

G&G Data Management And GIS: An Integrated Business Objects Based Approach

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Spatial information is a key element in any petroleum venture, from the initial opportunity analysis and exploration, through appraisal, production and the abandonment phase. E&P companies accumulate data from many sources which are in many different formats. The available historical data provides key insights to geologist and geophysicists in their endeavors. However, the identification of the relevant data and its availability in the required form takes substantial time in the evaluation process. One of the key reasons for this is the unavailability of standardized data as well as its missing spatial component.

E&P companies are increasingly trying to leverage from data management and GIS technologies in order to overcome these barriers. Data management encompasses three key areas: physical assets management, electronic data management and digital data management. GIS more coherently manages spatial data and makes crossdiscipline spatial data available to users ranging from satellite images to vector based data to DEM models. But the mammoth size of each individual repository foils the very criterion of relevance and ease of use.

This paper discusses Eni Pakistan's experience regarding its execution of G&G data management and GIS project. It examines the use of business objects as an integrating factor across multiple repositories and how PetroBank / PowerExplorer, ArcSDE and ArcIMS technologies were utilized to create a holistic view of G&G data. Furthermore, it also highlights available approaches towards the management of the repository after the execution of the project as well as further possible developments in this approach.