

Contract Management System

Office of the State Comptroller New York

Contact Person: Joan M. Sullivan
jsullivan@osc.state.ny.us

1. Provide a brief description of the project, including project objectives.

The Office of the State Comptroller (OSC) was engaged in an exciting agency-wide technology initiative that dramatically changes and streamlines its statutorily mandated contract review and approval process. Incorporating a technology solution, OSC's Bureau of Contracts has replaced a multitude of paper-based processes with a comprehensive Contract Management System (CMS) that contains the automated tools necessary to proactively manage an average annual volume of more than 14,000 new contracts, 30,000 contract amendments and 1,200 purchase orders, with a value exceeding an average of \$10.9 billion per year. The CMS interfaces with the Central Accounting System (CAS) eliminating duplicative manual entry and ensuring accurate data transfer. The CMS, which was launched in April 2003, serves as an innovative public sector model for processing efficiency, performance and risk management. What makes the CMS so uniquely successful is that it was created solely by in-house technical experts from its Bureau of Information Technology Services, Bureau of Accounting Systems, the entire 60-person staff of the Bureau of Contracts and through the support and assistance of OSC's Project Management Office.

The result is a system that is so robust, dynamic and well prepared for future e-government initiatives, OSC is seeking to copyright portions of it to protect the State's intellectual property. In addition, it is anticipated that many of the CMS application components lend themselves easily to transference to other contract operations within other State agencies, in particular the workflow and interactive auditing programming sections of the system.

2. What improvement(s), new functionality, or business application did the project address?

An interface with the Central Accounting System (CAS) that accepts the regular download of contract demographic information into the CMS and the upload of changed information, along with contract or rejection data back to the CAS. Although download programming has been completed and used before, this was the first time that OSC application developers had programmed an upload of audit data to occur from an application to CAS. Several complex programs were needed to allow the edit and validation of data prior to the upload of that information into CAS. Developers spent nearly seven months creating and testing the programming interface. A connection to CAS through a DB2 product was developed that displays CAS Contract Master File information in CMS allowing staff in the Bureau of Contracts to view agency encumbrance information in "real time". Access to this CAS information provides staff with the opportunity to ensure that agencies have set aside the proper dollar amount to fulfill contractual obligations.

The contract review process in the Bureau of Contracts was entirely a paper-based operation; staff used any one of 37 different paper checklists, forms and manuals to assist them in performing a contract review. The CMS created an automated contract management system that improved the efficiency and effectiveness of contract reviews, provided extensive reporting capability and outstanding customer service.

3. Describe the schedule of the project's design, development, and implementation.

The project took sixteen months. During November and December 2001, an initial business case was developed and upper level management approval was obtained. A CMS Project Team was assembled in December 2001, comprised of a variety of technical experts throughout OSC. The Team reviewed and segmented the system requirements and then developed comprehensive design specifications. By June 2002, design and development had begun on various components and by the first week of March, 2003 system development was complete. User acceptance was achieved by the last week of March and system delivery occurred on April 28, 2003.

4. What did the project accomplish? Who are the current and potential beneficiaries? Were other public sector entities, like component units or local governmental entities, or private sector entities able to participate and, if so, how did this add value to the development and outcome of the project?

Project accomplishments:

- A robust workflow and timekeeping component that allows the assignment and tracking of all contracts received in the Bureau of Contracts.
- An extensive data-capturing component, allowing the tracking of contract terms, budgets, payment information and auditor comments.
- An interactive auditing component that is programmed to allow the dynamic creation of interactive audits questions that are specific to the 106 contract types currently reviewed by staff. This part of the CMS application is so unique that OSC is seeking to copyright it.
- A Screening Database which reviewers and those involved in post-audit investigations can search against to discover issue pertaining to a particular contract or award type.
- Routine, customized and ad-hoc report and query capabilities that drive and support executive decision making and effective performance measurement system, including some information that was never available before.
- "Flags" built in to identify general areas of concern to the contract reviewer, or for post-audit purposes.
- An On-Line Help function that serves as a training tool for new or reassigned auditors. This on-line function includes a glossary of contracting terms and an indexed user's manual designed for ease of use and day-to-day reference.
- Links to Pertinent Websites and Databases that assist auditors in completing a contract review.

Current beneficiaries are OSC Bureau of Contracts staff (primary users), other Division audit staff and OSC policy makers and executive staff. Potential users include state agency procurement staff who can get current status relating to the review of their contracts. No other public sector entities were involved in this project.

5. What were the levels of personnel on the project team, and how did participation on the team enhance the skills of those personnel?

Over 20 technical staff from OSC's Bureaus of Information Technology Services and Accounting Systems worked on the project. Innovative solutions were devised like uploading information to CAS and real-time access to the CAS Contract Master File screen. The project manager was from the Bureau of Contracts. In addition, every member of the Bureau of Contracts' 60 person staff participated in various system testing and development activities during the project. Contracts staff knowledge of the system development process and the CMS were enhanced by their participation in the project.

6. List the funding source(s) (indicating those that would be innovative) costs incurred, benefits derived, and return on investment (factoring in hard and soft dollar savings).

The project had a very limited budget. After carefully considering the commercial off-the-shelf (COTS) alternatives and extensively reviewing the system requirements with OSC's Bureau of Information

Technology Services (BITS) and executive management, it was decided that OSC had the necessary in-house talent and technical expertise to meet the system specifications by the expected timeframe. Although clearly against the current trend, OSC felt confident that an excellent CMS application could be created using only internal resources.

The CMS has saved 9 FTEs of staff time that was required with the previous systems and processes:

- The integration of the CAS component into the CMS resulted in recapturing the substantial time previously lost due to data entry and the use of previous antiquated systems. This resulted in eliminating 1,571 days or 6 FTEs.
- CMS has an innovation connection with the CAS Contract Master screen allowing Bureau staff to view agency encumbrance information in “real time”. Access to this screen directly from the application is instantaneous on CMS. Since it previously took an average of five minutes to open up the CAS application each time a contract was reviewed, annual savings are 536 days, or 2.1 FTEs.
- The robust workflow and timekeeping component in CMS allows the assignment and tracking of all contracts received in the Bureau of Contracts. This workflow component has saved an estimated 128 days, or 0.5 FTEs, per fiscal year in researching location and completion status information of contracts.
- Links in CMS to Pertinent Websites and Databases assist auditors in completing a contract review. An average of one minute of time is saved per auditor for every transaction reviewed since staff can now open up any one or more of 30 links directly from the CMS application instead of being required to close out of the application and conduct an internet search for the desired site. This translates to 107 days, or 0.4 FTEs, saved per year for all transactions reviewed and approved.

7. What measurements have been established to monitor the continued success and benefits of the project?

Various standard reports in CMS continually monitor contract-processing timeframes. Existing performance measures developed in support of the Bureau of Contracts’ Strategic Plan show that contract processing time has decreased since CMS was implemented. This decrease has occurred during a time of staff shortages resulting from staff retirements and a hiring freeze due to the current fiscal environment.

8. How replicable in other areas of the public sector or other states do you consider this project to be? In discussing replicability, please address the following questions. What obstacles or problems might other states encounter in trying to implement this or a similar project? Specifically, how was this project communicated statewide? Were there cultural business barriers to overcome? If yes, please elaborate. Was training involved from the central project team? Were consultants involved in the project? If yes, what was their role?

The interactive auditing component that is programmed to allow the dynamic creation of interactive audits questions that are specific to many different contract types could be shared with other states after the copyright is obtained. The Bureau of Contracts engaged in a variety of business process analysis and redesign activities to identify and eliminate non-value added or duplicate tasks for over a year before the project was initiated. Other states should probably undergo a similar effort. This project was communicated statewide through articles in OSC’s statewide fiscal newsletter - Solutions. It was also communicated at various regional and annual training sessions provided to state agency staff by Bureau staff. Staff had to adjust from a manual to an automated system. Excellent training provided BITS staff on the project team helped staff make this transition. No consultants were used on this project.