Death and Revive of Downtowns in Hong Kong

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Background and Objective

The outbreak of Covid-19 has been proved to have numeric effects on downtowns (Loh, 2021). In this research, we will focus on downtowns in Hong Kong, trying to figure out how the pandemic impacts people's life styles, including way of work and entertain. Then based on the analysis, we will give suggestions on policy about recover the city.

Data Sets

Office vacancy rates, public transportation ridership, and retail spending are three typical indicators to evaluate the prosperity of downtown (Chapple et al., 2022). In that case, we plan to observe these three kinds of data in 2019 (before Covid-19) and 2022/2023 (after Covid-19) and visualize them. The data sets of office vacancy rates in Hong Kong can be found on _____. Public transportation statistical data is also publicly available and can be accessed on HK Government website _____. As for retail spending, …

Methodology

Tableau is the primary tool to be taken into account. Considering that we are going to measure and evaluate the vitality of downtown in Hong Kong, one way is to display it on a map of Hong Kong – and that's exactly what Tableau is good at (DataFlair, 2023). Then in order to build an interactive demo, Plotly may be a good choice. Initial plan is to apply various way of data visualization and display with different dimensions of data properties, trying to identify the potential relationship among data sets themselves. Then focus on the prominent relationships and provide analysis about them to figure out the weights of these three indicators on evaluating the prosperity. With comparing the data from 2019 and 2022/2023, we can draw a conclusion on whether the city has recovered from the impact of Covid-19, and what the government should do to speed the recovery procedure.

To do

1. Collect data sets on office vacancy rates, public transportation ridership, and retail spending respectively, process and clean them;
2. Visualize the data preliminarily, try identifying the significant properties using Tableau;
3. Solve potential technical and analytical problems, i.e., prepare that the data does not show obvious relationships with each other, then maybe we have to come up with a new indicator;
4. Analyze and correct the visualization;
5. Build demo;
6. Write literature materials (group and individual report et al.)

Task Timeline (非正式，仅供组员参考)

Task	Due	Members
Collect data sets	Oct 17	All
Preliminary visualization	Oct 24	
Pick and drop visualization patterns, analyze problems and draw a conclusion	Nov 7	
Complete demo and tuning	Nov 21	
Group and individual report	Nov 28	
Note: Considering potential problems, additional time should be reserved just in case, tasks above should be done as quickly as possible.		

References

Loh, T. H., & Kim, J. (2021). To recover from COVID-19, downtowns must adapt.

Chapple, K., Leong, M., Huang, D., Moore, H., Schmahmann, L., & Wang, J. (2022). The death of downtown? Pandemic recovery trajectories across 62 North American Cities.

DataFlair. (2023, August 4). Top Tableau Case Studies – JP Morgan, Lenovo & Lufthansa. from https://data-flair.training/blogs/tableau-case-studies/