

Governing Energy

Nonlinear

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We humans embrace change and we have made this point in these *virtual* pages several times. However, we struggle with disruptive transformations. For example, natural disasters force change upon unwilling and sometimes unsuspecting participants. Yet most overcome and when interviewed later many actually see the positive in life changing incidents.

This author has made the case for a couple of decades at least that much of management thought is more along the lines of evolution as opposed to revolution. Most management gurus build upon the work of their managerial forefathers.ⁱ Management principles advance in a linear fashion.

Economist Joseph Schumpeter's *Creative Destruction* suggests a level of mutation that results from the rebuilding of process norms.ⁱⁱ Some data suggests that this process accounts for more than 50 percent of the growth in productivity.ⁱⁱⁱ

So the evidence suggests that innovation or nonlinear change adds the most value, yet managerial philosophy tends to move in a less dramatic manner. In other words, human nature has not changed much if at all when measured at the fundamental levels.

For almost four years, the energy industry has been undergoing a linear/nonlinear transformation to a new culture; one of a Safety Culture as defined by the nine characteristics issued by BSEE.^{iv} This process is linear in that managerial practices are evolving as good practices.^v

This process is nonlinear in the sense that desired end state is a cultural transformation that will be enabled by new technologies.^{vi} The digital engineer of this new Culture of Safety will perform his or her work in a much different manner than today.

Much as our horse and buggy forefathers would not recognize today's metropolitan traffic, this generation will not recognize tomorrow's Culture of Safety drilling operation. However, human instincts and fundamental drivers will not have changed.

In our technologically driven society, this tension at the margin will continue. The linear and nonlinear will coexist and act as accelerators as well as brakes on change management processes.

How is your organization implementing nonlinear cultural change?

About the Author

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End Notes

ⁱ Shemwell, Scott M. (1993). Management Theory - Evolution Not Revolution, Proceedings of the 11th Annual Conference of the Association of Management, 11 (2), pp. 74 - 78.

<http://www.scribd.com/doc/13395793/Management-Theory-Evolution-Not-Revolution>

ⁱⁱ <http://www.econlib.org/library/Enc/CreativeDestruction.html>

ⁱⁱⁱ <http://economics.mit.edu/files/1785>

^{iv} <http://www.bsee.gov/uploadedFiles/BSEE/Safety/Robust%20Safety%20Culture%20Poster.pdf>

^v Shemwell, 1993.

^{vi} http://www.amazon.com/IMPLEMENTING-CULTURE-SAFETY-PERFORMANCE-COMPLIANCE-ebook/dp/B001LXY7ZC/ref=sr_1_3?s=books&ie=UTF8&qid=1393686437&sr=1-3&keywords=dutch+holland+phd