MIS0855: Data Science
In-Class Exercise for Wed, Mar 11 – Identifying Key Performance Indicators

Objective: Select Key Performance Indicators (KPIs) that facilitate evaluation for a given scenario

Learning Outcomes:

- Identify "good" KPIs that adhere to the SMART criteria
- Select the best KPIs from a list of potential metrics

Describe the limitations of using KPIs to make an evaluation

Scenario:

Working in groups is something students regularly do in their classes. However, everybody has worked in a group where the quality of individual contributions vary significantly among group members.

Your task is to come up with a set of KPIs to evaluate a group member. This can be used as a tool for groups to evaluate and give feedback to each other during group projects.

Step 1: Identify Key Performance Indicators (Individual, 5 minutes)

Working individually, come up with five KPIs that can be used to measure how a student is doing as a contributor to a group project. This should be done from the perspective of another student, not an instructor; however, an instructor might be interested in your list.

Make sure each KPI is adheres to the SMART criteria discussed in class: Specific, Measurable, Achievable, Relevant, and Time Phased.

For example, "Student contributes quality work" is not a good KPI:

- It isn't specific – What does "quality" mean? What does "contribute" mean?
- It isn't measurable – It is unclear how quality would be measured?
- It isn't time phased – A time period is never specified; is this weekly contributions, or over the course of the entire project?

However, "Number of ideas contributed each week" would be a much better KPI. It is certainly more specific and more measurable!

Step 2: Determine the Best KPIs (Group, 10 minutes)

In groups of three to four, compare your lists. Choose the five best KPIs, taking ideas from your individual lists.

Remember that you should choose items that best adhere to the SMART criteria, but you should also think about the items that are most important in determining who is a good member of a project group.

Step 3: Group Discussion (5 minutes)

Share your KPIs with the rest of the class. They should all meet the SMART criteria and explain why the ones you've chosen are the best to use for evaluation – why are they the most helpful in differentiate good group members from poor ones.

Send your group's note to minspang@temple.edu by 10:00AM.