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Problem Set #5

Monday:

A: Go to a Starbucks and sit next near the mobile pay area where customers pick up their order. Ideally, you pick a Starbucks that is in a prime location and a time where they are busier than normal. Spend two hours observing customers come and go. Pay attention to the number of customers using mobile pay and those using the traditional method of ordering when they arrive.

Questions you would be able to answer after the observation:

- How do people behave when they are picking up their mobile orders?
- Do they seem frustrated?
- Are they waiting around a long time for their orders or are they in/out without a problem?

The data you would be able to obtain:

- How many customers used mobile pay versus those who did not
- Wait time
- Estimation of \$ spent and/or quantity ordered

B: Go to a Starbucks and see ask people as they exit if they would like to be part of a focus group to better improve Starbucks' mobile pay systems. Once you have a group, you can start asking them about things you saw when you did observations or you could already have a list of questions ready for the group. Try and keep the focus groups as ~20 minutes so that you don't lose the attention of the members.

Questions you would be able to answer after the focus group(s):

- How often do you use the mobile pay system?
- What would make you use the mobile system more?
- Do you use another business's mobile pay system?
- If you don't use Starbucks, why not?

The data you would be able to obtain:

- Times per week they go to Starbucks
- How much they usually spend
- How often they use the mobile pay app
- How pleased they are with the mobile app versus non-mobile app users
- How likely they are to suggest mobile pay to a friend

C: An online survey should be brief and you should outline what type of data you are hoping to learn and base your questions accordingly. Once you have a set of question, preferably around

10, you should post it out to several social media site, friends, friends of friends, etc. Try and get as many people to take the survey as possible so you have a large snapshot of data to use. Make the questions as clear as possible to avoid confusion and try and use as few short answer questions as possible.

Questions you would be able to answer after the survey:

- Are you happy with mobile pay?
- How often do you use mobile pay?
- What day(s) of the week do you go to Starbucks?
- Have you heard of mobile pay at Starbucks?

The data you would be able to obtain:

- How happy on a scale of 1-5 with a variety of mobile pay related questions asked.
- Frequency of use

Wednesday:

2.

- A) Does emotional contagion occur between Facebook users?
- B) User's emotions in the news feed
- C) How people expressed their emotions

3.

- A) I would use Archives in this scenario. Archives make the most sense because I don't want any outside influences that could alter perceptions, like an interview or focus group.
- B) I would use an Experiment for this example. I would have an independent variable being the old design and the dependent variable the redesign. I would have users try and accomplish the same task on both the old and new design and compare.
- C) I would use a Simulation for this example. Since we have a lot of data and parameters from previous iphone releases, we can plug in anticipated information to predict results. For example, is this new iphone a new shape? How did the last launch of a new shape do for Apple?

4.

A) For example, if McDonalds launched a new social media campaign, I would turn to Twitter and Instagram to see what types of things people were saying about it. My question I would want to answer would be, "Was the reaction to McDonald's new campaign positive or negative?" I would copy and paste people's quotes into a file, then write a program to look for positive words such as "great, fantastic, awesome, etc" and negative words such as "horrible, stupid, dumb, lame, etc" Then, I could compare my finding of positive/negative words to get an overall barometer of how people perceived the campaign.

- B) I would target people that have never used the website in question. First, I would have a user accomplish a specific task on the website using the old design. Next, I would have that same user use the website with the redesign. My question I would attempt to answer would be, "Which website allows the user a more efficient experience?" I would keep track of how many click it took the user to accomplish the task on each website as well as how the duration. After I have the number of clicks per and duration from each user, I will compare to see which design had fewer clicks/shorter duration.
- C) I would pull up data on previous iphone releases and try and find the ones that best match the current iphone release. For example, if the latest release comes with big changes (new button, no button, new bluetooth tech) I would look at past releases with similar updates and compare how they did. Did they turn a profit? Are new changes welcomes in the Apple community? I would analyze old iphone data and plug in the upcoming release to predict profitability and how welcomes changes will be.

5.

If I had a large dataset of location/GPS data as well as what apps they used to communicate at those locations, I should be able to infer a few things. From 10pm-7am, I would assume the location for most people would be home. 7:01am-5pm I would assume work and/or school. 5:01pm-10pm I would assume leisure activities, grocery store, or errands. Now that I have plotted the location of people for these timeframes, I would fuse it with what apps they were using at the location during these times. When fuse the data, I should be able to tell what apps people use to communicate at home versus what they use when they are out running errands.