**COMP7507 Visualization and Visual Analytics**

**Project Report**

**Visual Analysis on the Covid-19 Pandemic**

**Recovery of Hong Kong**

Group 7

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# Introduction

COVID-19 pandemic has impacted diverse aspects in the Hong Kong society since 2019. Whether this city has recovered to its pre-pandemic status is unobvious and difficult to observe. The concept of recovery is abstract, thus more concrete evaluations are needed.

Inspired by Loh et al., this report measures the recovery vitality of Hong Kong by three key indicators: 1) office price, rent and vacancy rates, 2) public transportation ridership, and 3) retail spending. The outcome of our work is a package of data visualization workbooks with necessary interactions and analysis on these materials.

# Datasets and Visualization Tool

In this part, we will briefly describe the composition of our datasets, giving an overview of the data structure of the three indicators above. Also, we will discuss the visualization tool and methodology we chose.

**Office data**

Office buildings are the most common location for work and thus can reflect the health of economy. There are various data related to office, among which we care the most are as follows:

Rent (/m2 per month)

Price (/m2)

Vacancy rate

The data above relies on seven regions of Hong Kong where the office buildings are centralized. We keep this feature in case there are potential discrepancy among different regions.

**Transportation**

(Overview. Can follow the above for reference. Details can be given in the later part)

**Retail**

(Overview. Can follow the above for reference. Details can be given in the later part)

**Visualization Tool**

Initially, we considered Plotly to proceed our work. However, we find it hard to merge our contributions together. In that case, we finally chose Tableau Cloud to conduct our visualization project because it can be easily used for collaborative development.

The Tableau is also good at displaying data on a map – in this case the map of Hong Kong. Although Tableau only provides geographic roles limited to province-level, we can reduce the granularity by importing Hong Kong’s space file. Tableau is also good enough for realize user interaction with simple operations on the workbook.

# Office: vacancy, rent and beyond

Data Details

Design

Visualization

Analysis

# Transportation

(Suggestion: develop this part from 4 subtitles: 1) detailed data structure (the columns), 2) design and how you came up with the design (with text), 3) final outcomes (basically your tableau work, just put some images here and briefly describe them) and 4) analysis)

# Retail

(Suggestion: develop this part from 4 subtitles: 1) detailed data structure (the columns), 2) design and how you came up with the design, 3) final outcomes (basically your tableau work, just put some images here and briefly describe them) and 4) analysis)

# Conclusion