Pilot Study - Group 16 (Evening Section)

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1. **What is the larger experimental question you are exploring (i.e., your "think big" idea)?**
   Measuring the impact of pushing app notifications on a company's revenue and customer loyalty.
2. **What is the goal of the pilot study? How will it inform the larger question?**
   To understand whether app notifications increase the time users spend on the app, increasing the company's product exposure and potential revenue.
3. **Where are you piloting? Who are your participants?**
   Instagram app notifications to 2-3 fellow students and friends who use iPhone.
4. **What are the <u>specific</u> treatments? How will you implement them?**
   1. Control group: people without app notification
   2. Treatment group: people with app notifications (include sounds and badges)
   3. Implementation: observe the screen time for Instagram for a week using iPhone built-in screen time app
5. **How will you <u>specifically</u> randomize? Include the level of randomization, tool for randomization and if relevant, any characteristics you are blocking on.**
   Randomize over blocks: Use Radiant to split participants based on their average screen on time and whether they had their notification on before the experiment.
6. **What is your primary outcome (remember, it must be a <u>behavioral outcome</u>, not a hypothetical outcome)? How will you collect the data?**

a. Are you measuring secondary outcomes (these can include hypothetical outcomes, such as survey responses)?
   -- Primary outcomes: User engagement data: daily sessions per user, average session length, weekly trends, (DAU & MAU)
   -- Secondary outcomes: Session intervals, in-app event tracking, daily screen time, notification open rate

b. Are you examining any subgroups (e.g., new vs. returning customers)
   No. iPhone app analytics data will be collected.

7. **Timeline and To Dos: When will you implement and what steps need to take place for implementation?**

a. In week 5, recruit students who use iPhones and Instagram. The total sample size would be about 20-30 individuals. Based on their usage, participants are divided into two blocks, light and heavy usage. Then randomly and equally distribute the participants in two blocks into the control group and the treatment group.

b. In week 6 & 7, ask participants in the control group to disable the notifications from Instagram, while asking participants in the experiment group to enable the notifications. For week 6 & 7, collect the screenshots of participants' everyday screen time and measure their usage of Instagram.

c. In week 8, perform quantitative analysis, test the correlation between whether participants receive notifications and screen time.

d. In week 9, draw conclusions of the screen time changing and find mechanisms behind the behaviors after the data collection and analysis are completed.