

State of Oklahoma

2009 NASCIO Recognition Awards Nomination

Statewide ERP Implementation

Office of State Finance

**Nominating Category:
Enterprise IT Management
Initiatives**

Lead, Support, Serve



B. Executive Summary

In 1999 the State of Oklahoma embarked upon a project to replace its aging accounts payable, budget, general ledger, purchasing, personnel and payroll systems. The state's central service agencies – the Department of Central Services (DCS), the Office of Personnel Management (OPM) and the Office of State Finance (OSF) – were the owners of the legacy systems that while loosely integrated, were out-dated and difficult to maintain. These centralized systems were housed on two hardware platforms at the OSF data center, and were written on two database platforms, as well as an ISAM file management system. The developers were spread across two state agencies, and were supporting systems developed using three different programming languages. Requests for information were time-consuming to fulfill and difficult to reconcile across the various systems.

In 2001 the state began implementation of PeopleSoft applications which would replace the outdated hardware and implement the software to replace the statewide legacy applications. In 2002, House Resolution 1037 and Senate Resolution 49 directed the OSF to “remain vigilant in carrying out its responsibility that state resources are not unnecessarily spent on individual agency computer systems for administrative operations”. In keeping with this directive, the State of Oklahoma was one of the first states to successfully roll-out a baseline suite of applications to all state agencies.

Initially the benefits included the statewide implementation of web-based applications that have a similar ‘look-and-feel’. Additionally, the statewide applications were deployed on a centralized platform streamlining the support and strategic planning efforts of the technical support staff. The development staff that was previously distributed across two state agencies was consolidated into the Information Services Division of the OSF realizing a net decrease in the development staff while allowing better coordination and management of development activities.

Additionally, the individual state agencies have access to their data through delivered reports, download files and queries; which allows them to provide information to agency decision makers, boards or commissions as needed. The central service agencies also have access to this data for statewide reporting to legislative requests and public information requests.

With the successful implementation, some state agencies have been able to move off of their legacy systems allowing those agencies to shift their focus to fulfilling their primary mission of providing services to the citizens of Oklahoma.

C. Description of the Business Problem and Solution

Business Problem - In 1999 state leaders began to aggressively pursue the idea of replacing the state's aging accounting, budgeting, claims processing, purchasing, personnel and payroll systems. The cash-basis accounting system, the claims system and the budget control system were designed in-house; while software was acquired to provide an automated procurement system. Additionally, a statewide personnel and payroll system was also developed in-house, but on a different hardware platform. These legacy systems were installed by July of 1990. From that time until 2003 the State of Oklahoma used these legacy systems and maintained them internally with state resources. Through the years these systems have been heavily modified to accommodate changes in state and federal legislation and to improve functionality and integration. Additionally, the technology was becoming antiquated and it was difficult to recruit and retain qualified technical staff to manage the hardware and software.

Business Solution - Many discussions and meetings were held to address whether to develop a new system using in-house staff or whether to acquire off-the-shelf software. In 2000, Oklahoma's central service agencies made the decision to acquire the hardware and software for a fully integrated Enterprise Resource Planning (ERP) system for the State of Oklahoma. The state determined that purchasing an ERP system would allow the state to replace its existing system functionality, update to a web-based system, consolidate the hardware to a single platform and eliminate the need for individual agencies to purchase, implement and support their own systems. In addition, an ERP would improve information access and retrieval, improve audit and security functionality, take advantage of industry-wide best practices and position the state to implement additional functionality and modules. By implementing an ERP system, the state believed that it would see an overall improvement in the delivery and reliability of services to state agencies, increased efficiency and productivity of agency staff through standardized processing and improved reporting to agency management, the legislature and the citizens of Oklahoma.

Once the decision was made, the central service agencies began the process of researching and procuring an ERP system. A project team was formed for planning purposes, and a method of action and implementation was determined. The following decisions/practices were discussed and decided upon to ensure a successful procurement and a smooth implementation:

- The state hired experienced consulting firms to help develop the functional requirements to be included in the Request for Proposal (RFP) and the Statement of Work (SOW).
- The state decided to only accept bids from software vendors, but the software vendors could include the utilization of an implementation partner. This worked in the best interest of the state because it created an enhanced working relationship with the prime vendor while meeting the goal of a single point of contact and accountability for staffing, billing and problem resolution.

- The state would consolidate its infrastructure to a single hardware and database platform. After researching several options, the IBM Regatta platform was selected. In order to leverage existing expertise, the state chose to run the application on an Oracle database.
- In order to minimize risk and change management initiatives, the state determined that the initial roll-out would only replace legacy system functionality. Additional functionality and modules would be rolled-out at a later time.
- When possible, the state committed to change its business processes to leverage delivered functionality. When a customization was required, the goal was to design it as a bolt-on so it could be 'lifted' from the delivered code and preserved during system upgrades.
- Existing interfaces with state agencies must be retained in the new system. This will allow agencies to continue interfacing data from/to their mission specific legacy systems.
- The project team involved agency users at every step in the project, including initial product demonstrations and business process review sessions. Agencies were also encouraged to provide staff to assist with testing and end-user training. Many agencies saw this as an opportunity to learn the new system and collaborate on the best solutions. Agency buy-in, acceptance and confidence were gained in the process.
- State staff conducted the training to help users transition to the ERP applications - the state staff could teach the application functionality using state-specific terminology.
- The state adopted a proactive change management plan.
- The state implemented a centralized helpdesk to record end-user calls and comments - this would provide a single-point of contact for end-users. This was an added feature developed indirectly to meet the needs of the initial implementation.

Implementation - The official project kickoff was held in the spring of 2002. The project guidelines were established using a modified version of the state's implementation partner's methodology standards. These standards were designed to employ a structured approach toward all project activities including design, implementation and production activities; ensuring effective communications, risk management and quality assurance.

The central service agencies assigned a project manager to work alongside a consultant project manager to determine project schedules, scope and staffing that would meet the needs of the state. These co-project managers worked together to track project progress against planned milestones, however, the state project manager retained final decision making authority regarding scope, qualified staffing, go-live readiness and go-live scheduling.

The project team was segregated into groups based on their functional expertise and consisted of employees from each of the central service agencies as well as

consultants. The state assigned qualified personnel to the project who not only understood the business needs of the state but were also able to make decisions that would ensure the correct setup and configuration for a statewide roll-out. During business process review sessions, the project team ensured that representatives from a wide variety of agencies were included in these meetings. The state was able to leverage the consultants' knowledge of the delivered software and best practices alongside the state's processing requirements to determine the best configuration.

As part of the project, change management opportunities were identified and addressed, and a full change management plan was developed. A project website was created and contained informational pages for each functional module, technical updates and all project communications. A monthly newsletter was prepared noting prior progress as well as 'next steps' including project timelines, training schedules and upcoming events. Communications liaisons were identified in each agency and project communications were pushed out to the liaisons who were then responsible for notifying their internal agency staff.

The initial roll-out of the ERP implementation has been successfully completed. The State of Oklahoma was one of the first states to successfully roll-out a baseline suite of applications to all state agencies. The targeted PeopleSoft modules were acquired along with the preferred hardware selected by the state. The state conducted appropriate hardware sizing and load testing exercises and followed project management guidelines for software implementation. The state project team carefully monitored project progress to ensure statewide readiness for the ERP roll-out and, when necessary, adjusted the implementation schedule to ensure a smooth transition. The ERP modules were implemented according to the following schedule:

Module	Implementation Date
CRM – Help Desk	November 1, 2003
Financials – Accounts Payable, General Ledger and Procurement	November 1, 2003
HCM – HR, Payroll, Time and Labor, and Base Benefits	July 1, 2004 thru October 1, 2006
EPM – Budgeting	July 1, 2005
Training Administration	July 1, 2008

D. Significance of the Project

The implementation of the ERP applications has consolidated the support of the statewide system, delivered enhanced reporting to end-users, standardized business processes and positioned the state to move forward with additional functionality and modules.

The ERP implementation consolidated the technical support to a single hardware platform, a single database and a single suite of development tools. The technical staff is now able to focus more strategically on its future plans rather than supporting three

disparate and aging systems. The development team has been consolidated under a single state agency. While each developer supports a specific application, since all of the applications are written using the same development tools, the developers can be reassigned as necessary depending on state priorities and business needs. Overall, the implementation has provided the state with a modernized infrastructure, a web-based application, a simplified disaster recovery model and an updated strategic infrastructure plan.

The state has changed its reporting structure with the ERP implementation. Previously, all reports were run on the mainframe, printed at the OSF data center and then distributed to agencies. In addition, outbound data files were available to those agencies with the capability of loading the data into legacy systems. With the ERP implementation, agencies are still able to download data files as needed. However, the OSF data center no longer runs, prints and distributes reports to the agencies. Agencies are able to run their own reports and view them online, print them or save the reports as pdf or excel files. Additionally, agencies are able to schedule the reports to run at specified time intervals so that the reports are ready when needed. Agencies are also able to run pre-defined 'queries' which return data to the screen based on parameters specified by the users and then the data can be downloaded to excel if needed. As described above, agencies now have several methods of access to the data. Reports can be used as designed or agencies can download data and create their own reports.

Although the transition to a new system is never easy, the state has seen growing end-user acceptance to the new processing. The business process review sessions conducted during the implementation provided insight into how agencies were conducting business. In some instances, state agencies had implemented varying methods for calculating or processing transactions. The implementation of the ERP applications has enabled the state to enforce standardized processing to better comply with both state and federal requirements.

Since the implementation the state has been able to review its implementation decisions and make further adjustments to business processes. The state has also participated in a benchmarking project to determine how it can better utilize the software to implement industry-wide best practices. Some agencies have already been able to decommission legacy systems. While some agencies are still dependent upon legacy systems, many have made the statewide ERP system their original point of entry for transaction processing and are utilizing their legacy systems for back-end reporting until the time that they are able to get rid of those systems altogether.

E. Benefit of the Project

The first and driving benefit to the State of Oklahoma is the replacement of aging legacy systems that were not compliant with laws and regulations, difficult to maintain and processed in stand-alone environments. One of the notable upgrades is that the implementation of the PeopleSoft applications has brought the state into compliance with The Rehabilitation Act Amendments (Section 508).

Another benefit of the centralized system is the reporting that is available to the central service agencies, agency decision makers, legislature, and eventually to the citizens of Oklahoma. Using PeopleSoft, agencies have the ability to schedule/run their own reports, utilize pre-defined reports and produce custom reports by extracting or downloading data from the system. The ability to quickly and efficiently produce custom reports allows users to prepare reports for agency management, boards or commissions based on their individual needs. Likewise, the central service agencies are able to answer legislative inquiries or public requests based on information available in the system. In turn, this results in better responsiveness to the needs of the public by providing quicker response times to public questions. Additionally, the PeopleSoft application is the main source of financial data provided on the state's OpenBooks website (www.openbooks.ok.gov) - the state's website to promote transparency.

The state continues to review and refine business processes on a regular basis. Due to the standardization of business processes, the state has been able to expand its implementation of shared services. Utilizing shared services, an agency can manage its transaction processing activities at a reduced expense of a full-time employee. And, with the ERP system, the agency has access to the system so they can manage their research and reporting activities.

Project staff has been trained to research issues and resolve end-user questions and problems. The project staff conducts regular training and review sessions covering almost 40 training courses to ensure that agency personnel have the required skill-sets necessary to perform their job functions.

Since the procurement of the ERP system, and in accordance with legislative direction, the state has aggressively scrutinized - and typically denied - any procurement requests for alternative agency financial systems, to ensure that agencies are not duplicating functionality that is available in the ERP. This allows the state to continue standardizing processes, integrating systems and ultimately saving the taxpayers money by preventing the purchase of obsolete non-integratable systems.

The State has made a sizeable investment in the ERP implementation. At the onset of the project it was understood that this was a necessary investment in order to update technology, standardize business processes and position the state to achieve its ultimate objective to have a central financial and management information system. The state has been able to realize a limited return on its investment by consolidating the hardware for the statewide system onto a single platform and utilizing a single database solution. As a result, the state was able to eliminate \$17,196 per year, in equipment and licensing fees that the previous accounting and purchasing systems were using. Also, the two development staffs were combined into a single organization with an overall net reduction in staffing. One of the biggest benefits of the initial ERP implementation is that the State is able to and has begun the roll-out of additional functionality and modules. The roll-out of these additional modules onto the centralized platform with standardized processing allows agencies to eliminate in-house financial systems resulting in further cost savings to the State of Oklahoma.