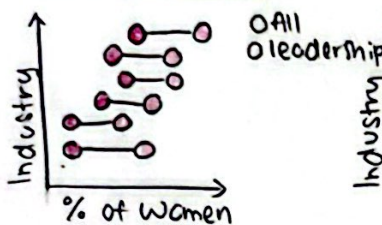
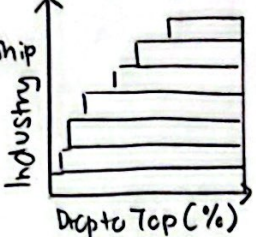


IDEAS

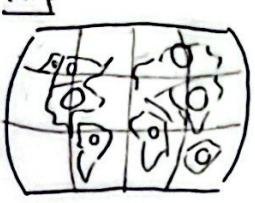
① Connected Dot Plot



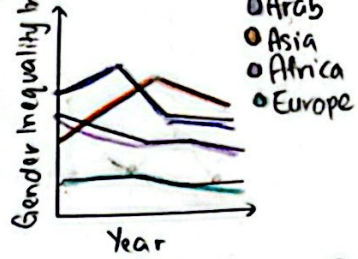
② Bar chart



③ Proportional Symbol Map



④ Line Graph



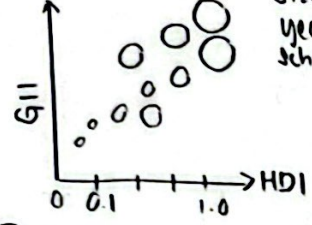
⑤ Pictogram



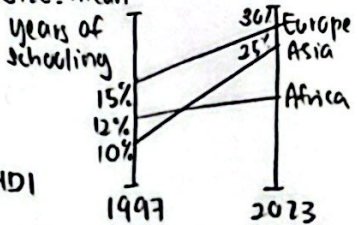
⑥ Choropleth Map



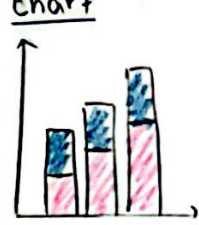
⑦ Bubble chart



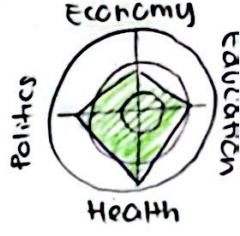
⑧ Slope Chart



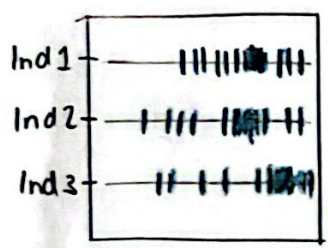
⑨ Stacked Bar Chart



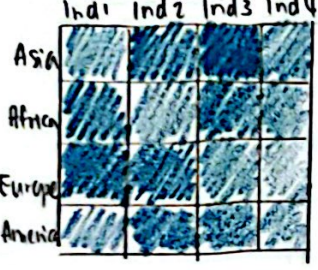
⑩ Radar Chart



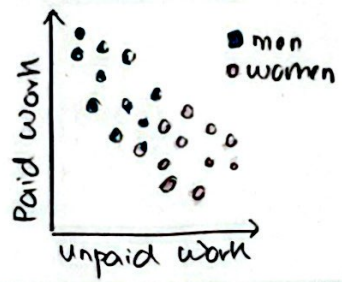
⑪ Barcode Graph



⑫ Heatmap



⑬ Scatter Plot



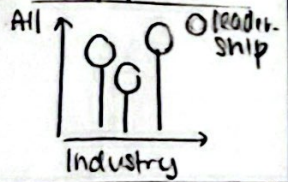
⑭ Bubble Chart



⑮ Grouped Bar Chart



⑯ Lollipop Chart



③ CATEGORISE

GENDER GAP THROUGH TIME

④, ⑥, ⑩

GENDER GAP PERFORMANCE

⑪, ⑫

ECONOMIC PARTICIPATION

①, ②, ④, ⑥, ⑫

EDUCATIONAL ATTAINMENT

②

HEALTH

③, ⑤, ⑥

POLITICAL EMPOWERMENT

⑧, ⑨

OBSTACLES TO EQUALITY

①, ⑥, ⑦

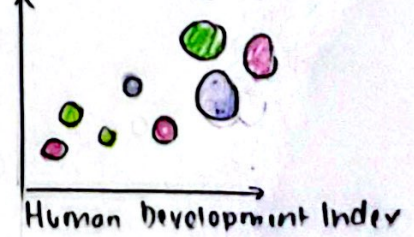
⑤ QUESTION

→ Are some of the charts too complex or too simple
→ Is it better to demonstrate change in gender inequality index with a choropleth map and slider or a dot plot map and brushing with line graph

④ COMBINE & REFINER

⑦ Bubble Chart can be refined by utilising a colour channel to encode a 4th characteristic.

Gender Inequality Index



② FILTER

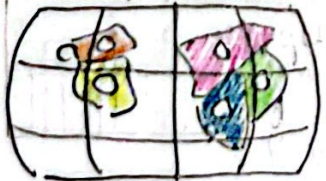
① Bubble Chart

Not very intuitive & too many bubbles is overwhelming

Lollipop Chart

It's not as intuitive to compare diff between lollipop head and stick.

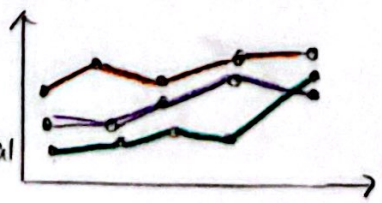
③ Proportional Symbol Map + Choropleth Map



Choropleth map with bubble overlay

Choropleth map to group categorical attributes

④ Line graph can be refined by adding the dot mark for clarity when user hovers over the point to view details of data.



Title: The Global Gender Gap
Author: Rebecca Chan Ting Yee
Date: 18 Oct 2025
Sheet 11
Task: FIT-379 Assignment 2

LAYOUT

THE GLOBAL GENDER GAP

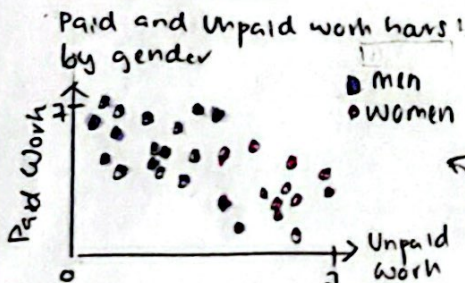
Gender Gap Performance by Region

	Economic Participation	Educational Attainment	Health	Political Empowerment
East Asia	60%	65%	85%	10%
Africa	50%	50%	85%	15%
Europe	75%	80%	95%	40%
South Asia	65%	55%	98%	12%

heatmap

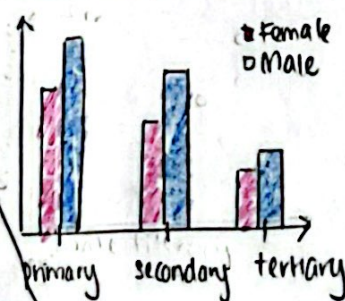
Text

Women At Work



Text

Gender Gap in Education



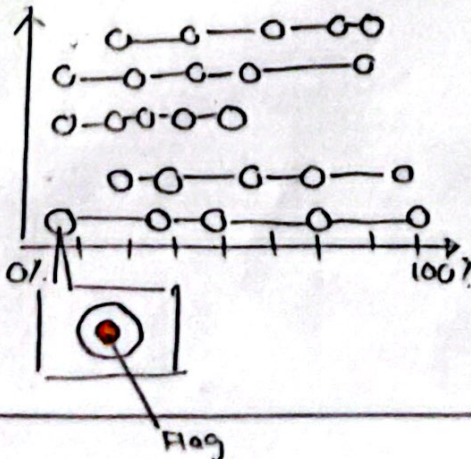
Women Health



Text

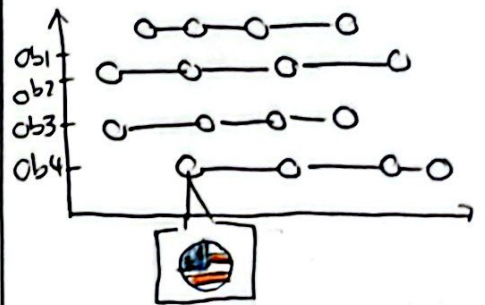
Obstacle to Gender Equality

Access to Education
Employment Opportunities
Physically weaker
Political Representation
Treated Differently



Title: The Global Gender Gap
Author: Rebecca Chan Teng Yee
Date: 19 Oct 2025
Sheet: 2
Task: F17-3179 Assignment 2

FOCUS



- a connected dot plot is used to visualise the number of countries with the same perceived problem and how much the obstacle ^{seems to} contribute to the gender gap in their country
- the countries' flags are used to easily differentiate b/w them

OPERATION

① Tooltips

- hovering over any of the data will give the exact/detailed value

② Filtering with selection

- user can select a country to highlight in the connected dot plot to reduce visual overload

③ Filtering with legend

- users can select on either men or women option in the legend to highlight that gender & grey out the other

DISCUSSION

Pros:

- simple to implement
- adding the countries flag to the connected dot plot makes the graph more intuitive for users

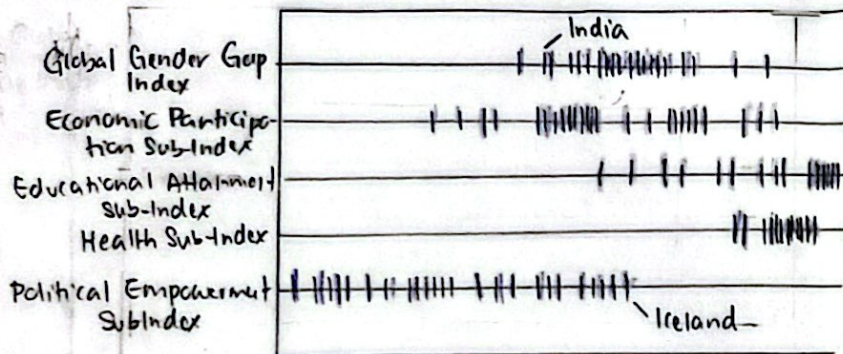
cons:

- interactive elements are basic and not very insightful
- graphs are quite simple and not very innovative

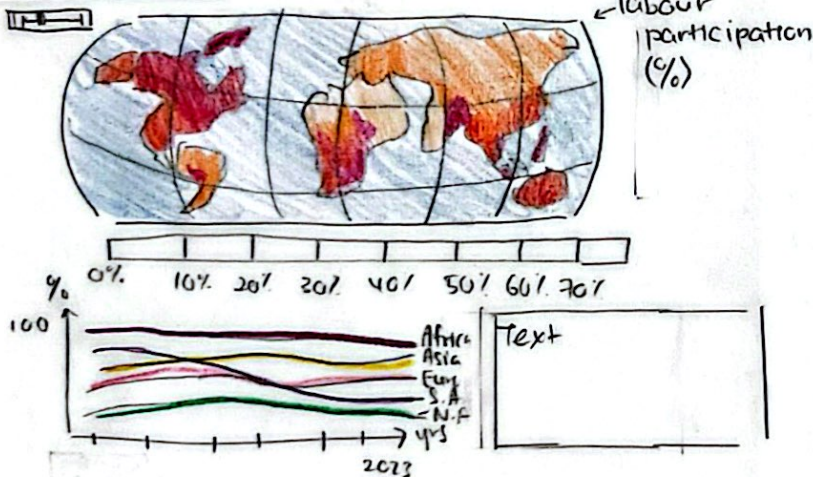
THE GLOBAL GENDER GAP

Text

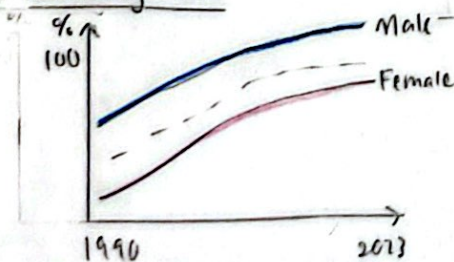
Indexing Equality: Gender Gap Insights



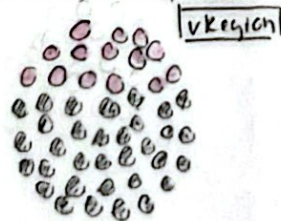
Women at Work



Literacy Rate

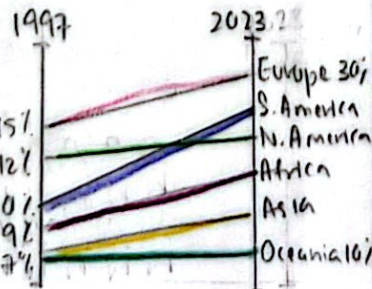


Maternal Mortality Rate



Women in Power

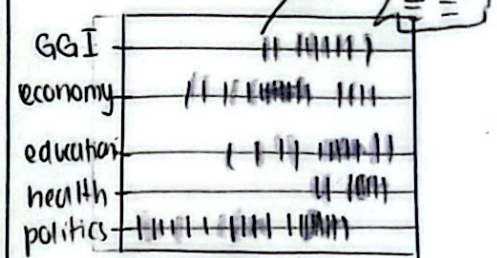
Text



Author: Rebecca Chan Teng Yee
Source:

Title: The Global Gender Gap
Author: Rebecca Chan Teng Yee
Date: 18 Oct 2021
Sheet: 3
Task: FIT3179 Assignment 2

FOCUS



- The barcode chart shows the scores for the global gender gap index and sub-index for each country
- Annotations for outliers of key countries will be shown.
- Tooltip revealing all index and sub-index score for the country

OPERATIONS:

① Tooltips

- hovering over any of the data will give the exact/detailed value

② Filtering/Selections

(a) Filtering with Slider

- user can slide the slider to view data at a specific pt in time

(b) Filtering with Selection menu

- user can select a region to display the mortality ratio for the specific region

DISCUSSIONS

Pros

- Good use of sight-lines, columns and whitespace to achieve symmetry.
- Clear storyline flow as it aligns with viewing path principle

Cons

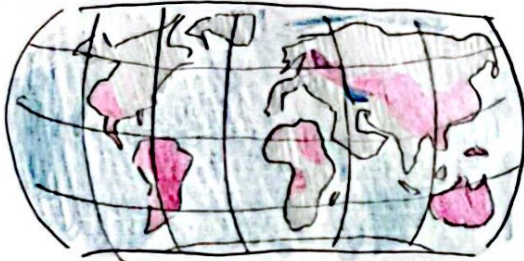
- Line graph for literacy rate is too simplistic & not as insightful
- The Barcode Plot may overwhelm users as there are too many data points.
↳ would a box plot resolve this?
- Too many categories for legend in choropleth map.

THE GLOBAL GENDER GAP

Text

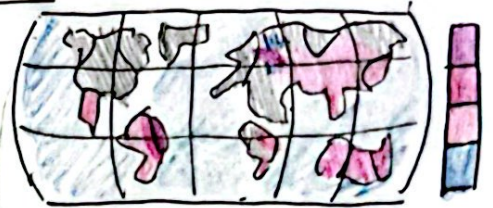
Are We Closing the Gap?

Exploring changes in attitude towards gender equality



Progress on Equality

FOCUS



- Hovering over a country will show the country's details
- The qualitative legend has been converted to categories for easier viewing

Operations

① Tooltips

- hovering over any of the data will give the exact/detailed value

② Filtering / Selections

(a) Direct selection on legend

Indicator
<input type="checkbox"/> Mobility <input type="checkbox"/> Workplace <input type="checkbox"/> Pay

→ user can select any of the indicators to highlight the relevant line.

(b) Filtering with selection menu

Country
<input type="checkbox"/> Malaysia <input type="checkbox"/> Korea <input type="checkbox"/> USA

→ user can select a country to display the sentiments for that specific country

Discussion

Pros

- Has a clear storyline flow.
- The use of filtering allows for users to easily glean data & for clarity
- Representing changes in attitudes towards gender equality as a choropleth rather than an arrow chart is more intuitive with countries.

Cons

- Might be challenging to implement / not implementable
- Using vega-lite.
- The use of too many small multiples and radar chart may overwhelm user with too much information in one go.

Gender Gap Through Time

1990

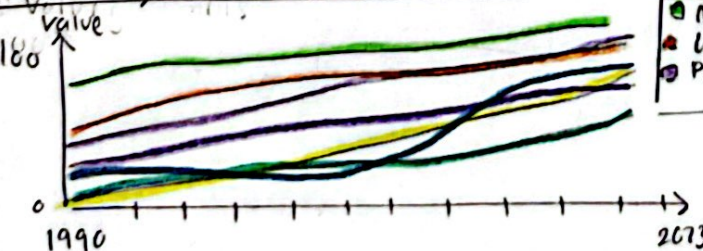
2000

2010

2023



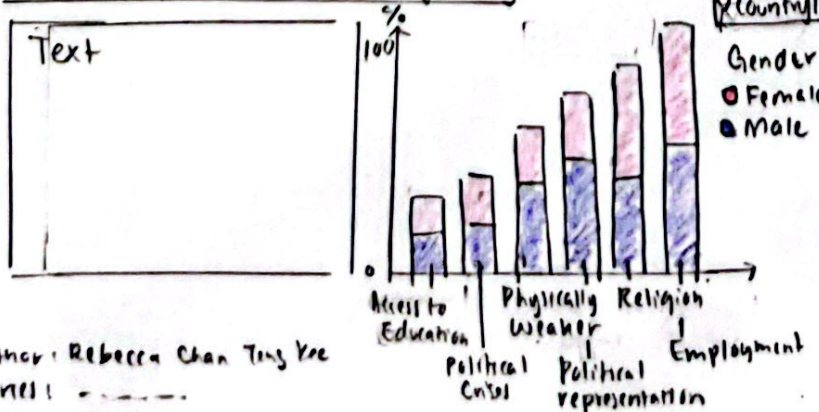
Advancing Women's Economic Role



Indicators
<input type="checkbox"/> Mobility <input type="checkbox"/> Workplace <input type="checkbox"/> Pay

Text

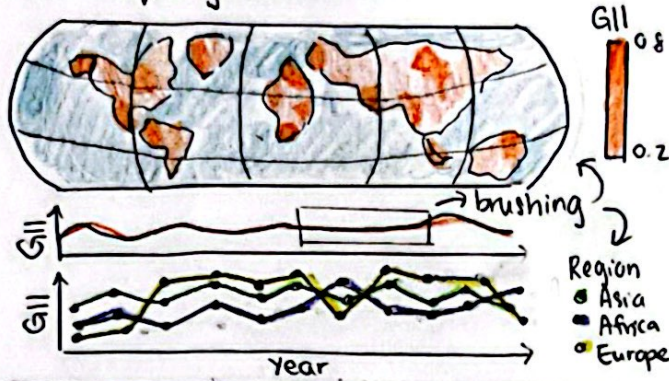
The Roadblocks to Gender Equality



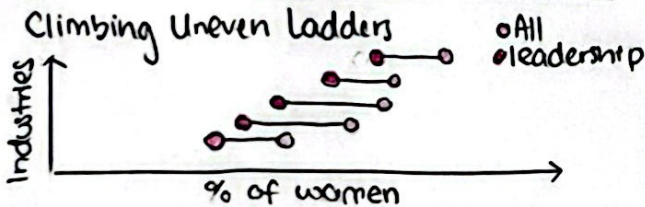
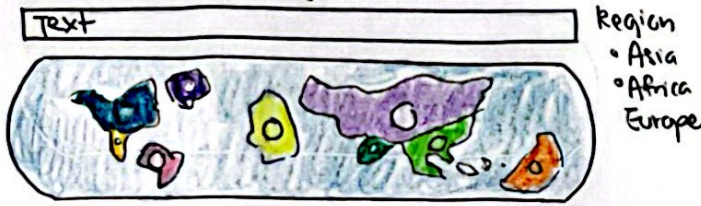
Author: Rebecca Chan Ting Yee
Source: - - - - -

The Global Gender Gap

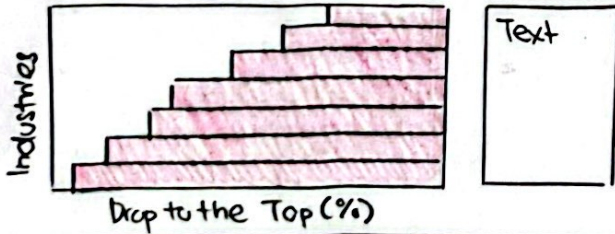
Gender Inequality Across the Years



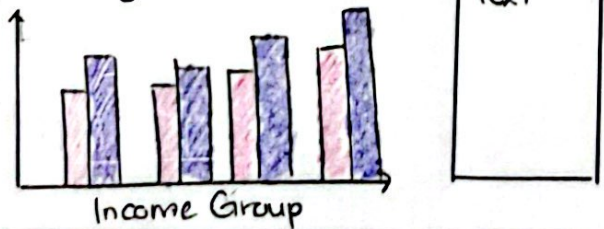
The Unequal Reality of Maternal Health



Drop to the Top



Literacy

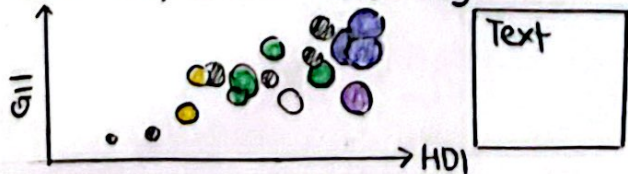


What Holds Equality Back

Perceived Obstacles

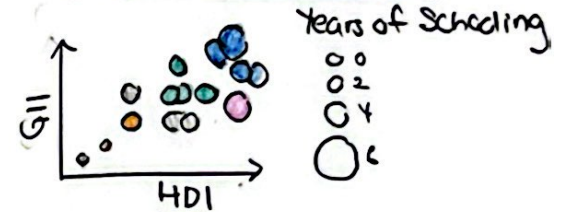


Does Progress Mean Equality



FOCUS

0 Ob1 0 Ob2 0 Ob3 0 Ob4



- selecting an obstacle in the legend will highlight the relevant data on the map & bubble chart
- missing country data will be displayed in grey, & when hovered over displays 'data not available'

OPERATIONS

(1) TOOLTIPS

- Hovering over any of the data will give the detailed value

(2) BRUSHING

- brushing the line chart will allow users to view the GI stats from different years & for different regions

(3) Selection On Legend

- selecting an obstacle will highlight the relevant data on both the choropleth map & bubble chart

DETAILS

- Dependencies: Python (Panda) for data cleaning
- Specific requirements:
 - larger map for clarity
 - annotations
 - rename legends / tooltips
- Estimated time & effort:
 - 3 days to build idiom
 - 2 days for implementing interactions
 - 2 days for formatting the visualisation