SEFS Value of Systems Engineering

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Abstract

How can we explain to managers, customers, or colleagues what the value is of applying systems engineering? This nugget uses Eric Honour's work to explain the value of systems engineering.

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Problem Statement

Why is it so difficult to convince people (managers, customers, colleagues) to use systems engineering?

- Many of them see only a part of problem and solution space
- and are **unaware** of the **relations** between the parts
- Consequences of lacking a systems view become visible at the end of development or in the field
- when repairing them is **costly** and **time consuming**
- Introducing systems engineering is a change, requiring change management



Operational Scope





Lacking Systems Engineering Results in Late Failures

failures found late in development

can be traced back to *unknowns*, *unforeseens*, and *wrong assumptions*



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Eric Honour's Research



Equivalent SE Effort as % Program Cost