ComputerScience

Mapping Amman in a Neoliberal Context

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Narrative

Amman, Jordan is a neoliberal city that has undergone rapid growth within the last one hundred years. Following the 2016 General Election, sentiments regarding young people in Amman highlighted the rapid growth of the city into a more conductive democratic and social society. Can social media help analyze those sentiments in Amman, Jordan? To answer this question, we utilized the intersection of social media and mapping to analyze whether young Jordanians in Amman are happy with political life and the current state of affairs.

Data Collection

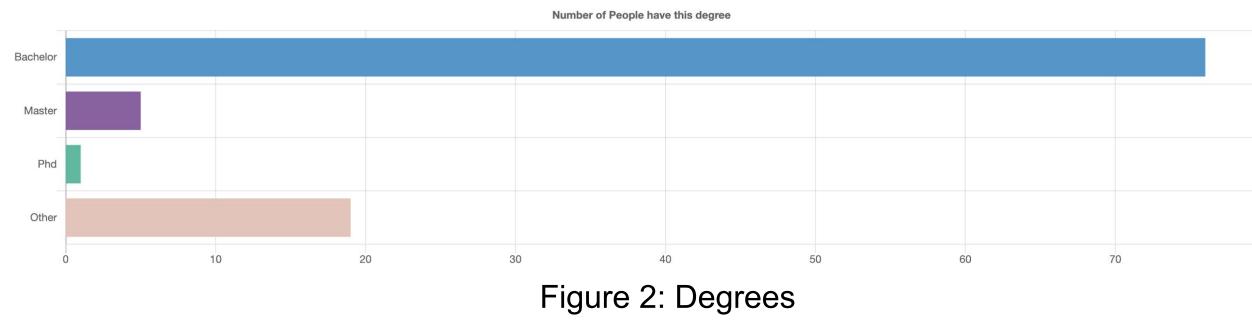
We collected tweets, captions, and posts from Twitter and Linkedin to evaluate sentiments regarding the 2016 General Election in Jordan. Information included posts, hashtags, and geolocation. Furthermore, we collected data regarding education level, age, gender, employment status, and other demographics from various platforms, such as Knoema and Kaggle.

Analysis Techniques

- Project One: Three transformations from the data sets that we collected from Kaggle and Knoema. To transform these data sets, we used these building blocks in the relation model: selection, projection, aggregation, and product.
- Project Two: We implemented a non-trivial optimization technique via k-means where k = 4 and calculated three correlation coefficients. Those correlation coefficients also required us to calculate mean, standard deviation, and covariance.
- Project Three: We scraped data from Twitter based on location, users, hashtags, retweets, and mentions and from Linkedin based on university degrees, professional skills, and foreign languages spoken.

Top 10 Skills IT Employees in Amman have Number of People That Are Capable of This Skill SQL. JavaScript Software Development Java HTML Databases Microsoft Office MySQL Microsoft SQL Server Cit Figure 1: Technical Skills





Top 5 Universities Employees in Amman attended

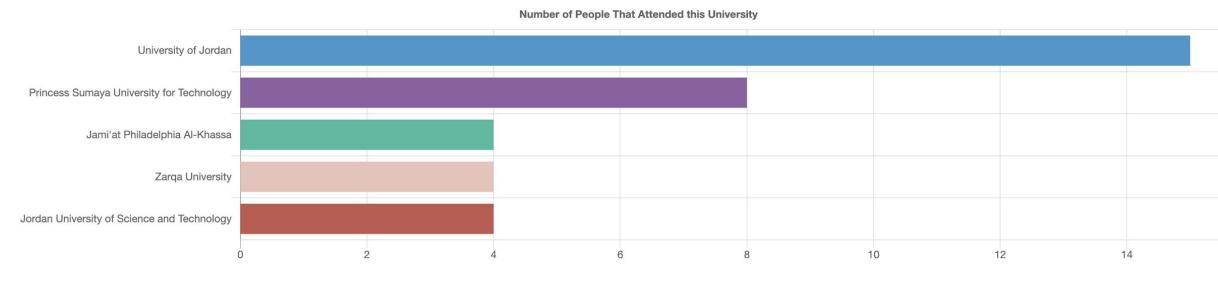


Figure 3: Universities in Amman

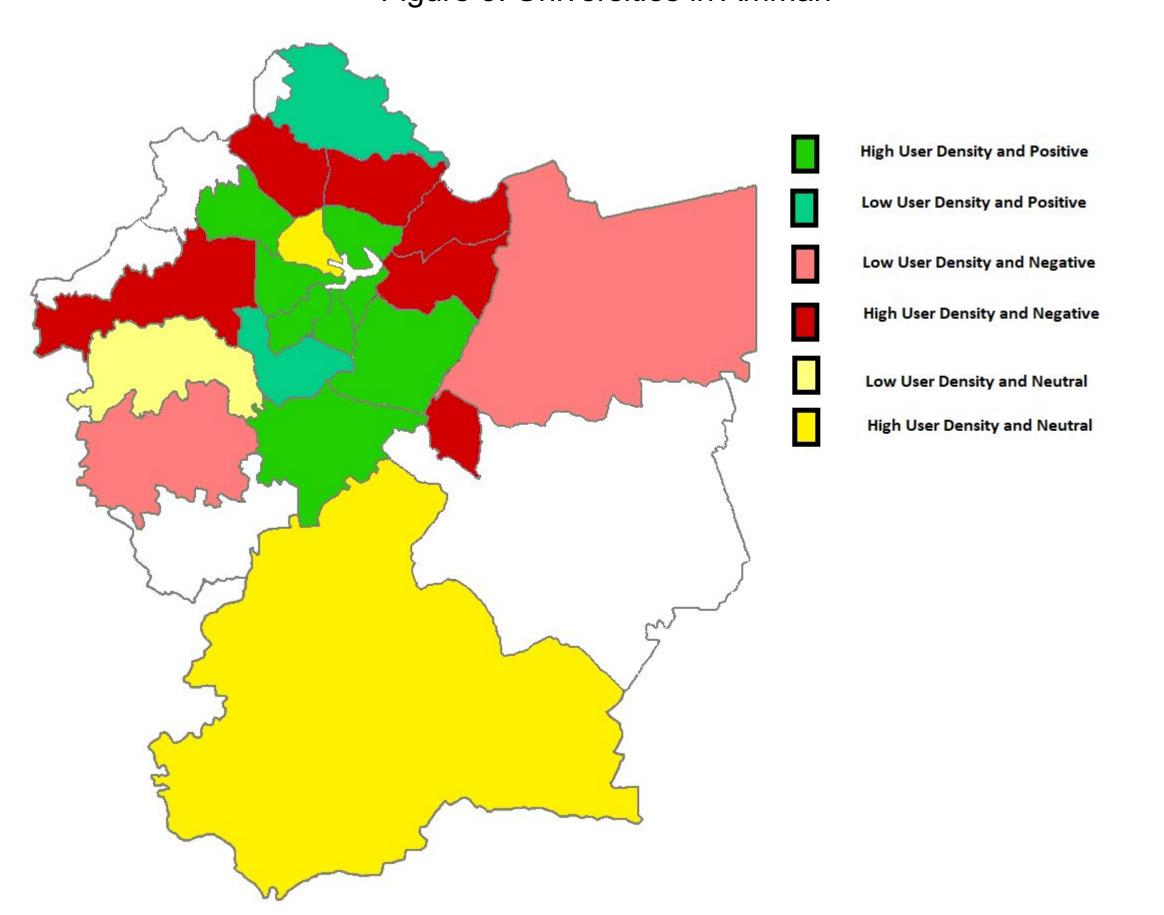


Figure 4: Sentiment Analysis

Analysis

When analyzing the data, we focused on whether the demographics had any relation to sentiments regarding the 2016 General Election. Furthermore, we hypothesized that higher educational status, social media usage on platforms, such as Twitter and Linkedin, related to positive sentiments of political life and the current state of affairs in the neoliberal city of Amman, Jordan.

Conclusions

For the LinkedIn portion of the project, due to the restrictions, we were only able to collect data related to IT employees. Based on the data, we concluded what skills and degrees a person in Amman needs to have an IT related job. Nearly all of them can speak English, which means speaking English is an indispensable skill. Furthermore, for the Twitter portion of the project, we were able to conclude that sentiments regarding the 2016 General Election varied (positive, negative, or neutral) across the country of Jordan. However, for Amman, Jordan, sentiments were positive and density was higher.

Future Work

In the future, it would be interesting to complete a similar analysis of upcoming elections in Jordan to compare to the 2016 Election. Thus, analyzing the progression, if any, of a neoliberal city. Furthermore, expanding our data set to include political parties for further analysis, additional data from different social media platforms such as Instagram and Facebook, and any local websites to connect young Jordanians in Amman.