

Governing Energy

Cultural Simulation

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This pundit has long advocated the use of games and process simulations not just as learning tools but as useful methods for exploring the results of complex scenarios in a comparative analysis.ⁱ Which scenario has the highest return with the lowest risk profile?

Moreover, as when the invading aliens on the video game win, no one is seriously injured when the “Failure is not an Option” problem generates disappointment! Perhaps embarrassed or “put in one’s place”, hitting the *reset* button and trying again costs nothing other than the Human Marginal Cost of Mortification (HMCM).

As with any learning experience, failure is often the best teacher. This is all fine and good unless the stakes are high.

“Conventional wisdom says that we learn from our errors, but errors in the business world can be prohibitively costly. To truly understand how our complex business organizations function requires different tools than managers typically have been given.

One tried and true method is to build models.”

Almost a decade ago, we released the first version of Project Management Scenario Simulations. This was later codified into a formal methodology including a software suite.ⁱⁱⁱ This enabled organizations to test various risk based scenarios before, “cutting steel.”

In a recent survey, only 21% of the companies “self-reported” that their organization had attained the top level of Culture of Safety Maturity.^{iv} Attainment for the Five Levels of COS Maturity:

- Level 5 21%
- Level 4 36%
- Level 3 26%
- Level 2 11 %
- Level 1 06 %

Moreover, when those top level organizations contract with partners or suppliers whose maturity is lower, by default the maturity level of that *project* can only be as high as the *highest maturity level of lowest organizational maturity*.

Additionally, each organization has its unique culture which is often the source of competitive advantage; certainly organizational pride. By type, a large operator has a different culture than a large service company or manufacturer and so forth for all large medium and smaller firms in the sector.^v

Effectively, these organizational/inter-personal *Cultures* of Safety must interact on a project to create ONE effective CULTURE of Safety for that particular operation. To better understand and develop Operations Management Systems that incorporate cultural differences, ***one tried and true method is to build models.***

Cultural Interactions

In this era of lower commodity price points, there is no relief on the requirement for safe and environmentally responsible operations.^{vi} With these constraints on the business model, *rehearsing* cultural scenarios offers opportunities to address complex functions without making costly business mistakes.

Cultural gaming tools are available to help minimize the risk associated with cross-cultural Cultures of Safety. As computer simulation solutions, they are less costly than *prohibited costly human errors* in this area.^{vii}

How does your organization assure an effective project Culture of Safety?

About the Author

Dr. [Scott M. Shemwell](#) has over 30 years technical and executive management experience primarily in the energy sector. He is the author of five books and has written extensively about the field of operations management. Shemwell is the Managing Director of The Rapid Response Institute, a firm that focuses on providing its customers with solutions enabling operations excellence and regulatory compliance management. He has studied cultural interactions for more than 30 years--his dissertation; *Cross Cultural Negotiations Between Japanese and American Businessmen: A Systems Analysis (Exploratory Study)* is an early peer reviewed manuscript addressing the systemic structure of social relationships.

End Notes

ⁱ Shemwell, Scott M. (2006, September). Assessing Drilling Risk. [Digital Energy Journal](#), Issue 3, pp. 10-11.

ⁱⁱ Morecroft, John. D. W. (1994). Executive Knowledge, Models, and Learning. In Morecroft, John D. W., and Sterman (Eds.), *Modeling for Learning Organizations* (pp.3-28). Portland: Productivity Press.

ⁱⁱⁱ The Rapid Response Institute. (2010, January). *Project Management Simulation Guidelines: A New Risk Mitigation Process*. Author.

^{iv} Shemwell, Scott M. (2015, April). Culture of Safety: Industry Self-Assessment. A PennEnergy Research Center Report.

^v _____ (2015, April 7). How Can Humans Effectively Manage Increasingly Complex Systems? Deep Space Deep Ocean: Aramco Technology and Operational Excellence Forum. The Woodlands.

^{vi} _____ (2014, December 18). 2008—Redux. Governing Energy. PennEnergy.

^{vii} The Rapid Response Institute. (Available Q3 2015). Culture of Safety Cross Cultural Negotiation Game.