Final Report: Capstone Project – The Battle of Neighborhoods My Kansas City Sports bar Venture

1. Introduction/Business Problem

In Superbowl LIV the Kansas City Chiefs trailed the San Francisco 49'ers, 20-10, with 17:40 left in the game. But faithful fans knew that the Chiefs were still in the game. In the divisional round of the playoffs the Chiefs trailed the Texans 24-0 and trailed the Titans 17-7 in the AFC Championship game before coming out ahead in both games. The final score was Kansas City Chiefs 31, San Francisco 49ers 20. Kansas City had won its first Superbowl in *fifty* years.

Following the game, Donald Trump made a gaffe on his Twitter feed congratulating Kansas City and saying they made the 'Great State of Kansas' proud. Kansas City is actually in Missouri, not Kansas. But then I realized that perhaps not unlike Donald Trump I was a Chiefs fan and of their coach Andy Reid but I knew little about Kansas City, Missouri. Being enrolled in the IBM Applied Data Science courses I decided to create a hypothetical 'fan mission' to open up my own Chiefs-themed sports bar in Kansas City.

Being completely new to Kansas City, not having even traveled there before, I can't do this by feel or prior knowledge. I must let the data tell me a story on where to locate my new sports bar venture. I will need neighborhood data to show me patterns of where the venues would cater to a sports bar but be careful to avoid competition from other local bars, especially sports bars. This will minimize the risk to the success of my new venture.

2. Data

I was able to locate a Wikipedia page on the neighborhoods of Kansas City, Missouri here: https://en.wikipedia.org/wiki/Neighborhoods of Kansas City, Missouri. Parsing that page to data I will create a list of neighborhoods. I will be using Nominatim geolocator services for latitude and longitude data on these neighborhoods. Nominatim is a search engine for OpenStreetMap data. I will be using the Foursquare API data to obtain a list of venues in those neighborhoods to establish patterns in the neighborhood venue data along with visualization of those patterns to determine the best location for my sports bar venture. A discussion of the exact criteria used for selection will follow in Section 5 of this report.

- 3. Methodology
- 4. Results
- 5. Discussion
- 6. Conclusion