

Case: Implementation and Support of the Validated G&G Master DB in a Dynamic Environment

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ABSTRACT

Abstract— The Geological and Geophysical (G&G) data vary in a wide spectrum of types/attributes in extra huge volumes (>120,000 TB in KOC) with the complexity of the format/media and versions in addition to the dissemination in different DB's/applications. Managing and validating such data is a painful process and risky in most cases. The concept of validation through data mining processes has been implemented in our company to address the data gaps/challenges in 2030 strategy and to eliminate the conventional data issues that represents a hindrance in the interpretation that badly affects the decision time and effectiveness. We used a data-mining tool (INERLOGIX) where it has a standard queries and scripts for data mining/analysis to highlight the gaps, duplication/redundancy, inconsistency, incomplete record or attribute, conflict, typing mistakes, naming issues, nonstandard records and any other data issues. The best industry standards and the most up to date naming conventions have been applied to the Database in order to have a clean, consistent, complete, standard, unique object and authenticated data sets that complies with the aforementioned standards. During the planning phase, we studied many case studies, started with a pilot and then detect the weakness areas and bottlenecks that may represent a challenge during the full implementation and this why the implementation ran without any surprises. The evaluation committee in our company (Reservoir Management Team with LR Synergy) has recognized the project as the Best data management project (KOC 5th Sharing Best Practices 2017). The implementation of the project took place through the following: Best approved workflows in the industry Standard processes and business rules Sealed data governance strategy. Technology optimum utilization Update and then repeat the cycle again periodically. The E&P Information Management Team is committed to keep the project updated in a continuous improvement phase, DB with the consistent level of accuracy and validation as it is a dynamic process. The main benefits of such work are: Integrated System Well prepared system for the future and the knowledge/information burst (Exponential Data Growth) Right decision on the right time and more Save the end users time (30-40% for data searching/acquisition and 25-40% for check/validation) as per the worldwide benchmark Cost saving eventually Very effective disaster recovery policy