Minutes for Supervisor Meeting 6

Date: 3 March 2016

Time: 5:00 – 6:00 pm

**Main Agenda:**

* Discuss business objectives and analytical problems
* Update data exploration process
* Update on preliminary findings

**Discussion**

* Business objectives and analytical problems from interim report is alright
  + At the end of project, team should produce a multiple regression model to explain the student performance based on factors such as school resources, family background.
  + Also cluster the schools based on their characteristics
* Data exploration process: show Prof dataset consisting of 3 tables: student, school and cognitive scores. Explain briefly what each data table captures and the relationship between them.
* Preliminary findings
  + Current framework: team proposes to analyze 3 tables separately to find patterns, then join the tables to answer more complex analytical questions
  + However, Prof advised team to straight away investigate the relationship between 3 data tables on different aspects i)relationship between student performance and school resource availability ii) student performance and family background iii) cluster schools based on student performance
* ***Revised framework***
* *Cogs: Calculate the no.of correct answers for each student; then derive the score in % by dividing no.of correct answers by the no.of total questions they attempt. Based on the student score, we can derive score distribution for each school, and compare their means and standard deviation. Apply this framework for Math, Reading, Science and Computer-based tests.*
* *Stu: At the student level, calculate the no of correct answers for each student. Then among the variables which may affect the score of students, do multiple regression to evaluate the support of the variables. Process should be done layer by layer. First round should evaluate all the variables then narrow down to small groups of variable. Using JMP (suggested by prof)*
* *Schl: refer to framework applied to Stu*
* *Team are advised to explore JMP Pro (available on SMU directory, refer to Prof’s email sent few weeks ago) and SAS Enterprise Miner*

**Attendee:** Prof Kam, Ngoc, Yazhi