

Due: Sunday, 28 July 2024, 9:55 PM

Post one visualisation that shows ordered (ordinal or quantitative) data and also qualitative data. Very briefly (1) describe the type of datasets and attributes and (2) identify the marks and channels used. Follow the What? Why? How? framework by Munzner described in the textbook that is introduced in the video lectures of this week. Do not forget to add a link to the source of the visualisations.

Search for a chart that is interesting and non-trivial. That is, do not just post a simple static pie chart with a few values, but instead post a visualisation that is interactive, combines two or more diagram types (e.g. bar charts and line charts), uses complex data sets, overlays a map with interesting diagrams, etc.

Do not post a visualisation that another student has already posted on the forum. Do not use a visualisation included or mentioned in the lecture, textbook, required or optional readings, or any other source discussed or shown during any unit activity. You must find an existing visualisation and not create a new visualisation.

You may use artificial **AI technology**, such as ChatGPT or Google Bard. We asked current generative AI tools to solve this task, and have sometimes received hilariously wrong responses. Sometimes the AI tool only produced vague responses that did not really answer the questions, and very often the responses included (sometimes wrong) recommendations that we did not ask for. Therefore, if you use AI tools to answer this task, it is crucial to critically assess and if necessary correct the answer.

**Marking**: The four forum postings combined contribute 4% to the unit mark. The mark has two components: (1) Ability to identify data visualisation principles taught in the unit (maximum 50%); (2) quality of the critical analysis conducted (maximum 50%).



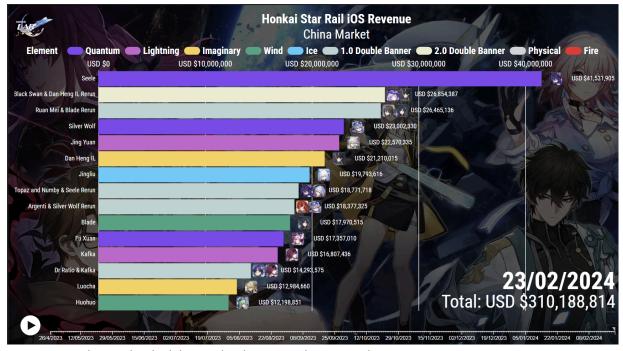


Image Source: https://honkailab.com/honkai-star-rail-revenue-chart/

## What? Why? How? framework by Munzner

# **What**

The graph visualisation shows the revenue in USD for different characters' elements and banners in the game Honkai Star Rail.

Type of dataset: Tables. 2D.

### Ordered & Qualitative data:

- **Quantitative**: The bars represent revenue in USD, which is a measurable and comparable quantity. The data is ordered by year, showing a progression over time from 2014 to 2021.
- Ordinal: The YoY growth percentages are also ordered, showing the trend of growth rates over the same period.
- Categories: The different years (2014 to 2021) are qualitative as they categorise the data points.
- Attributes: Revenue in USD for different characters' elements path and banners in the game Honkai Star Rail.

### <u>Why</u>

The purpose of the graph visualisation is to analyse and compare the revenue generated by different elements and banners in the game. This helps in understanding which elements are more favoured or profitable.

Marks: Horizontal bars representing revenue for each element and banner.

### Channels:

- **Position**: The y-axis lists the elements and banners (qualitative data), and the x-axis represents revenue in USD (quantitative data).
- Colour Hue: Different colours for each bar to distinguish between elements and banners.
- Length: The length of each horizontal bar indicates the amount of revenue generated for each banner.
- Labels/Annotation: The labels/annotations added at the end of each bar are additional notes or comments added to the visualisation to highlight important information or provide further explanation like in the image is the total revenue for the banners





Because I can't find the edit or delete button... the updated forum post is as below:

P.S. The same visualisation image will be used.

Image Source: https://honkailab.com/honkai-star-rail-revenue-chart/

# What? Why? How? framework by Munzner

### **What**

The graph visualisation shows the revenue in USD for different characters' elements and banners in the game Honkai Star Rail.

**Type of dataset:** Tables. 2D. Each banner has its own value of total revenue obtained from the said banner. Ordered & Qualitative data:

- **Quantitative**: The bars represent revenue in USD, which is a measurable and comparable quantity. The different years (2023 to 2024) are qualitative as they categorise the data points.
- Ordinal: The data is ordered by year, showing a progression over time from 2023 to 2024.
- Categorical: Different characters in each banner possess different elements.

**Attributes**: Revenue in USD for different characters' elements path and banners in the game Honkai Star Rail.

### <u>Why</u>

The purpose of the graph visualisation is to analyse and compare the revenue generated by different elements and banners in the game. This helps in understanding which elements are more favoured or profitable by the players. The higher the revenue within the banner period implies that the character(s) are more likely favoured by the players. The reason on why the characters are more favoured arise from many factors such as the character(s)' kit, playstyle, visual/design or just pure player personal favourites.

### **How**

Marks: Horizontal bars representing revenue for each element and banner.

### Channels:

- **Position**: The y-axis lists the elements and banners (qualitative data), and the x-axis represents revenue in USD (quantitative data).
- Colour Hue: Different colours for each bar to distinguish between elements and banners.
- Length: The length of each horizontal bar indicates the amount of revenue generated for each banner.
- Labels/Annotation: The labels/annotations added at the end of each bar are additional notes or comments added to the visualisation to highlight important information or provide further explanation like in the image is the total revenue for the banners