



**MIS 0855 Data Science (Section 006) – Fall 2017**  
**Assignment #3 – Temple Analytics Challenge (10% of the Total Grade)**  
**Due by Tuesday, October 31<sup>st</sup>, 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:

- OVC Challenge: *Does speed matter in E-commerce?*
- Pfizer Challenge: *How can you eliminate the harmful effects of smoking on society?*
- Comcast Challenge: *How can you predict which movies will be a hit or a bust?*

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 (QVC, Pfizer, or Comcast) and (ii) each team member's name and AccessNet ID (tu\*\*\*\*\*).
- Submission to the Contest – Submit your two files to <http://ibit.temple.edu/analytics/submission/>.
- Submission for the Course – Submit your two files into Canvas.
- 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 Nov. 2, a 30% penalty will be imposed on your

submission. Therefore, your submission will be graded zero after the noon of Sunday, Nov. 5.

- A prep session for Assignment #4 will be held in class on Wednesday, October 25.
- 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)

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