



INCOSE CoA Chapter

Panel Discussion

Steve Fisher, Technical Manager Rolls-Royce Corporation

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01

Value of SE - how would you articulate the value of using a Systems Engineering approach?

Be successful!

01

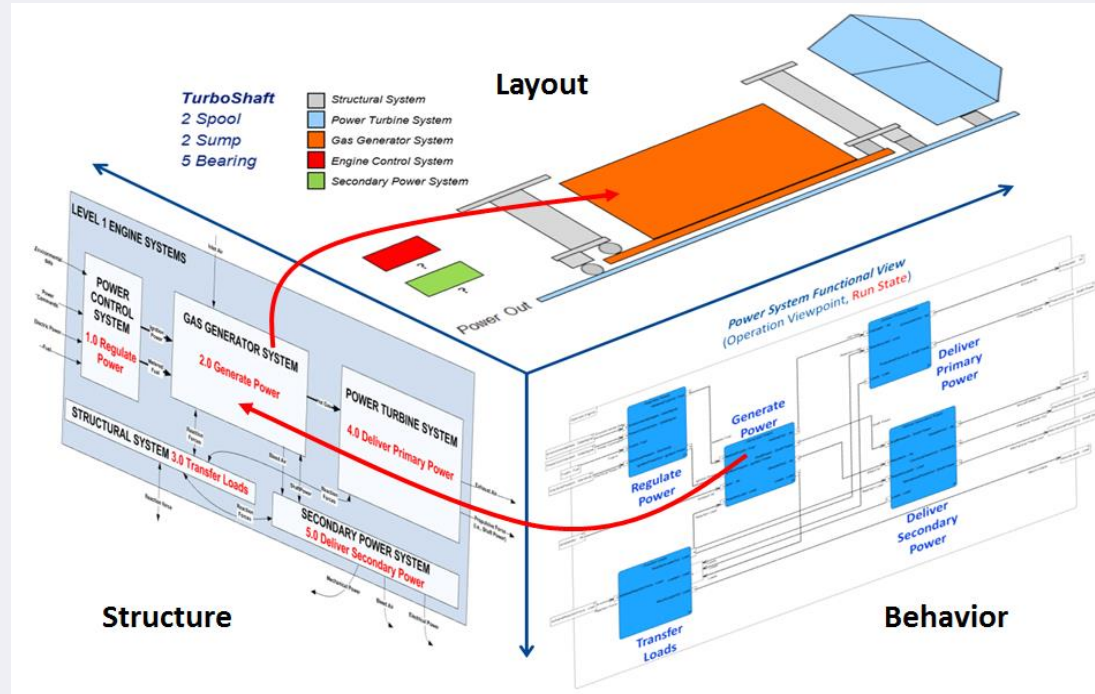
Value of SE - how would you articulate the value of using a Systems Engineering approach?

- Do what is valuable
- Think people, then process, then methods, then tools
- If it seems hard, you probably aren't doing something right
- Words matter
- Be patient
- Be humble

02

How to do an effective but minimalist SE approach to a design with a very limited budget?

- Think people, then process, then methods, then tools
- Start with good system thinking
 - Purpose
 - Interconnection
 - Synthesis – how we see interconnections
 - Emergence
 - Iteration / Feedback



Synthesis, Emergence, Iteration

02

How to do an effective but minimalist SE approach to a design with a very limited budget?

- Think people, then process, then methods, then tools
- Start with good system thinking
 - Purpose
 - Interconnection
 - Synthesis – how we see interconnections
 - Emergence
 - Iteration / Feedback
- Process, methods and tools?
 - Do what brings value, not just because it is better
 - Formality is expensive; so is failure

03

Verification and Validation - what's the difference and does it matter?

- Is it verification or is it validation?
- Object and perspective
- Conformance and need
- Component requirement as the object
 - Requirement writer perspective
 - System designer perspective
- Product as the object
 - Safety perspective
 - Customer perspective

