



UNLOCK: your business potential with Industrial AI – developed by PSI

The key drivers behind PSI's industrial AI are the digital transformation of industries and the shift from traditional software systems to AI-driven systems, which enable increasingly autonomous, decision-oriented operation of customers' business processes. PSI's extensive experience with fact-based AI across various industries offers a wide range of unique selling points in terms of improving business process efficiency and creating value. In the context of emerging generative AI, natural language-driven interaction with PSI's fact-based AI is becoming a key differentiator, forming a seamless cycle in which data-driven insights, natural language-driven decision-making, and the generation of fact-based content work together to enhance technological performance.

Fact-based AI and generative AI

Based on the PSI Industrial AI Framework, which provides AI algorithms for all PSI products, a continuous, interconnected ecosystem between fact-based AI and generative AI helps integrate AI into all business processes of PSI customers across various industries. This synergy is designed to deliver optimized decisions and increase efficiency across industries.

Real-World Benefits for Customers

A variety of customer benefits include relevant efficiency growth in production and energy sector and their corresponding real-world results across various industries. To save time and optimize resource handling, a European fashion retailer utilizes adaptive optimization within their warehouse logistics. For improving performance and productivity, a manufacturer of ATM and retailer systems employs adaptive sequencing and scheduling in the end-to-end production. A car OEM enables autonomous operations through worldwide AI-based sequencing of production lines in both planning and real-time modes. To facilitate faster and better-informed decisions, a European energy company implements adaptive decision support and optimization for operations and asset management. Finally, a metalworking company navigates successfully through business transformations by developing a new smart factory that uses adaptive optimization for self-organizing material testing processes. Overall, these cases demonstrate a shift toward autonomous AI-driven systems designed to enhance efficiency and decision-making in complex environments.

More than generative AI

PSI's Industrial AI Framework is a multi-layered architecture that integrates fact-based AI and generative AI and RAG capabilities to produce correct results and plausible explanations. RAG is important because it integrates document management with LLMs and prevents hallucination.

From Decision-Making to Generative AI

The framework is structured into five distinct levels of application, ranging from decision-driven and adaptive optimization-driven AI to full AI stack-driven analytic applications and Generative AI for business use. On one side, the Qualicision AI and PredAI components focus on making precise decisions in „either-or“ situations based on hard facts. On the other side, the integration of Qualicision A2 with Gemini focuses on the probabilistic generation of plausible answers.

The Technology Behind the Framework

This entire system is supported by a comprehensive technical AI and software stack including various programming languages like Python, model frameworks, and integrated LLMs like Gemini.

Ultimately, the framework leverages PSI's deep process know-how to act as a set of agents, ensuring that every AI-driven output is grounded in documented facts to deliver both accuracy and transparency.