## Aligning the Coring Processes to Yield Reliable Geological Data

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## **ABSTRACT**

This case study examines the creation of a core information system covering the entire coring process from planning through acquisition to analysis and archival. Business process mapping was used to define all related activities and their interactions, which were then used as a basis for realizing improvements using principles from the Operational Excellence management philosophy. This methodology for realizing process improvements is detailed and discussed, and an assessment of the benefits is presented.

Core samples allow geologists and engineers to make direct physical rock measurements to determine subsurface properties and are therefore indispensable either for primary information generation or to confirm results obtained from other sources such as well logging or seismic data. Coring processes, such as core acquisition, are expensive and time consuming; and improvements can yield greater efficiency and cost reduction. While attempts at continuous improvements of the coring processes have been attempted within the company, these have resulted in limited success. Operational Excellence principles emphasize that improvements should be directly related to delivering value, and that participants should understand the link between their work and the value it generates.

While the primary purpose of this project was to realize improvements in performance and data reliability, the work has demonstrated other benefits, which include improved collaboration. The presented lessons learned can be used to optimize other business processes and should be of interest not only to business analysts but to anyone looking to improve business processes.