFERENCES



BOOSTHEAT



### TECHNOLOGIES



Séries temporelles



Azure Machine Learning

### DURATION

3 ► 12 mois

# MORE THAN 50 "IA INSIDE" PROJECTS

Consulting and delivery, exploratory and at scale



NLP



RECOGNITION & VOICE SYNTHESIS



ARTIFICIAL VISION, IMAGE ANALYSIS



STRUCTURED DATA ANALYSIS



TEMPORAL DATA ANALYSIS

The Kooples cegid

ACCOR HOTELS  
Feel Welcome

france télévisions

Cdiscount

EUGENE PERMA  
Paris

Microsoft

Pernod Ricard

Groupama

early makers  
em lyon business school

direct energie

legrand

L'ORÉAL

SNCF  
TRANSILIEN

SEPHORA  
VISEO

SEPHORA

orange

ENGIE

Carrefour



La publication d'une étude :  
*La voix monte le son*, étude  
Roland Berger/VISEO  
sur les assistants vocaux

Nexans faurecia

LATÉCOÈRE

LA POSTE

believe.  
Distribution services

CHASSIS  
BRAKES  
INDUSTRIAL

ALTA METRIS

ses imagotag

TOTAL

ACCOR

Pernod Ricard

POCLAIN  
Hydraulics

SAUR

PSA  
GROUPE

TEN  
NIS

Cegid

SFR

ROULLIER

EIFFAGE

bouygues

FDJ

SNCF

EURO  
TUNNEL

SNCF

SAINT-GOBAIN

RENAULT

GEODIS

Colibri

SEDIVER

CLIMESPACE  
ENGIE

nielsen

KEOLIS

BOULANGER  
GENERALE

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