

A wide-angle photograph of an industrial refinery or chemical plant at sunset. The sky is filled with soft, orange and pink clouds. In the foreground, there are several large, white, cylindrical storage tanks with red railings. The background is dominated by a complex network of tall distillation columns, pipes, and structural steel frameworks, all illuminated by the warm light of the setting sun.

DIGITAL TANK SOLUTION FOR OIL & GAS STORAGE PROVIDER

CLIENT OVERVIEW

Our client is a leading storage service provider ensures safe storage of energy products such as chemicals, oil and gas. Reducing energy consumption and efficient utilization of assets is a critical requirement of Oil & Gas storage service providers

KEY REQUIREMENTS

- Client was challenged to efficiently utilize and maintain a large number of owned and leased oil and gas storage tanks and equipment
- Due to the large number of assets, the client was unable to monitor and schedule terminal activities efficiently, resulting in only 20-30% utilization of overall asset capacity
- Higher energy consumption at terminals resulted in significant cost increases

KEY CONTRIBUTIONS

- We developed a smart solution to collect real-time energy consumption data from devices (motors, pumps, electric meters, heat panels, etc.) installed in oil and gas terminals, and perform analytics on the data captured
- We implemented predictive analytics to forecast energy cost at peak and recommend a terminal activity schedule (loading, unloading, heating, stirring, mixing, etc.) to optimize energy consumption
- We developed a feature to trigger real-time notifications and suggestions to keep power consumption below a pre-defined threshold
- We developed responsive data visualization for the web application

KEY BENEFITS

- 20% reduction in substation level energy consumption and associated 11% cost reduction
- 25% increase in equipment utilization
- Efficient management of all device activities
- Reduction in maintenance cost of assets by optimizing energy utilization

TECHNOLOGY STACK

- Angular JS
- Java
- KEPServerEX
- OPC UA



About Xoriant:

Xoriant Corporation is a Product Development, Engineering and Consulting Services Company, serving technology startups as well as mid-size to large corporations. We offer a flexible blend of onsite, offsite and offshore services from our eight global delivery centers with over 2000 software professionals. Xoriant has deep client relationships spanning over 25 years with various clients ranging from startups to Fortune 100 companies.