Analyst, Developers, and Tableau: Making a Visual Story

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Outline

• Introduction
• Analyst and App Developer Relationship
• Data Processes
  - Tableau
• Reports
  – Enrollment Update Report
  – Academic Program Review
• Disadvantages
• Summary and Conclusions
Introduction: DePaul University

- Founded in 1898
- Largest Catholic
- Enrollment of over 25,000 students (Fall 2010)
- Nine colleges
- Six campuses
- Diverse student population
Introduction

• Institutional Research and Market Analytics (IRMA)

• Functions of IRMA

• Agents of Change

• Support Decision Making
Analyst and Applications Developer Relationship

Developer
ERP/Data Warehouse (PeopleSoft/Oracle)

Developer
Reporting DB (SQL Server)

Analyst
Web Reports

Analyst
Tableau

Analyst
ODBC Access
What is Tableau and Why?

• It is a data visualization software
• Build a dashboard on the fly
• Dashboard gives a more complete picture
• Interactive
• Connects with several varieties of data sources
• Tableau works with your data fast
• Easy Collaboration
Tableau Reports: Enrollment Update

- Year-to-Date report
  - Budget
  - Revenue
  - Headcount
  - Starts a month before each quarter until census
  - Snapshot captured twice a week
Tableau Reports: Enrollment Update

- Static Excel
- Automated Excel
- Tableau (Desktop and Server)
Tableau Reports: Enrollment Update Process

- Tableau Report connected to SQL database to post to Tableau Server
- Data refreshed from PeopleSoft
- Create custom table used for this report
Tableau Reports:
Academic Program Review (APR)

- Self study
- Faculty
- Assessment of Programs
- Academic Quality
Tableau Reports: APR

• Academic quality

• Aligned with University Mission

• Continuous feedback

• Accountable plan of action
Tableau Reports: APR

• More results with less effort

• Trend data

• Comparative analysis
Tableau Reports: APR Process

• From data to dashboard
  ▪ Identify the desirable output
  ▪ Prep the data
  ▪ Build the dashboard
Tableau Reports: APR
Tableau Reports: APR
Disadvantages

- Tableau needs the data prepared
- Formatting issues
- Limited amount of graphs
- Incompatible with the older versions
- Expensive
Summary and Conclusions

• Application developers need to work closely with analysts
• Visualize major reports
• Customize tables to fit report
• Implement dashboards for ad hoc basis
• Decrease production time