AirBnb: A Disruptive or Exploitive Force in Informal Tourism

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Title : Effects of AirBnb on Hotel/Rental business

Abstract:
Airbnb describes itself as 'a trusted community marketplace for people to list, discover, and book unique accommodations around the world'. It is essentially an online platform through which ordinary people rent out their spaces as accommodation for tourists.

Our work involves three major aspects:
I) Trying to segregate Airbnb rentals being used as a corporate versus individual rentals, in compliance with the local city laws.
   a) Which hosts are running a business with multiple listings and where are they?
   b) How do airbnb's compare across corporate versus individual rentals?
      i)   By cost
      ii)   By facilities
      iii) By star rating
      iv) By text reviews

II) Analysing how growth of Airbnb is affecting hotel business in terms of revenues and occupancy.

      a) Are the revenues and occupancy rate positively or negatively correlated with growth of AirBnb?

      b) Whether a regions' affluence has an effect on the above?

III) Proximity of Airbnb listings to tourist places.

Brainstorming:
1. Define detailed hypothesis and come up with definitions to categorize AirBnb listings into corporate and individual listings.
2. Categorization of tourist and non-tourist places.
3. Merging AirBnb dataset with hotel revenue dataset to uncover hidden insights.

Methodology:
1. Data Collection:
a. AirBnb Listings: We are analysing data from the following areas: Inside Airbnb is an independent, non-commercial set of tools and data that allows you to explore how Airbnb is really being used in cities around the world. By analyzing publicly available information about a city's Airbnb's listings, Inside Airbnb provides filters and key metrics so you can see how Airbnb is being used to compete with the residential housing market.
http://insideairbnb.com/get-the-data.html

b. Individual Landmarks: Dataset for tourist places in and around New york city
   https://data.cityofnewyork.us/Housing-Development/Individual-Landmarks/ch5p-r223
c. Hotel Occupancy Statistics
   https://www.statista.com/markets/420/travel-tourism-hospitality/

2. Data Preprocessing
3. Relevant Analysis based on Hypothesis
   Tools we will be using:
   ggplot, leaflet, R shiny, D3.js and text processing libraries.
4. Visualization