Digitalization with Microsoft Teams & PetroVisor™

A unique approach to collaborating using existing infrastructure accessible by all companies and individuals

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Integration between the PetroVisor™ platform and Microsoft Teams shares workflows among staff and facilitates collaboration

As working remotely evolves into a common and more permanent reality, businesses across the globe are developing plans for long-term work-from-home options. Adapting to a new working environment brings a reliance on digital tools to share data and workflows, while increasing collaboration and communication. Ideally this is accomplished without accessing multiple new software programs across different platforms. In a recent whitepaper Deloitte states that in the model digital organization "virtual work creates a seamless organizational identity and experience across employees," and that "personalization and collaboration tools… bring out the best of (employee's) unique abilities." Research conducted by the University of Chicago, Booth School of Business found that almost 40% of jobs in the U.S. could be performed remotely, with tasks requiring computer and mathematical operations leading the way. According to The Guardian, BP plans to reduce office space more than 50% by shifting 50,000 employees to fully-remote or a hybrid office/home work model.

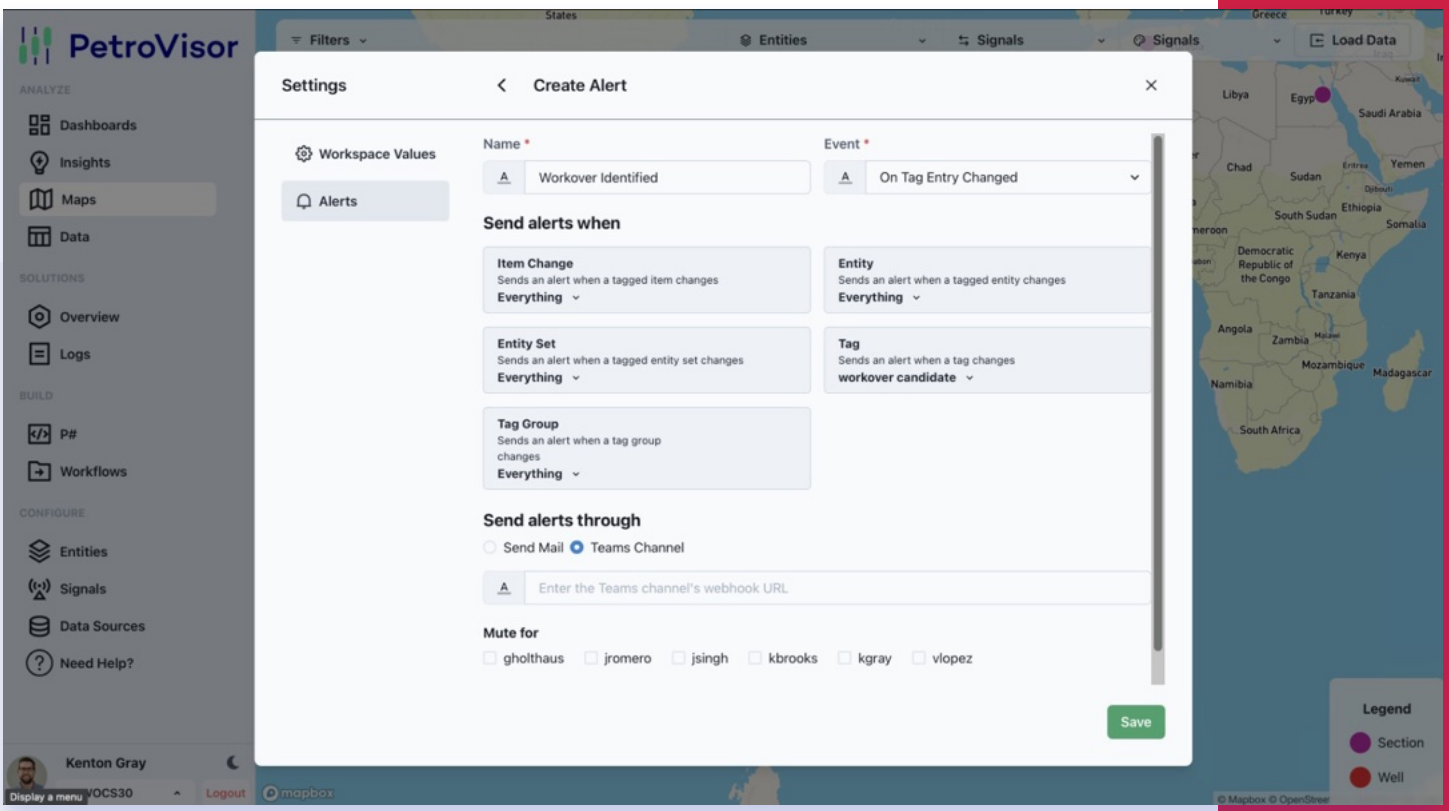
Shifting to a remote work environment brings new challenges. According to Harvard Business Review, remote workers often find information difficult to locate – requiring added time and effort. The study found that remote workers also perform better when richer technologies such as video and messaging tools are introduced for increased mutual knowledge and, in turn, reduce reliance on email. A common platform is essential to improve work efficiency between individuals and groups whether they are in the office, working from home, or at a remote location.

Datagration has developed a unique team collaboration software platform that helps oil and gas companies work together effectively when employees are dispersed. Integrating the PetroVisor platform with Microsoft Teams, a popular toolset used by many oil and gas operators, data and workflows can be securely shared. Leveraging existing infrastructure for collaboration eliminates training on new tools and does not require funding for additional software.

Benefits of the PetroVisor and Microsoft Teams integration

Oil and gas operators that adopt the Microsoft Teams integration with the PetroVisor platform enjoy rapid implementation and see collaborative benefits quickly. With visualization through Microsoft Power BI, a platform for collecting and visualizing data, well information from PetroVisor is configured and displayed through dashboards in Microsoft Teams. Microsoft Teams provides a comprehensive set of tools and apps for collaboration that can be used on any type of project, workflow or practice.

Within oil and gas operators, different disciplines have varying requirements for data visualization. The PetroVisor platform allows unique, fully-configurable displays that can be tailored for each job role such as production engineer, asset manager, or operations supervisor. For example, an operations supervisor may require alerts and notifications regarding wells that require immediate action. Engineers may perform analytical work that relies on historical data. Asset teams and management personnel may be more interested in economic information.



Combined benefits of PetroVisor workflows with Microsoft Teams through the PetroVisor Teams integration

Microsoft Teams Capabilities

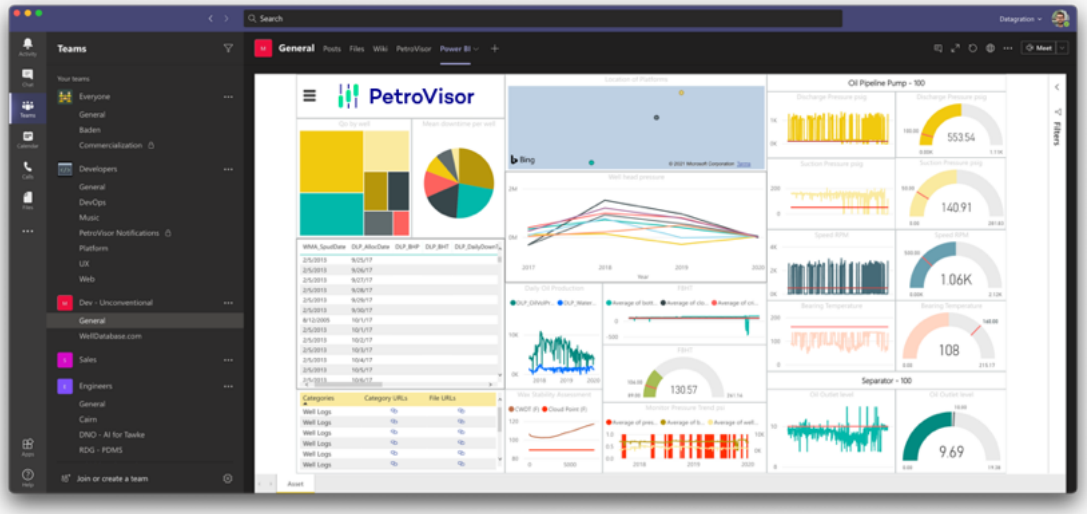
- Information is shared in the workflows, independent of where people are located
- Microsoft Office 365 applications (and others) are fully integrated
- Eliminate missed emails, multiple threads and annoying “reply all”
- Discussions are pervasive and spread organically through an organization to keep teams informed
- Channel content such as chat logs, files and apps are fully searchable using the latest version

PetroVisor Teams Capabilities

- The platform can be implemented quickly with minimal training and cost
- Provides access to the latest PetroVisor results via automated workflows
- Fully configurable event and notification engine
- Allow access to PetroVisor through Teams to improve discoverability and engagement
- Real-time notification of changes and alerts to specified teams

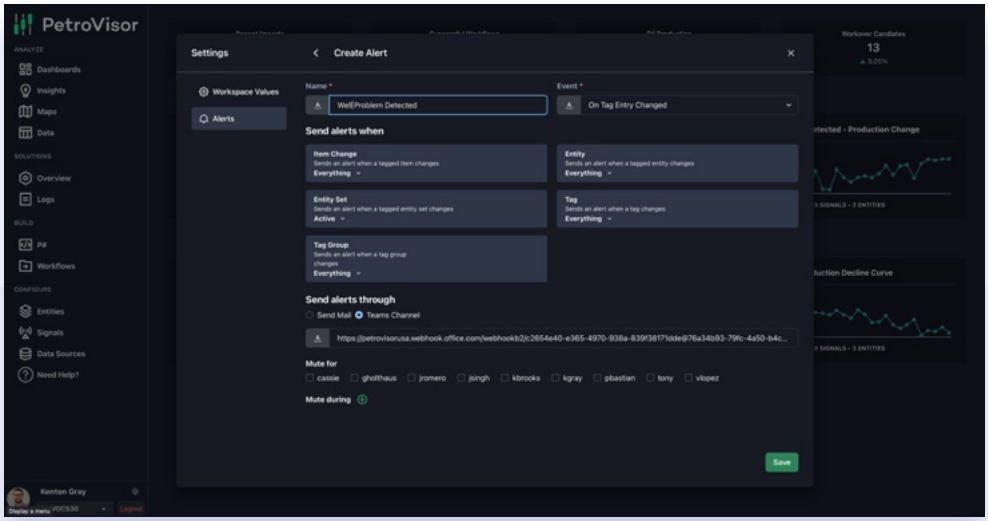
PetroVisor Teams Analytics

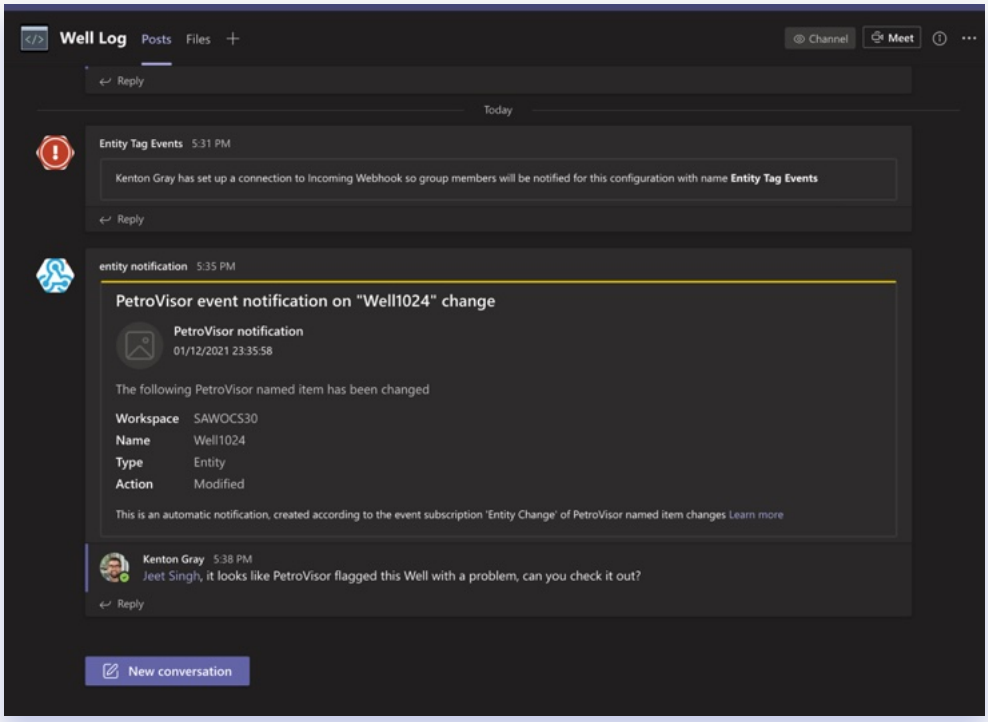
Using Microsoft Power BI, the PetroVisor Teams Analytics provides operations and management dashboards for wells, fields, and projects. Using the dashboards helps operators collaborate by referencing reports that are consistent, accurate and up to date. Integrating dashboards from the PetroVisor platform into regularly scheduled or ad-hoc meetings helps experts share information and provide feedback regardless of their work location or environment.



PetroVisor Teams Bot allows users to ask questions and receive smart answers in reply. With a simple query in either a private or group chat, the PetroVisor Teams Bot can provide a well information summary, progress against selected KPIs, rankings from a set of wells, or selected well production data.

PetroVisor Alerts brings information that requires immediate intervention or awareness, such as detected problems, anomalies, well events and alarms into the activity feed. Notifications are fully configurable and can be sent to specific channels and team members. Ticket alerts allow assignment to a responsible party for action. Tickets can provide suggested remedies using an operator's documented best practices and can be tracked and measured for performance and resolution.

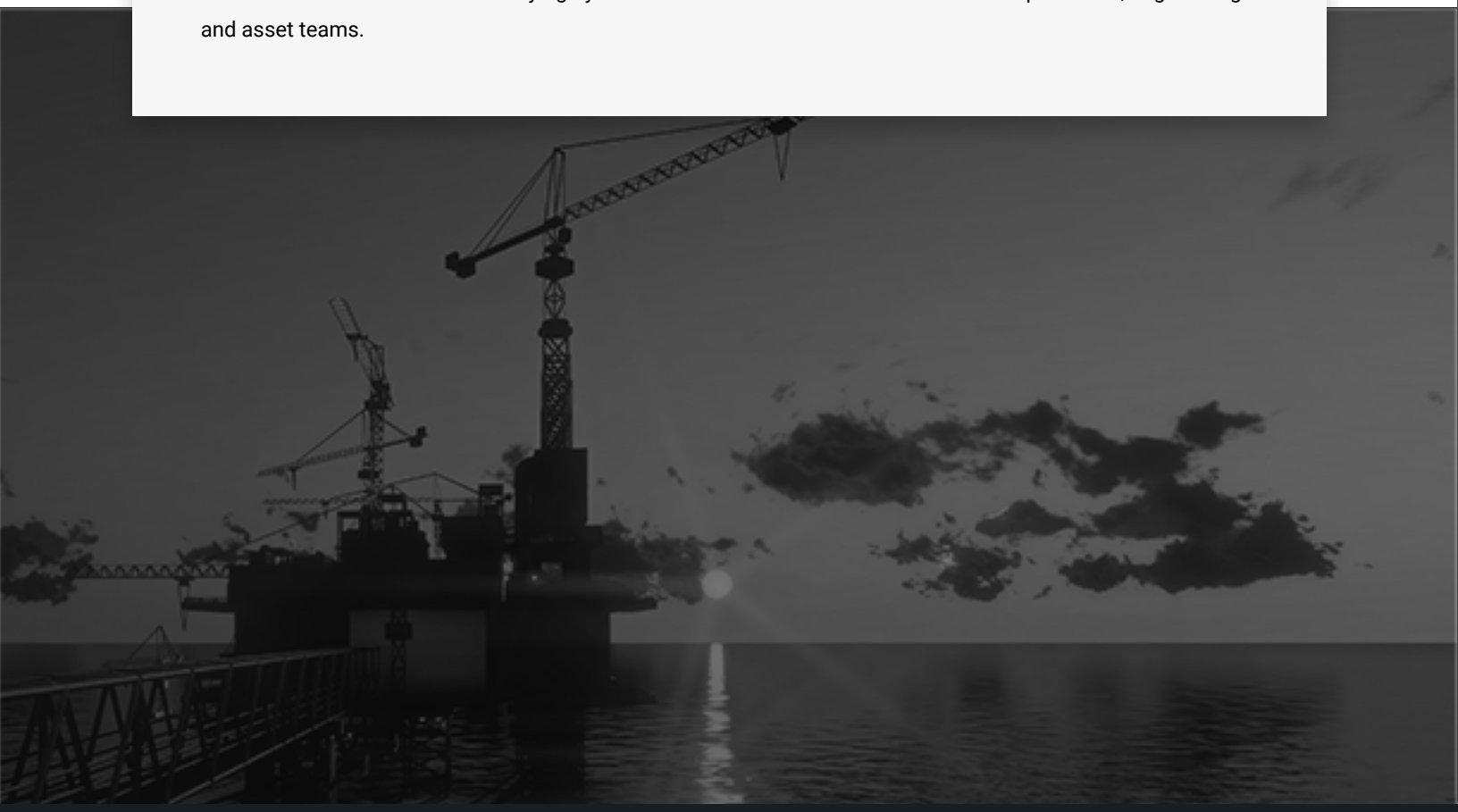




Examples of the PetroVisor Platform and Microsoft Teams integration in Action

Actionable information used to alert an operator of downhole issues

An operator in the Gulf of Mexico produced oil and gas from platforms across three deepwater fields. In production for over 20 years, the wells suffered from wax buildup that hampered their output. The PetroVisor platform was used to develop a workflow that gathered data from surface and downhole sensors to monitor the wax precipitation and present well status to the operator personnel. The automated system, deployed in Microsoft Teams, alerted the operator personnel using PetroVisor Teams Ticket when wax precipitation became an issue, and displayed the urgency (criticality) of the problem along with recommended steps to correct the problem. Alarms built into the system automatically alerted the personnel via desktop or mobile device, allowing them to have around-the-clock coverage and visibility. The personnel utilized a standardized dataset with customized views varying by role with individual dashboards suitable for operational, engineering and asset teams.

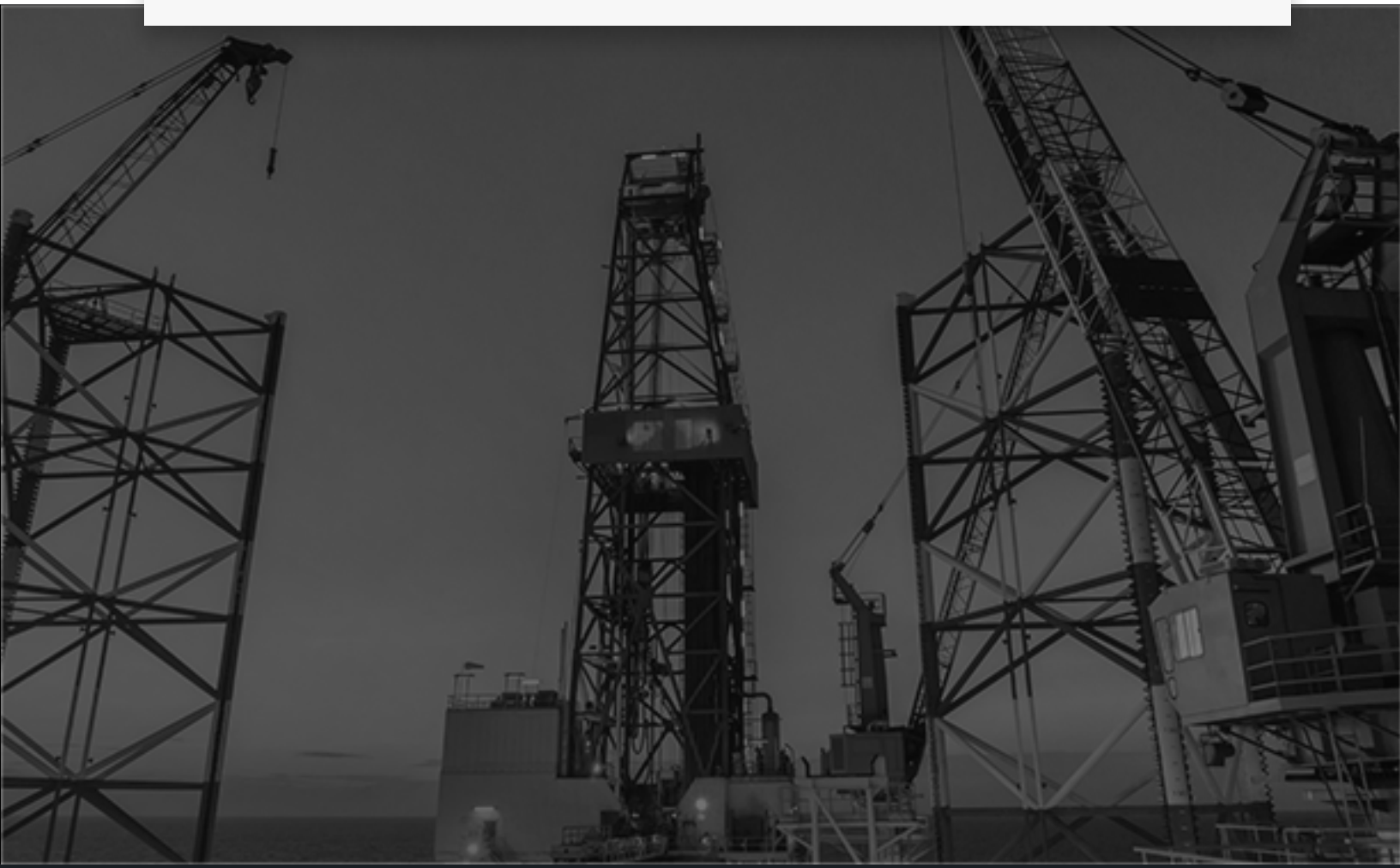


Well selection of steam injection candidates

An onshore operator relied on cyclic steam injection to increase production from a field. Injection amounts were determined daily, designating which wells would come off or on steam. The engineering team required information from the operations group to help determine the daily cadence. Once the selections were made, the list of candidates were sent to managers for review, feedback, and approval. A workflow was designed using the PetroVisor platform and deployed through Microsoft Teams to automate the daily steam switch selections and simplify the review and approval process. The interactive dashboard deployed through PetroVisor's Teams Report highlighted the wells that were up for review. Included in the automated workflow was well performance evaluation and tracking to determine the appropriate cycle plan for each well.

Well placement optimization for Middle East NOC

A National Oil Company in The Middle East wanted to stabilize production declines in an offshore field by implementing an automated process for improving new well placement and identifying workover candidates. The PetroVisor platform was selected to help develop and implement streamlined processes for evaluation, focusing on wells with the highest estimated production returns. Although the operator previously used another product as their standard analytics interface, the PetroVisor platform was used to translate data into a Microsoft Teams environment. Multiple applications and databases were linked through the platform to evaluate and rank the opportunities. This automated process allowed the best candidates to be identified in days as opposed to the previous manual process that took months and sometimes years.



Results

Integrating workflows from the PetroVisor platform into Microsoft Teams helps operators, consultants and third-party contractors become more responsive, productive and collaborative. It improves how messages, files and information about wells, facilities, leases, and other assets are shared, assuring that employees can work more effectively and can communicate effortlessly when working remotely. As dispersed teams become more prevalent in daily work environments, collaborative platforms will be called upon more frequently to facilitate open dialogue, advanced communication, and to drive a more productive workforce.

Links

https://www2.deloitte.com/content/dam/Deloitte/gh/Documents/human-capital/gh-remote-work-the-new-normal.pdf

https://bfi.uchicago.edu/wp-content/uploads/BFI_White-Paper_Dingel_Neiman_3.2020.pdf

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https://hbr.org/2020/03/a-guide-to-managing-your-newly-remote-workers

https://support.microsoft.com/en-us/office/five-things-to-know-about-apps-in-microsoft-teams-747492ee-7cdd-4115-a993-8c7e7f98a3d0?ui=en-us&rs=en-us&ad=us