SCM 651: Business Analytics

WEEK 5

Agenda

Welcome/Polls

Homework #1: review

Homework #2: discussion

Review of concepts

Group discussion of articles

Upcoming Assignments

Wrap up/feedback

Homework #1

Pivot table

Pivot charts

Correlation – any negative correlations?

Regression – any non-intuitive results?

Prediction model

Non-intuitive results and additional data

Homework #2

Campaign time frames, costs, effectiveness

Future campaign: geographic regions, key words, day of week and time of day

Allocation of costs by program and region

Performance measures

Other data that would be helpful

Example of how to find information in Google Analytics

Week 5 - Review

Power Pivot

- Data can be imported from database tables, Excel spreadsheets, SQL servers, other types of files
- Relationships can be established
- Relationships can be established among database tables, excel spreadsheets and other files

Power Pivot properties

- Shows connection to data sources and last time data was refreshed

Week 5 - Review

Slicers

◦ Creates a menu structure to slice the data by a specified characteristic

Timelines

◦ Similar to a slicer, but using a date timeline rather than a categorical classification

Power Pivot charts

◦ Same capability as Pivot Charts

◦ Can be created using database tables, Excel spreadsheets and other files

Article #1: Innovating with Airborne Analytics

Innovating with Airborne Analytics

1. What are the three areas of focus for their strategy for the next 3-4 years? Give examples of what they are doing
2. What are the challenges with hiring data scientists?
3. What are the risks trying to use technology in the organization? Give an example of each

Article #1: Innovating with Airborne Analytics

Innovating with Airborne Analytics

1. What are the three areas of focus for their strategy for the next 3-4 years? Give examples of what they are doing
   - Operational efficiency:
     - engine performance, reliability, fuel burn
     - Optimize crew and shift deployment (match to plane types, destinations, breaks for staff)
   - Customer intimacy:
     - Frequent flyer preferences, flying preferences
     - Click stream data
     - Customer complaint data
   - Innovation:
     - Site monitoring: download Financial Times & WSJ
     - Lost-bag retrieval (LED tags & iPhone), customer follow-up

Article #1: Innovating with Airborne Analytics

Innovating with Airborne Analytics

2. ## What are the challenges with hiring data scientists?

   ◦ Not needed all the time

   ◦ Sometimes they blindly follow the data, not incorporating experience

3. ## What are the risks trying to use technology in the organization?

   ◦ Interoperability: merging data from different sources

   ◦ Data security: privacy

   ◦ Taxonomies: architecture, naming conventions, context

   ◦ Data ownership: internal versus external, and internal rivalries

Article #2: A New, Analytics-Based Era of Banking Dawns at State Street

A New, Analytics-Based Era of Banking Dawns at State Street

1. What were the key questions that they asked which analytics could help?

2. What was the challenge of launching analytics at State Street?

3. How do they continue to push analytics forward?

Article #2: A New, Analytics-Based Era of Banking Dawns at State Street

A New, Analytics-Based Era of Banking Dawns at State Street

1. What were the key questions that they asked?
   ◦ How do we better manage, measure, visualize risk?
   ◦ How do they deal with regulatory change?
   ◦ How do they find new sources of return?
   ◦ What new types of investments do they need to increase yields?
   ◦ How do they keep costs down?

Article #2: A New, Analytics-Based Era of Banking Dawns at State Street

A New, Analytics-Based Era of Banking Dawns at State Street

2. What was the challenge of launching analytics at State Street?
   Answer: Culture

- Remaining agile in decision making
- Inspiring staff toward new organization
- Be more nimble and market savvy

3. How do they continue to push analytics forward?

- Quarterly pulse check survey of employees
- Working list of goals every quarter

Upcoming assignments

1. Homework –

Homework #2 due before live session #6

Submissions instructions:

a) Each team member submits the same team documents in the 2SU site: MS Word homework assignment

b) <u>One</u> team member emails a copy of the team assignment to lflee100@syr.edu noting both the team name and day/time of class

2. Hands-on: Week 6 online materials

<u>MS Excel</u>: Optimization

Complete before our next live session