New User Onboarding

Context: Hitwicket has a new user onboarding tutorial for players to learn and experience cricket with Hitwicket's unique probability based game mechanic. However, data shows that a significant number of new users drop out during this tutorial phase. You are assigned to carry out the root cause analysis for the drop-offs.

A. What specific data points and user feedback would you collect to analyze the current tutorial drop-offs.
B. List down your top 5 hypotheses based on point(a).
C. Suggest an experiment to validate your top hypothesis for the drop off during the tutorial.
D. Explain the reason behind your proposed experiment and possible drawbacks if any where the experiment could fail.

ANSWER:

A. Data points and User Feedback:

The first tasks that needs to be under priority consideration as soon as a user logins and initiates its first match are listed below:

a.) **Tutorial Completion**: When greeted with the tutorial of the game , assessment on how engaging the tutorial is for the players.
This would ensure to generate the rate of any premature exit from the game because of either lack lustre tutorial or too complicated.

b.) **User Interaction data:** Based on the button clicks, and user navigation around the map of the UI of each segment of the videogame , one can derive path of users and classify them as:

- Intuitive: Without a delay , the user navigates directly to the 'Play' Button to start the next match or first match of the day.
  Overtone:- Playing consecutive matches
  Undertone;- Taking a break between matches. The break time could be signified by a time or screen off time

- Non- Intuitive : Opens the application and would go to player stats(My team in the application) or would navigate to stores before opting for a match

c.) **Demographic and Behavioral Data:** As new users would sign into the gaming landscape, inputted data would help us derive demographic characteristic of the user such as age, name, location that could create general sense of the playing population
Behavioural data would encompass the users network type , device type and user engagement hours throughout the day as in if the user engages in the game at morning or at night. This data would be helpful to generate user pattern and give more foundation to the demographic

B. Five Hypotheses for Drop-offs:
a.) **Complexity or Length of the Tutorial** : If a lot if information is presented to a player during the very start of the game , it might get too complicated for the player to actually appreciate the different technologies in the game
The second problem might arise due to the length of the game. Since Hitwicket is a strategic game , there would be a lot of game mechanics that the players should be introduced to, but without proper intervals and activity trigger sensitive procedure , the length would seem tedious and drop offs could be certain.

b.) **Technical issues**: Loading of offline games and quick matches when the player is opting for the pvp option are considered under technical issues and if these issues persist even after multiple logins, drop offs rate could be at a high.

c.) **Lack of reward/progression system:** Strategic games employ fun within their mechanics with challenging yet rewarding progression systems. A user would want to unlock a new player or other rewards upon hours of grinding and if perchance , the reward system is a little flaky or the progression system downgrades only after a few levels, the drop offs could be certain.

d.) **Mismatch of Expectations**: This particular hypothesis could be considered at the pre-download segment when players would have a different notion of what the game might be before download. This could result in drop offs of player under the subject of negative reception

e.) **Wrong Target Demographic:** One hypothesis could be derived when we talk about different parts of the videogame. Talking of sports as a genre and that too , cricket, we target a plentiful demographic. But the other part of the video game comes out to be turn based strategy. Depending on that , we might narrow the player base.
But this also holds another point , that pertails the game structure . Since demographic could be influenced depending upon the gameplay , clear evidence is Pro soccer evolution and Xcom, the hypothesis becomes circumstantial.

C. Experiment to Validate Top Hypothesis:

Given Hypothesis: Complexity or Length of the Tutorial

Proposed Experiment: A/B Testing

- **Version A** : The preliminary version of the Tutorial
- **Version B**: The Updated version of the Tutorial addressing the issues that were brought up. For this instance , let's talk about dividing the tutorial throughout the game so that it would be triggered only when specific mechanics are triggered that would shorten the length of the tutorial

Evaluation Metrics:

- **Completion Rate** : This is to be calculated as the rate of player that completed the match and opted to start another game after the tutorial completion
- **User Feedback** : Quantitative feedback during the very start of the journey could be received poorly by the user , but qualitative feedback could be drawn if the assessed time spent , completion rate , consecutive match loads after tutorial completion are considered.
- **Time spent** : This particular metric can be highly localised for analysis of how well structured the tutorial is . if the user finished each of the steps in a specified time frame, it could be concluded that it is not too complicated for users to understand the lay of land

D. Reason for experiment:

A/B testing was done to filter out the glaring problems that might be present during the first step of the videogame. Assessment is at trivial level as of now,but, for the analyst, the data generated could be enough to lay a foundation on users engagement with application and would aid them to draw

out directions into which they would perceive proceeding could generate better results.
Once laid foundation , other type of testings such as usability testing and user journey map could be incorporated

Drawbacks:

a.) Simplified testing:

A/B testing is a highly trivialised form. Although it is a very good first step for analysing the fundamental problems underlying the application, the hypothetical filter would not be able to generate the specialised problems, if any, of the application.

b.) **Delayed reports:**

Collecting qualitative information might result in delayed reports on user feedback that would prolong the procedure of A/B testing and updates rolled out for the application might also get delayed.