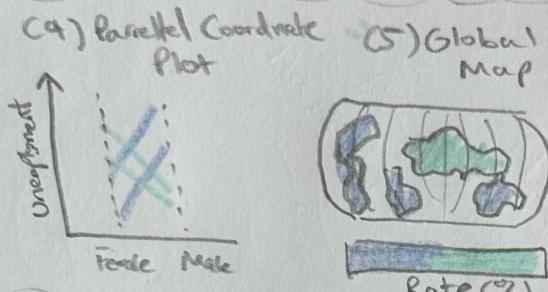
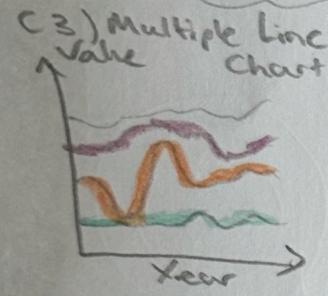
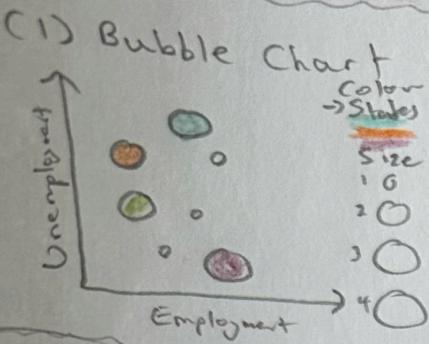
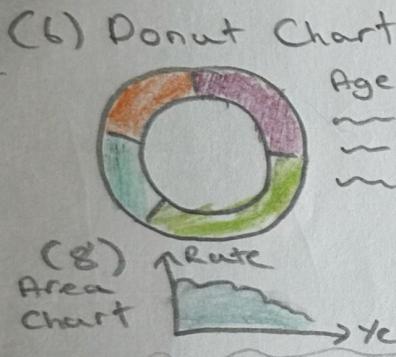
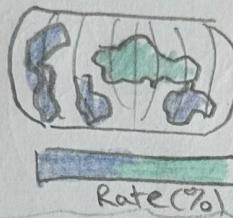


IDEAS

AUTHOR: SHEAN DE FONSEKA
DATE: 14/10/2024
SHEET: 1
TASK: LABOUR MARKET IN AUSTRALIA.



(5) Global Map



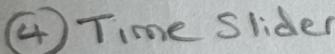
(8) Tree Map



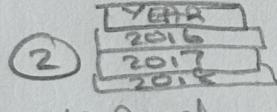
SELECTORS



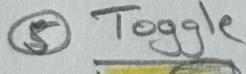
↳ Choose degree
↳ Shows effect of degree on employment



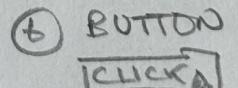
2016 → 2020
change date easily



↳ Dropdown of years



→ COVID
→ PPE



↳ Redirecting to more info on topic

CATEGORISE

(1) Employment (Rise of Workers)

* Bubble Chart

↳ Will Show Australian Market Trends (2020-2024).
* Australian Map
↳ Participation rate
* Multiple Bar Chart
↳ Value of degree on employment

(2) Unemployment (Track Australian Job Markets)

* Parallel Coordinate Plot

↳ Employment metric comparison with gender.

* Global Map

↳ Show unemployment rate for each country

* Multiple Line Chart

↳ Show temporal trend data can of countries on employment

(3) COVID Recovery in Australian Labor Market

* Sankey diagram

↳ Show flow from one employment type to another

* Donut Chart

↳ Jobseeker

↳ Show temporal trend data can of countries on employment

FILTER

* Bubble Chart

↳ Keep as it is considered complicated visual
↳ Shows relationship between multiple variables.

* Australian Map

↳ Compulsory for dashboard

↳ Good representation of AUS.

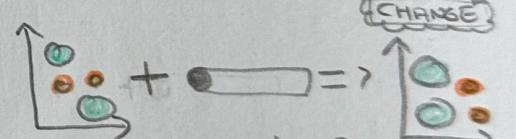
* Donut Chart

↳ Simple/Easy
↳ Works well when comparing metrics.



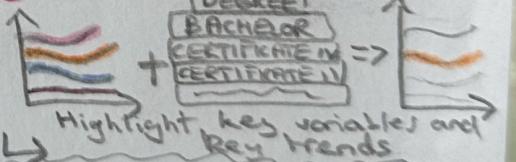
COMBINE AND RERINE

* Bump Chart + Time Slider



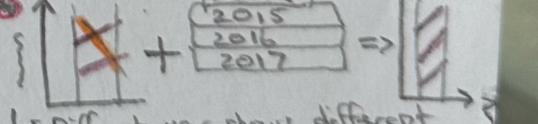
↳ Show temporal info (change in time)

* Multiple Line + Dropdown



↳ Highlight key variables and key trends

* Parallel Coordinate + Dropdown



↳ Different year shows different relationships

QUESTIONS

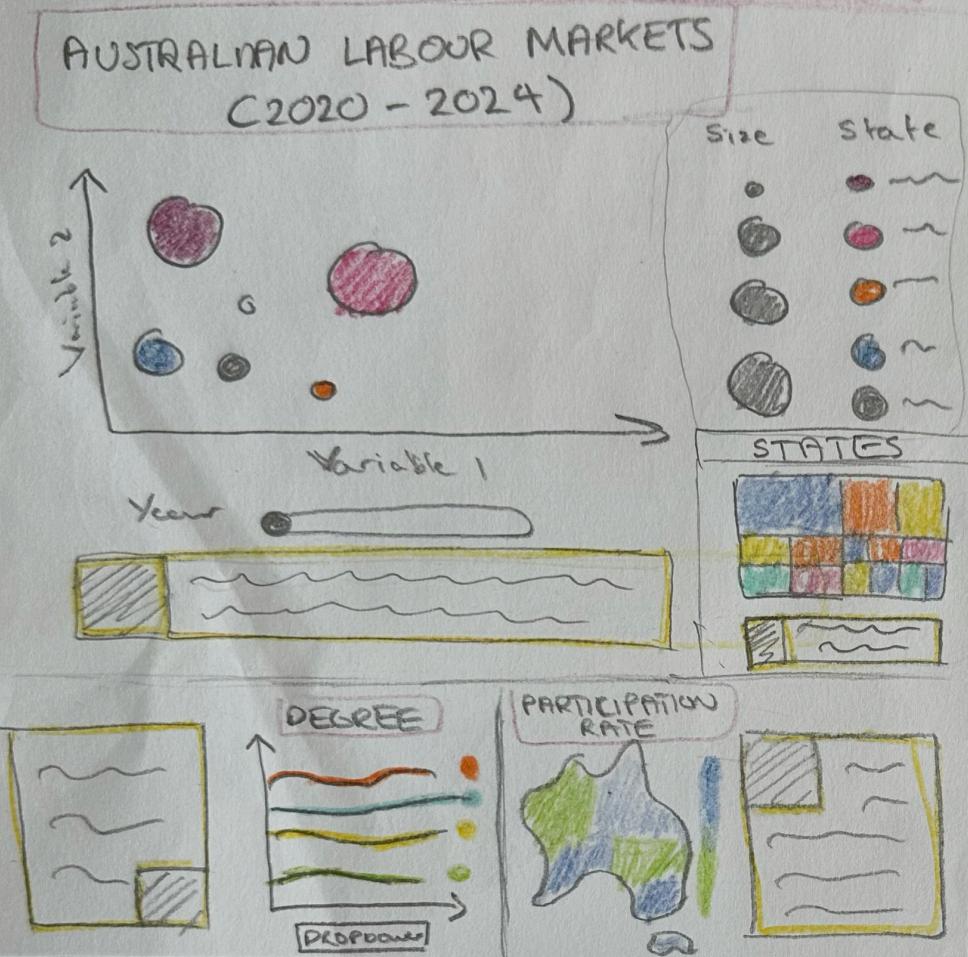
* Do the visuals convey the best for Labor Market in Australia?

* Are idioms complex?
Are they the best for given data?

* Does interactivity improve user experience?

LAYOUT

THE RISE OF SKILLED WORKERS



AUTHOR: SHEAN DE FONSEKA
DATE: 14/10/2024
SHEET: 2
TASK: LABOUR MARKET IN AUSTRALIA

OPERATIONS

* Bubble chart Selector

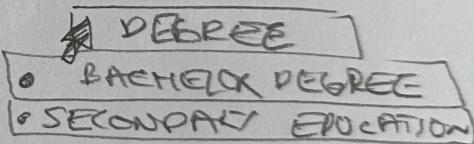
- ↳ Year level Slider to show how unemployment and employment-to-population ratios evolved over 2020
- 2024

* Tooltip for each data point (bubble)

- ↳ Can add to all graphs

* Filter dropdown

- ↳ Select specific skill level (Bachelor, Secondary Education, etc)



FOCUS

→ Introduce key labour market trends in Australia focusing on

- Unemployment rate
- Employment-to-population ratio
- Skill level based employment

Narrative begins with broad overview of employment metrics into more details like participation rates.

We are following Z pattern story-telling (LHS graph, RHS text explanation and vice versa)

(This helps glide the reader according to the dashboard and increase effective understanding)

DISCUSSIONS

⊕ Engaging storytelling through Z pattern layout and interactive elements

- ⊕ Educational Value:
- ↳ Tooltip/dropdown/Slider allows for complex data to be digestible more easily.

⊖ Information Overload

- ↳ Several charts and filters in one section can be overwhelming

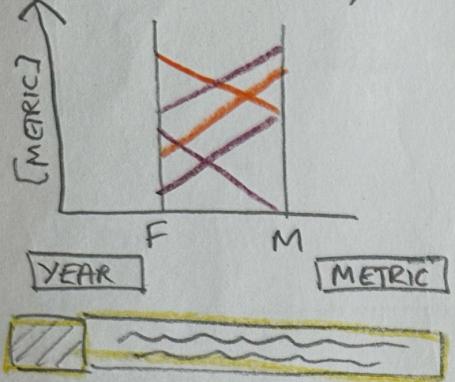
⊖ Specific State Analysis

- ↳ Focusing on individual states may remove/neglect user from international perspective

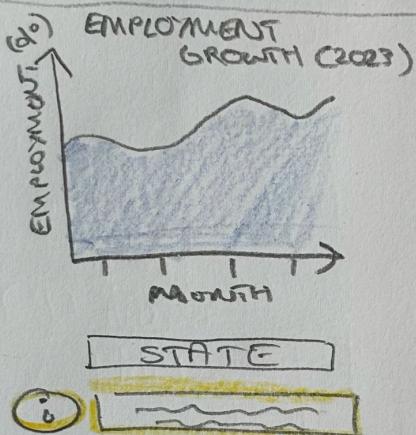
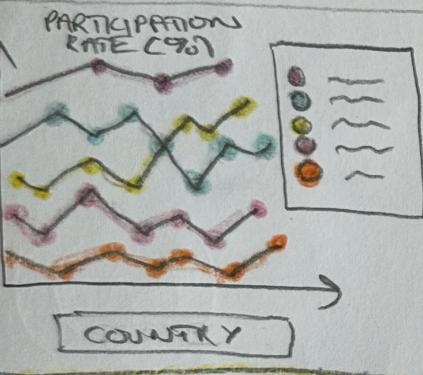
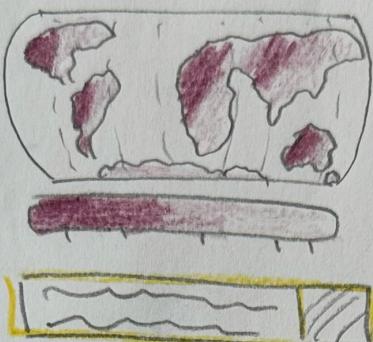
LAYOUT

TRACKING AUSTRALIA'S JOB MARKETS

METRICS BY GENDER
(2015-2020)



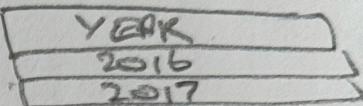
GLOBAL UNEMPLOYMENT
RATES IN 2023



AUTHOR: SHEAN DE FONSEKA
DATE: 14/10/2024
SHEET: 3
TASK: LABOUR MARKET
IN AUSTRALIA

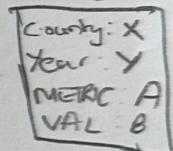
OPERATIONS

- * Year dropdown to view different years and effect on gender employment disparities



- * Tooltip - For each country has own respective info on employment metric and link to year + Country.

- * Metric Selector
 - ↳ Choose from the following
 - Vulnerable employment
 - Employment-to-population
 - Participation Rate.

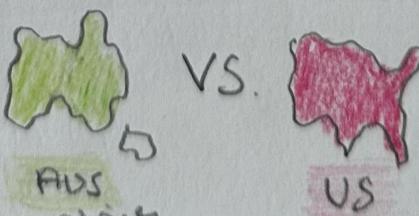


FOCUS

- Insight into Australia's employment metrics by Gender and compare global labour metrics with Australia.

- ↳ Showcase Australia's labour market resilience against other countries + main countries.

- ↳ Compare how Australia is within the states as well with prominent countries



- ↳ Identify / Compare gender equality in the workplace while contrasting with underemployment performance.

DISCUSSIONS

- ⊕ Clear Comparison
 - ↳ Contrasting Australia with other countries visualising labour markets clearly.

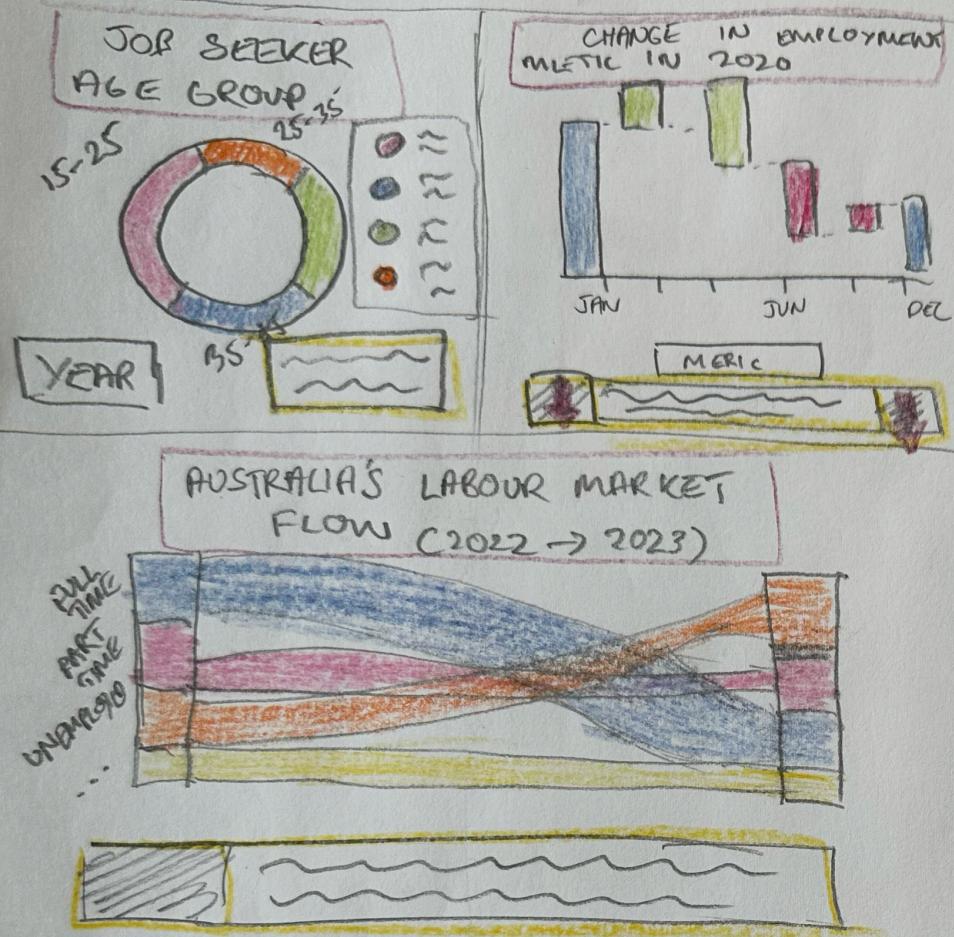
- ⊕ Gender focused insights to identify gender equality in the workplace. Compare trends with other countries

- ⊖ Potential complexity
 - ↳ Many selectors for one graph might be too much

- ⊖ Focus Dilution
 - ↳ Having selector changing metrics might steer away from meaning of this specific section in terms of story-telling.

LAYOUT

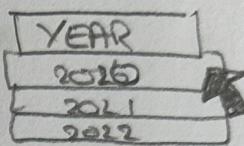
AUSTRALIA'S COVID LABOUR RECOVERY



AUTHOR: SHEAN DE FONSEKA
DATE: 14/10/2024
SHEET: 4
TASK: LABOUR MARKET IN AUSTRALIA.

OPERATIONS

- ① **Propdown**
 - ↳ Year dropdown for Job Seeker donut chart to observe age group reliance on government financial aid.

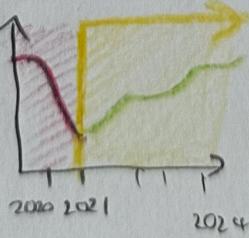


- ② **Tooltip (Waterfall and Sankey diagram)**
 - ↳ Change in metric for each month → $\text{Metric: } \Delta \text{ Growth: } X\%$
 - ↳ For Sankey show initial location → destination and amount ($X\%$) distributed.



FOCUS

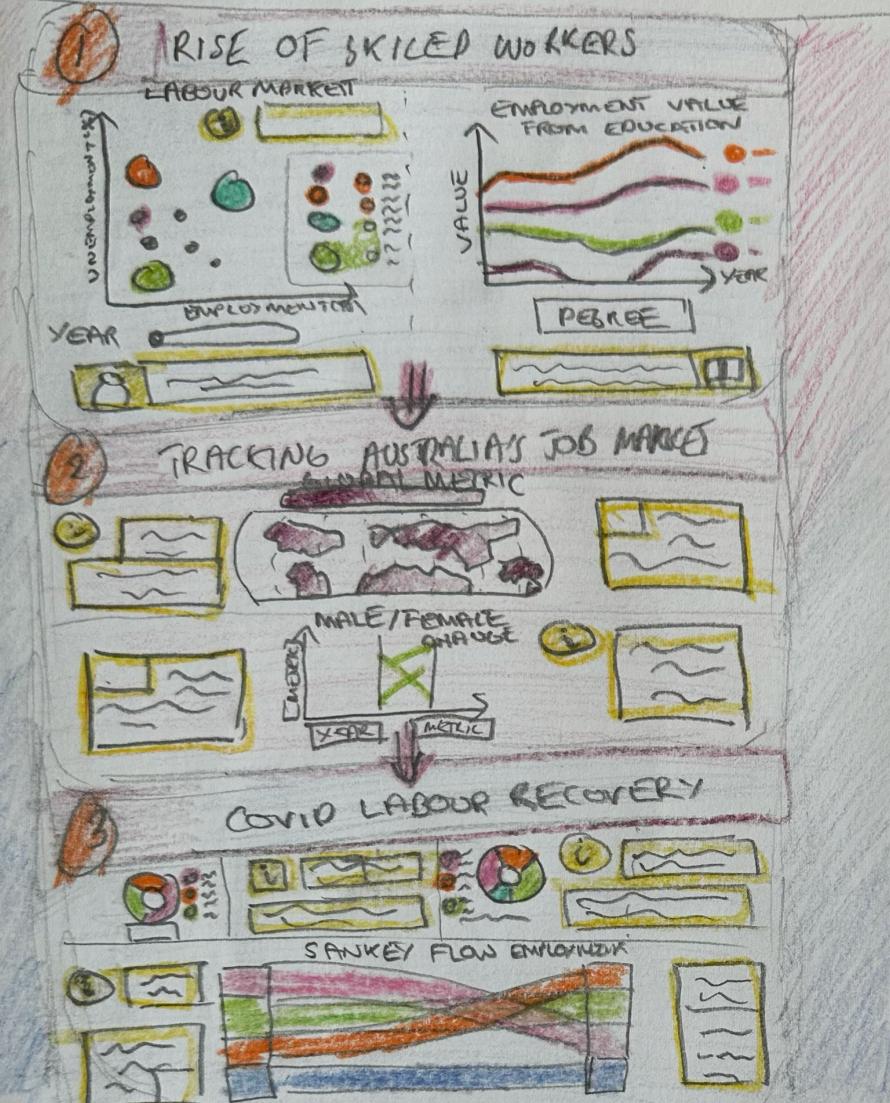
- Focus on demographic shifts and industry employment patterns during Australia's recovery from COVID-19.
 - ↳ Highlight employment trends and how they evolved over the years after 2020 (2021 → 2024).
 - ↳ Show the distribution and affect in Job Seeker to see demand and change.
 - ↳ See sector population and demand to see what industries are likely to be affected by pandemic.
 - ↳ Identify flow of changes for everyone from full-time → part-time & unemployed.



DISCUSSIONS

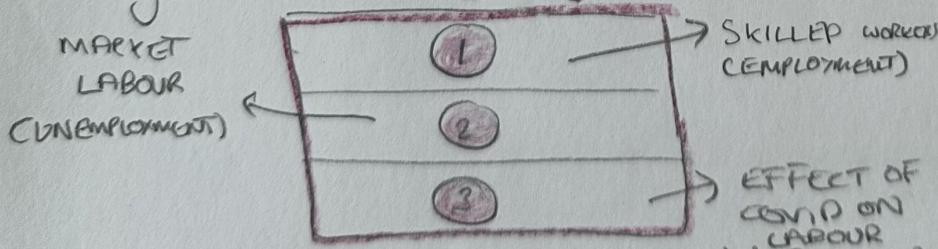
- ③ **Labour Transitions**
 - ↳ Very clear and distinct visual representation to show change in effect.
- ④ **Demographic Focus**
 - ↳ Unlike other sections, also analysing new demographic data which is vital for recovery section.
- ⑤ **Interactivity dependent**
 - ↳ Some graphs require movement / using to highlight and identify trends (Interactivity is compulsory).
- ⑥ **Sankey diagram might be fixed with 2022 → 2024 only (unable to change years)**

LAYOUT



FOCUS

Layout is set to be divided into 3 sections. Each with a unique aspect and discussing individual storytelling aspects.



→ we will include detailed analysis on the graph itself including information icons (info) to explain selecters/toggles.

→ Integrating visual centre showing both the global comparison, tracking of Australia and key demographic trends in labour industry like the wage gap.

→ Colour scheme follows magma to ensure accessible to people who are colourblind.

AUTHOR: SHEAN DE FONSEKA
DATE: 14/10/2024
SHEET: 5
TASK: LABOUR MARKET IN AUSTRALIA

OPERATIONS

① Propdowns

↳ Used widely by line chart to highlight the respective line

↳ Used by parallel coordinate plot to show respective metric in the graph

↳ To also show the respective year for donut charts

② Time Slider

↳ Used by bubble chart to ↑ interactivity and make it more appealing

③ Tooltip

↳ All graphs will have tooltip to ensure full transparency of data in each of the graphs and pinpoint important events.

DETAILS

④ Dependencies & Tools

↳ **Visual Studio Code + Vega-Lite Editor Online**: Used to create visualisations / idioms from data. HTML / CSS / JS used to combine all data from export of Vega-Lite code.

↳ **Python / Excel**: Data wrangling and data-cleaning to format properly and used by Vega-Lite.

↳ **Photoshop**: Enhancing visual appeal through photos.

⑤ Time Estimate

↳ Data-Cleaning (4-5 hours)

↳ Visualisation (8-10 hours)

↳ Refining (3-4 hours)

↳ Layout (2-3 hours)

↳ Requirements: Desktop/Laptop to run VSCode + Python and use of Excel and VScode software + Browser.