

Impact of “Raiden Mei” on IAP for HSR and Genshin.

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Project Objective

Raiden Mei is a character introduced during the days of Honkai Gakuen and Honkai Impact and has found her place among many player's hearts. It is safe to say the appearance of her character that spanned throughout different games made by Hoyoverse have had a significant impact on player spendings.

For this project, I am using two datasets obtained from Statista, both stating the In-App-Purchases (IAP) revenue for Genshin Impact and Honkai Star Rail.

In each of this dataset, we are given the date of the earnings split by the month and years, and the revenue (in millions) for each month.

The goal of this project is to determine if the implementation of Raiden Mei's equivalent in each game had a significant impact on the revenue earned by IAP during their respective releases. Successful analysis of this data can prove to be relevant for the business team to make their decisions on the game's direction by introducing more fan favourite characters.

Data Visualization

To begin analysing the trend and impact, I would first import the necessary libraries in my python code such as Pandas and Numpy.

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
```

Figure.1 Imported Libraries

The dataset downloaded are in an excel format which I had converted to CSV for convenience. To begin the analysis, data is read from a csv file.

As the dataset obtained are raw datasets, I would first like to categorize them by headers with a simple code.

```
#Read Data
data = pd.read_csv("/ldap_home/brandon.chewzy/Project/HSR.csv")

#Insert Headers for Data
df = data
Headers = ["Month", "Revenue"]
df.columns = Headers
```

Figure 2. Reading and Inserting Headers

Honkai Star Rail

As HSR is a recent game with it being 1 Year old, the data contains revenue from May 2023 to July 2024.

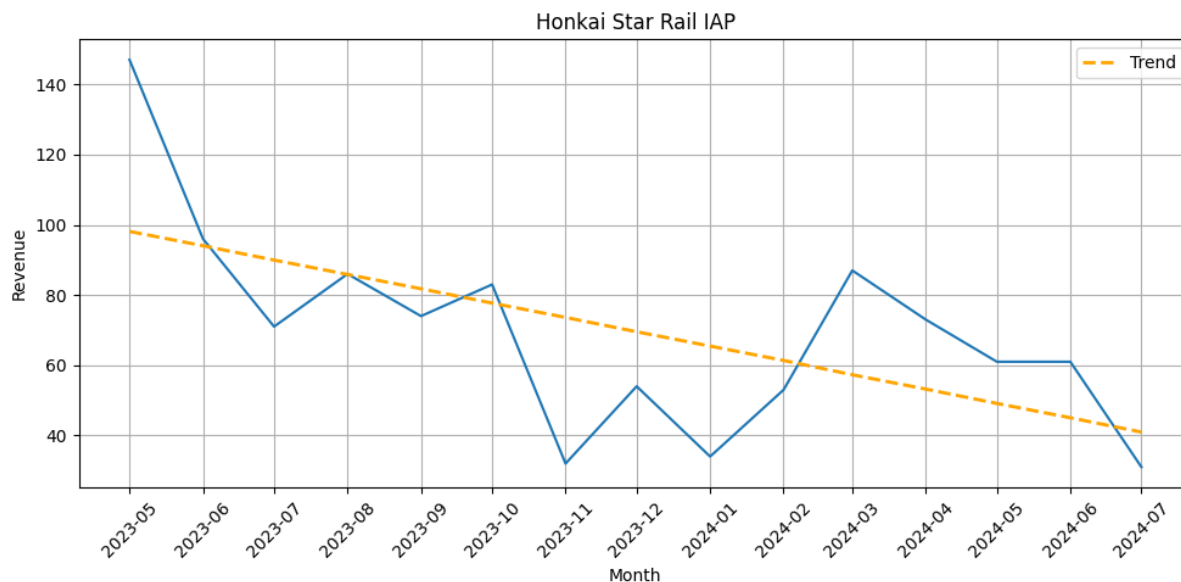


Figure 3. HSR IAP

In Figure 3, we can see that HSR had an explosive start in terms of revenue during their release but appears to have stabilised after the first month. While experiencing drops in revenue near the end of 2023.

The drop in November 2023 and January 2024 could possibly be attributed to the banners that were release during the period whereby a rerun of their first ever limited character, 'Seele' started in November, and the banner of 'Dr. Ratio' in January as he was given as a free 5-star character to every player, disincentivizing them on making IAPs.

To determine the impact of Raiden Mei's equivalent in HSR, Raiden Bosenmori Mei (Acheron), we would compare the IAPs during her banner to that of another popular character, Firefly.

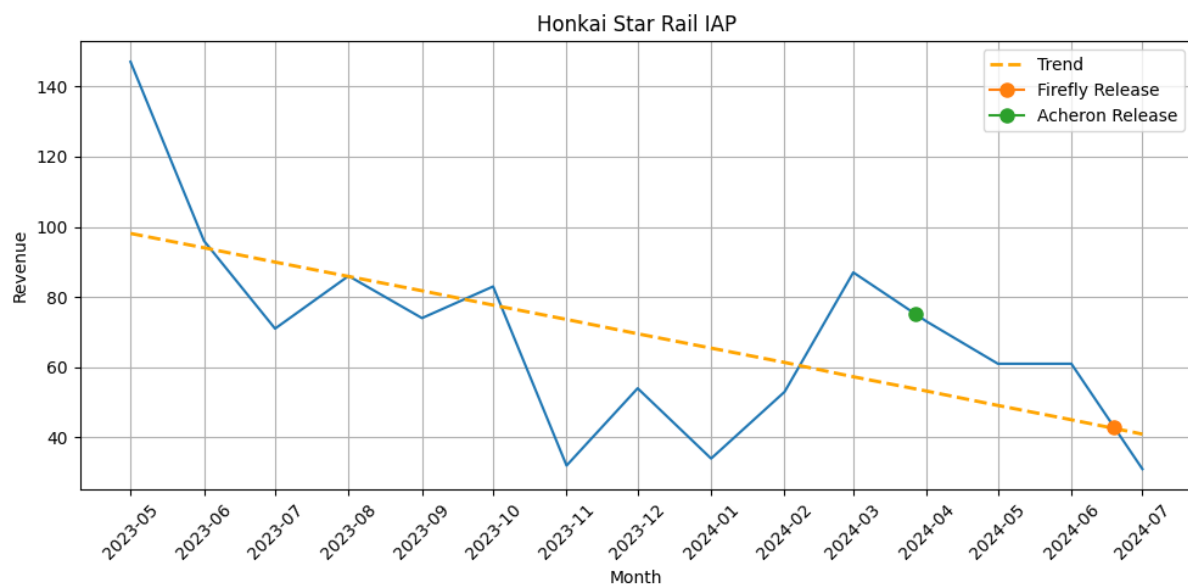


Figure 4. Revenue of Acheron and Firefly

Figure 4 shows us that Acheron has generated close to \$80 million in terms of IAP revenue compared to Firefly at a little over \$40 million.

Month	Revenue	Monthly Growth
2023-05-01	147	0.0
2023-06-01	96	-51.0
2023-07-01	71	-25.0
2023-08-01	86	15.0
2023-09-01	74	-12.0
2023-10-01	83	9.0
2023-11-01	32	-51.0
2023-12-01	54	22.0
2024-01-01	34	-20.0
2024-02-01	53	19.0
2024-03-01	87	34.0
2024-04-01	73	-14.0
2024-05-01	61	-12.0
2024-06-01	61	0.0
2024-07-01	31	-30.0

Table 1. Monthly Growth for HSR

While Acheron's banner may not have caused a growth in IAP based on the trend, it did show a lesser drop in revenue compared to other periodic drops with it having the lowest decrease since the start of the game's service at a drop of \$14 million.

Genshin Impact

With Genshin Impact (GI) being released in October 2020, there is more data to draw from. However, for this analysis, we would be using a period of 2 Years during the year which Raiden Mei's equivalent, Raiden Shogun, is released, from 2020 October to 2022 December.

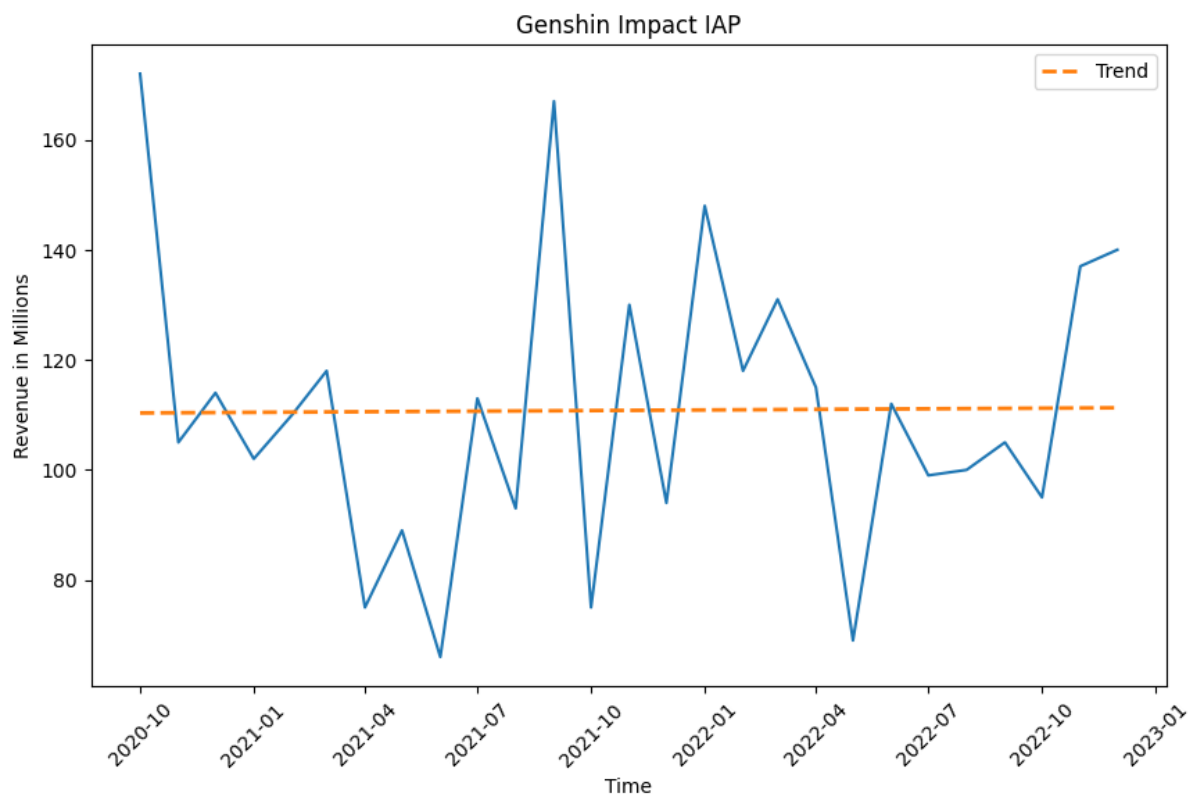


Figure 5. GI IAP

Like HSR, Genshin also had an explosive start in terms of revenue which then dropped significantly after the first month. However, for GI, the trend line indicates an average revenue level over the observed period, suggesting consistent performance over time.

With periodic drops in their revenue due to rerun banners of Childe and Zhongli, where most players would have either owned or prefer not to pull during the rerun.

For comparison to Raiden Shogun in GI, we would compare her to Shenhe, which released 4 months after Raiden.

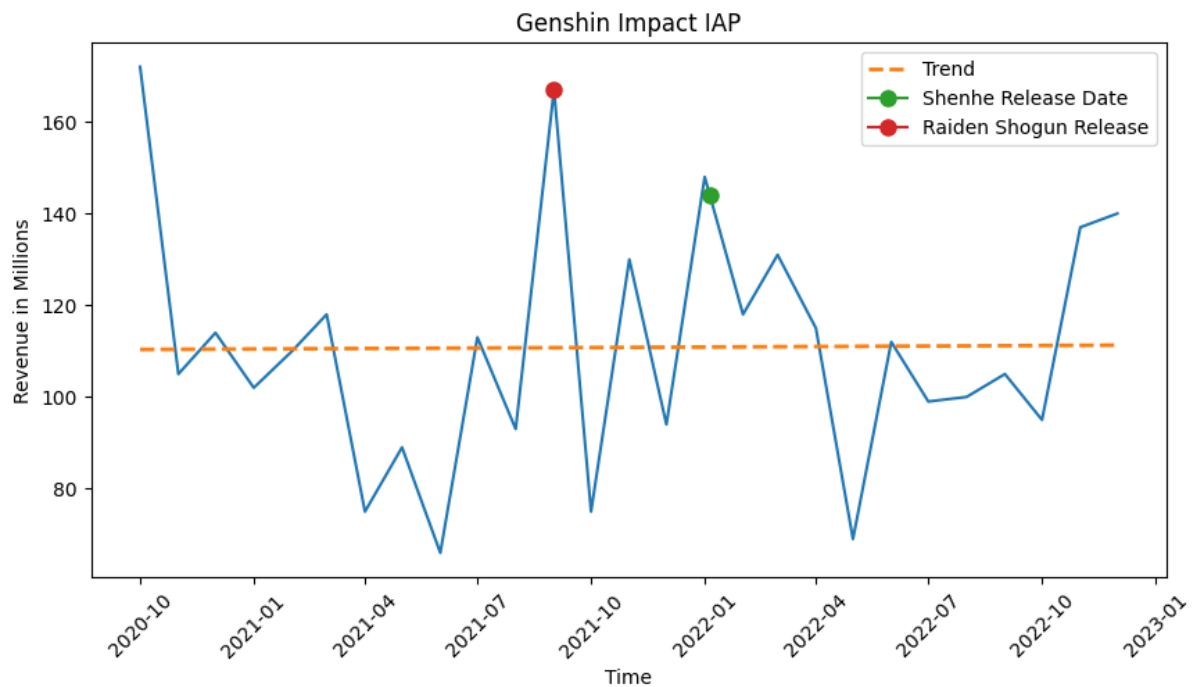


Figure 6. Revenue of Raiden and Shenhe

Within the first day of release for the Raiden Shogun banner, there was an astronomical increase in terms of revenue, almost matching the revenue earned during the initial launch, with Raiden generating almost \$170 million. Shenhe being one of the fan favourites, has also shown a high revenue at \$140 million.

Both can be seen to have spiked the IAP revenue during their release in Figure 6, proving the impact of fan favourite characters' revenue contribution.

Month	Revenue	Monthly Growth
2020-10-01	172	0.0
2020-11-01	105	-67.0
2020-12-01	114	9.0
2021-01-01	102	-12.0
2021-02-01	110	8.0
2021-03-01	118	8.0
2021-04-01	75	-43.0
2021-05-01	89	14.0
2021-06-01	66	-23.0
2021-07-01	113	47.0
2021-08-01	93	-20.0
2021-09-01	167	74.0
2021-10-01	75	-92.0
2021-11-01	130	55.0
2021-12-01	94	-36.0
2022-01-01	148	54.0
2022-02-01	118	-30.0
2022-03-01	131	13.0
2022-04-01	115	-16.0
2022-05-01	69	-46.0
2022-06-01	112	43.0
2022-07-01	99	-13.0
2022-08-01	100	1.0
2022-09-01	105	5.0
2022-10-01	95	-10.0
2022-11-01	137	42.0
2022-12-01	140	3.0

Table 2. Monthly Growth for GI

With Raiden Shogun's release, they had a growth of \$74 million in revenue, recording the biggest growth in the game's history till date whereby Shenhe showed an outstanding growth of \$54 million as well.

Conclusion

For HSR, aside from the revenue from the initial launch, the highest generated revenue was recorded in March 2024, where Sparkle's banner had first released, with Acheron coming a close second.

For GI, it was established that Raiden Shogun had recorded the highest revenue generated, comparable to their initial launch.

Based on this analysis, we can conclude that Raiden Mei has a significant impact on the IAP revenue of Hoyoverse games and that fan favourite characters drive the revenue for their respective games up.

This analysis would be further proven once the next Raiden is released in another or existing Hoyoverse game such as Zenless Zone Zero.