The Good, the Bad, and the Ugly of Data Migration: a Case Study with ECU
Agenda

• What did ECU want to accomplish?
• Stakeholders and timeline
• Gain, pain, and lessons learned
• Recommendations
Scope of Work

To replace the old faculty activity reporting system with a new system. Expectations include:

• **Interface**: single sign-on, easy navigation, and clear directions
• **Data integration**: integrating with university data sources; harvesting external publication data sources; feeding to an ECU faculty profile website
• **Flexibility**: customization and flexibility in data entry and reporting; satisfying a variety of faculty activity data reporting needs
• **Personnel evaluation/electronic review**: built-in workflows for annual evaluations, reappointments, and P&T reviews
Why do you get that look whenever we talk about the replacement of our faculty activity system?
Why Faculty180?

• Interface/Navigation
• Single Sign-On
• System Interoperability
• Flexibility
• Smart features that help
  – Reduce errors in data entry
  – Eliminate multiple entries of the same activity from year to year
  – Identify duplicate entries of the same publication

Better user experience and better data quality!
End Goal: Use Faculty180 Data for Faculty Expertise Profiles

Cornell University

University of Arizona

The Visualizations

UA Profiles provides a single and convenient place for you to learn more about our faculty members and their achievements. Faculty profiles include information about teaching, research, service, and other activities.
Challenges for Faculty180 Project

Project Management
- **Scope**: large
- **Time**: lengthy
- **Cost**: high
- **Procurement**: requiring buy-in
- **Integration**: complex
- **Communications**: strategic

Change Management
- **Human behaviors**
- **Paperless process**
- **Sensitive data**
- **Risk management**
- **Product enhancement**
- **Quality control**
Faculty180 Stakeholders

- Academic Council
- Faculty Senate
- Deans and Chairs
- Office of Faculty Excellence
- Division of Research
- Libraries
- IPAR
- IT & Computing Services
- Personnel Mgmt
Stakeholder Management

- Faculty Senate
- Academic Council
- Deans

ECU Faculty

Strategies:
- Focus group and faculty survey
- Campus forums
- Campus-wide demos (recordings)
- Faculty180 Website
- Presentations and debriefings
- Faculty memos
- Faculty180 Retreats
Faculty180: Faculty Reporting System

Announcements

**Sedona cut off June 15**
ECU access to Sedona will be cut off June 15, 2018. Please retrieve any reports and attachments you may need from Sedona in advance of this date.

Historical data from Sedona will be retained for archival purpose, but does not include reports and attachments. Questions may be addressed to your College Coordinator.

**Faculty180 interface update**
Faculty180 got a facelift on March 30! Visit the SharePoint site, contact your College Coordinator, or email faculty180@ecu.edu with questions.

If you are having problems logging in, check your browser version and clear your cookies and cache.
Faculty 180 Project Timeline

Initiation: Spring 2015
• Exploring Products; Defining Scope; Identifying Resources

Planning/Procurement: 2015-16
• Assessing Needs: Evaluating Products; Gaining Buy-in

System Configuration & Data Migration: 2016-17
• Mapping Data; Standardizing Categories of Activities

Deployment: 2017-18
• Testing, Trouble-shooting, Adjusting, and Training

Faculty Website & Evaluation Workflows: 2018-19
Faculty180 Implementation Task Force

Steering Committee

- Faculty180 Manager
- Project Sponsor
- Project Manager

Communications
- Website Development
- Campus-wide Communication
- IT Support

Implementation
- Interface Configuration
- Data Migration & Integration
- IT Support

Unit Super-users
- Input Form Customization
- Training & Consultation
- IT Support

Unit Personnel Managers
- Evaluation Workflow
- Eval Form Customization

Faculty Profile Website
- Content Development
- IT Support
Data Migration Challenges

• Ten years of legacy data in 13 databases
• >10,000 accounts and >4,000 migrated
• Lack of reporting consistency across units and across years
• Need to restructure input forms and activity classifications to fit Faculty180
• A lot of dirty data (e.g., triple reporting, wrong categories, errors never got fixed, etc.)
• Manual editing of reports outside the faculty activity reporting system
Migration Workflow

- Design & modify input forms and activity classifications.
- Review existing data structures.
- Then review and validate. If needed, reexamine data structures.
Example: Creative Activities (College of Fine Arts and Communication, CFAC)

Original CFAC Data Structure
- 80 Activity Types

CFAC Faculty180 Input Form
- 28 Activity Types
- Classifications

University Faculty180 Form
- 14 Activity Types
- Mapping
Solutions to Improving Data Quality

- Designed uniform input forms across units
- Consolidated and revised multiple activity types and created roles
- Created new sections (clinical practices, administrative duties, etc.)
- Cleaned up historical courses taught data to fit Faculty180's data template
- Created "historical" sections to house old committee data
- Ongoing effort in developing definitions of activity types and classifications (e.g., a Faculty180 User Manual)
- Ongoing effort in clarifying and standardizing input rules (e.g., no double reporting)
Faculty180 is more robust than ECU’s previous system. It has the capability to:

• Harvest publication data from external sources
• Upload pre-populated journal, conference, and committee lists
• Integrate with Banner and other ECU data sources
  – Reduces data input burdens on faculty
  – Ensures better quality of data
• Create activity classifications to meet reporting needs
• Identify duplicate entries and deploy data visualization
• Customize workflows for personnel evaluations
The Pain

Implementation process is more complex and time-consuming than originally anticipated due to the following reasons:

- Need for in-depth documentation from Faculty180
- Company merger and ECU staff turnover
- Labor-intensive migration of legacy data
- Errors in data pulled from Banner and other ECU systems
- Across-institution decision rules (e.g., activity classification) are not always possible.
The Lessons Learned

• Have the right people and establish effective teams!
• Promote campus-wide participation and collaboration.
• Maintain effective communication at all stages of the process and across all stakeholders.
• Do due diligence in data validation and integrations.
• Document definitions, business processes, and major decisions.
• Take the effort to nurture a long-term, collaborative relationship with the company.

Partnership
Recommendations to Interfolio

- Enhance reporting functions
  - Cross-category reporting
  - Reporting on co-authors
- Enable audit trail for changes, especially for emulation
- Allow auto-fill functionality for additional fields (e.g., professional development)
- Guide campus through implementation planning
- Make DOI a live field to import and link publication details
- Import subject terms to enrich metadata about publications
- Use existing org. structure for annual evaluation workflow
Recommendations to IR Professionals

1. Take time to understand expectations and needs, and nail down project details.
2. Identify stakeholders and assemble an effective team.
3. Secure resources for implementation, evaluation, and improvement.
4. Define critical milestones and set firm deadlines.
5. Develop and implement a communications plan.
7. Be prepared for the unexpected and be flexible.
Questions?