Insider's Guide to Using Information in Government

Case

Listen before you leap:

revitalizing the New York State central accounting system

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How do you go about revitalizing an 18 year-old system that is the financial backbone of one of the world's largest governments? You start by asking the people who depend on it some serious questions about their needs. You listen carefully to the answers--and act accordingly.

Introduction

New York State's Central Accounting System (CAS) is almost 20 years old. The system marked a major step forward for the State's financial management capabilities when it was implemented in 1982. It was a state-of-the-art, GAAP- (Generally Accepted Accounting Principles) compliant system designed to simplify the management of public funds. The CAS also enhanced budget accountability: it allowed for budgeting and appropriation of all funds, including federal funds. Operated and maintained by the Office of the State Comptroller (OSC), the CAS has served the State well in the four areas of accounting, reporting, planning, and controlling for nearly two decades.

Solid maintenance and enhancement of the system over time has allowed the CAS to keep pace with changes in the key areas of pre-audit and payment processing, and current users attest to the reliability and usability of functions the CAS was designed to perform. However, there is an increasing gap between what the CAS can do and the current accounting and financial management needs of State agencies. OSC leaders recognize that the 18 year-old mainframe-based CAS is insufficient to support agency accounting and financial management needs. OSC has been hearing anecdotally from state agencies that they increasingly want:

- easy access to CAS information to support agency-specific financial management
- modifications in the processes by which they share information with the CAS,

- more influence over the functionality of the CAS.

Within OSC itself there is growing concern about:

- investments being made in individual agency-based systems designed to address the gap between agency needs and CAS functionality,
- the ability of the CAS to support OSC's own operations in the future,
- dramatic changes in technology that offer new options for an effective central accounting system.

Despite its limitations, the CAS supports the monitoring and controlling of State agency spending; issues local assistance, vendor, and other payments; and processes and reports the State's financial transactions on cash, accrual and encumbrance bases. This mission-critical, statewide system issues 15,000 payments daily, tracks 80,000 State contracts, and processes 17.5 million transactions annually. Clearly, the CAS is still the workhorse and backbone of New York State's financial structure.

The original design of CAS did not include techniques and technologies to support agency access to and manipulation of detail data. Over time, however, agencies have come under pressure to provide cost-based performance measures which depend on these techniques. They have taken a variety of approaches in responding to this pressure ranging from basic data extraction and download to a desktop application, to procurement of their own financial management systems. Several agencies have become "customers" of the financial management system at the Department of Corrections (DOCS). The mainframe system maintained by DOCS, which has been made available to the agencies (at a slight cost), serves many FMS needs. Overall, many agencies have become much more knowledgeable about and comfortable with the techniques and technologies of data manipulation.

The evolution in the use of financial data to support decision making and planning has consequently played out in a very ad hoc, non-integrated way. Most agencies have made independent decisions about how to address the gap between the functionality of the CAS and their needs for financial data. These decisions have been driven by two main concerns with the current system—lack of easy access to information and outdated, labor-intensive work processes.

OSC's leaders recognized the enormity of the effort that would be required to address concerns about the CAS, but they also understood the risk of rushing too quickly to a

conclusion about what to do. OSC's own main business focus is the administrative "enterprise" of state government. The staff responsible for the central accounting system are very experienced and well aware of the central and pervasive role that CAS plays in state and local government operations. Having readied the CAS for Y2K and assured themselves of its continued reliability, they were ready to pursue a course of action toward a renewed system. Their first critical step was a decision to focus first on stakeholders' current and future needs.

CAS stakeholders rely on the system to conduct the financial business of their organizations. They include state agencies using the CAS for budgetary controls, accounting, and reporting; vendors and municipalities requiring payments and payment information; and the Legislature, Division of Budget, and financial community relying on cash and accrual accounting information to make budget decisions and assess the state's financial health.

To guide this effort, OSC developed a partnership with the Center for Technology in Government (CTG) under the Center's Using Information in Government Program. The Center contributed expertise in stakeholder identification, needs analysis processes, and data analysis, while OSC provided the expertise in the CAS and its use within New York State. OSC initiated the stakeholder needs analysis to answer the following questions:

- How do users and other stakeholders assess the capabilities of the current CAS system?
- How can the growing demands for flexible, extended financial management capabilities best be addressed?
- To what extent are missing financial management capabilities related to emerging deficiencies in the existing CAS data structures?
- To what extent do existing CAS processes preclude the implementation of desired and necessary financial management activities?
- What is the scope of, and what are the types of Financial Management Systems (FMSs) in use by and available to New York State?
- What are the characteristics of a system that can address the current and future accounting and financial management needs of State agencies?
- What are the requirements, features, and benefits of this system?

A stakeholder is not a stakeholder, is not a …

OSC-CTG team initiated the stakeholder needs analysis in two steps, asking first "Who are the stakeholders?" and then "What do they need and want from the Central Accounting System?"

The list of CAS stakeholders turned out to be quite long. All of New York's 90+ state agencies use the CAS, and many, including OSC itself, depend heavily on it for daily operations. The billions of dollars that flow to all local governments through the State flow through the CAS. Private sector organizations interact with CAS usually in the form of vendor payments. In addition, some of the information generated from the CAS is used to build the financial statements used by the financial community. The state Legislature casts a watchful eye on the system and uses CAS data to help formulate budget proposals and decisions. The state Division of the Budget (DOB) has a vital interest in CAS as part of the budget planning and execution process for more than $70 billion each year. And the Office for Technology (OFT), the state's central IT planning and management agency, views CAS as one of the state's most important interagency information systems.

When the joint project team compiled the stakeholder list, two things became clear:

- stakeholders were not uniform in their interests or influence
- dealing directly with well over 100 organizations and thousands of individuals would be impractical

The team dealt with these conclusions by identifying a small group of "strategic partners" and selecting 40 organizations to represent other users of the CAS.

Engaging strategic partners

In the OSC project, the first group of very influential stakeholders was named "strategic partners." Strategic partners have the authority to exert a powerful, make-or-break influence on the project, as well as uniquely important needs to be addressed by the system. The group comprised OSC's internal leadership, DOB, OFT and both houses of the State legislature. Although OSC has the statutory authority to make changes in the system on its own, the agency's executives chose to open the process of defining the problem and designing the necessary steps for solving it. The project leader reached out to key people in each organization to become involved in the project. The team organized a series of meetings during which each aspect and step of the project was discussed in depth before being carried out. These meetings established opportunity to influence the process as it was being devised. They also kept these key decision makers well informed of the project's goals and progress so that eventual recommendations would be viewed in the context of this ongoing discussion.

The project team elicited the needs of the other stakeholders in a series of half-day workshops. Each workshop focused on stakeholders that had some common characteristics. For example those agencies that use the Department of Corrections financial management system formed one group, those that rely entirely on CAS for financial information formed another. Altogether 201 individuals from 52 organizations attended the workshops. Each workshop followed the same agenda and information-gathering plan. Each participant was asked to answer two "complete-the-sentence" questions:

- "An accounting system designed to meet the informational and information access needs for my agency would ideally..."
- "An accounting system designed to meet the transactional needs for my agency would ideally..."

All answers were posted on the wall. The workshop facilitator then helped the participants group the answers into clusters of similar ideas, and the clusters were given appropriate topical names. Finally, the participants individually ranked the named clusters in order of importance. CTG staff analyzed the data, summarized the findings, and made recommendations to OSC for next steps.

Different data collection techniques for different kinds of data

When OSC embarked on the renewal of CAS, it soon became clear that "accounting" in a narrow sense and financial management in a broader sense cannot be separated. Numerous demands for CAS improvements were, in fact, fueled by the need for more sophisticated reporting and ad-hoc information analysis. A dozen or so state agencies had already built or purchased financial management systems to address these needs. OFT, one of OSC's strategic partners, was particularly concerned with the growing proliferation of these costly independent and incompatible FMS systems.

While the general transactional and informational needs that CAS sought to satisfy were elicited in the 13 facilitated workshops, specific details about agency experiences with financial management systems could not be uncovered in the same fashion.

This difference was reflected in two tailored data collection methods. First, semi-structured personal and phone interviews with agency FMS experts provided rich data on the rationale for investing in a financial management system, current status, capabilities, limitations, application types, and unmet needs in the systems in use. In the second part of the study, the three types of FMS users (commercial packages, in-house systems, and DOCS users) were interviewed in groups about the advantages and disadvantages of their systems.

Finding the story in the data

The 13 workshops generated more than 1,100 individual proposals for enhancement and extension of the Central Accounting System. The participants themselves grouped their proposals into clusters of similar ideas. They also gave the clusters descriptive names. Finally, the workshop participants ranked the clusters in order of importance. The data analysis then focused on the clusters and the participant-defined rankings rather than the frequencies of similar proposals.

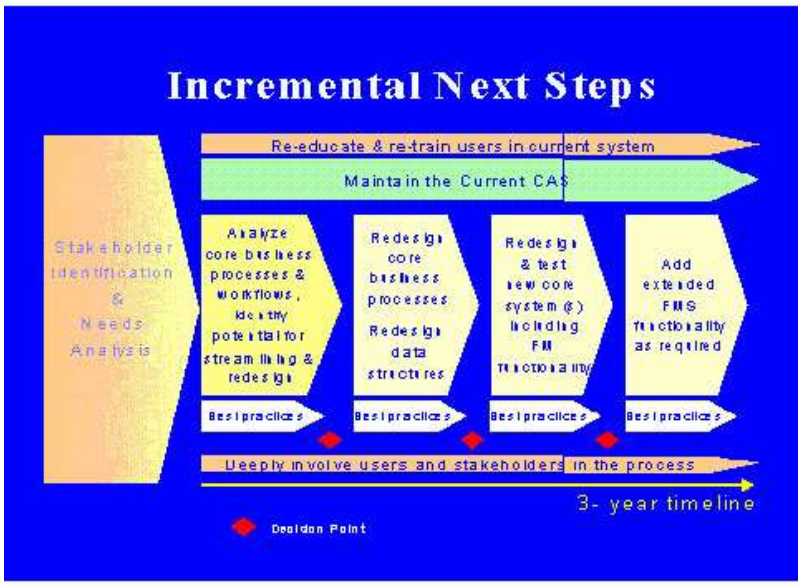
Analyzing the clusters from the workshops to identify common themes was very straightforward in some cases and a particular challenge in others. Because the approach used in the workshops was to allow the participants, not the facilitators, to identify clusters of ideas, and to label them, there was a reasonable amount of variability of clustering and labeling across workshops. For the most dominant themes there was little question about the theme represented in the cluster. For example, in the clusters for transactional needs the dominant issue of system integration appeared in the following forms: "integration," "integrated systems," "integrated data allowing for ad hoc linkages," "horizontal and vertical integration," "seamless processing," and "avoid redundant data entry."

Ad hoc reporting was a high ranking informational need, made up of clusters called " ability to manipulate data and formulate reports," "flexibility in creating summaries," "reports canned and ad hoc,". "reporting flexibility," "ad hoc reporting " "continuum of flexible reporting," and "flexible reporting." For the less dominant themes, more detailed analysis of the specifics of each cluster was necessary to determine if the theme had been raised in multiple workshops.

The top five clusters for both transactional and informational needs that were generated in each workshop, were finally consolidated into six "dominant themes" whose occurrences across all workshops were analyzed and compiled. The team expected user needs to vary across agencies depending on a variety of factors such as size, sophistication of current agency technologies and practices, and the agency's relationship with the CAS. However, this was not the case. The results were quite consistent across all groups. Large agencies with in-house technical expertise and local

financial systems identified unmet needs and a vision for a future system that were very similar to those identified by agencies with no in-house technical expertise and complete dependency on the CAS.

Among the top themes, data access and manipulation capabilities emerged as a high priority item in every workshop; real time workflow support, improvement in basic financial processes, support for e-business, and better usability were high priority themes in half to two-thirds of the workshops. Consistency across related systems was a top theme in about one-quarter to one-third. These very strong findings laid the groundwork for recommended action steps.



An incremental strategy reduces risk, contains costs, and keeps options open

The overhaul of a backbone system like the CAS inevitably raises concerns about project size and scope, technical feasibility, and stakeholder involvement and support. A fourth concern, of course, is the price tag. The recommendations that emerged from the stakeholder needs analysis address these concerns. Using the main themes as guidance, the recommendations lay out an incremental course of action that adds more information at each step to guide both decisions and cost estimates. For the first phase of new work, the focus will be on process analysis. Since the strategic partners were

deeply involved in the whole project and had complete information. OSC was able to receive funding in the budget for this next step in the analysis.

Later project phases will benefit from the information produced in earlier ones. This approach reduces uncertainty and provides decision points for each major phase of work. The results of each phase will provide crucial information for deciding to proceed to the next phase and for defining its detailed work and costs. By following this incremental strategy, OSC postpones costly system decisions to a later project phase when other vital information, such as the potential for business process simplification, will become available. Phasing the project in this way gives OSC more control over costs, better information for each decision point, less reliance on assumptions, and more options for action than would be the case if the entire project were laid out in detail from the outset.