Profitability and Optimisation of Data Management

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The advent of data management made it possible to improve the working conditions, but much remains to be made, because there are many gaps. Many papers were written to show the need for building a data base and to improve it, because the lack of reservoir information increases oil field investment risk. It is therefore, essential to a lot the funds and time available for data collection in such a manner that this risk is minimized. In a typical production and engineering department approximately 80% of the man hours expended by key technical personnel involve the collection, storage, retrieval and arrangement of data for production reports and engineering studies. This leaves approximately 20% of available manpower for analysis and recommendation of future production schemes. The success of the petroleum industry relies upon a combination of multi-dimensional reliable information and proper cross-disciplinary techniques, because the erroneous data can mislead the strategic-level of decision making and causes operational failures. Reservoir development involves a dynamic planning process in which future activities are planning process in which future activities are based on an assessment of past and present production performance. The object of this paper is to outline methods of reducing oil field investment risks by correct allocation of reservoir data collection and evaluation effort. The systems which will be outlined are basic. They are intended to provide a framework to which future more rigorous methods of data control can be applied. Having several years of work in data management, I will want by this paper to bring one more method on the improvement and optimization of a bank of data. We are concerned with the problem of collecting the right data at the right time and applying it correctly to field development and operations decisions. A rigorous operation research approach to oil field information handing is beyond the scope of a single paper.