

CERAMAH TEKNIK TECHNICAL TALK

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Portfolio optimisation and capital management: NOC integrated e-Workflows as catalyst to optimized growth and efficiently manage E&P investment activities

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Oil and Gas industry faces its unprecedented prolonged downturn since the oil price plunged starting June 2014 with no obvious sign of recovery to date.

NOCs are facing increasing challenges in its operating environment since then as a result of falling revenue and profit hence continue to be cautious on every single capital investment. The NOC plays a vital role to collectively reshape and take transformative measures to maintain the momentum of upstream growth.

In addition to low oil price hurdle, portfolio management at corporate level is required due to significant disconnect between corporate and its operation units thus leading. This silo management between regional operation lead inefficient utilization of investment.

NOCs have adopted an integrated e-workflow to address the above needs to remain competitive and resilient. The approach are as following:

Step 1: Operator's Work Program, Budget, Resource and Reserves are submitted, reviewed and approved on line by NOC using standardized workflow and data format. Actual expenditures are tracked based on approved budget on monthly basis. The consolidated budget expenditure against its approved value will be submitted and reviewed to determine if the contractor is eligible to carry over the unfinished budget to the following year or request for additional budget if required.

Step 2: Enterprise registers all the exploratory prospects and notional projects and track its maturation electronically. PSC terms and commitments are materialized and tracked on contract by contract basis. Production supply and demand are pre optimized to balance the available sales and obligated supply.

Step 3: Data seamlessly transform to required format and granularity to prepare for economics evaluations incorporating the application of risk and uncertainty analysis in estimating the economic worth of an investment within the available capital.

Step 4: Portfolio optimization systems ensure that NOC maintains the best portfolio of investment options to achieve business goals while honor constraints, effective balance of value and risk management and making timely decision based on up to date data, reliable and consistent factual information with analytics foresight.

We would like to present the solution workflow and present the general benefits that NOC has obtain from this workflow.