League of Legends Champion Analysis Notes

Central Questions to be answered

1. What are the strongest champions in the meta

   - Top
   - Mid
   - AD Carry
   - Support
   - Jungle

2. Based on:

   - K/D/A
   - Dmg Done/Healed
   - Bans

Sheet 1 - Most Popular Champions

In this plot we cans see that the most chosen champions are Lee Sin, Caitlyn and Lucian. It seems that people really enjoy playing Junglers and AD carries, I could investigate this further by looking at the number of kills made by these champions.

A filter was added in order to see what the most popular champions are in terms of position and role.

The top 5 champions by popularity are as follows:

- Support:
    i. Thresh
    ii. Lulu
    iii. Janna
    iv. Rakan
    v. Blitzcrank
- AD Carry:
    i. Caitlyn

      ii. Lucian

      iii. Vayne

      iv. Xayah

      v. Jinx

- Mid:
    i. Ahri
    ii. Orianna
    iii. Zed
    iv. Lux
    v. Syndra
- Top:
    i. Riven
    ii. Fiora
    iii. Darius
    iv. Renekton
    v. Yasuo
- Jungle:
    i. Lee Sin
    ii. Master Yi
    iii. Graves
    iv. KhaZix
    v. Warwick

Sheet 2 - Top Bans

It seems that the most banned champions this season are Yasuo, Fizz and Xayah. These champions are also likely characters that are very dangerous given that Yasuo and Xayah are still some of the most popular champions given their position and that they are banned very frequently, so when investigating which champions have the most kills and total damage done I should keep an eye out for these champions as well

Sheet 3 - Game Durations

Game durations seem to be randomly distributed around the 30 minute mark with few game durations longer than 60. With a peak at 20 minutes. This is because there is a minimum of time that needs to pass before players are allowed to resign the game. Although, it seems that games shorter than 20 minutes are also possible and likely occur when a champion becomes "fed", meaning that one character has received a disproportionate number of kills making them more powerful relative to other champions in the same match.

It seems that there are a lot of games which fall flat on their face as soon as a game starts. This could be due to "leavers" and the entire team just abandoning the game. This effect might be showing itself again at the 15-minute mark as the trajectory of the game becomes more clear.

Sheet 4 - Highest K/D Champions

This graph was calculated by taking the average kill death ratio for each champion so that using the champion more frequently does not mean that it will get an advantage from that.

The average of KDR is roughly 1.35 although it seems that the standard deviation is also relatively large at 1.6 so it shows that there is some deal of variation

From this graph we can see that most champions have a fairly consistent kill/death ratio when no filter is applied, which suggests that the more aggressive or dangerous a champion is the more likely they are to be targeted to be killed.

When filters are added, it is possible to see which champions do best in terms of K/D for each position. This also adds a layer of exploration and interaction, which is nice.

Sheet 5 - Highest A/D Champions

This graph was calculated similarly to Sheet 4 except the assist-death ratio was calculated instead of kill-death ratio. This should show which support classes are best at helping champions land kills.

We can see that the champions that help land kills for the ADC are champions that are traditionally ADC characters themselves. However, this advantage likely also comes with a disadvantage that these champions are not as powerful themselves if they do not get fed. Support characters need to be worthwhile in themselves without getting a lot of gold.

Problem - Not good data to analyse Champion strength

I think that it is difficult to determine champion strength based on statistics alone. This is because champions seem to be relatively well balanced but also because champions are fairly diverse meaning that there is a lot of context that statistics do not capture.

Instead, what I should try to use is to use these statistics to help discern general strategies to adopt for success.

Sheet 6 - Win Ratio vs Wards

It seems that wards provide a short term advantage in terms of cost. Eventually too much money is spent on wards and that impedes on champion development. Interestingly, this pattern also holds for supporting characters, even they don't want to spend all of their money on wards.

This means that a strong LoL player will buy a couple of wards but will use them effectively in terms of placement and timing to make the most use of them.

This also means that placing wards is a group effort more than it is simply the task/responsibility of the support champion to do so.