1. Ideas

International Migration into Australia

MIGRANTS FLOW

0 — AUSTRALIA

2000 — 2022

NSW
VIC
QLD

2000 — 2022

TOP COUNTRIES IN 2023

India		90000
China		70000
Indonesia		60000

China
India

2000 — 2023

Inflow
YEAR
Outflow

China
India
Vietnam
UK
Australia

2. Filter

Show normalized value

NSW
VIC
QLD

0

YEAR
100%

TOP COUNTRIES MIGRANTS

	90000
	70000
	60000

2000 — COUNTRY — 2023

3. Categorize

1. Show immigration trends
IN FLOW

QLD
VIC
NSW

0

2000 — 2023

2. Show immigration value

3. Show origin Countries

country 1		120000
country 2		90000
country 3		70000

2000 — 2023

4. Combine & Refine.

0

2000 — 2023
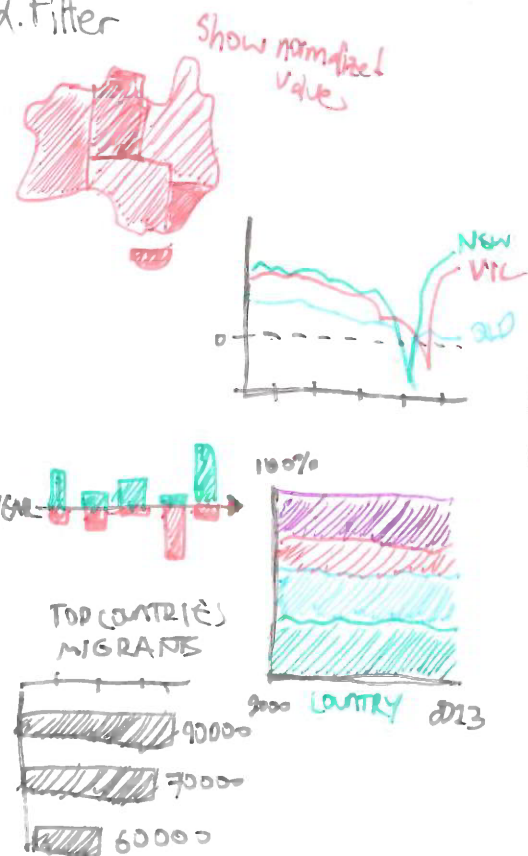
(Shows values too)

MIGRANTS FLOW

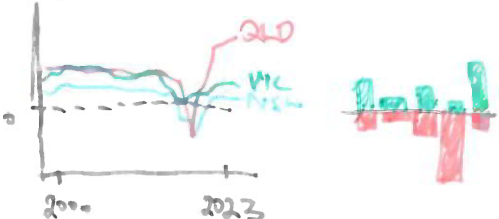| S. Korea		70000
China		60000
Vietnam		30000

5. Question.

1. Shows immigration trends across time? **Yes!**

2. Shows values on a map? **Yes!**
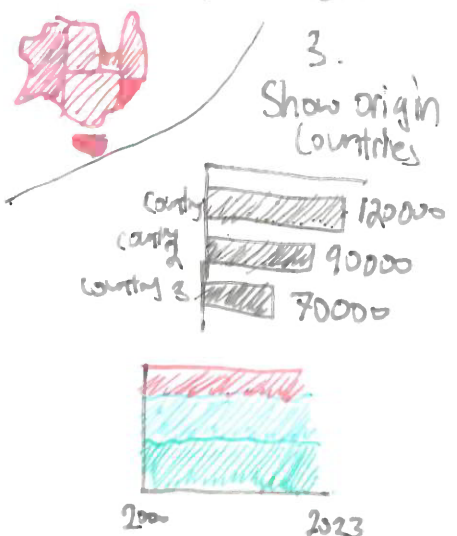
3. Shows different countries coming in? **Yes.**

LAYOUT 1

International Migration into Australia

NET FLOW BY STATE

FLOW ACROSS TIME

- NSW
- VIC
- QLD

India Vietnam
China
Japan
Indonesia
Australia
Year
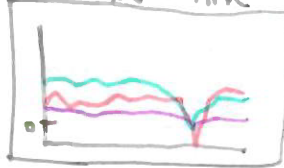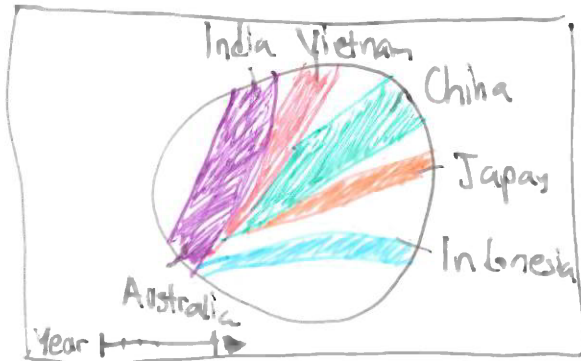
Lorem ipsum dolores this a Is a placeholder text. More text here please there are quite a bit of text, not going over 10 per line though. Some text will be **BOLD**.

Title: International Migration into Australia.

Author: Racharit RAMNARONG

Date: September 30, 2024

SHEET: Design 1

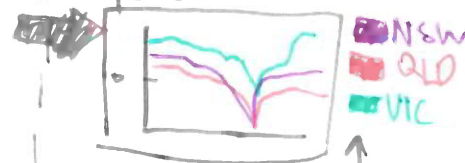Task: Visualize number of migrants coming into Australia.

Advantages

- Map - clearly shows values more clearly than a choropleth map.
- Interactivity with year allows you to see country trends through time.
- Filtering states help focus on specific info.

Disadvantages

- Map - Does not look interesting.
- Interactivity / animation might freeze up, resulting in deductions.

FOCUS

- NSW
- QLD
- VIC

← User can click to focus on a specific state.

Main focus of the visualization will be on the chord diagram. A year slider will allow the user to see changes across time.

India China USA

India China USA
AUS 2004 → AUS 2020
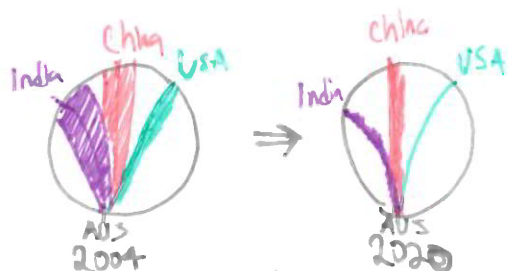
User can see changes in magnitude.

Operations

- NSW
- QLD
- VIC

User can CLICK
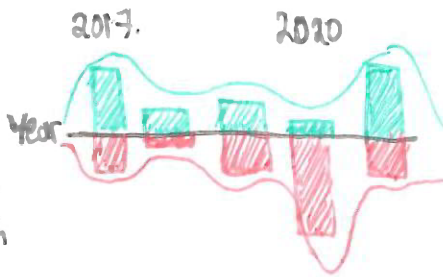

- NSW
- QLD
- VIC

(Other states will be de-emphasized.

Year slider
2009
Year

User can click play to watch an animation or slideshow of the chord diagram through time.
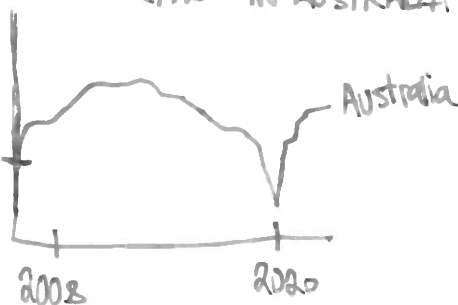
Layout 2

INTERNATIONAL MIGRATION INTO
Australia

This is placeholder text that is going to explain the graph on the right. If someone is reading please help me with this. Just kidding.
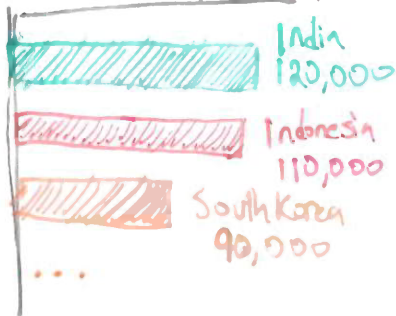
2017   2020

● = 10,000 migrants

This is another placeholder text explaining the graph on the left. Why am I writing so much OH MY GOSH.

This explains the graph on the right. It only shows the net value of Australia rather than per state.

NETFLOW IN AUSTRALIA

Australia

0

2008   2020

This final text explains the graph on the left. I think the alternating text pattern will be interesting.

MIGRANTS PER COUNTRY

India 120,000
Indonesia 110,000
South Korea 90,000
...

DISCUSSION

Advantages
• Clear storytelling layout
• Formatted like a magazine, which users may be used to.
• Not visually cluttered.

Disadvantages
• NO VIS to focus on, may not be memorable.
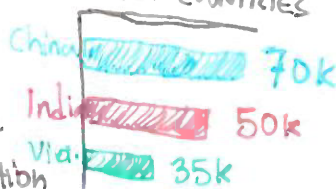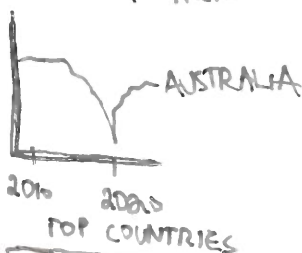• No clear storytelling hierarchy. It shows yearly trends, then state, then back to yearly trends.

FOCUS

No graph is the center focus. All graphs are given equal importance. Here, the text allows for more storytelling and explanations. There will be tooltips for the map to help explain the values.

Operations.

1. Tooltip.
   State Amount
   Tooltip will show extra detail about the state Hover and migrants.

2. Vertical Scroll.
   User will scroll through the page to be exposed to the story through graphs one by one.

Layout 3

Australian Migration

This is some placeholder text to explain the graph a little bit. Sort of like a magazine.

Another annotation

Maybe an annotation

AUSTRALIAN TREND

AUSTRALIA
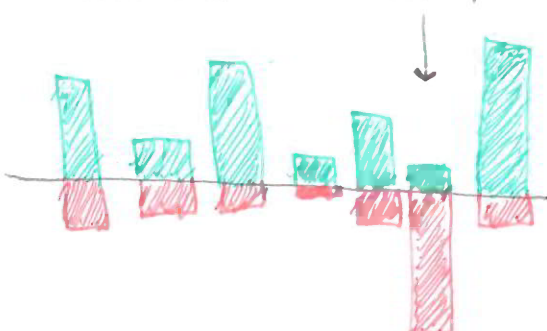
2010   2020

TOP COUNTRIES

China — 70k
India — 50k
Vietnam — 35k

Another piece of text will explain this section of the dashboard. Maybe point out some insights too.

Inflow vs Outflow covid pandemic hit...

FOCUS

The main focus will be on the map, as it is in the center. Next focus area will be on the diverging bar chart, as it is also big/colorful.
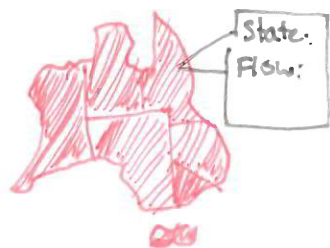
Annotations on the map and bar chart will also bring the graphic to life and provide more insights. Tooltips for the map and diverging bar charts will also provide more detail.

Operations.

1. Tooltip.

For the map and the diverging bar chart, users can hover above items to show tooltips.

State:
Flow:

Year:
Flow:

DISCUSSION

Advantages
- There is a central graph users can focus on.
- Since the vis is divided into two horizontal sections, it is easier to tell a story.

Disadvantages
- Cannot see state trends over time.
- Not much interactivity.
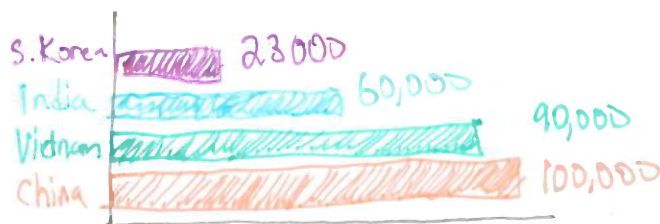- May look visually cluttered.

FINAL LAYOUT

AUSTRALIAN MIGRATION
DASHBOARD

Introduction text goes here to introduce the users to the content at hand.

The text here will introduce the graph on the right. Also note any important parts
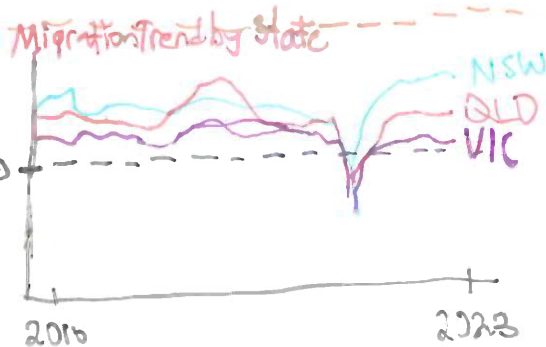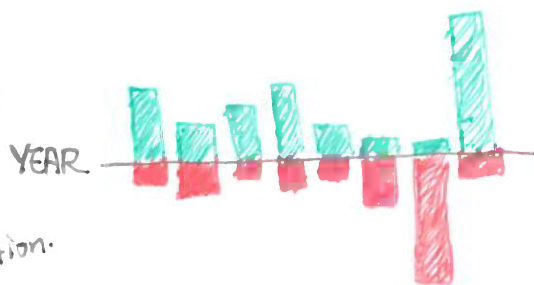
TITLE

200

50

TOP Countries Coming In 2023

This text will introduce the graph on the right. And give insights.

S.Korea — 23000
India — 60,000
Vietnam — 90,000
China — 100,000

Migration Trend by State

The text here will introduce the graph on the right and point out insights.

NSW
QLD
VIC

0

2010   2023

Click Me!

Migration Inflow vs. Outflow

The text here will introduce the plot on the right and point out any important information.

YEAR

Note.
1. Requires Vegalite.
2. HTML & CSS can be used to style vis.
3. All idioms possible with Vegalite.

➡ FOCUS

• Main focus on the map along with the texts next to the graphs.

○ There is also a hierarchy of the story line, showing 2023 data with the map and country bar charts before going more general with the trends

Operations ⬇

1. Tooltip ⟶ The bottom two graphs will also contain tooltips

Map will have tooltip when hovering above the states.

2. Filter.
The graph that shows the states trends can be filtered to allow you to look at a specific state. Other non-selected states will be transparent.

☑ NSW
☑ QLD
☑ VIC ← Click! Then
VIC highlighted

VIC   0   VIC

Detail Work Estimation

1. Finding and wrangling data → 1-3 hours
2. Creating map → 1.5 hrs
3. Bar chart → 0.5 hrs
4. Trend by State → 1.0 hrs
5. Diverging Bar Chart → 1.0 hrs
6. Revision → 3.0-4.0 hrs

TOTAL ≈ 8 - 11 hours of work