

People are more likely to volunteer to charities with captions that reflect trust, joy and anticipation

Profiling volunteering transactions in South Africa.

INTRO

The volunteering pattern in South Africa is not well understood

- Demand of volunteers - aspects like location, type, duration, and underlying need
- Supply of volunteers - aspects like frequency, type and scale

The goals set are to:

1. Understand the seasonality of volunteering
2. Profile and gain knowledge of charities
3. Understand volunteers

METHODS

- Secondary analysis of 8 .csv files
- Time series analyses (Holt winters model) - used for forecasting
- K-means clustering - used to profile charities
- Natural language processing (NLP) - used for sentiment analysis

RESULTS

Time series analysis:

- Supply of volunteers – decrease year on year
- Demand of volunteers – increase year on year

Natural Language Processing:

- Trust joy and anticipation are the most prevalent emotions to the needs responded to by volunteers

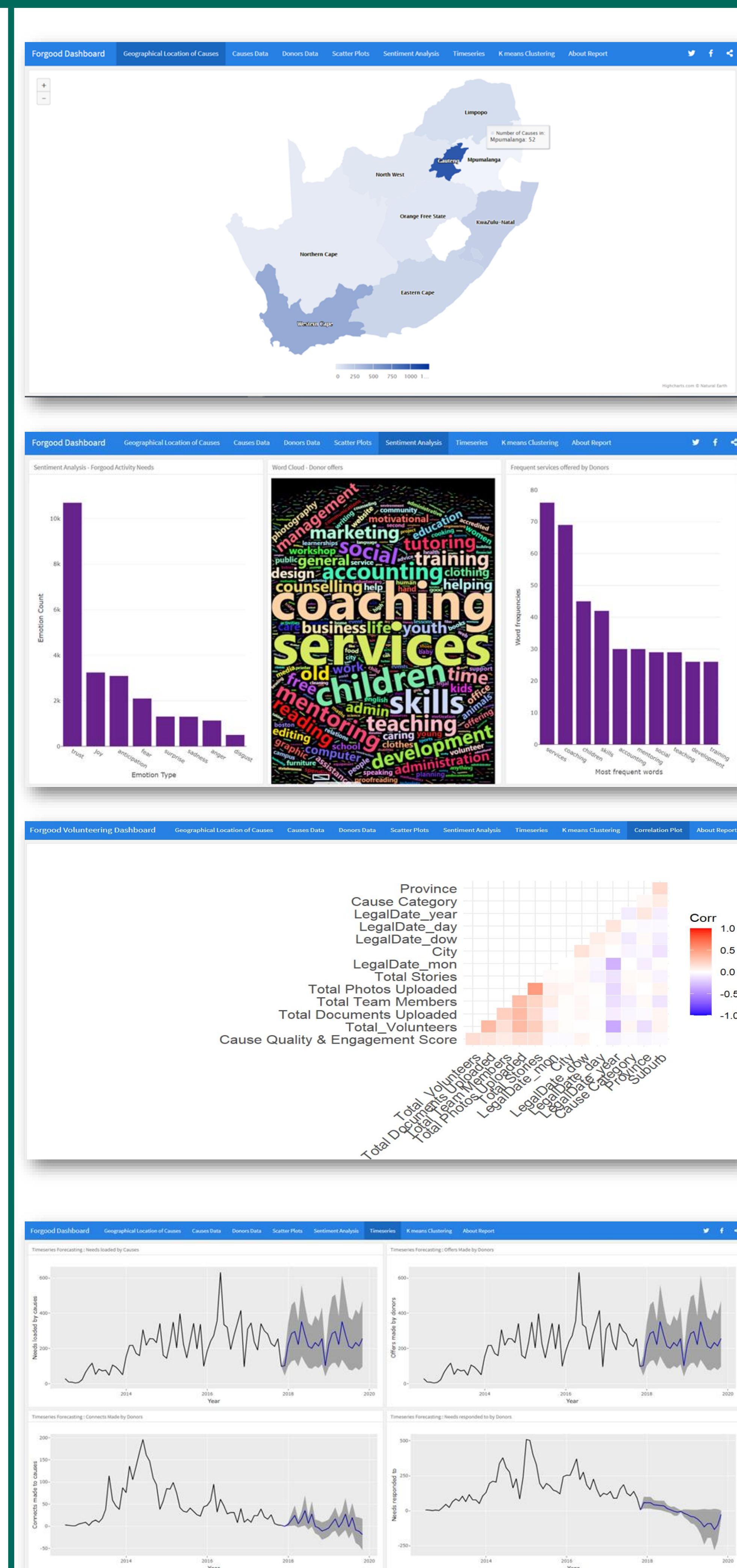
K-means clustering:

- Charities are segmented into 3 clusters based on the characteristics of their features
- 63% of the charities are in cluster 1
- 26% are in cluster 2
- 11% are in cluster 3

DISCUSSION

- Results show an increase in the demand for volunteering before periods of notable events like Christmas Easter and Nelson Mandela day
- Our observation is that there will be a decrease in the participation of volunteers in the next 12 months
- There is a high correlation between the number of people who volunteer, and the number of stories, documentation and photos uploaded by the charities

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