

# Laboratory Activity 2 for Math 080: Topics from Chapter 1

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## 1 Introduction

Malcom Gladwell is a celebrated non-fiction author who tells intriguing and intellectual stories about real situations, and thinkers. In this TED talk, he explains how his friend Howard Moskowitz used statistics to reveal clusters in the food preferences in American shoppers.

Answer the following questions and submit as a PDF file Moodle.

## 2 Questions

1. Identify the “three things” that Howard Moskowitz brought to the food industry.

- 1) He showed that talking with people about their preferences is not always the best solution, the statistics and experiments work better. Makes a coffee example
- 2) Horizontal segmentation, there should be many types of mustard, different people like different mustard
- 3) There is no universal solution, he pushes people to think about variability more.

2. Suppose Howard Moskowitz, when helping Campbell’s to redesign Prego tomato sauce, had used simple random sampling in his analysis instead of clustering style. What might have been missed?

Since there are too many people with different opinions and taste, using random sampling would not bring any significant results to scales and graphs. There has to be clusters, because it would allow them to make variations that fit those clusters.

3. Take the ideas of Gladwell and Moskowitz, and use them to describe the design of a market study that would reveal people's preferences regarding your favorite product. For what reasons do they buy it? Argue for the use of one of the sampling techniques in Chapter 1, explaining why it would allow you to differentiate and enhance your product.

I am very interested in finding a perfect burger solution. I think that a lot of people prefer the burgers with soft buns and a lot of bacon, but some people prefer soft buns and no bacon, some people like simple ketchup burgers. To find the best solution I am going to run an experiment using the stratified sampling. I choose using the stratified sampling because I believe that there is no one perfect solution, there are going to be variations and the best way to find those is to group people into pre-defined groups. I think it will allow us to get better results and will help us find the best few solutions that would work for our company.