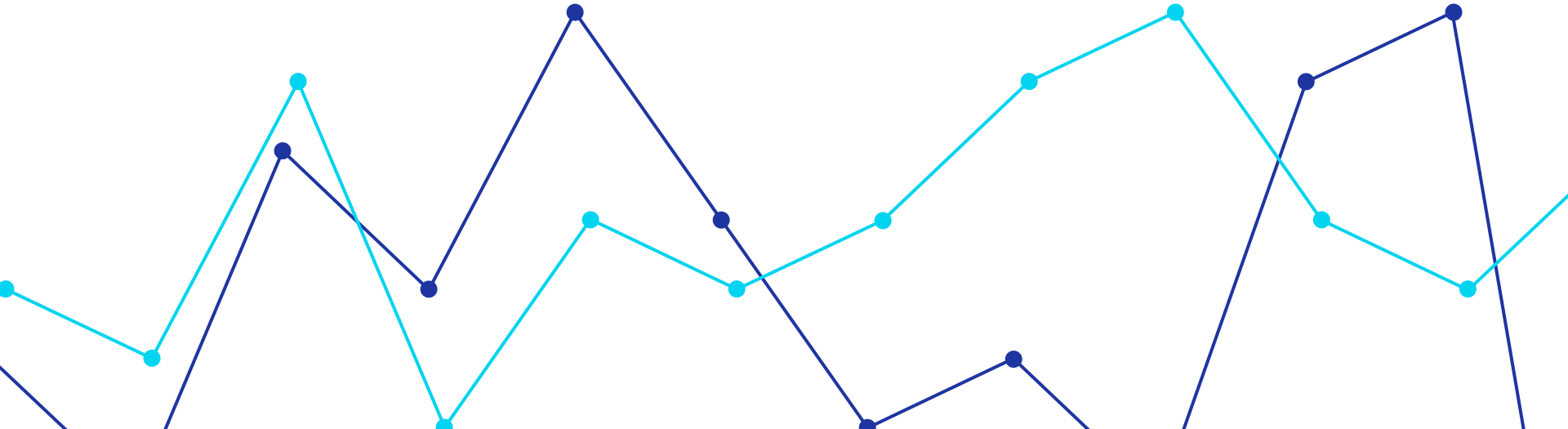


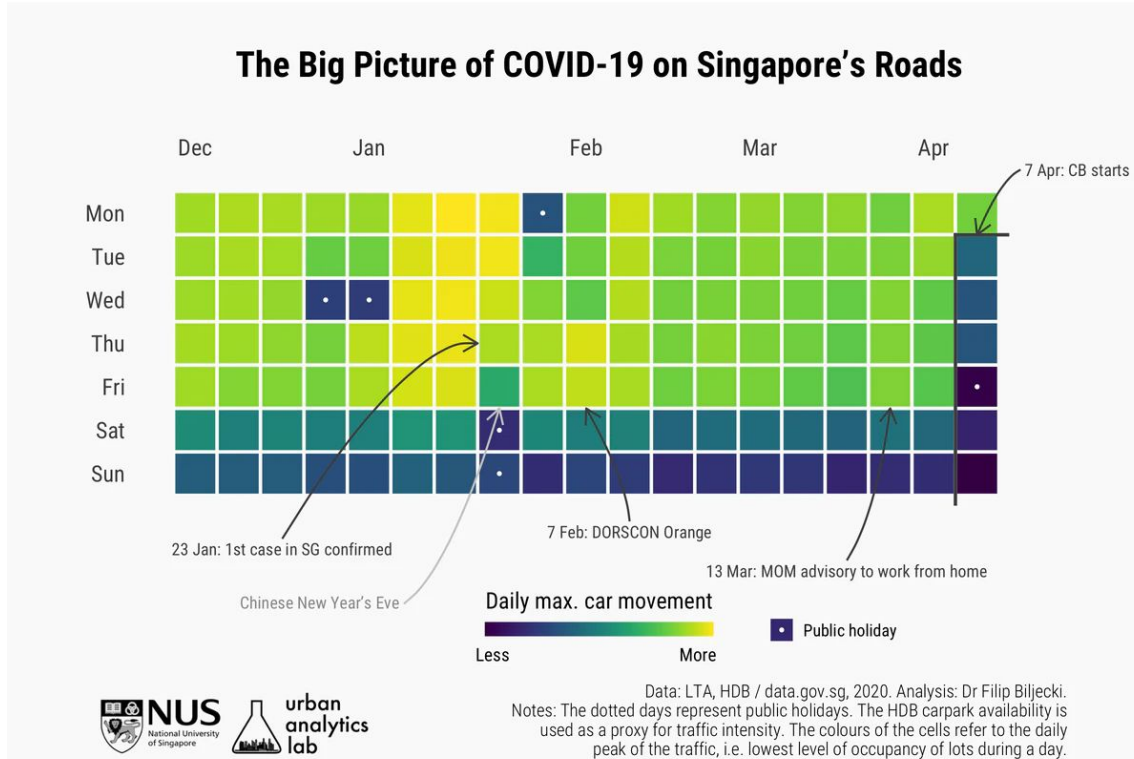
# CSC3007

## Milestone 1 (M1)

Critique/Validations of Visualizations  
Team 3



# VISUALIZATION 1



Visualization 1 illustrates the traffic trend on Singapore's Roads, affected by the Covid 19 Pandemic.

# CRITICISM

## CHART 1

The Big Picture of  
COVID-19 on  
Singapore's Roads

### IDIOM

1. The idiom used in this visualization chart is a heat map that displays magnitude of a phenomenon as color in 2D dimensions but the y-axis label was located right below the chart title. Unexpectedly, the layout of the chart may give the viewers a misleading direction or impression that they are viewing a calendar.
2. The colours utilized are very confusing. The darker and intense colours signifies lesser traffic while yellow and green is used to signify a higher traffic. In User Interface (UI) design, this should be done in reverse.

# CRITICISM

## CHART 1

The Big Picture of  
COVID-19 on  
Singapore's Roads

### DATA

1. No clear direction on the axis parameters with x-axis label showing by months (Dec-Apr) while y-axis label showing by week (Mon-Sun). Although there is found to have arrow indications highlighting those special events happening during Circuit Breaker, but it did not state which year does it occurred.

Therefore, viewers are not be able to comprehend the information immediately by looking at the chart.

2. The dataset used to present data on the chart do not correspond to the chart title. In fact, it depicts the HDB carpark lots availability instead of the traffic intensity on the Singapore's road.

# IMPROVEMENT (CHART 1)

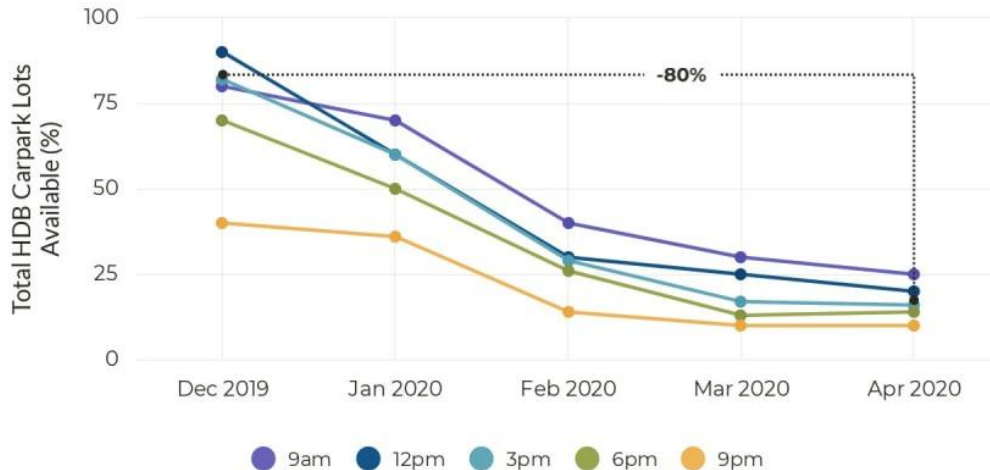
1. Transform the existing chart type into a line chart, which may be used to show patterns in traffic flow on Singapore's roads over the epidemic period.
2. In order to provide viewers with more accurate representations, the correct dataset should be utilized instead of the existing one. On top of that, it will be nice to have an organized short description as its legend to be positioned besides the improvised chart.
3. The x-axis label should start from the baseline of the chart in the format of MM-YYYY (e.g., Dec 2019) to give a clearer indication. Also, the y-axis label will be renamed to “Total HDB Carpark Lots Available (%)” so that the data shown is correctly reflected.
4. The various shades of green used to indicate the daily maximum car movement should be readjusted, as light color generally denotes low value and dark color denotes high value.

# PROPOSED SOLUTION (CHART 1)

Line Chart

## The Big Picture of Covid-19 on Singapore's Roads

DATA: HDB Carpark Availability



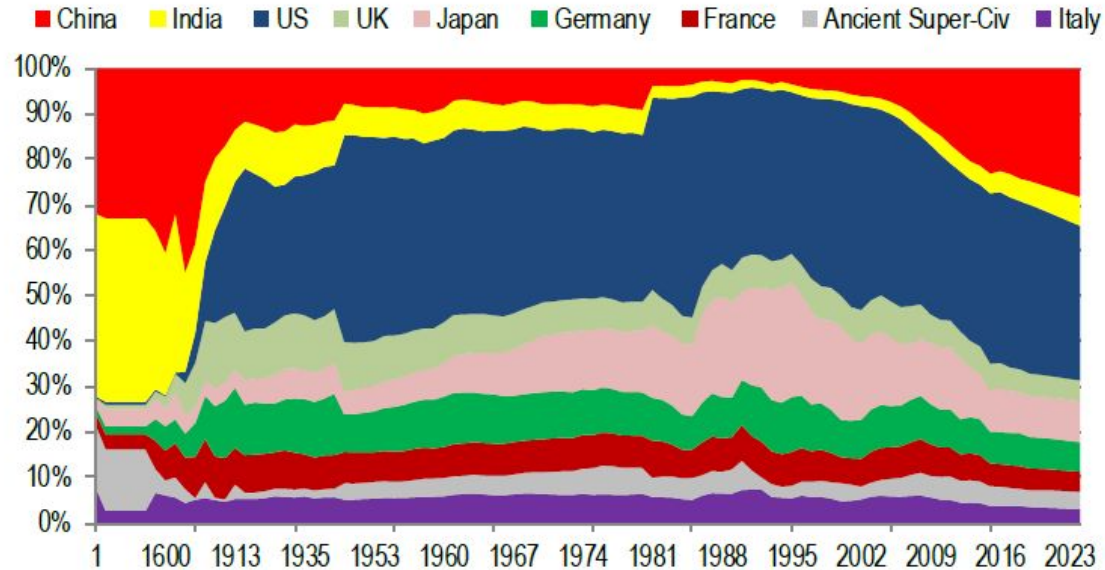
**Up to 80% decrease**

Decreasing availability of HDB parking lots as Covid measures tightened.

More people are staying at home, therefore lesser vehicles can be seen on the road

# VISUALIZATION 2

The progression of world GDP – percentage of world GDP by major countries/regions. Are current trade tensions really an attempt to stymie China's impressive rise?



Source: BofA Merrill Lynch Global Research, Angus Maddison, IMF GDP data and estimates between 1980 and 2024. Ancient super-civilizations include Greece, Turkey, Algeria, Iraq, Egypt and Iran.

Visualization 2 illustrates the Global output (measured in gross domestic product) from the beginning of the common era (1600) of the Ancient super-civilizations.

# CRITICISM

## CHART 2

The Progression of  
World GDP

### IDIOM

1. The idiom used in this visualization chart is a 100% stacked area chart. Considering the chart is a non-intuitive presentation, it may be unfamiliar to many.

It is at this point that the misconception arises that values overlap, implying that they all begin at 0. The truth is that each series representation begins where the previous one ends.



# CRITICISM

## CHART 2

The Progression of  
World GDP

### IDIOM (CONT'D)

2. Overuse of different colors makes it difficult to distinguish one from another, resulting in viewers having a hard time to see the region encompassed by each of the countries.
3. Because of what was mentioned above, it also affects the chart for being able to demonstrate the trends over time. The range of values on the x-axis (e.g., years) is inconsistent with no equal interval between start and end year.

# CRITICISM

## CHART 2

The Progression of  
World GDP

### DATA

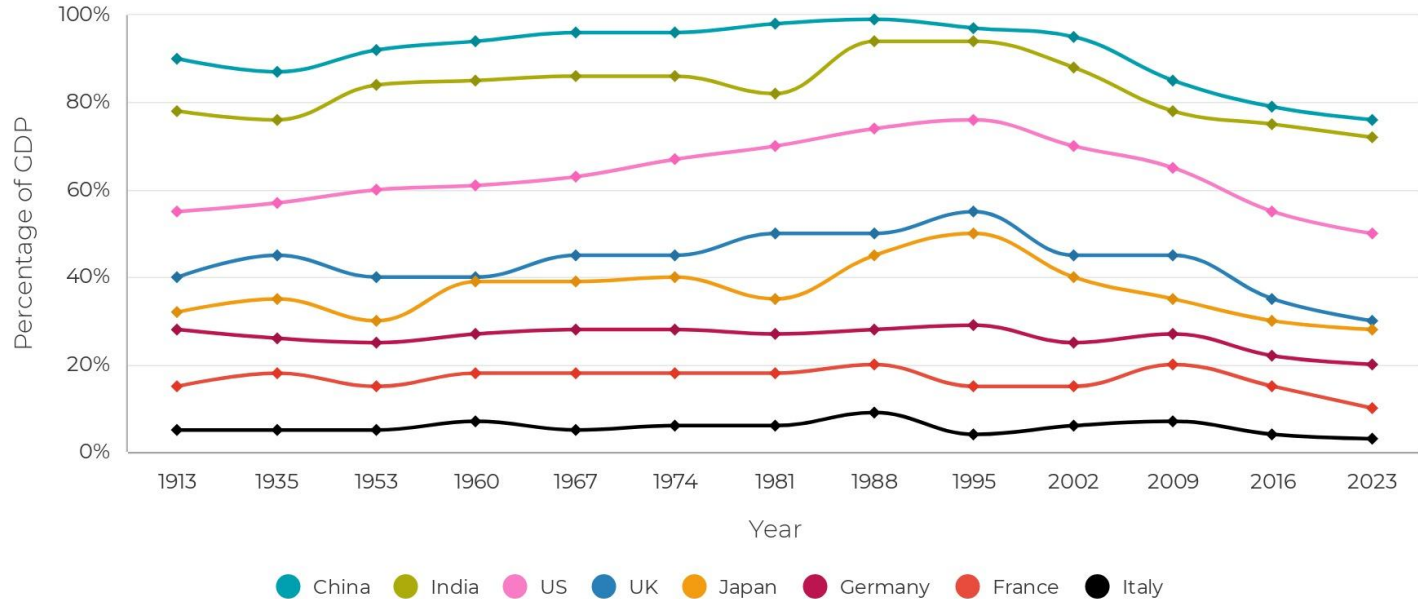
1. Data represented in the chart is messy as it has a huge jump from the starting point to its first year as shown on the x-axis label (e.g., 1 to 1600, 1600 to 1913). The spacing increments on the x-axis varies because of missing data.
2. Data shown is also sloppy as there are many overlapping data to show on which country has progress the most over the years.

# IMPROVEMENT (CHART 2)

1. The idiom used in the improvised visualization chart will be turned into a line chart so that the values can be depicted easily.
2. Originally, x-axis label represent the years but it was replaced with the name of the countries and y-axis label would remain unchanged. The only difference was that now there will be an indication labels on both the x and y-axis to reduce viewers confusion about the chart.

# PROPOSED SOLUTION FOR CHART 2

## The Progression of World GDP



# THANK YOU

Any questions?

