A New Technique to Increase Efficiency and Consistency in Faculty Reporting

Thursday, May 31, 2018
3:00pm to 3:45pm
Level 1 – Panzacola F-3
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Outline

- UCF Facts
- Challenge
- Old vs. New Process
- Data Dictionary
- Demonstration
- Future Improvements
- Q&A
UCF Facts

ESTABLISHED 1963  FIRST CLASS 1968

- Large metropolitan university
- Orlando, FL
- Over 66,000 students and 12,000 employees
- Highest Research Activity Carnegie Foundation
- Scale X Excellence = Impact
Challenge

**Problem** – Missing piece of the puzzle

- Existing dashboards focused only on student data
- Faculty data was not self-serving and required ad hoc reports
- Employee dataset needed to be replaced
  - Limited to Fall term
  - Refresh once per year
- Same ad hoc requests over and over each term
  - Waste time recreating same variables in new project
- Data existed in separate tables
Solution – Balance the scale

- Create one updated source table – Faculty/Staff
- Add fields based on our most common data requests
- Table should have all historical terms, relevant information
- Create public Tableau report for anyone to view this data
Steps
1. Run the PeopleSoft query
2. Save the data file
3. Upload into SAS Enterprise Guide
4. Manipulate in SAS Enterprise Guide
5. Calculate fields
6. Create report
7. Send to requestor
8. Provide support
Run PeopleSoft queries
- Created by Human Resources
- Active employees
- Snapshots from 2002 onward
  - Fall as of November 1
  - Spring as of March 1
  - Summer A as of June 1
  - Summer B as of July 15

Import and compile Excel files
Communicate with HR to learn about the variables
9-month Equivalent Salary
  Goal: Compare 9-month and 12-month faculty

Faculty Rank
  Goal: Report on groupings
  Based on Jobcodes
  Simple case statement

Years Since Most Recent Hire
  Goal: Approximate years at UCF
  Problem – hire and rehire dates
  Calculated only for non-hourly employees

Newly-hired faculty
  Defined as having been hired within the previous year
Share with those not involved in the creation process
  - Document definitions for each field
  - Include formulas for all calculated fields

Collaborate with HR to confirm definitions of fields

Fields that are similar
  - 5 different fields for salary

Located in shared drive

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## IKM IR Faculty/Staff Data Dictionary

Note: This table has full Academic years from 2002 onward, but only the Fall semester for years 1990, 1995, and 2000

<table>
<thead>
<tr>
<th>Field</th>
<th>Type, Length, Format</th>
<th>Definition</th>
<th>Sample Value(s)</th>
<th>Notes &amp; Logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>IKM_Ethnic_Group</td>
<td>Character 13 $CHAR13</td>
<td>Ethnic group that pulls in international</td>
<td>Am. Ind, Asian, Black, Hawaii/Pac, Hispanic, International, Multi-racial, Not Specif, White</td>
<td>Overrides Ethnic_Group if International, pulls in Ethnic_Group if not (International status derived from EEO table information) when t1.Intl_Flag in(&quot;Yes&quot;) then &quot;International&quot;</td>
</tr>
<tr>
<td>Budgeted_Week</td>
<td>Numeric 8 $BEST12.</td>
<td>Number of weeks employee works in a year, used to calculate salary</td>
<td>52.2</td>
<td>Most employees have 52.2; 9 month employees have either 39 or 43.5.</td>
</tr>
<tr>
<td>Princ Place of Empl</td>
<td>Character 10 $CHAR10</td>
<td>Campus location where employee spends majority of time/duties</td>
<td>Main, Cocoa, Daytona, Palm Bay, Lake Mary</td>
<td>Note that locations have changed over the years.</td>
</tr>
</tbody>
</table>
Considerations

- Difference: Original dataset and new Faculty/Staff table
  - Approved HR retroactive changes in PeopleSoft are captured
  - May not match any previous reporting using original dataset

- Data gets messier the further back we go
  - 7-digit to 8-digit home department numbers
  - Creation/elimination of different employee types
  - College/department reorganization

- Leading zeroes dropping off
  - Employee IDs
  - CIP codes
Benefits of Table

- **Increased efficiency**
  - More people can easily process a faculty data request
  - Most required fields live together in the same table

- **Ensured consistency**
  - Fields are calculated within the dataset rather than for each and every project separately
  - Dozens of old projects which used to come from static files could be reassigned to the new Faculty/Staff table
  - Table is stored in SAS library available to multiple users for consistent reporting

- **Automated update process**
  - Changes to the table were applied historically then added to our update stored process to apply moving forward
Dashboard

- Tableau visualization
  - Including only faculty data right now
- Public website access
  - Does not include personally identifiable information
- Decrease time spent creating reports
- Allow stakeholders to learn and gain insight from the data in a more interactive way
  - Users can take ownership of the data
  - Spurs creative thinking
Dean Knight needs the number of newly-hired Assistant Professors within the College of Arts and Humanities for a meeting ASAP!
Add staff profile to Tableau
• Tricky because of potential duplication

Add faculty retention
• Complex to create cohorts

Career progression, promotion

Trends over time
• Reorgs
Each reporting agency has different definitions of the types of faculty included in their dataset.

- IPEDS
- AAUP
- CUPA
- Academic Analytics
- Common Data Set
Conclusion
Audience Q & A
Thank you!

Please remember to submit your evaluation for this session.