A Transformation to Succeed in the Digital World

KPIT helps Weatherford build a Digital Enterprise Hub for rapid delivery across business processes.

With roots dating back to 1941, Weatherford International is one of the world's largest diversified upstream oil field services companies, offering a host of products and services including drilling oil and natural gas wells, manufacturing and sales of oil field tools, and creating software for maximizing well production.

Weatherford has a presence in more than 100 countries, with more than 45,000 employees. The company has some 10,000 active Oracle's JD Edwards users, making it one of the largest JD Edwards customers in the

Jason Penner, Director of Application Development and Information Management, Weatherford

world operating on a single global database instance.

Prior to 2014, Weatherford had implemented an older version of the JD Edwards enterprise resource planning (ERP) solution with custom integrations to a large number of ancillary and external systems. Any change in business process, due to market conditions or a new regulation, meant

that a change would have to be implemented in the ERP platform. This often led to customizations in the JD Edwards environment that made it difficult to adopt ongoing upgrades and revisions.

An outdated company website affected the company's ability to effectively share information and take its story to the market. Weatherford's marketing organization was increasingly becoming frustrated with the outdated information on the website and the long delivery times associated with changes to the website.

Weatherford's IT organization saw the need for a digital transformation to occur. Weatherford partnered with KPIT, an Oracle Platinum Partner with deep Oracle Fusion Middleware expertise, to create a "Digital Enterprise Hub." The key goals of the Digital Enterprise Hub are to

1. Engage and empower the customers, employees, and partners to share information
2. Improve operational efficiency by automating business processes and access to information
3. Improve time to market in delivering solutions aligned with evolving business needs

Using these goals as key requirements, Weatherford and KPIT designed the Digital Enterprise Hub leveraging core components of Oracle Fusion Middleware. Key elements of the hub provided the capability to develop flexible and agile business processes. "The concept of a Digital Enterprise Hub and reusable services did not exist two years ago at Weatherford. Now we are fully engaged on service-oriented architecture (SOA) and the enterprise services mindset that it brings," says Jason Penner, director of application development and information management at Weatherford.

Penner says Oracle Fusion Middleware and KPIT enabled Weatherford to build composite services that span multiple systems, including JD Edwards. This is leading to dramatic benefits in terms of how Weatherford interacts with customers, employees, and partners, and it provides access to shared data.

Business to Business, Enhanced

A top priority of the program was to improve the interaction between suppliers and customers. The B2B component of Oracle Fusion Middleware made communications with customers and suppliers far more reliable, secure, and compliant with Petroleum Industry Data Exchange (PIDX) industry standards. Partner satisfaction has risen since the implementation of Oracle B2B, and Weatherford's IT organization now has time to work with the business to drive higher adoption of electronic commerce.

"After implementing Oracle B2B, Weatherford saw dramatic improvements in the number of daily transactions, while at the same time lessening the time IT was spending researching transaction failures," says Penner.

Oriented Around Services

A big advantage with the Digital Enterprise Hub was during the upgrade from the older version of the JD Edwards ERP solution to JD Edwards EnterpriseOne 9.1. The SOA integrations were migrated with minimal effort and almost no coding changes. The hub allowed Weatherford to build an architecture that provided enterprise services to be consumed internally by other applications and externally by customers and suppliers. "We aren't using traditional 'enterprise application integration' anymore as a solution for point A to point B integration," says Penner. "Now we're exposing these interfaces as enterprise services and allowing for authenticated users in the organization to get information from JD Edwards EnterpriseOne and other key systems via SOA."

Extending the Mobile Enterprise

Mobility was an important element in Weatherford's digital journey. The Digital Enterprise Hub helped Weatherford to start using mobile and social through the use of Oracle Access Management Suite to provide security for mobile usage. Using this platform it has been possible for Weatherford to quickly deploy mobile solutions that leverage existing enterprise services and deliver composite applications that provide significant benefits to the company's mobile workforce.

Leveraging Information

The Digital Enterprise Hub allows key systems in Weatherford to use a common platform to share data. Data from Weatherford's master data management platform is now shared through services that are consumed by other key systems. "One of the key benefits is that many services have been built to enable JD Edward EnterpriseOne to become an easily accessible source of truth for many organizational entities," says Advait Waghmare, head of the Oracle Fusion Middleware practice at KPIT.

Through standards-based interfaces, Weatherford is now implementing many more enterprise-wide services, such as customer lookup, item availability, and item pricing. This has led to greater efficiency and helps eliminate the possibility of multiple versions of data that are not synced. Weatherford has also built various near-real-time interfaces, which allow immediate notification of internal events to external systems.

Improved Company Image

In order to improve the digital image and share information with customers and others, KPIT helped Weatherford to improve the company's website. After selecting and implementing Oracle WebCenter Sites, the new Weatherford.com site now serves as an important platform to support business growth and stakeholder engagement. It also meets Weatherford's marketing goals to improve sharing of key product and service information with customers while improving the image of Weatherford

as a true technical leader in the oil field services industry. Content editors can self-serve and deploy fresh content independently, and promotions easily go through proper workflows for approval. The user experience on the website and social channels has dramatically improved. Penner says, "The new website has helped to deliver an engaging and relevant digital experience, making Weatherford stand apart from its competitors."

Partners in Growth

Weatherford attributes much of the project's successes to the partnership with KPIT, noting that KPIT's experts in Oracle Fusion Middleware advised Weatherford on exactly what such a platform could do for the company. "We consider KPIT a pioneer in helping customers realize the true value in Oracle Fusion Middleware. Their strategic approach and innovation is a key differentiator," says Penner.

Weatherford now has a strong and robust platform, which will contribute significantly in its continued evolution toward becoming a digital enterprise.

> "
> We consider KPIT a pioneer in helping customers realize the true value in Oracle Fusion Middleware. Their strategic approach and innovation is a key differentiator."
>
> —Jason Penner, Director of Application Development and Information Management, Weatherford

KPIT

For more information, visit
www.kpit.com/transform