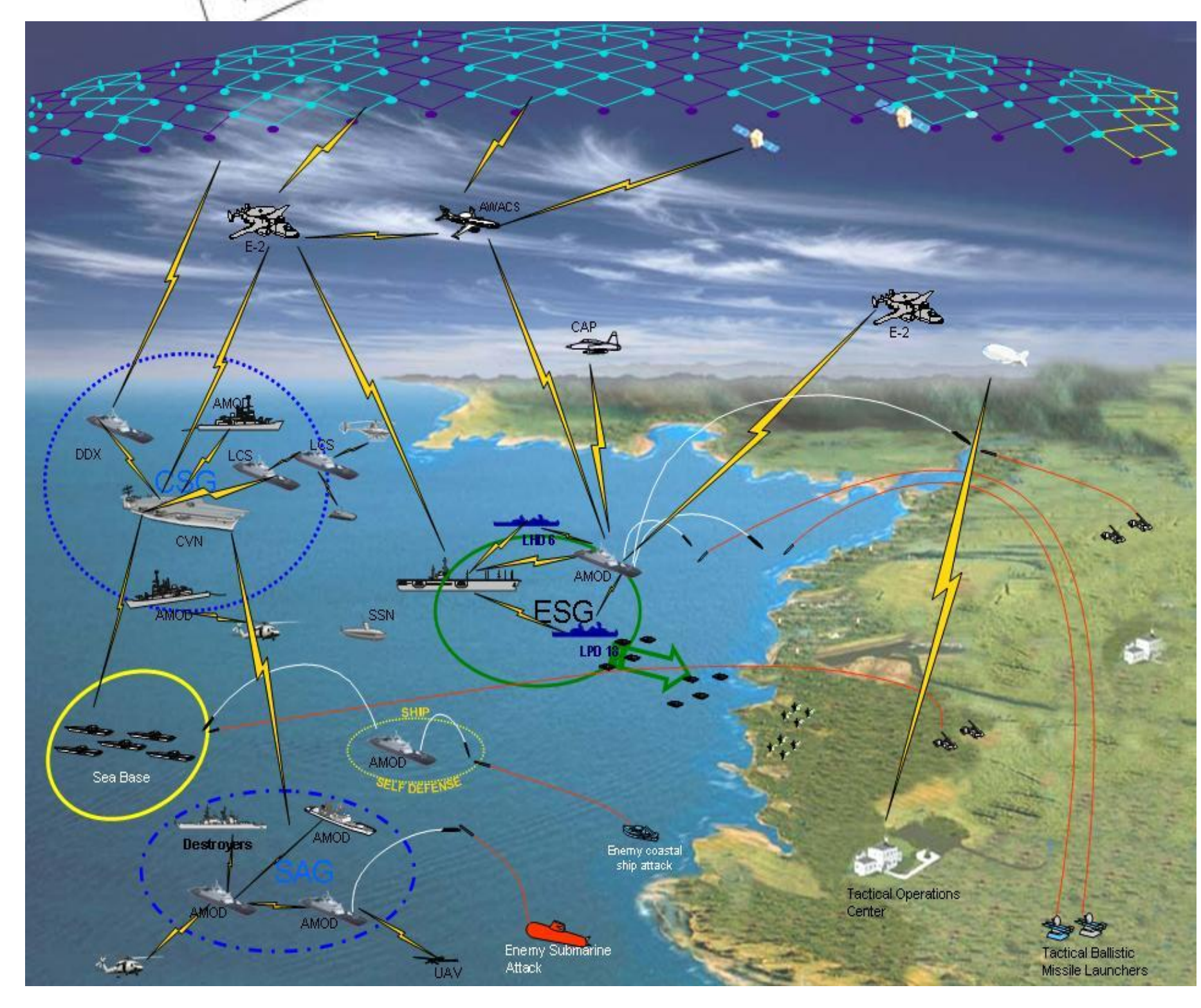
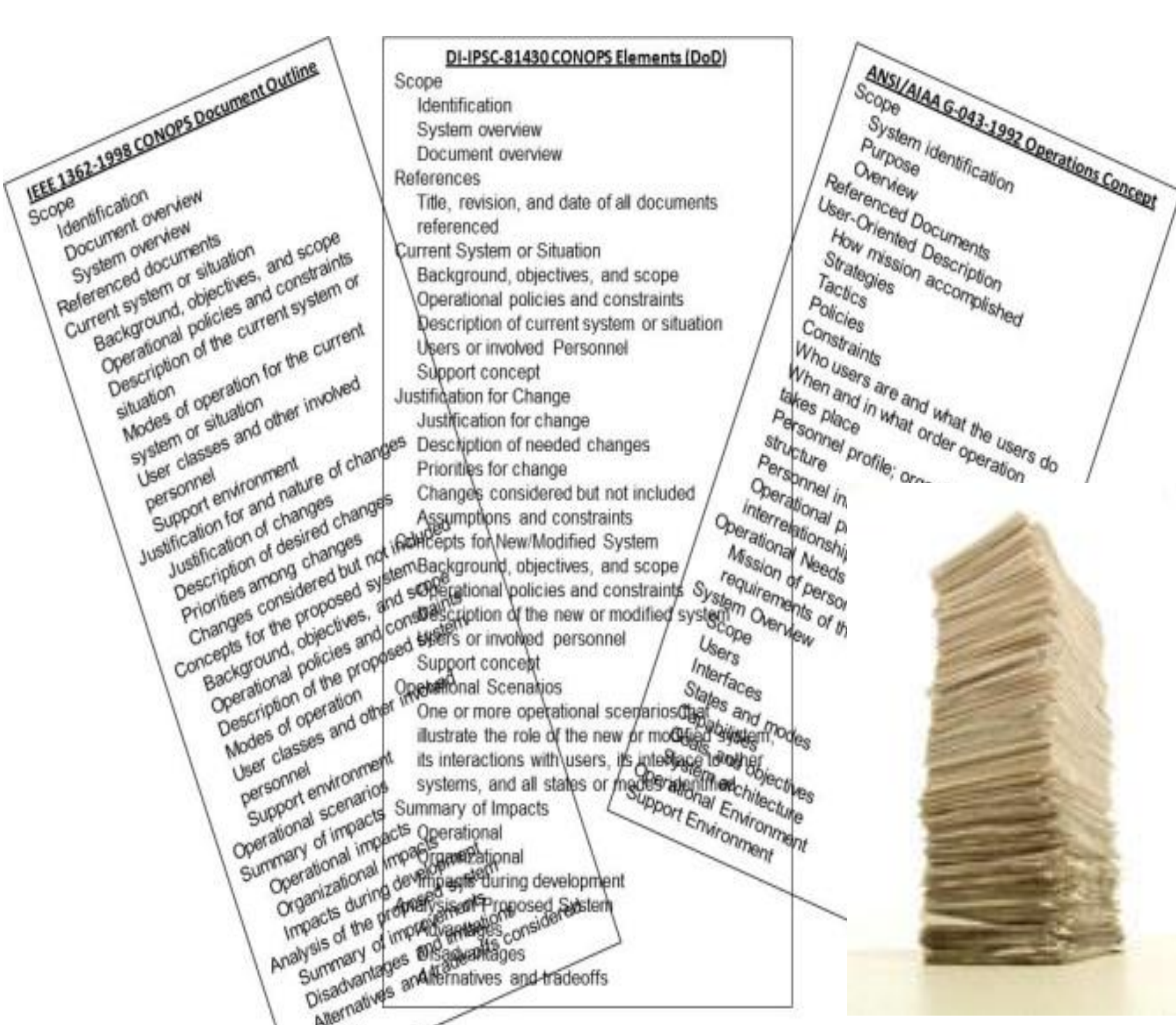


CONCEPT ENGINEERING AGILE DEVELOPMENT OF A GRAPHICAL CONOPS

Today



Problems: Static text, static graphics, difficult to change, no human roles are represented, difficult to visualize

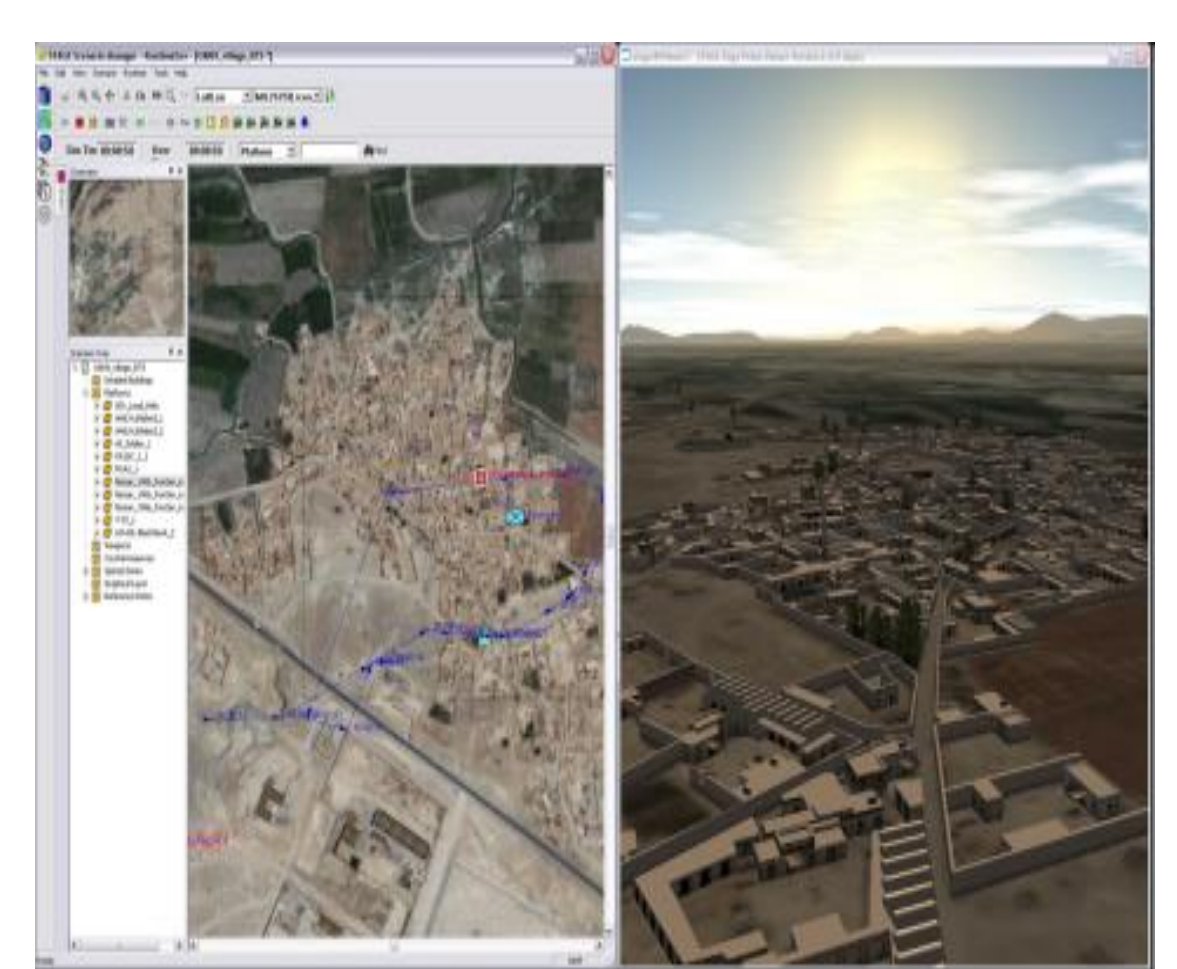
RESEARCH NEED: There is a need to quickly and graphically articulate a concept of operations (CONOPS) for new missions, business processes, and feature sets to realize a shared mental model and understanding of the mission, and potential solutions across a set of diverse stakeholders

Current Technologies



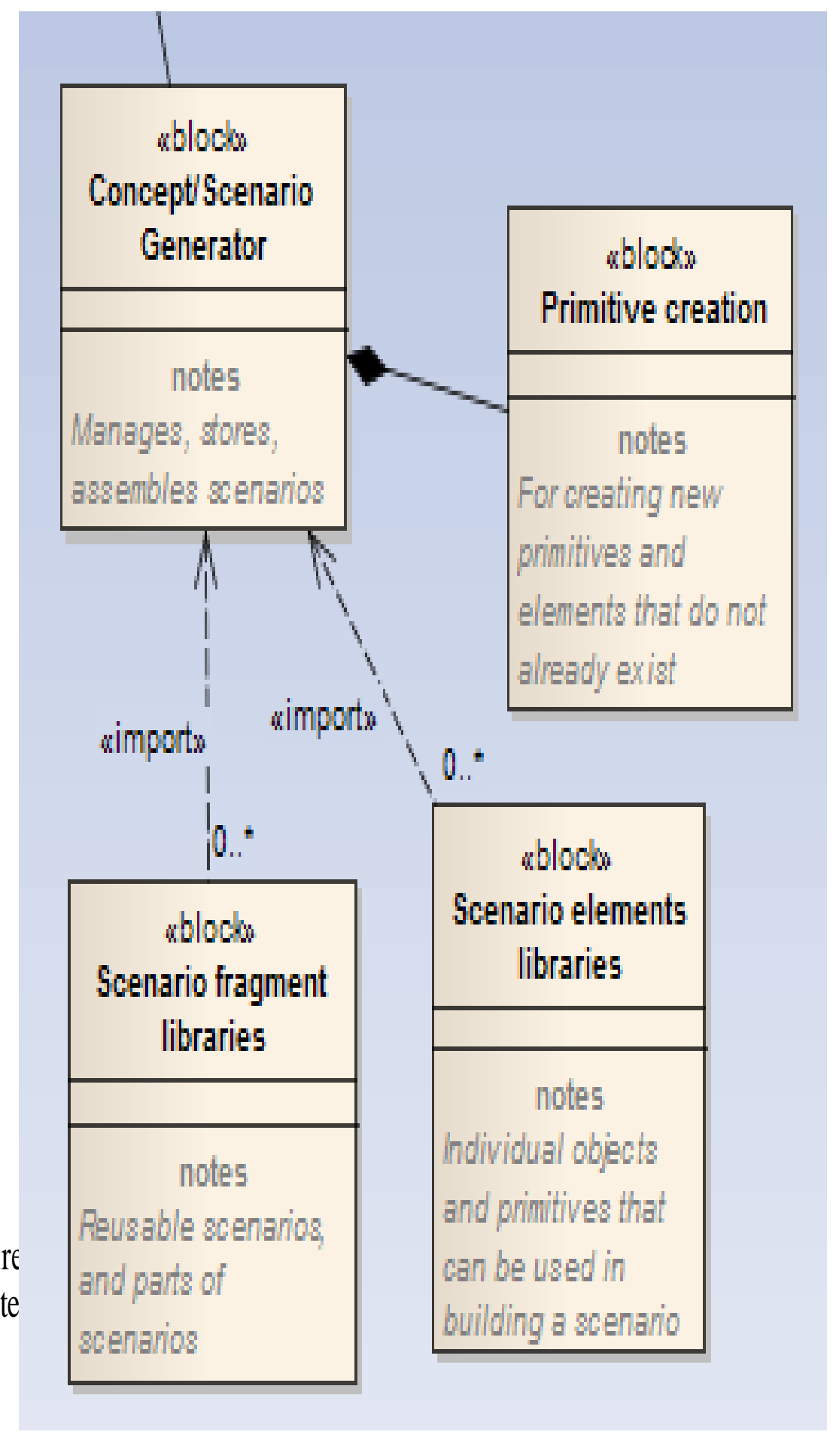
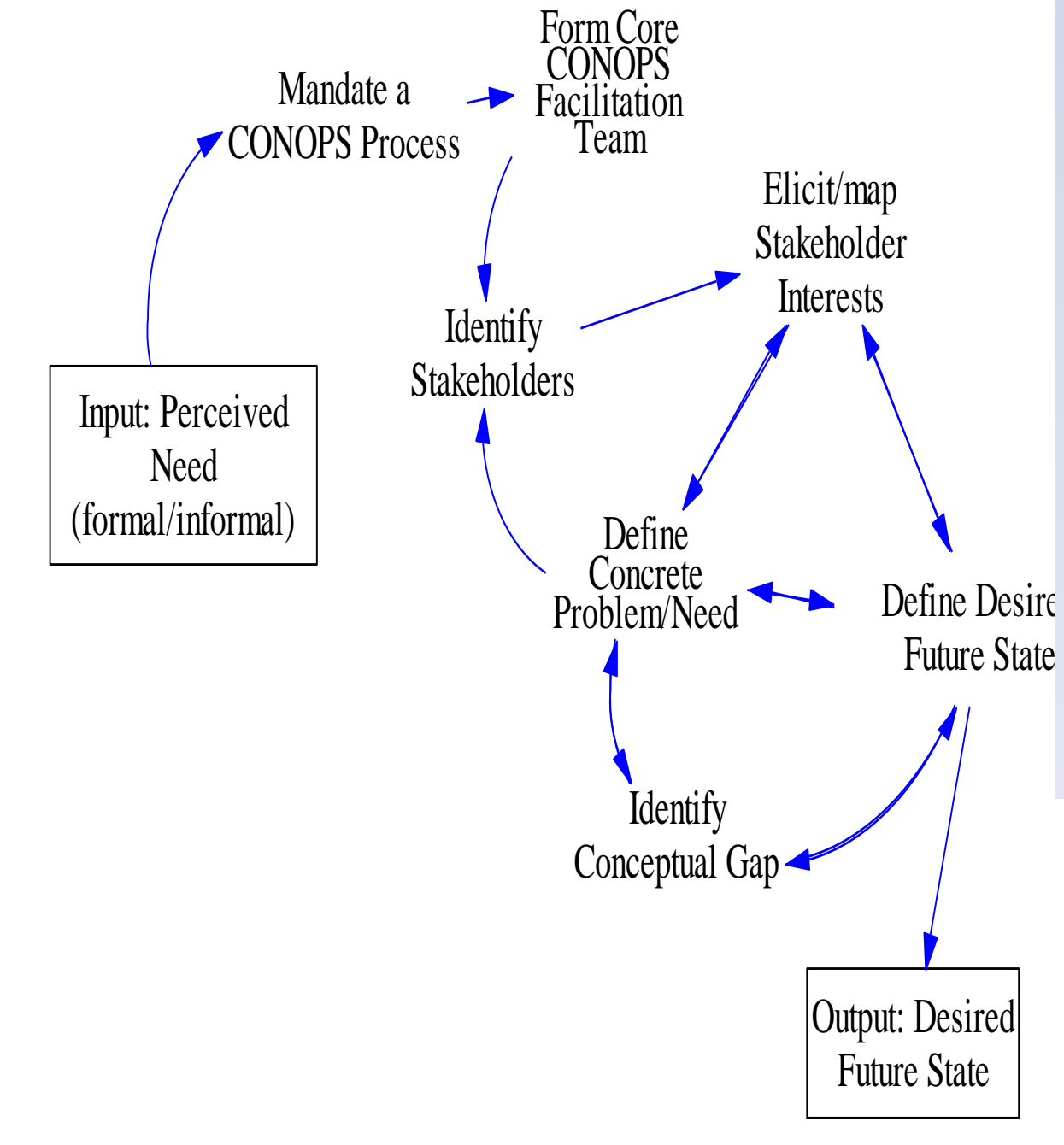
Human-Centered Design Approach

Graphical Programming



Rapid Virtual Environment Generation

Reusable Taxonomies & Agile Processes



Immersive Virtual Environments

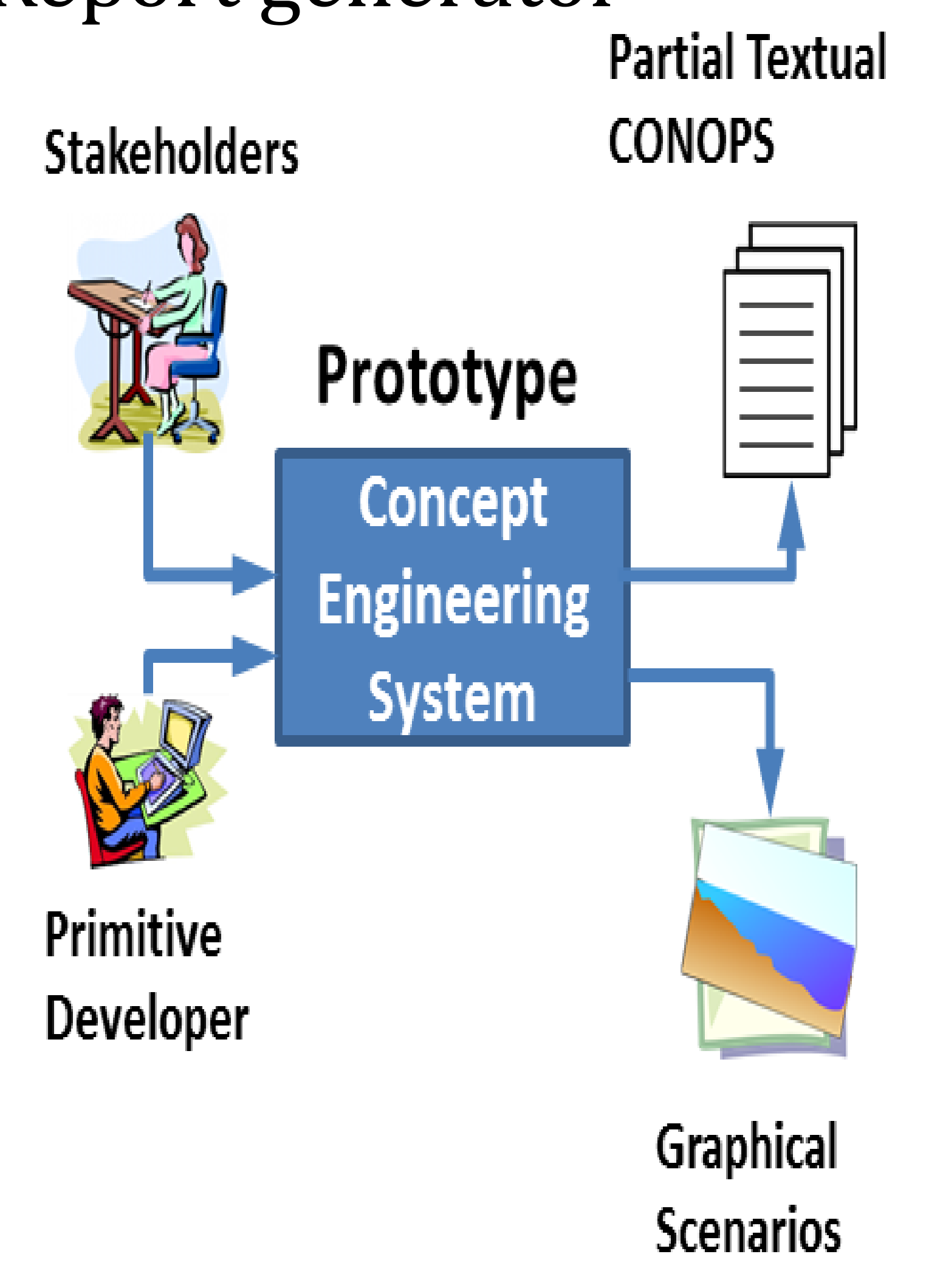
A significant amount of research has been accomplished, and technology exists – but it needs to be reconstituted to enable CONCEPT ENGINEERING

What is Needed

Proof of concept prototype to demonstrate the integration of research and technology to graphically create a CONOPS which is both graphical and textual

Some Top Level Requirements

- Graphical storytelling to build scenarios
- Execution engine
- Reusable objects and actions in pre-programmed libraries
- Real-time, viewable, graphical and textual results, to include multiple dimensions of info transmission, such as voice, video, dynamics, etc.
- Rapidly iterative environment enabling trade-off analysis
- Report generator



This work is consistent with findings in the Rapid Capability Fielding "Toolbox" Study



For more information:
Dr. Robert Cloutier
robert.cloutier@steve ns.edu
856-470-0458