

## Know How to Engineer the Cost of Oil & Gas Projects on Uncertainty Conditions

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A review of 5-years published reports has presented the probability of cost and time overrun of oil & gas projects which is around 60.5%. By studying similar statistics, an important question comes to mind: is the project still stable and feasible with such a big amount of uncertainty? The further researches on the challenges force us to redefine the concepts and reengineering the process of forecasting, estimation, budgeting, control and risk analysis of oil & gas projects.

This article provides a method for conceptual engineering of cost of the projects in the Persian Gulf region (Iran, Kuwait, Iraq, Qatar and Saudi Arabia). Findings from the research present a methodology which addresses us to: projects' stakeholders, engineering of cost, interactions between project environmental characteristics, project technical specifications, technology, consultants, design, procurement, subcontractors, methods of forecasting schedule of rates, structure of management and risks which cause costs overrun.

Chaos theory is used to explain how cost overrun occurs in projects and Chi-square method is used for generalizing the developed methodology. This article, also, provides a case study for cost engineering of an oil production offshore platform in order to explain the methodology clearly.

As a result, it is suggested that the methodology is used for some on-going projects in other regions in order to globalization.

### Biography:

Sadegh Yazdani is an International energy industry leader with over 25 years of experience, Managing Director of NPSN Co. and a published author of 15 books in the area of energy management, operation management, financial and cost engineering. High-profile executive providing technical and business expertise helping the project owners how to maximize benefit from the energy projects.

Offers comprehensive training solutions in Project / Operational Management, Risk Management, Cost Engineering / Management. Conducted training for 1255 trainees in the total of 40160 hours in 11 countries. Developer and simulator for cost modeling and financing of Oil & Gas in Upstream, Midstream and Downstream sectors. Directed 6 onshore projects in the fields of wellhead facilities, Gas Gathering Units, Central Processing Facilities, Gas Compression Station, and Gas Pipeline and was a Project Director Deputy for 2 offshore platform projects.