

Title: Interdisciplinary Task Force Creates a Financial Reporting System from Scratch

Submitter: James Lin, CTO, College of Humanities, Arts, and Social Sciences, UC Riverside, james.lin@ucr.edu, 951-827-5031

Project Team:

Project Task Force: <ul style="list-style-type: none">• James Lin – CTO for CHASS, Project Lead• Raymond Holguin – Enterprise Systems Manager• Matthew Chu – Enterprise System Architect• Kelvin Mac – Digital Media and Mobile Apps Manager• Lilia Liderbach-Vega – Financial & Administrative Officer• Michael Molinar – Department Manager• Jennifer Morgan – Department Manager• Katrice Calloway – Budget and Operations Manager• Tanya Wine – Academic Resources Manager• Sharon Payne – Budget and Operations Analyst	College Partners: <ul style="list-style-type: none">• Katharine Henshaw – Associate Director, CIS• Diane Shaw – Financial & Administrative Officer• Josie Ayala – Financial Analyst• Diana Marroquin – Budget Analyst• Vonnie Tessier – Financial & Administrative Officer• Susan Komura – Financial & Administrative Officer• Jay Melashenko – Financial & Administrative Officer
Executive Level Support: <p>Cindy Williams – Assistant Dean and CFAO, CHASS Milagros Peña – Dean, CHASS</p>	

Project Description:

The innovative CHASS Financial Reporting System improves accountability, transparency and financial communication for department chairs, financial officers and college administration.

Project Narrative:

Problem

With an annual enrollment of over 10,000 students, the College of Humanities, Arts, and Social Sciences (CHASS) is the largest college at UC Riverside. As a substantial arm of this R-1 university, CHASS houses over 40 of academic departments, multidisciplinary programs, and research centers, in addition to an art gallery, museum, and performing arts studio. Successful management of an over \$100 million annual budget requires monitoring myriad data points on revenues and expenditures in conjunction with fundamental efficiency, accuracy, transparency and accountability metrics. With several hundred Financial Accounting Units (FAU) and several hundred thousand transactions each month across over 40 organization units, the compilation of accurate and useful college financial reports has been time-consuming, laborious and inconsistent.

The college’s decentralized approach to departmental management allows each unit maximum flexibility to create processes that respond to student and faculty needs. In the area of financial reporting however, this departmental autonomy has resulted in a highly variable set of reports and data sets throughout the year. “We would ask for quarterly [departmental] reports and they would come in several different formats,” said Katrice Calloway, the college’s Budget and Operations Manager. “It was hard to translate them all into one, readable report for the Chief Financial and Administrative Officer (CFAO).” Routinely, the CHASS Financial Team translated and compiled tens of thousands of lines of financial data on hundreds of unstandardized spreadsheets from more than 40 organization units in an attempt to create useful and accurate college reports. In turn, college budgetary reports issued to departments required additional translation to align with each unit’s processes, resulting in errors and a lack of transparency. In order to improve fiscal oversight, efficiency and communication, the college’s problems with financial data reporting required an immediate solution.

Goals

The project task force determined to find a technological solution that provided efficient, easy to use, standardized and up-to-date financial data reports that improved communications between the college office and departments/units and helped support CHASS on the path to increased enrollment and research support demands. The team challenged itself to develop innovative ways to introduce the solution to CHASS organization units and to ensure that the solution would enhance the culture of financial operation transparency and accountability. In addition, the team aimed to move this important endeavor forward – helping the CHASS solution to become a model that other colleges/schools at UCR or system-wide strive to emulate.

Strategy, Solution and Innovation

The project team implemented Current State and Future State process analyses to assess CHASS financial reporting effectiveness, articulate the envisioned future, set the effectiveness target, and develop the long-term stretch goal. In addition, How We Get There analysis helped to discover innovation opportunities and identified the resilience needed to reframe the college’s financial reporting as the best imaginable model.

Current State (Where are we now?)	Future State (Where do we want to be?)
<ul style="list-style-type: none">• Financial data silos that are difficult to consolidate/unify• No standard report format across the college• Labor intensive and time consuming to compile and generate accurate financial report• Low accuracy requiring intensive communication, correction and verification efforts• Difficult to have full view of financial status until after annual fiscal closed• Lack of transparency from organization unit to Dean’s Office• Weak culture of financial accountability from organization unit• Data history loss due to staff change• Organization units manually generate reports upon request from Dean’s Office• Frequent miscommunication among staff regarding data accuracy	<ul style="list-style-type: none">• Summarized monthly financial reports for each academic department and program, museum, administration units and research centers on a consistent basis• Standardized financial reports so that everyone is viewing individual financial data in the same format• A user-friendly system where the financial information can easily be accessed and exported into Excel• A transparent method to ensure that Financial Managers, Chairs, Directors and the Dean’s Office are routinely informed on financial status of each department• Functionality that allows for quarterly routing of financial reports and provides a consistent review/approval process for Chairs, Directors and Financial Managers• Built-in business intelligence to automate user data entry and eliminate potential error• A tool to support college’s administrators for strategic financial and academic program investment decisions

Process

With executive sponsorship by Dean Milagros Peña and Assistant Dean & CFAO Cindy Williams, a project task force was assembled with key players willing to challenge assumptions about the most effective and efficient ways of creating solutions and delivering value to the project stakeholders. The task force included a broad coalition of leaders from administrative operations, finance and college IT with deep understanding of business and technology processes in higher education and at UCR. In a kick-off meeting with the executive team, the task force established guiding principles of honesty, openness and integrity and identified key questions, including: How can every CHASS unit keep their budget data consistent, accurate and up-to-date? What are the meaningful budget category grouping methods for standard financial reporting formats across the college? and How can the solution achieve high acceptance by stakeholders? The task force was charged with creating a solid solution for the college and empowered to explore all options.

The task force met weekly to discuss all aspects of the design solution, including:

- The selection of college’s opportunities and where to create value.
- How to create values to the stakeholders: chairs/directors, FAO/Financial Managers, financial analysts, and Dean’s Office, regarding financial reporting for the college?

- What are the college's distinctive competencies to sustain the created values?
- What data and reports should be aligned with the college's operation model?
- What functionality would allow for quarterly routing of financial reports through the system that would ultimately provide a review/approval process for Chairs, Directors and Financial Managers?
- How to differentiate academic department and non-academic unit funds based on their characteristics to classify and separate unrestricted/Chair Discretionary and restricted funds?
- How to handle up-to-date projected revenues, carry forwards, and expenditures in annual basis?
- How to handle future college financial commitments?
- How to achieve high acceptance from stakeholders, especially from chairs/directors?

After 8 months of robust discussion and feedback from college partners, the task force determined that a cohesive software tool adapted to the needs of stakeholders, integrated with built-in business logics from the UCR Financial System and secured by the campus single sign-on central authorization system would immediately improve the current financial reporting problems and provide a foundation for future growth and transparency. The final product would be similar to an accounting ledger, displaying expenses, allocations and pending commitments, and would include projections of a department's financial health each month. Built-in automatic electronic routing would enable quarterly certification by chairs, directors, and financial managers. Once the solution, the CHASS Financial Reporting System (CFRS) was defined, the CHASS IT team designed system requirements and a development plan. After 8 months the system was developed and the task force and the college partners spent an additional 4 months testing and recommending improvements. During the testing phase, the task force communicated with stakeholders through emails, in-person meetings, training materials and hands-on training sessions in an effort to gain feedback and early adoption by users. Ongoing, annual refresher training and new user training sessions provide continual feedback and improvement for the system.

Impact

The implementation of the CHASS Financial Reporting system has increased efficiency and financial accountability across the college in alignment with and support of the university missions of teaching, research and service. Prior to implementing CFRS, CHASS staff struggled with manually intensive processes that required pulling financial data from various UCR enterprise systems and manipulating financial data in spreadsheets. There were no instant reports available that provided financial status snapshots and no automated historical overview of financial status of individual department and the college. CFRS now manages financial reports of every CHASS organization unit down to the detailed FAU level (including carry forwards, confirmed and projected revenues, and confirmed and projected expenditures), sums up department totals, and consolidates all organizational units' data to a college budget total. Today, with data conveniently consolidated in CFRS, the reporting process has been streamlined and users can generate financial reports automatically. Stakeholders have been quick to realize the time-saving value of CFRS. The new and efficient system has reduced the number of ad hoc budget requests between organizational unit and the Dean's Office by more than 95% and have saved the college staff hundreds of hours in financial labor.

The automatically generated CFRS monthly and quarterly reports are now the college's mandated standard reporting format. Consequently, CHASS financial data is no longer locked in data silos and the various departments are working toward common goals of efficiency, accuracy, transparency, and accountability. Because of the ease of working with CFRS, departmental users are rapidly adopting the system. As of May 2020, 61 unique users from all CHASS organization units (100%) enter and update projected revenues and expenditures on a monthly basis. Widespread adoption and implementation has generated a cultural shift to acceptance of a more data-driven financial decision making process.

In the realm of budget planning, CFRS enables college administrators to make strategic decisions to improve college processes, programs, student services, and research support. CFRS functionality has helped the college to develop innovative strategies on the best use of financial investments. The system's Projected Yearend Balance tool will enable more nimble and accurate future-state budget planning that can better respond to the coming budget challenges due to the COVID-19 crisis.

Collaboration

Developing and deploying a tool that would be useful for a wide range of college users required a task force that combined technical expertise, extensive financial and business process experience and creative thinking. The CHASS IT team (James Lin, Raymond Holguin, Matthew Chu and Kelvin Mac) and college financial officers (Katrice Calloway, Tanya Wine and Sharon Payne) were joined by managers of large academic units (Lilia Liderbach-Vega, Michael Molinar, and Jennifer Morgan). These three perspectives (IT, college administration, and departmental management) created a strong foundation for robust problem-solving and allowed team members to draw on each other’s strengths as they forecasted likely outcomes of proposed solutions. In a spirit of highly engaged collaboration, the task force agreed to a practice of open communication and debate that reduced jargon and avoided inter-personal or territorial conflict. The testing team included financial officers from a variety of college offices and types, from small, research units, to mid- and large-scale academic departments. As a result, the CFRS is a collaboratively-designed system that draws on a range of skills and talents from across the college.

Project Timeline

September 2017- June 2018	Project task force formed, project planning, requirements analysis
July 2018 – June 2019	System programming, testing, documentation, validation and user training
July 2019 - present	Deploy to production and in full operation

Technology

Programming Language	Java
Frameworks	Grails, Hibernate, Spring, Struts
Application Server and DB	Apache Tomcat, MySQL
User Interface Framework	Bootstrap 4, Kendo UI

Future Goals





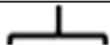
Phase 2 development of CFRS is currently in planning. Objectives include:

- Implement easy to use dashboards providing access to all Key Performance Index across the college by department for enhanced financial investment decisions.
- Enhance current data availability by replacing monthly data imports from UCR Financial Systems with daily data pulling.

The CFRS development team designed the program to be adaptable and shareable across colleges, schools and institutions. Built with IT industry-standard technology and UC system-wide FAU structured accounting method, CFRS is interoperable and implementable in other UC organizations. The team plans to share the technical design, specs and training materials with other units on campus and is willing to meet with interested representatives from other campus upon request.

Example of Fund Balance Report Overview:

The Fund Balance Report view displays a financial summary based on the Year, Period and Department.

	Report Type <ul style="list-style-type: none"> • ALL FUNDS REPORT: For Academic and Administrative Units • CHAIR DISCRETIONARY: For Academic Units only to inform Chairs of non-designated funding that is available to spend.
	The columns labeled Carry Forward Funds, YTD Allocations, YTD Expenses and Current YTD Balance are pulled directly from UCRFS Totals and cannot be changed.
	The green columns allow the user to view projected allocation and expense details. Click on any amount to view projection details and a new window will pop-up.
	The Projected YE Balance column is calculated using a formula which can be viewed by hovering over the "i" icon.
	This section displays the FAU or Full Accounting Unit

Year: 2020 | Period: September | Department: Hispanic Studies | Reporting through: 09/30/20 | Closing deadline: 10/1/2019

FUND BALANCE | SUMMER SESSIONS | CONCURRENT ENROLLMENT | SEA TRANSFERS

Report Type: All Funds

Funds exclude non-Compliance & 10000-000-0-0000-0000

	Activity Description	Activity T	Fund T	Function T	Fund Description	Carry Forward Funds	YTD Allocations	YTD Expenses	Current YTD Balance	Remaining Temp Allocations	Remaining Proposed Expenses	Proposed YC Balance
1	EF	AD1336	19900	40	GENERAL FUNDS	\$0	\$1,372,420	\$387,493	\$884,927	\$0	\$0	\$884,927
2	EF	AD1336	20322	40	LINEA CONCURRENT ENROLLMENT	\$18,963	-\$345	\$2,231	\$16,397	\$0	\$0	\$16,397
3	EF	AD1336	20712	40	UNION SPANISH AND PORTUG	\$2,810	\$0	\$0	\$2,810	\$0	\$0	\$2,810
4	EF	AD1336	20104	20	PLACEMENT TESTS	\$0	\$0,330	\$0	\$0,330	\$0	\$0	\$0,330
5	EF	AD1336	20104	40	PLACEMENT TESTS	\$43,206	\$0	\$7,887	\$35,317	\$0	\$0	\$35,317
6	EF	AD1336	20310	40	SALE OF EQUIPMENT	\$325	\$0	\$0	\$325	\$0	\$0	\$325
7	EF	AD1336	20900	40	UNATH DEF SUSP BOTY ERROR	\$0	\$0	\$28,838	-\$28,838	\$0	\$0	-\$28,838
8	EF	AD1900	19900	40	GENERAL FUNDS	\$17,358	\$0	\$8,827	\$12,359	\$0	\$0	\$12,359
9	EF	AD1900	19900	43	GENERAL FUNDS	\$930	\$900	\$0	\$1,200	\$0	\$0	\$1,200
10	EF	AD1900	19900	44	GENERAL FUNDS	\$2,834	\$3,600	\$0	\$6,434	\$0	\$0	\$6,434
11	EF	AD1900	47308	40	HILLMAN FELLOWSHIP	\$1,234	\$0	\$0	\$1,234	\$0	\$0	\$1,234
12	EF	AD1900	20000	44	UCOP FUNDING ASSESSMENT	\$42	\$0	\$0	\$42	\$0	\$0	\$42
13	EF	AD1900	20701	44	UC LAB FEES RESEARCH PROGRAM	\$82	\$0	\$0	\$82	\$0	\$0	\$82
					TOTAL	\$67,314	\$4,362,080	\$431,631	\$4,000,800	\$0	\$0	\$4,000,800

Showing 1 to 13 of 13 entries

Export