



ENERGY · PRODUCTION & ASSETS

Multi-Well Production Optimization for a Large Oil & Gas Operator

A large oil & gas company used Quantum One to coordinate setpoints across wells, clusters, and the full field, achieving a 3–5% annual production increase.

IMPACT

3–5%

Annual production increase

Field-level

Optimization across single wells, well clusters and the full field

Real time

Integrated with SCADA and production systems

CLIENT PROFILE

CLIENT

A large oil & gas company

REGION

Middle East

SCENARIO

Production & assets

INDUSTRY

Energy

COMPANY TYPE

Enterprise operator

CHALLENGES

- A large oil & gas company operates multiple oilfields where production teams must monitor and optimize dozens of wells simultaneously.
- Control tasks are highly complex, involving more than a hundred interacting parameters, against constant operational instability — pressure fluctuations, equipment degradation, choke changes.
- Operator attention is dispersed, and optimization has to be coordinated across single wells and multi-well clusters at the same time.

APPROACH

We developed an AI-powered optimization solution for oilfield operations, helping production teams monitor and optimize multiple wells simultaneously.

The system forecasts near-term operational outcomes, recommends optimal setpoints, and coordinates decisions across single wells, well clusters, and field-level operations.

BENEFITS

- Predictive deep-learning model for wells and clusters
- Single Well Optimizer for stable and safe operations
- Cluster & Field-Level Optimizer for maximizing total oil production
- Real-time integration with SCADA and production systems
- Autonomous control loop support for faster operational recommendations

MVP FUNCTIONALITY

- AI production monitoring view shows current and predicted production across wells and clusters, with AI recommendations, improvement estimates, and map-based field context for operational decisions.

TIME TO PRODUCTION

Stage	Quantum One	Typical process	
Problem definition	1 week	2–3 weeks	
Proof of concept	2–3 weeks	4–6 weeks	
MVP	4–6 weeks	8–12 weeks	
Scale-up	1–2 months	3–4 months	
Maintenance	Ongoing	—	

TAKE THE NEXT STEP

Speak with our experts to discuss tailored AI solutions for your industry

quantumone.ae