

## Accelerating Decision-Making in Oil and Gas Wells: 'A Digital Transformation Journey for Rapid and Precise Insights from Well History Data'

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**Abstract :** An excellent, well work program in the oil and gas industry can have numerous positive business impacts, contributing to operational efficiency, increased production, enhanced safety, and improved financial performance. In summary, an excellent, well work program not only ensures the immediate success of specific projects but also has a broader positive impact on the overall business performance and reputation of the oil and gas company. It positions the company for long-term success in a competitive and dynamic industry. Nevertheless, a number of challenges were encountered when developing a good work program, such as the poor quality and lack of integration of well documentation, the incompleteness of the well history, and the low accessibility of well documentation. As a result, the well work program was delivered less accurately, plus well damage was managed slowly. Our solution implementing digital technology by developing a web-based database and application not only solves those issues but also provides an easy-to-access report and user-friendly display for management as well as engineers to analyze the report's content. This application aims to revolutionize the documentation of well history in the field of oil and gas exploration and production. The current lack of a streamlined and comprehensive system for capturing, organizing, and accessing well-related data presents challenges in maintaining accurate and up-to-date records. Our innovative solution introduces a user-friendly and efficient platform designed to capture well history documentation seamlessly.

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