

FB DS Virtual Onsite

Statistics

1. Conditional Probability: Given bad actor rate is 1%, both false negative and false positives are 5%, what's the conditional probability?
2. What's the distribution of # of comment / active users?
 - a. follow-up question: pick P50 and P95 two groups of people, what would be the sample mean of these two groups after two weeks?
 - c. A/ B testing results for video cancel auto-play
 - d. N people, M impression, what's the expected value of impression per person?

Product Interpretation

1. Instagram story for close friends
 - a. How do you determine which country to roll out this feature?
 - b. What metrics you would use to measure success?
 - c. After launching this feature, we are seeing increase in engagement of this new feature while engagement with story to all friend decreased, how to investigate the root cause?
2. UI design change: the screen size for each post would decrease by 25% and there would be a "See more" button at the bottom of the post?
 - a. How do you evaluate the UI change
 - b. what are the success metrics?
 - c. How to design the experiment?
 - d. After launching the new UI, the performance in Thailand is better than that in US marketplace. How would you investigate?

Applied Data

1. Restaurant you may like
2. High Quality Notification
3. Fake News
 - a. What kinds of sampling method you would use to quantify the fake news in a short period of time? (what data to use?)
 - b. What model to use and how to evaluate?
 - c. If bad actor know how to fool the detection mechanism, what would you do?