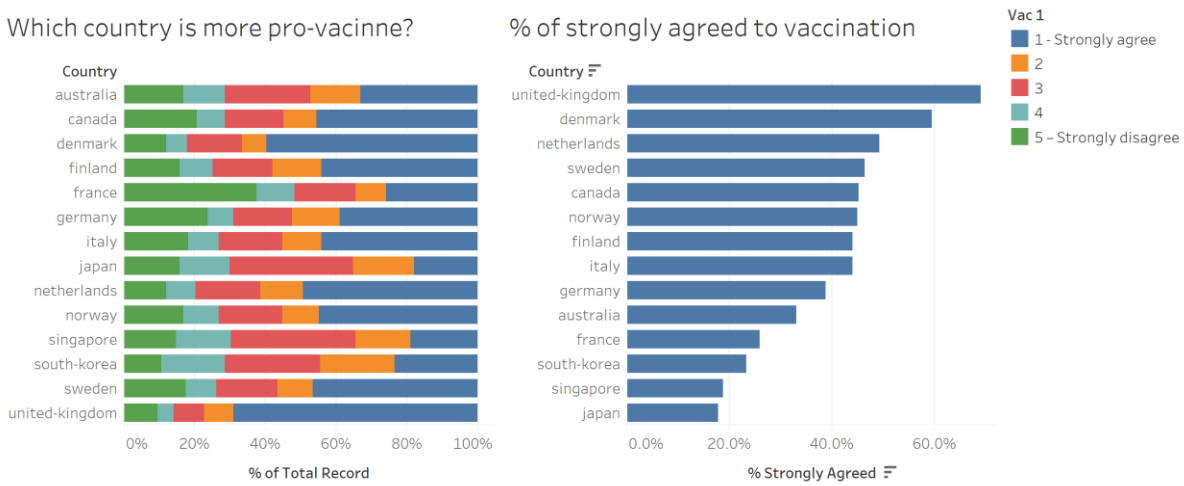
# ISSS608 Visual Analytics and Applications

DataViz Makeover 2

## The Scene

A research team is currently conducting a study to understand the willingness of the public on Covid-19 vaccination. Below are two data visualisation created by one of the research scientists of the research.




## The Task

a. Critic the data visualisation from both its clarity and aesthetics. At least three from each evaluation criterion. (15 marks)
b. With reference to the critics above, suggest alternative graphical presentation to improve the current design. Sketch out the proposed design. The proposed alternative design should include interactive techniques. Support your design by describing the advantages or which part of the issue(s) your alternative design try to overcome. (15 marks)

c. Using Tableau, design the proposed data visualisation. (25 marks)
d. Provide step-by-step description on how the data visualisation was prepared. (30 marks)
e. Describe three major observations revealed by the data visualisation prepared. (15 marks)

## The Data

age
gender: 1 (Male), 2 (Female)
household_size: 1-7, 8 (8 or more), 9 (don't know), 10 (prefer not to say) i.e. number of people in household
household_children: 1-5 (0-4), 6 (5 or more), 8 (prefer not to say) i.e. number of children under 18 in household
employment_status: 1 (full time employment), 2 (part time employment), 3 (full time student), 4 (retired), 5 (unemployed), 6 (not working), 7 (other)

The data used by the research team was obtained from Imperial College London YouGov Covid 19 Behaviour Tracker Data Hub hosted at Github. The research mainly utilised survey conducted on January 2021. The field *vac-1: If a Covid-19 vaccine were made available to me this week, I would definitely get it:* of the survey is used to prepare the data visualisation. For the purpose of this DataViz makeover, you are encouraged to use the data collected from vac2_1, vac2_2, vac2_3, vac2_6 and vac3 too. You are also encouraged to use fields such as *gender*, *age*, *household_size*, *household_children* and *employment_status* to provide on-demand parameters that will allow you to break down the results by gender, age, and so on.

vac2_1: I am worried about getting COVID19
vac2_2: I am worried about potential side effects of a COVID19 vaccine
vac2_3: I believe government health authorities in my country will provide me with an effective COVID19 vaccine
vac2_6: If I do not get a COVID19 vaccine when it is available, I will regret it
vac_3: If a Covid-19 vaccine becomes available to me a year from now, I definitely intend to get it
1 to 5 (Strongly agree to strongly disagree)

## Deliverable

- Upload the deliverable for (c) onto Tableau Public (https://public.tableau.com/s/) and the remaining sections (a), (b), (d) and (e) in a web blog document. You are required to provide the links for both the web blog and Tableau Public on eLearn and on course wiki.

## Submission date

19th February 2021 (Friday), mid-night 11:59pm.

Calculate percentage
Check normality assumption i.e. percentage vs number of countries
Use square root or log percentage to transform if necessary
Percentage for strongly agree/agree for vac_1 vs Number of survey responses
Funnel plot
Change to strongly disagree/disagree
Change to vac2_1

**For your eyes only ☺**

This makeover exercise have something to do with visualizing uncertainty.

Why It's So Hard for Us to Visualize Uncertainty (https://hbr.org/2016/11/why-its-so-hard-for-us-to-visualize-uncertainty).

Chapter 16 Visualizing uncertainty (https://serialmentor.com/dataviz/visualizing-uncertainty.html) of **Fundamentals of Data Visualization** by Claus O. Wilke.