Syllabus

Introduction to Business Analytics

MS in Business Analytics Program
January 2015

Professor: Don Kleinmuntz
Office: Chicago Campus (224 S Michigan Ave, Third Floor)
Office hours: By appointment
Telephone: 574-631-4943 (Chicago phone number to be provided when available)
E-mail: Kleinmuntz.1@nd.edu

Course Description

Business Analytics is the art and science of using data to create information that promotes more effective business decision making. This course provides an understanding of business needs and technology trends driving investment in analytics and big data technologies. The course also provides an overview of the role of analytics professionals in business organizations, and an approach for framing business problems and decisions in order to incorporate analytics into the solutions.

Learning Objectives

1. Understand the basic concepts of using analytics for competitive advantage
2. Learn about the personal and organizational competencies necessary to deploy analytics in an effective manner
3. Understand how to frame business problems and decisions in a manner that promotes systematic incorporation of data and analytics into the solution

Required Software

None. The assigned readings and cases, listed below, do not require any significant quantitative analysis or complex computations. However, you will probably want to have your laptop open during class (for taking notes, for accessing copies of presentation slides, or for doing discussion-related web searches). Several of the cases may lend themselves to "back of the envelope" analyses that will benefit from having a spreadsheet file open, but this is not required.
Grading
Grades will be based on two factors: (1) written final report, due about two weeks after the end of class, and (2) class participation.

Final report  50%
The assignment for this report will be distributed on or before the last day of class. This will be an individual rather than a group assignment.

Participation  50%
Class sessions will involve a mixture of lecture and case discussions. You are expected to have read each case and be prepared to discuss both the assigned questions and other issues that may be raised by the instructor or fellow students. In addition, feel free to ask questions at any time or to offer answers to questions posed by others. Both quantity and quality of participation are relevant. The key issue is the extent to which you contribute to the learning environment.

Honor Code and Class Conduct
You will receive a student handbook and related material on the Notre Dame Honor Code. You are expected to have read this material and to conduct yourself accordingly. More generally, the MSBA is a program offered for business professionals. Therefore, you are expected to conduct yourself in a professional manner. You agree to arrive for class on time and prepared to participate in the learning experience.

You are encouraged to use your laptop or tablet device during class period in support of your learning experience. Please refrain from non-class relevant surfing, emailing, texting and the like. Even when one tries to be unobtrusive, this behavior can be distracting to fellow students.

Devices with cellular service or wireless voice services (e.g., Skype or Facetime) should be set to silent or those capabilities should be turned off. In general, if it beeps, buzzes, rings, vibrates, plays your favorite Top 40 tune, or whatever, then you should take appropriate steps to avoid that happening during class sessions. If you must take a call or return a text, voicemail, or email, then try to do so during a class break or, if absolutely necessary, excuse yourself from class and go to a location that will not disturb your colleagues.
Readings and Pre-Course Assignments

All assigned materials are available for download in an electronic course pack. You will receive separate instructions on how to access them. All readings and assignments should be completed prior to the first class session on January 15. You may wish to reread cases and think about your position on the assigned questions several times, including at least once within a few days of the class sessions. Our class sessions are going to be a mix of lecture and discussion, but they will be heavily skewed towards discussion. I will assume that you have completed all the readings and are prepared to discuss assigned case questions, though you will not be required to turn your answer in for grading.

   - Read chapters 1 through 6. (The rest of the book is optional, but may be useful later in the program.)
   - Read chapters 1 through 5. (We will read the rest of the book later in the program.)
   - Describe the advantages of a firm setting up a centralized “Information and Decision Solutions” (IDS) group similar to the one at P&G.
   - What are the factors that would lead P&G to consider setting up a centralized IDS group? Consider both internal and external factors.
   - What lessons can be learned from this company’s experience setting up a centralized IDS group?
   - What did P&G do right, and what are some of the things that, on reflection, might have been done differently?
   - Describe the advantages of a firm of setting up an offshore analytics group.
   - What are the factors that would a firm to consider setting up an offshore group? Consider both internal and external factors.
   - What lessons can be learned from this company’s experience setting up an offshore analytics group?
   - What did the company do right, and what are some of the things that, on reflection, might have been done differently?
   - Describe the decision that Dave Armstrong faces.
   - What aspects of the PrOACT framework described in Smart Choices are relevant for Dave Armstrong’s decision problem?
   - What advice would you give Dave that would help him make a smart choice?
   - Why is the decision facing Dave Armstrong a difficult one?
   - Apply the PrOACT framework to Jaeger’s decision. In particular, describe the various alternatives available to Jaeger and evaluate the consequences of each.
   - What would you recommend to Jaeger?
   - Jaeger recently read an article that praised data-driven business decision making. What data should he obtain and how should he use it?