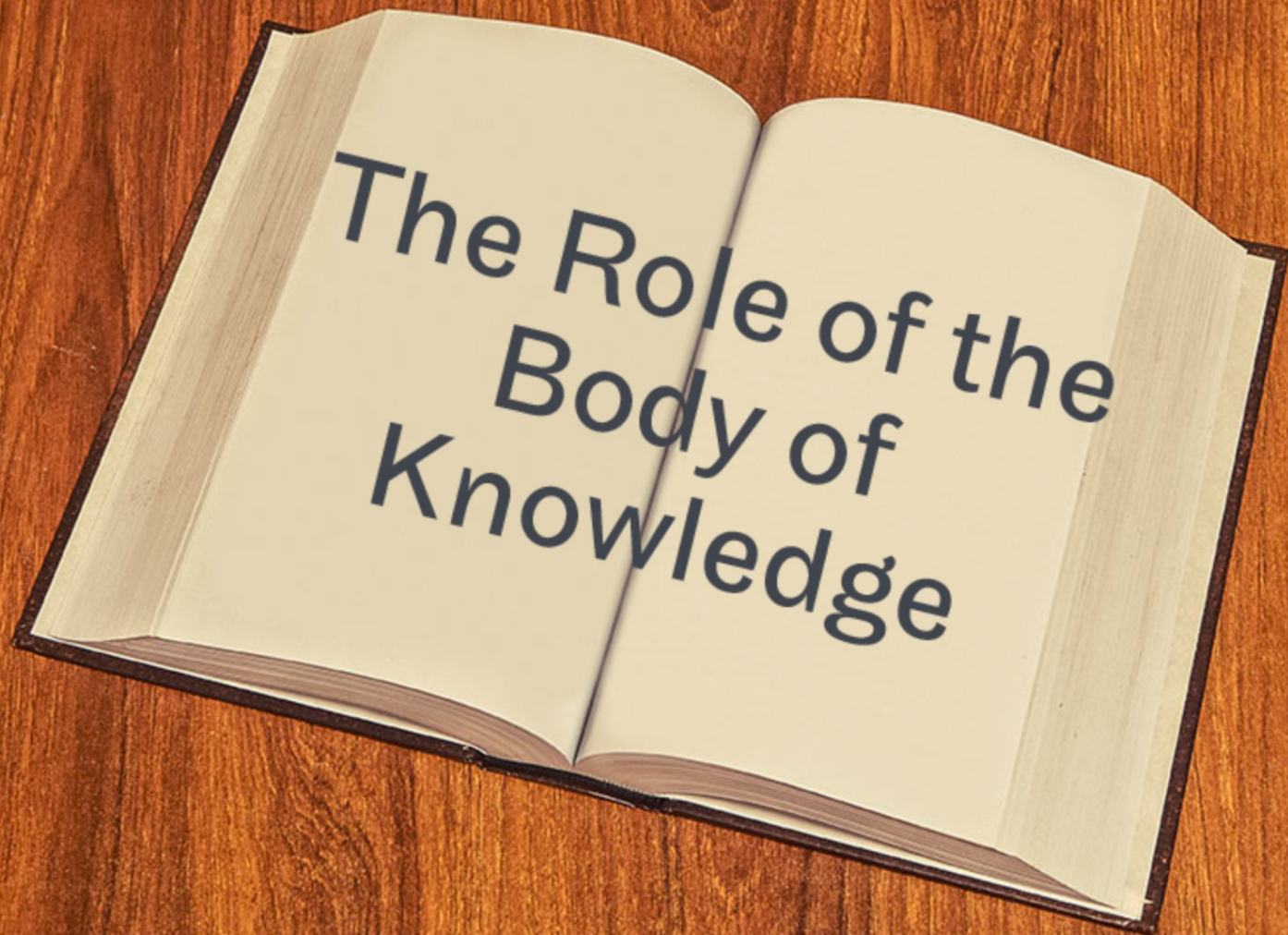




A Review of the 2018 ASQ CRE BoK

Fred Schenkelberg



The Role of the Body of Knowledge

A Reflection of Our Practices





Defining Reliability Engineering?

How do you use the
body of knowledge?

Additions



Risk Management



Reliability Engineering
Leadership Responsibilities



Other Additions

Risk Management



Alignment with various
ISO standards

New major section

Risk management techniques

Risk management tools

Mitigation




**How do you
work within
your risk
management
framework?**

Root Cause Analysis



This is good – wonder why not in previously

Wasn't in the 2008 CRE BOK

A historical map of Southeast Asia and the Indian Ocean, featuring labels like 'SOUTHERN', 'INDIAN OCEAN', and 'NEW HOLLAND'.

What RCA
tools do you
use?



Other Additions



Do you already do these activities?

Data Management – a group of old stuff
Performance Management
Quality Triangle (?)

Any
surprises?



What is your role
in risk management?

Deleted (reduced) Topics



Tolerance and Worst
Case Analysis



Reliability
apportionment
(allocation)
techniques



Testing topics



Other deletions

Tolerance and Worst Case



Interesting – distrubing

A major element of design for reliability

At one time the heart of six sigma design

When done well has a tremendous benefit to reliability performance

Derating downgraded also in BoK

Reliability Apportionment



Maybe the concept is
under modeling?

Not mentioned

Rather poor apportionment tools
previously cited

Yet wonder if the intent is to keep the
concept in modeling

Testing Topics



The many ways to evaluate
a design or process

Discovery testing - HALT is mentioned in notes

Product reliability acceptance testing

Ongoing reliability testing

Attribute testing

Other Deletions



Gone...

Warranty management
customer needs assessment
Poisson process models
Non-parametric statistical methods
Parts obsolescence management
Dynamic reliability
Non-destructive evaluation

Which of these do
you use regularly?

Intpretation of the Changes



More Risk



Less DfR



Less Rigor

Risk Management & Reliability



Design in Reliability

Seems less important



A vintage map of the Indian Ocean region, showing landmasses like Africa, Asia, and Australia, and bodies of water like the Indian Ocean and the Sea of Okhotsk. The text 'Science Statistics Analysis Rigor' is overlaid in a large, bold, black font.

Science Statistics Analysis Rigor



What is your
intrepretation?

More Information

Visit [AccendoReliability.com](https://www.AccendoReliability.com)

Let me know if you have any questions.

Check out the reliability engineering podcast network at [Reliability.FM](https://www.Reliability.FM)

Continue to explore your risk management program and make improvements.