



OPTIMAESTRO: METHODOLOGY

TRANSFORM YOUR DATA INTO SOLUTIONS





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ARTIFICIAL INTELLIGENCE COMBINED WITH PLANT STAFF EXPERIENCE

As a result of more than 15 years of experience, PEPITe has developed OPTI maestro, a participative methodology to deploy successful and sustainable AI projects in industry. Engineers and operators have accumulated a lot of uncodified knowledge on the operation of a plant while IT systems have accumulated a huge amount of unused data. OPTI maestro combines both sources of information to improve performance and deploy reliable decision support tools.

OPTIMAESTRO METHODOLOGY 3 STEPS FOR A SUCCESSFUL AI DEPLOYMENT





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STEP 01 DIGITAL DATA DIAGNOSTIC

01

OPTI maestro methodology optimizes operations based on existing process plant data. As a first step, a Digital Data Diagnostic helps gauge the technical and economic feasibility of Artificial Intelligence projects in your plant. We evaluate your plant's digital maturity, highlight data availability, identify roadblocks and how data can lead to process improvement opportunities and translate each opportunity into high-level economic potential. Based on your different opportunities, a pilot project is chosen for Step 2.

STEP 02 PILOT PROJECT

02



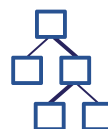
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1. PROCESS AND BUSINESS UNDERSTANDING



Which Key Performance Indicators (KPIs) measure my plant performances such as yield, energy efficiency, throughput, product quality, equipment availability?

The first phase of any analytics project allows our team to understand your process and business challenges.



4. ADVANCED ANALYTICS AND MODELING

Which parameters are key to maintain optimal performance?

In close collaboration with the production team and thanks to advanced analytics tools based on artificial intelligence, PEPITE's team:

- explores past operations variability and identify key parameters
- understand conditions leading to best performances
- predict best performance depending on plant conditions
- prescribe a range of manipulable parameters to maintain optimal performance

“Go / No Go” phase

2. FLASH ANALYSIS



What are the potential savings after implementing a pilot project?

The Flash Analysis is a preliminary analysis on historical production data to quickly quantify the potential improvements and main sources of variability that might explain low performances.

The goal is to refine the expected savings, identify possible roadblocks and prepare the brainstorming sessions with plant staff.



5. IMPLEMENTATION

What tools, dashboards or reports are required to facilitate and support operators in maintaining optimal performance?

Models built with machine learning feed in real-time dashboards and reports to ensure the right information gets to the right person at the right time. The decision support tools are adapted specifically for each client (dashboards, daily/weekly/monthly reports, etc.) and typically use existing technology solutions already operational in your plant.

3. WORKSHOP WITH OPERATORS



How can we involve operators to ensure a successful project?

At this stage, brainstorming workshops are organized with production and maintenance teams (operators, engineers, managers). These sessions are designed to pinpoint root causes underlying a particular performance problem and to understand operating constraints.

Experience has shown that this phase plays a key role in the successful implementation and engagement of plant staff to trust AI based decision support tools.



6. TRAINING AND REVIEW

How can I ensure long-term follow-up and sustainable results?

Following implementation, plant staff are trained to interpret and take-action based on live dashboards and reports. A follow-up review period ensures that models are performing correctly and that the reports and dashboards are understood and well used.



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STEP 03

KNOWLEDGE TRANSFER

The objective is that our clients have the tools and skills to deploy AI projects using DATAmaestro Advanced Analytics software and OPTImaestro methodology.

PEPITe, or a certified partner, will continuously coach your teams on the OPTImaestro methodology and help you to take full advantage of DATAmaestro features.

Learn how to implement your own AI projects!

