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ROI CASE STUDY COGNOS UNITED STATES COAST GUARD

THE BOTTOM LINE

By implementing Cognos, the Coast Guard has improved visibility into its supply chain, enabled its air station personnel to access key data and generate their own reports, and significantly reduced the costs of its aircraft parts requisition process.

ROI: 102%

Payback: 8 months

THE COMPANY

The United States Coast Guard is a military, maritime service and one of the nation's five armed services. Its mission is to protect the public, the environment, and U.S. economic interests – in the nation's ports and waterways, along the coast, on international waters, or in any maritime region as required to support national security. The aviation section of the U.S. Coast Guard, headquartered in Washington D.C., was founded in 1920, and currently includes 26 air stations in the continental U.S., Alaska, Hawaii, and Puerto Rico.

THE CHALLENGE

The Coast Guard aviation unit maintains a fleet of 200 aircraft. Flight operations information including flight itineraries, aircraft status, maintenance, logistics, and supplier information were stored in two legacy systems, each with its own database. This presented challenges to the aviation unit's 6000 users as the systems were not integrated, making it necessary to enter data twice, and also making it challenging to access information on aircraft parts. Lack of real-time information resulted in redundant purchases that led to excess inventory.

Users also had difficulty with the system interface and turned to the IT staff to prepare custom reports. Recognizing the need for improved information access and reporting capabilities, the Coast Guard conducted a search for a business intelligence system.

THE STRATEGY

In 2000, the IT staff of the Coast Guard began the first stage of the project by consolidating its flight operations data into a single system, called the Aviation Logistics Management Information System (ALMIS). The project included the evaluation of business intelligence products and one key requirement was a Web-based reporting tool that had a zero footprint on the desktop. After reviewing a

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number of business intelligence solutions, the IT team conducted a pilot using existing legacy reports to test technology from Business Objects.

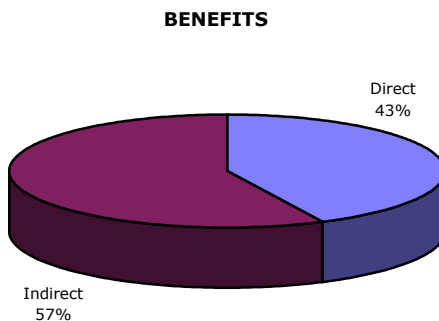
Near the end of the pilot project, the headquarters of the Coast Guard purchased a license of the Cognos business intelligence suite for evaluation. After further evaluation by the aviation unit, Cognos Series 6 with the Cognos Upfront portal was selected for the ALMIS project. Soon after the initial implementation began, Cognos released a new version of the suite. The aviation unit took a look at the new technology and found that Cognos Series 7 provided a significant advance over the previous release, and chose it as the business intelligence front-end for ALMIS.

An internal IT team of 5 people, along with a Cognos consultant, worked on the Series 7 deployment. The team spent two weeks mapping out the technical infrastructure for the 26 air stations and planned the implementation. The deployment was rolled out to individual business areas, using a 3-month timeframe to work with the functional analysts in each area on planning, and then conducted 2-hour training sessions with all users prior to going live on the system. The rollout was completed to all 6000 users in 2003.

KEY BENEFIT AREAS

By implementing Cognos, the Coast Guard has improved the visibility into its supply chain, enabled its air station personnel to access key data and generate their own reports, and significantly reduced the costs of its aircraft parts requisition process. Key benefits from the solution include:

- Reduced system downtime. Combining two legacy systems into a single integrated reporting system has increased reliability, eliminating two unplanned outages a month for an annual cost savings of \$5.2 million.
- Reduced inventory. Improved control of the purchasing process resulted in a reduction of warehouse inventory levels, resulting in a one-time benefit of \$3.5 million.



TOTAL: \$28M

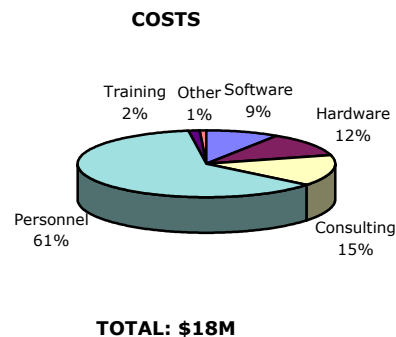
- Cost avoidance. With the ability for all air station employees to access part order information, the Coast Guard is realizing savings of \$500,000 annually by avoiding requisition reorder costs.
- Improved parts availability. The aviation staff now has better data and improved tools to produce accurate forecasts for aircraft parts. Efficiencies

gained from improved cost management are delivering \$2.4 million in annual saving.

- Improved flight log entries. Productivity gains in automating a paper-based flight log process enables information to be entered into and retrieved from the system faster.

KEY COST AREAS

Key cost areas for the deployment included personnel, consulting, hardware,



software, and training. Personnel costs for the time spent on the initial deployment along with ongoing maintenance of the system was the largest cost category at 61 percent. Consulting costs were 15 percent, hardware costs came in at 12 percent, while the software costs for Cognos licenses and ongoing maintenance were 9 percent. Costs for training business users, and other miscellaneous costs required for the daily operations of the system rounded out the total project expenditures.

LESSONS LEARNED

One of the success factors the Coast Guard attributes to the deployment was the inclusion of an onsite Cognos developer. Having the consultant there from beginning to end enabled the IT team to benefit from having an in-house expert to transfer Cognos product knowledge. At the same time, the consultant benefited from time spent learning the technology infrastructure and the business practices of the aviation unit.

CALCULATING THE ROI

Nucleus calculated the costs of software, hardware, consulting, personnel, training, and other investments over a 3-year period to quantify the U.S. Coast Guard's total investment in Cognos.

Key savings quantified included the reduction in requisition costs, savings from improved parts availability, reduced inventory, reduced system downtime, and productivity gains from improving the flight log entries into an automated system.

DETAILED FINANCIAL ANALYSIS

United States Coast Guard

SUMMARY

Project:	Cognos
Annual return on investment (ROI)	102%
Payback period (years)	0.68
Net present value (NPV)	3,600,892
Average yearly cost of ownership	6,041,694

ANNUAL BENEFITS	Pre-start	Year 1	Year 2	Year 3
Direct	0	6,439,008	2,937,500	2,937,500
Indirect	0	5,460,300	5,460,300	5,460,300
Total Benefits Per Period	0	11,899,308	8,397,800	8,397,800

DEPRECIATED ASSETS	Pre-start	Year 1	Year 2	Year 3
Software	0	0	0	0
Hardware	0	0	0	0
Total Per Period	0	0	0	0

DEPRECIATION SCHEDULE	Pre-start	Year 1	Year 2	Year 3
Software	0	0	0	0
Hardware	0	0	0	0
Total Per Period	0	0	0	0

EXPENSED COSTS	Pre-start	Year 1	Year 2	Year 3
Software	462,000	396,000	396,000	396,000
Hardware	592,911	508,209	508,209	508,209
Consulting	684,282	684,282	684,282	684,282
Personnel	3,276,982	2,642,943	2,642,943	2,642,943
Training	45,700	91,400	91,400	45,700
Other	35,101	35,101	35,101	35,101
Total Per Period	5,096,976	4,357,935	4,357,935	4,312,235

FINANCIAL ANALYSIS	Year 1	Year 2	Year 3
Net cash flow before taxes	7,541,373	4,039,865	4,085,565
Net cash flow after taxes	3,770,687	2,019,933	2,042,783
Annual ROI - direct and indirect benefits			102%
Net cash flow after taxes (direct only)	1,040,537	(710,218)	(687,368)
Annual ROI - direct benefits only			-5%
Payback (years)			0.68
Average annual cost of ownership			6,041,694
3-year cumulative ROI			141%
3-year IRR			106%

FINANCIAL ASSUMPTIONS

All government taxes	50%
Discount rate	15%