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Improving Outcomes for Oil and Gas Projects through Better Use of Front End Loading and Decision Analysis

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Abstract

Outcomes for oil and gas projects often fall short of the expectations predicted at project sanction. Appropriate use of Front End Loading (FEL) and Decision Analysis (DA) to achieve high Decision Quality (DQ) should increase the likelihood of achieving better outcomes. However, despite being successful methodologies, research has shown that they are not always applied. The focus of this paper is on how to encourage people to make better use of FEL and DA.

Previous results from this research program showed that there are two key reasons why FEL and DA are not used more: an over-reliance on 'experience' and judgment for decision-making, rather than the use of structured processes; and projects being schedule-driven, i.e. meeting target dates is the primary objective. This paper focuses on insights from a survey conducted to answer questions raised by the previous research and to test the likely uptake of methods designed to encourage more effective use of FEL and DA/DQ. It shows that there is strong agreement that good FEL leads to better project outcomes, and that the FEL benchmark score is a good indicator of readiness for project sanction. However, perhaps competing with the desire to complete FEL, is the view (of around 2/3 of respondents) that it is important to drive the schedule in order to prevent 'overworking' – continued activity that adds little value. All respondents agreed that it is essential: that the decision maker clarifies the frame, scope and criteria for the decision; and to have regular discussions between the decision maker and the project team to bring alignment. However, responses indicated that these only occur in practice around half of the time. Similarly, formal assessments are made of DQ for less than half of key project decisions.

Several novel solutions are proposed for increasing the likelihood of better project outcomes by improving the uptake and use of FEL and DA/DQ. These include: just-in-time training on FEL and DA/DQ; basing performance incentives on achieving high DQ and good FEL; and, developing a simple pragmatic assessment of FEL that can be used in-house. These suggestions were all supported by the survey respondents.

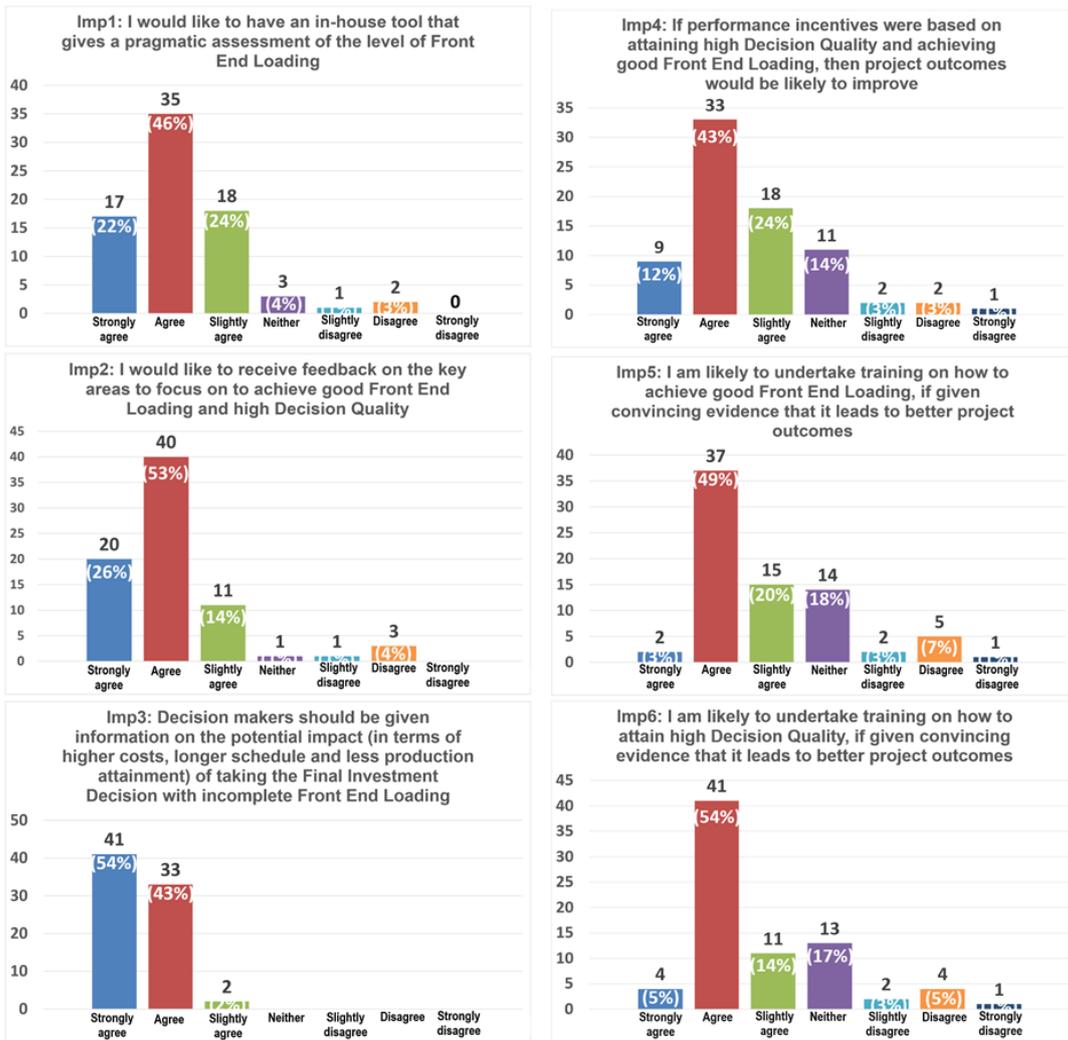


Fig: Survey results – Questions on proposals to improve the use of FEL, DA and DQ