iGaming Stats Task

Task Description

- We need you to look into a scenario for an iGaming platform
- The task at hand requires you to predict the profitability of a bonus campaign
- The bonus in question is called CashRake, it is a combination of instant cashback and instant rakeback, the example of how these two work are as follows:
    - Instant Cashback, here is how it works
        - Each time a player places a bet, he will get a percentage of the loss from that bet returned to him
        - Example Scenario:
            - Player places a 1$ bet, if he wins back 0.5$, we will return a percentage of 1$ - 0.5$
            - If our task the percentage is 3%, so in this example we will return 0.5$ * 0.03 = 0.015$ in cashback
            - If the player got back more than 1$ from his bet, he would not get any cashback, so only losing bets will be counted towards cashback
    - Instant Rakeback, here is how it works
        - Each time a player places a bet, he will get a percentage of the bet amount based on the house edge of the game, the average house edge is 3%
        - Example Scenario:
            - Player places a 1$ bet, for this bonus it does not matter if he wins or losses
            - If the percentage is 30% for example, we will give 1$ * 0.2 * 0.03 = 0.006$ in rakeback

- Important information about the feature:
  - Players are capped on the total amount they can claim on cashback + rakeback based on how much they deposited so far, the cap is set at 33% of their total lifetime deposit amount
  - For example:
    - Player deposits 100$, his cap is set to 33$, this means that he will not be able to earn more than 33$ from claiming cashrake
    - If a player makes another deposit of 100$, his total cap would then be 66$
    - Each time a player claims cashrake, he uses a portion of that cap
    - Cashrake can be claimed instantly after each bet
- Information to consider:
  - Average game RTP is 96.905%
    - So this is the theoretical Return To Player percentage, this is the percentage amount of money returned to the player across a subsequent amount of bets
  - Average deposit amount per player is 100$
    - This is the average amount deposited per player, it would be good to take into consideration that some players redeposit money in a single day as well
  - Average bet per player is 5$
    - This is the average bet amount based on the deposit amount, of course there are always big players that deposit a lot of money and also place very high bets, like 100$, 1500$, etc...
  - Average Wagering Multiplier per deposit: 6x
    - This represents the amount of times the players turn over their balance based on their deposit amount, so a 100$ deposit would amount to 600$ wagered
  - Average Per Player Acquisition Cost: 60$

        - This is our company cost to acquire a player
    - Average Retention Rate of Players: 50%
        - This percentage represents how many players we will retain and keep coming back to the website on a monthly level
    - Starting Player Count: 1000
    - Average growth rate of the number of players:
        - 1st Month 300%
        - 2nd Month 150%
        - 3rd Month 50%
        - Subsequent months 25%
            - These figures represent our growth rate on a monthly basis, so if we start with 100 players, month 2 we should have 400 players if the growth rate is 300%
- What is the task
    - We need to understand based on our information above, what would be our returns, losses, potential growth, how much volume we will need across players and wagering to make this campaign work
    - We will need this spread out across 12 months
    - The task should be delivered as a report, the format of the report can include, but is not limited to:
        - Excel
        - Google Doc
        - Graph based software by choice
    - We are here to understand what you can do with such information, we understand you have your own experience and processes so far, and thus all we ask is for you to give your best, nothing more, nothing less, good luck!