



## Empowering AI Preparedness in Energy

# Enabling Data-Driven Decision Making to Create Platform for AI Integration

Empowered Data-Driven  
Decision-Making and AI  
Preparedness

Centralized strategic KPIs  
Enhanced efficiency  
Reduced maintenance costs

### Executive summary:

*NowVertical partnered with YPF, a prominent Energy, Oil & Gas company in Latin America, to cultivate a data-driven culture. Tailored solutions encompassing data strategy, analytics, and training were implemented to consolidate KPIs, enable predictive maintenance, and enhance decision-making. YPF realized improved efficiency, reduced costs, and increased confidence in data-driven choices. Enabled by NowVertical's solutions, YPF is now well situated for the implementation AI initiatives that may include predictive maintenance, customer insights, analytics, financial risk management, supply chain optimization, and energy trading.*

### Business needs:

YPF, a prominent Energy, Oil & Gas enterprise, recognized the imperative of data-driven practices to maintain its leadership in the industry. YPF sought solutions to unify its data ecosystem, fortify data governance, and implement analytics capabilities. It aimed to leverage these advancements to enable future artificial intelligence across its operations. Partnering with NowVertical, YPF embarked on a transformative journey to enhance decision-making, optimize processes, and harness AI technologies.

### Business results after implementation:

- **Informed Decision-Making:** Centralized strategic KPIs empowered data-driven decisions across departments.
- **Efficiency Gains:** Streamlined reporting processes led to enhanced efficiency and responsiveness.
- **Predictive Maintenance Impact:** Optimized equipment maintenance minimized downtime and reduced maintenance costs.

## Empowering AI Preparedness in Energy

### Overview:

YPF sought to become a data-driven company by implementing a robust data strategy, defining data governance, integrating corporate architecture, and generating analytical capabilities. NowVertical provided tailored solutions and training to YPF's teams, enabling them to make informed decisions and drive the organization's growth.

### Situation:

YPF, as a major player in the energy industry, recognized the importance of embracing a data-driven culture to enhance its decision-making processes. The company aimed to consolidate and automate key performance indicators (KPIs) for a comprehensive overview, create predictive models for financial risk management, understand customer behavior, and establish predictive maintenance for equipment and piping.

### Approach:

NowVertical started by collaborating closely with YPF's teams to understand their specific needs and objectives. The solutions were designed to cater to YPF's unique requirements, focusing on the following areas:

**Data Strategy Development:** NowVertical worked with YPF to develop a comprehensive data strategy, encompassing data governance, architecture, and analytics. This laid the foundation for a data-driven culture within the organization.

**KPI Consolidation and Automation:** NowVertical created sales, commercial, and dashboard models, enabling YPF to consolidate and automate KPIs. This provided a centralized view of strategic metrics and streamlined reporting processes.



**Financial Risk Management:** NowVertical developed automation for forecast models, incorporating maximum aperture and granularity. Additionally, simulation capabilities were introduced to manage financial exposure through variations in balance sheet and income statement risk factors.

**Customer Behavior Analysis:** NowVertical employed segmentation models, retention analysis, cross-sell/up-sell, and loyalty insights to offer personalized and targeted offers to YPF's customers.

**Predictive Maintenance:** NowVertical implemented predictive maintenance solutions for equipment and piping, enabling YPF to optimize maintenance schedules and reduce operational costs.

### Outcome:

The partnership between NowVertical and YPF yielded significant benefits, enhancing the company's performance and driving data-driven decision making:

- Improved Decision Making:** With access to consolidated and automated KPIs and predictive analytics models, YPF's decision-making process became more informed and efficient.
- Cost and Risk Reduction:** YPF leveraged analytics solutions to reduce risk margins and operational costs. The implementation of financial risk management models allowed for better corporate strategy planning.

## Empowering AI Preparedness in Energy

- 3. Increased Efficiency:** By eliminating manual processing times, YPF's collaborators became more efficient in their tasks, leading to improved productivity and streamlined operations.
- 4. Confidence in Data-Driven Decisions:** NowVertical's solutions instilled confidence in YPF's data-driven decision-making capabilities, promoting a data-driven culture throughout the organization.
- 5. Scalability and Flexibility:** NowVertical's solutions were designed to be scalable, accommodating YPF's future projects and growth

### Conclusion:

NowVertical's partnership with YPF enabled the company to transform into a data-driven organization. Through implementing data governance, analytics capabilities, and training programs, YPF gained the tools and insights needed to make informed decisions, optimize operations, and sustain its position as a leader in the energy sector.

With the outcomes achieved through NowVertical's solutions, YPF has laid a strong foundation for enabling AI in its operations. The data-driven culture, robust data governance, centralized data insights, and analytical capabilities create an ideal environment to leverage AI technologies effectively. Here are some ways YPF could utilize these outcomes to enable AI in its operations:

**Predictive Maintenance with AI:** AI algorithms can enhance YPF's predictive maintenance efforts, predicting equipment failures and optimizing maintenance schedules to minimize downtime and reduce costs.

**AI-Driven Customer Insights:** AI can augment customer behavior analysis to gain deeper insights,

enabling personalized offers and improving customer experience and loyalty.

**AI-Driven Analytics:** Leveraging AI-powered analytics tools, YPF can quickly analyze vast data, extract meaningful patterns, and identify trends not evident through traditional methods.

**AI for Financial Risk Management:** AI algorithms can enhance forecast models, simulating risk factors to manage financial exposure and identify opportunities in financial planning.

**AI for Supply Chain Optimization:** AI can optimize YPF's supply chain by predicting demand patterns, optimizing inventory, and identifying efficient distribution routes for cost savings and improved efficiency.

**AI for Energy Trading and Pricing:** By analyzing market data and historical pricing, AI can optimize YPF's energy trading strategies, leading to informed pricing, hedging, and risk management decisions.

Overall, YPF can leverage the outcomes of NowVertical's solutions to embrace AI technologies across various operations. By combining data-driven insights with AI capabilities, YPF can unlock new efficiencies, gain a competitive advantage, and drive innovation in the energy sector.