Azpump Modernizes Operations With a Centralized Control Room Powered by Polywall

Enhancing live insight and collaboration across the company's production environment.

Azpump is a leading industrial manufacturer specializing in energy efficient technologies for oil production and power generation.

Project Goal

The objective was to build a centralized control hub that consolidates data, improves coordination, and supports continuous staff development.

Project Background

As operations expanded, Azpump struggled with scattered data and limited training capabilities. A new control room powered by Polywall aligned information flows, improved monitoring, and enhanced team collaboration, supporting the company's broader digital transformation goals.

Project

Development of a modern operational control room to enhance ongoing monitoring, coordination, and data visualization within Azpump's facility. The project unified live data from multiple operator workstations and web applications, improving decision making, transparency, and creating a multifunctional space for demonstrations, simulations, and staff training.

Solution

The project included the full design and setup of a new operational control room featuring a **Polywall Pro** powered video wall, a dedicated server room, an operator zone for multi-source control, and a training area for onboarding.

Digital Technologies developed the concept and system architecture, while **Bakinity** managed installation, custom furniture, and interior finishes.

Technical Characteristics

The architecture was developed in collaboration with **Matrox**, providing reliable multisource processing.

Configuration:
- 2-panel LG 55VSM5J-H video wall (6×2), 4K resolution
- Managed by Polywall Pro

Infrastructure:
- Matrox controller (Xeon W3400, 32 GB RAM)
- HP Pro Mini G9 workstations
- Socomec NRT3 7 kW UPS
- Kramer TP-583 4K transmission, TP-Link switch

"The integration of Matrox-based control architecture, Polywall Pro software, and LG professional displays was executed with precision, ensuring seamless synchronization and flawless image quality."

**Ahmad Rashtiyev,
IT Project Manager, Bakinity**

Results

The project delivered a fully functional control room supporting monitoring, data management, and training.

Key Results:

- **Improved oversight:** Live monitoring across operator workstations.
- **Centralized control:** Unified system view through Polywall, allowing faster decisions.
- **Enhanced training zone:** Dedicated space for onboarding and demonstrations.
- **Stable performance:** Industrial-grade components and Polywall architecture ensure uptime.

Powered by Polywall, the control room is now scalable and future-ready.