



U.S.ARMY®



Proposed Framework for Concept Development

DESIGN / DEVELOP / DELIVER / DOMINATE

SOLDIERS AS THE DECISIVE EDGE



- Outline
 - Problem
 - Purpose
 - Framework Elements
 - Proposed Framework





- Problem

- While the Army has a well developed Force Management model, it lacks a universally accepted framework to identify, analyze, and make informed decisions regarding trade-space within individual systems, across Systems-of-Systems (SoS), and across capability portfolios.
- The Army has well-developed processes to identify capability gaps, and propose individual systems to address those gaps, but lacks a universally accepted framework to analyze SoS and architecture alternatives to address mission-specific gaps.





- Purpose

- Propose a framework to examine individual system and SoS trades while considering multiple dimensions, in order to provide required information for leadership decisions across capability portfolios
- Advance towards the means to:
 - Establish an accepted framework for examining trade-space within individual systems and across Systems-of-Systems (SoS)
 - Consistently examine capability trades within portfolios
 - Provide decision-quality information to leadership using a consistent methodology





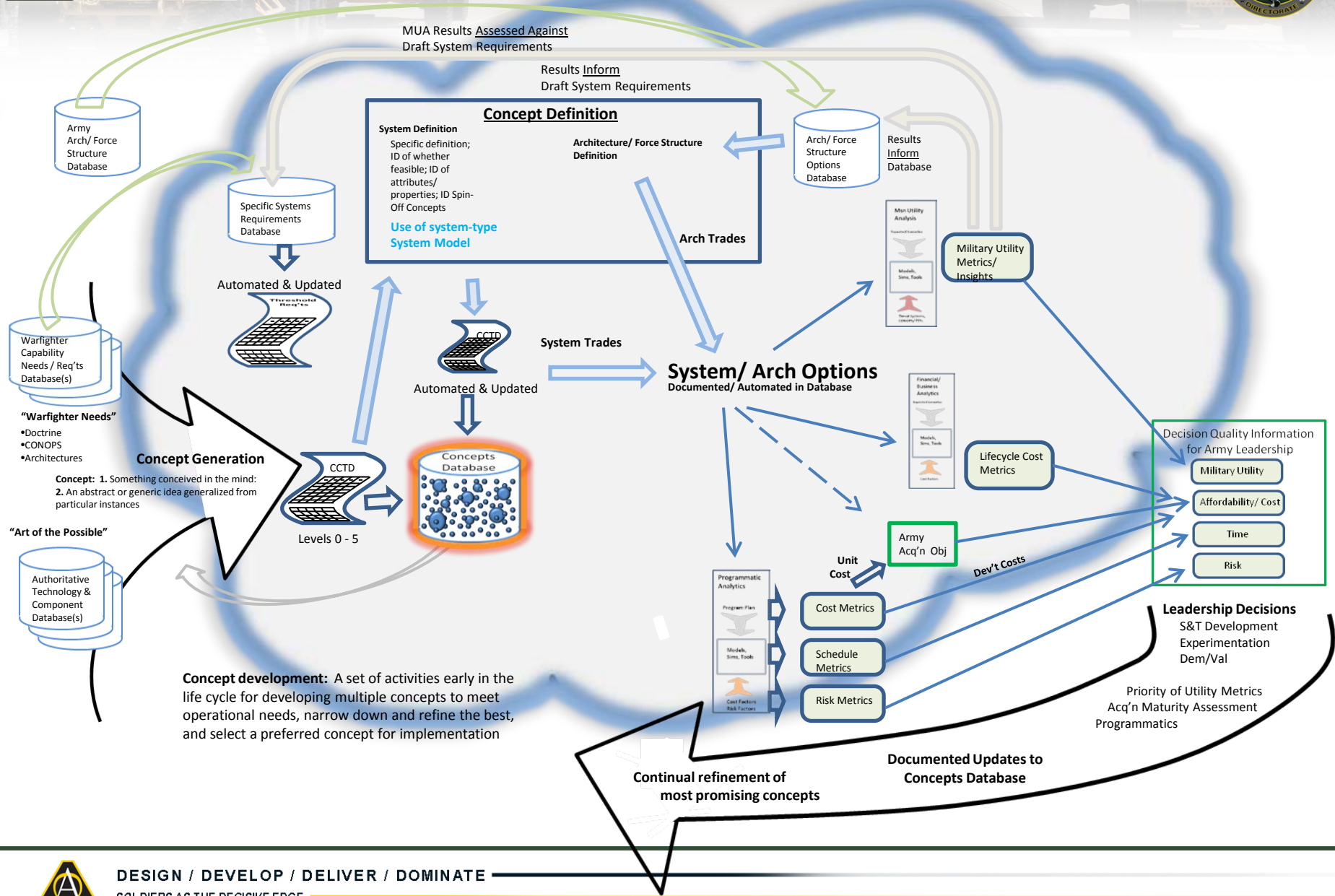
• Elements

- Concept generation
- Documentation of concepts
- Analysis of individual concepts
 - o Feasibility
 - o Physics-based capability analysis
- Architecture Analysis
- Mission Utility Analysis (MUA)
- Financial & Business Analysis
- Programmatic Analysis
- Information to decision-makers based on a consistent methodology
- Concept refinement



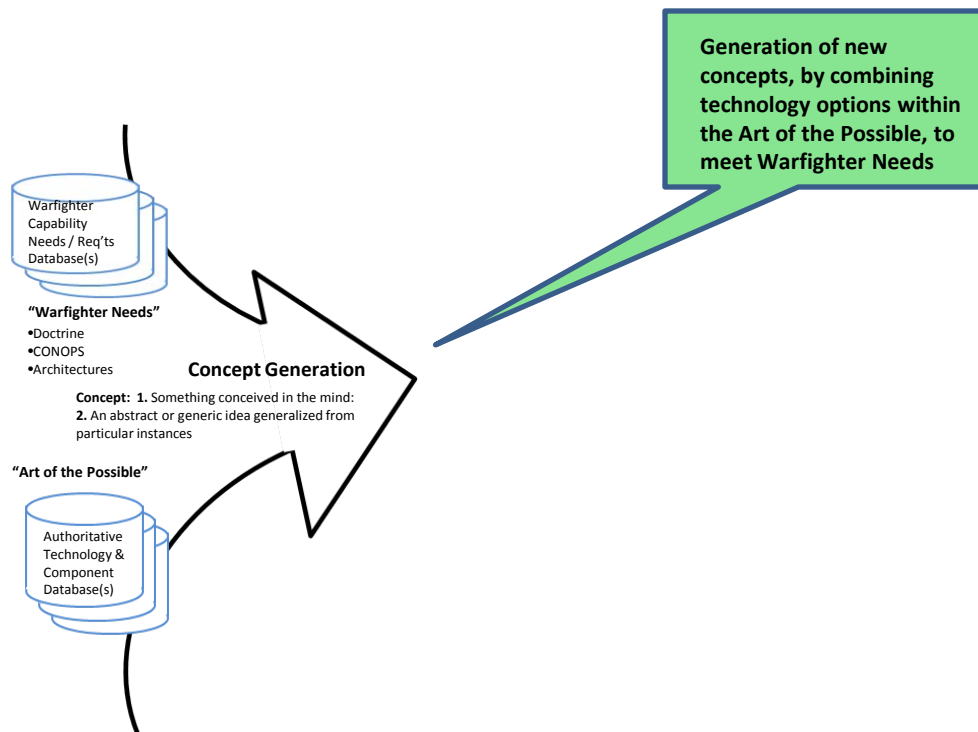


Proposed Framework for Concept Development



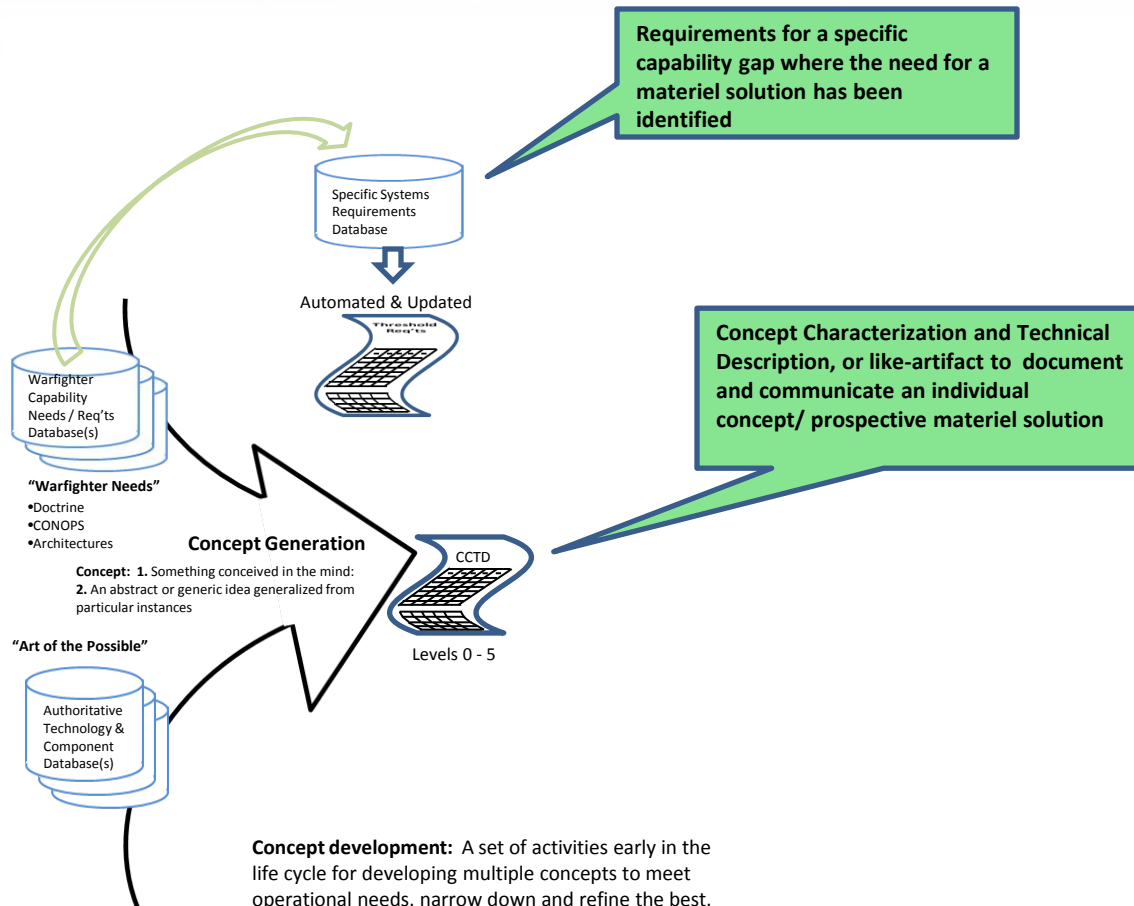


Proposed Framework for Concept Development





Proposed Framework for Concept Development



“Warfighter Needs”

- Doctrine
- CONOPS
- Architectures

Concept: 1. Something conceived in the mind:
2. An abstract or generic idea generalized from particular instances

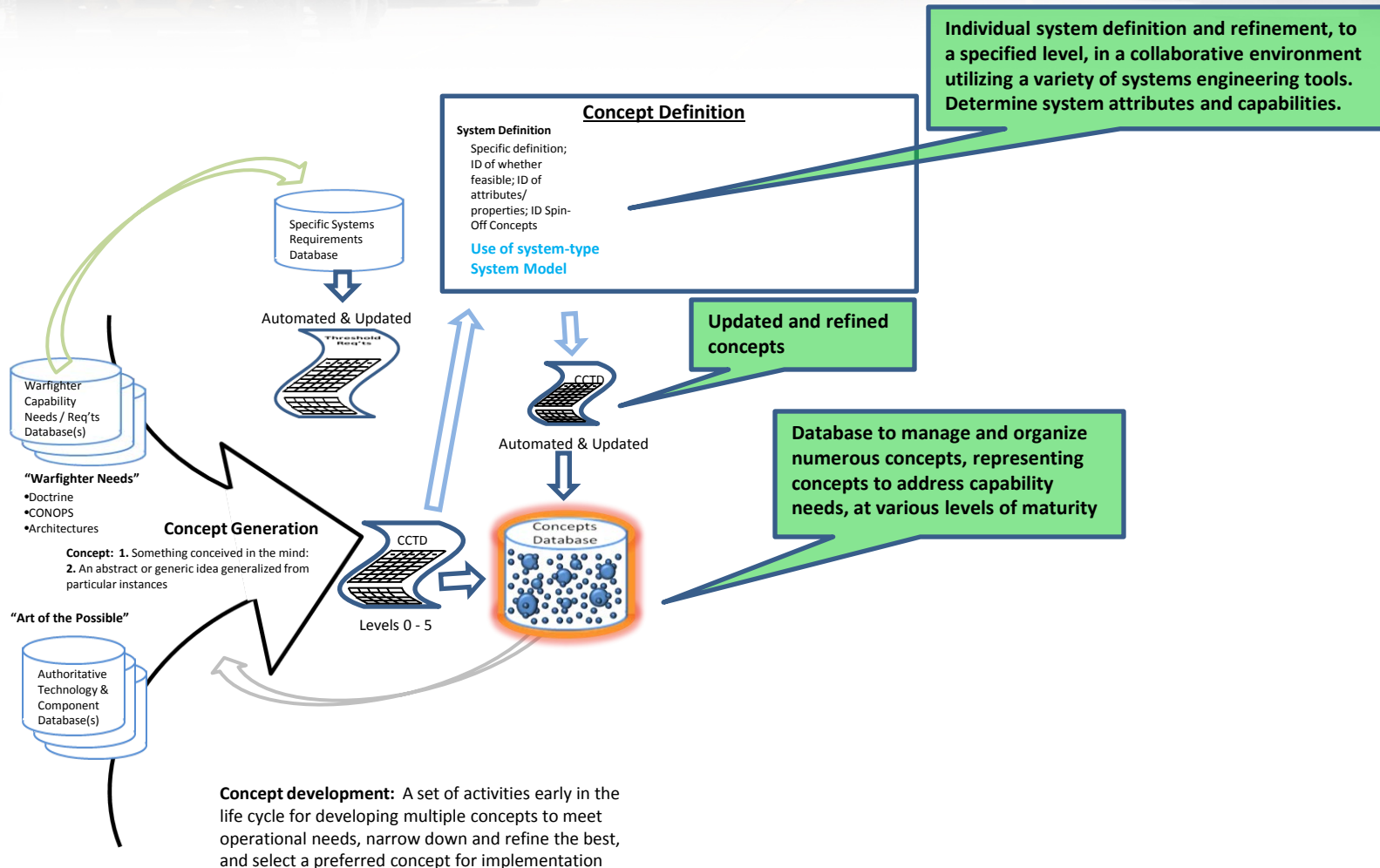
“Art of the Possible”

Concept development: A set of activities early in the life cycle for developing multiple concepts to meet operational needs, narrow down and refine the best, and select a preferred concept for implementation



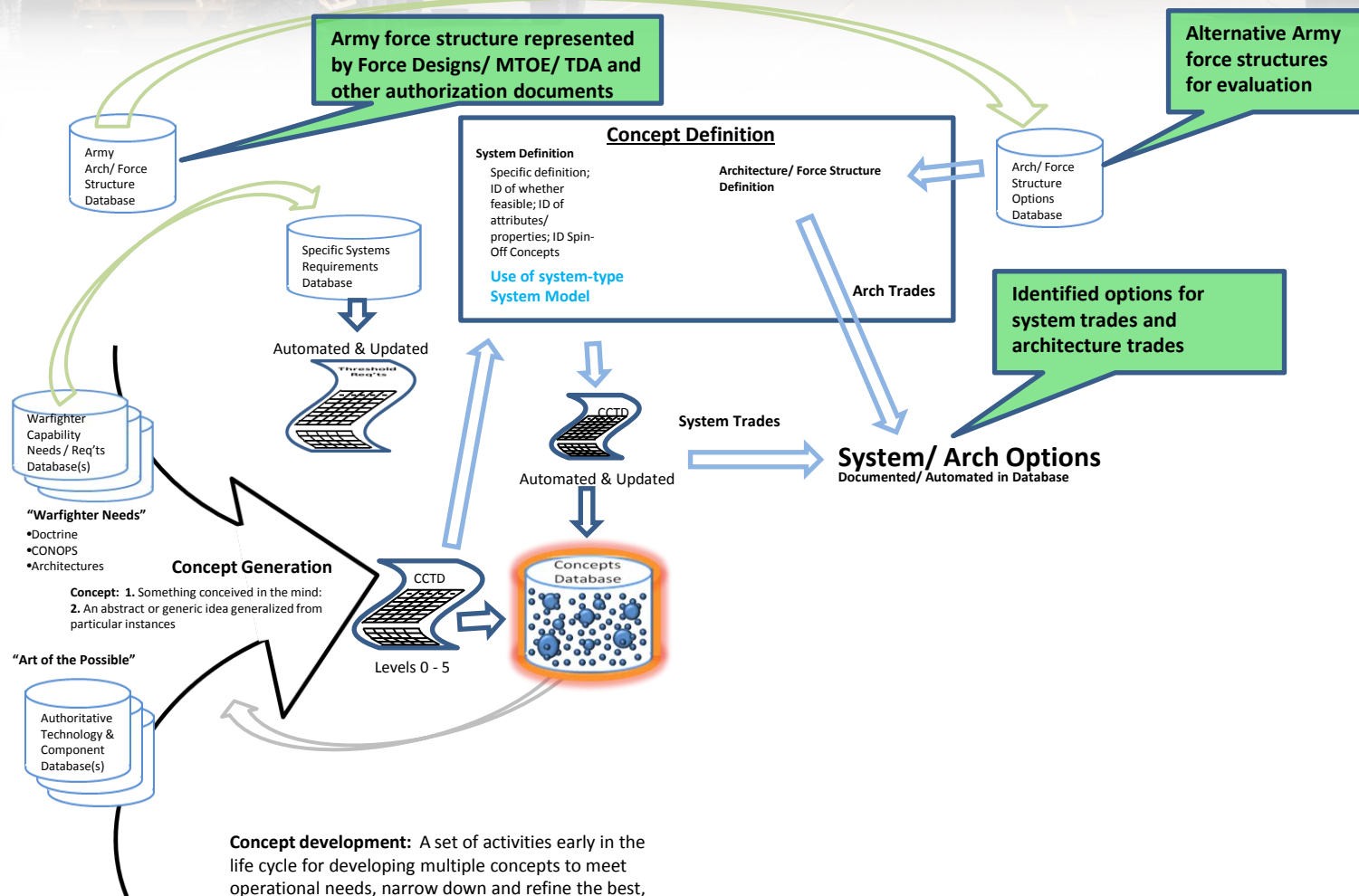


Proposed Framework for Concept Development





Proposed Framework for Concept Development

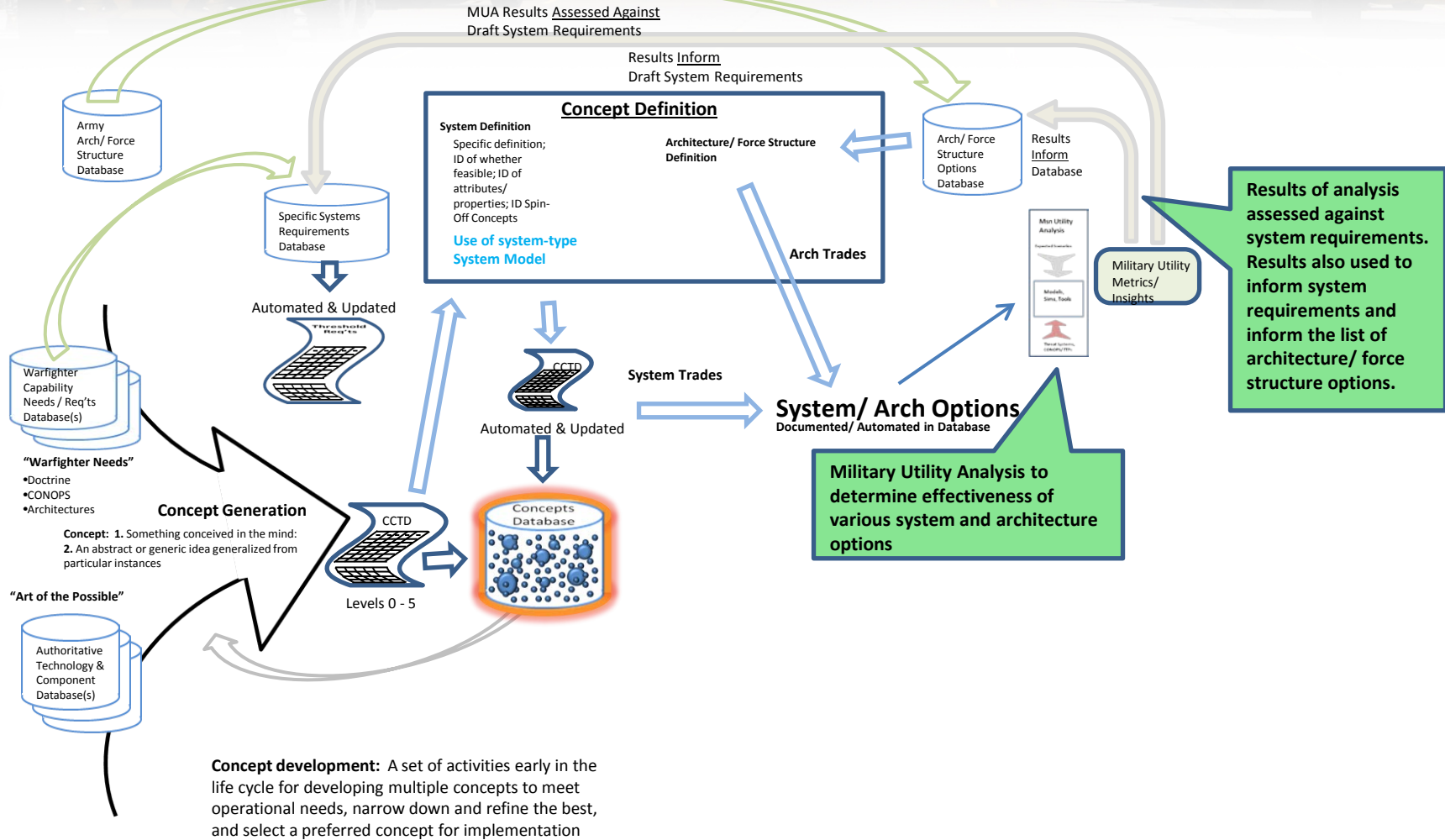


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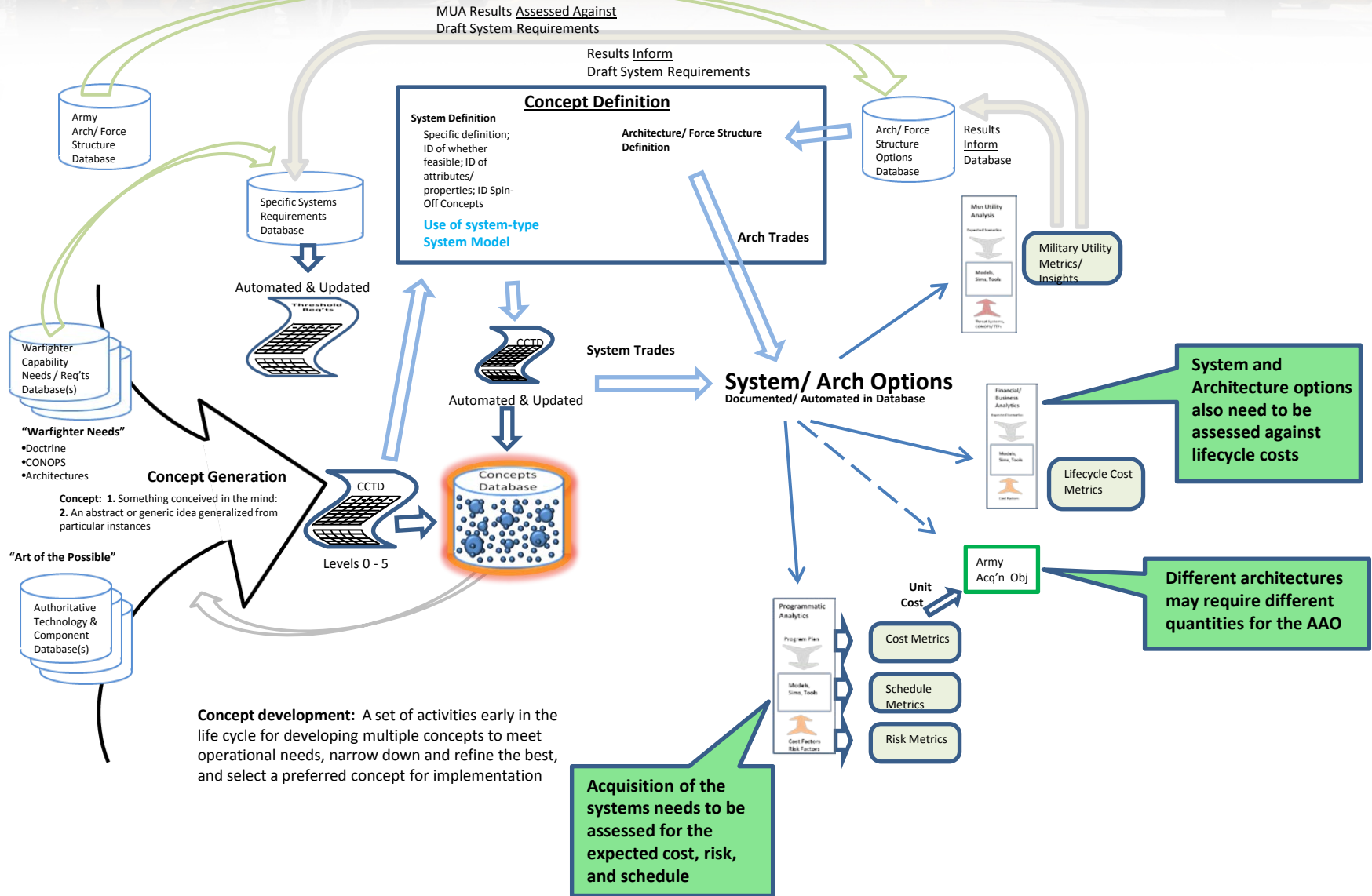


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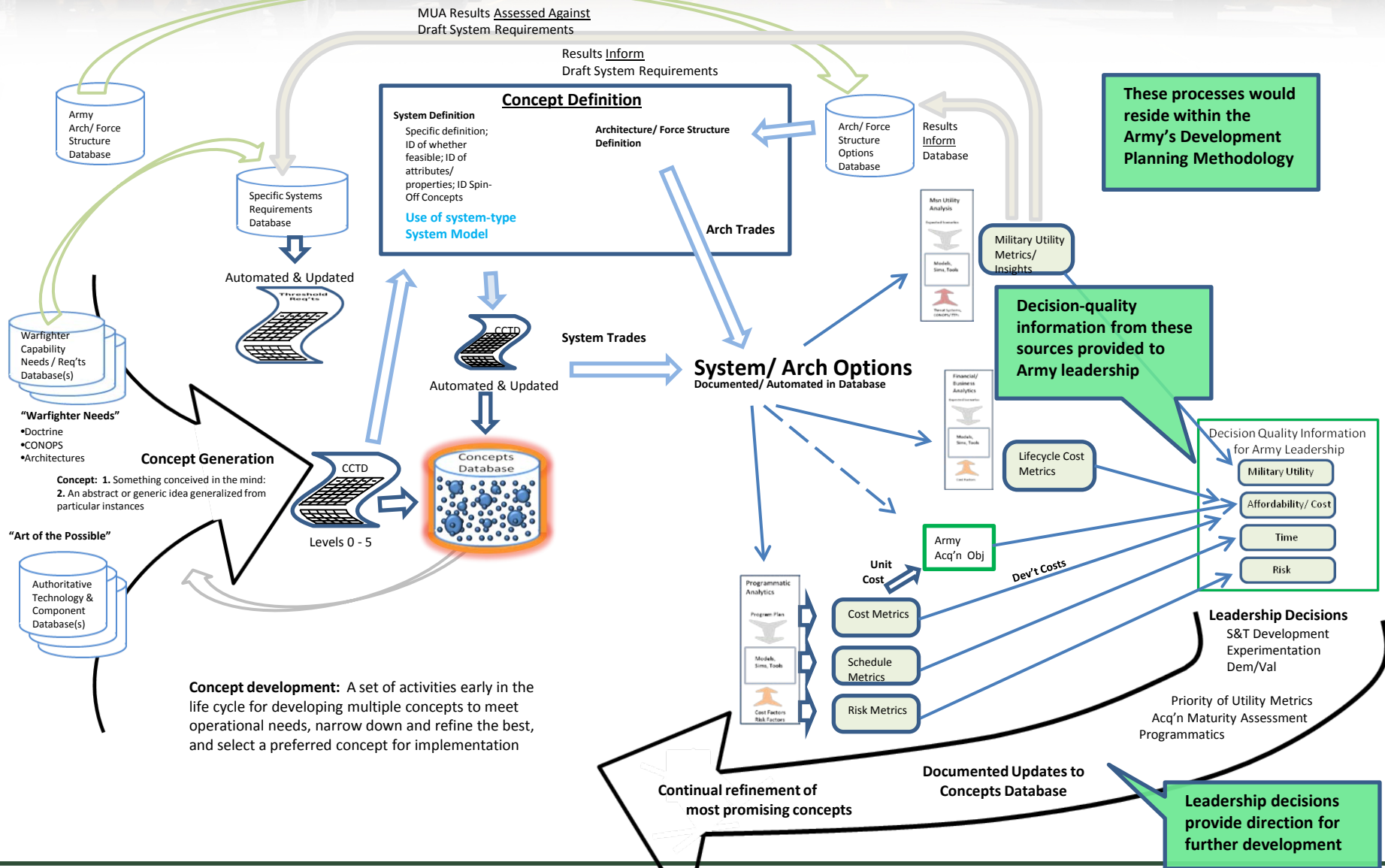


Proposed Framework for Concept Development



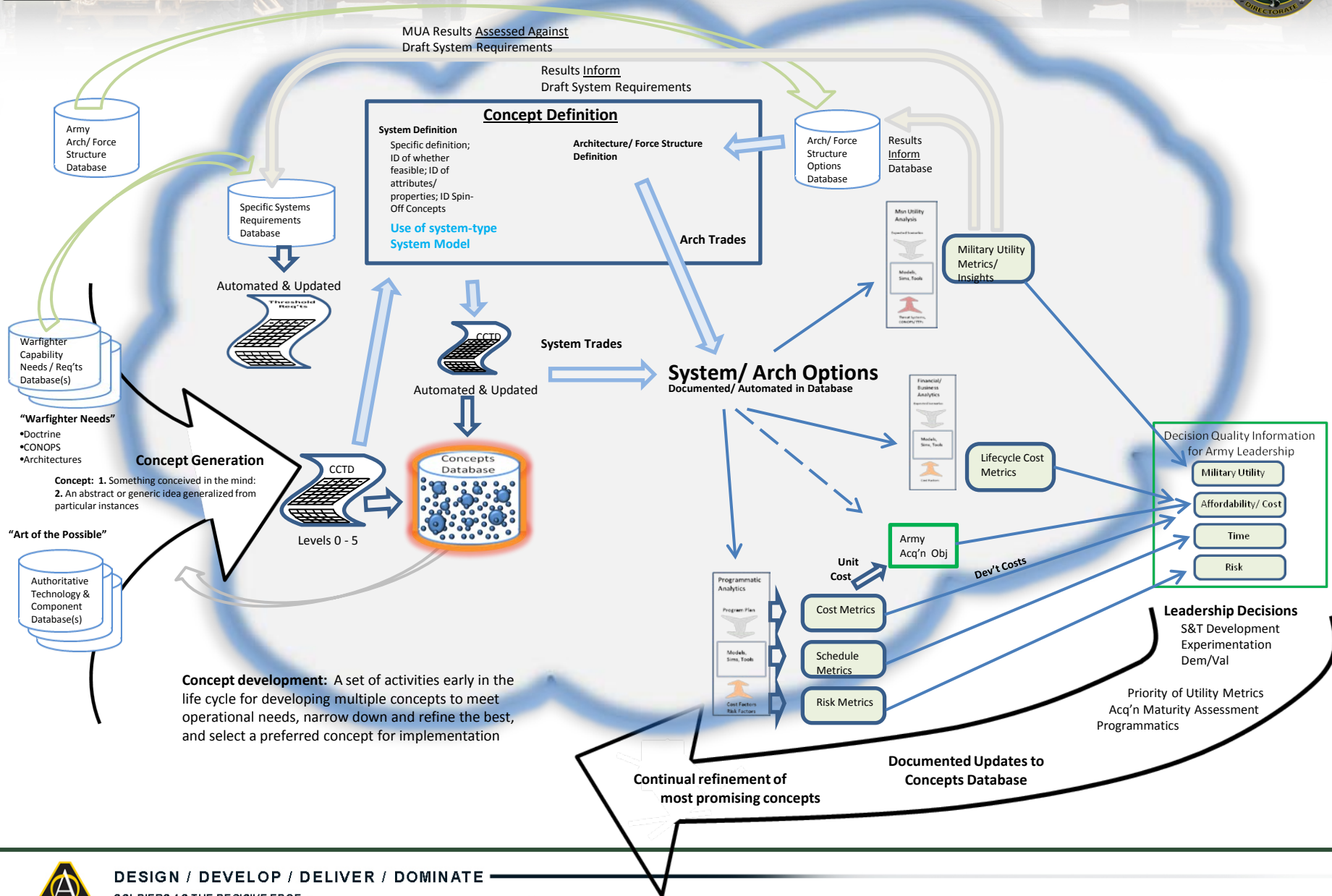


Proposed Framework for Concept Development





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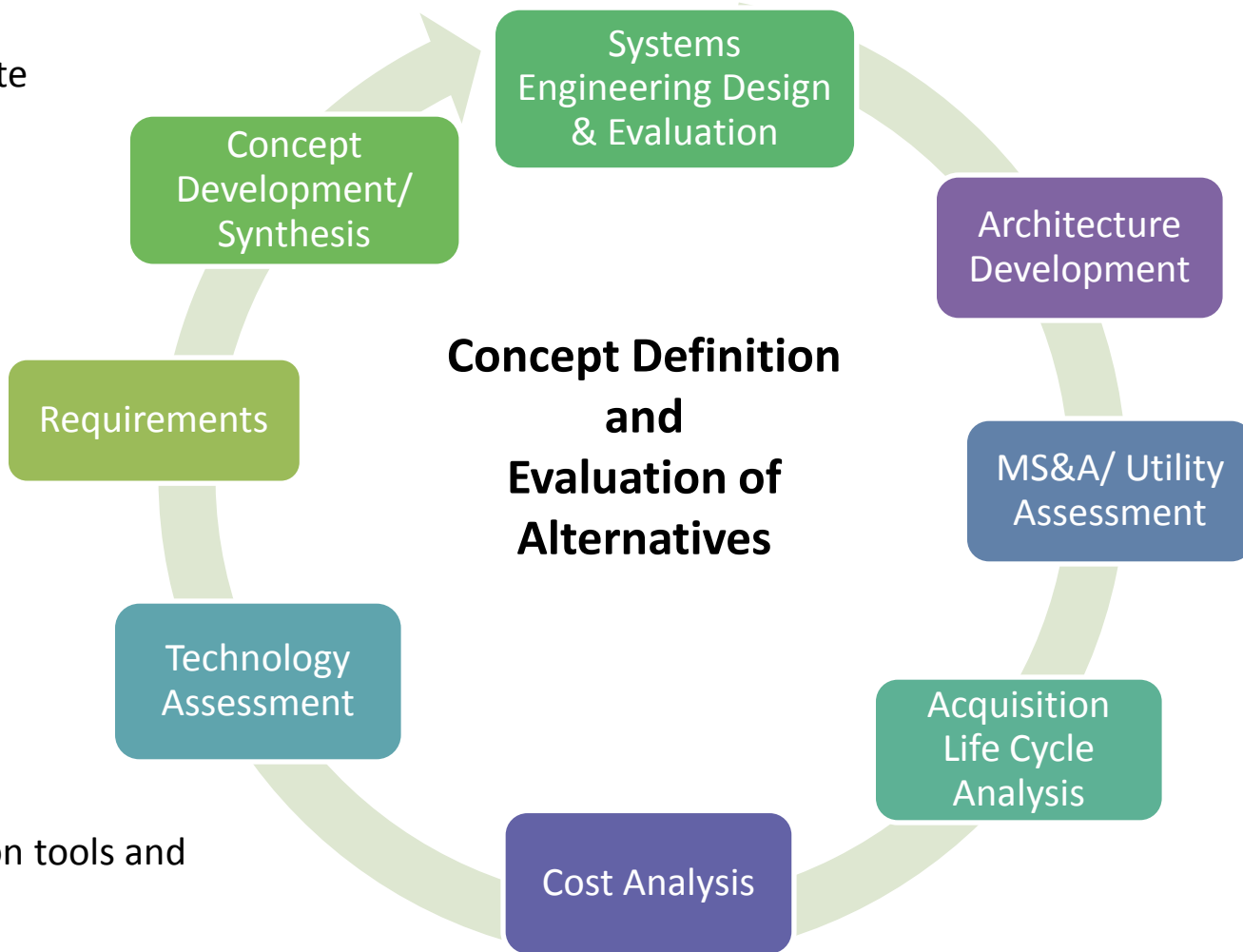
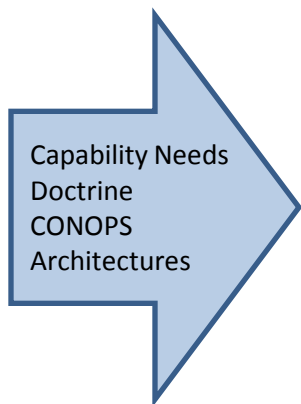
Back-Up Slides





Concept Definition and Evaluation of Alternatives

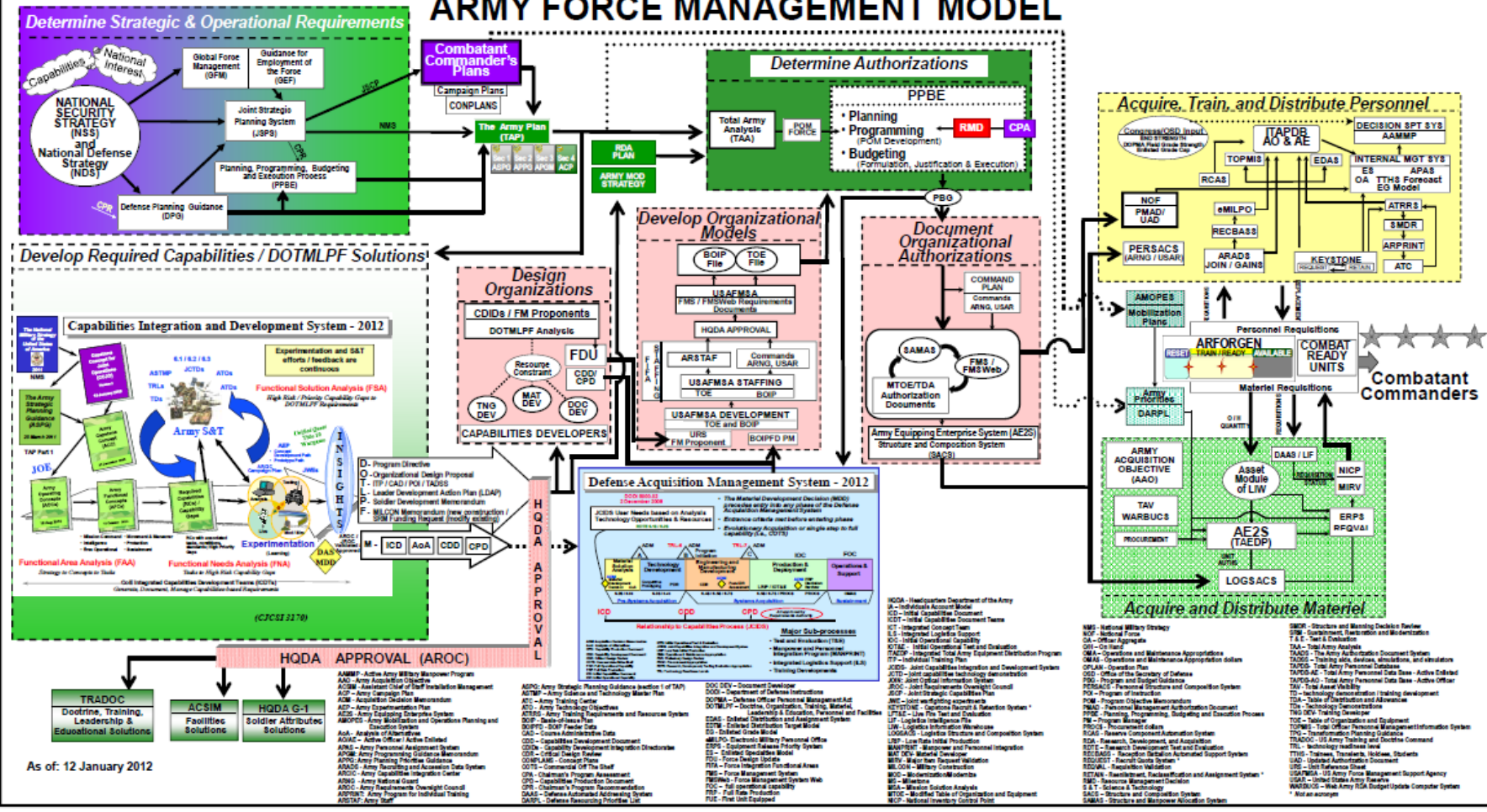
Teams formed to provide appropriate expertise



Make use of common tools and methodology



ARMY FORCE MANAGEMENT MODEL



Army Force Management Model “Strategy to Structure”

