TECH 646 Homework Assignment 2
Assigned date: Aug. 30, 2011
Due date: Monday, September 12, 2011, before 5 PM, as an email attachment

Turn-in requirements:
- Part I-A: One PowerPoint slide per team
- Part I-B: One Microsoft Word file per team
- Part II: Read and prepare for class discussion (no turn-in required)

References:
Text Book Discussion Questions and Exercise Problems

PART I-A: Discussion Questions (Making Research Decisions), pages 50-51
The teams are formed to work on the assigned questions.
- The team should study the question thoroughly, use proper references/guidelines to prepare answers for the questions.
- Discussion question 1 through 4 currently have two questions (a & b), and Question 5 has only one question. Team members who are assigned Q2 – Q4 are expected to design one additional question, and the last team for Question 5 would need to add two additional questions.
- A PowerPoint slide would be needed to lead the class for the Q/A discussions on Sept. 12

Question 2. Free Water in Micro Beach: Boaters Inc. versus City (David & Kevin)
Question 3. The High Cost of Organizational Change (Hemchand & Meng-Wei)
Question 4. Data-Mining Ethics and Company Growth Square Off (Bob, Samson, and Peter)
Question 5. Assume you were contracted as a research supplier to Apple during the development of the iPad, introduced in 2010. What ethical issue would you have influenced your firm’s behavior in its involvement with this project. (Vicky & Dorian)

PART I-B: Watch Cummins Engines, Case Study Video (Each team assignment as assigned above should answer all questions, and prepare it with Microsoft Word)
Abstract: Cummins Engines makes advanced, fuel-efficient diesel power systems and engine-related components and specializes in customized diesel engine production. Shipping more than 1,000 engines per day to customers and dealers on every continent, Cummins has a long history of innovation, from winning performances at the Indianapolis 500 to the first natural gas–fueled engine to pass California’s tough emissions regulations. This case focuses on the Signature 600 engine, the newest and most advanced diesel engine on the market. (Video duration: 14 minutes) www.cummins.com

- Watch Case Study video of Business Research Methods, 11/e, Online Learning Center, http://highered.mcgraw-hill.com/sites/0073373702/information_center_view0/
- Company URL: www.cummins.com
- The team are expected to answer the following questions
  A) What type of data is generated by Cummins statistical quality control program? And what does the collection of this information permit Cummins to do?
  B) How might employee input influence the creation of a new powerful engine like the Signature 600?
C) How could managers of the various strategic business units use tracking of web connections by customers and suppliers?
D) How can both Cummins and its competitors (like Caterpillar) use special promotional events, like the Signature 600 tour, to collect information?

PART II- Reading Assignment
- Read Chapter 3. Thinking Like a Researcher, of Boo1 - Business Research Method
- Read Chapter s1 & 2 of Book 2 – Applied Statistics and Probability for Engineers