**DW Assignment using Excel**

**The database is a star schema data warehouse:**

* 3 Dimension tables
  + Time – daily for 2 months
  + Machine – vending machines and their location
  + Product – 3 drinks and 3 snacks to go into the machines
* 1 Fact table
  + Stales removed from the machine
  + New product added to the machine

**Scenario represented by the data:**

* The data period is two months from Dec 2011 to Jan 2012
* A machine can hold either 300 drinks (3 products) or 450 snacks (3 product)
* These are new vending machines, first loaded on 2nd Dec 2011.
* Only snacks will expire within weeks, so the Stale count begins starting 21st Dec onwards.

**Questions for you to answer from this data warehouse:**

1. Do a profit analysis by machine for the machines at WPI. Which machines/locations are most profitable? Which machines/locations are least profitable?
2. How does usage (represented by stocking and stales) differ for machines at malls vs. companies vs. schools (WPI)?
3. Do machines differ by the number of stales? Which ones have the higher number of stales? Which ones have lower number of stales?
4. What are the managerial implications of these results? In other words, based on the results of your analyses, what are your three major recommendations to the manager of the vending machine company to improve their profit? Explain.

Submit your analysis and answers to the four questions to Canvas, no later than 5pm on September 11. Your answers to the questions should be complete and in the format of a report.