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HW04 Pandas Reflection

UMN Data Science Bootcamp

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Heroes of Pymoli Data Conclusions

The data collected from the player base of Heroes of Pymoli has many useful and insightful information that can help shape the growth and development of the game. Separating the data into different groups and bins to show trends based on different demographics can show the developers and marketers where, how, and why to target certain demographics to maximize potential growth and revenue.

The first major trend identified through the data was the distinction between gender and average spent on an item. While Heroes of Pymoli is a male dominated game, women and non-binary players averaged 18 cents and 33 cents more per item respectively. Marketers and developers can use this data to potentially gear items to appeal to both women and non-binary to cash in on the additional spent per item. While the total purchase value is much lower, it could see an increase if the margin of item cost per item is increased. Additionally, this bit of data shows that the marketing team should invest in attracting a larger female and non-binary player base overall, as more non-male players should continue the trend of paying more per item.

The second important distinction to know is the relation to age range and average spent on items. While the majority of players are age 15-25, there is no similar trend to average spent on items. Additionally, there is no upward trend based on average spent and older players. I had personally expected an upward correlation based on older players and more spent per item on average. Younger players have much less expendable income, while older players are much more likely to have the money to spend on microtransactional purchases. The data completely disputed my hypothesis, with players aged under the age of ten spending considerably more than almost every age group, with those aged 35-39 spending the most. Marketers can avoid either marketing to a group that won't spend as much, or specifically target age groups not spending as much as they would like, depending on what strategy the marketing team decides to take.

My third conclusion based on the data would be finding the potential true value of the game. While Heroes of Pymoli is a free to play game, the microtransaction store allows players to spend their perception of the value of the game. If a player feels the game is worth more than the free version, they can spend money on additional content (items). The amount they spend can be the perceived value of the game, and a deeper statistical analysis can be used to find the perceived true value of the game. This value amount can be used to determine if the developers wish to add additional paid content, and can judge the value of this new content based on what the average user values the game as an individual. With my baseline analysis, you can see no player has spent more than $20 on content, while many players seem to spend somewhere between $12-$8. It would be harmful for developers to try

and develop content that would be valued more than the $20. It would potentially be very helpful to try and gear additional paid content into the window where the majority of players value the game, and are likely to purchase the additional content.