Election Network Analysis

Introduction

A democracy-focused NGO is interested in learning which networks are responsible for seeding and spreading political hashtags in the upcoming August 9th General Election. They have extracted the mentions from several hashtags and need more analysis.

Methods used

The methods used were:

1. Network Visualization using Gephi materials

2. Explanatory Data Analysis using python Data Analysis tools

Findings

1. The most important network nodes as per the Gephi visualization were @williamruto , (@williamruto ,@railaodinga, @citizentv) , (@williamruto ,@railaodinga) having the most relation linked to them and were also the most mentioned Twitter Accounts
2. The most common hashtag was #MamaMbogaMoment
3. The most followed twitter account in the dataset is oleitumbi
4. The Account with the most impact was Selina Teyle followed closely by Oleitumbi
5. The Account with the highest impression was that of Oleitumbi
6. The Account with the most Tweets in the dataset was that of miguelmuguchia
7. There is weak correlation between the number of Twitter tweets and the Impact an Account has on the platform
8. There is weak correlation between the number of Twitter tweets and the Impression an Account has on the platform
9. The following features showed strong correlations :
10. Impressions and Twitter followers of 0.9
11. Impressions and Reach(new) of 0.71
12. Twitter followers and Reach(new) of 0.64

Conclusions

1. We concluded that the top three most significant nodes were @williamruto , @williamruto , @railaodinga, @citizentv and @williamruto , @railaodinga
2. We concluded the most significant features for an Account are   
   the number of followers, the Impact and Impression an account has on the platform these features determine whether an Account. Is influential or not
3. We concluded that there is presence of trend jackers because of the tags that were linked to #MamaMbogaMoment but do not speak to the significance of the issue instead they were promoting buying of Airtime
4. We concluded that there is little correlation between the number of tweets with the impact the Account has on the platform
5. We concluded that there is also little correlation between number of tweets and the Impression the account has
6. We concluded that there is strong correlation between the number of followers an account has and the number of new users an account reaches

Recommendation

1. We recommend further analysis on the dataset
2. We recommend the Ngo to consider accounts that have a combination of these features : High followers, high impact and high impression as they are very influential on the platform
3. We recommend the Ngo to consider the most mentioned Accounts as they are influential too