

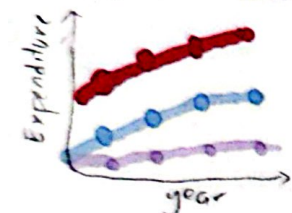
Ideas

1. Quantitative data

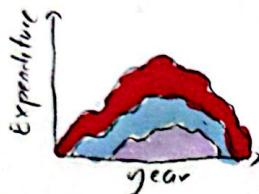
a. Choropleth map



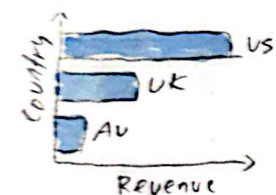
a. Multi line chart



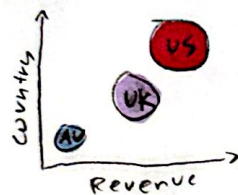
b. Area chart



a. Bar chart

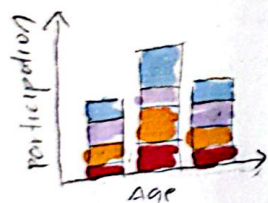


b. Bubble chart

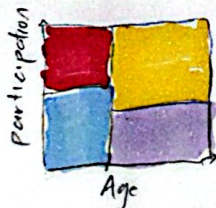


b. Ordinal data

a. Stacked Bar chart



b. Mosaic plot



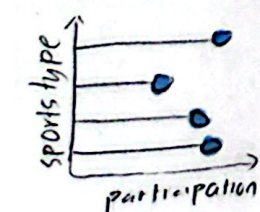
a. Heatmap chart



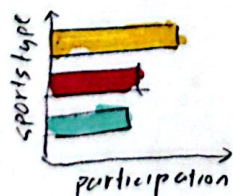
b. Sankey chart



a. Lollipop chart



b. Bar chart



Filter

1. Gambling loss per adult per state choropleth map:

- Colour gradient allows for easy comparison
- Geographic data makes it more amusing to visualize data
- Ability to display tooltips while maintaining good looks

2. Expenditure trends by game type

Multi line chart:

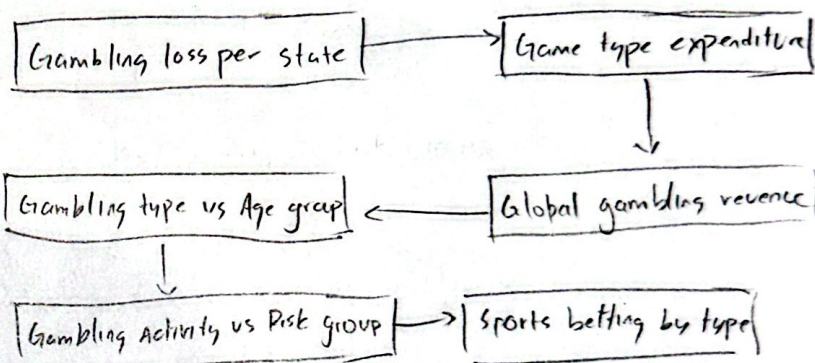
- Line position shows change in time effectively
- Shows changes in trend effectively

3. Global gambling Revenue

Bar chart:

- Simple and direct
- Visualizes categorical data (country) well

Categorize



Combine and Refine

Choropleth map + Line chart

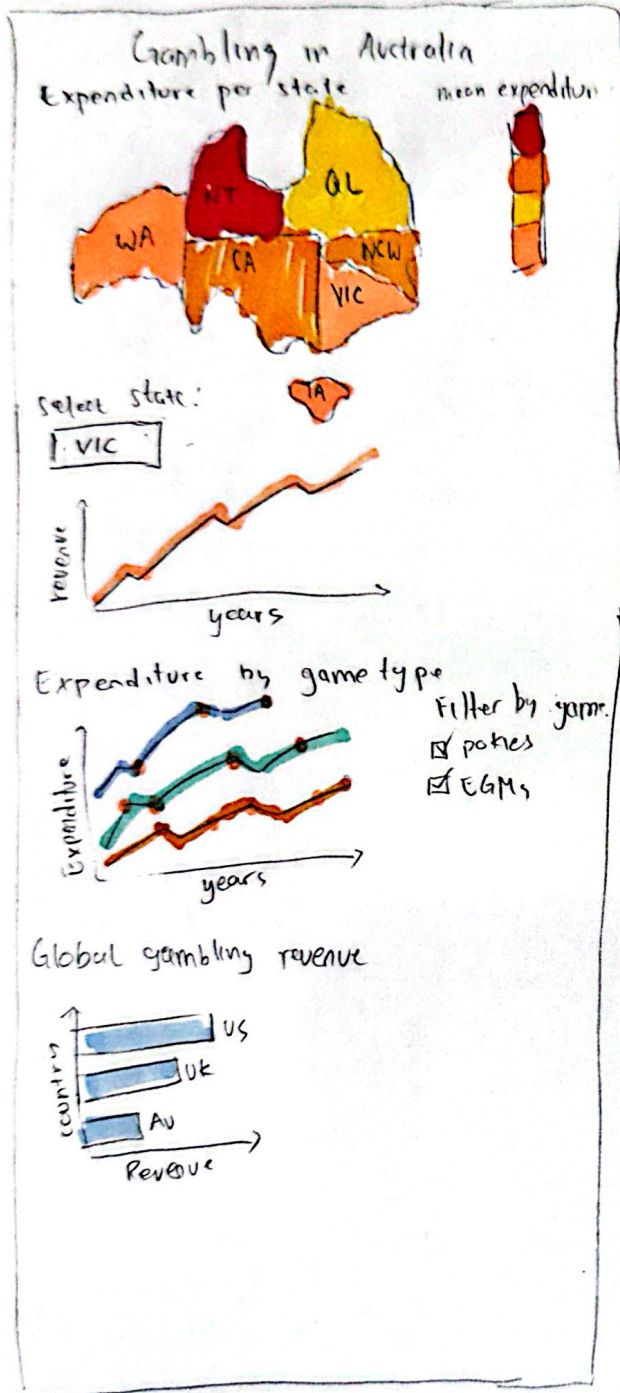
- Add a filter by state
- State shows gambling expenditure over the years visualized in the line chart

Questions

- Is it possible to combine choropleth map and line chart?
- Is it necessary to use lollipop chart instead of Bar chart?
- Is there a better way to categorize the data?

Name: James Alexander
 ID: 34726961
 Sheet No: 2

Layout



Operations

Gambling expenditure by state:

- click on select state filter and select the states to view gambling expenditure over the years

Expenditure by game type:

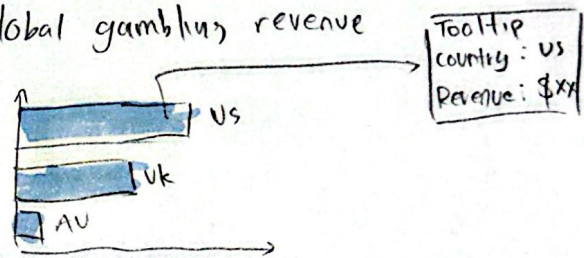
- click on the tick box to filter the line chart by game type.

Global gambling revenue

- Hover onto the bar to access the tooltip which will display gambling revenue details.

Focus

Global gambling revenue



Concept:

- Bar chart displays a tooltip when hover towards it.

Discussions:

- Is tick box the most effective way to filter data
- should we create colour legends for global gambling revenue

Name: James Alexander

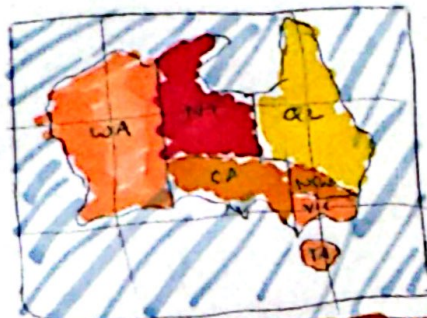
ID: 34726861

Sheet No 3

Layout

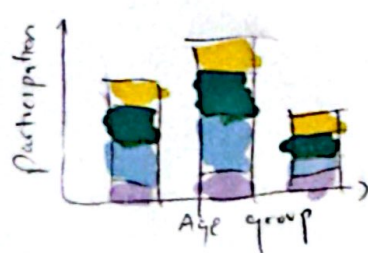
Gambling in Australia

Expenditure per state



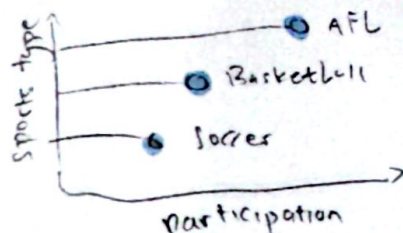
mean expenditure

Gambling preferences by Age group



Gambling type
☒ Lottery
☒ Sports betting

Sports betting by type



Operations

Gambling expenditure by state

- Oceans and graticules are displayed for better visualisation

Gambling preferences by Age group

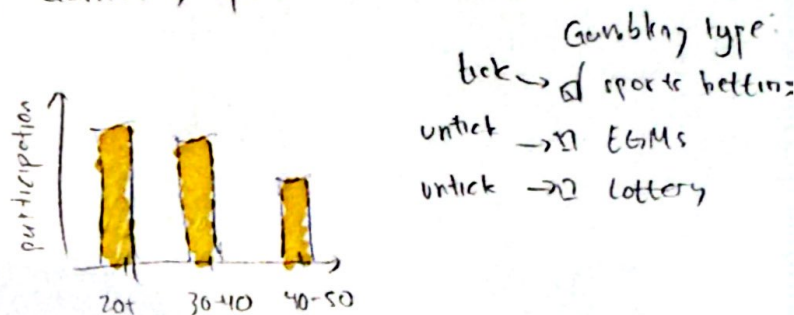
- Click on the tick box to view participation for a specific gambling type for each Age group

Sports betting by type

- Hover onto the circle to view the tooltip which will display percentage (%) of participation

Focus

Gambling preferences by Age group



Concepts:

- Stacked bar chart will display data based on which gambling type is ticked. If unticked, it won't be displayed.

Discussion

- Are ocean and graticules necessary in the choropleth map?
- Does making a box for headings and subheadings make the visualisation more appealing?

Name: James Alexander

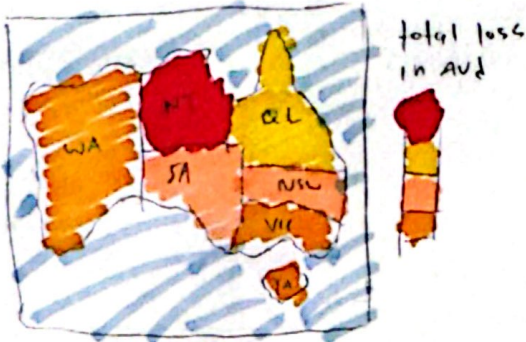
ID: 34726861

Sheet No: 4

Layout

Gambling in Australia

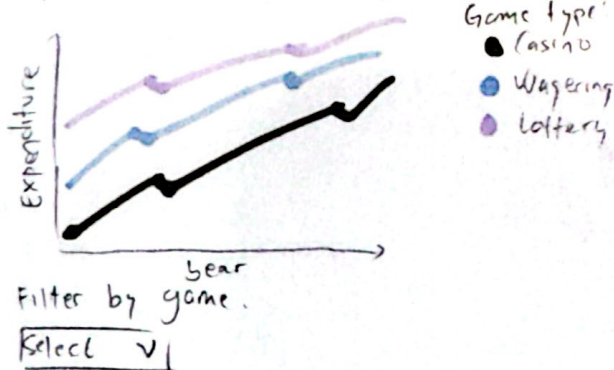
Expenditure per state



Gambling Activity vs Risk group



Expenditure trends by game type



Operations

Gambling Activity vs Risk group

- Hover onto a box in the heatmap to view the tooltip which contains the risk group, Activity and expenditure

Expenditure per state

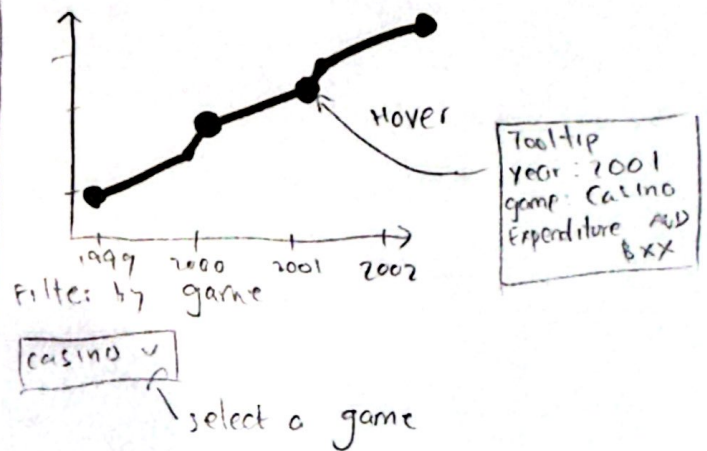
- The colour slider on the right hand side indicate total loss in AUD instead of mean expenditure

Expenditure trends by game type

- Features a dropdown instead of a tick box which will display individual line charts based on the game type

Focus

Expenditure by game type



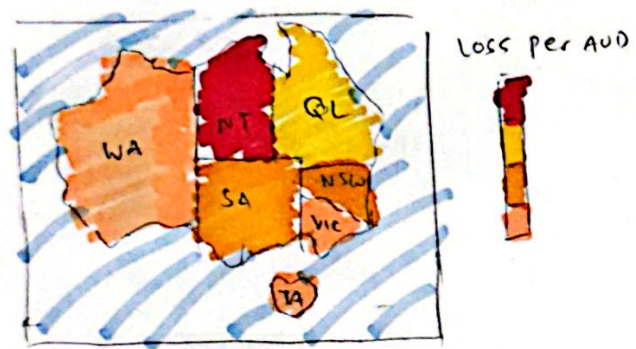
Discussion

- Is total loss in AUD a better metric for choropleth map?
- Is the colour slider for heatmap appropriate for colour blind users?

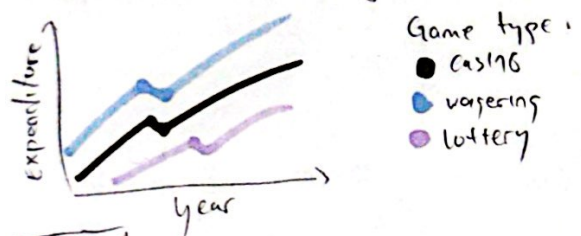
Layout

Gambling in Australia

Expenditure per state



Expenditure trends by game type



Global Gambling Revenue



Gambling preferences by Age group



Gambling Activity vs Risk Group



Operations

Gambling preferences by Age group

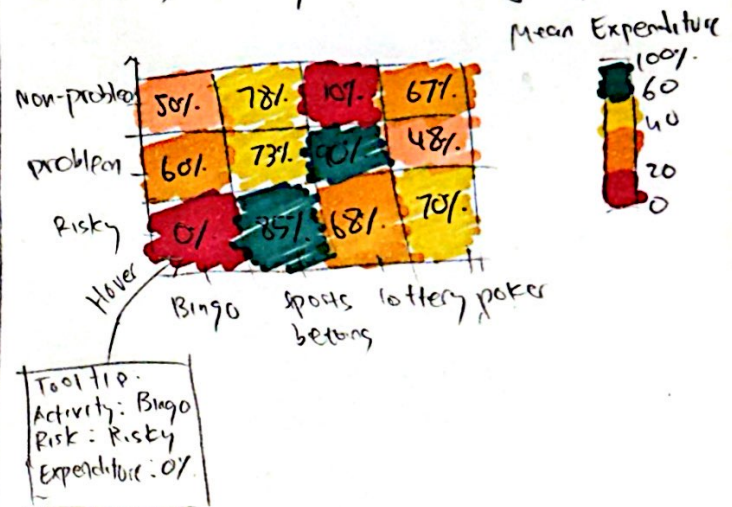
- A select dropdown is used instead of a tickbox which will display individual graphs based on game type

Other visualisations.

- No further changes

Focus

Gambling Activity vs Risk group



concept:

Each Activity and Risk type will display a mean expenditure in % along with a tooltip which can be accessed when hovered over a box.

Details

- Each visualisation will be implemented using csv files
- Download json files to build the choropleth map with states, oceans and graticules
- Gambling/Casino themed magazine styled visualisation