

# Governing Energy

## Getting Resilient

Volume 5 Number 9—May 9, 2016

### Prologue

This is the second in a three-part series. The last part will be published later this month. These three editions of the blog will address critical issues the energy sector must address in the current market environment—how to develop organizational *Agility, Resilience* and *Sustainability*. At the conclusion of this series readers will have access to our online Economic Value Proposition Matrix® model to assess the impact Organizational Agility, Resilience and Sustainability (OARS) can have on their business.

### Part Two

A major aspect of a High Reliability Organization is the ability to rebound after unexpected events. In today's dynamic economy a high level of resilience is critical to both public and private organizations.

We like to think of resilience as the ability to respond to incidents and limit their damage. The concept of the Bow Tie Risk Model is well defined.<sup>i</sup> Essentially, a set of prevention processes (including *sense and respond* controls) are “barriers” to a business disruption or safety incident, etc. In the event of a disruption, the system (organization) responds to return the process to its stable state.

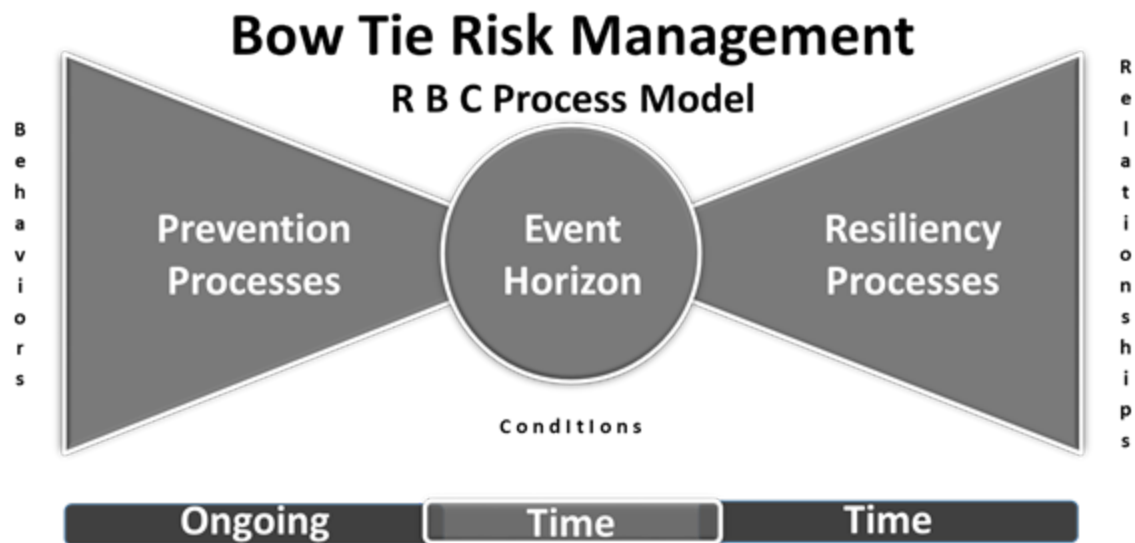
The following version of the Bow Tie Risk Management Model addresses this process from the **R B C** construct. This model was discussed in the previous blog regarding agility.<sup>ii</sup> Additionally, the temporal component is one of the **Condition** variables. This is less of an engineering approach to a risk management in the process industries but a broader business process risk management model.

It is important to note that there are three different yet perhaps overlapping time periods. First, the Ongoing effort to prevent a disruption or Event Horizon in this model. Second, the time the incident takes place.

It is tempting to think that the Event Horizon may be a single short period event such as a fire in a plant. Other scenarios can include disruptions that take place over a longer period of time. For instance, actions of some individuals over time that led to the demise of Enron.<sup>iii</sup>

Last, even at a high level of resilience the organization's recovery may take some time. Examples include western North American forest fires that can take considerable professional expertise, equipment, materials and time.<sup>iv</sup>

These time periods are often overlapping. During a forest fire, the Event Horizon most like will continue to unfold even as Resiliency Processes begin.



A holistic Bow Tie Risk Management **R B C** Process Model suggests that Prevention Processes are largely governed as a set of **Behaviors**. Various processes and controls to prevent an incident are behavioral driven although Conditions and Relationships exist therein.

Likewise, it is convenient to see the Event Horizon from the perspective of a number of **Conditions**, i.e., fire, governance failure, etc. Complex situations may have multiple Conditions interacting. Often a Black Swan event is a collection of small but systemic issues that unfold uncontrollably.<sup>v</sup>

Finally, the response component in a Bow Tie model is often referred to as “consequences.” In other words, a new set of **Relationships** is born out of the organizational resiliency. This information is provided as feedback to a new enhanced Prevention and Resiliency processes.

### The Resilient Line

Clearly prevention of an Event Horizon is the Ongoing goal of any organization. However, if the worst happens, there are two dimensions to resiliency or crisis management:

- **Time**—to the extent Resiliency Process can limit the time of the Event Horizon, i.e., quickly putting a fire or addressing shareholder transparency failure,
- **Damages**—can be reduced (including injuries) and Mean Time to recovery can be accelerated

Rapid return to production, reduce or no injuries and minimized equipment damage are Key Performance Indicators that add direct value to an organization and the reputation of a sector.

This author had previously noted that the Public Health sector was able to “get ahead” of the US Ebola virus outbreak originating in Dallas. Hyped public fear could have resulting in a terrible human and economic situation. However, to the point raised here the Event Horizon unfolded over time with several infected individuals surfacing but the outbreak was contained and trust restored.<sup>vi</sup>

As of this writing that sector is faced with a growing Zika virus outbreak.<sup>vii</sup> That Event Horizon is still unfolding; however, the Resiliency Process is well underway as is the feedback to the Prevention Processes. Once again, at stake is the *Relationship* between society and the Public Health Sector—more importantly lives may be at stake.

As with Agility, **Leadership** is the most important quality for a high level of resiliency. Operational Excellence with its direct impact on the bottom line is at stake, not to mention the risk of human injury or worse.

## What is the Value of Resiliency to Your Organization?

### 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 six books and has written extensively about the field of Operations Excellence. 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

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<sup>i</sup> <http://www.hf.faa.gov/workbenchtools/default.aspx?rPage=Tooldetails&subCatId=43&toolID=21>

<sup>ii</sup> Shemwell, Scott M. (2016, April 25). Going Agile. *Governing Energy*. PennEnergy.

<sup>iii</sup> <https://en.wikipedia.org/wiki/Enron>

<sup>iv</sup> <https://weather.com/news/news/fort-mcmurray-alberta-canada-fire-updates>

<sup>v</sup> [https://en.wikipedia.org/wiki/Black\\_swan\\_theory](https://en.wikipedia.org/wiki/Black_swan_theory)

<sup>vi</sup> Shemwell, Scott M. (2015, April 7). How Can Humans Effectively Manage Increasingly Complex Systems? *Deep Space Deep Ocean: Aramco Technology and Operational Excellence Forum*. The Woodlands.

<sup>vii</sup> <http://www.cdc.gov/zika/>