TABLEAU CONFERENCE 2016

#UCaliforniaData

The UC Information Center: How Did They Do It?

Ola Popoola
Director – Reporting and Analytics
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

TABLEAU CONFERENCE 2016

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

TABLEAU CONFERENCE 2016

TABLEAU CONFERENCE 2016

Demo

TABLEAU CONFERENCE 2016

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

TABLEAU CONFERENCE 2016

Vision

BUDGET, FINANCE AND HUMAN RESOURCES

Leverage reporting capabilities that support compliance with internal and external requirements
Analytics for recruitment and retention

UC CAMPUSES

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

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

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

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.

TABLEAU CONFERENCE 2016

The Key Needs

Access

Availability

Performance

Accountability and transparency

Data consistency

Goals

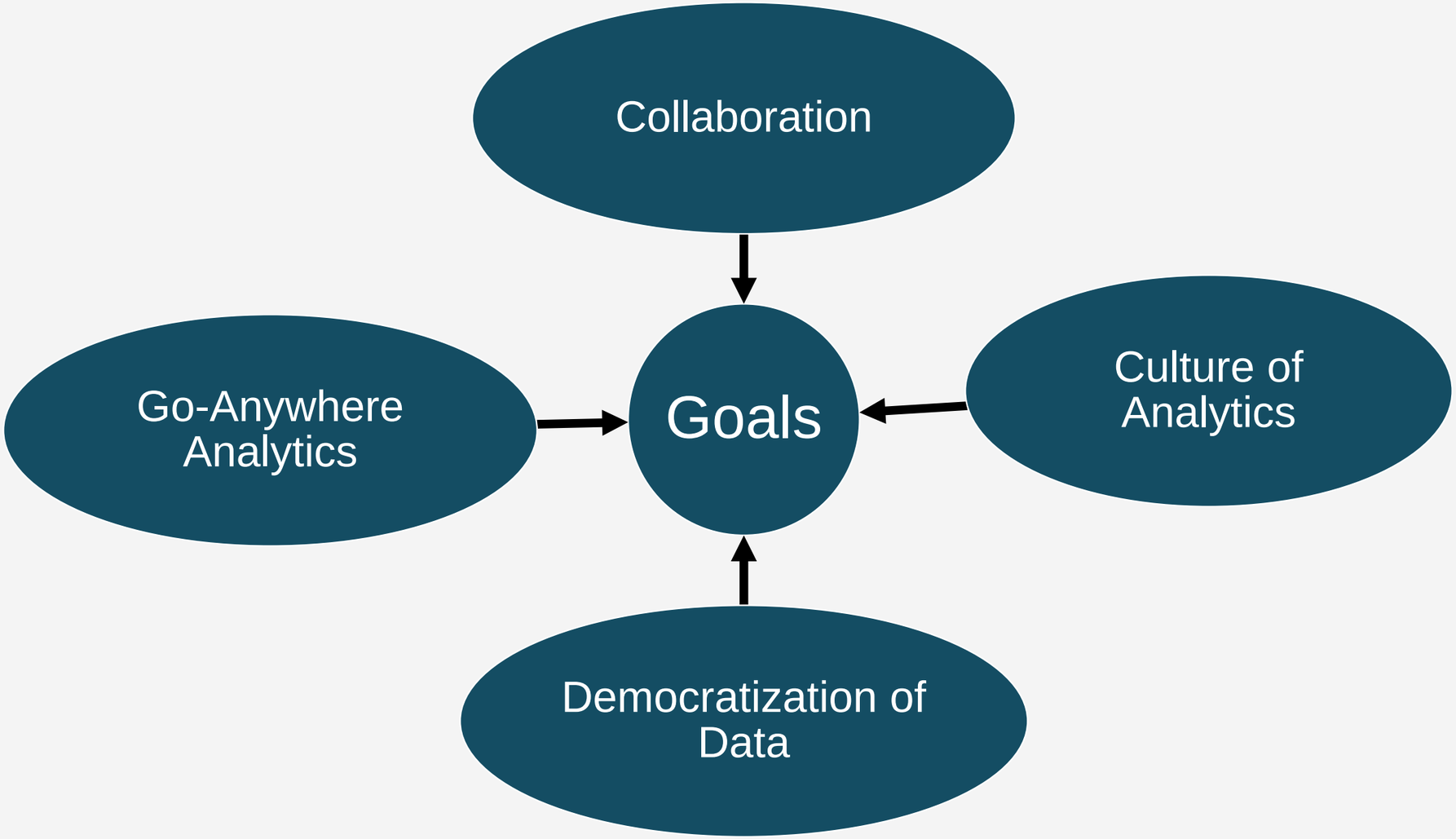


TABLEAU CONFERENCE 2016

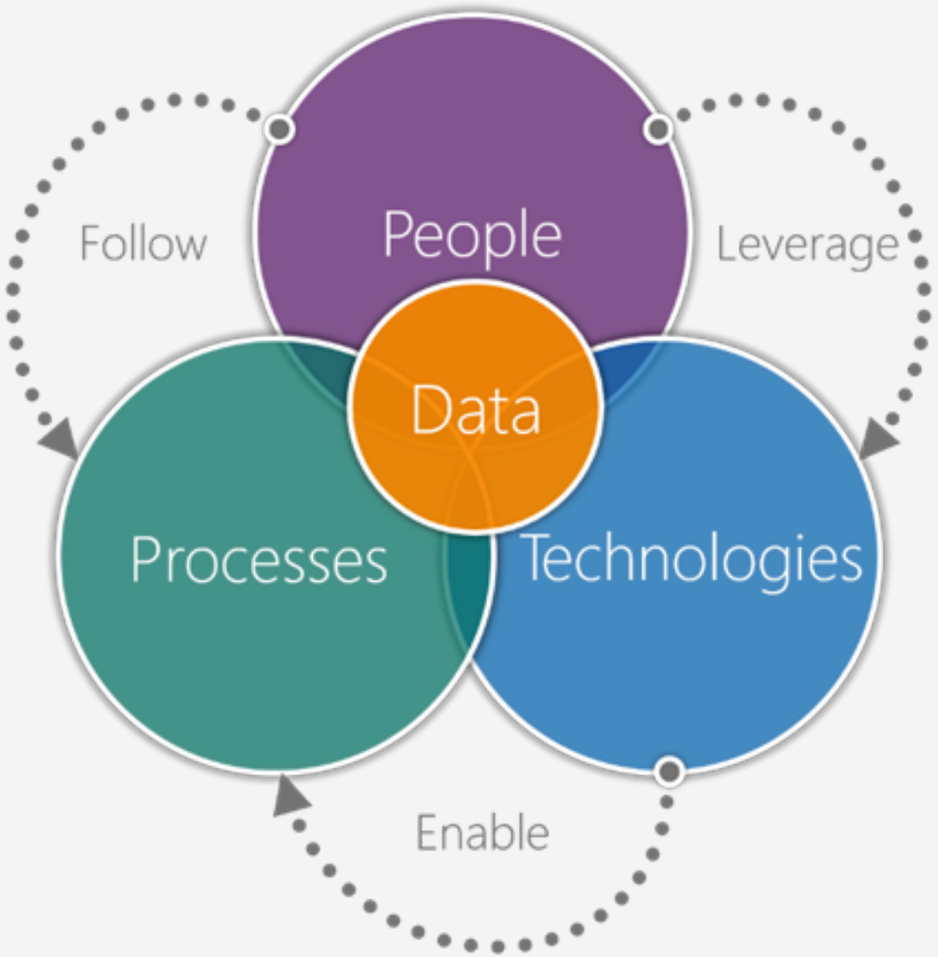
TABLEAU
CONFERENCE
2016

Let’s talk about technology…

Development Approach

Four component approach:

- **People**
- **Data**
- **Processes**
- **Technologies**



Technologies Employed

Technologies used are:

- Tableau Desktop Professional
- Tableau Server
- Drupal Content Management System
- SAS
- IBM DB2
- IBM DataStage

Data Infrastructure

ETL

Campus Input Files
- Defined Formats
- Clear Specifications

Data Processing
- ETL
- Enterprise Data Warehouse

Reporting and Analytics
- Tableau
- Cognos

Data Marts

Staging Layer

ETL

Reporting Layer

TABLEAU CONFERENCE 2016

TABLEAU CONFERENCE 2016

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

TABLEAU
CONFERENCE
2016

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

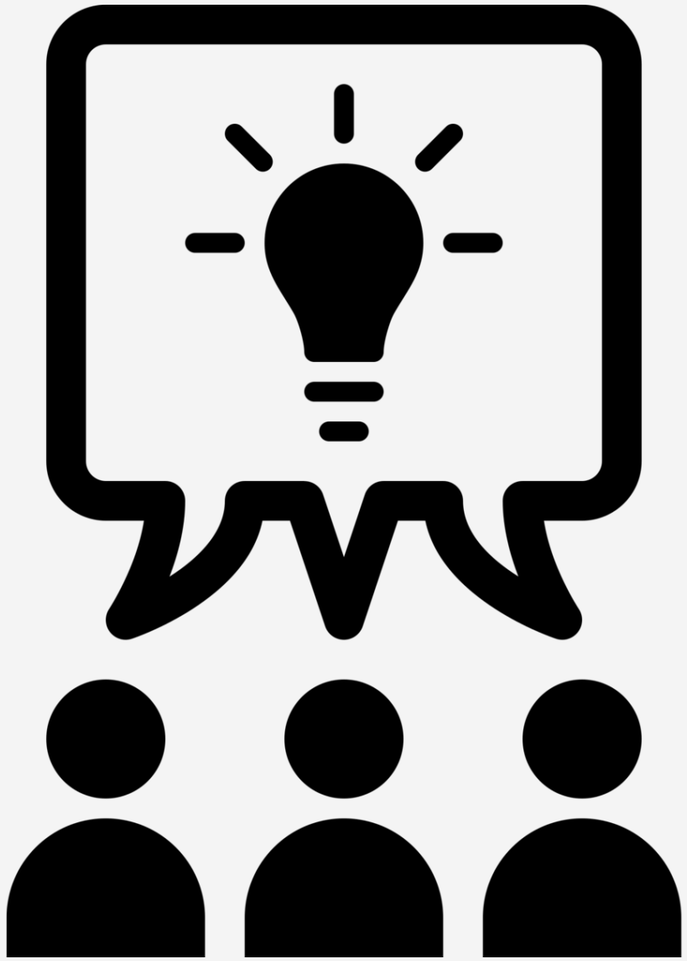
Get executive sponsorship!

- 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

Together for a common purpose

- Sense of belonging to a working entity
- Gain consensus in problem solving
- Encourage active participation
- Build reciprocity through sharing ideas
- Increase team connectivity/cohesiveness
- Co-operate to achieve innovation



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

TABLEAU CONFERENCE 2016

Celebrate Each Milestone

Celebrate every accomplishment

- No achievement is too small!
- Show your appreciation
- Remind yourself of the progress made
- Track and document your milestones
- Review your milestones
- Make individuals happy about work done

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

TABLEAU CONFERENCE 2016

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)

Please complete the session survey from the Session Details screen in your TC16 app

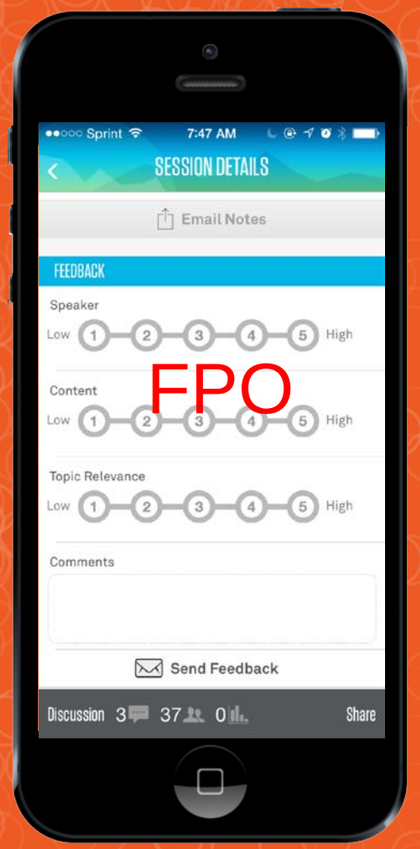


TABLEAU CONFERENCE 2016

TABLEAU
CONFERENCE
2016

Ola Popoola

ola.popoola@ucop.edu