This self-learning exercise is designed to supplement the “promotion” lecture and help you practice the following concepts.

- Memory schema.
- Cognitive style and purchase funnel.
- A/B testing.

**Memory Schema**

Good memory schema advance and communicate a positive brand image, whereas bad schema achieve the opposite. Memory schema should be consistent with the STP of your product.

With schema theory in mind, view the following advertising for the Apple iPhone and for the Samsung Galaxy. (These links were working when this exercise was posted. However, these links are taken down occasionally. If they are not available as you work through this exercise, please use Google/YouTube to find recent Apple iPhone and Samsung Galaxy advertising. List the links that you used. We provided extra links just in case—you only need view 3-4 for Apple and 3-4 for Samsung.)

**Apple**

- [iPhone X](#)
- [It's Tough Out There](#)
- [Introducing iPhone 11](#)
- [Selena Gomez Shot on iPhone](#)
- [Color Flood](#)
- [Privacy on iPhone](#)

**Samsung**

- [Galaxy S9](#)
- [Galaxy A](#)
1. List the memory schema communicated by the Apple iPhone advertising. Hint: What mental associations do you form from the words, images, music, and other creative elements?

Memory schema can be communicated over multiple advertising executions. Some schemas may overlap and some may be unique to a given execution. There might be some inadvertent schema as well. (Recall the examples covered in class.)

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

3. Based on these two sets of ads alone, draw a perceptual map to indicate the different positions of the Apple iPhone and the Samsung Galaxy.

4. Now draw another perceptual map, based on all of your experience with the Apple iPhone and the Samsung Galaxy. 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 Style and Purchase Funnel

Marketing promotion is often targeted based on customers’ cognitive styles and stages along the purchase funnel. For example, the banner ad below on the left was targeted toward customers of holistic-visual cognitive styles. The banner on the right was targeted toward customers of analytic-verbal styles.

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

By now, your team will have chosen an innovation to market for your Action Learning project. With this exercise, we would like you to start planning the promotion of your innovation.

5. Choose a pair of cognitive styles from the following list.

- Analytic vs. holistic
- Visual vs. verbal
- Deliberative vs. impulsive
- Individualist vs. collectivistic

For example, you may choose analytic vs. holistic. In reality, consumer cognitive styles may be combinations of two-way splits, such as analytic-visual, holistic-verbal-deliberative, and analytic-verbal-impulsive-individualistic. Let’s focus on simple pairs for now.

Design a banner ad of your innovation for each of the two cognitive styles you chose. For this exercise, focus on the purchase funnel stage of collecting information. If you are good at sketching or can obtain images, feel free to be artistic. Otherwise, words will do.

6. Choose two purchase funnel stages from the following list.

- Collecting information
- Comparing alternatives
- Committing to a (re)purchase decision

Design a banner ad of your innovation for each of the two stages you chose. To simplify, focus on one of the two cognitive styles that you chose in Question 5. If you are good at sketching or can obtain images, feel free to be artistic. Otherwise, words will do.
A/B Testing

You were careful and creative when you designed your banner ads, but even the best copywriters are not perfect the first time. That’s fine. You can test your banner ads with data.

Suppose you used an experimental design that included four combinatory cognitive styles crossed with three purchase funnel stages. That is, you tested a total of \( 4 \times 3 = 12 \) versions of banner ads. The results of this A/B test are presented below.

<table>
<thead>
<tr>
<th>Click-through Rates (CTR) in %:</th>
<th>Analytic-Visual</th>
<th>Holistic-Visual</th>
<th>Analytic-Verbal</th>
<th>Holistic-Verbal</th>
</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>

These results have been entered into a companion spreadsheet, “S17s Pricing Exercise Spring 2020.xlsx,” that is available on Canvas. If you are familiar with regression analysis in Excel, we’ve provided a design matrix in the spreadsheet so that you can run “dummy-variable” regression.\(^1\) In you are not familiar with regression analysis, simple calculations are sufficiently informative for this exercise.

7. Which cognitive style should you choose to maximize your CTR? (You can only choose one cognitive style for this exercise. Going forward, if you obtain finer-grained data on each customer’s cognitive style, you can target them with personalized ads.)

8. Which factor has more influence on CTR: cognitive style or purchase funnel stage?

9. What is the relative contribution of each cognitive style? Pick one cognitive style as a baseline, and compare the other cognitive styles against it.

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\(^1\) When you use dummy variables in regression analysis, you need to choose one cognitive style and one purchase funnel 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.