Well Lifecycle Management

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A major oil and gas producer sought AVIO's help to share data in a scalable and highly reusable architecture across an array of isolated departmental systems.

Our Clients Needs:

Each of the seven or eight phases of a well's life cycle ran on its own back-end system. Because these were unintegrated, information required by multiple systems had to be entered separately in each individual system. Duplicating-data entry wasted time and increased the likelihood of errors.

This likelihood created compliance concerns as well, which were exacerbated by the double-digit growth the company was experiencing. Regulation around activities such as paying returns to investors demanded data be accurate and consistent across all systems. Ensuring this consistency was costing our client hundreds of hours each month.

They needed a designated system of record into which data could be entered once and from which it would then propagate reliably down to the other systems.

Our Solution

We used Oracle Service Oriented Architecture (SOA) Suite to orchestrate the inter-system data transfer, and we used Oracle Business Process Management (BPM) for surfacing exceptions as needed. Wherever possible—for example, in the case of missing data which we could access by automating a call to another system—we harnessed SOA to automatically resolve exceptions.

In some cases, due to existing business rules, we surfaced a notification in BPM rather than automating a call. The appropriate resource could then manually review the error, resolve the issue, and then initiate the necessary call back into SOA, guaranteeing the necessary authorization or permission. By building this type of business rule enforcement into a thorough and reliable process, we ensured consistency, accuracy, and compliance.

Business Impact

Our client has seen a dramatic increase in data quality. Establishing a single, integrated system of record has minimized the likelihood of human error. And while the individual target systems remain editable, any data entered there inaccurately is overwritten the next time the corresponding field is updated in the system of record. This increase in data quality, as well the time saved by eliminating redundant data entry, has enabled them to handle the volume increase resulting from their rapid growth without adding personnel.

AVIO helped our client solve their business problem, leaving them more efficient, more reliably compliant, and better positioned for competitive advantage in a rapidly changing market. We can help you solve your business problems too. Contact us today, and take the first step toward a more efficient and effective enterprise.