# Brand Reputation Calculator

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# Problem

All the brands want to know its reputation in the social networks

Why?

❖ Advertising campaigns

❖ Service problems, incidences, etc.

❖ Regular reputation

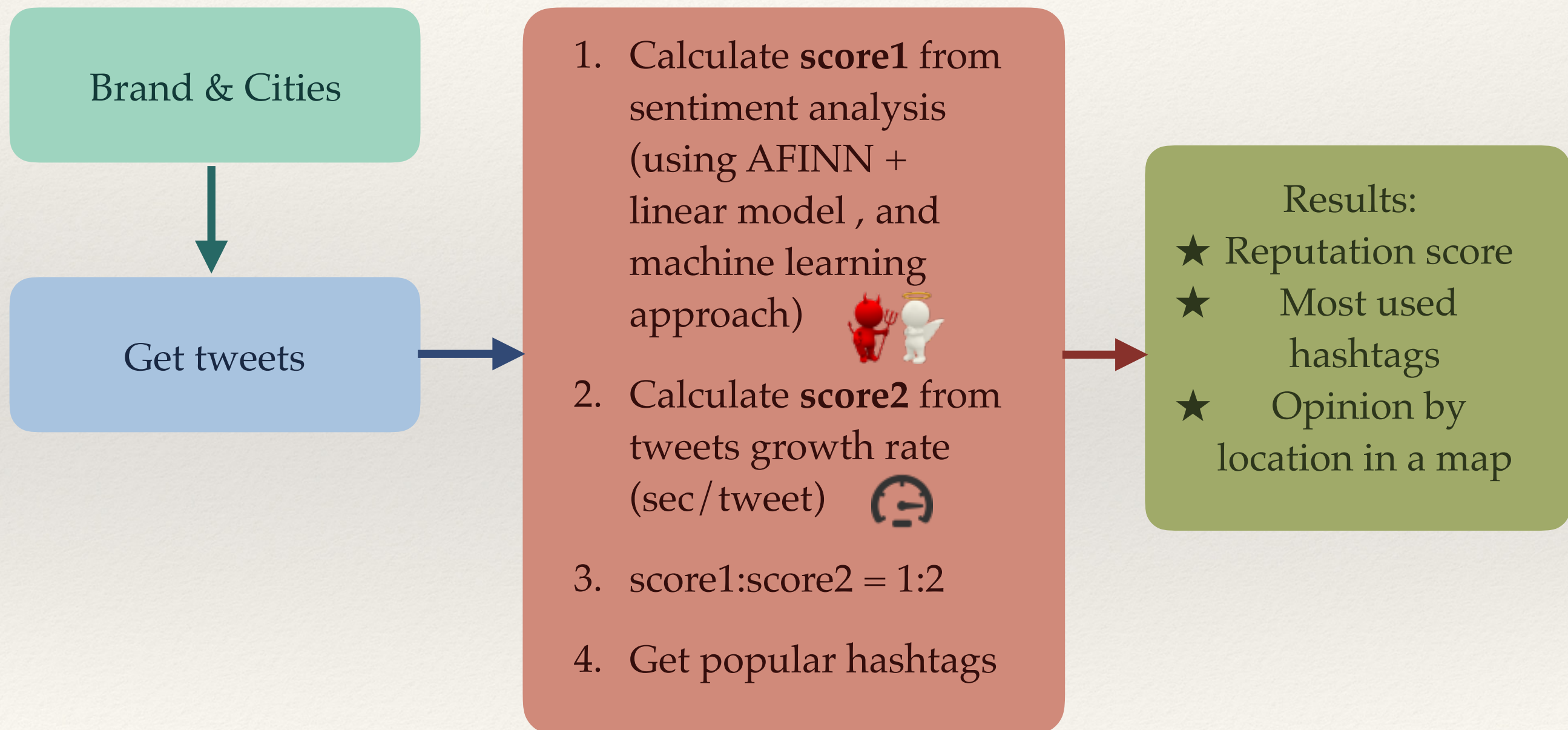# Approach

**Brand & Cities**

**Get tweets**

1. Calculate **score1** from sentiment analysis (using AFINN + linear model , and machine learning approach) 😈👼

2. Calculate **score2** from tweets growth rate (sec/tweet) 🕐

3. score1:score2 = 1:2

4. Get popular hashtags

Results:
★ Reputation score
★ Most used hashtags
★ Opinion by location in a map

# Data

- ❖ Training data for sentiment analysis:

  - ✦ 504 tweets: 253 pos., 251 neg.

- ❖ Coordinates of the cities (Geopy) to make a request of located tweets

- ❖ Using tweets created time to calculate growth rate

- ❖ Most used hashtags (top 10)

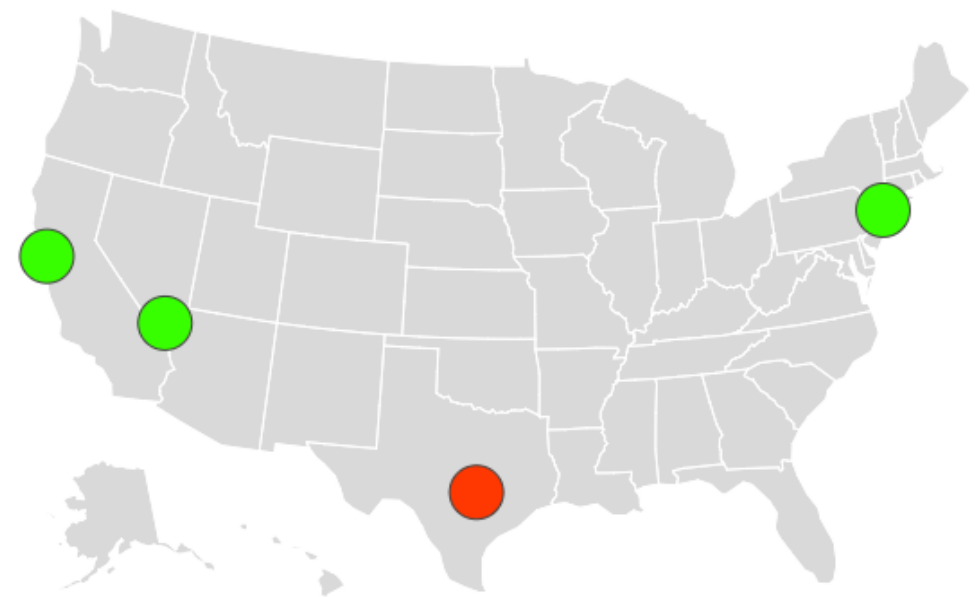- ❖ Using at least 100 tweets to compute reputation

# Results

* Sentiment Analysis of tweets: ~76% accurate (Cross validation)

* Reputation score: ~ 75% accurate
www.reputationinstitute.com



**Reputation score for ferrari:**

**8835.61/10000 points**

Most used hashtags
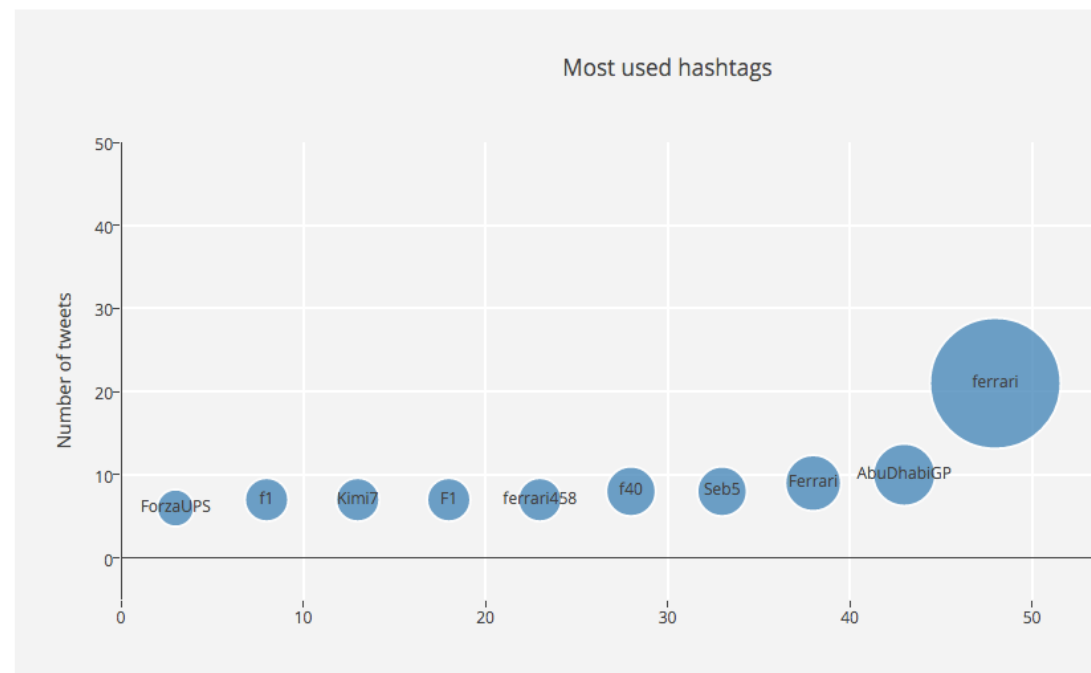


Reputation by city

# Conclusion

❖ It's hard to label data manually because there are many advertising tweets

❖ Data mining is not only about huge processing tasks but about interpretation of data

❖ Early detection of located problems is a big issue for the brands