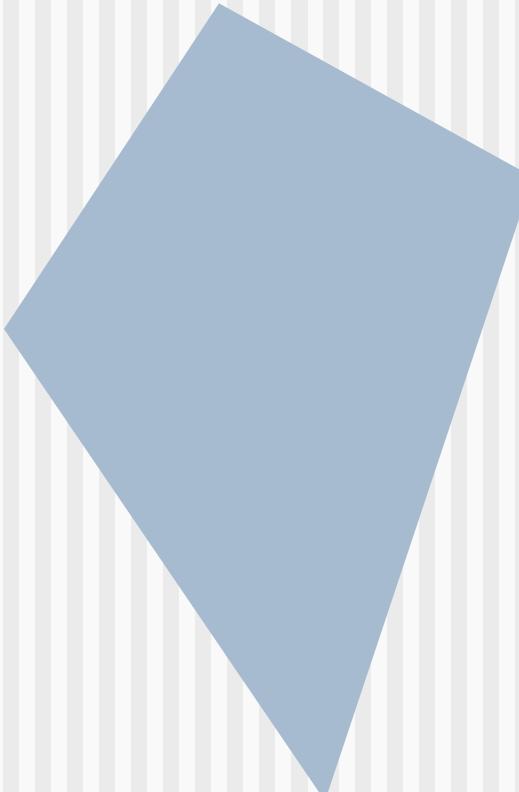




Honourcode, Inc.

People Can and Do Transcend Process



***Process is the panacea
of pedestrian planners!***

Eric Honour
+1 (850) 479-1985
ehonour@hcode.com

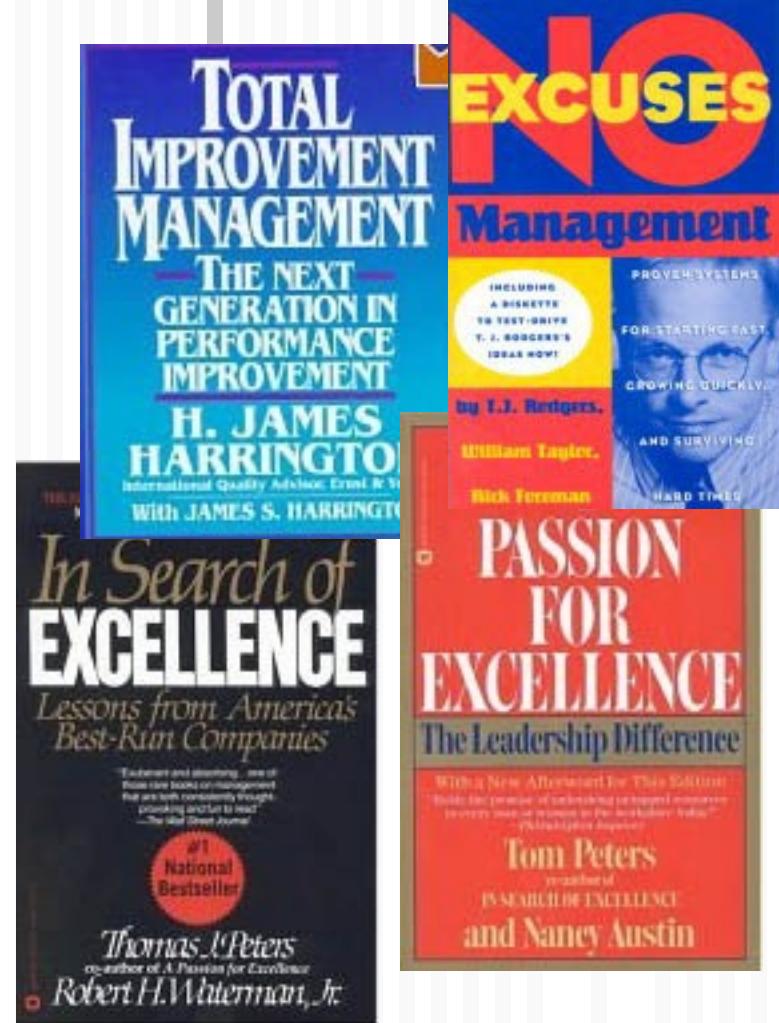
Focus is on **people**, not process

■ Literature

- Is full of advice as to how to make projects succeed
- All the well-known advice is about people
- Has little if anything to say about the proliferating process standards

■ Garbage-in-garbage-out

- Processes only work well when implemented by strong technical leaders
- ...who would have succeeded anyway!



People vs. Process

Effective Systems Engineers



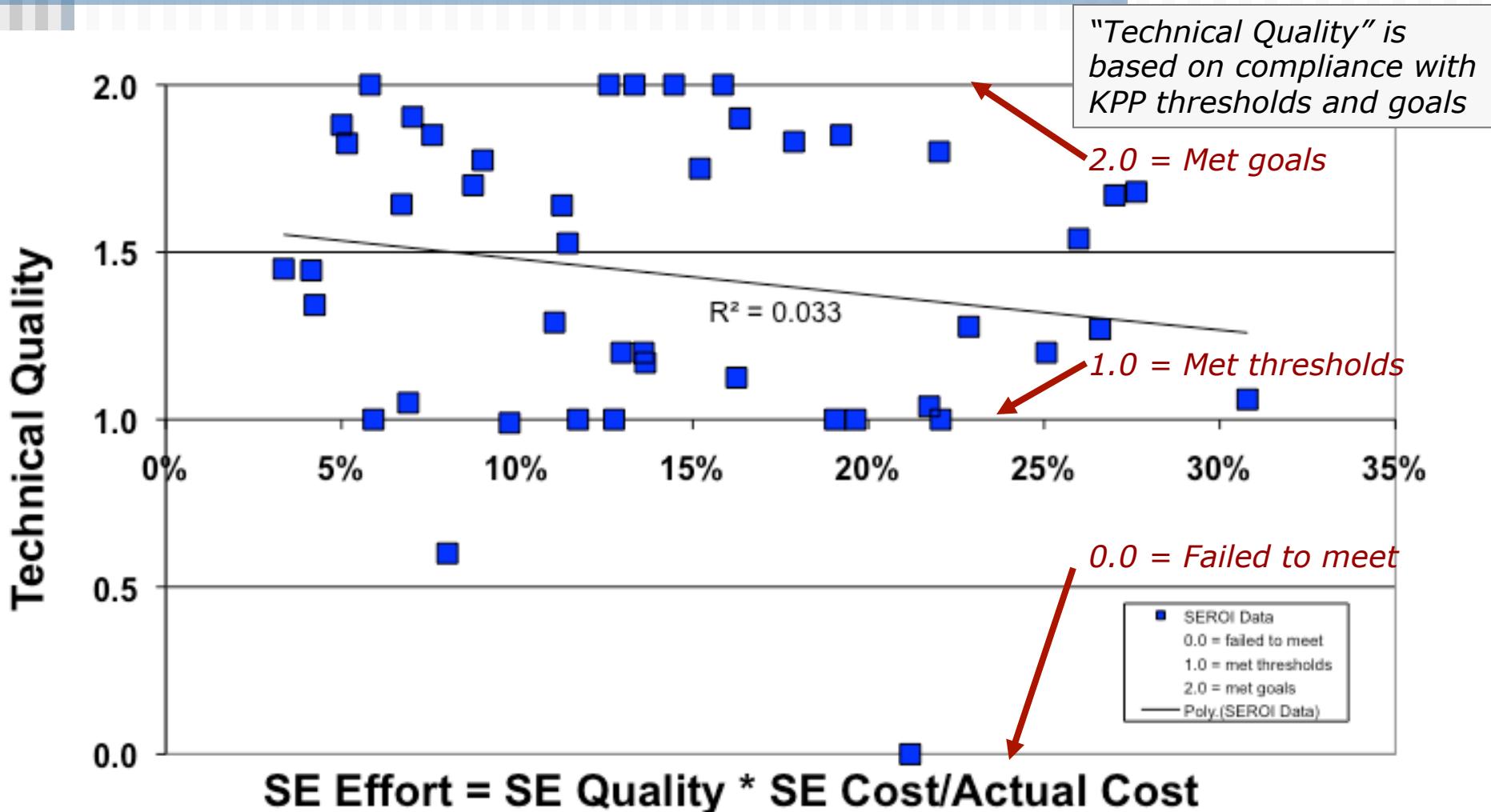
- *"Systems, even very large systems, are not developed by the tools of Systems Engineering, but only by the engineers using the tools."*

Dr. Robert A. Frosch, 1969

With appropriate deference to my esteemed colleague Dr. Kasser...

- **This is not a statement about working within process context!**

Technical Quality vs. SE Effort



Honour (2010) Systems Engineering Return on Investment, INCOSE'10 Chicago

What is a System?

Definition:

- *An interacting combination of elements, viewed in relation to function*



Amagasaki rail systems



Air Combat
Maneuvering
Instrumentation Pod



Virtuoso Implantable
Cardioverter Defibrillator

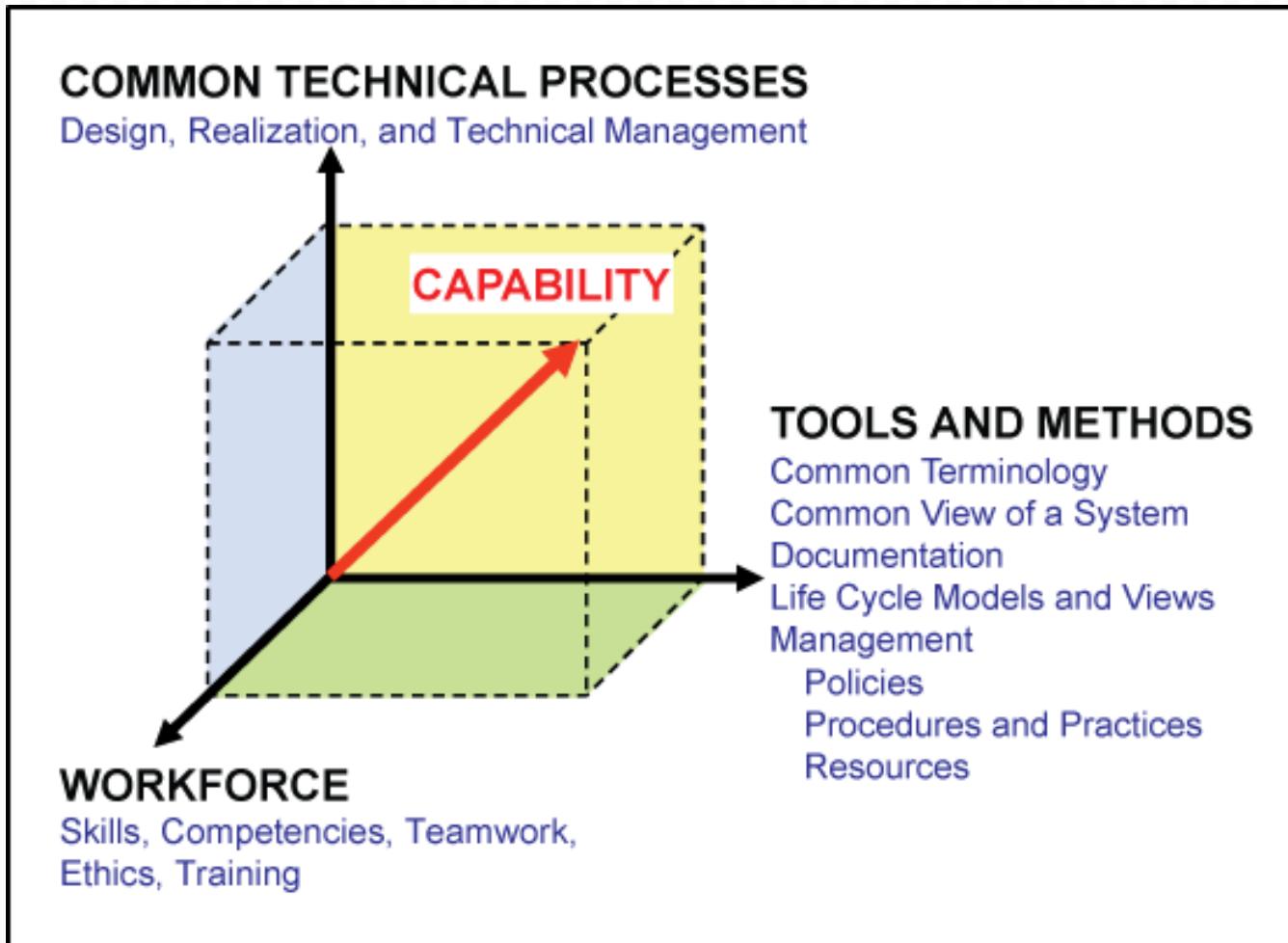
Increasing System Complexity

- No longer sufficient to do Systems Engineering by rote
- Premium is on the ability to ...
 - Rapidly decide, as situations develop, what is to be done, how, who with, & how to measure success
 - Rapidly assemble tailored diverse multi-disciplinary teams and get them operational and effective,
 - Maintain effectiveness under unpredictable and rapidly evolving conditions, retaining ability to raise additional tasks as needed
- **Dynamic properties** of the capability 'emerge' as a result of many decisions about structure, process, strategies, values, personnel, technology, training, ...

... Requires People, not "Process"



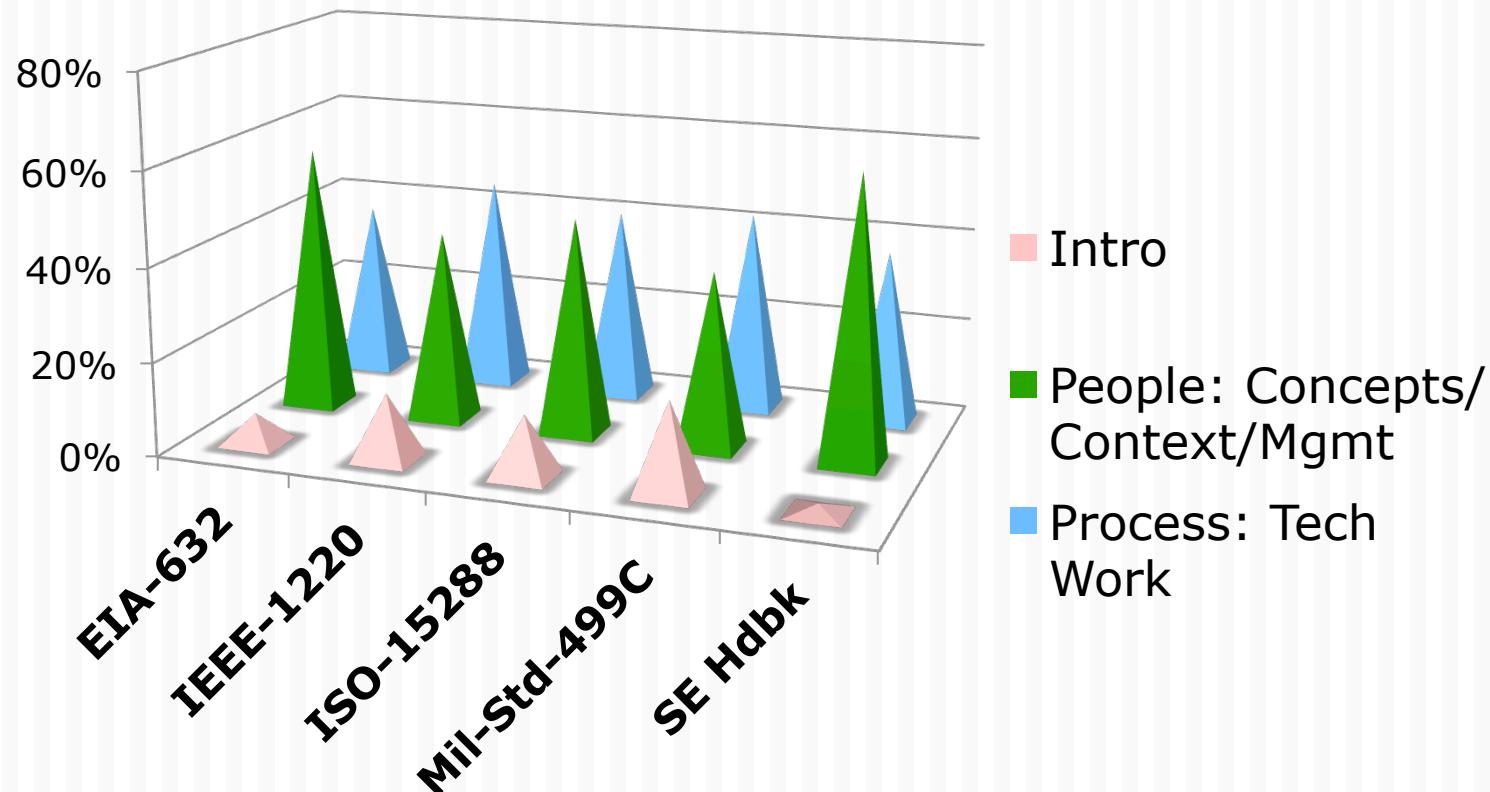
Systems Engineering Framework



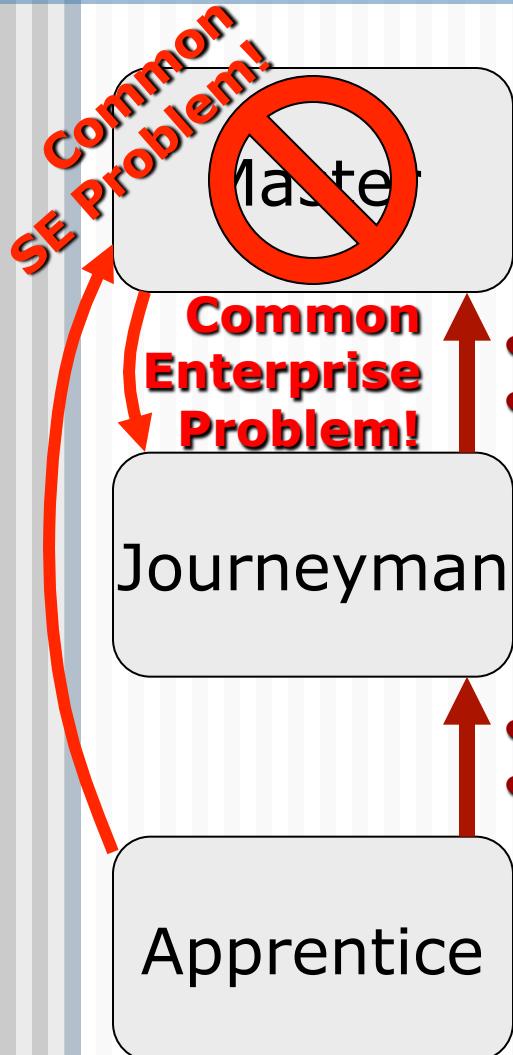
Graphic from NASA NPR 7123.1 Figure 1-1

Content of “Process” Standards

- Even in the process standards, people issues take up more page count!



Use of (and Problem with) Process



Systems Engineering

- Lead systems engineer
- System architect
- Leads complex projects
- 20-40+ years experience
- Acts as mentor

- Project engineer
- Process analyst
- Leads small projects
- 6-35 years experience
- Learns from projects

- Systems analyst
- Requirements manager
- 2-8 years experience
- Operates under mentor