Investigating the Feasibility of Opening Video Game Stores in St. Louis, MO, USA

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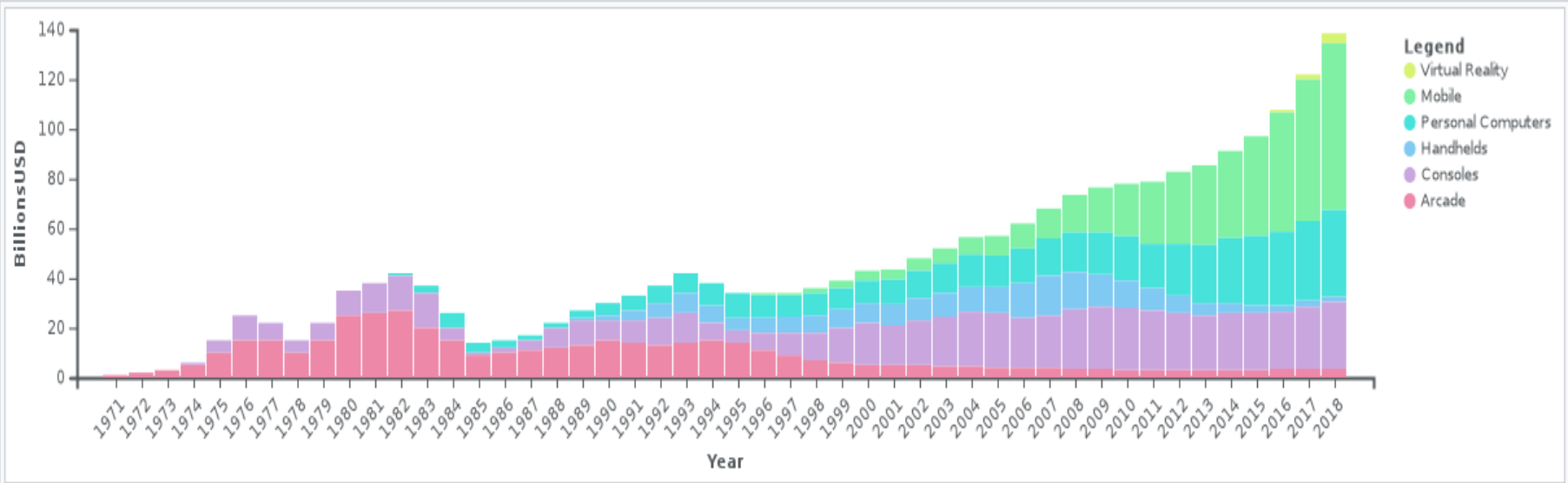
Introduction

- 140 billion USD Business in 2018
- 66% of tweens aged 8 to 12 play video games for an average of 2 hours per day
- 56% of teens ages 13 to 17 play video games for an average of 2.5 hours per day
- Over 80% of both tweens and teens have a gaming console
- Young children aged 2 to 4 play for 21 minutes per day,
- Young children aged 5 to 8 play for 42 minutes per day



Global revenues of the video game industry from 1971 to 2018, not adjusted for inflation.[40]

Business Problem

- Finding a good location is essential for business success
- Objective: To analyze neighborhoods and select best candidates to open Video Game Stores in St. Louis, MO
- Business Question: What neighborhoods are best targets for video game Chain store companies to open new stores in

Data

- Required Data
  - ✓ List of Neighborhoods in St. Louis
  - ✓ Latitude and Longitude coordinates of the neighborhoods
  - ✓ Venue Data, specially “Video Game Store” data
- Source of Data
  - ✓ Wikipedia Page

    https://en.wikipedia.org/wiki/List_of_neighborhoods_of_St._Louis
  - ✓ Geocoder package for latitude and longitude coordinates
  - ✓ Forsquare API for venue data

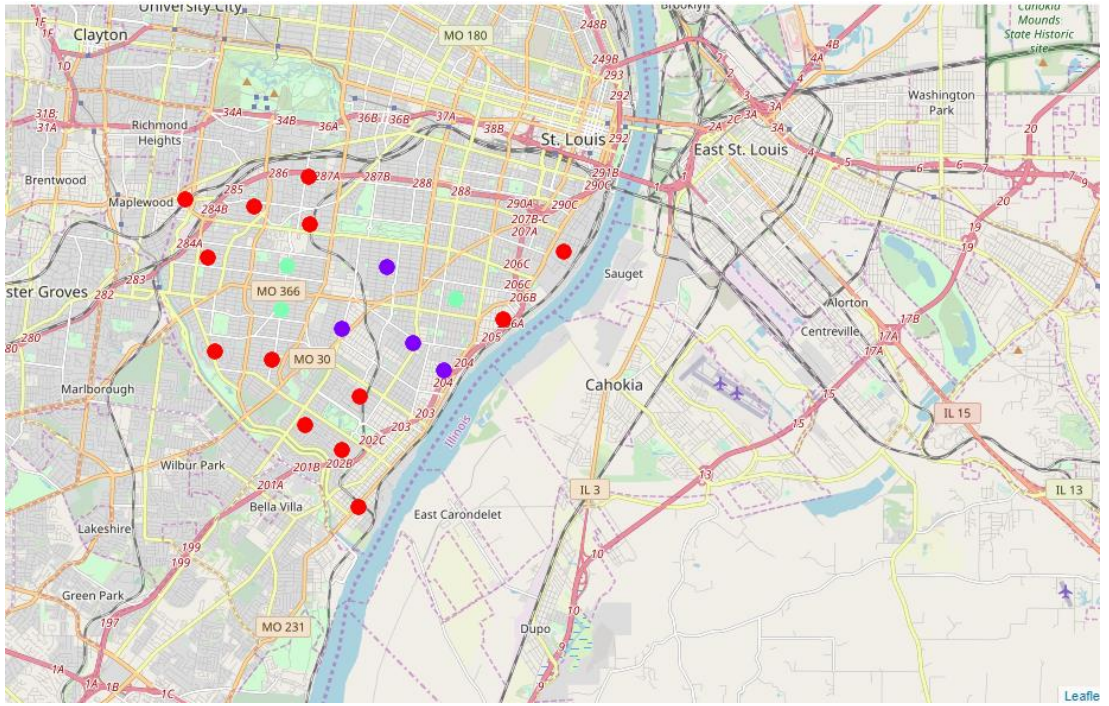
Methodology

- Web Scrapping Wikipedia page for neighborhood list
- Employing Geocoder to get latitude and longitude
- Using Foursquare API to get venue data
- Grouping data by neighborhood and taking the mean of the frequency of occurrence of each venue category
- Filtering venue category by Video Game Stores
- Clustering data using K-means clustering algorithm
- Visualizing the clusters using Folium

Results

Categorizing neighborhoods into 3 clusters

- ✓ Cluster 0: Neighborhoods with low number or without video game stores (red points)
- ✓ Cluster 1: Neighborhoods with highest number of video game stores (purple points)
- ✓ Cluster 2: Neighborhoods with medium number of video game stores (green points)



Discussion

- Majority of video game store are located in the central area of St. Louis
- Highest number of game stores are in cluster 1 then cluster 2
- Cluster 0 has the fewest or no video game stores
- Cluster 0 has the highest number of neighborhoods and is the best target to open new stores

Conclusion

- Cluster 0 (65% of all neighborhoods in St. Louis) is the best place to open

  new video game stores

- These Findings help video gaming branch stores to plan their future business strategies

  on where would be the ideal places with highest chance of business success to open

  new video game stores