

## U.S. Navy Strategic Systems Programs: A Case Study

### OUTCOME

As a result of the business modeling performed for the organization, the Navy stopped the implementation of Navy ERP in this organization when they saw the significant gaps in capability. In addition, the Navy is now aware of the lack of a well-disciplined program management module within their Navy ERP program. The office is evaluating the program modeled and deciding whether to adopt this business model as the enterprise-wide Navy model.

### INTRODUCTION

U. S. Navy Strategic Systems Programs (SSP) is a highly specialized workforce comprising military and civilian, scientific, engineering, and professional personnel that work closely with private contractors and consultants.

SSP directs the development, production, logistic support, and sustaining engineering effort of the Department of the Navy's Strategic Weapons Systems. This includes direction of research, development, manufacturing, test, evaluation, and operational support of the TRIDENT Fleet Ballistic Missile. SSP also plans and directs the development of training systems and equipment, including the training of fleet personnel in the operations of the systems; provides facilities; and has responsibility for fulfilling the terms of the U.S./UK Polaris Sales Agreement.

### PROJECT DESCRIPTION

SSP's organizational budget management, which includes formulation, review, approval, and monitoring across eight separate appropriations, is a highly complex activity that involves not only SSP, but also the Navy, the Office of the Secretary of Defense/Office of Management and Budget (OSD/OMB), and the United States Congress. The organization must plan multiple years in advance to the Federal budget. They must ensure that their contractors are funded in a timely manner; they must ensure that funds are planned, encumbered, committed, obligated, expended, and monitored through the budget cycle; and they must plan for Continuing Resolutions, as necessary. These efforts must be accomplished in accordance with the Program Objective Memorandum (POM) as issued by the Department of Defense (DOD).

Since the mid-1980's, SSP has relied upon the Resources Management Information System (REMIS) as their computerized financial management system for allocations, planning, and budget execution (performance vs. plan). In the late 90's, SSP commenced a REMIS replacement project due to limited functionality and diminishing support capabilities, and therefore, hired a contractor to develop a replacement system. SSP spent over \$3.5M and was unable to implement a replacement system due to the Vendor underestimating the complexity of the project.

In 2005, SSP learned of xBML and subsequently used this methodology to successfully model their procurement process. Based on this success, and given the previous failed effort to develop a new resource management system, they engaged BusinessGenetics to capture their budget planning and approval process to provide them with a single, clear view on the process required to authorize budgets, and subsequently model the future state of REMIS to enable SSP to improve their process and establish requirements for software modernization.

Further, due to the impending retirement of many SSP employees, knowledge capture, management, and transfer was considered a crucial capability that needed to be inherent in the new resource management system.

### **PROJECT SCOPE AND APPROACH**

BusinessGenetics uses Business Co-Formulation (BCF) to gain an explicit understanding of complex business issues. Business Co-Formulation is the combination of Document Co-Formulation (DCF) and Facilitated Co-Formulation (FCF), which results in the development of a set of models that capture all relevant dimensions (What, Who, Which, Where and When) of the subject process. DCF involves the initial model development through direct translation of client provided documentation. FCF is then completed to validate, correct, and further develop these models. FCF consists of facilitated work sessions with the organization's Subject Matter Experts (SMEs) and live capture and model update by the BusinessGenetics solutions enablers. The BusinessGenetics methodology is leveraged through the W5 Editor (proprietary software developed by BusinessGenetics' sister company, xBML Innovations). The xBML models provide a clear and synoptic view of the business process and enable exploration into all dimensions of the process.

All BusinessGenetics projects have, at their core, a need for process understanding and improvement. Once captured, the process can then be analyzed and improved. From the improved future state process, system requirements can be developed. These system requirements are very clear and aid the client in determining the viability of custom software development or the purchase of a Commercial Off-the-Shelf (COTS) System. If a COTS strategy is selected, the COTS requirements can also be developed to take to the marketplace. From the same improved business model, the options for reuse are numerous and include the development of policy and procedure, compliance with legislated mandates, and the development of training materials for the improved process.

The purpose of this specific project was to develop information technology (IT) requirements for a resource management system to replace REMIS. A secondary, but important, purpose was to capture the knowledge of retiring workers. As is true in many organizations, nearly the entire senior staff in the Resource Management Department is eligible to retire in the next few years. In the DCF phase, BusinessGenetics consultants reviewed over 800 pages of previously-developed software requirements for the new

system. From this documentation, a draft set of models was developed and was presented to the SMEs – the budgeting and accounting personnel in the organization. During the FCF phase, the models were rationalized by the SMEs to develop an agreed-upon model for their current state process.

## **PROJECT RESULTS**

During the project, the Navy Enterprise Resource Planning (ERP) office informed SSP that their target future state system would be an SAP implementation scheduled to be delivered across the Navy in its entirety. As a result, the current state models were then used to perform a gap analysis between the expected functionality that would be provided by the SAP implementation and the SSP business support requirements.

The gap analysis was executed as a concerted effort with participation from BusinessGenetics, Gartner Consulting, and BearingPoint (the Navy ERP integrator). The analysis clearly identified and quantified the gaps between the SSP business process requirements and the proposed ERP solution. The analysis identified the three critical business areas with the following significant gaps:

Program Management - SSP identified 32 gaps between Navy ERP current solution functionality and SSP business processes/legacy system capabilities

UK Polaris Sales Agreement - SSP identified 9 gaps between Navy ERP current solution functionality and Polaris Treaty mandated performance requirements

Pre-Contracting – SSP identified 7 gaps between Navy ERP current solution functionality which encompass the entire SSP Pre-Contracting capability

As a result, the Navy has delayed SSP's migration to SAP for at least 3 years to analyze and scope changes to Navy ERP.

## **CONCLUSION**

The models that BusinessGenetics developed through this effort were clear and concise and enabled SSP to not only make a solid decision regarding the planned SAP implementation, but also support this decision with specific information and corroborative documentation. Consultants from the Navy ERP Integration team commented that no other division of the Navy had such a clearly documented current state process. Although SSP has not yet developed training material requirements from the models, the potential for this type of reuse is significant. Once the dimensional aspects of a business process have been captured, that information can be used in a wide variety of areas, including, but not limited to, training, work load management and knowledge management.