

Channelling Hans



A tribute to Mr. Hans Rosling



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Part 1 – Channelling Hans

In this part, we tried to create a visualization similar to the GapMinder World Visualisation using d3.js. Below are the key features of the visualization:

- [GCI_CompleteData4.xls](#) – This is the dataset used for visualization and contains attributes like Country, GDP, Population etc which will be used to represent visualisation.
- [Bubble Plot](#) – A bubble plot where each bubble represents a particular country and its area represents the population for that country.

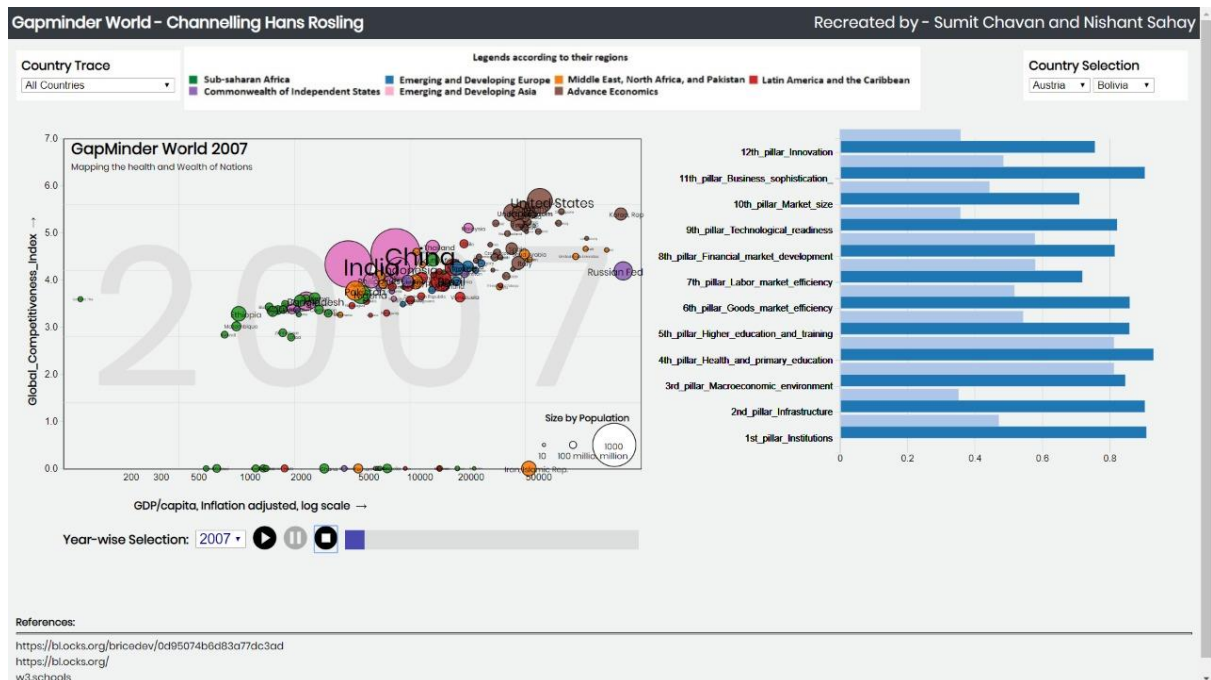


Fig. – Bubble plot for each country with its area as radius

- [Axes](#) – GDP is taken on X-Axis and Global competitive Index is taken on Y-Axis.
- [Animation](#) – The transition in country statistics (GDP and Global Competitive Index) from 2007 to 2017.
- [Labels](#) – Appropriate labels have been used for displaying country name, the X-Axis, the Y-Axis etc.
- [Mouse Hover](#) – On hovering over a particular bubble, the mouse pointer should display a tooltip window which has the details of that particular country (Country name, Year, GDP, Life Expectancy and Population).

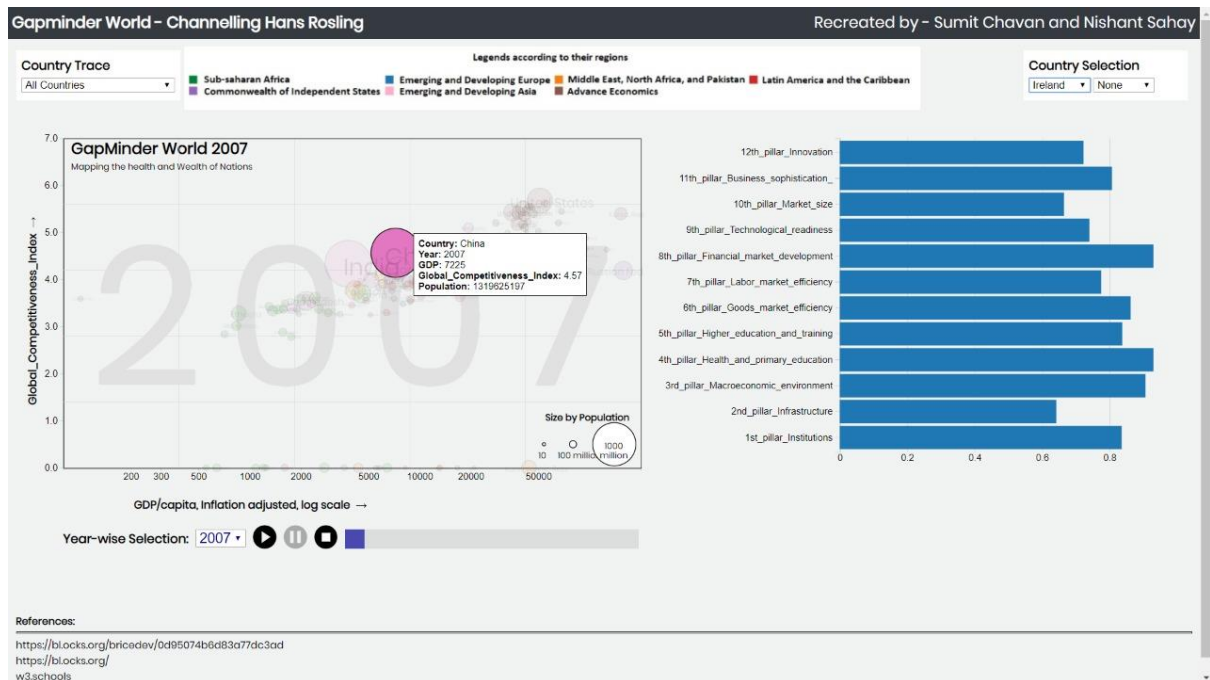


Fig. – Mouse hover displaying the details of that country

- **Dropdown menu** – It consists of list of all the countries through which we can select a country. By default, all the countries will be displayed on selecting play button.
- **Play/Pause/Stop** – Buttons have been added to play, pause and stop the visualisation. Please find the screenshot for the same below.

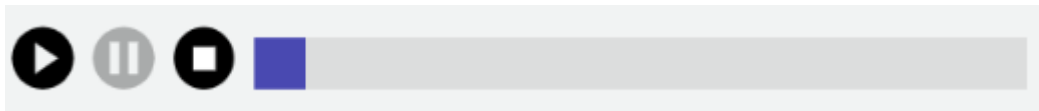


Fig. – Play, Pause and Stop Buttons for controlling the animation

Part 2 – Extending Hans

In this task, we have to add three extra features to previously created visualisation:

1. Adding a control which allows the journey of a country to be seen as a trace of positions as a static visualisation.

Below features were added to the visualisation:

- **Drop Down Menu** – We can select the particular country from the drop-down menu and then the animation is stopped and the trace of that country from 2008 to 2017 is displayed.
- **Transparency** – On mouse click, only the particular country is highlighted and all other colours are made transparent.
- **Selection** - When single country is selected, we won't be able to see the bar graph for multi variate analysis, though if all countries are selected, we can see the same.

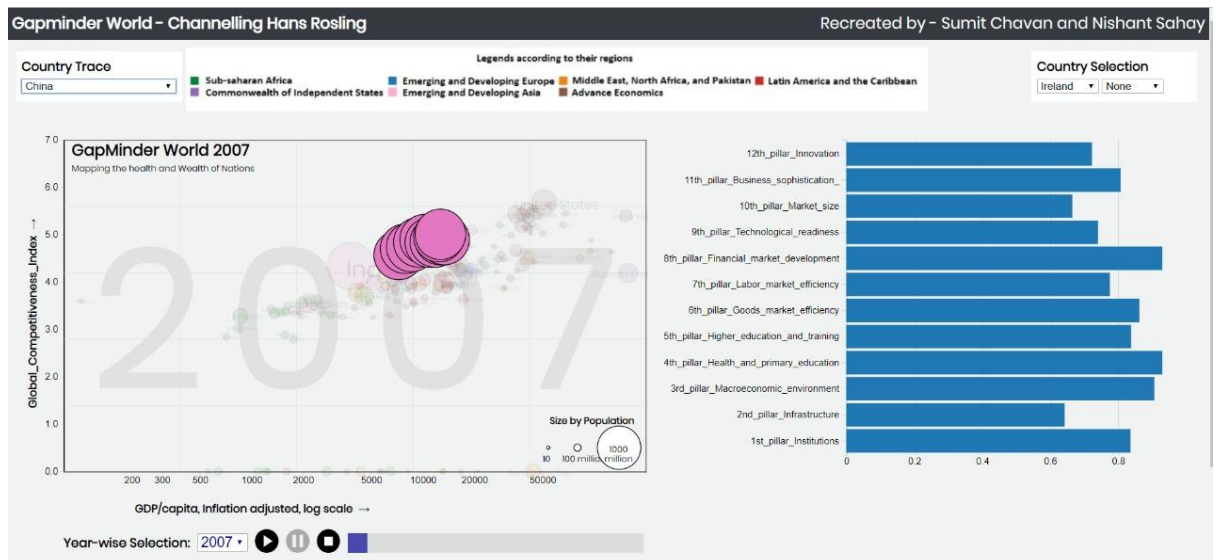
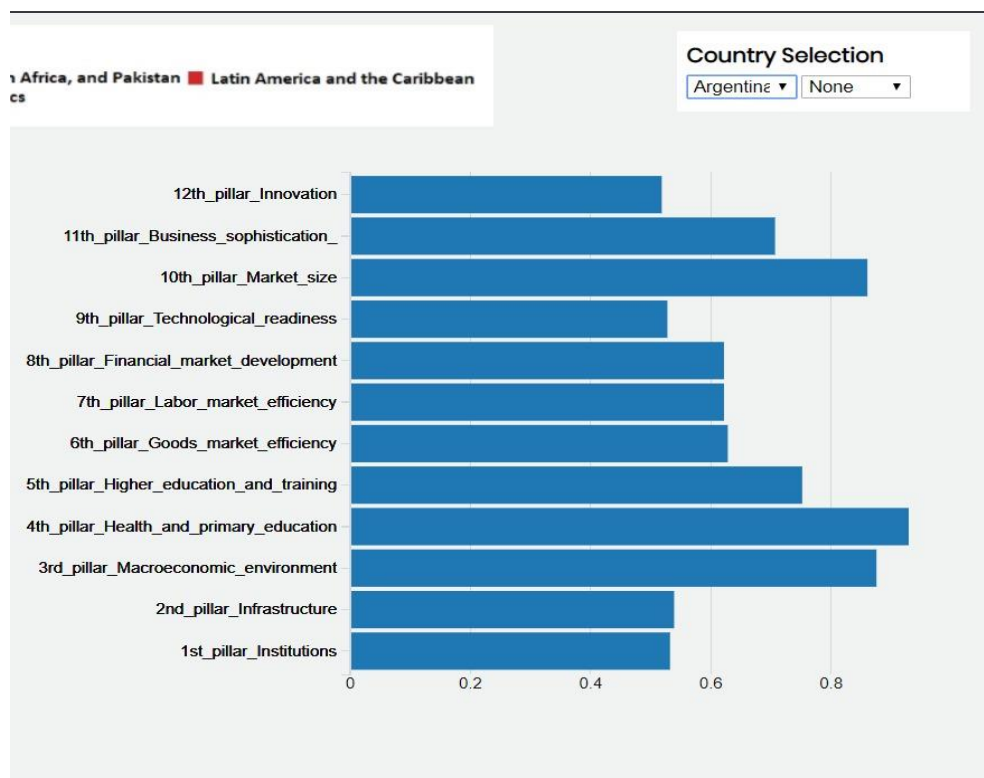


Fig. – A country showing its trace

2. A connected visualisation that shows the individual pillars of the Global Competitiveness Index for a selected country and should update as the year changes

We added the below features to our visualisation:

- **Bar Chart** – A bar chart is added below the canvas which has individual pillars on the X-Axis and their corresponding values on Y-Axis.
- **Transition** – The visualisation is updated as the year is changed.



3. A connected visualisation for the previous part so that the individual components of the competitiveness index for two selected countries can be compared.

Below features were added to visualisations:

- **Group Bar Chart** – A group bar chart has been used to compare all the pillar of two countries.
- **Transition** – The length of bars change with the change in year.

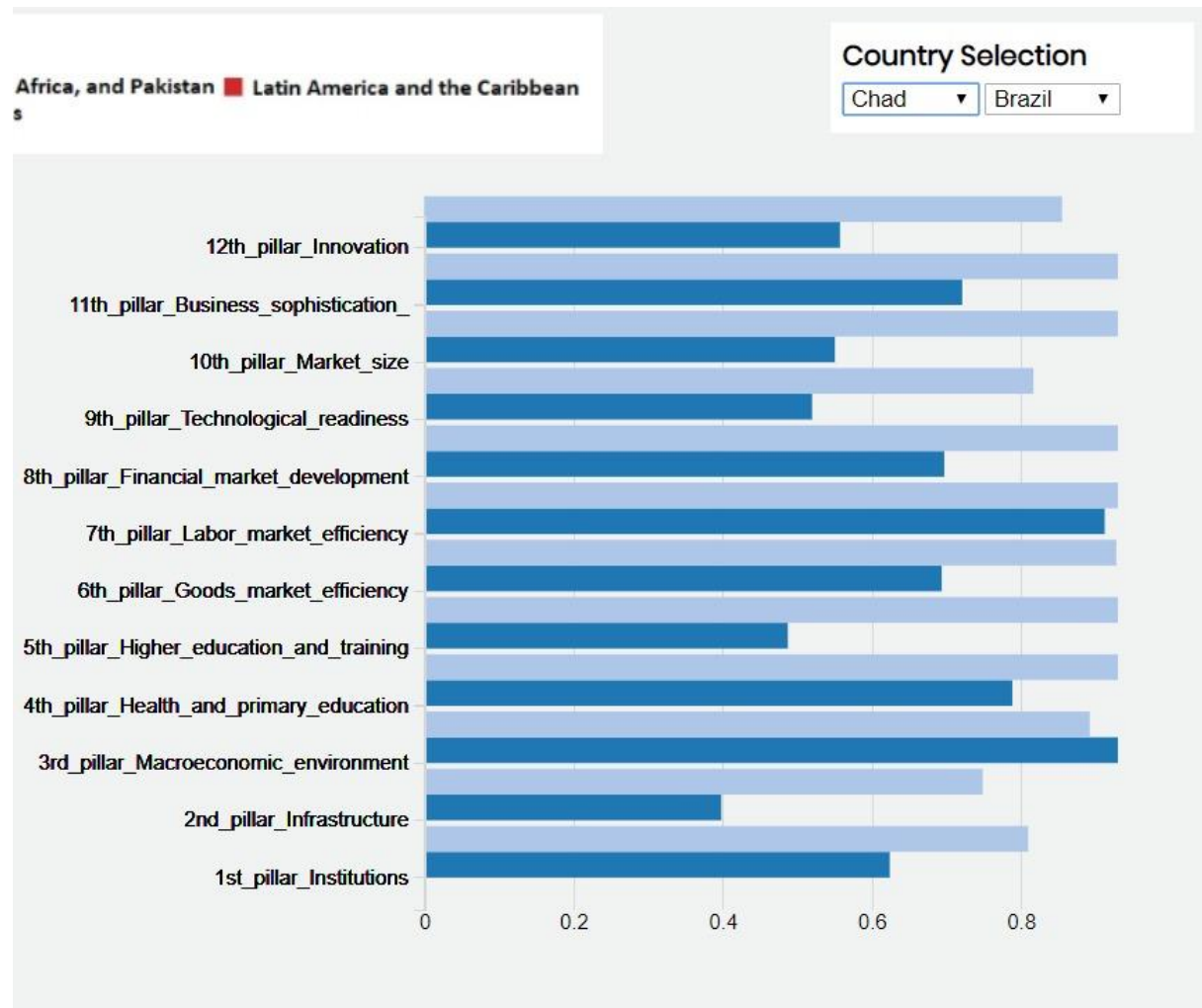


Fig. – Comparison of competitiveness of two countries