The "Berkeley Miracle:" Maintaining Quality With Fewer Resources

June 4, 2014
Larry Conrad
Associate Vice Chancellor-IT and CIO

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Agenda

Overall Context for the Operational Excellence Initiative

- Leadership Support

- Funding Model

- Multi-Dimensional Approach

Campus Shared Services

- Campus Shared Services IT

Results to Date/Lessons Learned

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A Business Case for Change
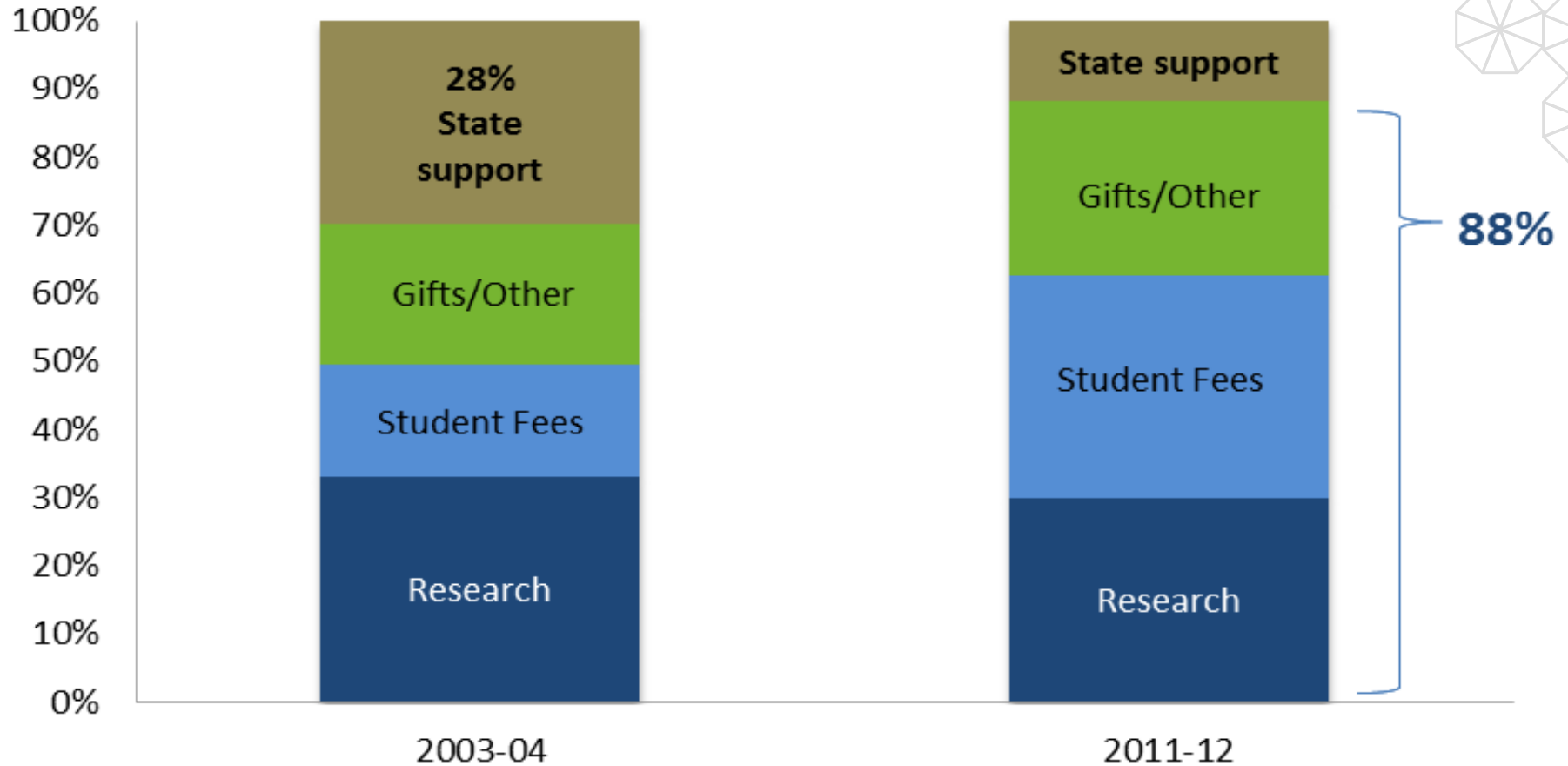
Financial realities require changes to:

- Contribute to long-term financial sustainability.

- Maintain accessibility of this world class institution.

- Create incentives that foster progress in alignment with strategic objectives.

Room for improvement in operational effectiveness:

- Duplicative, fragmented, and overly complex operations.

- Expensive, manually intensive processes.

- Error-prone data and information.

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Change in Revenue Sources
2004 to 2012

Diagnostic Phase

Setup

Scope	Deep, systematic look to significantly reduce expenses. • *In scope*: Campus operations, processes, and systems. • *Not in scope*: Teaching and research.
Governance	Chancellor Birgeneau formed *and led* Steering Committee.
Methodology	Collaborated with Bain Consulting to assess key operational areas, evaluated benchmarks from a broad range of public and private institutions, and recommended areas with the greatest potential for savings and improved service delivery.
Campus Involvement	700 faculty, administrators, staff, and students across the campus involved through in-person meetings and online surveys.

Diagnostic Phase
Outcomes

Findings	• Potential savings of >$100M from operations cost base. • Opportunities for improvements in operational effectiveness.
Plan of Action	• Chancellor launched effort to capture $75M in administrative costs and improve upon administrative operations.

Opportunity Areas	• Five areas enable delivery of more consistent, sustainable service levels at dramatically lower cost:
	   1. Procurement
	   2. Organizational Simplification
	   3. Information Technology
	   4. Energy Management
	   5. Student Services
	• Design of a modern financial management system to ensure more effective management of financial resources:
	   1. Commitment to a high-performance operating culture.
	   2. Redesign of a disciplined financial management model to ensure more effective management of financial resources.

OE Implementation Phase
Multi-Dimensional

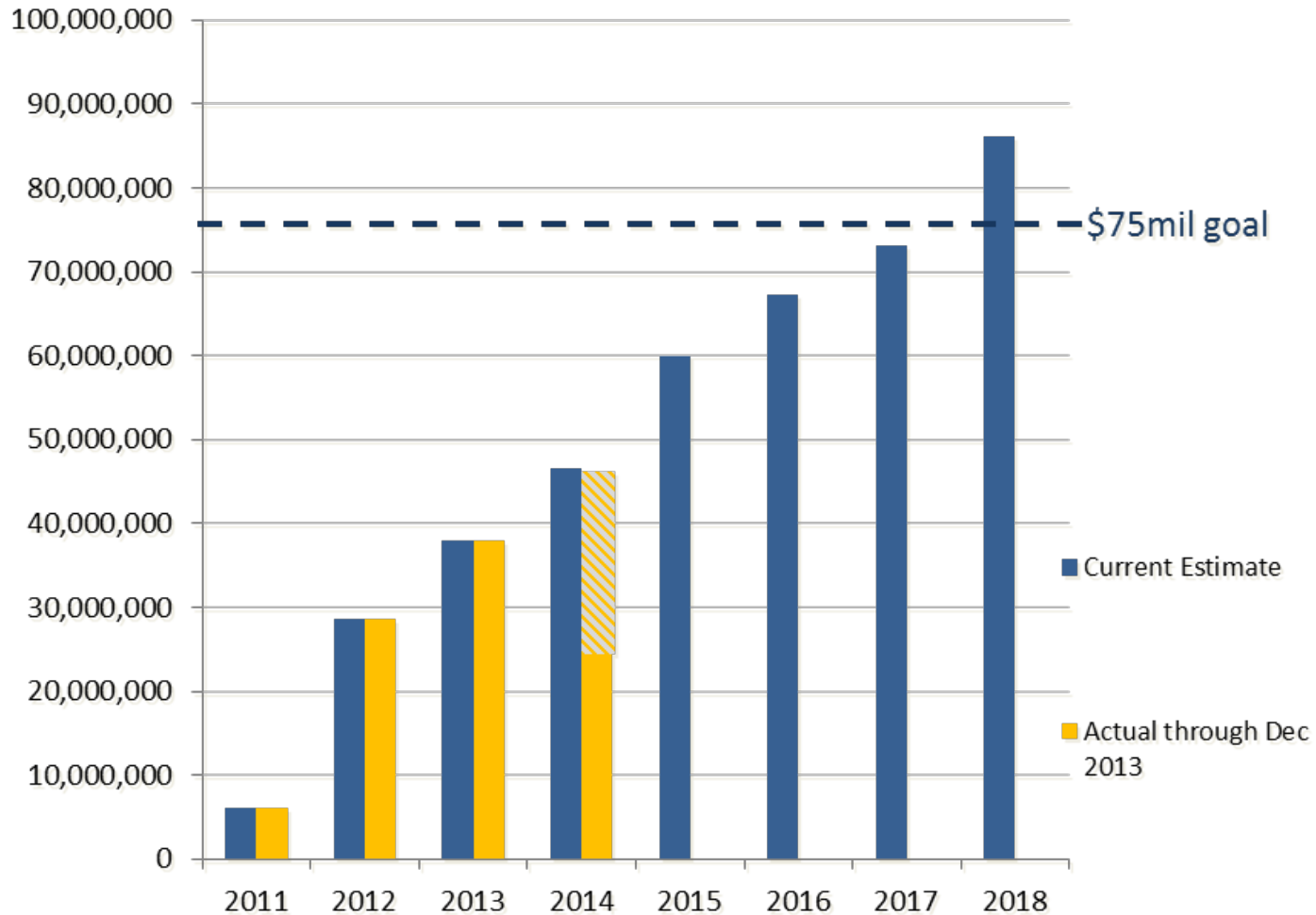| Initiative	Benefit
IT Productivity Suite	Enhancing collaboration between faculty, staff, and students by offering access to standardized, best-in-class IT tools from Google, Microsoft, and Adobe.
CalPlanning	Enabling units to submit department-level operating budgets, enabling richer budget discussions by campus leaders and strategic prioritization.
Unit Restructuring (spans and layers)	Streamlining the campus organization, unit by unit, to create a flatter, more effective organizational structure with well-defined roles and career paths for individual contributors and supervisors, and increasing span of managerial control.
Procure-to-Pay Reporting	Improving procurement and payment processing, compliance, vendor relationships and vendor diversity.
Campus Shared Services	Providing consistent, high-quality tier 1 support for new campus applications (e.g., BearBuy, bConnected, CalPlanning).
Energy Management Program	Showing reductions in electricity consumption.
Cal Student Central	Providing a one-stop source of information and assistance for student business transactions.

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OE Implementation Phase
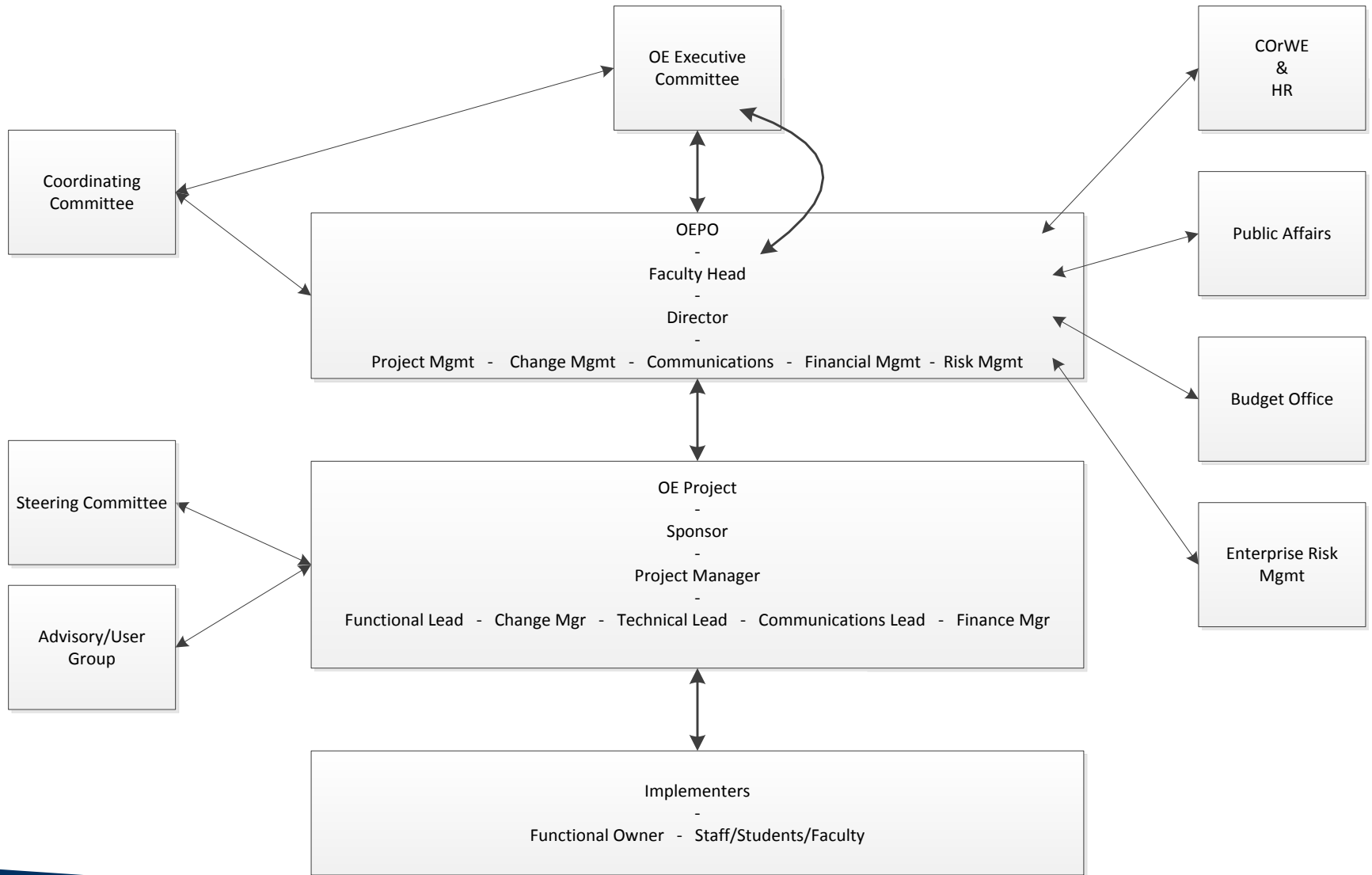## Multi-Dimensional

Initiative	Benefit
Campus Shared Services	Performing post-service delivery reviews. Incorporates feedback to improve operations and customer service.
BearBuy	Leveraging purchasing data to negotiate improved contractual terms.
Energy Management Program	Encouraging friendly competitions between units to continue to find new ways to reduce energy consumption leading to increased savings and reduced greenhouse gas emissions.
Berkeley Operating Principles	Inviting the campus community to publically post examples which demonstrate the operating principles in action, inspiring other members of campus to incorporate these principles into our work environment.
OE Program Office	Building a community of practice of project management professionals who share new knowledge, lessons learned, and effective approaches.
OE Executive Committee	Leveraging campus strategic goals and information on OE projects (e.g., financials, successes, obstacles) to make better informed decisions.

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OE Implementation Phase
OE Portfolio Savings

OE Project Organizational Structure

OE Executive Committee

Coordinating Committee

COrWE & HR

Public Affairs

OEPO
-
Faculty Head
-
Director
-
Project Mgmt - Change Mgmt - Communications - Financial Mgmt - Risk Mgmt

Budget Office

Steering Committee

Advisory/User Group

OE Project
-
Sponsor
-
Project Manager
-
Functional Lead - Change Mgr - Technical Lead - Communications Lead - Finance Mgr

Enterprise Risk Mgmt

Implementers
-
Functional Owner - Staff/Students/Faculty

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CSS Timeline & Implementation
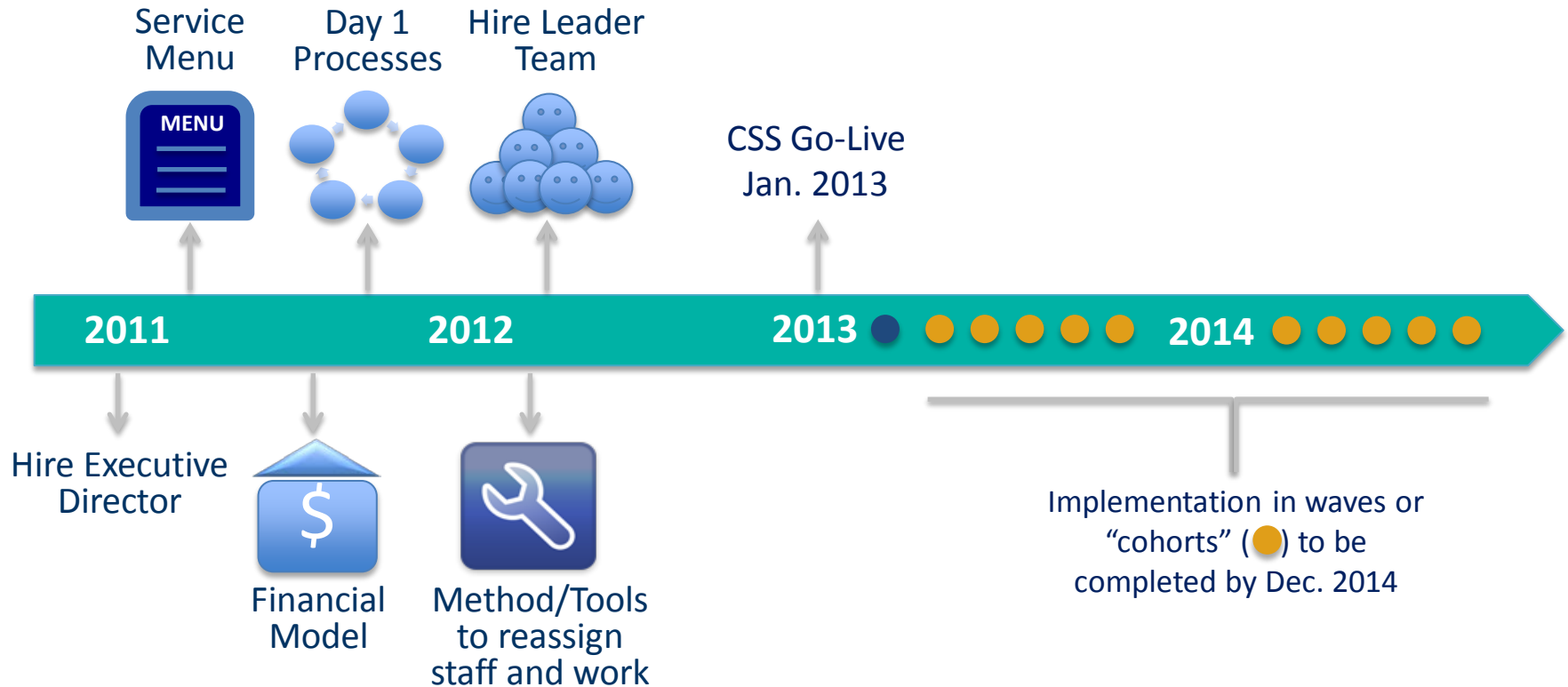
CSS Snapshot

BUSINESS AND FINANCIAL SERVICES	HR AND ACADEMIC PERSONNEL SUPPORT	INFORMATION TECHNOLOGY	RESEARCH ADMINISTRATION

- Organization has grown to 620 staff members across IT, Business and Financial Services, HR, and Research Administration.
- Now serves ~70% (over 17,500) of UC Berkeley's faculty, staff, student employees, and affiliates.
- CSS IT:
    - Has 114 staff members serving the campus.
    - Supported a total of **65,961** tickets from Jan. 2013 to March 2014 (an average of 32 tickets per business hour).
- CSS places a focus on staff diversity.
- Off campus central offices with 7 on-campus satellite locations.

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CSS IT – Zone Map

- Off Grid
- Upper Hearst
- Campanile
- Upper Bancroft
- Lower Bancroft
- Lower Hearst
- Central Campus

CSS IT – Organizational Chart

CSS – IT
Includes reassigned staff for
Cohort 3.1
Effective April 1st, 2014

Larry Conrad
Office of the CIO
Associate Vice Chancellor &
Chief Information Officer

Thera Kalmijn
Campus Shared Services
Chief Operating Officer

Jerry Yerardi
Director

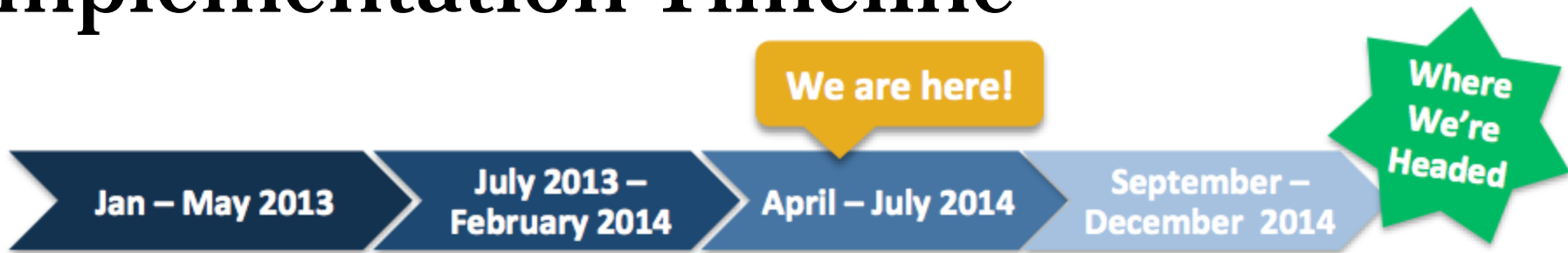**Operations Coordinator**
Nicolette Langer

Barinder Dhillon- Flanagan
Deputy Director

Service Desk
4th Street

Supervisor
Joseph Soares
Josie Glavan

Carol Chapman
Charles Heinz
David Holt
Joleen Locanas
Aaron Turner
John Valmores

Noah Bacon
Eric Fong
Jeff Gill
David Lee
Pat Mahoney
Sean McMahon
Melaniece Parker
Glenn Robertson
Donson Toy
Toni Ward
Theodore Mak
Adam Zukauckas

Procurement and Provisioning Team
Zone 0
4th Street

Supervisor
Glenn Cruz

Eric Avila
DeShawn Candate
Jesse Garcia
Fred Honschke
Mary Hullihan
Noel Keirnan
Erick Nagano
Kimiko Ramirez
Roberto Rivera
Donald Wong

Strategic Initiatives
4th Street

Supervisor
Frank Muth*
Jeanette Robinson

Chris Kosienski
Candy Skinner
Michael Thompson

Technical Projects
4th Street

Supervisor
Michelle Bautista

Luis Arias
Peter Lo
Louis Siu
Doug Van Buren

ServiceNow Team
Justin Anonuevo
Jennifer Dsouza
Aric Horstman
Tazo Stuart-Riascos
Anthony Roybal
Paula Driver Shimada
Vacant – QA/ Tester

Engineering & Security
4th Street

Supervisor
Micah Bot-Miller

Dan Russell
Christy Webber

End User Device Support Group

EUDS Team Upper Hearst Zone 1	EUDS Team Campanile Zone 2	EUDS Team Upper Bancroft Zone 3	EUDS Team Lower Bancroft Zone 4	EUDS Team Lower Hearst Zone 5	EUDS Team Central Campus Zone 6
Supervisor Luke Nucum	Supervisor Shirley Davis	Supervisor Duane Straub	Supervisor Lois Wareham	Supervisor Amit Singh	Supervisor Noah McGee
Athena Chavira Manuel Castrillo Freytes Vibol "Yoshi" Kim Bryan Lee Philip Loarie Steven Santiago*	Asitha De Silva Michele Dunleavy Mark Ingles Nadine Marturano* Guy Mirisciotta Edgar Ortega Ryan Tran	Robert Amsbury John Benedict Stuart Damon Benjamin Darmoni William Gross Steven Herrera Morgan Milligan Jimmy Morales Robert Rainey Thom Stokes Farnaz Stosik Seth Yanow	Steve Dalton Mike Daplas Devin Dunlevy Juan Grande Charles Lam Maria Martinez Khattab McIntosh Chris Morrison Ivan Ordonez Carl Petroff David Schwartz Alex Warren	Calvin Burnes Ayelet Donner Andy Edlen John Fuh-Sooter LaToya Floyd Adam Grimald Brett Larsen Eric Maddy Ben Serrano	Daniel Bass Paul Colley Roger Emond Paul Garnett Felicia Grant Jeremy Howard Lawrence Peng Vivian Sophia Jason Trout Kenneth Wilson

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Implementation Timeline

We are here!

Where We're Headed

Jan – May 2013	July 2013 – February 2014	April – July 2014	September – December 2014

Cohort 1
- AVC, IST
- Chancellor's Office
- CITRIS
- COENG Engineering (ERSO)
- College of Letters and Sciences, Division of Biological Sciences
- College of Environmental Design
- College of Natural Resources
- Environmental, Health & Safety
- Intercollegiate Athletics
- School of Journalism
- School of Social Welfare
- University Health Services
- VC, Administration & Finance
- VC, Research and RES

Cohort 2
- Academic Senate
- Blum Center
- College of Engineering
- College of Letters and Sciences (select Math & Physical Science, Social Science units)
- Executive Vice Chancellor & Provost
- Goldman School of Public Policy
- Haas (T&E Purchasing)
- L&S Computer Resource Users (IT)
- School of Public Health
- Summer, Study Abroad & Lifelong Learning (HR)
- VC, Student Affairs
- Vice Provost for Faculty

Cohort 3
- Art, Music & Pacific Film Archive
- Athletic Study Center
- College of Chemistry
- Education Technology Services
- Graduate Division
- Graduate School of Education
- KALX Radio Station
- Student Learning Center
- VC, Equity and Inclusion
- VC, Facilities Services

Cohort 4
- Berkeley Law
- Cal Performances
- College of Letters & Science, Deans Office
- College of Letters and Sciences (select Arts & Humanities, Math & Physical Science, Social Science units)
- College of Letters and Science, Undergraduate Division
- Haas School of Business
- Osher Lifelong Learning Institute
- School of Information
- Summer Sessions
- Study Abroad
- School of Optometry
- UC Library
- University Extension
- VC, University Relations

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CSS IT – Tools & Technology

Tool/Technology	Benefit
Bomgar	Remote support solution that allows technicians to remotely connect to end-user systems.
Avaya ACD	Automated Call Distribution tool that manages in and outbound phone calls and voicemails.
Helpdesk Institute (HDI) Customer Satisfaction Surveys	Tool for gathering customer experiences and feedback upon completion of services provided.
Tivoli Endpoint Management (TEM)	IT Asset Management tool enabling remote management and automatic delivery of software updates.
Incident Management Tools	System used to manage the documentation and response of customer reported incidents or issues.
Salesforce	Client Relationship Management
Confluence Wiki	Web application which allows internal team members to share information in collaboration with others.
Knowledge Base	Technology used to store and share structured, consistent and accurate information across internal staff and external customers.

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CSS IT – The Berkeley Desktop

The Berkeley (Managed) Desktop

- Provides a reliable, secure, and integrated computing environment that reduces the amount of time faculty and staff spend maintaining their computers.
- A standard environment combined with automated maintenance means you see fewer problems and are able to get help faster.
- List of models that have been tested and optimized to work with the Berkeley Desktop.
    - Dell OptiPlex 390, 3010, 3020, 760, 780, 790, 960, 980, 990, 9010, 9020
    - Dell Latitude E6220, E6230, E6410, E6420, E6430, 6430U, E7240, E7440

Non-Berkeley (Non-Managed) Desktops

- Higher costs.
- Higher risk of compromise.
- Less opportunities to receive remote desktop support.
- Longer to research/troubleshoot/resolve problems—greater downtime for customers.
- May not be compatible with enterprise applications.

CSS IT – Services

- Desktop Hardware Support

- Desktop Software Support

- Application Support

- Device Procurement

- Desktop Engineering & Security

- Incident Management

- Service Desk

- Infrastructure Support

- Technical Projects

- Strategic Initiatives (On-Boarding Team)

- Some Research Lab Equipment Support

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CSS IT – Service Gaps

Active Directory

- Not everyone is on the campus domain and some departments are on their own domain or only have local workstations.
- Departments may not have a back-up for a system administrator or lack a support community.
- Departments may need an OU to be created on the campus domain.

Applications

- Does a service partner exist?
- Only a limited group of people know how to setup specialized configurations.
- Are standardized procedures in place to handle applications?
- Patching, licensing, and security.

Database

- Expertise of DBA not funded and left to unqualified staff.
- Data classification.
- Many different tools used (i.e., MS Access, Filemaker, MySQL, etc.) which makes maintenance and scale difficult.
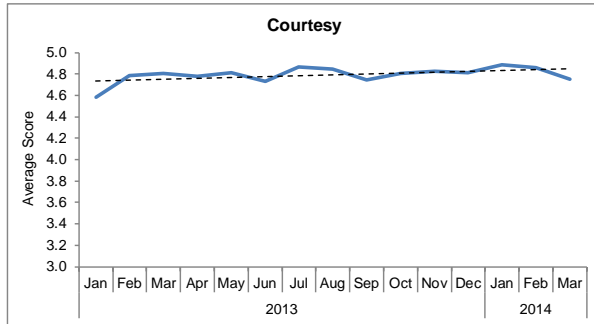
Metrics: IT Customer Satisfaction

Berkeley Campus Shared Services

1. Average Overall Satisfaction

Overall Satisfaction
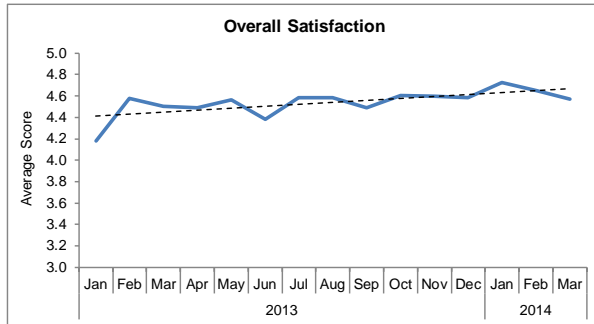
2. Survey Responses by Month

Responses per Month
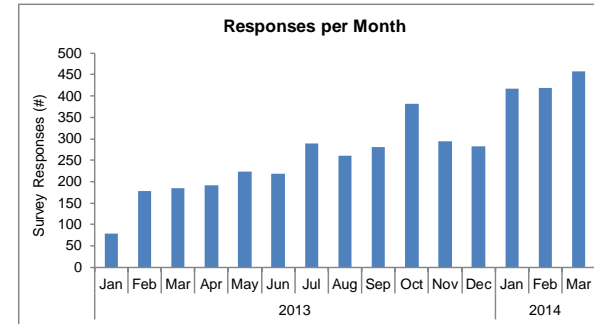
3. Scores by Question (1-4)

Q1 - Courtesy of Analyst

Courtesy

Q2 - Technical Skills of the Analyst (Avg)

Technical Skills/ Knowledge
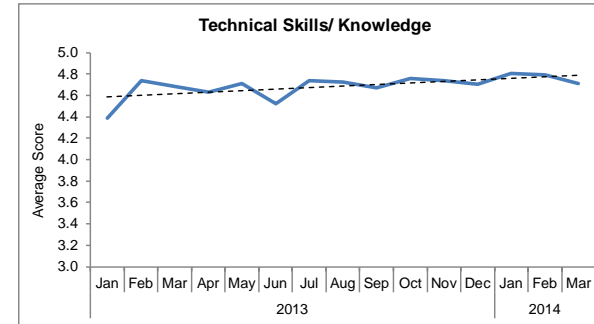
Q3 - Timeliness of Service Provided (Avg)

Timeliness
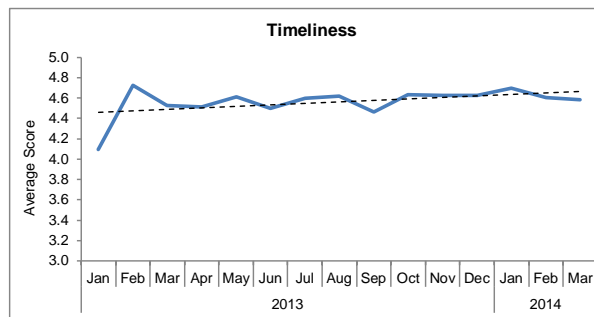
Q4 - Quality of Service Provided (Avg)

Quality
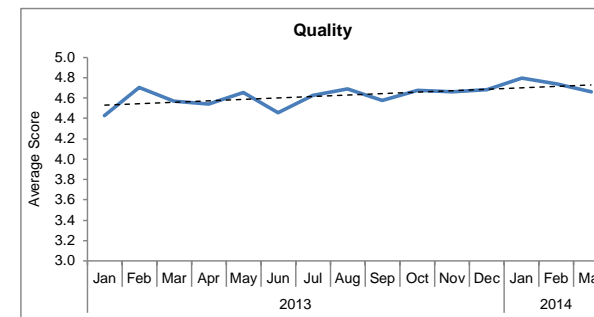
Metrics are based on the Help Desk Institute metrics for higher education.

CSS IT
Successes

Successes

- On-boarded 17,500 people
- Provided bMail support for entire campus
- Deployed 1500+ standard imaged PCs
- Provided desktop support to departments who had no support
- Initiated project management team
- Established Customer Technical Liaison role
- Launched Campus Ticketing Project
- Reorganized 4th Street Hub and Campus Zones
- Established ongoing relationships with various IT service orgs
- Created a security and engineering team
- Workforce & Talent Management

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Lessons Learned

- Leadership must be fully and visibly engaged in the program.
- The cooperation/collaboration of both sides of the house – administration **and** academic – is critical.
- Co-create to drive better outcomes and deepen commitment.
- Deploying new technology is **not** success.
- Changing mindsets and behaviors in order to realize the full potential of new technology **is** success.
- Changing behavior takes **time and effort.**
- Leverage the strengths of the organization to achieve behavior changes (strong culture, clear mission, committed workforce) .
- Change risks are predictable yet different in every case – customize the change plan.

Lessons Learned
Continued

- Project management must be coupled with change management in order to achieve desired results.

- Face-to-face communications is the most effective form.

- Feedback loops must be built into every phase of the program and the projects.

- Iterative and incremental development approach works best.

- Program management oversight provides consistency, rigor, view to the big picture, momentum.

- The results of OE must be realized in the units for OE to be successful.

- Business process management must shift to the horizontal flow of work rather than vertical hierarchies.

My Thanks to…

Thera Kalmijn, COO, Campus Shared Services
Peggy Huston, Director, Operational Excellence Program Office
Jerry Yerardi, Director, Campus Shared Services IT
Ben Gold, Manager, IT Services Communications

Questions?

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