Digitizing Remote Field Operations in Non-Connectivity Landscapes

About Nabors

Since its founding in 1952, Nabors has grown to one of the world's largest drilling contractors. In 1990, Nabors' fleet consisted of 44 actively marketed land drilling rigs in Canada, Alaska and various international markets. Today, Nabors owns and operates the world's largest rig fleet and is a leading provider of offshore platform workover and drilling rigs in the U.S. and international markets.

Nabors also provides advanced wellbore placement services, drilling software and performance tools, automated drilling equipment and innovative technologies. Through its various subsidiaries, Nabors manufactures and sells top drives, catwalks, wrenches, drawworks and other drilling related equipment which are installed on both onshore and offshore drilling rigs. Leveraging advanced drilling automation capabilities, Nabors' highly skilled workforce continues to set new standards for operational excellence and transform their industry.

The Situation

Nabors is a large, Oracle eBusiness Suite customer and primarily operates their field operations on top of Oracle. Nabors had an internal development framework built off of technologies such as .net and also an internal web portal to their applications suite called myNabors. The challenge Nabors faced was not unlike many in the oil and gas and \manufacturing space as they have tens of thousands of employees and many independent and seasonal contractors - all of whom work in landscapes that do not guarantee cell phone service or internet connectivity.

This made it extremely difficult for Nabors to digitize their business processes due to the complexity of data integration with their Oracle systems and intermittent connectivity that impactedt data accuracy and synchronization. The ability to respond to business requests quickly when building applications using traditional programming languages was also proving to be cumbersome, especially as the business users of these applications were quickly turning into millennial employees who typically knew only how to use mobile devices.

Nabors' goal to find a new application development platform to wrap around their core business system, enabling them to modernize their existing legacy applications, digitize manual processes in the field, build applications once that run on any device, and allow them to respond to business requests in weeks instead of months without putting an additional strain on their development organization was essential.

Nabors explored market offerings and evaluated dozens of low code application development platforms from Gartner's magic quadrant. Despite meeting all their technical requirements, the market solution that was chosen didn't seem to be established enough to handle their offline requirements. Nabors, who had originally approached the Pillir team (formerly known as appsFreedom) and chose to not utilize their EdgeReady Cloud solution, came back only four months later looking for a solution from the Pillir team.

An accelerated evaluation around their requirements mentioned earlier was then conducted, which included bringing multiple devices out to an actual oil rig and testing the data synchronization to Oracle in an advanced intermittent scenario with thousands of records that included data and pictures.

NABORS

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The Business Challenge

- Business requirement to modernize, digitize, and mobilize dozens of applications and manual paper processes at speed and scale.
- Reliance on a complex ERP system that is core to the entire business operation.
- Tens of thousands of field and plant service workers, fluctuating seasonally and working in remote locations with no connectivity doing jobs that rely on data being accurately collected and used.
- A need to enable the rapid development of applications in weeks instead of months with significantly less resources than traditional development based approaches.

Pillir's Solution

- Pillir's EdgeReady Cloud offered the ability for Nabors to quickly generate applications that worked in any connectivity landscape, on any device, and were tightly integrated to Oracle while running as cloud- native SaaS applications.
- The Nabors team now has the capability to design and build custom online and offline apps with user-centric, customized experiences that are tightly integrated with Oracle.
- Deployment to multiple locations and users was done seamlessly.
- Hosted on Pillir's cloud-native SaaS platform, with no infrastructure or operational overhead added to Nabors' plate.
- A simple, user-based pricing model is utilized that fluctuates seasonally for contract workers offering fully customized enterprise- scale applications.

Benefits Overview

Streamlined and Efficient Processes

Process and productivity efficiencies were gained, without dependency on network availability and resulted in near real-time updates into Oracle - enabling visibility with improved reporting capabilities, including users only having to enter critical information.

Deployed Quickly with Little-To-No Programming

Solution was deployed quickly with little-to-no programming and no infrastructure investments or people overhead for operational costs. Even offline capability and deployment were completed rapidly with minimal resources. Significant reduction of maintenance time and effort for future enhancements and support.

Ensuring Best Practices

Oracle was maintained as the core system of record, however, kept as standard and as close to best practices for existing processes as possible, allowing Nabors to still have customized user-centric experiences for edge use cases and processes.

aws

Pillir's EdgeReady Cloud is designed, built and deployed using AWS. Pillir uses AWS to extend business applications like SAP to remote places with no connectivity and enables personnel to work from any location, with any device, with or without connectivity or system availability.

With AWS, Pillir-built EdgeReady applications can scale to any amount of users and load in seconds, with no infrastructure or people overhead for internal IT organizations.Leveraging Amazon EC2 with Dynamic & Auto Scaling across Multi-Availability Zone redundant infrastructure and Amazon Elastic Load Balancer along with Amazon RDS and Dynamo-DB.

About Pillir

Formerly appsFreedom, Pillir is a low-code, cloud native, PaaS provider that specializes in enabling customers to generate resilient, always-available, self-managing applications that work in any connectivity landscape. Pillir's EdgeReady Cloud provides rapid application development with little-to-no programming and reusable objects; enabling companies to enhance speed to market and innovation. With pre-built integrations for SAP, Oracle, Microsoft Dynamics, Salesforce.com and other systems, customers leverage Pillir to modernize any process or application in weeks, regardless of connectivity, device or back end system. Contact us to explore how Pillir can improve business productivity by enabling teams to build apps quickly on any device and tightly integrate with core business systems that are critical to your operations.