



MIS 0855 Data Science (Section 005) – Fall 2016
Assignment #3 – Temple Analytics Challenge (10% of the Total Grade)
Due by Friday, October 28th, 11:59 PM EST

Please read all the instructions carefully.

Task

Create an original data visualization based on a scenario and a data set from the Temple Analytics Challenge, a University-wide data visualization contest. You have a choice of three scenarios:

- AmerisourceBergen Challenge: *Can small independent pharmacies compete with the big chains?*
- Alexion Pharmaceuticals Challenge: *Where will doctors find subjects for rare disease clinical trials?*
- Merck Challenge: *What solutions can analytics provide to the worldwide diabetes epidemic?*

A full description of each scenario and where to get the data are posted to the Challenge site (<http://analyticschallenge.temple.edu>). Please read all the instruction carefully in the site.

This assignment requires you to enter Temple Analytics Challenge, in which you could win up to \$2,500!

Assignment Guidelines

- You can enter the challenge either individually or as a group of no more than four students. You are allowed to work with students in another section of MIS 0855 or any other Temple students.
- The deliverables will be graded in the same criteria, whether they are individual or group work.
- You can use any software tool – Excel, Tableau, Powerpoint, Piktochart, or any tool!
- You will complete the following two deliverables for the challenge.
 - A graphic (or a series of graphics) as a PDF.
 - A brief summary of no more than one page explaining your graphic and why you think it is effective - also as a PDF.
 - Both your graphic and summary should display (i) the name of the challenge (Alexion, Amerisourcebergen, or Merck) and (ii) each team member's name and AccessNet ID (tu*****).
- Email both your graphic and your summary by Friday, Oct 28, 11:59 PM to both analyticschallenge@temple.edu and minspang@temple.edu with a subject line "Entry for Analytics Challenge." This deadline is firm, and the instructor will not take any extraneous

circumstance into consideration that occurs to you such as a PC malfunction or network outages.

- Late submission is allowed for the course, but not for the challenge. By being late, you are disqualified for the award. For the course, there will be 10% penalty per each 12 hours. For example, if you submit in the morning of Oct. 30, a 30% penalty will be imposed on your submission. Therefore, your submission will be graded zero after the noon of Wed, Nov. 2.
- It is highly encouraged to attend Analytics Challenge workshops (<http://ibit.temple.edu/analytics/workshop-schedule/>). One-to-one mentoring is also available at <http://ibit.temple.edu/analytics/mentoring-schedule/>.

Evaluation (for the Challenge)

All entries will be evaluated by the judges in two categories: visualization and analysis. Prizes will be awarded for each category separately and an entry can only win in a single category. The specific criteria for each category are:

- Graphic
 - Clarity (how well the graphic stands on its own without additional explanation)
 - Novelty/creativity (originality of thought; surprising way of approaching the data)
 - Insight (graphic aids understanding of the data)
 - Utility (ability of the graphic to aid decision making)
- Analysis
 - Relevance (analysis relates to the problem statement)
 - Completeness (degree to which the analysis answers the stated question)
 - Depth (sophistication of the analysis)
 - Consistency (conclusions consistent with the analysis)

Evaluation (for the Course)

Category (25% each)	4 (A-level)	3 (B-level)	2 (C-level)	1 (D or F-level)
Clarity	<ul style="list-style-type: none"> • The message conveyed by the graphic is very clear. • Graphic is simply constructed; does not contain more information than is necessary. 	<ul style="list-style-type: none"> • The message conveyed by the graphic is somewhat clear. • Graphic is simply constructed; contains minimal unnecessary information. 	<ul style="list-style-type: none"> • The message conveyed by the graphic is somewhat unclear. • The graphic contains more information than is necessary. 	<ul style="list-style-type: none"> • The message conveyed by the graphic is unclear. • The graphic contains a great deal of unnecessary information.
Novelty/ Creativity	<ul style="list-style-type: none"> • The graphic represents significant original thought. • The graphic goes beyond simply summarizing the data. 	<ul style="list-style-type: none"> • The graphic represents a substantial original thought. • The graphic goes beyond simply summarizing the data. 	<ul style="list-style-type: none"> • The graphic represents little original thought. • The graphic mostly summarizes the data. 	<ul style="list-style-type: none"> • The graphic represents no original thought. • The graphic simply summarizes the data.
Provides meaningful insight into the data.	<ul style="list-style-type: none"> • The insights revealed by the graphic are rather obvious. 	<ul style="list-style-type: none"> • The insights revealed by the graphic are somewhat obvious. 	<ul style="list-style-type: none"> • The insights revealed by the graphic are somewhat non-obvious. 	<ul style="list-style-type: none"> • The insights revealed by the graphic are non-obvious.
Utility of the visualization in aiding decision-making	<ul style="list-style-type: none"> • Conclusions from the analysis are very actionable. 	<ul style="list-style-type: none"> • Conclusions from the analysis are mostly actionable. 	<ul style="list-style-type: none"> • Conclusions from the analysis are somewhat actionable. 	<ul style="list-style-type: none"> • Conclusions from the analysis are not actionable.