**Clearing the air: understanding the factors that influences the number of bookings an AirBnB receives – compiled from AirBnB listings in New York City**

**INTRODUCTION**

In the past decade, AirBnB has exploded onto the global market and dominated the new digital frontier as a major player. It’s now one of the staple businesses in the ‘sharing economy’, a marketplace where retail investors and mum and dads looking for a side income can enter a market that was traditionally reserved for those with large capital, and use assets they already have to create their own revenue.

AirBnB provides the means for a customer who owns property to lease out a room or entire hom to lodgers. An AirBnB customer, or host, can set the terms for their listing: the minimum number of nights a lodger has to stay, price per night, rooms in the property etc. providing greater flexibility and freedom in how they run their business.

The impact of AirBnb has been monumental. In 2015-16, AirBnB was believed to have contributed $1.6 billion to the Australian GDP alone. The increasing popularity of AirBnB has led to real estate in many cities being swooped up and used as AirBnBs, driving up both real estate prices and competition from other AirBnBs.

As such establishing an AirBnB and ensuring its success can be fraught with risks due to both the increased competition and the greater capital a person has to put down to purchase real estate. It is now more paramount than before to ensure every advantage is taken to safeguard the success of an AirBnB. Therefore it would be vital to know what elements contributes to an AirBnB’s success, and how an AirBnB host can control these elements when setting up an AirBnB such as property location, the minimum number of nights a lodger is required to stay, the price per night and more.

By understanding what impact these factors might have on the rate of bookings brought in, AirBnB hosts can be prepared in entering the market and protecting their investment. As such an analysis that looks at the factors that influences the number of bookings an AirBnB receives would be incredibly helpful for both interested and experienced AirBnB hosts.

**DATA**

The primary data used was lifted from a dataset of AirBnB listings in New York City during 2019, compiled by user Dgomovon on Kaggle.com. The data was pulled directly from listings on the AirBnB website that were listed for New York City and advertised during 2019. Therefore, the data consists of the features seen in an AirBnB listing such as the name of the listings, the listing ID, the name of the host, the host ID, the borough it was located in, the specific neighborhood it was in, it’s address, the latitude and longitude, room type, price per night, minimum nights required to stay, number of reviews it has received, date of the review and other miscellaneous details.

How many bookings a listing receives is not publicly available so instead the number of reviews a listing has will be used as a proxy for the number of bookings a listing received, given that to provide a review, a reviewer had to have first booked and stayed at the AirBnB. The features found in a listing will also be used to assess how they influence the number of reviews a listing receives.

To supplement that data, data will also be taken from the FourSquare API which provides geographical and location data based on a specific area. It would be interesting to see how the close proximity of amenities could influence the booking rate of an AirBnB listing. This could help determine where property should be purchased to set up an AirBnB.

New York City is globally renowned for its museums, with many famous cultural institutions often right next to a museum. As such an analysis would be conducted to see how the proximity of an AirBnB listing near a museum could influence its success. To accomplish this, the FourSquare API will be used to pull the location of museums throughout New York City and this will be analyzed in conjunction with the geographical locations of AirBnB listings.