Information Systems Status for

California State University
Information Systems

March 27, 2012
Agenda

- Data Center Transition – George Mansoor
- ERP Applications – Mick McBride
- System-Wide Data Warehouse – Carlos Prieto
Data Center Transition

- IS and the CSU completing transition to new set of Datacenter Services
- Background
  - The current agreement between the California State University Office of the Chancellor and the Unisys Corporation, for data center services to support the CMS ERP Systems is scheduled to expire in April, 2012.
Strategy Development & RFP

- Steering Committee formed to look at alternatives for providing these data center services.
- SC charged with developing strategy to provide stable, flexible, cost-controlling DC services to support CMS ERP objectives.
- Alternatives evaluated based on ability to meet all CSU objectives.
Strategy Development & RFP

- RFP developed with focus on flexibility and cost management while providing the services necessary to support CMS ERP objectives.
- RFP/Vendor selection/Negotiation process led to awarding contract to Unisys to provide services through 2016.
Unisys Solution

- Flexible to scale up and down based on CSU Business Needs
- Predictive budgeting process with consumption-based pricing.
- Evolution of current architecture to reduce transition complexity while taking advantage of current technologies.
- Transition plan that minimizes risk.
Unisys Solution - Summary

- Secure Private Cloud Architecture
- Virtualization of the application, database, web tiers.
- Server clustering for high availability
- Managed Storage for flexible storage capacity.
- Managed Clone Service.
- DR Strategy Better suited for our size/complexity.
- Leverage lessons learned over last 10 years
- Specific Continuous Improvement Items added to Statement of Work.
Unisys Solution - Overview

- Leverage existing Security Policy and procedures in place today
- Leverage our current security & network environment
  - Network firewall and VPN services
  - Intrusion Detection and Prevention services
  - Secure Remote Access services
  - Vulnerability Scanning services
  - eTrust for access control
Unisys Solution - Flexibility

- CSU has the ability to add/remove resources (and cost) throughout the terms of the agreement.
- Set of fixed “baseline” resources (Resource Units) agreed upon by CSU and Unisys.
- Baseline Resource Units for DB, App, Web, Storage defined to support the base needs of the CSU.
- Resource Units required to support peak periods, projects, etc. not part of baseline but added via ARC/RRC.
Unisys Solution - Flexibility

- ARC (pronounced “arks” – Additional Resource Consumption/Cost
- RRC (pronounced “rooks”) – Reduced Resource Consumption/Cost
- ARC/RRC process adds/removes predefined resource units at a cost/savings.
Transition Plan

- Aggressively scheduled divided into achievable milestones.
- Focused on quick transition to new hardware to address issue of aged equipment.
- Positioned to improve internal processes.
- Required good working relationships with Campuses, CMS and Unisys.
Transition Milestones

- Key Dates
  - 11/11 – SLC hardware delivered COMPLETED
  - 11/15 – Eagan hardware delivered COMPLETED
  - 11/30 – OEM Initial Validation COMPLETED
  - 12/1 – Readiness Review COMPLETED
  - 12/12 – Pilot Testing (CSU Pomona) COMPLETED
  - 12/17 – Pilot Production Cutover COMPLETED
Transition Milestones

- **Key Dates**
  - 1/15  – All Environments Ready COMPLETED
  - 1/15  – Clone Service Start Date COMPLETED
  - 1/15  – Campus Testing Phase Begins COMPLETED
  - 2/15  – Prod/Dev Cutover Begins COMPLETED
  - 2/19  – Production Database Moves COMPLETED
  - 3/18  – Production Database Moves COMPLETED
  - 3/31  – Production Moves Complete COMPLETED
- CFS
- Asset Management
- CFS Steering Committee
- Common Human Resources System
- Early Start
- CFS
- Asset Management
- CFS Steering Committee
- Common Human Resources System
- Early Start
- Completed July 2011
- Operational/Maintenance
  - Maintenance Packs
  - Unscheduled MPs
  - MP Reviews
  - Campus Sign Offs
- Enhancements
  - Approved by EC
  - Delivered in MPs
- CO Finance
- FOA
EC Approval

Started in November 2011

Campuses:
- Bakersfield
- Channel Islands
- Chancellor’s Office
- Maritime
- Sonoma
- Stanislaus
- CFS Methodology
  - Weekly Meetings
  - Standard Project Plan
- Knowledge Transfer/Training
- Best Practices
- Completed by Year End
- AR/Billing to start following AM
Reconvened Last Month
Leverage Success of CFS
Use of Workflow
Cost Savings
Synergy Projects
Efficiency
Project has been approved

CHRS Steering Committee has been formed

Timeline
- Design (2012)
- Build (2012-2013)

Split and Consolidate

Integration
Executive Order 1048

- Establishes a program for CSU admitted freshmen who have not demonstrated proficiency in mathematics and/or English as established by CSU faculty.

- As of summer 2012, incoming freshmen who have not demonstrated proficiency in English and/or mathematics will be required to begin remediation prior to the term for which they have been admitted, e.g., summer prior to fall.
Campuses need

- A method to find out where/how the student will be participating in ESP
- A method to communicate student information between campuses
- A method for campuses to create applications/enroll/collect payment for a large population of students
- A method to transmit grades/scores to all the campuses
CMS Development

- Smart Page
  - Captures students’ Early Start decision/intention
- Global Database
  - Ability to share and communicate student data across campuses
- Self Service Admit/Enroll/Pay
  - Capability to create applications and enroll large population of students
- ETS Upload of Early Start Scores/Grades
CMS Deliverables

- Phase 1 – *delivered January 2012*
  - Smart Page
  - Global Database
- Phase 2 – *targeted April 2012*
  - Self Service Admit/Enroll/Pay
- Phase 3 – *targeted delivery June 2012*
  - ETS Upload of ESP Scores/Grades
CSU BI Components

- Definition
- Current State
- Vision
- Mission
- Approach
- Actions
- Next Steps
Definition

Business Intelligence Definition:

Business Intelligence provides a framework and unified approach for the construction and management and delivery of integrated operational, analytic, and database solutions. BI integrates cross functional data across data warehouses, transactional systems, disparate applications, external sources, etc. to provide the business community easy access to business data and allows them to make accurate business decisions.
BI / Reporting Applications and Tools

- CFS BI Application
- CO Reporting Applications
- CO Hyperion Reporting Applications
Delivered

✓ General Ledger (Completed Data Marts) – Phase 1
✓ Grants and Sponsored Programs Information
✓ Additional Chartfield Trees (Required Auxiliaries)

In-Progress

☐ System wide Dashboard
   (Production: June, 2012)

Current environment leverages some pre-built components and supplements with custom mappings and database structures. OBIEE provides reporting/analytics based on these structures.
The Manage My Budget dashboard contains reporting capabilities geared for users who are responsible for managing one or more department budgets. The dashboard pages allow users to choose meaningful report criteria based on how chartfields are used at their campus. This dashboard is limited to reporting Revenue and Expense categories by default.
CFS BI Dashboard: Operations

The Operations dashboard is geared toward the Finance power user. The Operations dashboard allows the user to filter reports based on selected fund attributes, account attributes, and campus unique department tree levels. The Operations dashboard includes Ledger and Trial Balance reporting. Unlike the Manage My Budget dashboard, the Operations dashboard is not limited to Revenue and Expense categories by default.
CFS BI Dashboard: Management Reporting

The Management Reporting dashboard replaced the Auxiliaries dashboard with enhanced and new reports. It contains 5 reports that can be used by Auxiliary organizations as well as state side users. The reports contain filters and report options not found in the other CSU DW dashboards. These features make it easy to produce custom management reports for a variety of Auxiliary organization and campus needs.
CFS BI Dashboard: Sponsored Programs

The Sponsored Programs dashboard is designed to support the reporting needs of sponsored programs administrators, management and faculty/principal investigators (PIs) to effectively manage externally funded projects (sponsored programs).
The FIRMS-GAAP dashboard was developed to facilitate the GAAP preparation process, and the much needed drill down capabilities from GAAP balances to legal summary to campus detail. It also serves as an analytical tool for both GAAP and Legal basis reporting.
## CO Reporting Applications

<table>
<thead>
<tr>
<th>App Name</th>
<th>App Name</th>
<th>App Name</th>
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<tbody>
<tr>
<td>Enrollment Reporting Applications</td>
<td>Contracts System</td>
<td>Faculty Survey/IPEDS</td>
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<tr>
<td>APDB</td>
<td>OSCAR</td>
<td>University Advancement DB</td>
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<td>Common/COSAR Table System (ERS/APDB tables)</td>
<td>Governor's Teaching Fellowships</td>
<td>CSU Degrees DB Phase I</td>
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<td>FIRMS</td>
<td>Community Service Learning</td>
<td>CSU Degrees DB Phase II</td>
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<td>Grievance &amp; Arbitration</td>
<td>Library Special Collections</td>
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<td>Seniority Points Calculator</td>
<td>Accounting Tables (SAM99)</td>
<td>CO Personnel Table Load</td>
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<td>Custodial DB</td>
<td>Lower Division Transfer</td>
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<tr>
<td>ESP</td>
<td>Special &amp; Minor Capital Outlay</td>
<td>Notify DB</td>
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<tr>
<td>Space and Facilities DB</td>
<td>Instructional Equipment</td>
<td>Fast Ed</td>
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<td>Cash Management Operations</td>
<td>Fees DB</td>
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## CO Hyperion Reporting Applications

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<tr>
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<th># of CO Users</th>
<th># campus users</th>
<th># of CO Standard Reports</th>
<th># of CO Adhoc Reports</th>
<th># of Campus reports</th>
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<td>&gt;30</td>
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*Note: All counts are approximate*
Tools: Current List of Campus Implementations

- OBIEE
- Oracle PS EPM
- Cognos
- iStrategy
- Hyperion
- Microsoft
- PL/SQL
Vision

- Consistent information
- Focus on Information not technology
- Timely and Accurate Information
- Improve Insight Into Business Opportunities
- Actionable Information Supporting Synergy
- Strategically Aligned With the Business
CSU BI: Integrated data to deliver information
Approach

- Governance
- Standard Tools (OBIEE/Oracle BI)
- Unified Framework and Architecture
- Master Data Management
- Holistic View of Information
- “Buy/Delivered” Solutions over “Custom Build”
- Sustainable Support Model and Services
CSU BI Flexible Architecture

Oracle Business Intelligence

Campus Level Security

CSU Master
Student, HR and Finance

CSU Reporting (OBIEE)

Student Systems

CHRS

CFS

CO/Campus Ancillary Systems

ETL/ Data Import

Campus End User

Campus Reporting

Campus Ancillary Systems
CSU BI Services

- Prioritize delivery of subject areas
- Develop Timelines for Delivery
- Establish governance structure
- Develop scope for projects and services
- Integrate with CMS Roadmap
- Build support infrastructure
- Campus collaborative development and support
- Leverage Fusion Applications
CFS Finance Application

Build the additional reporting and analytic components required to complete the finance business process suite.

- Candidate Subject Areas
  - Asset Management
  - Vendor Information
  - Purchase Order Information
  - Payment Activity
  - Receivables
  - Contract Information
  - Labor Cost Distribution

- Historical Reporting
  - Effective Dated Trees
  - Prior Year Comparisons
Next Steps

- Upgrade OBIEE 11g
- Build ETL Jobs
  - Custom solution Data Stage EE based on EPM models (near term)
  - BI Apps (long term)
- Build Reporting and Analytics
  - Custom Reporting and Analytics
  - Extend Current Meta Data Repository (near term)
  - BI Apps Meta Data Repository (long term)
- Migrate CO Application to Common Tool Sets
  - PeopleTools, SQR, PL/SQL, Data Stage and OBIEE
- CO Hyperion Migration to OBIEE
  - Pilot Cash Management Applications
Questions and Answers

Q&A