

# The Student Exchange Visitor Information System Program Office – *Government Business Case Analysis*

Government IT Program Managers must develop business case analysis to justify their projects. For every major change in a project, another business case analysis must be performed, reviewed, audited, and approved. This process, while difficult and time consuming, assures the taxpayer's dollars are spent appropriately. The Student Exchange Visitor Information System Program Office found a way to perform the Business Case Analysis efficiently, effectively, and with confidence.

## **The Challenge**

Homeland Security is incredibly important. It is also very visible with many overseer organizations watching every dollar spent and challenging every decision made.

All government programs must produce a Business Case Analysis (BCA) to justify the money being spent. Government Program Managers are expected to do a complete BCA at the beginning of their program. Then they must update it every year and at every major change in the program.

Producing a quality BCA is a “best practice” as defined by the Performance Management Institute and the Government Accountability Office. Each Program Manager has to assure that the BCA is performed carefully and accurately. The BCA establishes the baseline that the project will be measured against effectively becoming a benchmark for the Program Manager's performance.

Each Program Manager must determine how much time and effort to spend developing a quality BCA while still balancing the needs of the program.

The Student Exchange Visitor Information System (SEVIS) is a program critical to our homeland security. To perform this critical BCA function, the SEVIS program office came to PRICE Systems.

## **The SEVIS Program**

The U.S. Department of Homeland Security's (DHS), Immigration and Customs Enforcement (ICE) agency operates and maintains the Student and Exchange Visitor Program (SEVP). SEVP provides information to various government agencies on non-immigrant student and exchange visitors participating in authorized scientific, educational and cultural exchanges across America.

As a result of the events of September 11, 2001, SEVP developed the Student and Exchange Visitor Information System (SEVIS) to track foreign exchange visitors wishing to study in and experience another culture.

SEVIS I began its journey through the bureaucratic process in 1999; and was expedited to completion as a product of the post 9/11 global terrorism environment. Developed in late 2002, SEVIS I became fully operational in February of 2003, and is one of the early successes of the newly assembled DHS.

### The SEVIS Integrated Product Teams

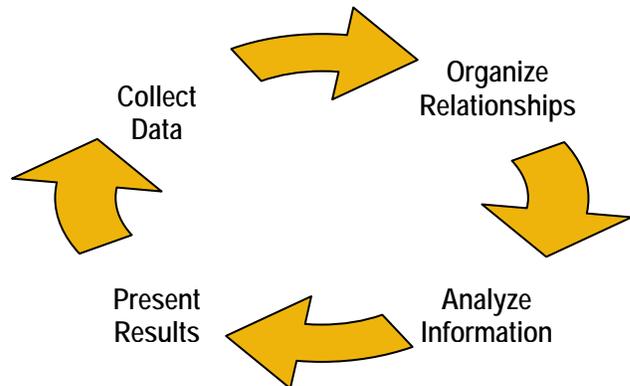
The SEVIS Program Office was challenged to assess the current SEVIS program (SEVIS I) and determine what was needed to improve it to meet the ever-increasing demands of the homeland security mission. This new system, SEVIS II, would provide enhanced capability for the next generation of student visitors. To successfully develop the roadmap for the SEVIS II program, the program office implemented the SEVIS Integrated Product Team (SEVIS IPT).

The SEVIS IPT was composed of contractors and federal program management personnel who defined the alternatives ICE was considering in lieu of new functionality required for a United States student tracking system. These alternatives are as follows:

1. Develop a completely new SEVIS from the ground up. This would be a mixed life cycle development effort; SEVIS I would remain online and operational until SEVIS II is tested and successfully fielded.
2. Have SEVIS II subsumed into the larger DHS initiative: The CIS Transformation Project. This would involve Project Management level changes and challenge the ability of SEVIS to be effective.
3. Upgrade SEVIS I and rebuild SEVIS I with new functionality needed as a next generation system.
4. Steady state, do nothing. This is a baseline comparison case, used largely for quantifying benefits

### The Process

The SEVIS IPT used the PRICE Systems cost estimation methodology which is an iterative methodology – simplified in Figure 1.



*Figure 1: SEVIS II used an iterative methodology*

This methodology assured two things:

1. The SEVIS program would be in compliance with the GAO Cost Methodology shown in Figure 2.
2. All members of the SEVIS IPT would have input into the full process.

The purpose and scope were identified in the initial phase, and the Work Breakdown Structure was developed as part of the Cost Baseline. Data collection focused on three elements:

1. High level system requirements which provided the data source for a function point analysis of the proposed system.
2. SEVIS Operations & Maintenance (O&M) costs provided by the support contractor and ICE.
3. Discussions with key individuals in the Office of the Chief Information Officer and the SEVP. SEVIS I O&M costs were based heavily upon existing O&M historical costs.

PRICE Systems, working with the SEVIS IPT, used a “Validate and Verify” approach illustrated in step 4 of Figure 1. Software development costs were modeled with PRICE Systems’ TruePlanning® framework using the TruePlanning for Software model.

## The Results

After the extensive analysis, the SEVIS IPT produced a Business Case Analysis that supported the development of a new, improved SEVIS II (alternative 1). The BCA supported this finding and provided a method for evaluation by oversight agencies. The ICE management was so impressed with the results that they made this process the recommended process for all future Business Case Analyses performed.

ICE first and foremost seeks to protect American's safety while allowing students and people from other countries an opportunity to visit the United States and become more informed about American life. PRICE Systems is dedicated to the service it provides government agencies; both from a technical and policy standpoint. The approval of a system such as SEVIS II reflects that dedication.

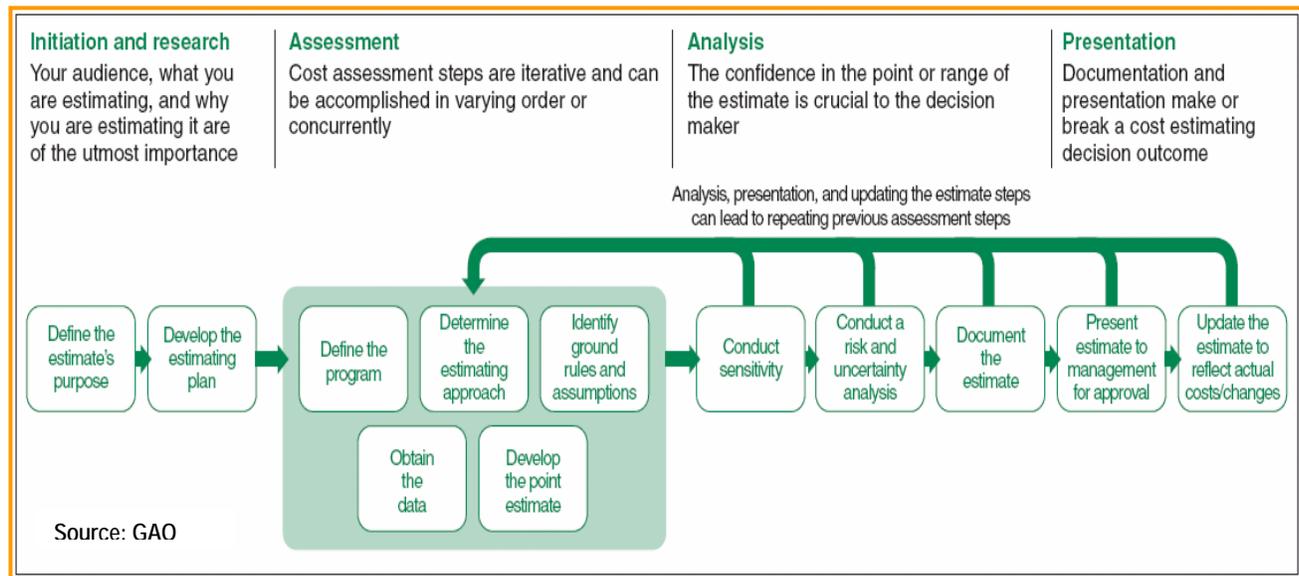


Figure 2: GAO methodology diagram 12 step process

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