Objective

You have been hired as a consultant by a small pizza company (you may create a name for this small pizza company). They want your help to collect and summarize appropriate data to be used in a marketing advertisement that makes a comparison between their small pizza company and their main competitor (you may create a name for this competitor too).

You are asked to prepare a memorandum to the small pizza company's CEO describing how they could conduct such a study to support claims focusing on one or two of the company's strengths (such as amount of toppings, speed of service, customer satisfaction, etc. ~ be creative). Be sure to include the research question(s) or claims you would propose to address and the different variables that should be recorded as part of the study (both what you would measure and how you would measure it). Additionally, describe how you would summarize the data (which graphical and numerical summaries you would report or possibly use in the ad) to help address the claim(s).

A Few Notes for Completing the Assignment

The purpose of the prompt is to describe through words your proposed study. You should not make up data, you should not generate your own graphs and numerical summaries, you should not provide detailed formulas nor conduct any actual statistical tests. But rather, you should include a description of the type of data you propose to collect (what variables you would measure and how you might measure or collect them), and the various of graphs and numerical summaries that could be used to further demonstrate the company's strengths.

Some Items to keep in mind:

- When your memorandum is read by your peers, they will play the role of your client, the company's CEO, with basic statistical literacy who is trying to understand your study design proposal.
- . Since you are explaining this to your client, you should take care to carefully edit and proofread your memorandum.
- Your memorandum should be between 350-500 words (excluding header, footer, citations). In case you aren't sure what memorandum (or, "memo") format should look like:

https://owl.purdue.edu/owl/subject_specific_writing/professional_technical_writing/memos/index.html

- You should not include your name on the assignment (to keep the peer review anonymous).
- Please do NOT post a request for a peer review on the Forums. Coursera automatically assigns reviewers for you and
 posting a request doesn't make the process faster. Typically, 7 to 10 days are needed to accumulate the necessary 3
 reviews.
- To preserve the discussion forums for course content questions and conversation course staff may delete posts that request peer reviews.

A Few Notes for Providing High Quality Peer Review

- Use respectful language whether you are suggesting improvements to or praising your peer.
- 2. Look over your peer's memo to quickly get an overview of the piece.
- 3. Next, read the memo more slowly keeping the rubric in mind.
- 4. As you re-read, note the pieces of texts that let you directly address the rubric prompts in your online responses.
- 5. In your online responses, focus on larger issues (higher order concerns) of content and argument rather than lower order concerns like grammar and spelling.
- 6. Be very specific in your responses, referring to your peer's actual language, mentioning terms and concepts that are either present or missing, and following the directions in the rubric.
- 7. Peer Review is important and helpful (to both the reviewer and receiver of the review), so be sure your online responses are detailed enough (minimum word count for each of the 4 criteria is 30 words).
- 8. Peer Review is most helpful if received in a timely basis. Complete your thoughtful online feedback for all your assigned submissions ASAP so you can provide that feedback and thus earn your points for this helpful exercise.

Grading Criteria

The Coursera peer review system will assign peer graders to your assignment until you have received three grades/reviews from fellow students. This process usually takes about 10 days but sometimes takes as long as 15 days. Please be patient!

These are the criteria that will be used to grade your assignment. You will need to pay attention to these, both as a learner and as a peer reviewer.

- 1. This memorandum should be written to be understandable to the company's CEO who has basic statistical literacy. Comment on whether this was achieved. What parts were written well? What parts would be more difficult to understand?
- The study design should be described in this memo. Comment on proposed research questions or claims that would be

addressed. What is described well? What is missing? How might the description be improved?

- 3. Comment on the proposed variables that would be recorded. What is described well? What is missing? How might the description be improved? Do they generally align well with the proposed research questions or claims? Is there enough detail so the company's CEO will generally understand what is proposed to be measured and how it would be measured?
- 4. Comment on the proposed graphical and numerical summaries. What is described well? What is missing? How might the descriptions be improved? Do they generally align well with the proposed research questions or claims? Do they align with the type of data that is being recorded?



You passed!

Instructions

Congratulations. You earned 10 / 10 points. Review the feedback below and continue the course when you are ready. You can also help more peers by reviewing their submissions.

Review assignments

Discussions

Shareable Link

Di--- Ct. I. D.--i---

My submission

Pizza Study Design assignment
Submitted on September 20, 2020

Enter the text from your memorandum into the text box provided. If desired, you can use *text formatting* to increase the readability of your memorandum.

MEMORANDUM

PROMPT

the rea

•TO: Pizza Plazza
•FROM: aBc Consulting

•DATE: Sep 19th, 2020

This memorandum should be written to be

statistical literacy.

Comment on the degree to which this was achieved.

1. What parts were written well?

2. What parts would be more difficult to understand?

understandable to the company's CEO who has basic

•SUBJECT: Pizza Marketing Study Design Word count: Minimum 30 words

We have conducted a study for your company's next marketing advertisement.

We think technology is a wonderful thing and is helping our industry grow to a great extent. During these times when the price of labor is getting so high, things like kiosk ordering and mobile ordering have taken a giant leap. It's less expensive for a small size like us to be able to keep business going. Technology is something we all have to keep an eye on. Because there always lots of our customers waiting outside of our restaurant. We should consider how to shorten the waiting time for customers in the store. Their waiting time, for now, is 30 minutes average. A full 43% of pizza customers say they find online ordering and tracking technologies "appealing or extremely appealing," according to a Technomic study, while the same study found that 24% of consumers felt similarly about pizzas that can be ordered from a smart

Our competitor like Zume Pizza, a California-based startup with a so-called "cobot" culture—humans and robots working side by side in the kitchen. They use a robot-enabled assembly line to prep and par-bake pizzas, plus predictive algorithms that forecast where pizza orders will come from and what types will be ordered. The par-baked pizzas are then loaded onto huge delivery trucks equipped with refrigeration units and dozens of computerized ovens; as the truck cruises a predetermined delivery area, human employees pop the pies into the ovens for the finishing bake when an order comes in and deliver them, fresh and piping-hot, to the customer's door.

TV.



Sujan Chandra Mondol

This memo is written in easy-to-read language and any manager with basic statistical knowledge can understand it. Moreover, there is no part that is difficult to understand.



Andrew Semeniuk

I think the idea of this memo is wonderful. The writing of this piece is done very well, and in just a few short paragraphs I have a good visual of the company & what problems data might be able to solve



Ali Ramdan

1.research questions 2.the description of the proposed variables

The study design should be described in this memo. Comment on proposed research questions or claims that would be addressed.

- 1. What is described well?
- 2. What is missing? How might the description be improved?

Some research questions:

human interaction required.

survey would be helpful too.

favorite flavor) would like to order from a smart TV or IoT devices.

1. How many people (grouped by gender, age, race,

2.How long would our customer like to take to get his or her order?

service mobile order pickup station in the quick-service

3.Pizza Portal is described as "the first heated, self-

- restaurant industry." Customers download an app, prepay for their food on a mobile device, and receive a three-digit PIN or QR code. The customer can then go to the Pizza Portal at the store and input their PIN or scan their QR code to open a secured compartment in the portal, retrieving their pizza and skipping the line—no
- How much percentage of our customers prefer this kind of Pizza Portal?
- **4.**Would our customer like to be served by a robot waitress?
- According to our database, people are most likely completing online surveys on Thursdays and Fridays between 7 a.m. and 1 p.m. PST. If you want more responses faster, try sending out survey requests during peak response times. And also donate to our respondent's favorite charity every time they complete a



Sujan Chandra Mondol

Word count: Minimum 30 words

It seems that you've written about a ongoing study while you were asked for a prospective study. Hence, the possible studies have been suggested based on the results of the previous ones. But you were supposed to form the framework of the study from absolutely nothing.



Andrew Semeniuk

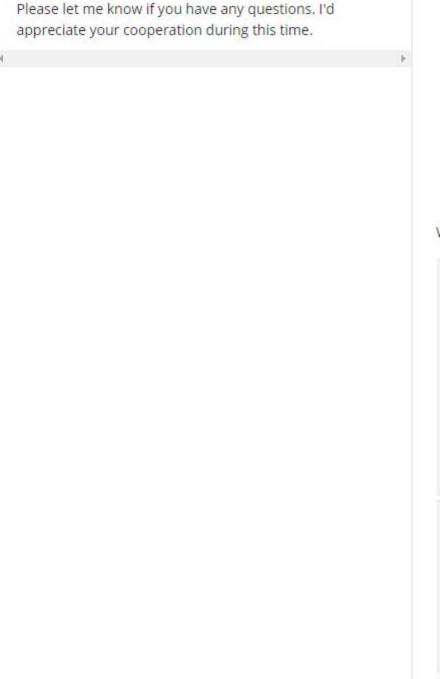
These research quetions are very well laid out. They are very clear. I think this idea and the questions asked in it are very forward thinking, and I am a huge fan of that



Ali Ramdan

1.proposed research questions 2.nothing is missing

Comment on the description of the proposed variables that would be recorded.



- What is described well?
 What is missing? How might the description be
 - improved?
- 3. Do they generally align well with the proposed research questions or claims?
- 4. Is there enough detail so the company's CEO will generally understand what is proposed to be measured and how it would be measured?

Word count: Minimum 30 words



Sujan Chandra Mondol

It seems that the research questions are more focused on the likes and dislikes of the customers than their experiences with the pizza company and its competitor. There is no evidence that any of the research questions will help to get an idea about the strengths of the company over



Andrew Semeniuk

its competitor.

This is written well, and I think any competant CEO would be able to understand the goal of this memo, what is trying to be studied and how it would be measured.



Ali Ramdan

1.some variables are described well
2.nothing is missing 3.yes they align 4.yes
there is enough detail

Comment on the proposed graphical and numerical summaries.

- What is described well?
 - 2. What is missing? How might the descriptions be improved?

the type of data that is being recorded?

improved?

3. Do they generally align well with the proposed research questions or claims? Do they align with

Word count: Minimum 30 words



Sujan Chandra Mon

Sujan Chandra Mondol
It is good to see that you have included a number of numerical summaries from the previous studies. But unfortunately, no graphical or numerical summaries were proposed.



Andrew Semeniuk

I think the questions you are asking are the right ones. I would like to see more explination of what type of graphical and numerical analysis we would be looking at and how that would help us make a decision

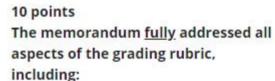


Ali Ramdan

1.numerical summaries, 2, the descriptions are very improved 3.yes it's align

Thinking about your written assessment of the four components of the learners' memorandum, please provide an overall grade for the assignment that is consistent with your carefully written observations.







- being understandable to a stakeholder with basic statistical literacy
- a clear description of study design
- complete description of proposed variables

- complete description of proposed graphical and numerical summaries.
- 8 points
 The memorandum <u>mostly</u> addressed
 aspects of the grading rubric, with only a
 few areas needing improvement.
- 6 points
 The memorandum <u>partially</u> addressed aspects of the grading rubric, with several areas needing improvement.
 - 1 point
 The memorandum did not address the aspects of the grading rubric, with nearly all components missing or needing significant improvement.