

# Appendix B



**California State University, Chico**  
Office of the Vice Provost for Information Resources

## **Enterprise System - CMS** 2006/2007 Annual Report

August 2007

## Introduction

CSU, Chico completed the first phase of CMS administrative systems in 2005 including implementation of PeopleSoft financials, human resources, and student administration. Although initial implementation was a huge milestone, not all modules were fully implemented, additional modules were determined to be core by the Chancellor's Office, systems upgrades were already scheduled, and there was much to be done to leverage the completed baseline CMS implementation.

The CSU, Chico CMS project has transformed into an Enterprise Systems model that encompasses more than just the implementation of the system wide developed PeopleSoft deliverables. It also envisions the continuing development and augmentation of those administrative systems, learning and systems infrastructure, unified web presence, and knowledge management capabilities to improve the learning and business processes that support the educational mission of the university.

## Current Implementation Overview

### ***CMS/PeopleSoft 2006-2007***

This year, upgrades were applied to the PeopleSoft human resources and student administration systems (v8.0 to v8.9), resource management project was implemented for PeopleSoft financials (Fees and Trusts), and data warehouse implementation became core. Two additional human resources modules are scheduled for implementation and the system wide modification of the degree audit report for facilitating graduation (CAFG - Campus Activities to Facilitate Graduation) was included in the student administration upgrade. Both the upgrade to CMS v8.9 and the resource management implementation were completed by Chico staff without the need for outside consulting assistance.

Chico was also scheduled to implement the student administration EPM warehouse to replace the current campus SA warehouse pending release by the Chancellor's Office. This release was delayed compelling the warehouse team to upgrade the existing RDS database to maintain reporting capabilities in the upgraded administrative system. Chico is playing a lead role in providing other CSU campuses our developed tables and reports to for both financials and student administration/human resources warehouses pending the system wide EPMv9.0 data warehouse baseline releases anticipated over the next few years.

### **CMS Project Summary**

***Human Resources*** - Completed v8.9 upgrade of current HR modules and developed additional processes and self-service functionality for improved operations.

- ✓ Completed 8.9 upgrade of current functionality
- ✓ Commence implementation of Benefits Administration (April)
- ✓ Commence implementation of Absence Management (May)
- ✓ Additional Student Payroll/ Time and labor processes implemented
- ✓ Additional/enhanced self-service functionality implemented

***Student Administration*** - Completed v8.9 upgrade of SA modules, completed upgrade of SA data warehouse, and developed additional processes and self-service functionality for improved operations.

- ✓ Completed 8.9 upgrade of current functionality
- ✓ Improved student and faculty self-service functionality
- ✓ Implemented Degree Audit modification for Facilitating Graduation process
- ✓ Improved security/access processes and procedures
- ✓ Completed upgrade of v8.0 RDS tables to v8.9 RDS tables
- ✓ Completed rewrite of data warehouse queries and reports

***Financials*** - Completed Financials Revenue Management Project (transition to operating out of Trust).

- ✓ Deliver year end financial reports to Chancellor's Office on new schedule
- ✓ Completed Revenue Management Project
  - Depository bank – cutover March 1
  - Disbursement bank – cutover April 1

## ***Enterprise Projects 2006-2007***

Development of an Information Resources technology strategic plan supporting the new campus strategic plan necessitated a revisit of the scope and purpose of the CMS budget. On October 6, 2006 the cabinet approved redefining the CMS budget as the Enterprise Systems budget to support centralized planning, integration, and development of enterprise information systems. This provides a consistent funding source for many essential IT initiatives that would otherwise depend on dwindling one-time funds, compete for funding with campus wide strategic initiatives, or be eliminated from consideration. The Enterprise Systems budget allows for sophisticated long and short term project planning resulting in efficient use of technology resources.

Currently the budget funds:

- Core campus applications and associated processes (i.e. CMS/ PeopleSoft, Learning Management System, Information Security Office support/training, and Data Warehouse team).
- Campus portal providing access to core services
- Identity management and security, the prerequisites for secure transactions and protected data
- Significant projects with defined objectives and measurable outcomes that support/improve core business and learning processes
- Server and storage resources to support the above services
- Training to provide key technical/functional skills within the campus community that support core services
- One time projects related to the campus technology infrastructure as approved by CIO
- Project start-up support/assistance to provide staffing, training, hardware, software, etc. for high profile technology needs until alternative funding can be identified (i.e., ATI support)

## Enterprise Project Summary

**Knowledge Management/Enterprise Data Warehouse** – First year of Enterprise Warehouse initiative to merge multiple warehouse solutions into a single entity that will accommodate data from the enterprise applications as well as other campus data sources. Phase 1 includes conversion of RDS warehouse tables from CMS v8.0 to v8.9 and stabilizing Financials EPM warehouse. The Knowledge Management team provided data and reports for the WASC review team (pbViews) and for the campus community. Chico became a member of the Higher Education Data Warehousing organization (HEDW) and campus representatives attended a national convention of Higher Ed campuses to discuss uses of data warehousing and knowledge management tools for educational accountability. The team is working with academic departments on data needs analysis and with the Provost's Office to assist with the Academic Program Review delivery.

Initial year progress includes:

- ✓ Knowledge Management initiative included in IT strategic plan
- ✓ Warehouse program manager and technical analyst hired
- ✓ Developing/refining the enterprise data warehouse architecture
- ✓ RDS upgraded to accommodate CMS v8.9 table changes
- ✓ Financials EPM warehouse in use and stabilizing
- ✓ Providing data modeling and tools training for warehouse team members
- ✓ Contributing Chico financials EPM model and reports to other CSU campuses
- ✓ Testing campus owned reporting tools (Oracle Discoverer/Hyperion Brio)
- ✓ Developing additional content for SA/HR warehouse
- ✓ Reviewing Business Intelligence tools for system wide and campus acquisition

**Learning Management System (LMS)** – Upgrading current LMS from WebCT Campus Edition to Blackboard Vista. Enterprise budget provides funds for student support staff, incremental funds for staff release time, and consulting services. Funded hardware and storage solutions as well as Vista software licenses.

- ✓ More than 50% of courses have been converted
- ✓ More than 1000 sections with 550 instructors are active in Vista for Spring 2007
- ✓ Course conversion completion scheduled for 12/30/2007
- ✓ Vista architecture in operation; future storage solutions under review

**Security** – The Information Security Office works with the campus community to secure system and network resources, and protect the confidentiality of student, faculty, and staff information. In 2006/2007 an Information Security Analyst was hired to help identify risks in the Chico environment. ISEC also worked with many departments to assist them in better securing their servers and confidential data. New procedures have been implemented so that security is considered prior to system implementation. Further, these new procedures have helped enable a number of new technologies which would have otherwise been too difficult or insecure to implement.

Enterprise Systems funding provided:

- ✓ Training/certification for technical and functional analysts
- ✓ Further rollout of multi-factor authentication devices to ESYS group
- ✓ Purchase of vulnerability scanning tool and training. Implementation rollout scheduled during spring/summer

- ✓ Project planning for rollout of password management utility to faculty/staff. Implementation began November 2006
- ✓ Two full time security staff

See Information Security Office Annual Report, Appendix C.

***Identity Management*** –Support for developing an infrastructure that provides authentication and authorization to enterprise applications while protecting confidential personal and business information

- ✓ Support for development of password management tool for students implemented February 2007
- ✓ Fund hardware support – maintenance for directory servers
- ✓ Support IdM Committee participation – committee meetings in LA to review/recommend system wide solution
- ✓ Provided upgrade funding for hardware and consulting services for campus LDAP directory

***Enterprise Hardware/Systems*** – Hardware support, monitoring tools, storage solutions, enterprise applications, and training to support enterprise applications. Introduction of innovative server management technologies

- ✓ Purchase Server Virtualization software spring 2007 to allow reduction of number of physical servers in the data center. Tech training scheduled
- ✓ Purchase Anti-Spam device spring 2007. Training/installation scheduled
- ✓ Purchase RedHat Linux Enterprise license to replace individual server licenses at substantial cost savings
- ✓ Fund Oracle licenses for all campus use/applications. Technical training funded as approved by Technical manager

***Accessible Technology Initiative (ATI)*** – System wide mandate requires specific timelines be met in providing accommodations for individuals with disabilities. Positive progress toward first year initiative deadlines for web site accessibility, purchasing procedures to ensue acquisition of accessible technologies, and timely production of accessible instructional materials

- ✓ Providing project planning and support for campus compliance committees
- ✓ Purchased HI Software – web page scanning tool to determine compliance/usability of campus web pages
- ✓ Assisting DSS staff with accessible materials production issues

***Business Process Improvement Projects*** – Projects that that support/improve core business and learning processes through use of technology, utilizations/customization of administrative systems already in place, or that result in cost savings through retirement of outdated services/software

- ✓ Facilitating Graduation process improvements – project funded, staffing identified

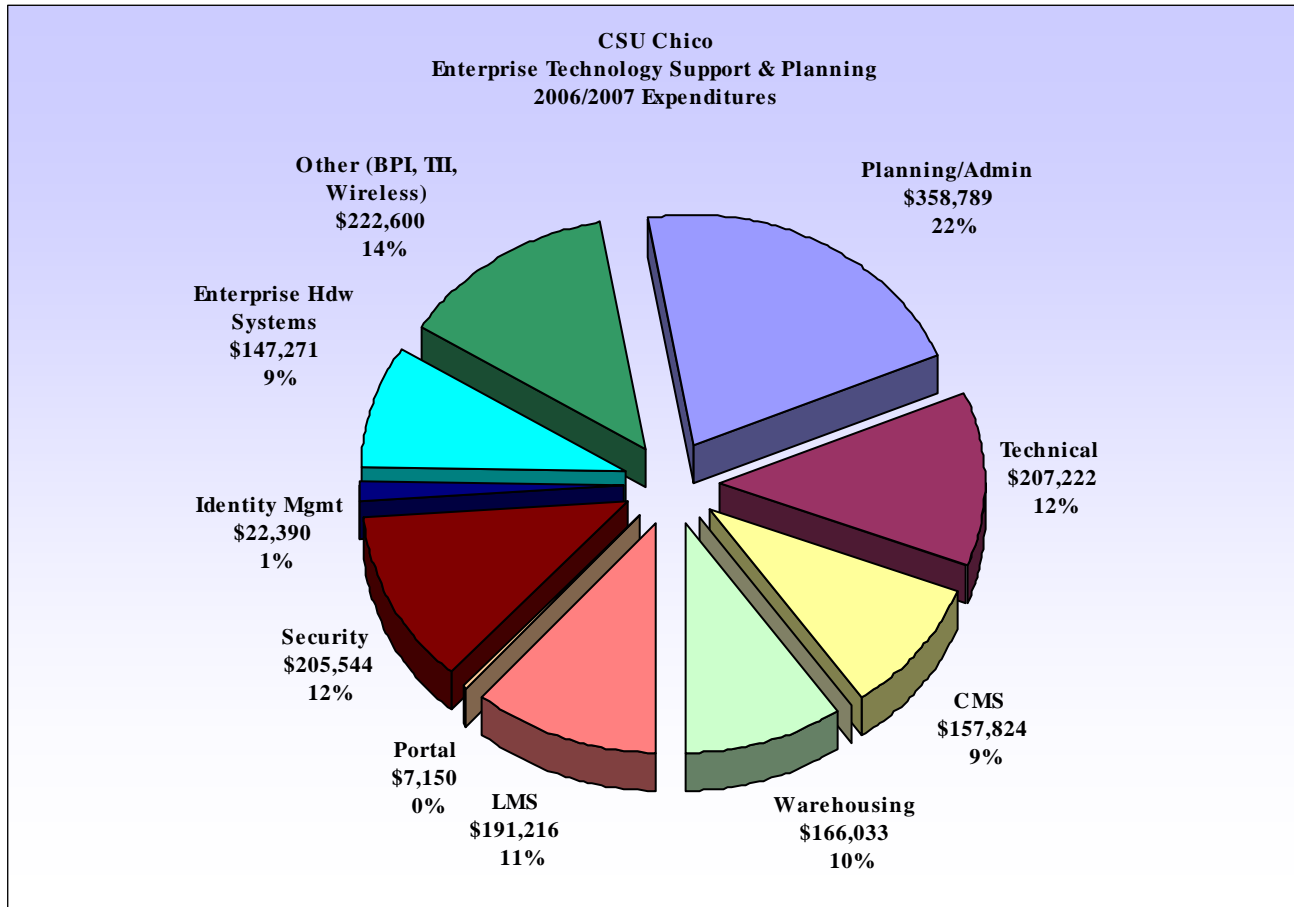
- ✓ Purchase Hobson’s EMT Connect 2 Prospect/Communication services – initial use by Recruiting/Admissions commences May 2007
- ✓ Hyperion/Brio upgrade to convert from client tool to web-based reporting – spring 2007

**Other Projects** – One time projects related to campus infrastructure

- ✓ Funded one time addition of Wireless access points to extend campus wireless coverage as requested by the Cabinet and UTAC, the campus technology committee

**Enterprise Administration** – Staffing of project planning office, technical DBA’s, and Security technical and business analysts. Travel, training, and conference fees for these staff and other campus staff engaged in enterprise activities. Consulting fees as needed for enterprise projects

- ✓ Chancellor’s Office functional and technical meetings
- ✓ Software and operating systems training
- ✓ Oracle/PeopleSoft technical/functional training
- ✓ User conferences including Educause, Alliance (Oracle/PS Higher Ed User Group), Higher Education Data Warehouse (HEDW) conference, SAN Security
- ✓ Consulting - Blackboard Vista, Oracle, IBM, PeopleSoft



Transitioning the CMS budget from CMS expenditures to Enterprise Technology expenditures

