THE UNIVERSITY of TEXAS SYSTEM
UT SYSTEM DASHBOARD

TELLING A STORY WITH DATA

Dr. Stephanie Bond Huie, Vice Chancellor
Office of Strategic Initiatives

About UT System

About UT System

- 217K students
- 52K degrees
- 37% of all degrees in Texas
- 40% are STEM degrees
- 900 MDs from 4 medical schools
- 2 new medical schools coming online

About UT System

- $2.7B in research
- 50% from federal sources
- 2/3 from health institutions

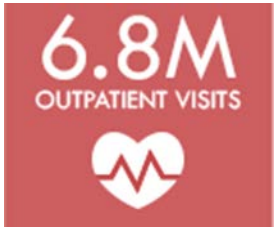
About UT System

- 8 Nobel laureates
- 47 members of IOM
- 44 members of NAS
- 59 members of AAAS

About UT System

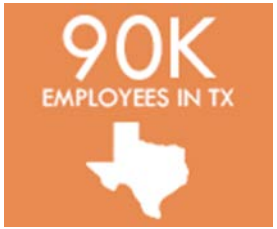
- 40% hospitals, clinics, prof fees
- 13% state appropriations
- 9% revenues from tuition & fees

About UT System



- 5 university-owned hospitals
- 1.4M hospital days annually

About UT System



- 20K faculty
- One of the largest employers in Texas

About UT System

- A decade of earnings
- Students who left between 2002 and 2013 and entered the Texas workforce

Using Data to Tell a Story

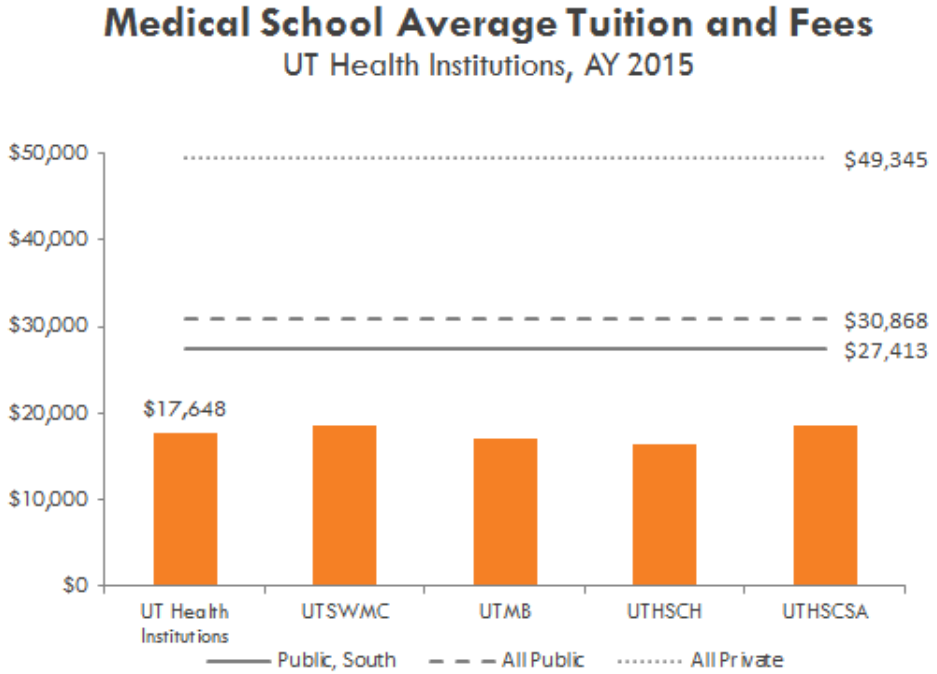
Things to Consider

- Audience
  - How much do they know about the subject?
  - How familiar are they with data?
  - How much time do I have to engage them?
- Story / Message
- Goals
- Data available
- Elements of data presentation

Elements of Data Presentation

- Data points (measures)
- Breakouts (categories)
- Format
  - counts, percentages/ratios, etc.
- Context
  - benchmarking, write-ups
- Visuals
  - graphs/charts, tables, diagrams, images/logos
- Design
  - layout, colors

Complex is not always better



Best Practices

- Be Data Smart
  - Data is just data
  - Research and analysis transform the data into information
  - Visualization and presentation make that information consumable

- Beware Data Marketing
  - Data should tell a story, but only in the sense that the visualizations presented should accurately reflect underlying patterns
  - Not all data consumers are data savvy
  - Use good data practices and be consistent

Data Visualizations

Data Visualizations

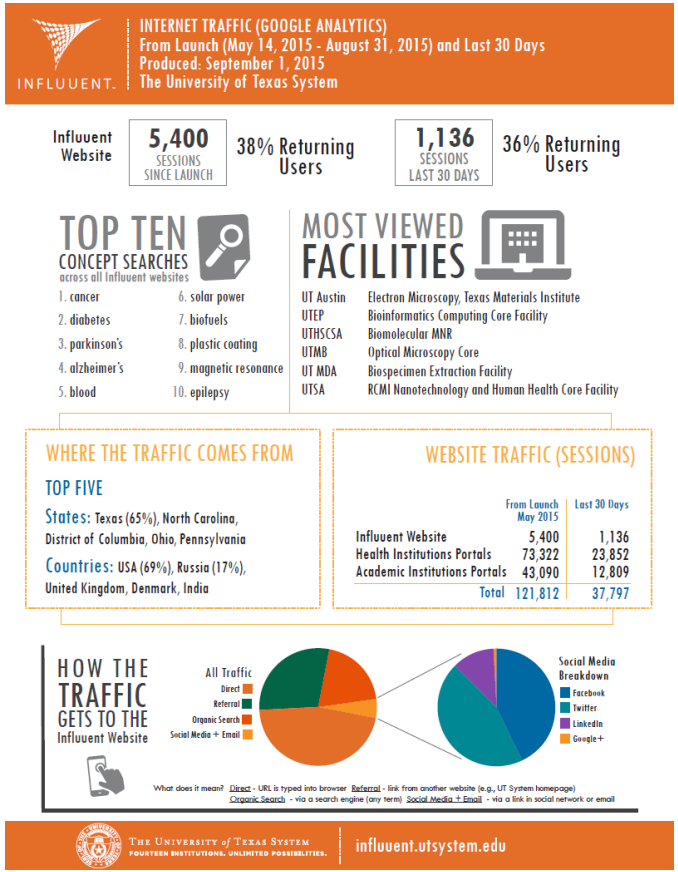
- Facilitate understanding of complex information
- Provide context
- Allow user to interact and select specific data
- Support and inform policy-making decisions
- Evaluate the impact of policies, initiatives

Using Data Visualization to Inform Policy

- Use trend analysis and predictive modeling
- Communicate message to audiences of all levels
- Collaborate with other researchers, educational leaders, visualization experts, and outside agencies
- Provide benchmarks for comparison and/or progress

Example: Initiative Impact

- Presenting multiple data points
- Tracking progress
- Evaluating success



How to Make It Happen

Building Capacity in Your Organization

Building a Foundation

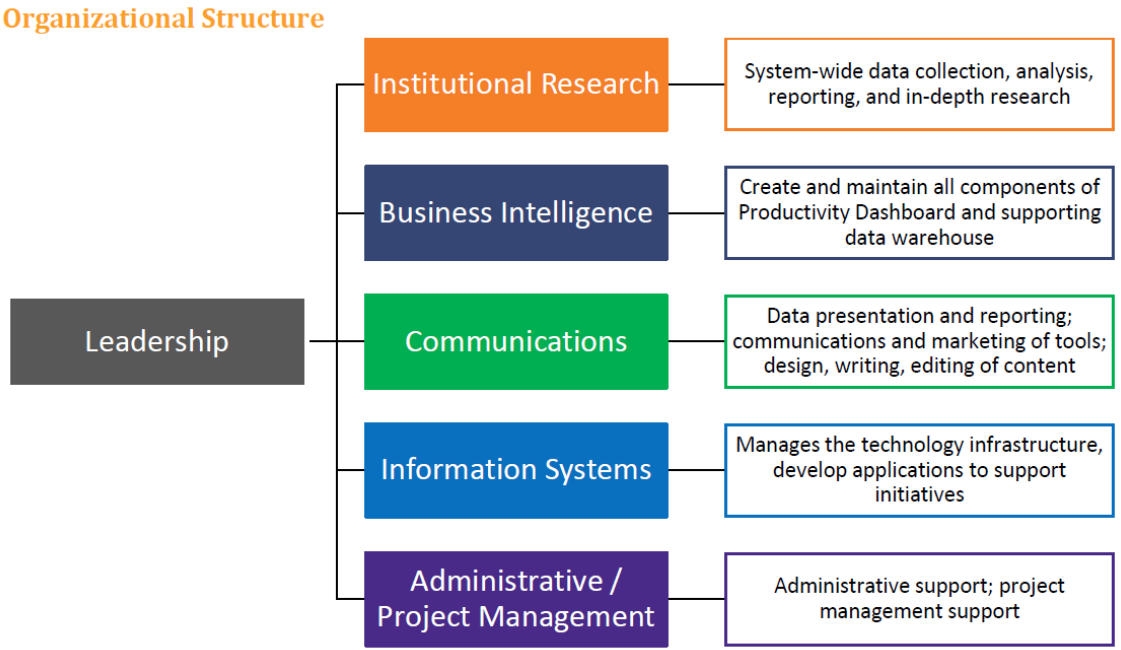
- Customer service
- Timeliness
- Reputation for quality–are you trusted?
- Solid knowledgebase
  - Content experts

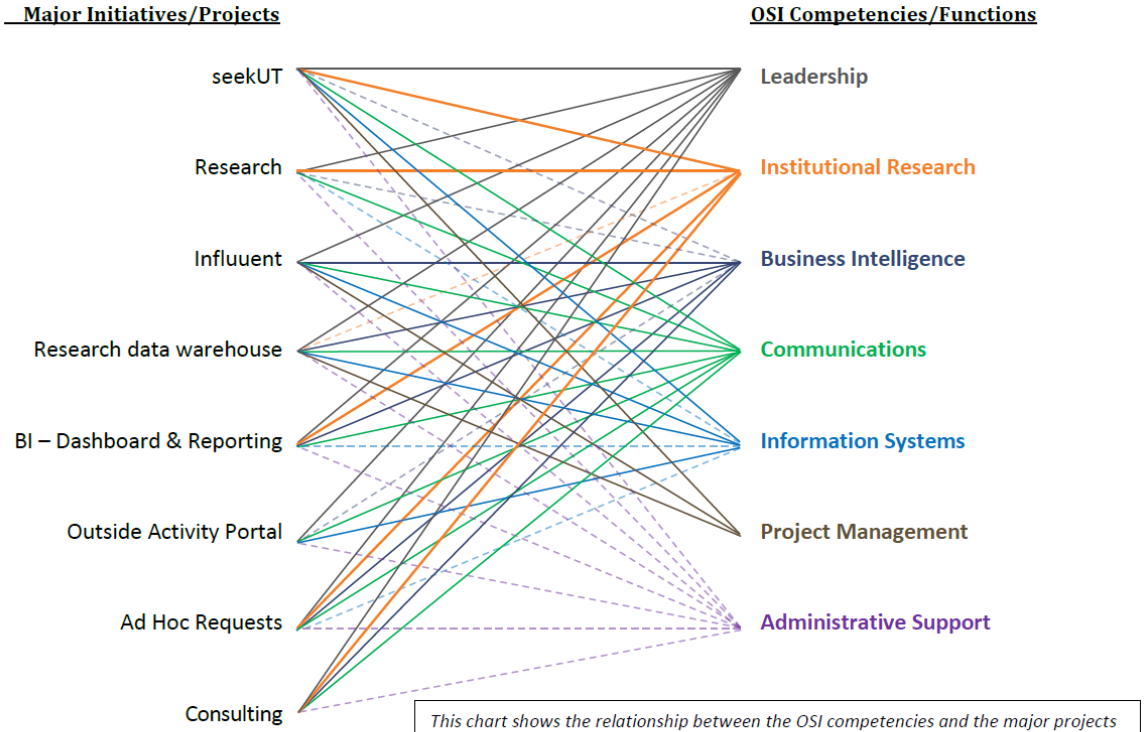
Expanding Skill Sets

Expanding skill sets—beyond reporting

- Complex data analyses
- Strong technical writing
- Data presentation (visualizations)
- Communications

OSI's Organizational Structure





This chart shows the relationship between the OSI competencies and the major projects and functions of the office. The chart demonstrates the complexity of the work, a visualization of how each project has many different contributors from our office. OSI uses a multi-disciplinary approach for more creative problem-solving.

Focus on Communication Efforts

- Tell your story
  - Advertise
  - Talk to others about what you are doing (conferences, meetings, etc.)
  - Social media and blogging efforts
- Collaboration w/ external relations (communications/public affairs)
- In-house professionals

Case Study

The UT System Dashboard

Driving Forces

- Board of Regents
- Executive leadership
- State and national trends

Who is the Dashboard for?

Audience: Everyone

- System Administration
- Campuses
- Government; private industry; media
- Public access
- NOT a primary source for students/parents

Finding a Dashboard Solution

End-User Features

- Public-facing (no log-in required)
- User-friendly
- Ability to export
- Web-based custom reporting
- Mobile-friendly

Finding a Dashboard Solution

Internal Requirements

- Data warehouse integration with BI tools
- Streamline processes with automation
- Analyze large data sets
- Conduct robust statistical analyses

Dashboard Version 1

- First launched in December 2011
- Began as online fact book—not a true dashboard
- Started with 10 Core Indicators
- Grew to more than 70 measures
- Included some benchmarking
- Added some interactive data visualizations

User Feedback

- Hard to find what you are looking for
- Long load times
- No context
- Too few outcomes measures

The (r)Evolution of The UT System Dashboard

Responding to User Feedback

- Improve user experience
- Include more outcomes measures
- Create a functioning and highly-focused dashboard
- Incorporate more benchmarking, context, and analysis
- Design to be responsive, and easy to maintain and change

A Collaborative Effort

DASHBOARD ADVISORY GROUP

Focus	Members
•Overarching goals •Content Areas •What matters? (metrics) •Feedback and guidance	•Executive Leadership •Campus Vice Presidents/Provosts

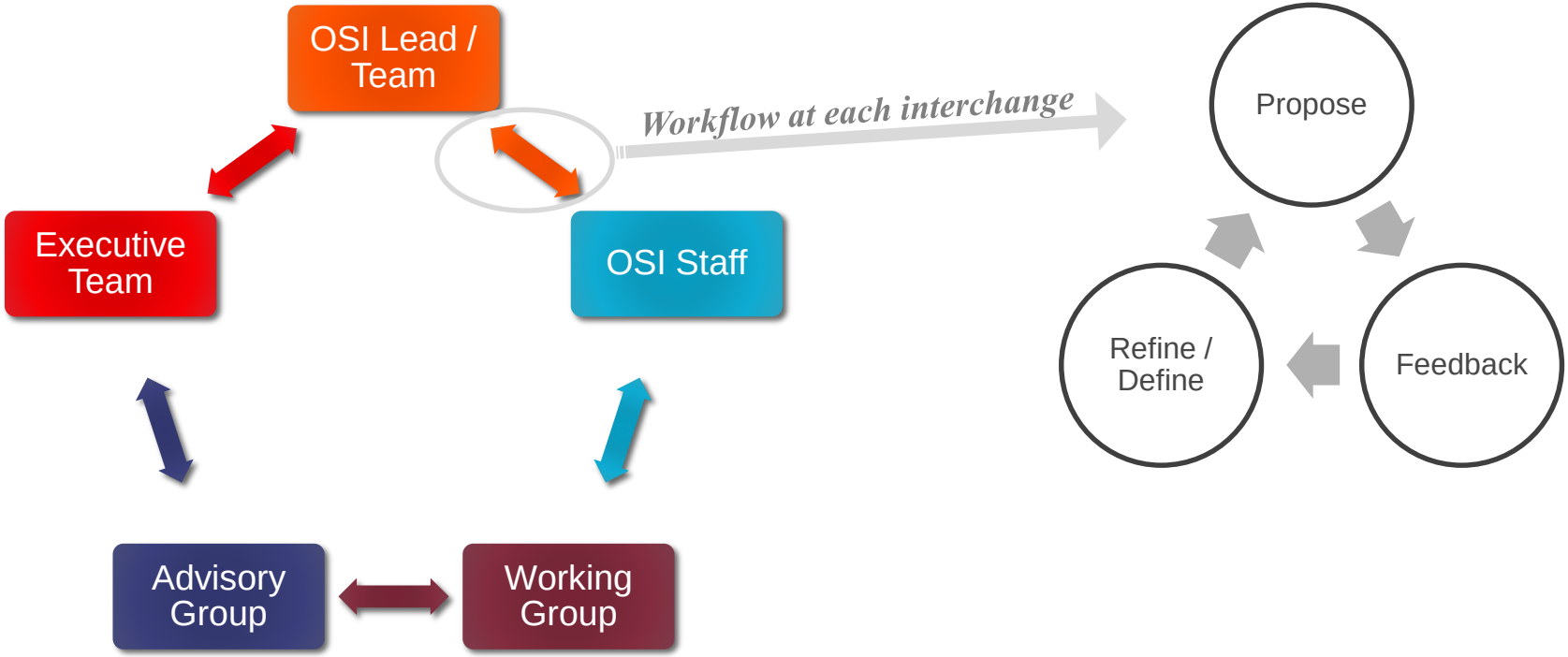
WORKING GROUPS

Metrics Development	Design and Presentation
OSI staff, System staff, campus IR staff Responsible for: •Metrics - Refine and Define •Data Sources •Breakdowns, Drill-down levels •Benchmarks/Targets	OSI staff, System staff Responsible for: •New design/user interface •Data presentation •Technology selection

Primary Content Areas

- Students
- Faculty
- Research / Tech Transfer
- Finance / Productivity
- Health

The Collaboration Process



Enhancements to the Dashboard

- Improved user experience to promote use
- Focused on outcomes measures
- Added context (What? Why?)
- Developed more infographics
- Created data narratives (stories)

Lessons Learned

- Start small—and start where you are
- Change is hard—expect resistance
- Demonstrate success and value and build on that
- Give them what they want—but show them what's possible
- Make the hard sell
  - And then do it again
  - And again

Demo

- http://data.utsystem.edu