

A study on the transformation of overall awareness in shopping streets according to the resolution of information sharing with individual businesses

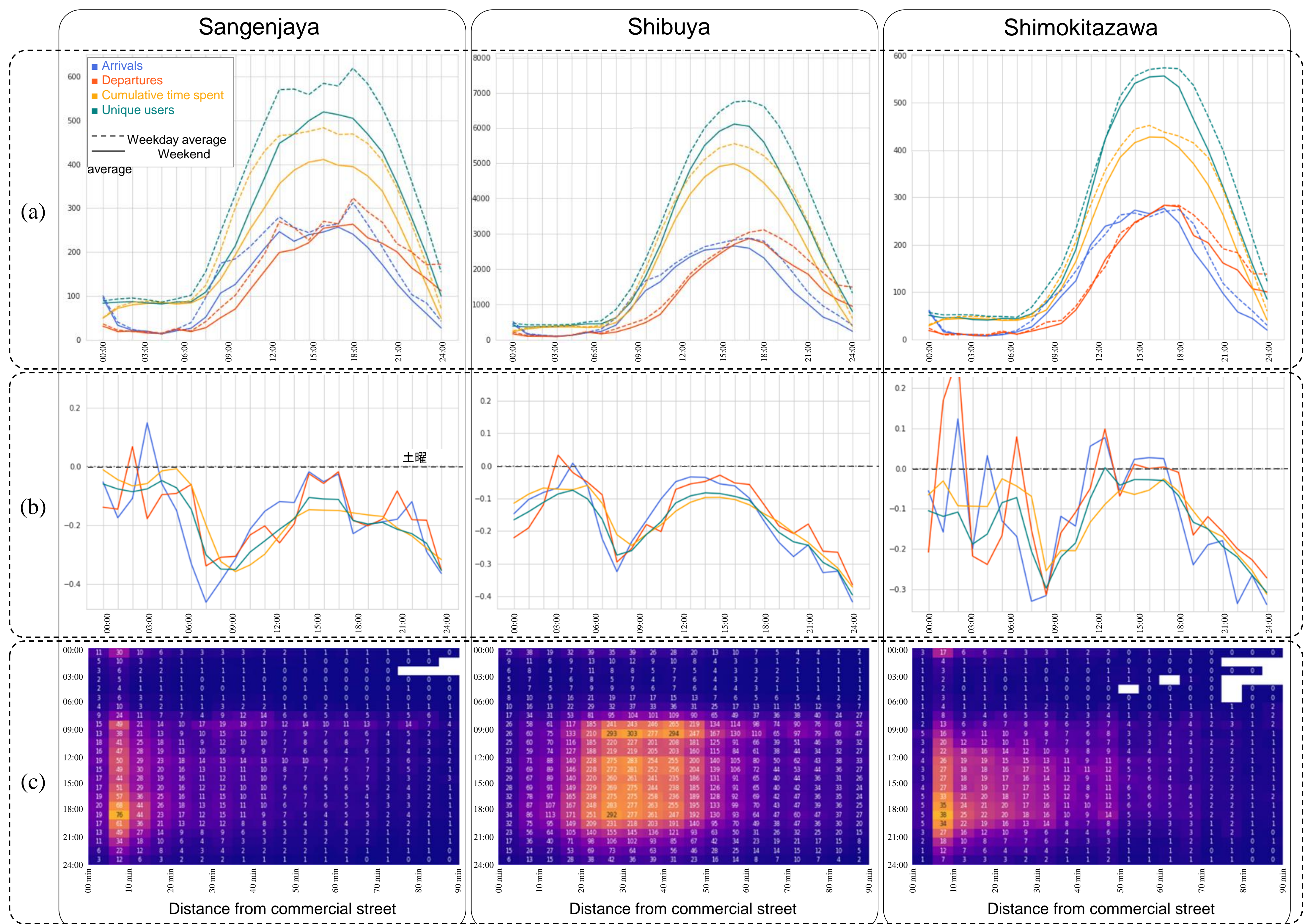
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Background

Commercial streets are gradually declining, making human settlements more vulnerable as they play a fundamental economic and social role in communities. To counter this decline, we must first understand the behavior of their customers to propose more effective policy changes aimed at commercial revitalization

Different behavior by street

While the number of visitors can vary significantly between commercial streets, the overall visitation trends are quite similar for weekdays and weekends in both absolute (a) and relative (b) terms. Nevertheless, when we analyze the Commercial streets by identifying the home location of the visitors (c), we can identify significant variation on the source of their customers. We use this information to simulate the attraction different commercial streets have over their surrounding areas, and what how diverse revitalization policies could alter such patterns, both on the temporal and spatial scales.

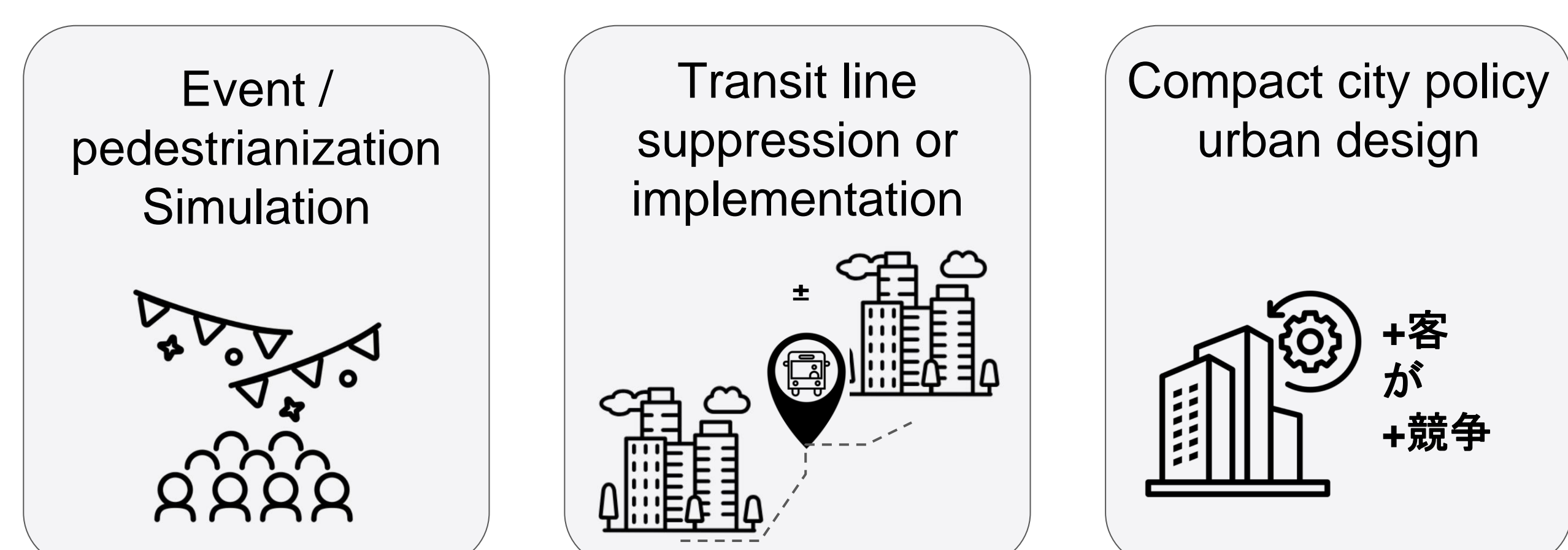


Methodology

For this research we first need to identify the source of the people visiting commercial streets. To do so, we estimate the distance between commercial streets and visitors' homes using network analysis. We finally classify the visits based on the time of visit and the estimated distance relative to the shopping streets. We use such data to predict customer visits using Spatial Interaction Models.

Case studies

Our research aims to analyze multiple case studies frequently implemented as commercial revitalization strategies to analyze their effectiveness to attract more customers and to distribute the benefits between stores equitatively or if current strategies could to commercial gentrification.



Stakeholder interaction

The results will be published on a webpage to inform store owners and commercial associations of the impact of diverse policies. Furthermore, this webpage will be used to obtain data to improve the model precision.

