

Governing Energy

Price of Failure

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A recent blog celebrated the management guru truism that organizations learn from failure and that individuals should be provided an environment where failure is acceptable and part of the learning organization process. This author might take exception to that management “rule.”

We all grow as people and it is true, in the opinion of this writer that sometimes we learn more from failure than from success. In many cases, it is ok to foster a culture that rewards those you reach for the stars and occasionally miss.

However, some industries require organizations to manage to a high degree of reliability—High Reliability Organizations.ⁱ In these sectors the price of failure can threaten the very survivability of the firm itself.

So can these different approaches to empowering people be reconciled? The answer might surprise you; both can be highly aligned and generate an organizational culture where a “focus on failure” is highly prized.

First let’s posit a matrix of hypotheses (researchers will forgive the lack of null hypotheses for brevity and to provide focus).

- One of the processes described in the High Reliability Mindful Infrastructure is a “Preoccupation with Failure.”ⁱⁱ From the perspective of the (R) Relationships, (B) Behavior, and (C) Conditions Framework (previously discussed in this blog series and elsewhere) this preoccupation with failure might be considered the Relationship variable.ⁱⁱⁱ
- BSEE has presented and the industry has accepted nine tenets of a robust safety culture.^{iv} A subset of them include:
 - Number 3—Personal Accountability
 - Number 5—Continuous Learning
 - Number 6—Raising Concerns
 - Number 7—Effective Communication
 - Number 8—Trust and Respect
 - Number 9—Inquiring Attitude

We could probably make the case that the other three points should be included but readers will get the point. These are a set of Behaviors.

- SEMS II Stop Work Authority^v Finally, this is a Condition variable.

Again at the risk of offending mathematicians everywhere, we posit that that this is effectively a set of difference equations (output based on past and present data)^{vi} or perhaps differential equations (similar but continuously varying).^{vii} This is an extension of the R B C Model expressed mathematically as follows:

$$R_t = f(B_{xt}, B_{yt}, C_{xyt});$$

$$B_{xt} = f(C_{xt-1}, C_{xyt-1}, B_{yt-1}, R_{t-1});$$

$$B_{yt} = f(C_{yt-1}, C_{xyt-1}, B_{xt-1}, R_{t-1}).$$

$$C_{xt} = f(C_{xt-1}, B_{xt-1})$$

It follows that Failure can be expressed as a function of R B C and therefore it can be treated equivalently by those organizations that encourage extended reach even if a new product launch flops and those High Reliability Organizations where failure is not an option.

We may further develop the math later, but sociologically solving this set of simultaneous equations (*a set of equations that are all satisfied by the same values of the variables*^{viii}) effectively supports the hypotheses that *understanding failure does not mean one must experience it to learn from its potential consequences*.

We need to foster an environment of individualism within the context of organizational constraints.

How does your organization define failure and its consequences?

About the Author

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End Notes

ⁱ <http://amp.aom.org/content/15/3/70.short>

ⁱⁱ Holland, Winford "Dutch" E. and Shemwell, Scott M. (2014). Implementing a Culture of Safety: A Roadmap to Performance-Based Compliance. New York: Xlibris.

ⁱⁱⁱ Shemwell, Scott M. (1996). Cross Cultural Negotiations between Japanese and American Businessmen: A Systems Analysis, (Exploratory Study). Unpublished doctoral dissertation, Nova Southeastern University, Ft. Lauderdale.

^{iv} http://www.bsee.gov/uploadedFiles/BSEE/BSEE_Newsroom/Speeches/2013/COS%20Speech.pdf

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- v <http://www.pecsafety.com/stop-work-authority-a-key-safety-management-tool/>
- vi https://ccrma.stanford.edu/~jos/fp/Difference_Equation_I.html
- vii http://en.wikipedia.org/wiki/Differential_equation
- viii <http://dictionary.reference.com/browse/simultaneous+equations>