



Customer success story

A modern UX/UI design for gas well performance

Partnering with AWS Professional Services and Cognizant, an energy producer bets that the contemporary UX on a critical new application will help improve its natural gas wells' productivity.

Customer challenge

To improve the performance of its natural gas wells, one of Australia's leading energy retailers and producers sought a state-of-the-art application that its workforce could rely on for more informed decision-making. The application would be based on reinforcement learning models and generate recommendations for control factors such as downhole pump speed.

The complex application faced several challenges. Without user-friendly interfaces to display insights and recommendations, the application's adoption remained low. Equally important, the information that fed into the application was scattered across disparate systems and solutions, hampering stakeholders' ability to collaborate.

The company recognized that a positive user experience (UX) was critical to the application's success. It would not only help the company realize its ROI on the solution but also advance its journey toward continuous optimization of its wells' performance.

Two factors weighed heavily on the application's UX design challenge. One was the requirement for multiple interfaces to serve a wide variety of stakeholders, from well performance technicians and control room panel operators to production engineers. The other was that to support more informed decision-making, the interface would need to leverage data and views from existing products.

AWS + Cognizant solution

AWS ProServe recommended Cognizant to design the new user interfaces (UIs) based on the team's extensive experience in digital, analytics and user-centered design thinking techniques.

Over four 2-week sprints, Cognizant worked closely with the client. The discovery phase included user interviews and workshops to develop personas and user journeys, and to better understand the application's challenges.

During the design phase, target UIs were created and related artifacts were developed. The conceptualized UIs enabled the presentation of insights, recommendations, and related information as well as task management, such as allocating tasks between teams. The client team was continuously engaged and educated on all aspects of user-centered design principles.

Our team provided the client with the following deliverables:

- Interactive, clickable prototype of the new UI
- Storyboards depicting user journeys
- List of information sources required to support the new UIs
- User guide for the new UIs.

A final playback session ensured all aspects of the design had been clearly communicated to stakeholders and incorporated final feedback.

Outcomes/results

With the stakeholders' endorsement of the UI design, the next step is for the front-end development team to build the end-to-end application. The robust UX/UI approach will help accelerate development and ensure the application delivers outcomes that include:

- Uplift in usability
- Broad adoption across the business
- Consolidation of well-performance-related insights and information
- Easy access to context and supporting information related to recommendations
- Faster, more informed decision-making
- Improved productivity and collaboration
- Consistency in analysis across teams and stakeholders
- Visualization and tracking of optimization effectiveness

Why Cognizant?

Cognizant (Nasdaq-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. We engineer modern businesses to improve everyday life. Our unique industry-based, consultative approach helps clients transform technology, reimagine processes and transform experiences ensuring businesses remain agile, relevant and ready to run more innovative and efficient enterprises.

With AWS as our partner, we focus on the outcomes that matter most to businesses and underpin our solutions with deep industry experience and market-leading IP. Cognizant brings more than 13,000 AWS certified professionals, dedicated AWS certified consultants in 43 countries, hundreds of customer launches and successes, and more than 70 transformational blueprints to drive innovation beyond cloud migration.

As a premier consulting partner, Cognizant hold numerous AWS competencies, including AWS Mainframe Migration, AWS SAP, AWS Migration, AWS Financial Services, AWS Healthcare, and AWS Life Sciences. Partner programs include AWS Well Architected, AWS Managed Service Provider, AWS Marketplace Seller, AWS Solution Provider Program, and AWS Public Sector Solution Provider.



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