There are three parts to this exercise.

- memory schema and how memory schema relate to marketing communications.
- how cognitive styles and buying-process stages help you to target communications.
- how to evaluate the results of a simple A/B experiment.

**Memory Schema**

In the session on “Communicating Wisely,” we introduced the concept of memory schema and illustrated their use with two television advertisements for British Airways. The first advertisement illustrated poorly chosen schema (thunder and lightning, threatening music, etc.). British Airways would definitely not want these schema associated with their brand. The second advertisement illustrated much better memory schema (smiling faces, happiness at arriving at a destination, multicultural crew and passengers, uplifting music). These schema advance and communicate a positive brand image for British Airways.

We discussed that target schema often come from the voice-of-the-customer (consumer insights) and from funnel analyses. Communications may enhance awareness, tell customers why your brand does well on important customer needs, or position your brand on a perceptual map. You may wish to review the example memory schema given in the PowerPoint slides for “Communicate Wisely.” The PowerPoint slides can be downloaded from Canvas.

View the following advertisements for the Apple iPhone and for the Samsung Galaxy. (Just the first commercial in each link.)

**Apple**

https://www.youtube.com/watch?v=wmEggjT61FA

https://www.youtube.com/watch?v=Kkq8a6AV3HM

https://www.youtube.com/watch?v=Hn89qD03Tzc

https://www.youtube.com/watch?v=REZl-ANYKKY
1. List the memory schema that are communicated by the Apple iPhone advertising. Be sure to include emotional schema and schema that are tied to words, pictures, images, or music. Some of the schema may come indirectly. The advertisement may cause you to think about other things that carry their own memory schema.

It is perfectly reasonable that memory schema are communicated over multiple advertising executions. Some schema may overlap and some may be unique to a given execution. There might be some inadvertent schema as well. (Recall the problem that one advertisement for brand of children’s food taught children they could kiss toasters.)

2. List the memory schema that are communicated by the Samsung Galaxy advertising.

3. Based on these two sets of advertising, draw a perceptual map to indicate the different positionings of the Apple iPhone and the Samsung Galaxy. The map should be based purely on the two sets of advertisements.

4. Draw another perceptual map, but this time consider all of your experience when placing the Apple iPhone and the Samsung Galaxy on the perceptual map. Are the positions the same or different between the two maps? What is your guess about the positions the two brands want to occupy?

Cognitive Styles and Buying-Process Stages

Communications, particularly banner advertisements, are often targeted with respect to consumers’ cognitive styles and toward different stages of the buying process. In the session on “Communicating Wisely,” we provided examples of banner advertisements for Chevrolets that were targeted in this way.
Repeating those examples, the banner below on the left was targeted toward consumers who had holistic-visual cognitive styles. The banner on the right was targeted toward consumers who had analytic-verbal styles.

The banner below on the left was targeted toward consumers who were just beginning their search, the banner in the middle was targeted toward consumers who were in the stage of comparing a relatively small set of vehicles in their consideration set, and the banner on the right was targeted toward consumers who were ready to purchase a vehicle. All banners are holistic-visual.

In Session 5, you chose an idea for your project. We recognize that you may pivot as you get information from your customers and we recognize that you do not yet have sufficient data with which to identify a target positioning. Nonetheless, we would like you to think about how to communicate your idea. For this exercise, assume your idea is your final idea.

5. Choose two cognitive styles. The two cognitive styles can be any combination of the following. For example, a cognitive style can be analytic or holistic. It can be based on two dichotomous extremes, e.g., analytic-visual, three dichotomous extremes, e.g., holistic-verbal-deliberative, or four dichotomous extremes, e.g., analytic-verbal-impulsive-individualistic. For the purposes of this exercise, you don’t have to know the full definitions of a cognitive style. The adjectives should suffice.
• analytic vs. holistic
• visual vs. verbal
• deliberative vs. impulsive
• individualist vs. collectivistic

Describe a banner advertisement for your idea for each of the two cognitive styles you chose. Focus on the buying-process stage of collecting information. If you are good at sketching or can obtain images, we encourage you to do so. But if you are artistically challenged, words will do.

6. Choose two stages in the buying process from the following three:

• collecting information
• comparing alternatives (possibly generic)
• committing to a decision

Describe a banner advertisement for your idea for each of the buying-process stages you chose. Focus on one of the two cognitive styles that you chose in Question 5. If you are good at sketching or can obtain images, we encourage you to do so. But if you are artistically challenged, words will do.

An Example of A/B Testing

You were careful and creative when you created banner advertisements for your idea, but even the best copywriters don’t get it perfect the first time. That’s fine. You can test your banner advertisements. Suppose we used an experimental design that included four cognitive styles crossed with three buying-process stages. This is a total of 4 x 3 = 12 combinations.

If you choose your media carefully, it is likely that your target customers would see your banners. But you aren’t sure of your target customers’ cognitive styles and you don’t yet know the best stage in the buying process to which to target your advertisements. Later, when you have more data, you will get better at targeting. But in your first foray into banner advertising, you plan to use only three banners, one for each of the buying-process stages. You want to use the cognitive style that gives you the best click-through rate.

We provide the results of an advertising experiment below. These results have been pre-entered into a companion spreadsheet, “S09 Communications AB Fall 2018.xlsx.” The spreadsheet is available on Canvas. If you know regression, we’ve provided a design matrix in
the spreadsheet so that you can use “dummy-variable” regression to estimate all effects.\(^1\) If you don’t know regression, do the best that you can with simple calculations. At this point in the program, we want you to focus on the concept of A/B testing rather than the best way to analyze the data.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Collecting Information</td>
<td>1.23</td>
<td>1.36</td>
<td>1.00</td>
<td>0.82</td>
</tr>
<tr>
<td>Comparing Alternatives</td>
<td>1.62</td>
<td>1.12</td>
<td>0.95</td>
<td>0.68</td>
</tr>
<tr>
<td>Committing to a Decision</td>
<td>1.30</td>
<td>1.19</td>
<td>0.82</td>
<td>0.77</td>
</tr>
</tbody>
</table>

7. If the click-through-rates for banners with each combination of cognitive styles and buying-process stages are given in the table, what is the best cognitive style to target? (You can only target one cognitive style—not a different cognitive style for each buying-process stage.)

8. In the data, which factor has more influence on click-through rates: cognitive styles or buying process stages?

9. What is the net relative contribution of each cognitive style? Pick one cognitive style as a baseline against which to compare the other cognitive styles.

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\(^1\) When you use dummy variables in regression analysis, you need to choose one cognitive style and one buying-process stage as your baseline. This has already been done in the design matrix in the spreadsheet. The other dummy variables measure net effects relative to the baseline. Otherwise, the regression will not run. For advanced analysts, there is also sometime known as “effects” coding of the dummy variables. Don’t worry about effects coding for this pre-case exercise.