



INDUSTRY 5.0 SPECIALISING IN ROBOTICS AND DIGITAL TWINS



Digital twins

Predictive maintenance of machines

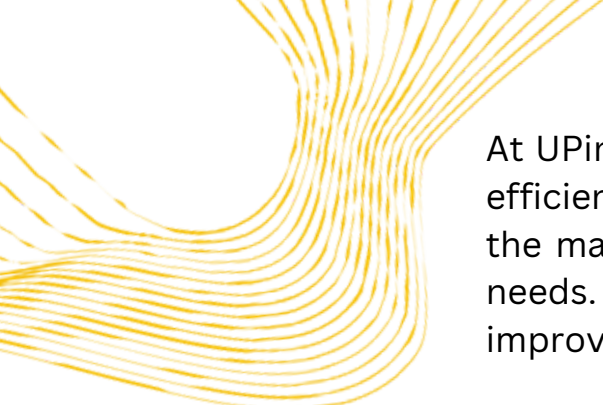


Demand prediction

Collaborative robotics



Smart stock system



At UPindustry, we aim to offer industrial companies greater efficiency and quality in processes and products, all through the management of algorithms tailored to each customer's needs. The ultimate goal is to optimise processes and improve productivity.

DEMAND PREDICTION

We use historical data to create, through algorithms, a demand forecast for products and services.

INTELLIGENT WAREHOUSE SYSTEM

We offer more reliable and accurate stock control and logistics, sending alerts of any need or stock shortage.



PREDICTIVE MACHINE MAINTENANCE

We programme alerts that will inform when machines need to be checked for future breakdowns, thus preventing them from occurring so as not to disrupt the production rhythm.

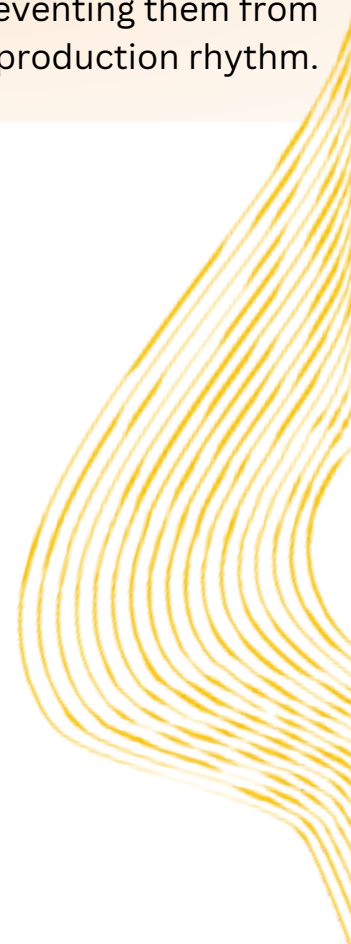


DIGITAL TWINS

By means of IoT sensors, we create simulation and analysis of industrial processes in order to achieve a safe and secure environment for experimentation, to be able to detect problems before they occur, to plan maintenance activities avoiding unplanned shutdowns, to build new, more efficient operating scenarios, to develop new business opportunities and new production plans, or even to make predictions for the future.

COLLABORATIVE ROBOTICS

We develop software applied to robotics to facilitate and automate industrial processes. Recently introduced in collaboration with companies in the sector, the aim of our service is to bring this type of technology closer to small and medium-sized enterprises.



STOCK CONTROL

Physical location of products and transactions made with them. The main objective is to have control over the location of the products, as well as the application of data mining techniques to identify products that appear together in the same transaction in order to position them in a nearby space that allows resource optimisation.

On the other hand, a transaction analysis using Machine Learning techniques makes it possible to predict future transactions by controlling the stock of each of the products, optimising the required space.

WHAT WE OFFER

- Inventory control and optimisation of product location.
- Analysis of operations carried out.
- Use of external databases such as meteorological data and environmental factors, open data provided by public institutions or data deemed useful.
- Identification of relationships between supplied and external variables.
- Identification of patterns through data mining and clustering techniques to characterise visitors.
- Preparation of predictions by modelling with Machine Learning and selection of algorithms by benchmarking.
- Use of the predictions made to calculate the necessary stock.
- Dashboard with historical data, forecasts and stock calculation. Expert system.

BENEFITS

Helps in decision-making, improving the quality of its results

Improving productivity

Anticipation of future scenarios

Optimisation of resources

Reduction of preparation time and storage space

EXPERT SYSTEM

Possibility to develop an expert system for data analysis and prediction.

Adaptive mobile and web app that enables the visualisation of historical data, forecasts and recommendations to be taken into account.

- Authentication system based on OWASP methodologies
 - Customised display format according to customer criteria
 - Data export
- PDF report with NLP algorithms

EXPERIENCE

Our clients and projects

Artificial intelligence-based platform to improve the sustainability of health transport



Development of a prototype threshing machine for fresh beans with integration of 4.0 technologies and machine learning-based control systems.

Intelligent machine vision system for industrial inspection



Digital twin of the warehouse for stock management and prioritisation