

15th Maintenance Forum




PRECognition team:



PRECognition

An innovative platform for factory equipment maintenance that combines innovative prediction and fault detection models.

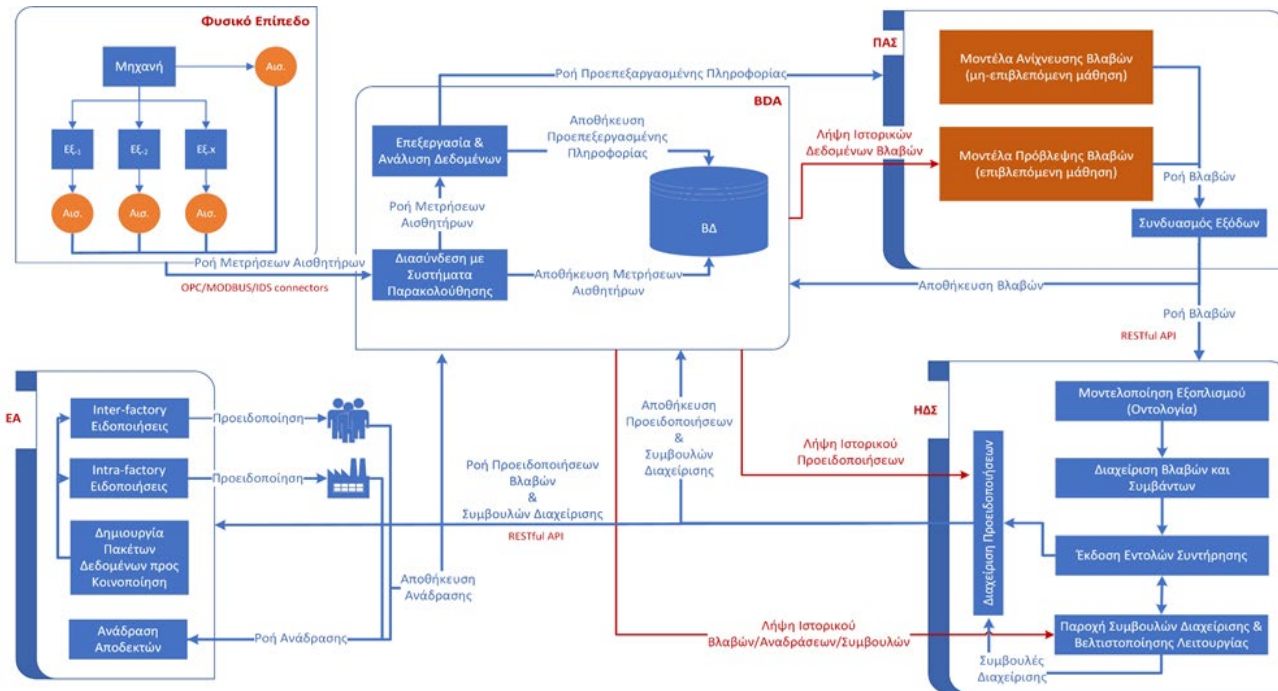
Challenges:

-  Significant reduction of equipment downtime due to failure.
-  Increasing the lifetime of equipment.
-  Reduction of total maintenance and production costs.

Apply novel and state-of-the-art machine learning techniques:

- leverage unsupervised anomaly detection
- capitalize on advances in ML
- mitigate the need for experts to label data
- process a variety of sensor signals: PLC entries, acoustic emissions, pressure, current and temperature measurements.

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- Leveraging advanced machine learning and data analytics models to predict future failures. Meta-model → Fusion of predictive models.



- Development of a sub-system to support taking actions and strategies to prevent failures (automated assistance)



- Development of a sub-system for notifying the engineers regarding ongoing or already foreseen damages.



- Evaluation of the PRECognition Maintenance Platform in an industrial environment.