NEW YORK UNIVERSITY
WAGNER GRADUATE SCHOOL OF PUBLIC SERVICE

PADM-GP 4150 - LEVERAGING IT FOR PERFORMANCE MANAGEMENT

Summer 2011

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Day, Time: Tuesdays 6:45 – 8:25pm; May 24 – July 5
Room: 567 Waverly (24 Waverly Place)
Credits: 2 credits
Prerequisites: A good knowledge of Excel (Excel course module 1032 or completion of the Excel exam) is required.
Course Twitter Tag: #LeveragingIT

COURSE DESCRIPTION
This course describes the growing role of IT in nonprofits and how high-impact organizations are using IT platforms to manage and analyze their programs. Included is a discussion on the IT-related problems faced by nonprofits and solutions available to address these problems. Methods for implementing solutions and best practices for data collection and analysis will also be outlined. The second portion of the course will be hands-on: we will identify techniques for quickly analyzing datasets using MS Excel and create a functional specification document to customize an application. We will also examine how to best recruit and manage consultants and vendors for IT projects.

LEARNING OBJECTIVES
At the end of this course, you will be able to:

- Articulate the IT-related problems facing nonprofits and how they impact outcomes
- Intelligently develop criteria for selecting an IT product
- Understand the concepts and considerations when implementing an IT solution
- Understand both the front-end and back-end of a database (tables vs. dashboards)
- Use tools in Excel to analyze datasets quickly
- Effectively communicate IT requirements to IT staff and consultants
- Understand how to recruit, select, and manage IT consultants and vendors

COURSE STRUCTURE
Classes 1-4, 7 will require readings and participation in a lecture setting.
Classes 5 & 6 will include at-home exercises and will take place in a computer lab.

ASSIGNMENTS AND GRADING

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percent of Grade</th>
<th>Date Distributed</th>
<th>Date Due</th>
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</thead>
<tbody>
<tr>
<td>Take-Home Case (written)</td>
<td>35%</td>
<td>6/7</td>
<td>6/21</td>
</tr>
<tr>
<td>Reporting Case (Excel)</td>
<td>25%</td>
<td>6/28</td>
<td>6/28</td>
</tr>
<tr>
<td>Functional Spec. (written)</td>
<td>40%</td>
<td>6/28</td>
<td>7/5</td>
</tr>
<tr>
<td>Extra Credit</td>
<td>10%</td>
<td>5/24</td>
<td>7/5</td>
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Take-Home Case Assignment
The take home case will be due before the 5th class. You will be given 3 problems and required to solve 2 of them based on what you have learned in class. The problems will involve IT and database implementation and data collection and reporting, and will be in the format of a memo to the CEO. You will be expected to make clear recommendations and outline the positive and negative aspects of your proposed solutions.

In-Class Reporting Case in Excel
The reporting case will be administered in the computer lab. You will be given a primary dataset from a typical database export and asked a question that will involve multiple steps to achieving the answer. You will be graded on whether you arrive at the correct answer, your justification on how you arrived at the answer, and the speed in which you arrived at the answer.

Functional Specification Document Assignment
Nonprofits use functional specifications to save time and money when customizing an IT product by assuring that all staff and IT consultants are on the same page before beginning work. A functional specification document, or functional spec, describes how you want an IT application to function. You will create a functional specification document based on a fictional program's requirements. The functional spec. must includes the functionality of the program, scenarios outlining the desired user experience, a graphic flow-chart of the user’s experience and non-goals of the application (i.e. what don’t you want it to do? And, what is beyond the scope of the project?).

Extra Credit – Force.com Application
Using the Force.com Workbook (http://www.salesforce.com/us/developer/docs/workbook/workbook.pdf), create a free force.com account, and successfully build the working application through tutorial #5. Physical copies of the workbook will be available, but do not include tutorial #3 (reports and dashboards), to receive full credit you must do all tutorials in the online version. Each tutorial takes approximately 30 minutes to complete. You must present the application to the professor before the end of the last class.

READINGS

Required:
2. Other assigned course readings.

Optional:

COURSE OUTLINE AND READING ASSIGNMENTS

Class 1 Problems Faced by Nonprofits
Nonprofits face a suite of unique IT dilemmas including an inability to track and report leading indicators and outcomes, fractured data due to information silos, and inefficiency due to duel data entry. In this class we will explore each of these issue areas to better understand how these issues impact the work of nonprofits from a financial, staffing and outcomes perspective. Examples of how IT would be used are provided.
Readings:
2. Raising the Bar: Serving Hunger and Poverty in Cincinnati:  
   http://www.showyourimpact.org/raising-bar  

Optional:

Class 2 Solutions to Problems
In this class we will explore some of the many products available and how each addresses the particular issues faced by nonprofits. We will look at specific applications and platforms, such as Social Solutions’ Efforts to Outcomes (ETO) and Salesforce.com. We will identify the positives and negatives to each product and identify how they can solve each of the various problems described in Class

Readings:
1. A Few Good Case Management Tools:
   http://www.idealware.org/articles/few-good-case-management-tools-0
2. Donor & Membership Management 2.0 (Salesforce.com):
   http://www.youtube.com/watch?v=XBVo_rmoQhk
3. Social Innovation in the Cloud (Salesforce.com):
   http://www.youtube.com/watch?v=suK7CW8_4NU
6. ETO Demo - http://www.youtube.com/watch?v=2vN0Iti-kfg
7. Client Track Demos (all) - http://www.youtube.com/user/ClientTrack#p/u
12. Case Studies:
b. CEO: http://www.salesforce.com/customers/education-non-profit/ceo.jsp

c. Year Up: http://www.salesforce.com/customers/education-non-profit/yearup.jsp


e. Latin American Youth Center (ETO).

f. Catholic Charities of Central Maryland (ETO).

Optional:


Class 3

Implementing a Solution

Now that you know about the different products, we’ll explore the considerations during implementation. We will focus on security, infrastructure, operating model (i.e. the level of standardization and/or integration appropriate for your nonprofit), licensing and change management considerations. We will also explore various methods of implementation as well as financial, staffing, and training considerations.

Readings:

1. Implementing Software:
   http://www.idealware.org/articles/imp_dm_software.php

2. Before you Choose a Cloud Computing Vendor: 8 Questions:
   http://www.cio.com/article/print/592064

3. How to Negotiate a Better Cloud Computing Contract:
   http://www.cio.com/article/print/591629


5. Top Five Cloud Computing Security Issues:
   http://www.computerweekly.com/Articles/2010/01/12/235782/Top-five-cloud-computing-security-issues.htm


7. The Economics of Software as a Service (SAAS) vs. Software as a Product:

8. Basecamp for Project Management:

Optional:

Class 4 **Collecting Data**
At the heart of every solution is a database that houses data for analysis. In this class we will explore how effective nonprofits are designing processes and leveraging the strengths of IT to collect better data and increase outcomes. You will learn different ways that data is organized and how relational databases work. We will also explore how to create dashboards and reports to monitor and manage processes.

**Readings:**
1. **What is a Database Anyway?**
3. **Adventures in Executive Dashboards:**
4. **Back Away from the Spreadsheet: Why Excel Isn’t a Donor Database:**

**Optional:**
1. **PULSE / IRIS Application in Salesforce (Presentation, 40 min):**
   [http://pulse.app-x.com/8-recorded-webinars](http://pulse.app-x.com/8-recorded-webinars)

Class 5 **Excel for Data Analysis**
Microsoft Excel is a common denominator in any analysis. In this class you will learn the key formulas and functions to quickly analyze large datasets for reporting and analysis. This class will be hands-on and take place in a computer lab. We will go over a series of common requests that nonprofits receive and you will learn the tools to quickly provide answers from multiple angles. Examples of the tools are: array formulas, pivot tables, text to columns, index, match, sumproduct, etc.

**Case Assignment Due**

**Readings:**
1. Brush up on your Excel skills using Excel Help or the Excel Bible.
2. Practice problems will be provided.
3. Additional readings TBD.

Class 6 **Creating Functional Specification Documents**
Most IT products will require some customization, adding new contract requirements or new programs also usually require nonprofits to modify their
existing applications. Functional specification documents save nonprofits time and money by making sure that everyone is on the same page with how a program should function. Functional specs are different than technical specification documents, because they solely focus on how an application will work, not on how the code will be written, etc. Nonprofits create these specifications to ensure that the IT consultants or staff are precisely aware of the way an application should function, thus saving time and money compared to not creating specifications. In this class you will learn the best practices in creating these documents as well as when and how to build them.

**In Class Reporting Case:** First 20 minutes of class.

**Readings:**

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**Class 7  Managing Consultants and Vendors**

In this final class you will learn how IT consultants and vendors impact the work of nonprofits. You will learn to chose the best consultant by learning the requirements for a Request for Proposals (RFP), how to recruit/identify consultants, and managing the selection process.

**Readings:**
5. *Additional Readings TBD.*

**Functional Specification Document Due**