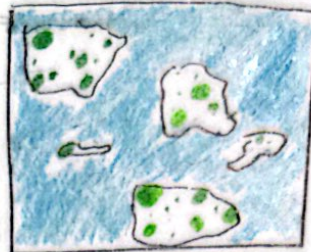


# IDEAS

## ① Map (Geographical Data)

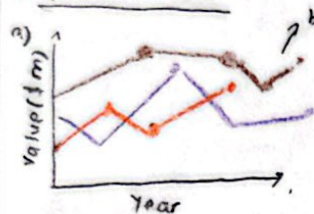


choropleth map

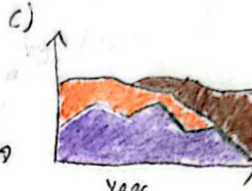
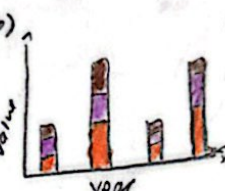


proportional symbol map

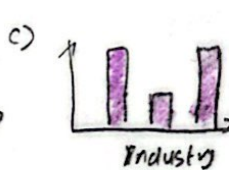
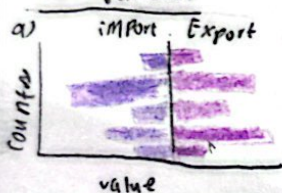
## ② Annual Trends



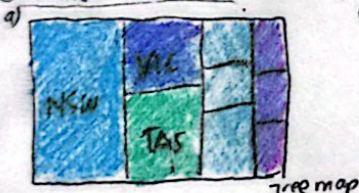
by industry (country)



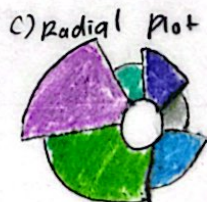
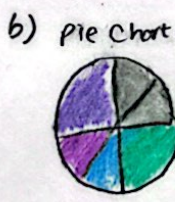
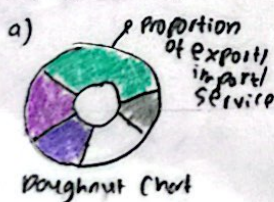
## ③ Comparison



## ④ State Breakdown



## ⑤ Proportional Data



## Combine & Refine

### 1) Map + Bar chart

↳ Put the Bar chart as a tooltip with the industry breakdown for the specific year

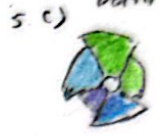
### 2) Treemap + Radial plot

↳ Put the Radial plot as a tooltip total of industries making up for the state  
or  
the treemap act as a filter for the radial plot

## Filter



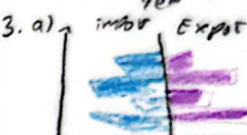
## Proportional Data



## 2) Line Graph - more effective



In showing for a industry



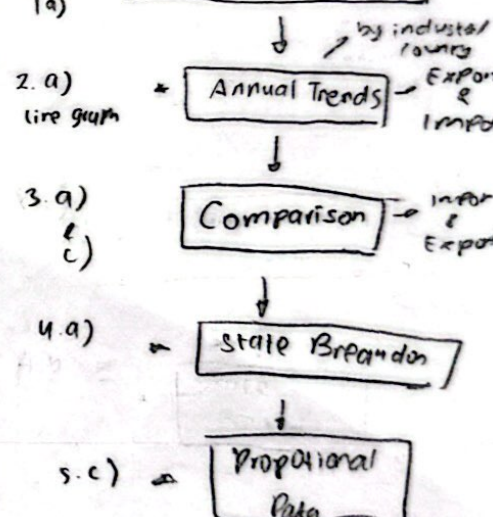
for comparison  
Export & Import



for state comparison

## Categorise

Using map = Country Comparison



## Questions

- 1) Does these graph can show all the data effectively
- 2) Is the idions too simple?
- 3) What different filter/ interactive features?
- 4) Do we have the normalised data to show for the choropleth map?
- 5) Will the users able to understand the data using this



## LAYOUT

Author: Merisa Indang  
 Title: Australia International Trade  
 Date: 23/9/2024  
 Sheet: 2

## Operations

### ① Time Slider

↓  
 show the data in the map based on different year

### ② Filter dropdown

For more and other charts based on the type of the trade

### ③ Tooltips

↓  
 ① a more detail information of the specific data  
 ↓  
 users can hover and see the tooltip information

② From the tooltips can further drill down to each country for the line graph

## Discussion

### \* Advantage

- clear hierarchical structure
- multiple idioms
- Have adequate space for Text Explanation

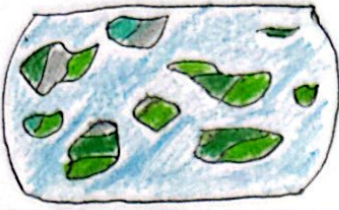
### \* Disadvantage

- Overcrowding
- The map might not seem to be the centre/focus
- small text and Chart Areas
- limited interactivity

## Australia International Trade

Select Data: ☐

Year

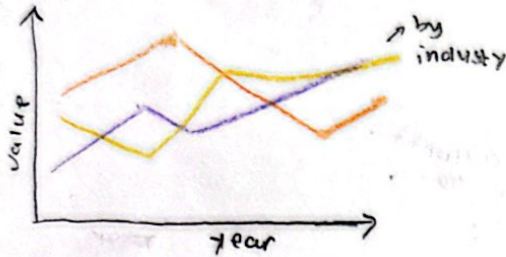


Legend

Geographical Trade-to-GDP Ratio

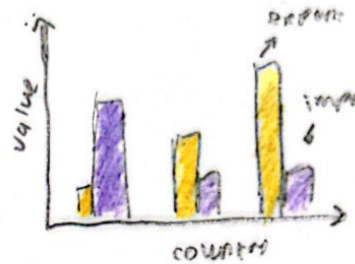
Text

### Historical Trends in Trade



Text

### Top 10 Trading Partners



Text

### State Drilldown of Trades

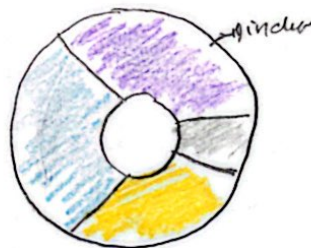


Text

Data

Export ☐  
 Import ☐

### Proportion of Trade



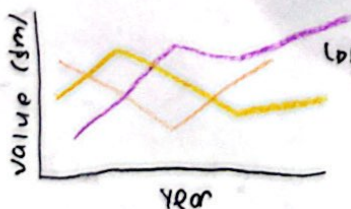
Text

## FOCUS

① Focus on the International map → focusing on how the other countries dependent on the trade with Australia → intensity of the partnership

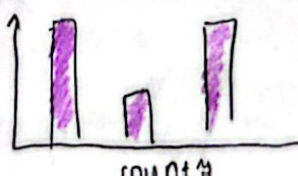
② Line chart

↳ trend on how the export & import of Australia evolve



↳ by industry tooltips

for the specific industry

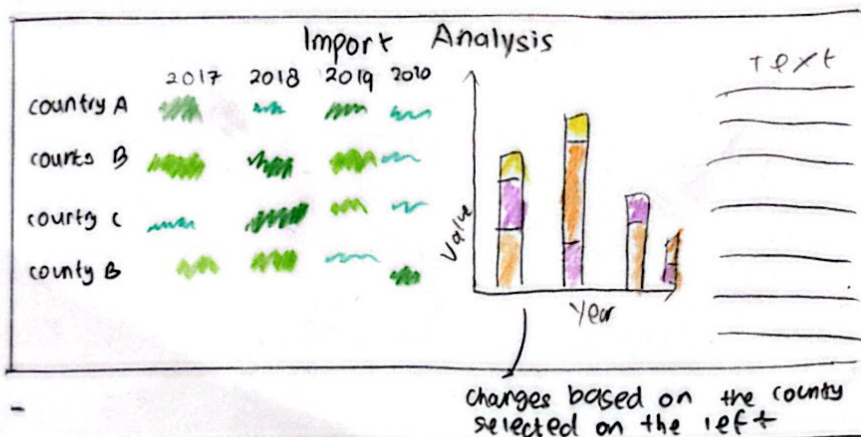
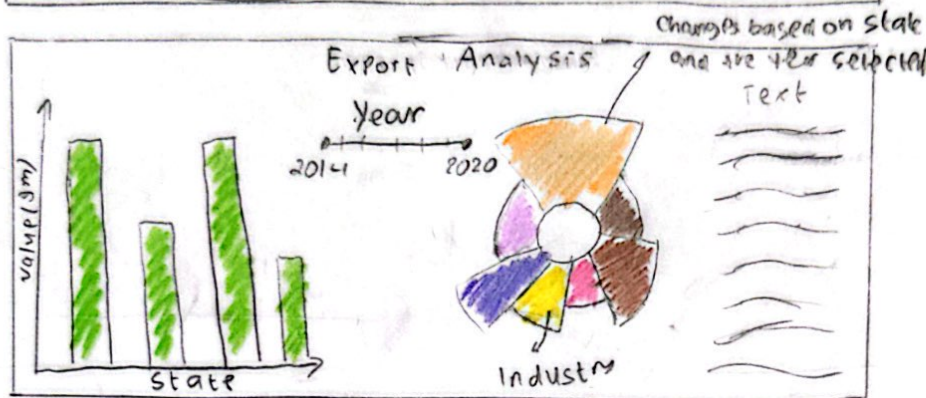








# Australia's International Trade



Author: Menna Indjajang  
Title: Australian International Trade  
Date: 23/9/2024  
Sheet: 4

## Operations

- ① Data type Drop down  
↳ to filter based on the trade type of
- ② Year Time slider  
↳ to filter on the year of the occurrences
- ③ Interactive selection  
↳ interaction between 2 graphs  
↳ Radial plot changes based on the state that is selected on bar chart  
(default: sum of All states)  
↳ Stacked Bar chart change based on the country selected on the heatmap table  
(default: sum of all countries)

## Focus

- Focus on the map → shows the trend from the time slider globally  
↳ for all the world
- Interaction between the actions → based on clicking
- Any redundancy? between radial plot & stacked bar chart
- overload of information?
- Is the text too many?

## Discussions

### Advantages

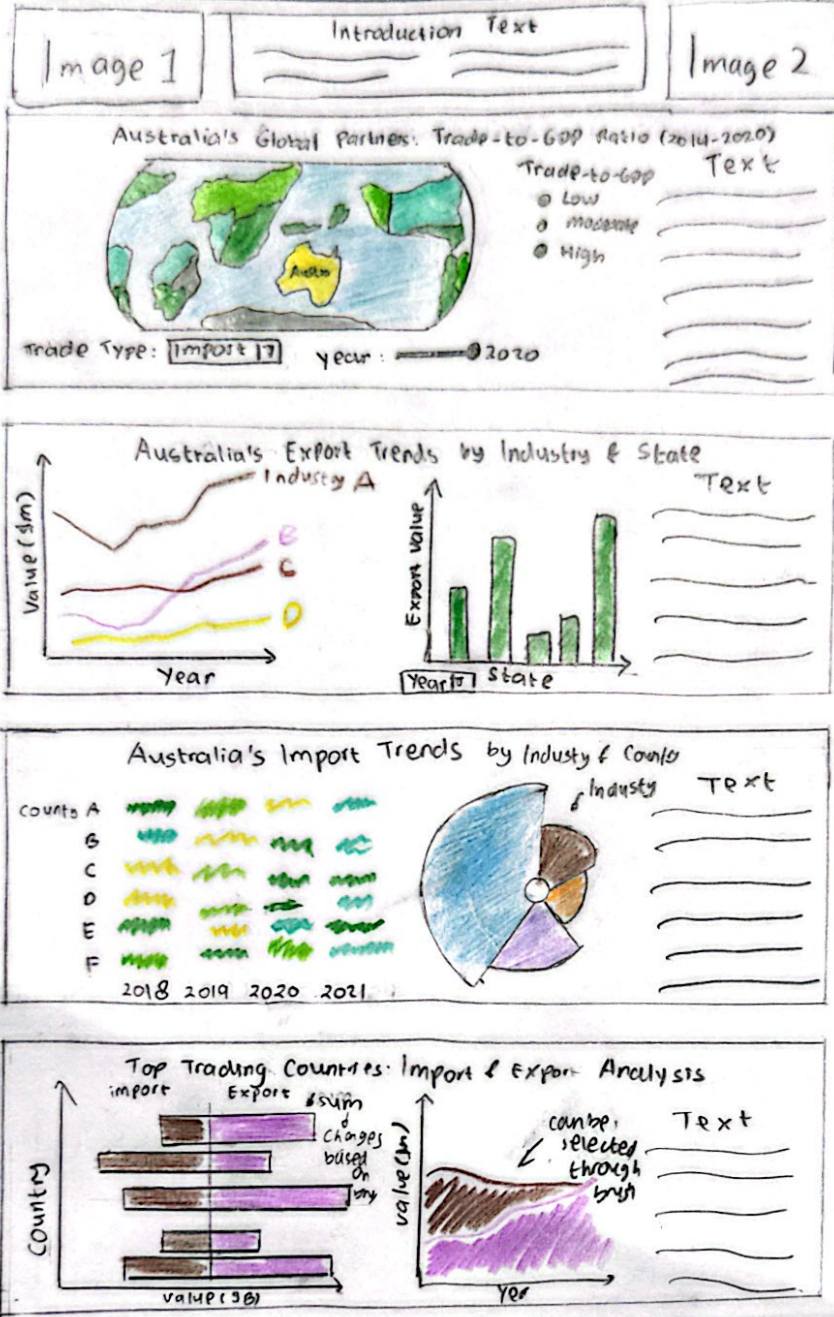
1. Global Overview
2. Interactive Elements
3. Structured Layout

### Disadvantages

- ↳ stacked bar chart & radial plot can be redundant



# Australia's Global Trade: Import & Export



Author: Merisa Indayang  
 Title: Australia's International Trade  
 date: 23/9/2024  
 sheet: 5

## Operations

- ① Data Type Filter → map  
     ↓  
     drop down for the trade type
- ② Time slider → map  
     ↓  
     year of trade
- ③ Time dropdown → bar chart
- ④ Interactive Selection  
     ↓  
     each part of chart is interactive  
     a) bar chart changes based on industry selected in the line graph  
     b) Radial plot changes based on the cell selected (country & year)  
     c) Pyramid bar chart on the left changes based on the brush from the area plot
- ⑤ Tooltips select year

## Focus

- ① No main focus chart → flow of the webpage  
     ↓  
     Global (both trade)  
     ↓  
     Origin of Industry country (import)  
     ↓  
     State (export)  
     ↓  
     Conclusion (both Import & Export)
  - ② Colour consistency
  - ③ Interaction Elements:
    - filter
    - time slider
    - clickable filter to other graphs in the same container
- ④ Correct amount of text  
 ⑤ Good layout & structured spacing

## DETAIL

- Dependencies
  - Vega-lite → building the graphs charts & interactive
  - HTML & CSS → styling and layout
  - Tableau → data cleaning
  - Excel
  - Google Font
- Estimate time & effort:
  - 3 days → data cleaning
  - 9 days → create idions & layout
  - 2 days → fixing bugs & final