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Integrated Data and Information Management System from SubSurface to Surface to Enhance Production Activity and Business Decision – Driving Cross Disciplines Integration through Data/Information Management

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Extended Abstract

“Today knowledge has power. It controls access to opportunity and advancement.”

-- Peter F. Drucker

Today, it is so often we heard the words of “data or information”. Furthermore, it becomes the data or information management process, where three important parts should be involved: input – process – output. From those three, data become the “input”, and running systems or applications are the “processes” which will deliver information as the “output”. Those three basic parts are essential for running continuously and simultaneously in a daily operation by implementing the data or information management system practices within the company.

For Total E&P Indonesia, the beginning of “Data/Information Management” project (dedicated for Geoscience and Reservoir division) had been carried out in the year 2000 and was successfully completed in 2003. Today its Geoscience and Reservoir division has applied an integrated data and information management practices starting from subsurface activities (well and reservoir production data) to surface facilities (production and/or process data (either non-realtime or realtime data capture methods) by having Geoscience Data Management (GaDaMa) and Production Data Management System (PDMS). A unique data or information management system was implemented by integrating Information/Data Management tools (i.e. Web Based Application – ¹DecisionPoint, MS Excell, etc) as an interface for reporting and data accessing to geosciences and production databases. Data entry is carried out either manually through MS-Excell and Web-based application gadgets, or automatically captured with source of data from Distributed Control System (DCS) on several sites. Integrating PDMS into a new Plant Information Real Time Data Management (²PI-RTDB) deployed in Total E&P Indonesia is underway to enable auto-capturing of high frequency data mainly on well flowline parameters.

Thus, a daily and integrated Geoscience Data Management and Production Data Management System Workflows are now uniquely operating in Total E&P Indonesia.

Different entities (geologist, petrophysic, reservoir and production sites) within the division have been taking full benefits of the implementation of data and information management. QC and validation before loading data into corporate database has been applied by entities using a Web-based application (*Decision Point*) or manually by other applications (i.e. ³Geolog6 and MS-Office).

Much of the groundwork had already been implemented, as Total Indonesia had adopted an aggressive information and data management policy. In order to improve studies reliability, it is a mandatory to build good quality uniqueness of the data. The principle is to store into a single memory (database) with unique data key to avoid redundancy as reference, each technical expert for each discipline is responsible for his owned data to be accessed, and has to give the technical workflow for its own data. A quality control is systematically done and the