CONCEPT ENGINEERING
AGILE
DEVELOPMENT OF A GRAPHICAL CONOPS

Today

Current Technologies

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

Graphical Programming

Rapid Virtual Environment Generation

Reactive 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.

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.

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This work is consistent with findings in the Rapid Capability Fielding “Toolbox” Study.