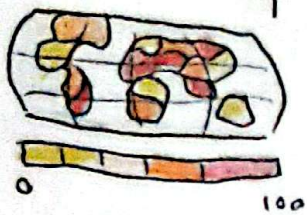
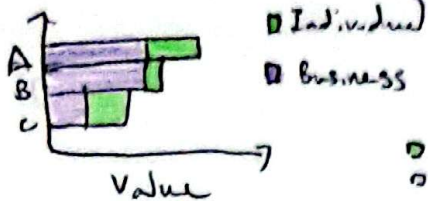


IDEAS

Choropleth Map



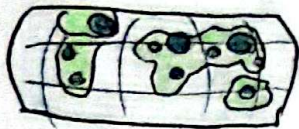
Stacked Bar Graph



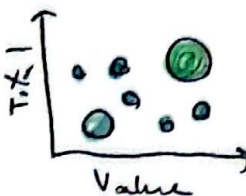
Pie Chart



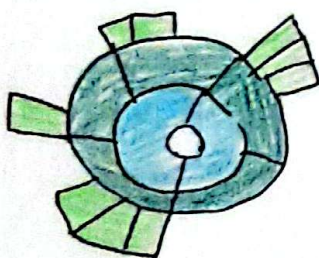
Proportional Symbol Map



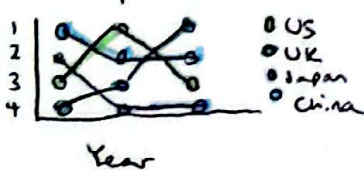
Bubble Chart



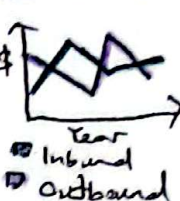
Sunburst Chart



Bump Chart



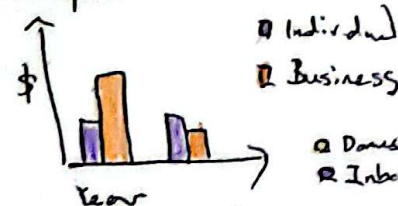
Line Chart



Word Cloud



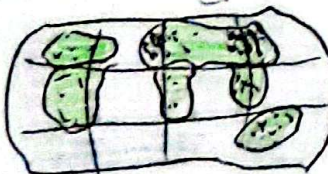
Grouped Bar Chart



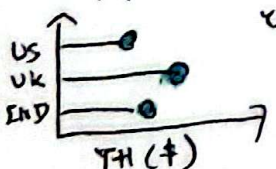
Donut Chart



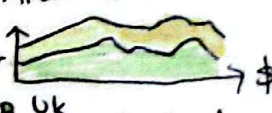
Dot Density Map



Lollipop Chart



Area Chart



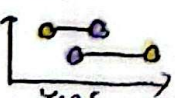
Packed Bubble Chart



Tree Map

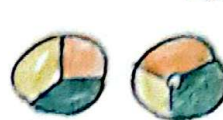


Barbell Chart



FILTER

Duplicates: Pie Chart, Donut Chart



Same categorical vs percentage

only difference is there is extra space in the middle

Sunburst and Tree Map: Very similar, use for hierarchy so can choose either one.



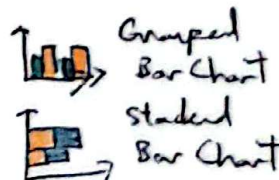
Not Feasible:

Dot Symbol Map, not too easy to find relevant data for tourism, also hard to see.



CATEGORIZE

Comparison focus



Map



Trend - Focus



Proportional Symbol Map

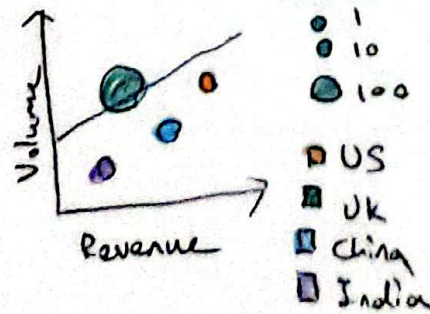
Line chart Area chart

COMBINE & REFINE

- Can combine grouped bar chart into stacked bar chart & line chart. Provides multiple comparisons among categories. Shows trend over time for tourism details.



- Combine bubble chart with a line chart or area chart, to show trends when comparing multiple quantitative data against each other.

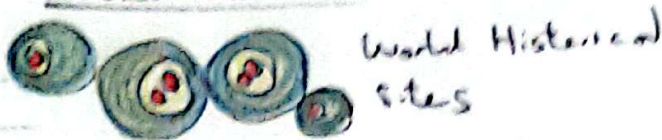


QUESTION

- 1) Can users tell which country's GDP is good?
- 2) Can users see which country had highest no. of tourists?
- 3) Can users tell the relationship between GDP from tourism of the overall income of a country from tourism?

LAYOUT

Global Travelers



World Historical Sites

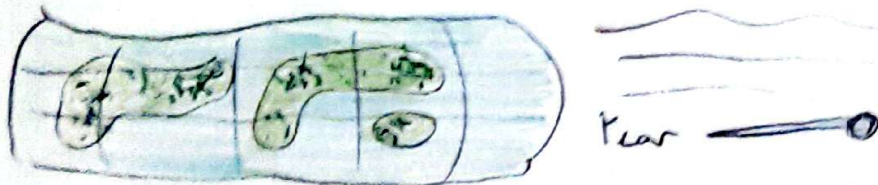
Work For Your Country! Tourism Employment (Top 10)



Inbound, Outbound & Domestic



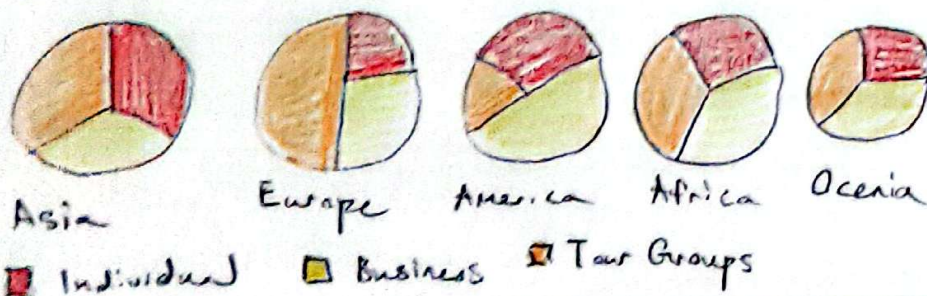
Google Map Attractions



The Impacts of Covid-19 (GDP of each country)



Expenditure for Tourism in each region

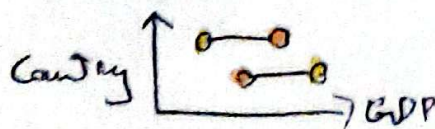


FOCUS

- Hovering over segments in the bubbles show what the category / country / region / site is



- Barbell Chart is good for letting users see how a thing has changed over time, whether it has improved or not



THEME: DV2 - SDS

Author: Thang Wan Mun

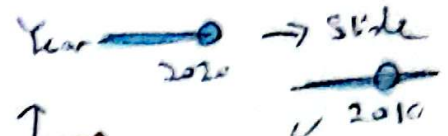
Date: 20/10/25

Sheet: 2

Task: Represent World Tourism Trends

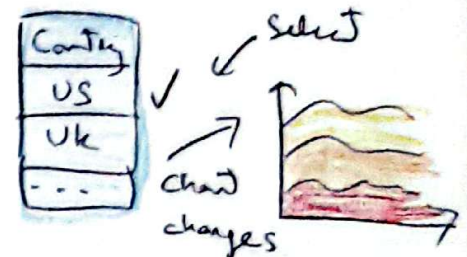
OPERATIONS

- 1) Chart 2 and 4 have Year sliders, allows users to see change over the years.



- Chart changes based to compare trends over the years

- 2) Chart 3 allows users to select the country they want to see



- Allows users to focus on one country at a time

DISCUSSION

- + Small multiples summarize expenditure of each region well at a glance
- + Barbell chart allows focused comparison between years
- options that filter by year can be very long selections, not too good.

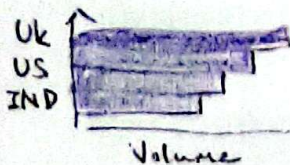
LAYOUT

Global Travelers

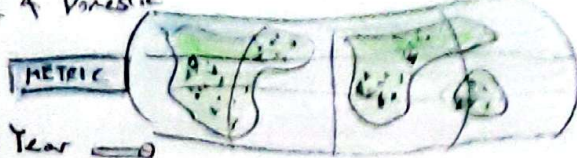
World Historical Sites



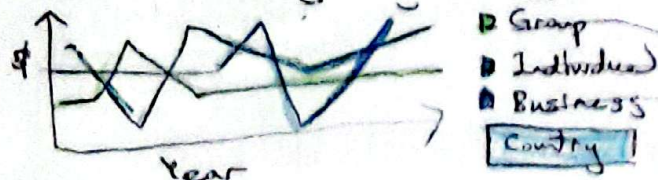
Tourism Employment by Country (Top 10)



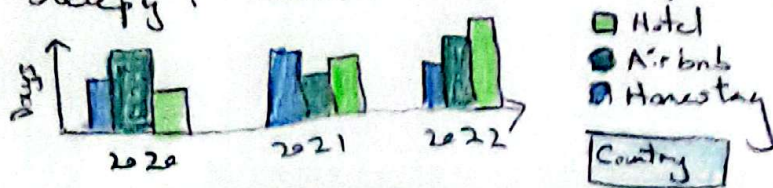
Inbound, Outbound & Domestic



Expenditure by Tourist Type



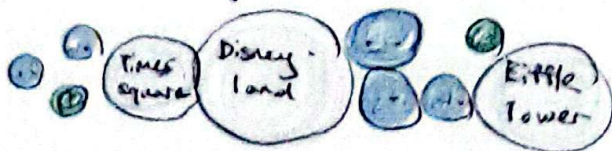
Sticky? Accommodation vs Average Length of Stay



Google Map Attractions

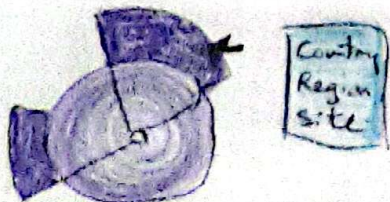
PARIS MILAN KUOLA LUMPUR DELHI TOKYO
NEW YORK SEOUL SHANGHAI BALI LONDON
MELBOURNE

Ratings of Attractions



FOCUS

- Tool tip show when users hover over charts. Ex, Sunburst



Good for seeing what the category is

- For word cloud & packed bubble chart, users can immediately see top performers by their size



PARIS
TOKYO
BALI

THE: DV2 - SDS

Author: Thery Wan Hoo

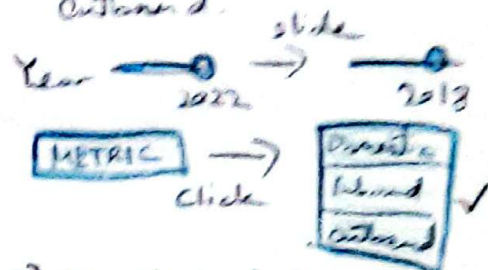
Date: 20/10/25

Sheet: 3

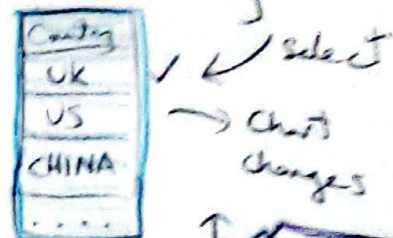
Topic: Represent World Tourism Trends

OPERATIONS

- 1) Chart 3 (Dot density Map) has a Year Slider, and a Metric to allow selecting by Inbound, Domestic or Outbound.



- 2) Chart 4 & 5 allow selection by Country



Good for focusing on a country itself.

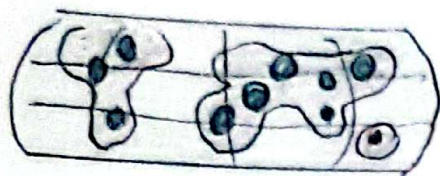


DISCUSSION

- + Sunburst chart is great for showing hierarchy
- + Packed bubble & word cloud are simple to understand
- + Grouped bar chart is good for comparing between categories
- Dot Density Map is not too good for showing amount of tourists

LAYOUT

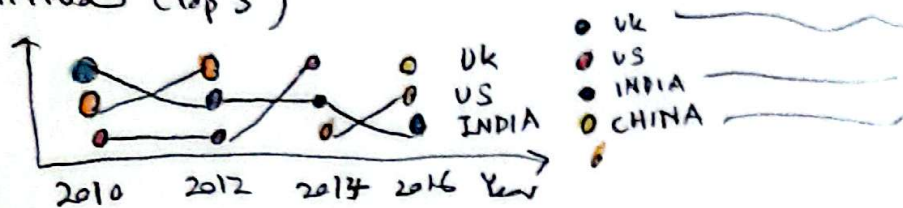
Global Travelers



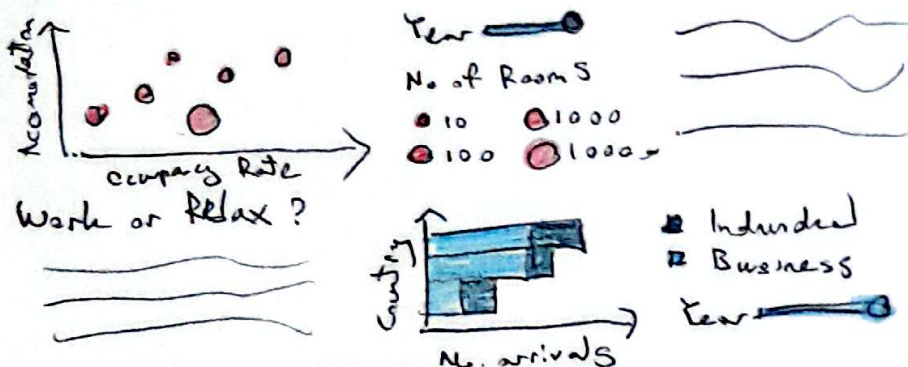
Domestic Tourism in 2022



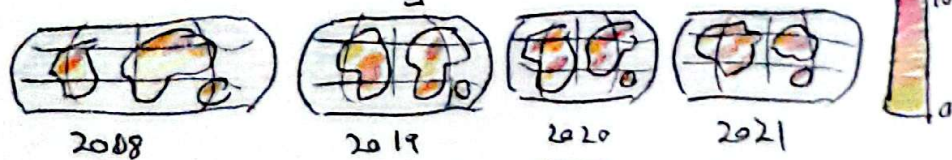
Arrival (Top 5)



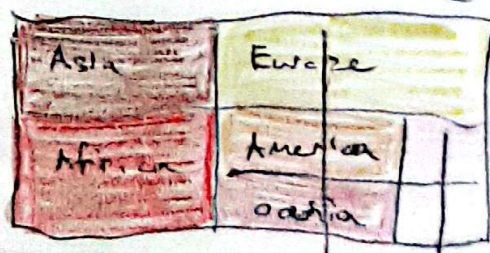
Sleepy? Accommodation No. Vs Occupancy Rate



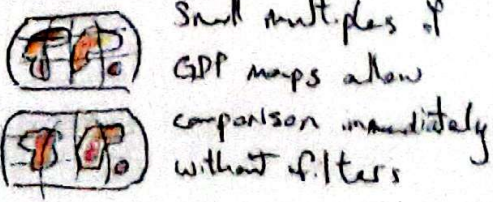
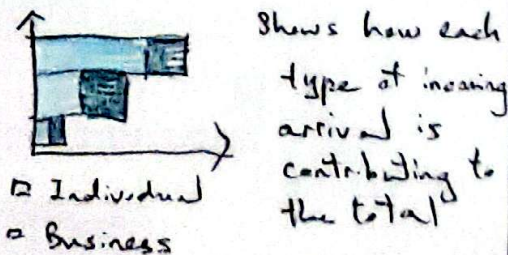
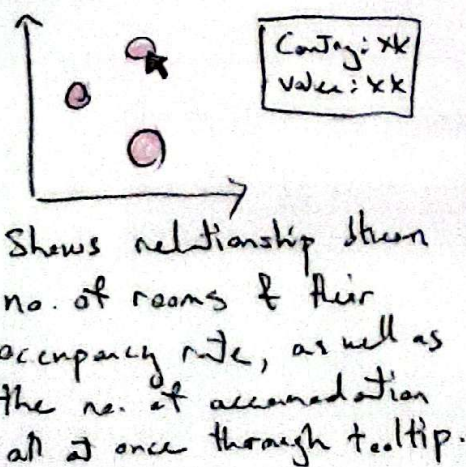
Work for Your Country!



World Historical Sites



FOCUS



THE D2 - SDS

Author: Thang Van Min

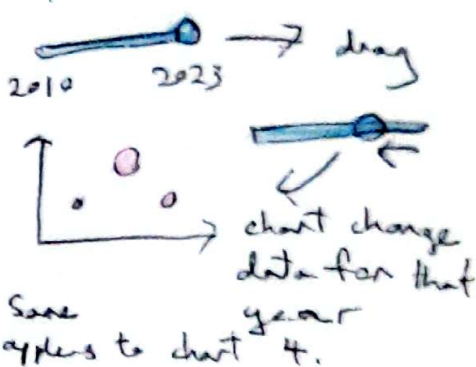
Date: 20/10/25

Sheet: 4

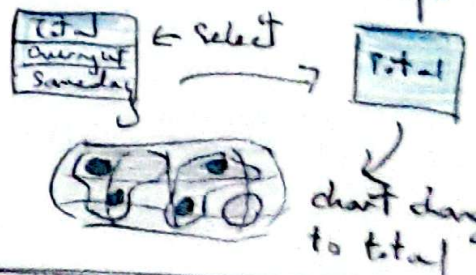
Task: Represent World Tourism Trends

OPERATIONS

1) Chart 3 & 4 have Year slider, so users can see the change in values over time



2) In chart one, filter dropdown selection box lets users choose if they want to see total/overnight / Same-day data for domestic trips

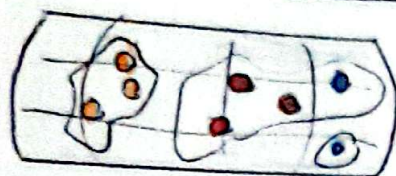


DISCUSSION

- + Small multiples remove use of filter to see changes
- + Treemap shows hierarchy well
- + Bump chart good for showing ranking of countries
- Small multiples cannot show all data, only some

LAYOUT

Global Travelers

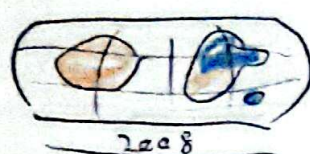


Domestic Tourism in 2023

Asia Europe
Africa America

METRIC

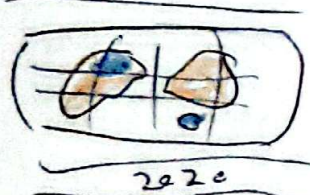
Show Me The Money!



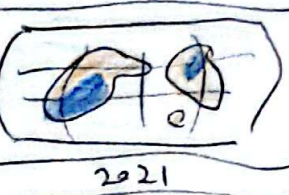
GDP



GDP

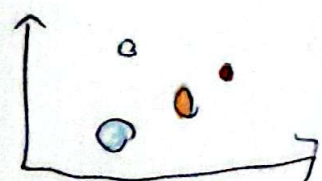


GDP

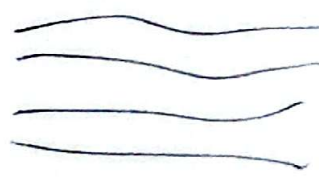


GDP

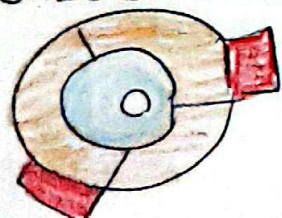
When Tourists Sneeze & How Long?



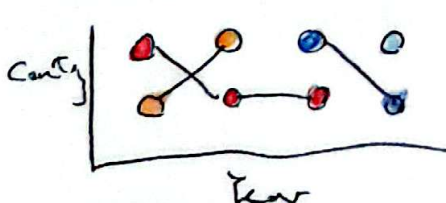
0 10
100
1000
YEAR



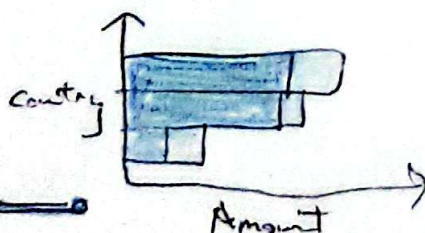
UNESCO Sites



Inbound Arrivals



US
UK
CHINA
INDIA



Year

Amount

Title: DV2 - SDS

Author: Thong Wan Mun

Date: 20/10/25

Sheet: 5

Task: Represent World Tourism Trends

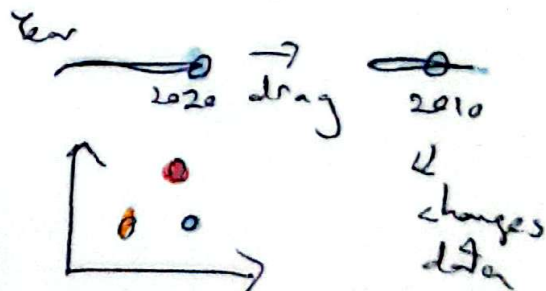
OPERATION

1) Chart 1 allows users to select what type of data they want to view, allowing for comparison.



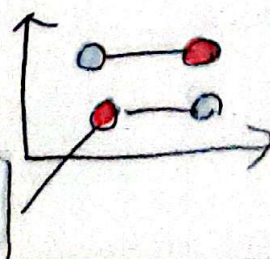
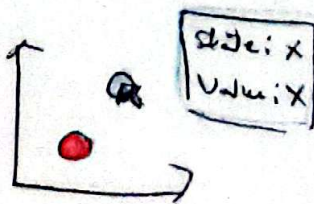
chart changes

2) For charts 6 & 9, the user can choose the year through a year slider, allowing them to see the changes over time



FOCUS

- when users hover over the marks, tooltip shows the exact values
- Annotations on charts show interesting trends or insights



DETAILS

Estimate - Time to build: 48 hours

- cost: none

Dependencies: Data from UN Tourism, kaggle, WHC website (CSV, Files)
Total Estimate 8 datasets used
Colour will avoid red-green combos.