

California Department of Corrections and Rehabilitation

Enterprise Information Services



Business Information System Project

Initiation: January 2001

Completion: December 2012

2013 NASCIO Recognition Award Submission Nomination Category: Improving State Operations

Nomination Submitted By:

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Enterprise Information Services

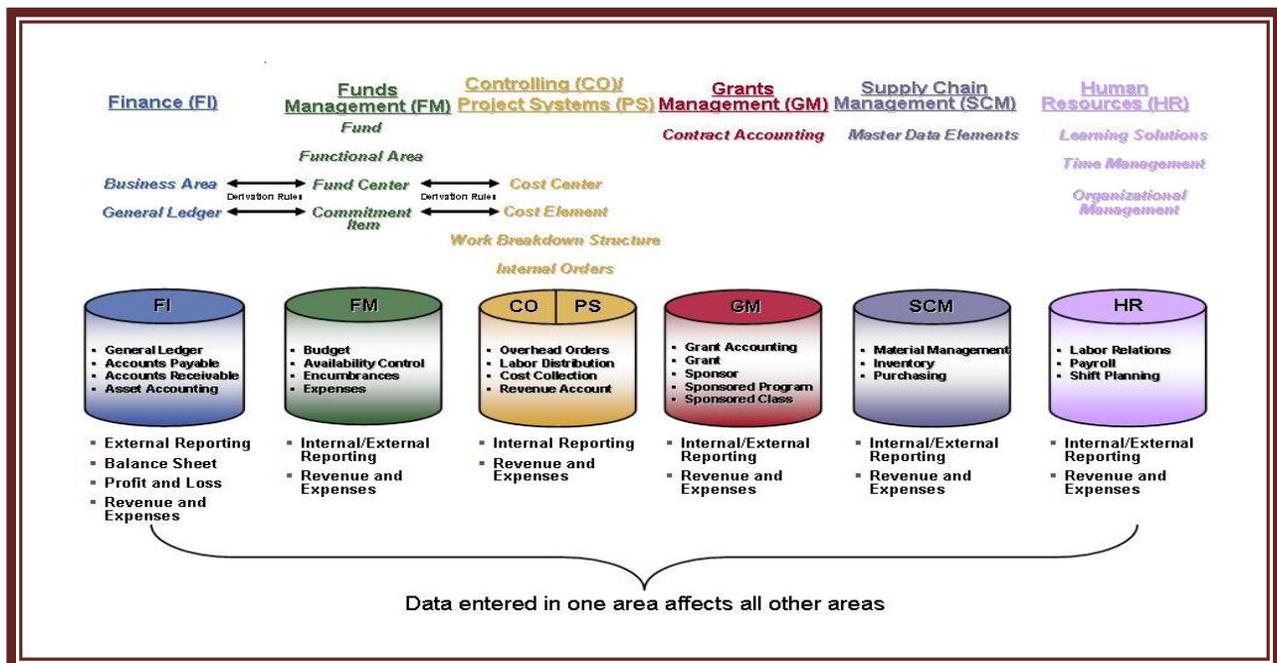
Department of Corrections & Rehabilitation

Executive Summary

The Business Information System (BIS) is the largest Enterprise Resource Planning Solution (ERP) implemented in California's Public Sector. BIS replaced hundreds of standalone databases, legacy systems and manual processes with an integrated, proven solution for achieving operational efficiencies. BIS has streamlined the administrative processes of the California Department of Corrections and Rehabilitation (CDCR), including financial, supply chain, and human resources management by applying best practices. The new system provides CDCR with more efficient, automated business processes, as well as real-time reporting.

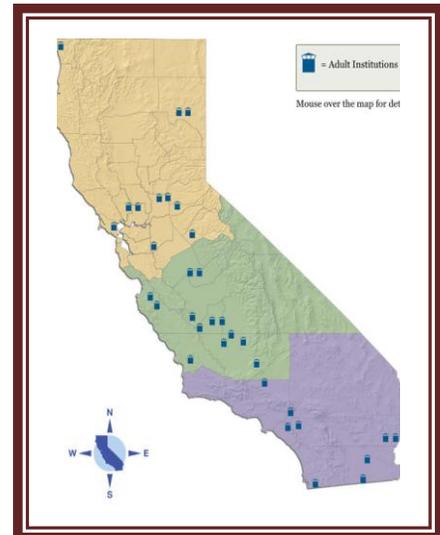
The CDCR has an annual budget of \$8.5 billion dollars and is responsible for the safety and security of 135,000 inmates with 58,000 employees in 33 institutions along with numerous Headquarters and satellite operations. Tangible savings of several million dollars have been achieved in resource reduction and operating costs as a result of the implementation with more identified as additional components and efficiencies are being recognized. The project exemplifies the effort of integrating and standardizing best practices so that the CDCR can acquire and track its labor and assets in an efficient and fiscally accountable manner that results in external and internal stakeholders being well served. BIS's vision is to be a national model for state government organizations in implementing and operating an efficient, reliable, cost-effective, and standardized ERP while providing excellent customer service.

CDCR's BIS solution was an implementation of the SAP suite of enterprise business management software beginning in 2007. The one-time software and integration costs along with project staffing were approximately \$84 million. BIS identified and worked to streamline the core administrative processes of the CDCR. SAP provided CDCR with more efficient, proven business processes as well as real-time reporting which allow for improved management of valuable financial and human resources.



Business Problem and Solution

Problem: In January 2000, a Bureau of State Audits report on CDCR's operations concluded and stated "The fiscal practices and internal controls of the CDC are inadequate to ensure effective fiscal management and protect the best interests of the State of California." At the time, CDCR was facing critical budgetary, business, and workload issues that affected not only the Department, but the entire State of California. Workload continued to increase due to the statewide budget shortfall, hiring freeze, and the need to provide accurate data for a variety of internal and external purposes. Many of the Department's processes at the time were manual and paper intensive. These labor intensive processes offered no efficient means to control spending or identify deficiency drivers, and did not allow for easy collection and retrieval of historical data. Errors due to inconsistent data and entry duplication continued to increase and needed to be eliminated. In addition, with the Department geographically spread across the entire State, each of the 33 institutions relied on multiple stand-alone duplicative programs and systems to track all personnel, accounting and purchasing activities. All information recorded in each of the programs and systems was sent to Headquarters by courier on floppy disks to compile for department-wide reporting purposes. Year-end reports took from one to two months to prepare and involved thousands of staff hours. The accuracy, timeliness, and integrity of the information CDCR executives needed for decision making was at risk. It was clear that a statewide integrated database that had the ability to provide a variety of real time information was imperative to the Department's ability to make sound and accurate fiscal decisions. The challenges and risks in achieving the successful procurement and implementation of an ERP were great. However, the negative impact of not moving forward in this effort was far greater.



Solution: A major change in strategy to account for the Departments' resources was needed. CDCR executive management in FY 2001 directed that a study of possible solutions be undertaken. The BIS Project Team was established to complete an analysis of the Department's business processes with the expectation that an integrated approach to the administrative functions be identified and implemented. Executives and Subject Matter Experts from all business areas collaborated over the course of three years to capture and blueprint the rules and regulations governing a Public Entity with the goal of realizing increased efficiencies in workload management, reducing expenditures to the department and accurately reporting departmental information to the various agencies and legislative bodies requesting updates. Based on the collective approval of CDCR Management, the decision was made in FY 2005 to acquire and implement an ERP that would allow for an integration of the current business functionality while providing the potential for growth as additional efficiencies were realized.

Formal approval was secured from the Department of Finance in FY 2006 and the formal contract process occurred over the course of the next year and a half. A contract was awarded in May 2007 to IBM as the Integration Manager with SAP as the chosen solution. Core functionality was deployed in waves beginning with basic Accounting functionality in July 2008. Deployment schedules included over 39 locations throughout the State of California, ranging from Crescent City to San Diego. Live training, internet training, recorded sessions and written materials were all methods used for training. The project used an Academy like approach and provided training for approximately 100 staff each week for 25 weeks. Each round of training was provided by project staff along with super users from the business areas and consisted of six to eight classes geared to the specific role each end user was provided. A clear outline of access requirements was forwarded to each Program area to assist in identifying staff for each role. These role authorizations continue to be used to ensure access is provided only to appropriate staff. For the last year, cleanup activities and upgrades to the original software have occurred. Formal status from Project to Program occurred in December 2012.

Significance of the Project

As the largest ERP system to be implemented in California's Public Sector, the state is now able to leverage lessons learned as well as development information to streamline implementation activities which may serve as a model for other departments and states pursuing the same goal. Since going live in July 2008, all divisions and their respective program areas have benefited from access to BIS and the data it holds. BIS now supports over 6,000 end users who generate thousands of transactions daily in the purchasing, accounting and personnel areas in support of the Department's \$8.5 billion budget. Over 500,000 Purchase Orders (PO), 46,000,000 financial accounting entries, and 325,000 human resources transactions have been processed in BIS since the first go live activities in July of 2008. All divisions, as well as each institution, now have an on-site Change Agent assigned to facilitate with the new system. The implementation of the SAP integrated software suite provides a tool to align the State's goal of standardizing business practices through the use of Information Technology. Benefits include:

- Program areas increasing their collaborative efforts in areas such as maintaining master data. Business owners have recognized that an integrated system requires an understanding that master data needs to be consistent and available for multiple areas.
- Institutions having a clear schedule of deliveries with Business Services now able to issue consolidated purchase documents which is reducing the number of POs as well as decreasing processing time by approximately 50 percent.
- Businesses better able to provide lower costs as a result of consolidated purchases through consistent delivery times and reduced freight costs.
- Businesses have benefited from timely payments. In turn they are providing additional early payment discounts which is driving down costs.

Program areas now have the ability to data mine for information via standard reports and perform data analysis on purchasing activities, allowing the department to begin inventory leveling and identify areas where inconsistent costs raise expenditures.

Strategic & NASCIO Priority Alignment: This project aligns with the NASCIO State CIO Priorities by consolidating and optimizing CDCR's internal administrative services to increase operational efficiencies. The project also aligns with the California Information Technology Strategic Plan, Objective 4.3 to enhance the value of state information through tools to increase the ease of collaboration and data analysis. The implementation of the ERP system also furthered collaboration efforts between divisions and their respective program areas.

Benefit of the Project

Implementation of BIS eliminated the use of multiple databases, spreadsheets and manual processes for maintaining the Department's administrative functions. Institutions and Headquarters were maintaining data in different formats and locations, making it difficult for the Department to produce reliable mandatory fiscal reports to support agencies. The new system provides real time reporting in a fully automated and integrated system, standardizing procurement, contract, inventory and financial reporting practices along with reducing the resources needed to provide support. These resources are being redirected or reduced as necessary to realign the department's budget.

Major stand alone systems that have been retired:

- Procurement Tracking System - Used by all 34 Procurement Offices to create and track purchases. Each of the 34 Procurement Offices sent monthly backups to Headquarters Business Services for reporting purposes. All backups had to be merged to provide data for the reports. The amount of time needed to create these reports can now be done at a single point and has been reduced by over 75 percent.
- Property Control System - Used by over 40 program areas to track assets. Property Controllers had to manually input master information for each asset as it was received, creating a backlog for processing and delivering assets to the program areas. Workload is now spread across the organization allowing the Property Controller to quickly complete the tracking process and deliver the asset to the appropriate area.
- State Logistics and Materials Management System - Used by all 33 institution support and maintenance warehouses for tracking recurring usage goods. This software had not been supported for over 15 years which resulted in frequent calls for assistance to local and regional IT staff.
- CalStars - Used by all Accounting Offices for tracking encumbrance and expenditure information for all program areas within the department. Efficiencies gained include staff reductions and elimination of approximately \$1,000,000 in system access costs.
- Access Databases and Excel Spreadsheets – Used by all areas for internal tracking of purchases, budgets and personnel activities. Hundreds of individual databases/spreadsheets have been eliminated with the access to transactional data from BIS.

Interfaces that have reduced the amount of manual inputting:

- Third Party Adjudication – provides a daily file for all medical claim payments. Several thousand invoices are automatically processed each day and forwarded electronically to the State Controller Office (SCO) for payment.

- TLOG Interface – All personnel actions are transmitted electronically each day to SAP which automatically updates master information on each employee within CDCR. Each Personnel Specialist can now confirm every morning the transactions keyed into SCO were processed. Any errors are immediately identified and corrected ensuring budgeted positions are aligned with staff. This reduces the number of Accounts Receivables through overpayment of salaries.
- SCIF Worker's Comp Interface – All injury claims are transmitted electronically to the State Compensation Insurance Fund (SCIF) reducing processing time and keying errors.
- Travel Interface – Headquarters travel claims are forwarded electronically to CalAters for processing. Processing time has been reduced by 25 percent.

Increased Efficiencies:

The Department continues to identify areas to improve by adding functionality to the implemented system. Current enhancements include the use of Electronic Funds Transfer (EFT) to achieve the goals of early vendor payments to capture prompt payment discounts and reduce late payment penalties. A second initiative currently being rolled out to all 33 adult institutions and juvenile facilities is the Time and Shift module, which tracks the 24/7 posted positions for 35,000 Custody and Nursing staff, providing accurate staffing and overtime/leave usage reports to identify expenditure trends quickly and efficiently as well as ensuring that safety and security is maintained.

Posting of transactions within BIS across all functional areas is now automated compared to being manually entered, which reduces redundant staff work and increases efficiencies. The implementation of the enterprise solution now allows management to work with Support Agencies to provide file uploads in the human resources (455,000 time sheets annually), supply chain (280,000 line items annually) and financial areas to replace current time intensive manual keying and paper reports.

Financial Reporting/Savings

- For the first time BIS provides real-time financial reporting, which previously had a 45 day lag, allowing the Budgets Division to accurately address questions from Support Agencies the same day they are presented.
- Time to process invoice payments has been reduced dramatically. This has resulted in reducing our Late Payment Penalties from \$2,687,000 in FY 2008 to \$681,000 in FY 2011. This is an 80% drop in three years.
- Year End Financial reporting has been streamlined. In 2008, the last year the Department prepared Year End statements manually, it took 28 staff two months to complete and submit to the Support Agencies. The statements at the end of 2011 took five staff one month to complete and submit. This was the first time in 10 years that the Year End statements were submitted on time.
- SAP Interfaces automate Payroll and Travel payments resulting in an ongoing savings of \$1,000,000 per year for costs associated with access to CalStars.

Asset Management

- The department now has a tool that can track at a holistic level the 8,000 vehicles, 540,000 assets and \$7,034,000,000 in physical property. This provides the ability to track tangible assets on a strategic enterprise level and quickly shift existing assets versus purchasing new assets where they are needed.

Procurement

- The purchasing process (from purchase request through payment of invoice) life cycle has been reduced from an average of 60 days to 30 days allowing the department to store a leaner inventory of goods while ensuring shortages in materials are reduced.
- The Department is required to report certain Small Business/Disabled Veteran Business purchases on an annual basis. Prior to implementation of SAP it took approximately 45 days for the 34 Procurement Offices to compile the information and forward it to Headquarters for submittal. In 2012, it took one staff member four hours to create the same report using BIS.

Inventory

- For the first time the Department has a tool that provides the ability to review inventory quantities stored allowing for inventory leveling across the entire Department, leading to significant cost savings. A number of institutions have from six to twelve months of certain materials stored. Data analysis is providing management with the ability to redirect or reduce the level of stored materials across the entire Department.

Training and Events

- The SAP Training and Events (T & E) module, an integrated solution to tracking and managing departmental training data, will replace the In-Service Training program and provide reports based on input of training activity for both posted and non-posted CDCR employees in SAP. Additionally, employee qualifications will be captured using T & E functionality, assisting in the accurate posting of custody and nursing staff. There is a strong integration between the T & E, Organizational Management, and Personnel Administration modules in SAP. This integrated, real-time system will result in more efficient workload processing; reducing staff time spent by an estimated 50 percent.

Time and Shift

- Once fully deployed, post assignment schedules will be captured and updated utilizing Telestaff, the new shift-scheduling tool that is interfaced to SAP, where time recording, time processing, and time evaluation activities are automatically performed. CDCR is utilizing a phased approach of Time/Shift deployment across the institutions with the last go-live scheduled for 10/31/13. Once all institutions are online, 35,000 posted staff time will be processed monthly. Significant savings are realized as all overtime pay calculations are processed and calculated automatically in SAP during time evaluation, with real-time data and better reporting and tracking capabilities than what exists with the existing legacy systems. Anticipated savings of \$2.5 million are expected due to a reduction in staff keying overtime.
- The Time and Expenditure Management System (TEMS) tracks regular, Overtime, and Temporary Help hours and related costs, and provides reports on leave and overtime usage. Separately from the payroll input process, institution staff key time data into TEMS. In conjunction with Time and Shift functionality, Institution budget staff will now be able to run this report in SAP either monthly as required, or on an ad-hoc basis which will result in an 80% savings of \$1.46 million.