TECH 646 Analysis of Research in Industry & Technology
Assignment 2

Assigned date: Tuesday, August 31, 2010
Due date: Tuesday, Sept. 7, 2010, before 5 PM

Hand-in requirement:
- Use Microsoft Word to copy questions, and prepare your answers.
- Give proper references (quotes, citing, etc) to information used to answer the assigned questions.

Submit the Hw2 as an email attachment.

PART 1. (40 points)
Discussion Questions – Making Research Decisions

4. Data-mining Ethics and Company Square Off, page 53
SupplyCo. is a supplier to a number of firms in an industry.

Questions
(a) Give definitions of the following terms: database, data warehouse, and data mining.
(b) What are the most prudent decisions SupplyCo. can make about its responsibilities to itself and other firms in that industry?
(c) What are the implications of those decisions even if there is no violation of laws or regulation?
(d) Examine other ethics issues that would consider breaching of ethical standards of accessing to customers’ data.

PART 2. (60 points)
1. Watch Cummins Engines video case (15 minutes) in the DVD to accompany the text book.
2. Visit Cummins Inc.’s URL: http://www.cummins.com

Questions
(a) Give background info about Cummins Engines, its competitive positions in diesel engine industry, and the Signature 600 engine.
(b) What is statistical control? And how to use it to enhance product quality?
(c) What type of data is generated by Cummins statistical quality control program? And what does the collection of this information permit Cummins to do?
(d) How might employee input influence the creation of a new powerful engine like the Signature 600?
(e) How could managers of the various strategic business units use tracking of Web connections by customers and suppliers?
(f) How can both Cummins and its competitors use special promotion events, like the Signature tour, to collect information?