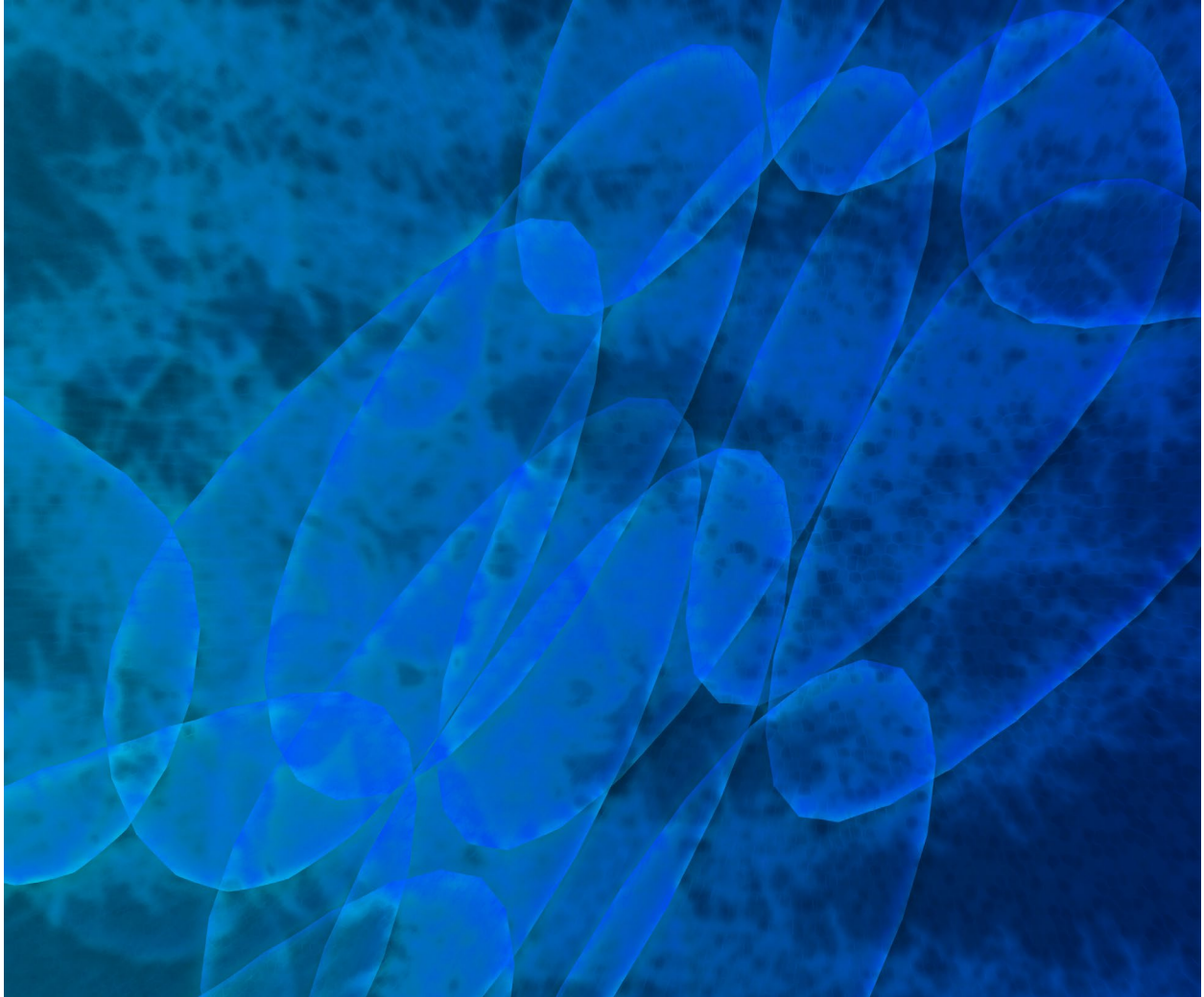


## Governing Energy



### Contagion

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Ever wonder why certain things hit a “tipping point” while others do not? For example, the huge turnout in the city of Houston for the Houston Astros baseball team only after winning the World Series.

In this series and other publications, the author has commented on the non-linear stochastic nature of the world, including human behavior. One researcher into contagion theory has used non-equilibrium statistical physics to assess user behaviors on some well-known social media sites.

Their focus was on the “visibility of information,” or its ease of discoverability, i.e. SEO. Fundamentally, “each exposure increases the likelihood of a response” and the larger the network the greater the amplification as those who have previously adopted the idea, retweet, etc.<sup>i</sup>

As with its name, human behavior from a contagion perspective is more akin to the propagation of a pathogen than any linear based “adoption model.” Perhaps one of the reasons well-known brands continue to market themselves aggressively.

According to some, the adoption rate for digitization projects in the energy sector lag that of others. The concept of *no one wants to be first appears alive and well*. This reaction is typically believed to be due to the conservative nature of engineers and the need for a high level of vetting.

Similarly, the belief that only large organizations can add value to other large organizations is contrary to the evidence. Folk lore from the past!

Perhaps there is another reason. The processes necessary for stopping the spread of disease are well understood by the medical community. One example is the quick arrest of the Ebola virus in 2014.<sup>ii</sup>

In that unfortunate case, while there was a small outbreak and mistakes were made handling it, the feared broad pandemic did not unfold. A brief review of the case study suggests aggressive and sustained efforts effectively stop the spread.<sup>iii</sup> A high level of “Resilience” appears to have existed.

Are certain individuals, organizations and even entire sectors “inoculated” against rapid adoption? Perhaps the visible information is, *this is a conservative sector and technology must be adequate vetted*. If this is the case, retweets will reflect that position.

Determining the right rate in an age of digitalization is important. Safety, operational excellence and competitive advantage will demand an adoption rate that is higher than it currently appears to be the case.

As stated in a forthcoming article, according to the World Economic Forum, *‘Digital transformation in the Oil and Gas industry could unlock approximately \$1.6 trillion of value for the industry, its customers and the wider society.’*<sup>iv</sup> This is too large an opportunity to be an adoption Laggard!

Social scientists and other such as those guarding against deadly pathogen pandemics understand the contagion process. To a lesser extent, those developing SEO and other social media tools do as well.

In the 2009 White Paper, Rapid Response Management: Thriving in the New World Order the construct “Velocity of Information” was put forth—the exchange rate of information.<sup>v</sup> Today this exchange rate can go viral at the colloquial *warp speed*.

The contagion process can be good or bad. However, it is part of daily life. Perhaps it is time for executives to understand the impact (plus or minus) this is having on their firms.

## **Is Your Organization Letting Past Conventional Wisdom Win the Day?**

For more on this subject, see [Structural Dynamics:Foundation of Next Generation Management Science](#)

Free [Economic Value Proposition Matrix](#) version 2.0 (Realize the value of your investment)

Also, checkout our [YouTube Channel](#)

Additional details are available from the author.

## 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. Shemwell is the Managing Director of The Rapid Response Institute, a firm that focuses on providing its customers with solutions enabling Operational 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 societal relationships.

## End Notes

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<sup>i</sup> <https://www.nature.com/articles/srep04343>

<sup>ii</sup> <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm63e1114a5.htm>

<sup>iii</sup> Ibid.

<sup>iv</sup> Shemwell, Scott M. (2017, December). A Governance Model for the Era of Digitalization: Achieving Operational Excellence Using Disruptive Data Management Techniques. *Petroleum Africa Magazine*.

<sup>v</sup> \_\_\_\_\_ (2009, January). Rapid Response Management: Thriving in the New World Order. *Author*. <http://www.scribd.com/doc/11792098/Rapid-Response-Management-Thriving-in-the-New-World-Order>