The UC Information Center: How Did They Do It?

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University of California, Office of the President
Agenda

Planned presentation outcomes
Demo – UC Information Center
IRAP mission, vision, needs and goals
Development approach
Technologies employed
What worked and what didn’t
Future plans
What can I expect to get out of this?
Planned Presentation Outcomes

Introduction to the UC Information Center:
Discover a Tableau powered website that provides key information about UC
Get ideas on how to build an information center site of your own

Tips on understanding your user base:
Find out what they need to know
Figure out what they already know

Developing a vision for your information center:
Collaborate with your team and find out what kinds of stories you want to tell
Start a culture of analytics at your organization

Putting the building blocks in place to make it happen:
How to create a data infrastructure that is consistent, reliable and sustainable
Have the right technology in place
The UC Information Center

Overview of Site Structure

Demonstration of:

**Storyboard**
Affordability Storyboard
http://universityofcalifornia.edu/infocenter/uc-remains-affordable-undergraduates

**Dashboard**
California Community College New Enrollments at UC
https://www.universityofcalifornia.edu/infocenter/california-community-college-enrollments-uc

**Data Table**
Admissions by Source School
http://universityofcalifornia.edu/infocenter/admissions-source-school
Demo
Mission, Vision, Needs and Goals
IRAP Mission

- **Trusted source of information:**
  - Provide evidence-based analyses and reports
  - Serve as UC’s think tank that leverages its unique position to access and analyze data across all ten UC campuses

- **Provide quick response to questions about UC:**
  - Respond in a timely, accurate and consistent manner to requests for information
  - Deliver support and guidance

- **Furnish consistent and reliable information:**
  - Deliver regular proactive research results that help drive and inform policy decisions
  - Provide analytics and reporting capabilities that stay current on UC’s changing environment
Vision

**UC CAMPUSES**

*Provide* analyses that support and guide enrollment planning, degree achievement, policy creation and revision, statewide higher education studies, and UC operations.

**UCOP LEADERSHIP & STAFF**

*Support* UC’s leadership role by providing analytics based on the analyses of data across all ten UC campuses, in comparison to other segments of California’s public higher education community and peer institutions nationwide.

*Reveal* issues that are critical to UC and public higher education through proactive analyses and research.

**BUDGET, FINANCE AND HUMAN RESOURCES**

*Leverage* reporting capabilities that support compliance with internal and external requirements.

*Analytics* for recruitment and retention.

**STATE & FEDERAL LEGISLATORS**

*Demonstrate* UC’s contribution to California’s and the nation’s culture and economy.

*Highlight* the value of public education by reporting the measures that demonstrate that value.

*Show* that UC is meeting its objectives and using resources efficiently.

**STUDENTS, PARENTS, TEACHERS & COUNSELORS**

*Give* useful information to prospective students on how to gain admission into UC.

*Present* data around graduation outcomes by major for enrolled students.

*Equip* teachers and counselors with facts that will help guide them in better informing their students about access to UC.

**GENERAL PUBLIC**

*Display* information about the University of California and the community in which it operates.

*Furnish* evidence that shows how UC plays a major role in fulfilling dreams, and contributing to the economic development of the state and the nation.
The Key Needs

Access

Availability

Performance

Accountability and transparency

Data consistency
Goals

- Collaboration
- Go-Anywhere Analytics
- Democratization of Data
- Culture of Analytics
Let’s talk about technology...
Development Approach

Four component approach:

People
Data
Processes
Technologies
## Technologies Employed

<table>
<thead>
<tr>
<th>Technologies used are:</th>
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<tbody>
<tr>
<td>Tableau Desktop Professional</td>
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<tr>
<td>Tableau Server</td>
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<tr>
<td>Drupal Content Management System</td>
</tr>
<tr>
<td>SAS</td>
</tr>
<tr>
<td>IBM DB2</td>
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<tr>
<td>IBM DataStage</td>
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Data Infrastructure

- **Campus Input Files**
  - Defined Formats
  - Clear Specifications

- **Data Processing**
  - ETL
  - Enterprise Data Warehouse

- **Reporting and Analytics**
  - Tableau
  - Cognos

**Staging Layer**

**ETL**

**Reporting Layer**

**Data Marts**
What worked and what didn’t
Keys to Success

Clear purpose
Clear goals and objectives
Strong sponsor engagement
Collaboration - Promoting team cohesiveness
Communication
Frequent core group meetings
Project management
Celebrating each milestone
Clear Purpose

Find your sweet spot

- Why does your organization need this?
- What matters most to the organization?
- Who will the information center serve?
- What stories can you tell using data?
- How do individuals find their place?
- How can you define common purpose?
Clear Goals & Objectives

Start your road trip with a plan

- State clear begin and end objectives
- Tighten goal alignment and goal visibility
- Define specific roles for each individual
- Have a clear communication path
- Have contingencies in place for changes
- Implement an ongoing feedback process
Strong Sponsor Engagement

Get executive sponsorship!

- Sponsor support = project success
- Secures project resources
- Champions the project at executive level
- Clarifies and aligns expectations
- Identifies what the project must achieve
- Ensures that expectations are being met
Collaboration

<table>
<thead>
<tr>
<th>Together for a common purpose</th>
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<tr>
<td>Sense of belonging to a working entity</td>
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<td>Gain consensus in problem solving</td>
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<td>Encourage active participation</td>
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<tr>
<td>Build reciprocity through sharing ideas</td>
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<tr>
<td>Increase team connectivity/cohesiveness</td>
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<td>Co-operate to achieve innovation</td>
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### Communication

**Communicate for motivation and productivity**

- Effective communication = success
- Create a safe environment
- Be culturally sensitive
- Provide constructive feedback
- Assign tasks directly and clearly
- Make the work fun
Core Group Meetings

- Meet regularly to review artefacts
- Meet to flesh out stories to be told
- Decide who build what viz
- Come up with design standards
- Review vizs in development
- Provide feedback to each other
- Provide support to one another
Sound Project Management

Effective project management

Good project management pays off
Organize, schedule and delegate tasks
Clarify individual roles
Keep communication lines open
Manage project scope
Manage project risk
Celebrate Each Milestone

<table>
<thead>
<tr>
<th>Celebrate every accomplishment</th>
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<tr>
<td>No achievement is too small!</td>
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<tr>
<td>Show your appreciation</td>
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<tr>
<td>Remind yourself of the progress made</td>
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<td>Track and document your milestones</td>
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<tr>
<td>Review your milestones</td>
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<td>Make individuals happy about work done</td>
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What Didn’t Work

Pitfalls to avoid

- Poor investment in data infrastructure
- Rigid operational style guide
- Using ad-hoc data files
- Skimping on testing and validation
- Cross-functional team management
Our next steps
Future Plans

What we are doing next

- Tableau Server as a shared service
- Creating a private UC Information Center
- Integrating Tableau and D3.js
- Migration of Accountability Report
“The goal is to turn data into information, and information into insight.”

Carly Fiorina
Former Chair and Executive President, Hewlett Packard Co.
“If we have data, let’s look at data. If all we have are opinions, let’s go with mine.”

Jim Barksdale
Former CEO, Netscape
“The greatest value of a picture is when it forces us to notice what we never expected to see.”

John Wilder Turkey
Mathematician, Exploratory Data Analysis (1977)
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