Army Force Generation (ARFORGEN)

Vertical	Manufacturing	Pharmaceutical	Healthcare	Portfolio	Logistics	Financial	Government	Business

Genre	Case Study	Project Review:	White Paper	Technology Overview

Client United States Army

Objective

Provide FORSCOM with a Continuous Process Improvement (CPI) and Six-Sigma capability by integrating requirements and processes into the ARFORGEN predictive synchronization effort.

Background

The Army Campaign Plan mandates implementation of ARFORGEN. The Commander, FORSCOM resourced the exploration of a predictive synchronization capability to address ARFORGEN in CY2004. FORSCOM executed a Proof of Principle (POP) using COTS manufacturing software. This software was provided by ProModel Corporation. The POP was successful and the FORSCOM commander allocated additional funds in CY2005 to develop a prototype ARFORGEN Synchronization Tool (AST) for evaluation. ProModel competed in an open solicitation and was awarded the contract to fully develop the AST in January 2006.

Situation

FORSCOM, Executive agent for ARFORGEN is presently funding all development.

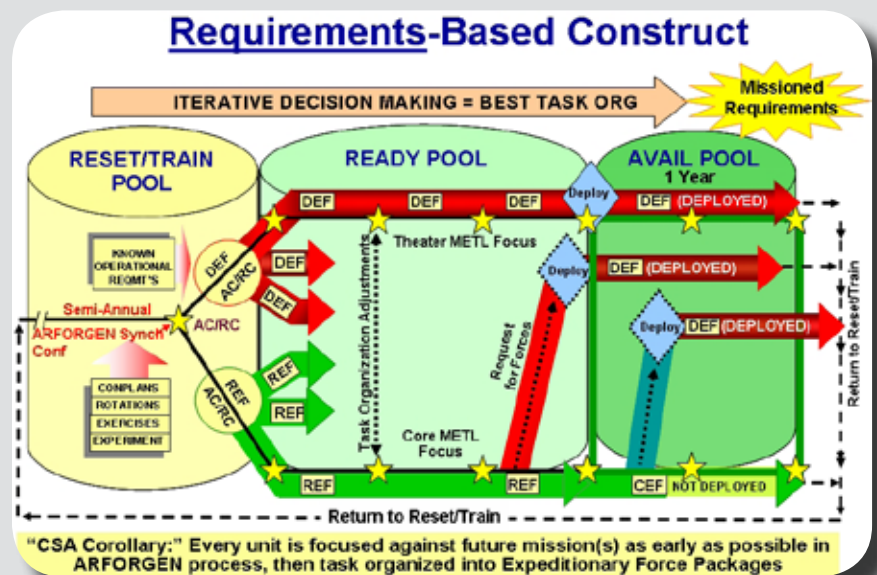The ARFORGEN synchronization effort is progressing on schedule and has the following capabilities:
- View Army forces in force pools and Expeditionary Force packages
- Depicts deployable forces from all Army components
- Compares available forces to requirements and determine shortfalls
- Aligns forces in hierarchal structures

The following capabilities are currently scheduled for delivery in October 2007:
- Integrate unit sourcing capabilities in AST
- Integration of training templates and Combat Training Center resources

The following capabilities are currently scheduled for delivery in March 2007:
- Depict the impact of all Equipping events and strategies
- Ability to schedule unit entities through various prioritized Training requirements and strategies
- A capability is developed and provided to handle and depict the life cycle Manning for officers, enlisted and warrant officers with analysis capabilities on their entity level attributes
- A capability is developed and provided to apply Resourcing criteria to predict the impact on various events
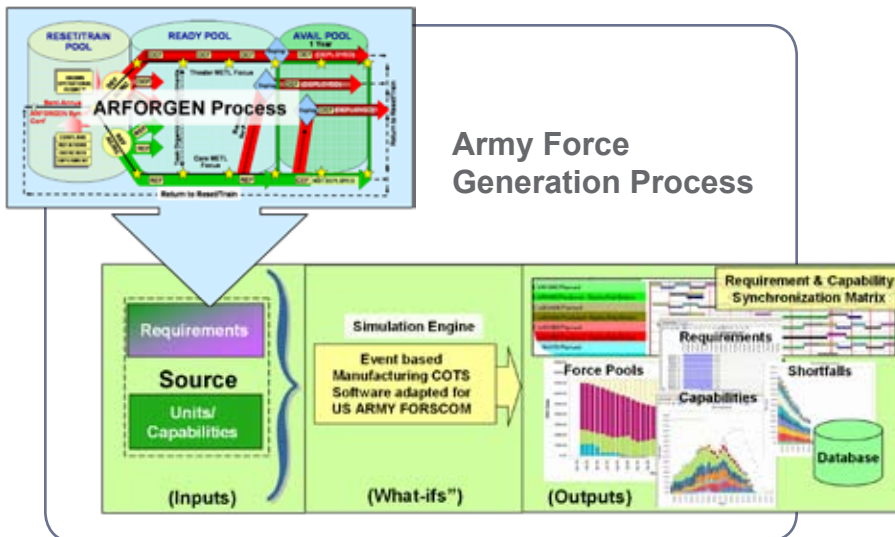

Benefits

1. Predict POM material readiness funding through visibility of mission requirements and Force Management recommendations or actions
2. Predict funding for future maintenance and sustainment requirements that are generated by combatant commander mission requirements
3. Synchronize maintenance, sustainment, and recapitalization efforts within all components
4. Provide real-time visibility of Combat Support and Combat Service Support units and assist in developing sourcing recommendations and solutions
5. Synchronization distribution of new or mission essential equipment to prioritized units
6. Provide "What-if" analysis within a transforming environment that can validate or deny Course of Action analysis and optimize processes by minimizing costs or maximizing system or unit availability
7. Evaluate and execute Lean and Six-Sigma CPI initiatives

ProModel serves the United States Federal Government and Department of Defense (DoD) by providing innovative and adaptable Commercial Off The Shelf (COTS) decision support services by using reusable or customer specific advanced simulations and innovative technologies through our Visualize, Analyze and Optimize (VAO) methodology. The powerful simulation tools are capable of replicating complex environments with various interdependencies and variabilities. These tools help commands synchronize operational needs, mitigate risk, and optimize resources.

ProModel provides tailored processes and solutions through a variety of user specific mechanisms including process identification, value stream mapping, Lean, and Six Sigma implementation. The rapid development of "what-if" scenarios empowers the client with predictive analysis solutions so that they can effect cultural changes in a transforming system. ProModel enables change champions to understand, quantify and minimize the risk associated with change.

ProModel has extensive experience in applying industry solutions to required military metrics including mission accomplishment, readiness, and process integration through stovepipe reduction. These capabilities enable staffs to develop Courses of Action for leaders so that they can make informed decisions.

ProModel is a small business that has provided value-added business solutions to 75% of the Fortune 500 and all three branches of the DoD.

Army Force Generation Process
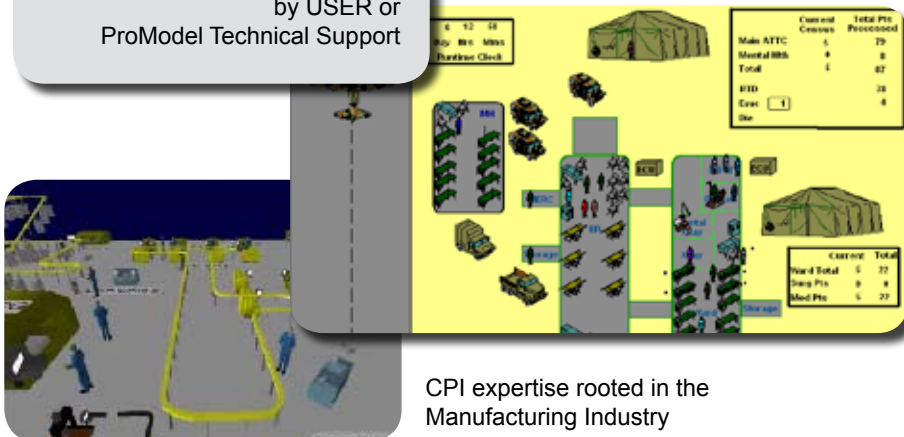
Lean Six.Sigma

Product improvement analysis to benefit soldiers

Images courtesy army.mil

Example of Simulation Developed by USER or ProModel Technical Support

Partnered with academia

Images courtesy navy.mil

CPI expertise rooted in the Manufacturing Industry

System Improvement Analysis

"Most people spend more time and energy going around problems than in trying to solve them."

— Henry Ford