

TEACHERS' RETIREMENT BOARD

REGULAR MEETING

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SUBJECT: BusinessDirect - CARM Project Close-out

ITEM NUMBER: 5

CONSENT:    

ATTACHMENT(S):

ACTION:    

MEETING DATE: September 11, 2013 / 30 mins.

INFORMATION: X

PRESENTER: Robin Madsen

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**PURPOSE**

The purpose of this item is to provide 1) a close-out report for the project effort associated with Release 1 of BusinessDirect; 2) an initial assessment of the impact of the implementation as compared to the objectives established for the project, as well as 3) identify some of the experiences with this implementation effort that may inform approaches to other BusinessRenew projects and the continuing assimilation of BusinessDirect by CalSTRS.

**BACKGROUND**

As early as 2004, CalSTRS recognized the need to reduce the operational risk associated with serious deficiencies within its accounting processes and systems. The Accounting Reengineering Project initiated that year and subsequent assessments, including the FundWare General Ledger Assessment, the Penalties and Interest Discovery Report, the Pension Accounting Initiative Gap Assessment and Recommendations, and the Investment Accounting Project Gap Assessment completed by the end of 2009, all identified the need for CalSTRS to have a single integrated financial system. In addition, external auditor reports to the Audits and Risk Management Committee (ARM) in 2004 and through 2009 have contained various comments and recommendations related to CalSTRS manual accounting practices, financial reconciliations, investment accounting, reconciliations of accounts other than investments, and turnover of personnel. Beginning in the report to the ARM in 2010, external auditors have noted significant deficiencies and material weaknesses in internal controls over financial reporting.

In late 2009, CalSTRS initiated efforts to implement an automated solution for the calculation of penalties and interest (P&I) on late and inaccurate employer contribution remittances and monthly creditable compensation reporting. This was in response to legislation effective in late 2008 that established timeframes for reporting creditable compensation used to determine General Fund contributions to the Defined Benefit Program. The recommended approach to automation leveraged a commercial off the shelf (COTS) financial system for penalty and interest calculation and employer accounts receivable management.

Understanding the critical need for an integrated financial system, the CalSTRS procurement for a COTS product to automate the calculation of penalties and interest and employer accounts receivable management included options for software and implementation services for additional functionality. The additional functionality included budgeting, purchasing, project and cost accounting, fixed asset management, fund accounting, and (investment) asset management. These components would supplement the general ledger, accounts receivable, and accounts payable components required for the automation of P&I to create a fully integrated financial system.

In December 2010, the business case for the Corporate Accounting and Resource Management (CARM) project<sup>1</sup> and the recommended schedule, scope and budget prepared in conjunction with Deloitte Consulting, were approved by the CalSTRS Enterprise Program Investment Council (EPIC). EPIC also authorized the negotiation of contract amendments for the P&I project systems integrator, Ciber, and project management consultant, Gartner, to extend the existing scope of the Penalties and Interest work to include the CARM project. The Teachers' Retirement Board authorized \$14.5 million in one time Fiscal Year 2011-12 funding to initiate the project.

### **CARM PROJECT SCOPE, SCHEDULE, BUDGET**

The scope of the CARM project encompassed the reengineering and implementation of key business processes within BusinessDirect. These processes and the work efforts included the following:

- Financial Reporting and General Ledger: Includes banking interfaces (State Controller's Office, [SCO] and commercial banks) to support automated daily cash reconciliations, START interfaces for cash and non-cash transactions, SCO interfaces for payroll and other direct charges and transfers, processing of all general ledger transactions, legal basis fund management, cost allocation, period end closing, and financial statement, note and disclosure production from a single integrated system.
- Accounts Payable: Includes vendor management, procurement vendor selection, ordering, contracting, tracking, and reporting, fixed asset and project cost accounting, travel planning and expense reimbursement, encumbrance accounting, and processing for pension and non-pension related payments. Pension payment calculations remain in START, but are interfaced into the financial system for claim schedule preparation and cash clearance tracking.
- Accounts Receivable: Includes miscellaneous deposits, contribution remittances, START interfaces for pension receivables, and vendor and employee receivables. Provides a full, accurate and timely view of the state of CalSTRS accounts receivables and aging. Pension related accounts receivable details remain in START, while investment related accounts

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<sup>1</sup>. Throughout this report, "CARM" refers to the project and/or project team that resulted in the financial system named "BusinessDirect".

receivable details remain in the investment custodial bank's subsidiary ledger, but are interfaced into the financial system to enable reporting and analysis.

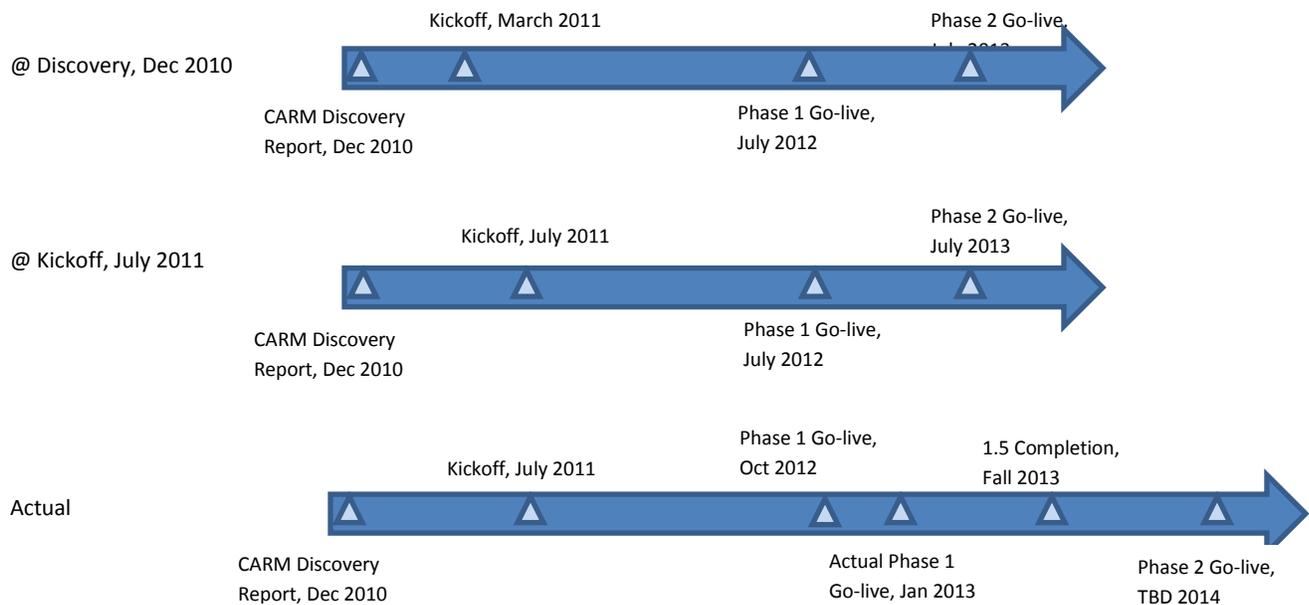
- Investment Accounting: Produce investment-related financial reports, disclosures, footnotes, and support other related analytical reviews to verify and validate the accuracy of the financial results. Interface with investment custodial bank (State Street Bank [SSB]) subsidiary ledger and other systems to support monitoring and tracking cash disbursements and receipts as well as investment positions by investment type and managed portfolio.
- Budgeting: Manage budget, encumbrance, and expenditure data, provide budget to actual variance analysis and reporting, and support contract, project, and organizational cost accounting.
- Tax: Automate processing of income tax withholding, excise, and sales-and-use taxes for non-pension related payments. Produce periodic tax reports and remittances for state and federal agencies.

A total of 1,240 functional requirements and 200 technical requirements, covering two phases were specified by CalSTRS as necessary to achieve the stated project objectives. Phase 1, which incorporated the majority of these requirements, was implemented with an accounting effective date of January 1, 2013. In order to achieve that implementation date, a number of important but less critical phase 1 requirements covering year end reporting, automation of currently manual payments for the Replacement Benefits and Cash Balance Benefit programs, and business partner integration for the Pension2 program, have been deferred to Release 1.5, currently scheduled for completion in the fall of 2013. Phase 2 covering project accounting and cost accounting capabilities is currently in the planning stage and is expected to be introduced in 2014.

### Schedule

After negotiations were completed with the two vendors, Ciber (providing project integration and support services) and Gartner (project management services), the project officially kicked off in July 2011. This was a four month shift from the March 2011 start date anticipated by the CARM Discovery process. At that time, the project decided to maintain the original Phase 1 completion date of July 2012, but it became evident during the design portion of the project that the complexity of the implementation was going to require a more typical 18 month implementation timeframe. Over the course of the project, the schedule was formally adjusted twice, once to October 2012 and then a second time, to the actual Go-Live date of January, 2013. As mentioned previously, a portion of Phase 1 functionality was pushed to Release 1.5 in order to achieve the January 2013 date.

**Figure 1, High-level Implementation Timeline**



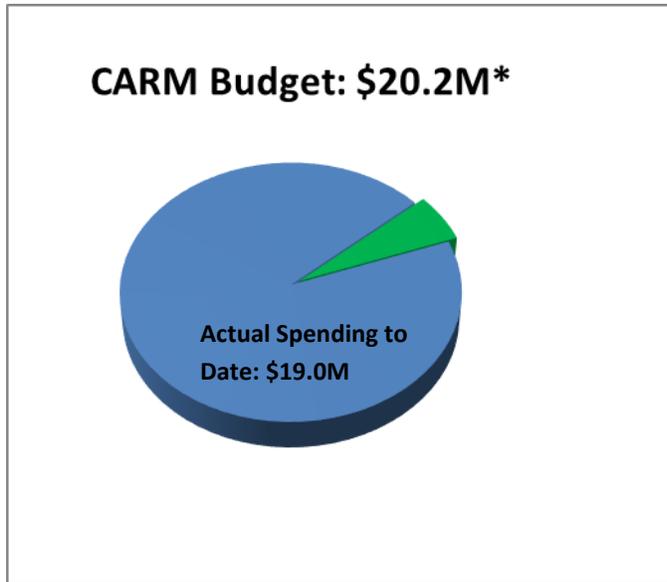
The extension of the “go live” date from July 2012 to October 2012 and then January 2013 and reallocation of scope to Release 1.5 were primarily the result of delays in resource availability and inaccurate estimates for time to complete activities during the development and implementation phase of the project (Winter 2012 – Fall 2013), as well as the complexity of interfaces with external partners (due to inbound file formats, the need to merge multiple files to extract all required information, and the sheer volume of inbound data).

**Budget**

While the CARM Discovery process estimated a project cost of \$16.2 million, prices submitted by integrator, Ciber, and project management consultant, Gartner, during the contract amendment process resulted in an increase in the project budget of \$2.6 million, bringing the initial budget to \$18.8 million. To fund the CARM budget, the board approved a one-time budget augmentation of \$14.5 million in Fiscal Year 2011-12 (included in the Governor’s budget for the year). An additional \$1.0 million from internal resources augmented the one-time funding. To supplement the \$15.5 from Fiscal Year 2011-12 funds, EPIC allocated another \$3.3 million in Fiscal Year 2012-13 from internal resources.

Since these original allocations to the project, there have been two budget increases. In March 2012, EPIC approved \$600,000 for additional hardware and in April 2012, EPIC approved \$750,000 to provide additional project management and testing resources and to establish a \$100,000 risk reserve for the project, all from existing Fiscal Year 2011-12 funding. The resulting total project budget is \$20,150,000. Ciber project deliverables were contracted for at fixed cost and have been delivered on budget.

Actual spending, as measured by commitments to date, is approximately \$150,000 over the initial budget and \$1.2 million under the adjusted budget as a result of lower-than-anticipated project management and internal backfill costs.



\* An additional \$843,505, not currently included in the CARM Budget of \$20.2M has been tentatively approved by EPIC pending the start of CARM Release 2.0.

### **GOAL AND BENEFITS OF BUSINESSDIRECT**

The primary goal of the CARM project was to transform CalSTRS into a financial services organization within the pension industry that utilized leading practices. As the first step of the BusinessRenew program, the implementation of BusinessDirect was intended to allow the CalSTRS to begin modernizing its business practices and systems, enable staff to work effectively in the future environment by deploying a proven enterprise resource planning system in use by thousands of public and private sector organizations throughout the world. The project was based on the concept that the tool would provide the “best practice” foundation for CalSTRS transformation. Additionally, the project was expected to provide risk mitigation capability and a more controlled fiscal management environment.

Specifically, implementation of BusinessDirect was expected to:

- Improve the organization’s control environment by increasing reliance on automated controls, process and technology
- Increase the ability for the organization to produce financial reports in an efficient and expedient manner
- Provide better organizational visibility of business transactions by improving the monitoring and analysis of financial transactions throughout CalSTRS

- Replace many manual processes with better defined and streamlined automated processes which will improve the efficiency of the day to day operations through improved processes, staff interactions, and training
- Result in a close integration between the pension administration system, control agencies systems and CalSTRS financial systems resulting in organization wide availability of financial information for CalSTRS decision makers.

The fiscal year 2011-12 budget change proposal (BCP) for one-time funding of the CARM project described the purpose of the system as:

“...will replace the current use of FundWare and CALSTARS applications at CalSTRS, includes software functions commonly used in large financial institutions, such as general ledger, accounts receivable and payable, financial reporting, cost accounting, procurement, asset management and budgets configured to address specialized pension accounting and investment financial reporting needs. CARM will provide CalSTRS with improved fiscal management efficiency and effectiveness.”

The BCP identified ten different outcomes and accountability measures for the requested funding.

1. Improved internal controls and risk mitigation
2. Reliable, accessible and timely financial reporting and information
3. Reliable, accessible and timely budget reporting for cost analysis, control and forecasting
4. Cost accounting applications
5. Reliable, accessible and timely reporting of member accounts receivable and payable for financial reporting, as well as for member’s online access
6. More complete tax compliance through automation and proactive interpretation of the tax codes
7. Enhanced decision making capabilities for CalSTRS management and the CalSTRS Board
8. Improved resource management through information technology infrastructure and automation of manual processes
9. Elimination of negative audit findings related to extensive manual practices and inefficient internal controls
10. Provide a flexible framework to incorporate future changes to the CalSTRS business environment

CalSTRS expects to realize these outcomes over the next year or two, as the organization moves through the significant transition from paper-based and fragmented fiscal systems and processes to assimilation of the automated control environment and online availability of information provided by BusinessDirect, the system implemented as a result of the CARM project. Initial indicators for these outcomes and accountability measures include a reduction in the use of spreadsheets to manage financial information, electronic manager review and approval processes, implementation of online budgetary controls from the request to purchase through expenditure,

and the use of automated interfaces to post investment and member subsidiary information to the general ledger for financial reporting.

**IMPLEMENTATION**

BusinessDirect, was first used in production on January 28, 2013, approximately 19 months after the July 2011 kickoff. At implementation, BusinessDirect (BD) became CalSTRS general ledger and the source for financial and budgetary reporting. BD also supports CalSTRS vendor management, procurement, and payment processes as well as tracking and accounting for sensitive and capitalizable assets. It includes interfaces with the State Controller’s Office for payroll, direct charge, claim schedule, and cash processing, interfaces with CalSTRS custodial bank, SSB, for investment transaction general ledger posting and analysis, and interfaces with START to send and receive member and employer cash and non-cash transaction data between the subsidiary and general ledger.

**Conversion**

In order to support immediate business processing, BusinessDirect was implemented with master and transactional data. SAP configuration relies on master data to establish system functionality ranging from the chart of accounts to vendors to CalSTRS organization structure, staff, and workflow hierarchy. Even without bringing historical data into the system, the mid- fiscal year “go live” date required the conversion of general ledger and other transactional data from CalSTRS legacy financial systems, CALSTARS and FundWare, as well as from a myriad of spreadsheet and paper records. The information loaded into the system included data in forty-five separate areas grouped into the following major categories:

Master Data	<ul style="list-style-type: none"> <li>Core data establishing the financial, budgetary and cost management foundation for BusinessDirect, including the Chart of Accounts, Funds, Budget Periods, Business Areas, Cost Centers, Profit Centers and so forth.</li> </ul>
General Ledger Balances	<ul style="list-style-type: none"> <li>Ending month balances from FundWare for the periods from June 30, 2012 through December 31, 2012 were populated in BusinessDirect using special conversion accounts to allow for mapping to the new chart of accounts structure. After reconciliation with FundWare totals, CALSTARS balances by expense type were loaded to provide more detailed monthly expenditure totals within BusinessDirect.</li> </ul>
Budget	<ul style="list-style-type: none"> <li>Fiscal Year 2012-13 appropriations were established and year to date encumbrances were loaded against the initial balances to establish the budget at the remaining levels six months through the fiscal year. Ten years of projected future appropriations were also populated to provide future year budget control over encumbrances in multi-year contracts.</li> </ul>
Procurement	<ul style="list-style-type: none"> <li>345 contracts with a value of \$692 million, 850 purchase orders with a value of \$597 million, and 1,982 business partner (vendor) records were converted from primarily paper records.</li> </ul>

**Usage Levels**

As of January 2013, BusinessDirect became the system used by accounting, budget, procurement and many other CalSTRS staff to perform critical business functions. The following table provides information on the usage of BusinessDirect since implementation. (Table data for the number of active users, number of logins, and volume of transactions processed by month in BusinessDirect are incomplete due to the level of effort required to compile the statistics from system logs. BusinessDirect System Support staff will evaluate the need to establish dashboard reporting for this type of information in the future.)

BusinessDirect Usage Trends											
	6 Months Prior to Implementation		6 Months After Implementation		Months						
	Total	Average Month	Total	Average Month	1/1/2013*	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13
# of Active Users										620	604
# Logins										5,114	5,138
# Transactions <sup>@</sup>										16,079,676	20,257,941
# Shopping Carts (post BD)			835	139	0	96	148	161	167	148	115
# of PO's Initiated	542	90	891	149	n/a	99	139	156	97	252	148
# of Trips or Reimbursements	991	165	1,083	181	139	143	181	214	218	188	99
# of Unique Trip or Reimbursement Submitters	246	n/a	309	n/a	104	103	127	141	151	138	76
# Checks					117	98	359	292	327	394	160
\$ Checks			\$7,971,223.01	\$1,138,746.14	\$ 400,096	\$ 256,169	\$ 2,170,693	\$ 1,283,152	\$1,281,893	\$1,998,178	\$ 581,042

\* Information for January 2013 may not be consistent with other months due to conversion activities

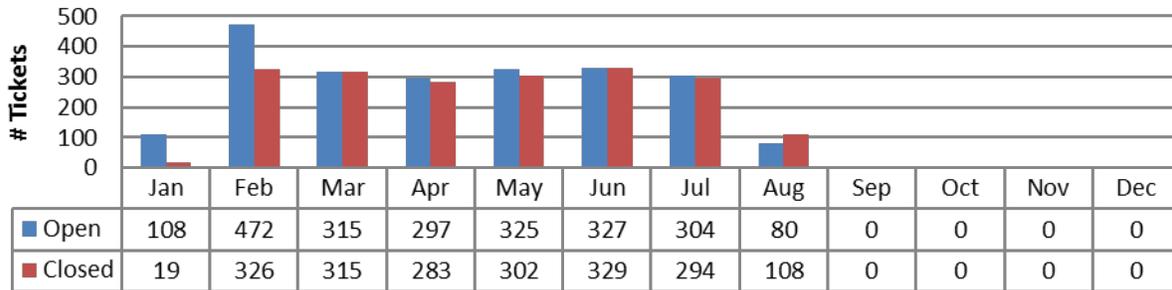
@ Number of transactions includes both online and batch submissions and is based on usage within core system

As this document is written, CalSTRS staff have produced fiscal year 2012-13 legal basis financial statements based on BusinessDirect reports and queries and submitted them to the SCO to meet the August 20, 2013 deadline.

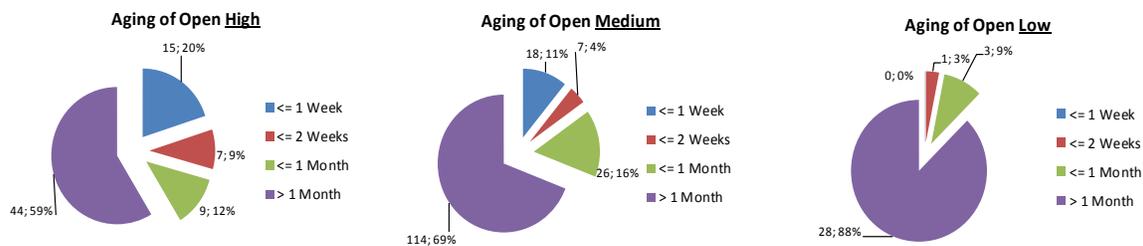
**Stabilization**

The stabilization and ongoing production support of a large enterprise resource planning implementation challenges most organizations and CalSTRS is no exception. CalSTRS and Ciber production support resources have faced significant volumes of user requests for assistance, interface processing backlogs, identified system and master data problems (incidents), and requests for system and master data changes in the six months subsequent to “go-live” on January 28, 2013. This workload is in addition to the design and development workload necessary to complete system functionality pended for Release 1.5 (about 60 percent complete as of August 15, 2013) and the migration of the testing environments off the CalSTRS production network to a staging network to address information security concerns related to off site development work. The following table provides information on the number of production support tickets received and closed by month.

**Trending - Opened/Closed by month**



The length of time that is necessary to resolve support requests, particularly those deemed of high impact or priority is also an important measure. The following data provides aging of open high, medium, and low priority support tickets as of August 9, 2013.



Although the number of requests for assistance are decreasing, and we have begun a trend of completing more requests than are initiated each month, the workload has not “settled” to anticipated ongoing maintenance and support levels.

CalSTRS also experienced backlogs in procurement, contract initiation, and vendor payment processing during the stabilization period. CalSTRS staff worked intensively to address issues created by (primarily) manually converted data, an incomplete understanding of BusinessDirect processes, and the volume of work accumulated during the conversion black-out period from late December 2012 through most of January 2013.

It’s clear from our experience to date that CalSTRS staff require additional training on how to effectively perform critical business processes in BusinessDirect. Although training materials were provided prior to and immediately after implementation via a variety of mechanisms (classroom, eLearning, online help), the training was not always effective and the organization has still been challenged to perform work using BusinessDirect in a consistent and timely manner. While this is understandable given the level of process change implemented, we need to enhance our ability to provide the necessary support and tools on a timely basis.

As a result of interviews with stakeholders throughout CalSTRS (on project lessons learned and specific training needs), management is in the process of developing a plan for an additional

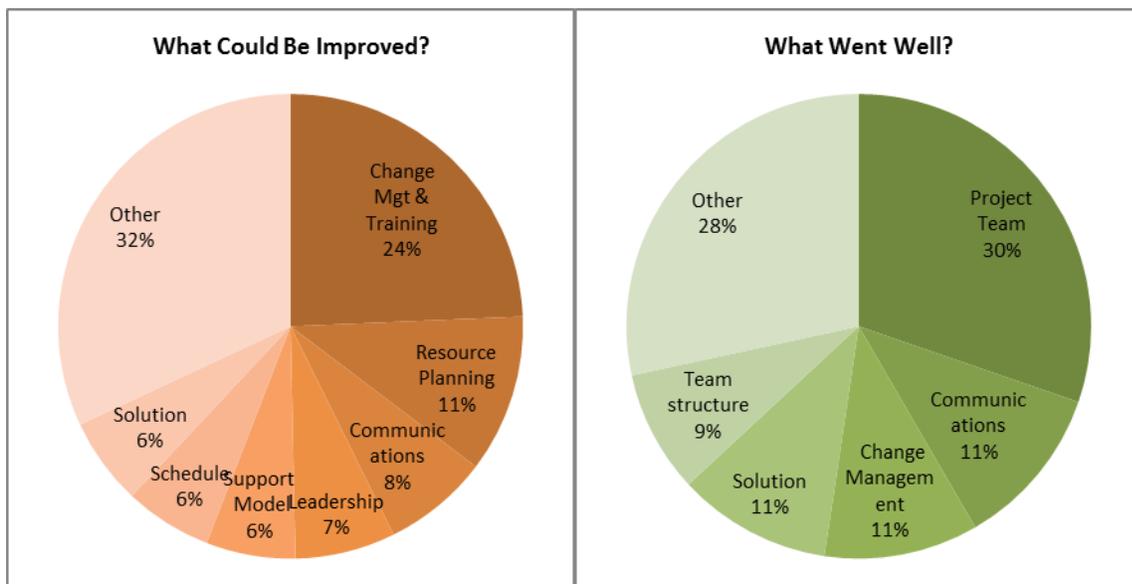
round of training in key areas as well as to support the long term needs of the organization on the use of BusinessDirect. We intend the updated training to leverage the significant knowledge acquired since implementation and to provide CalSTRS process specific training in high impact areas such as procurement, accounts payable, budget management and reporting. Executing on these training plans to increase our ability to utilize BusinessDirect efficiently will be a critical factor driving adoption and success.

### **POST IMPLEMENTATION PERSPECTIVES**

During April through June 2013 CalSTRS, in partnership with the system integrator, Ciber, facilitated a series of “Lessons Learned” sessions with key CARM project stakeholders (many BusinessDirect system users). The intention of the “lessons learned” process was to understand and leverage the collective experience with the design, development, and implementation of BusinessDirect Release 1.0 to gain insights to enhance management of large projects in the future. Interview sessions were held with individual members of executive staff and thirteen focus group sessions were held with key stakeholders inside the project and throughout CalSTRS.

The two primary questions discussed in the interviews and sessions were “what could be improved?” and “what went well?”

A significant amount of information was provided by participants during these interviews and facilitated sessions. A total of 773 comments were captured on “what could be improved” and 317 comments were captured on “what went well”. Our system integrator is in the process of analyzing and synthesizing the responses in order to identify the key “take aways”. The following graphics highlight the areas most cited for each question.



Although the analysis is not complete, several “themes” from the lessons learned will likely emerge:

On the “what could be improved” side, greater emphasis on organizational change management and communications, more comprehensive and effective training, particularly end to end business process training, and more realistic resource planning and scheduling will be cited as areas that can be improved. The “Other” category includes comments and suggestions around a broader group of topics including effectiveness of documentation, user access to BusinessDirect and managing security, improvements to testing, and other areas.

On the “what went well” side, there was widespread recognition of the commitment, expertise, and collaboration of individuals throughout the project team. The co-location approach for CalSTRS staff, Ciber integrators, and other contracted support was cited as beneficial. The “Other” category includes comments and recognition around meeting effectiveness, the amount of Executive backing, that BusinessDirect was in fact implemented, and other areas.

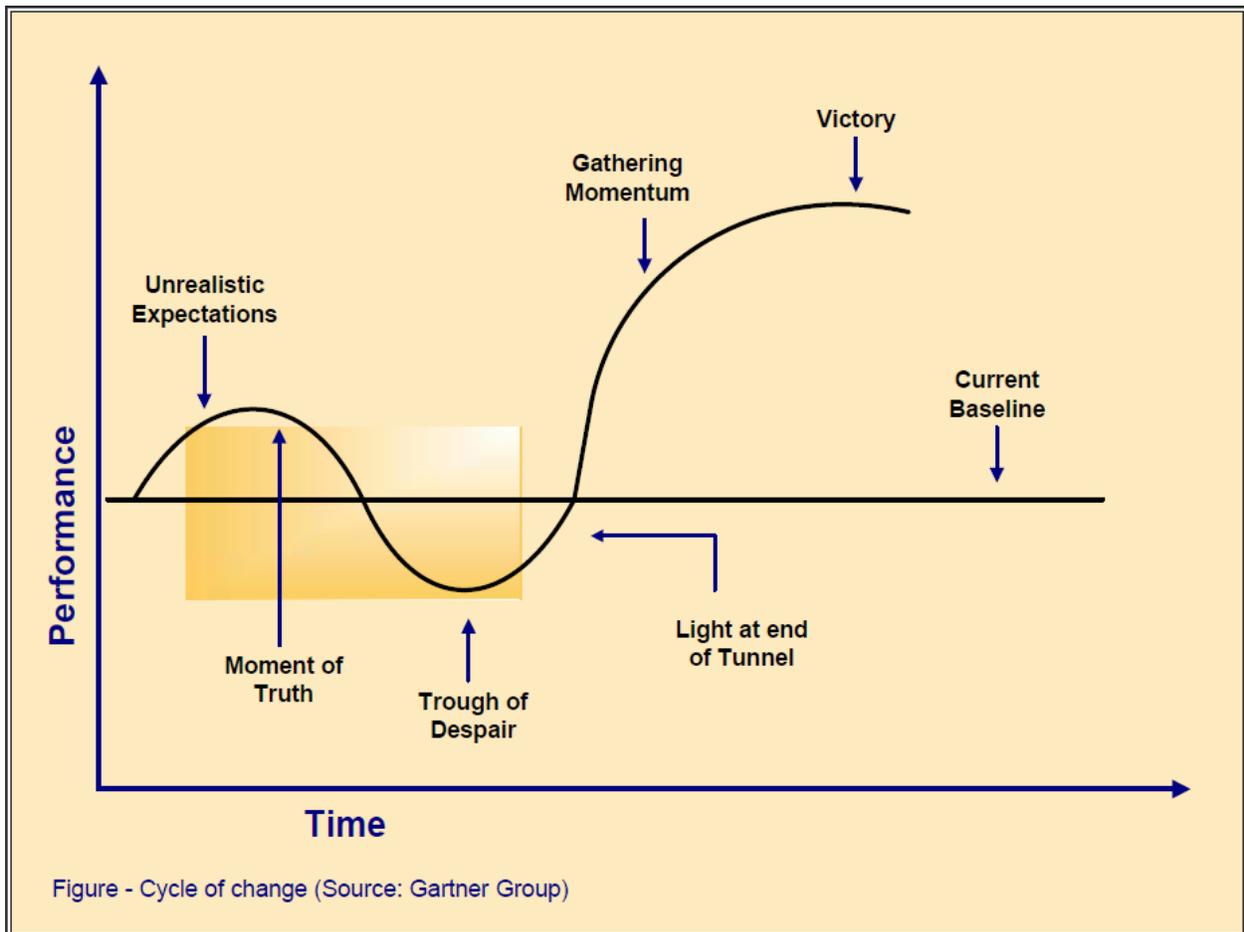
Over the next several weeks, Ciber is scheduled to complete and distribute the overall analysis. At that time, a much more detailed synthesis of results and a prioritized set of recommendations for the future will be available.

### **What to Expect in the Future**

Implementing a complex enterprise resource planning (ERP) system like SAP is a difficult proposition. A significant percentage of ERP projects are terminated prior to implementation and of those where implementation moves forward, up to half don’t achieve their original objectives.

Research from Gartner, Inc. indicates operational disruptions are not unusual during ERP implementation and that it’s rare for an organization to achieve true stabilization within the first six months post “go live”. Increased problem tickets, user requests for basic functional assistance, difficulty in understanding new processes and procedures, inability to extract information from the new system and poor system performance are common issues.

It’s typical for organizations experiencing this type of implementation to go through what Gartner calls the “Trough of Despair”. Users experience an unfamiliar system, can’t recall training materials, are unsure of how to complete work the “new way” and generally experience lower productivity. Public sector implementations can be particularly challenging, especially when transitioning to a commercial off the shelf ERP system for the first time, as users face significant changes to procedures that have been in place for years.



The good news is that most organizations realize significant improvement in the six to twelve months following implementation.

Over the near term, CalSTRS is focused on moving towards stabilized operations. As a result of this focus, BusinessDirect priorities currently include:

- Continuing to drive adoption and appropriate usage of the system by providing additional, detailed training on how to effectively perform key business functions
- Clarifying and consistently applying our overall support methodology and processes to drive to production stabilization
- Implementing remaining Phase 1.0 functionality through completion of Release 1.5

Although not without challenges, the CalSTRS implementation of BusinessDirect is proceeding along a path that will allow us to achieve most of the objectives originally established for the project. We expect to begin to measure these achievements over the next twelve months.