



A people-focused approach to field service transformation

KPMG reconfigures Microsoft Dynamics 365 for a major oil company



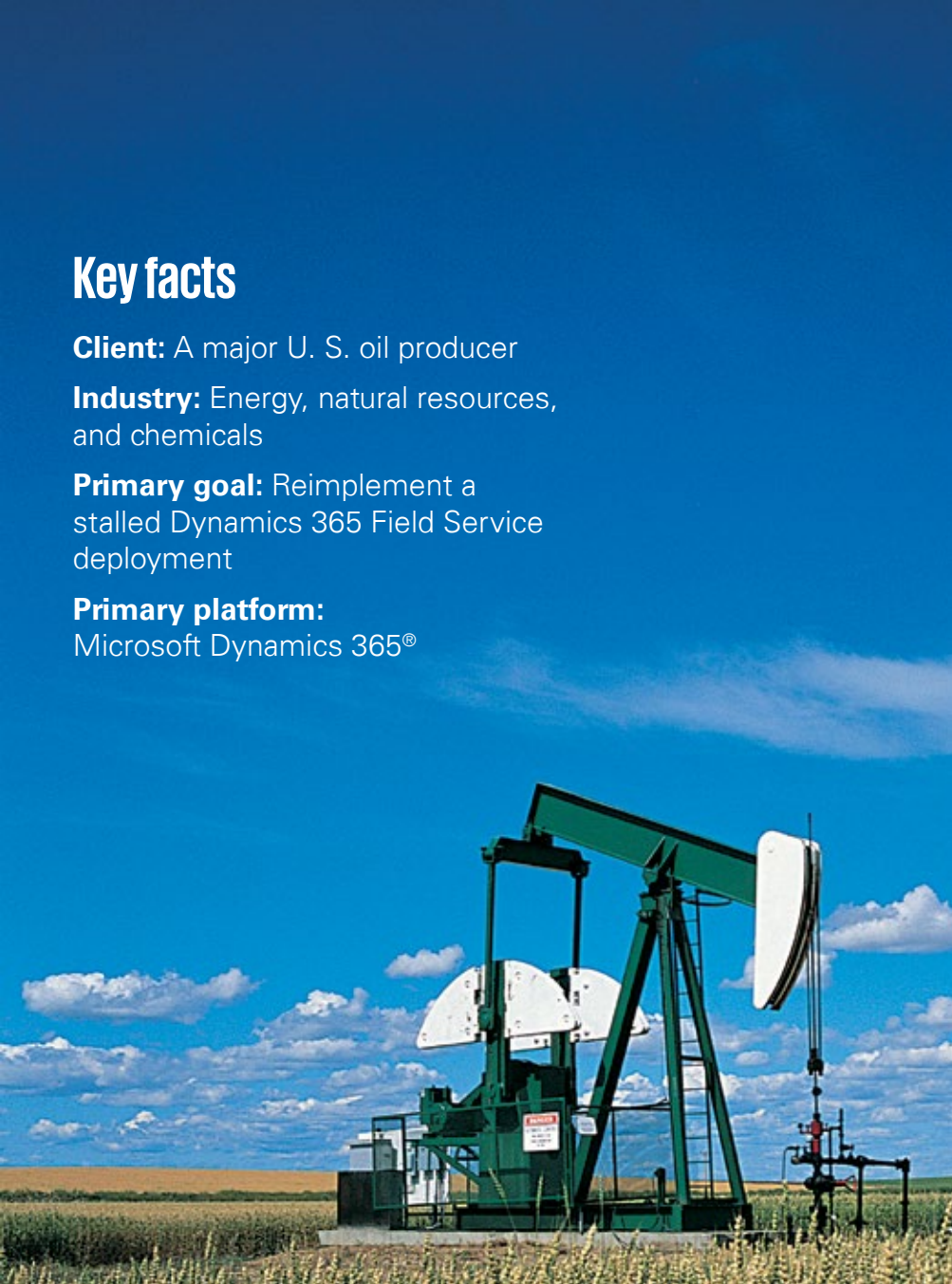
Key facts

Client: A major U. S. oil producer

Industry: Energy, natural resources, and chemicals

Primary goal: Reimplement a stalled Dynamics 365 Field Service deployment

Primary platform: Microsoft Dynamics 365®



A major oil and gas company chose Microsoft Dynamics 365 Field Service® to transform operations and maintenance for producing assets. But their initial implementation failed to make everyday activities much easier for employees, even those accustomed to making reports via pen and paper. It also failed to deliver the efficiency and data sharing that management expected. KPMG was selected to replace the original system integrator (SI) and reconfigure Microsoft's technology. By fielding a cross-functional team that combined energy industry experience with Dynamics 365 specialists, we helped enable connected operations that empowered people across the organization—from field workers who needed better tools to managers who needed better insights.

Outcome highlights

Key outcomes			
	Estimated 2 percent to 5 percent operations expense savings from worker efficiency	Projected 1 percent to 5 percent gain in production volumes	Single asset launch as the model for enterprise-wide transformation

Client transformation journey

Before

Technology without context

After working with the original Dynamics 365 deployment for a year, the client found that while it worked technically, it had not been optimized to make key tasks easier for field workers or make relevant data more accessible.

Instead of acting as a true partner for digital transformation across the organization, the previous SI had focused on deploying technology without understanding the specific requirements of oil and gas workers or the client's broader business objectives.

A new deployment would need to be reconfigured to address these issues and get real value from Dynamics 365.

After

Connected operations at a key site

In 2022, a new version of Dynamics 365 was strategically launched at an initial North American unconventional oil and gas asset. Based on input from the client's IT team, on-site workers and managers, and other stakeholders, the new solution initially focused on managing and connecting key functions such as recurring tasks, routine inspections, alarms, and maintenance.

Thanks to limited customization, the new cloud-based solution is flexible enough to enable additional functionality.

Next

Initial asset and beyond

With the new system functioning successfully at one regional asset, management is evaluating it as a model for transforming field service operations across its entire range of assets for oil and gas exploration and extraction.



What makes KPMG different is our ability to give clients a range of knowledge and experience delivered by a single coordinated team. This engagement required a strong understanding of the oil and gas industry as well as deep experience with Microsoft Dynamics 365 Enterprise Resource Planning platform. By listening closely to the client from the very beginning, we were able to assemble the right group of specialists to help meet their specific goals.

—Rob Moeller

KPMG Advisory Managing Director, Platforms

KPMG uses technology to improve operations and deliver real value



1. Vision and validation phase Real goals and relevant functions

Despite the unsuccessful first launch, the client understood that the Dynamics 365 Field Service application was the right solution for automating and connecting operations, so the need for an initial technology review and selection process was eliminated. The client’s basic goals were also already well-defined: to implement a scalable Microsoft Field Service foundation that would optimize routine, ad-hoc, and maintenance tasks for their production, maintenance, and reliability workers in the field.

The key to a more effective deployment would be to bring a “business value first” approach to the project by defining leading practices that would drive value for the business overall and then configuring Dynamics 365 to meet those objectives. It would also require prioritizing which field service tasks mattered most to employees and ensuring they worked well before adding other functions. Before the project began, our KPMG team spent weeks with the client’s Information Technology (IT) team to establish clear business objectives for the new deployment and review existing problems. Putting in this time at the start helped to build acceptance among management and local stakeholders as the project moved forward.

2. Construction phase Building a strong foundation

In designing and constructing a solution for the client’s initial unconventional asset, our team needed to balance specific local requirements with the broader goal of establishing a strong foundation that could be scaled and adopted more widely in the future. While focusing on the initial asset deployment, our team engaged with other regional assets, gathering requirements to inform design decisions for a scalable company-wide solution.

While the Dynamics 365 Field Service app can be used to connect and automate a wide range of activities, our team began by focusing on the most common recurring tasks at a single unconventional asset, such as routine inspections. The new configuration would allow field service workers to log onto the system to find their daily routes for recurring tasks across multiple locations; record their activities; and report leaks, malfunctions, or other relevant information.

Because recurring tasks tend to be numerous, frequently executed, and relevant to other activities, establishing strong performance on this function was a critical first step in our initial deployment. After that, our teams worked with IT managers in the client’s Houston offices and on-site personnel in the field office to design other key functions, such as routine maintenance, alarm responses, and ad-hoc responses to problems found during inspections. The data gathered through these activities would also help on-site managers to anticipate possible problems or performance issues—such as lower-than-expected oil or gas flows—before they become serious enough to produce an alarm or cause a downtime event.

Combining the industry knowledge of the KPMG Energy, Natural Resources & Chemicals practice with the Dynamics 365 experience of our software platforms and implementation specialists let us create a solution that was tailored to the initial asset, but only lightly customized, and thus scalable to other locations.

3. Delivery phase

Quick acceptance and tangible benefits

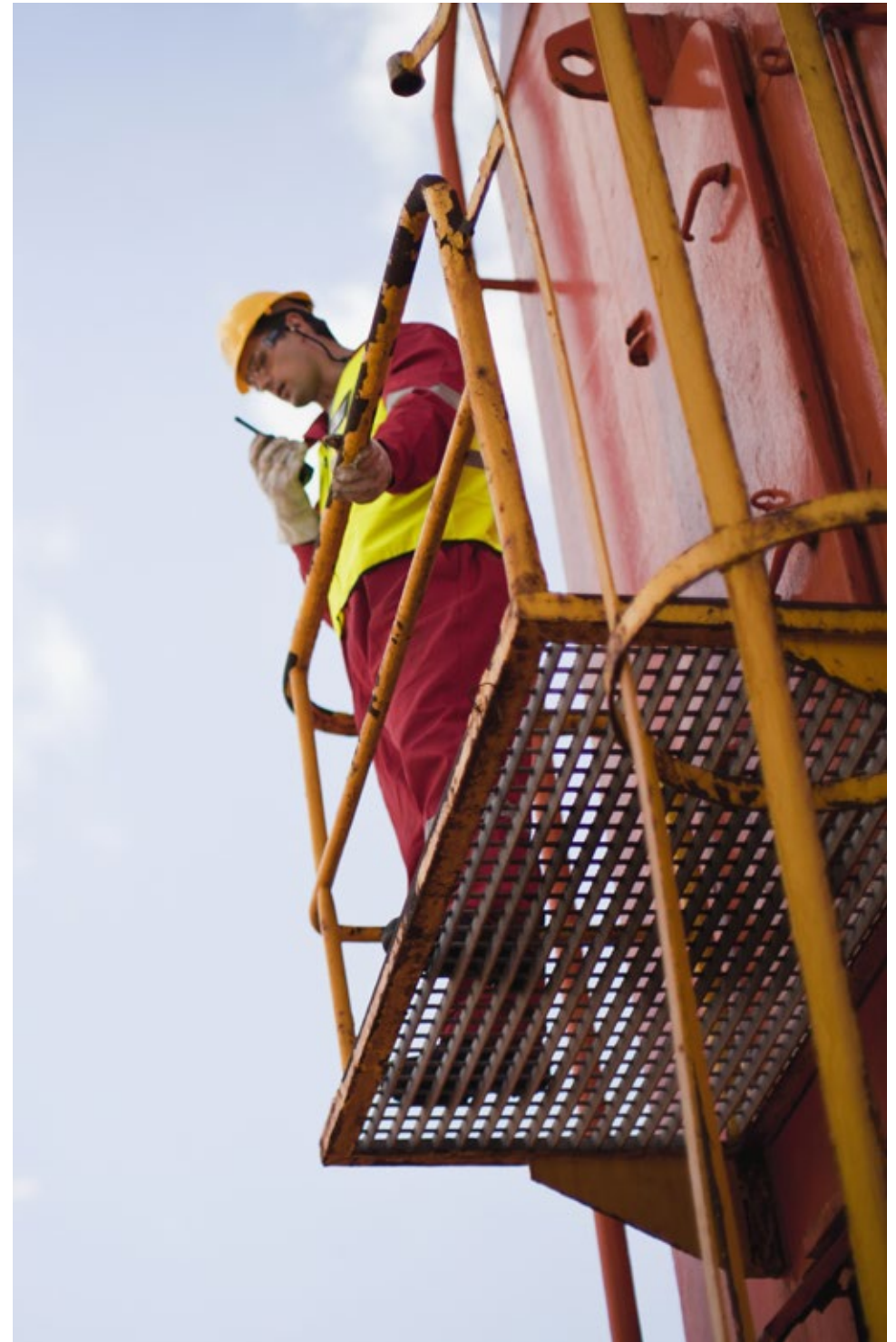
After nearly a year of work, the new Dynamics 365 Field Service application went live at the initial North American unconventional asset. Thanks partly to our early validation work with IT management and extensive testing and User Acceptance Training, employees were ready to accept the new system and impressed with its functionality. Key outcomes for the client included:

- Better worker efficiency overall, including an estimated 2 percent to 5 percent in operations expense savings
- Increased field task transparency and reporting for supervisors to monitor performance
- Improved scheduling and prioritization efficiency
- Reduced downtime leading to a projected 1 percent to 5 percent production volume increase
- Improved operations by consistently defining priorities and exceptions, leading to an estimated 3 percent to 10 percent unit cost reduction
- Allowed client to automate deployments, reducing errors and administrative effort required
- Improved online and offline communications
- Optimal development and configuration of Dynamics 365 has allowed client to manage the platform without KPMG support
- Platform can be easily extended via simple low-code enhancements.

4. Evolution phase

Ready for the next stage?

The successful redeployment at the initial unconventional asset has established a strong basis for developing a wider “Connected Field Worker” cloud-based platform across the client’s entire range of assets. KPMG continues to work with the client on related IT projects, but the decision to move forward with such a major enterprise-wide transformation may require greater support from senior management and other stakeholders.



Spotlight

Turning insights into opportunity

Energy industry experience and knowledge

The KPMG Energy, Natural Resources & Chemicals practice offers oil and gas clients the experience and knowledge to respond to changing market conditions and execute dynamic business strategies through digital transformation. Along with consulting services, we also bring industry-specific insights to tax and audit projects. Learn more:

[Oil and Gas \(kpmg.us\)](https://www.kpmg.us).

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Transform the way you manage field service and operations

Let's talk about where you are now and your goals for the future.



Start a conversation

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