Assignment #5: Monday Makeover
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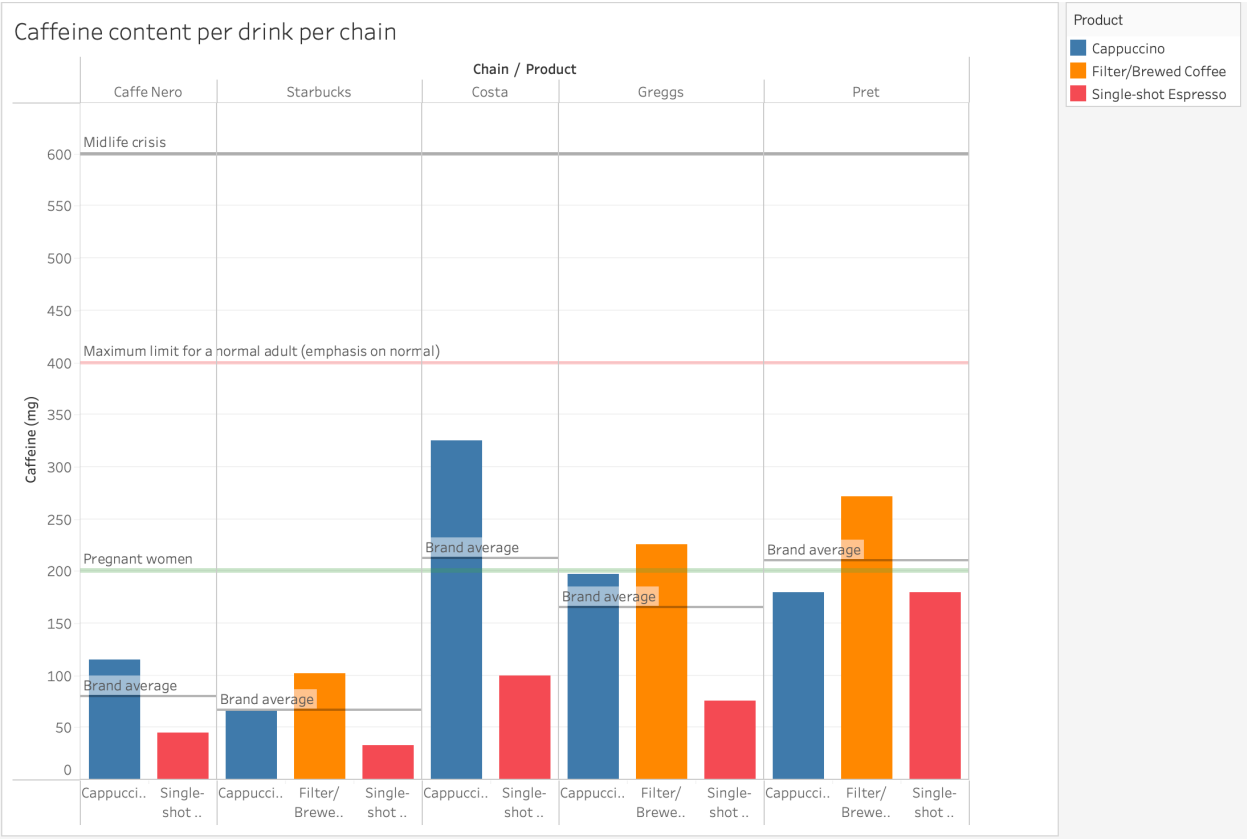
For this assignment, we are analyzing the Monday Makeover project. I have selected the data on "**High Street Coffee Caffeine Content**".



Business Context

We are developing a visualization for our lifestyle magazine, primarily targeting Gen-Z and Millennial readers aged 20 to 40. These readers actively participate in coffee culture, consuming various beverages from an array of brands. Our magazine explores the complexities and nuances of our readers' lives, including their daily caffeine intake and its limitations, such as those imposed by pregnancy.

To ensure our data is easily understood and memorable, we've adopted a two-pronged approach. Firstly, we've incorporated elements of humor into our graph, as this has been proven to aid memory and recall. Secondly, we've color-coded the beverages by

type, as different brands may offer the same beverage but with varying caffeine content. This approach allows us to present the data in a digestible and engaging format while maintaining the accuracy and integrity of the information.

Audience

Our primary audience comprises individuals aged between 20 and 40, specifically Millennials and Gen-Z. This demographic is deeply engaged in coffee house culture, frequently patronizing branded shops over preparing coffee at home. Recognizing their appreciation for humor as an aid to memory and recall, our visualization incorporates such elements. If our target audience were Baby Boomers, we would have opted for a more straightforward and simplistic approach.

Charts used (and not used) and why:

- We have utilized bar charts in this instance. Given that our audience primarily consists of non-experts, we have opted for simplicity and employed bar charts.
- The charts are color-coded according to beverage type. Color coding can be implemented in two ways – by beverage or by brand. Color coding by brand is unnecessary as we have already included brand name labels. Color coding by beverage allows for easy identification and comparison of preferred beverages across all brand types. For instance, a cappuccino enthusiast can effortlessly compare just the blue bars across all brand types.
- Reference lines for each brand have been incorporated. This addition aids in memory and recall. Although one may not recall the exact value of the lines for each brand, they can remember that Starbucks contains the least caffeine and Costa contains the most. Thus, they can select the brand based on their caffeine requirement.
- A reference line for pregnant women has been included. High levels of caffeine intake may result in low birth weight, which puts newborns at risk for low blood sugar, low calcium levels, and a weakened immune system. There is also some evidence suggesting that caffeine exposure can impact a child's brain development. Therefore, it is crucial for pregnant women to maintain low caffeine intake, and we have added this reference line accordingly. Furthermore, the reference line is kept gender-neutral (not blue or pink) by using green.
- A maximum limit for adults of 400mg has also been added and is colored red. This is the maximum safe amount for a normal, healthy adult to consume and is colored red to attract attention. Due to its long wavelength, red is one of the

most visible colors in the color spectrum (second only to yellow). Its ability to immediately capture people's attention is why it's frequently used to alert people of potential danger. Consider: stop signs, sirens, fire engines, and red traffic lights.

- A 600mg reference line has also been added and is labeled "Midlife Crisis." The FDA cautions that 600mg is excessive and could cause consumers to feel nervous, anxious, irritable, jittery, and experience excessive urine production or irregular heartbeat. As a lifestyle magazine, we need to communicate this information without sounding overly serious or alarming. Referring to it as "Midlife Crisis" will evoke feelings in our readers to avoid it while also conveying the consequences in a memorable way. The language is slightly humorous to aid in memory and recall while also serving as a messenger.
- A global reference line (of all brands and beverages) has not been used. While this may seem simpler than averages of different brands, it provides less useful information. Imagine you're going out for a drink and want to keep your caffeine intake low. Which brand would you choose? A global average would not answer this question, but brand averages do. Starbucks has the lowest caffeine content, making it the preferred choice. Although the average of each brand may appear cluttered, its benefits are too numerous to disregard.
- The thickness of the pregnancy limit, normal adult limit, and midlife crisis reference lines is greater than that of the brand averages. The first three convey crucial information about an individual's health and are therefore made thicker, while the average line is thinner to prevent drawing too much attention away from the bars.

Rules followed and not-so-followed (Learnings incorporated):

- Neutral colors: In the context of pregnancy, a neutral color scheme is adopted, excluding the traditional blue and pink.
- Audience first, charts second: Considering our business context and audience, we opt for a simple bar chart. Complex chart types are avoided as our audience may not be familiar with them.
- Redundant labels: Color-coding the bars by brand type would have been redundant, as the chart is already divided by brand.
- Not color coding the bars (broken): To maintain simplicity, the bars should not have been colored. However, we have broken this rule and colored the bars by beverage type to facilitate easy comparison across all brand types.
- Sorting: The bars in each brand are sorted alphabetically. An alternative approach would be to sort them by caffeine content.

New learnings gained:

A simple visualization, though it may appear straightforward and elegant at first glance, often requires a significant amount of forethought and trial and error. Each minor adjustment necessitates careful consideration of its purpose, the information it communicates (and omits), and its coherence with the overall graph. Consequently, the process of refining the visualization may involve several iterations before it meets approval.