**Heroes of Pymoli Analysis**

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*In this text file I will offer an analysis of the “purchase\_data.csv” data set and offer three trends that can offer key insights into the purchasing characteristics of the customers. The data and my quantitative analysis using python language in Jupyter Notebook can all be found within this repository:*

**Gender**

Out of the total 576 players that purchased an item within this data set, 484 or 84% of these players were male. Male purchases resulted in $1,967.64 out of the total revenue of $2,379.77 or 83% of total revenue. With such a large population of customers identifying with the male gender, a few different steps can be taken. Firstly, a company with this type of costumer base may want to market their products strongly to males as this will be their most successful demographic. In a different approach, this information could also serve to expand their customer base. With only 81 or 14% of players identifying as female, the company can attempt to design a product that they feel will more strongly identify with the female demographic. By doing this, they would both expand consumer base and increase product revenue.

**Age**

The largest age demographic by both purchase count (number of purchases made by individuals in the age group) and total purchase value is between ages 20-24. With 365 purchases and a total purchase value of $1,114, it has almost double the purchases than the next highest age group (15-19 with 136 purchases). Unlike my suggestion for gender, in which I state that it could be an opportunity to expand into other costumer groups, I believe that age would be a more difficult demographic to expand into. Older generations may be less inclined to try newer games and younger generations may already have their time being sold elsewhere. It is very clear that the most likely to purchase demographic is between the ages of 20 to 24. This can be used to target marketing efforts so that the marketing money is not wasted.

**Top Spenders**

The top five players in terms of amount of money spend on games spent a total of $61.34 and an average of $15.99. The top five players ranged from 3 to 5 unique purchases. This may indicate most players only purchase 1 to 2 items and are spending a relatively small amount of money. This means that the company relies on many consumers spending a relatively small amount, and typically the players do not purchase many items. To change this, designing a product that causes players to purchase more frequently could allow the company to then have a reliant base of costumers that are frequently purchasing their products. Having this strong base can then allow the company to continue to try to expand.