LinQuest’s unique model-based systems engineering (MBSE) methodology provides solutions across the entire program lifecycle and goes beyond “traditional” MBSE capabilities by incorporating key tools in a seamless MBSE framework. The key–and the LinQuest difference–is the Power of i: integration with standard and custom models, simulations, tools, and databases; innovation through our use of advanced 3D visualization; and implementation by our domain and architecture experts.

MBSE can be used to provide solutions directly focused on addressing critical program challenges and improving execution success early and in any phase of the program lifecycle. It supports any level of an enterprise from individual systems to complex systems-of-systems.

MBSE uses INCOSE processes centered around the Systems Engineering V-model, accomplishes verification from requirements to performance, defines architectures, controls the technical baseline, tests systems, and provides technical and operational analysis and assessments.

Features

MBSE is a core capability for program planning, traceability, dependency assessment, architecture, analysis, and impact assessments. Our coordinated, model-centric approach uses common data and shared views to improve technical baseline document quality, change control, stakeholder integration, collaboration, and execution.

• JCIDS support
• Gap analysis and mitigation strategy development
• Analysis of alternatives and systems-of-systems analysis
• Portfolio management
• Test plan development and Requirements V&V
• Scenario modeling
• Business process re-engineering

Benefits

• Technical baseline accuracy, quality, and configuration control
• MBSE model repository and reuse enables efficiencies, reducing manpower requirements by 50% and saving months of development time
• Cohesive end-to-end analysis in support of integration activities reduces cost growth and schedule delay
• Model-based artifacts shorten coordination timelines by reducing document length by more than 80%