# Effective matching of offers to

# existing needs on the Forgood

# website using NLP

### **Profiling Volunteering Transactions in South Africa**

#### INTRO

- Various needs are created on the Forgood website but only a few of them are successful. The purpose of the study is determine what makes needs successful.
- Users also create offers for volunteering time or donating goods. Are these offers created because the needs that could be

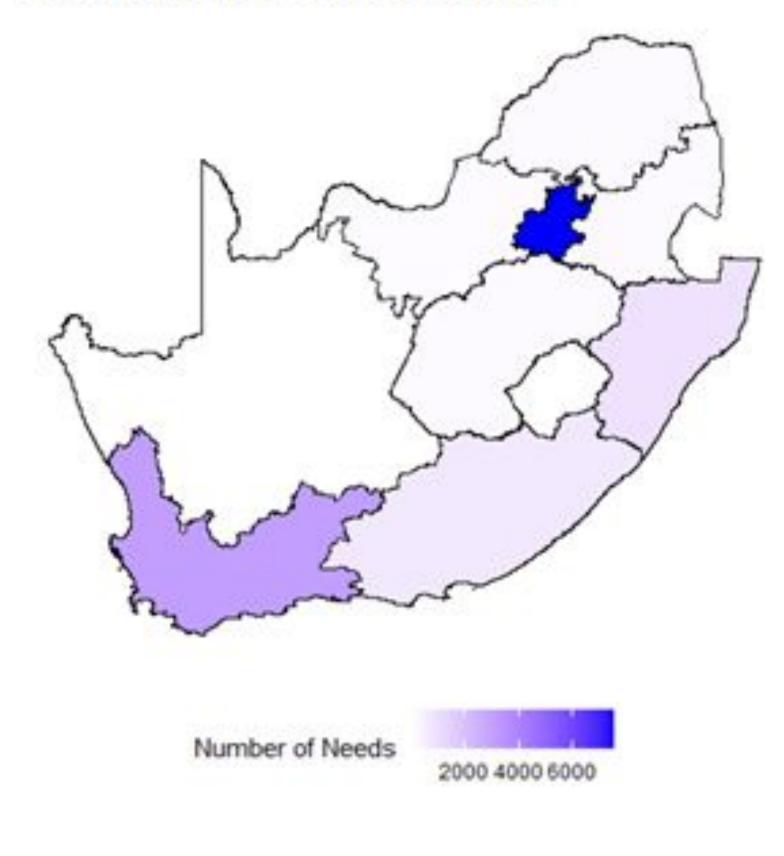
#### RESULTS

- Location is an important factor for goods donation and time volunteering
- Good needs to offer matching

Offer	Returned need
I'd like to teach high school kids programming	Help Alexandra Education Committee with 50 volunteers for 4-8 hours for teaching high school kids how to code!
donating winter clothes	Help Little Fighters Cancer Trust by Donating NEW Warm Winter Clothes & Blankets #MandelaDay for Children with Cancer 0 - 18 yrs old #MandelaDay
l'd like to offer school pants	Help Siyakholwa Support Care Centre by DONATING OF OVC SCHOOL SHOEBOX GREY TROUSER,WHITE SHIRT for OVC SCHOOL

### **AMMO BAR**

Distribution of Needs across provinces



Time Offers

- serviced by these offers are absent? Can existing needs be matched to these offers optimally?
- Is there an optimal duration to use when setting a need expiry?

#### METHODS

- 1. Inference
- 2. NLP (Word2Vec)
- 3. Exploratory Data Analysis
- Liketso Nthimo, Lerato Khumisi

SHOEBOX WITH SCHOOL CLOTHING, STATIONERY

### DISCUSSION

- Causes cannot change location, therefore the insight from the Inference is not helpful to the causes
- Using soft cosine similarities based on Word2Vec returned matching needs
- Among successful needs, 80% of them get their first connect within 69 days

