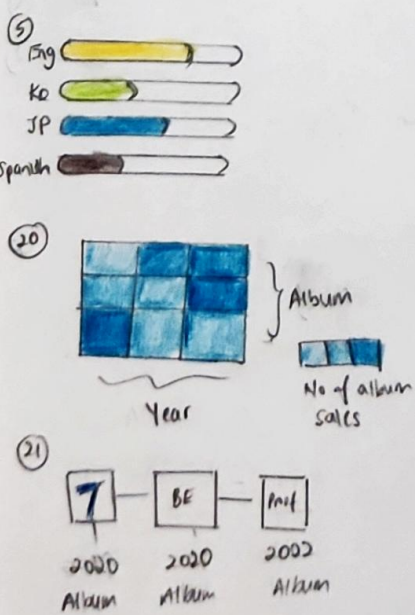
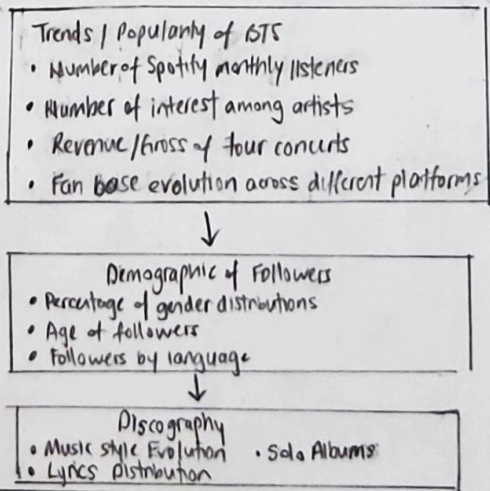


2. Filter



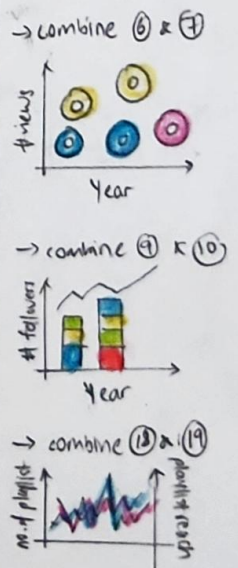
3. Categorise



5. Questions

- Does this vis tell a clear story?
- Could Alluvial / Sankey diagram be implemented using Vega-Lite?
- Any similar attributes can group as one chart?
- Does it convey essential information about bts as global wave to viewers?
- Does dual-axis chart make viewers hard to interpret, making them loss interest?
- Could Vega-Lite able to build custom charts like word cloud, timeline chart etc?

4. Combine & Refine



LAYOUT

Beyond The Sound

Background image

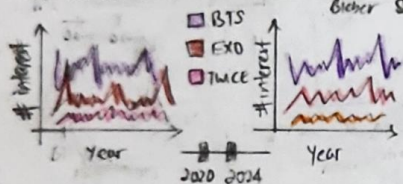
Popularity of BTS Across Global Based on Spotify ML

Spotify ML Per 10,000 population



text

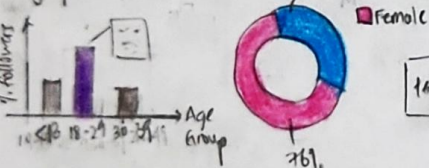
The Trendsetters



Fan Base Evolution Across Years



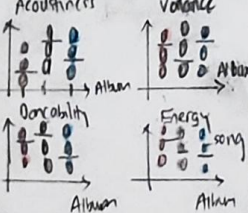
Demographic of Followers



The Influencers (LY concert in 2019)



Music Style Evolution



Philanthropy Efforts



Title: Dashboard View

Author: KOE RVI EN

Date: 15-09-2024

Sheet: 2

Task: Design infographic poster

OPERATIONS

Tooltips

- Hover over choropleth map
- Hover over multi lines chart
- Hover over dot strip plot
- Hover over bar chart
- Hover over histogram
- Hover over bubble plot
- Hover over line chart / stacked bar chart

- Highlight over region when mouse hovers over for all visualisation.
- Slide the slider to filter year of the interest search that viewers are interested to analyse.
- Filter dropdown box to filter the region by dropping selection for viewers to select.

DISCUSSION

Advantages

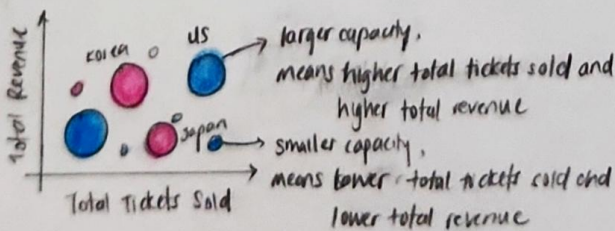
- Viewers can easily understand the information indicated in the dashboard and visualisation.
- Good flow of visualisation
- Easy to follow along and gives a clear information about BTS (popularity, discography, revenue etc.)
- Good user interaction
- Attract user to engage with data
- Viewers able to view the trend/popularity of BTS across the global and also the demographic of their followers

Disadvantages

- Normalisation on choropleth map may be difficult to perform as some regions on the map may disappear after normalising.
- May visual cluttering, less white space.
- May confuse viewers when viewing the combination of chart.
- Might be information overload

FOCUS

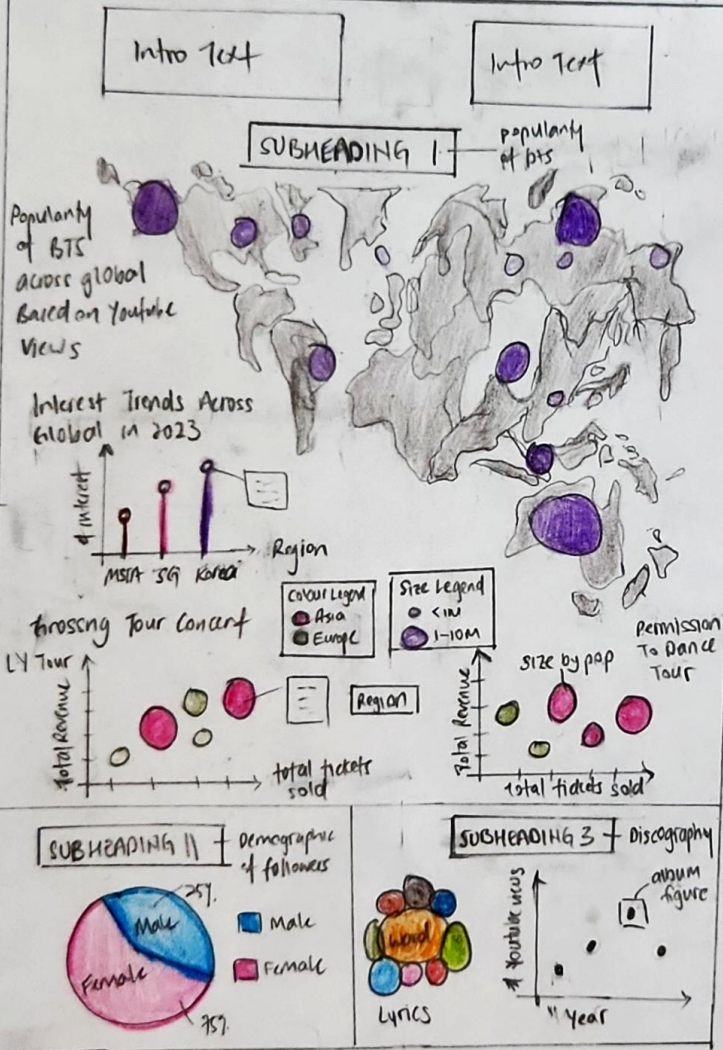
- Focus on highlighting the relationship between total revenue and total tickets sold by audience / stadium capacity



Audience Region
 ○ < 10K ○ Asia
 ○ 10-50K ○ North America

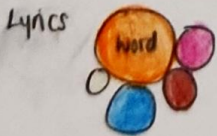
LAYOUT

BTS: Beyond The Science



FOCUS

① Word cloud



- show the number of word to be appeared in the lyrics
- Highlight the features of lyrics that a song that BTS want to express.

② Proportional Symbol Map

- show popularity of BTS across global based on Youtube Views at different regions
- the size of symbol / circle marks will indicate the popularity of BTS in certain countries / continents.
- viewers are able to view and compare trends in popularity at different countries

Title: Dashboard View

Author: KOE Rui EH

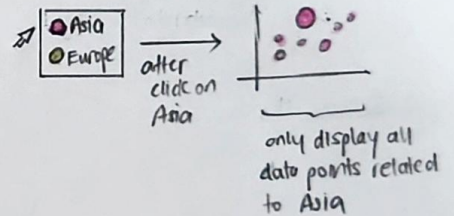
Date: 15-09-2024

Sheet: 3

Task: design infographic poster with annotations

OPERATIONS

- Highlight over region when mouse hover over for all visualisation.
- **Region** drop-down box to filter the region by dropping selection for viewers to select.
- Hover mouse over data points to show tooltips for all visualisations.
- Highlight data points that viewers interested when they select on the legend.



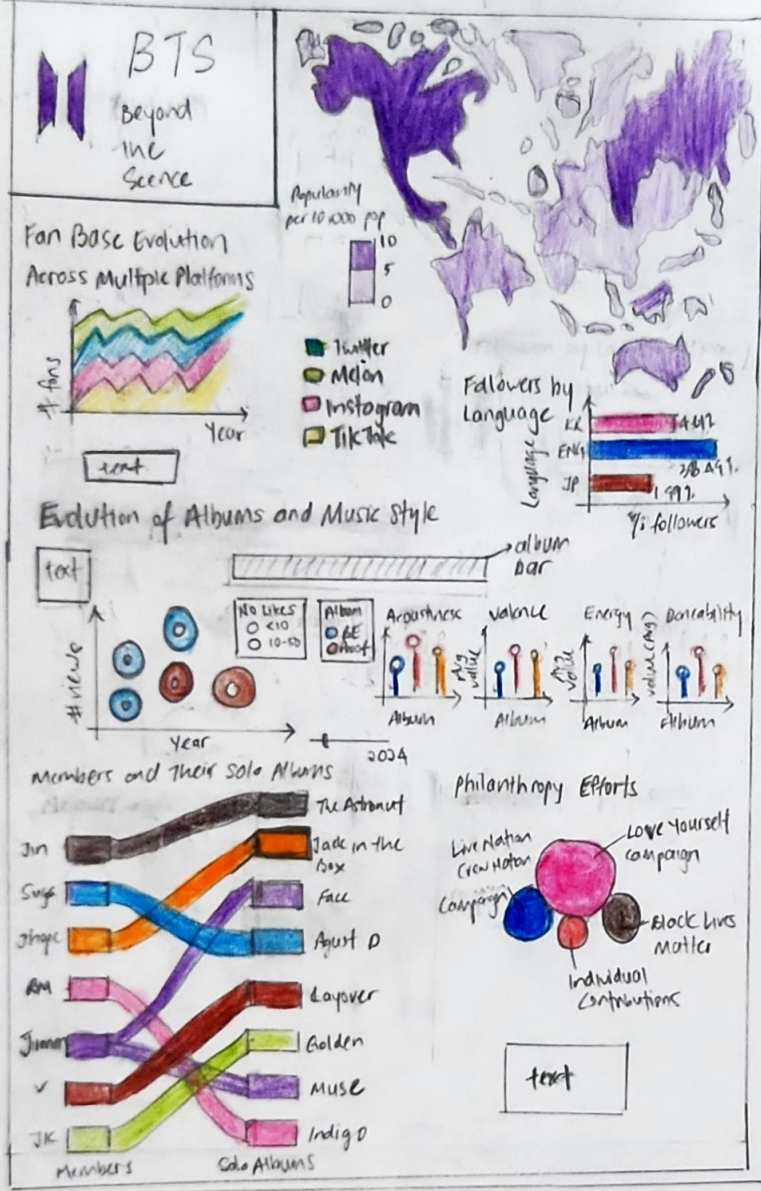
DISCUSSION

Advantages

- Well segmented into clear sections
- Involves various implementation includes complex one and can highlight these
- Involves wide range of visualisations.
 - ↳ attract viewers attention
- Clear layout, avoid visual cluttering.

Disadvantages

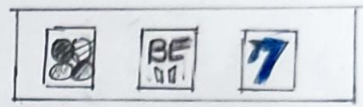
- Word cloud may difficult to be implemented using Vega-Lite. May require external software
- Viewers may found difficult to interpret the proportional symbol map as some marks may too close to each other due to some values are similar between countries or two / more countries are close to each other
- Viewers may difficult to interpret when the bubble areas vary only slightly, causing viewers to be confused
- Lack of annotation or text descriptions.



Title: Dashboard View
Author: KOE RUI EH
Date: 15-09-2024
Sheet: 4
Task: Design a scrollable infographic poster

OPERATIONS

- Bar at the top to filter / highlight album



↳ can filter by clicking the album icon

- Hovering mouse over visualisation to highlight data area that the viewers interested



- Slide the slider to filter year of number of Youtube viewers of all albums that viewers interested.

DISCUSSIONS

Advantages

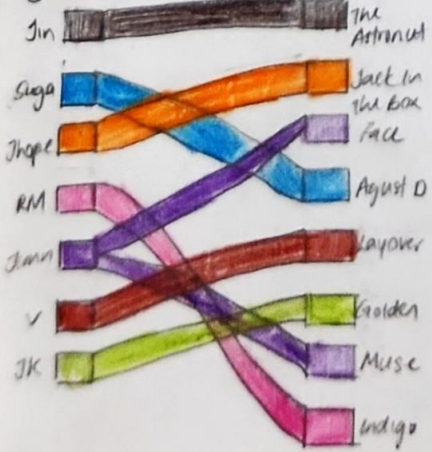
- Good user interaction.
↳ attract user's attention
- use of colour palette to differentiate between categorical attributes
- User interaction is easy to implement and also easy for user to operate
- users can understand the versatility of BTS and their popularity across global

Disadvantages

- Too many vis → visual cluttering
↳ confuse viewers
- Proportional Symbol / Packed bubble chart may difficult to implement using Vega-Lite.
This situation also applies to Alluvial Diagram.
- Layout is messy → Legend and Title.
- Viewers may found difficult to interpret when the diagram contains inner and outer bubbles.

FOCUS

① Alluvial / Sankey Diagram



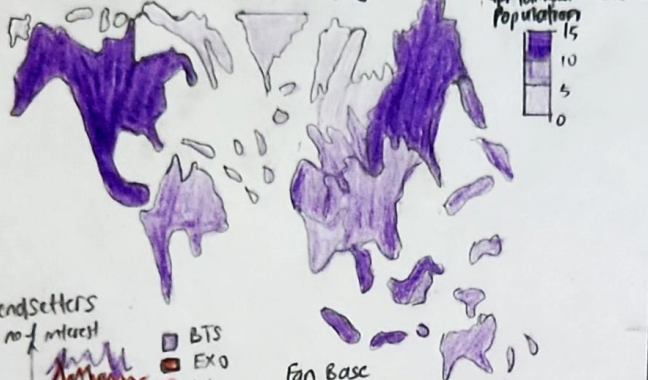
- Illustrates which members have released solo work and the volume of their releases.
- The thickness of flow lines represent the number of album sales / number of solo work released.
- Highlight how BTS members active in releasing solo work.

BTS: Beyond the Science

Introduction about BTS & their music journey

Image

Popularity of BTS Across Global Based on Instagram Followers



The Trendsetters

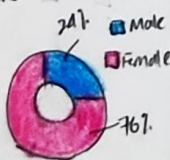
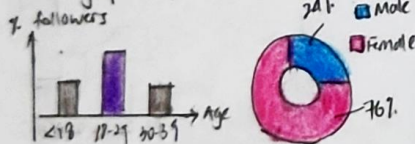


Fan Base

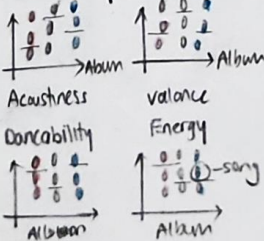
Evolution Across Years



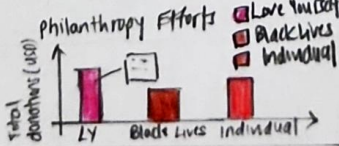
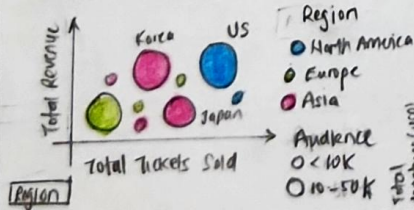
Demographic of Followers



Music Style Evolution



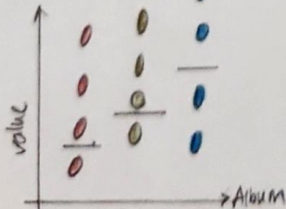
The Influencers (LY concert in 2019)



FOCUS

① Dot strip plot

eg: Acousticness



- Illustrates how music styles evol for songs released in each album.

- Compare the music characteristics vary from album to album.

Title: Dashboard View

Author: KOE RU EN

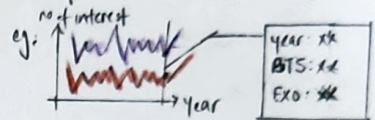
Date: 15-09-2024

Sheet: 5

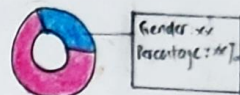
Task: Design the final layout

OPERATIONS

- Hover mouse over data points to show tooltips for all visualisations



OR



- Highlight over region when mouse hovers over for all visualisations
- Slide the slider to filter year of interest search that viewers are interested to analyse
- **Region** drop-down box to filter the region by dropping selection.
- Highlight data points that viewers interested when they select on the legend.

DETAIL

- Dependencies:

- Vega-Lite to build map and diagrams.
- HTML, CSS and pure CSS grid to visualise the idoms built using Vega-Lite
- Excel for data formatting, scrapping, wrangling.

- Estimated time and effort:

- at least 4 days to build all idoms including cleaning and formatting and 3 days for final design/layout
- need extra 1 day to do research before building idoms using Vega-Lite

- Specific requirements:

- Device at least 1200x900 screen size to view dashboard
- Need Geojson/Topojson files to build base maps