Master of Business Analytics Applied Project

Business context of the project:

At Ninja Kiwi (NK) we've been developing the kind of games that we would want to play for almost two decades. We've always tried to make games that are fun for our players over anything else and to continue to do this effectively, we'd like to be able to understand our players better.

Bloons TD 6 is our flagship game. It's available on numerous platforms across a multitude of devices and is the main NK game for most of our players. It's a paid game, although the cost is relatively small in gaming terms, so microtransactions also exist in terms of in app purchases (IAP) for in game currency and items.

To grow as a business, we need our games to make money, but we want to achieve this by making games that players always want to come back to. To achieve that, we strive to make the IAP something that will really add value to our players experiences.

Description of the business problem:

We believe that our players privacy is paramount, so we don't implement code that tracks a player's demographic. Despite that, we would like to be able to group our players intelligently and work out which kinds of players engage in what parts of the game and what kind of additional content would be beneficial both to their long-term playing and to us as a business.

Players play games in a myriad of ways, and we'd like to know which kinds of players interact with our games and where. We don't track a player's demographic so instead we would rely on psychographics; how a player plays the game is how we'd differentiate and group them. We'd like to understand these psychographics and which groups should be our focus for future content.

What we'd like from this project is to be able to define these psychographic groupings of our players and measure how they differ in terms of IAP spend and churn. Then, hear proposals of changes we could make to the game to improve certain groupings' IAP spend and retention rates.

Key Variables

These are some variables provided which can form the basis of the psychographic cluster analysis. These are only a guideline; students are recommended to come up with other groupings which can enhance / differentiate the groupings.

- The platform the player is playing on. (Mobile or Desktop)
- The game modes the player takes part in. (Which area of the game the player interacts with, and if the modes reward trophies)
- The level of the player. (Indicating their experience with the game)
- Have made in app purchases or hasn't spent within the game. (What converted the player to make their first spend.)
- Interacted with cosmetics or not.
- Days spent in the game (different from experience as they can have played for many days but be low level)
- Difficulty of the games they play.

Bartle Taxonomy can be referenced to understand clustering psychographic traits and behaviour.