

Governing Energy

Checking Doctors

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Pilots use them and now doctors do as well. Mission critical is by definition an activity that must not fail. Partial success in such an environment may not be good enough and often has management visibility and even legal consequences.

After placing at the top of his or her pre-med Bachelor level degree and four years of medical school, a period of on-the-job training ensues. After another four or more years as an Intern then Resident, a physician certainly can be deemed to an expert in his or her field.

Research has shown that even these highly trained and motivated individuals dealing with complex (often life or death) situations on a daily basis benefit from the use of checklists. Checklists assure that bases are covered quickly and concisely with the most obvious and common sense and immediate solutions tried first.ⁱ

The medical doctor author of *The Checklist Manifesto* makes several salient points:

The Problem—highly trained professionals are so busy in their respective areas, that sometimes basic and preventable mistakes are made.

The Solution—many of today's tasks are too complex to be carried out from memory alone. The pilot's checklist is a systemic approach to daily operations.

Validation—seemingly trivial, good checklists have been shown to work. They can get the routine and obvious off the table quickly so the focus can be on the "hard" stuff.

According to the World Health Organization there are over 13,000 different diseases, syndromes and types of injuries. The medical industry has developed about 6,000 drugs and 4,000 medical/surgical procedures.ⁱⁱ We all know that each drug and procedure can generate side effects and each has its own risk profile.

However, even the best checklist is of no use if it is not followed. In the August 2, 2012 edition of this blog we lamented the ill-fated Northwest Airlines flight where experienced pilots did not follow a standard takeoff checklist due to confusion. This is the basic premise of the checklist—*take the routine and obvious off the table*.

Proposition—highly trained and experienced pilots and medical doctors recognize the value of checklists. Isn't this methodology equally applicable to industry sectors where safety and environmental

management are paramount? Life and death as well as significant capital and operations expenditures are the daily fare of highly trained and experienced petroleum personnel.

Moreover, as with these other professions, the world of the petroleum professional is getting more complex not less. Good checklist methodology mitigates risks to the individual, the firm, the industry and society in general.

It is time to implement this proven technology at all levels of the corporation. Organizational governance demands no less.ⁱⁱⁱ

How does your knowledge based organization assure that complex solutions go right?

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 two books and has written extensively about the field of operations management. Shemwell is also the CEO of Knowledge Ops, Inc.; a firm that focuses on providing its customers with solutions enabling operations excellence and regulatory compliance management.

End Notes

ⁱ [The Checklist Manifesto: How to Get Things Right](#)

ⁱⁱ Ibid.

ⁱⁱⁱ http://www.therrinstitute.com/uploads/Asset_Integrity_Governance_-Ver_1.1.pdf