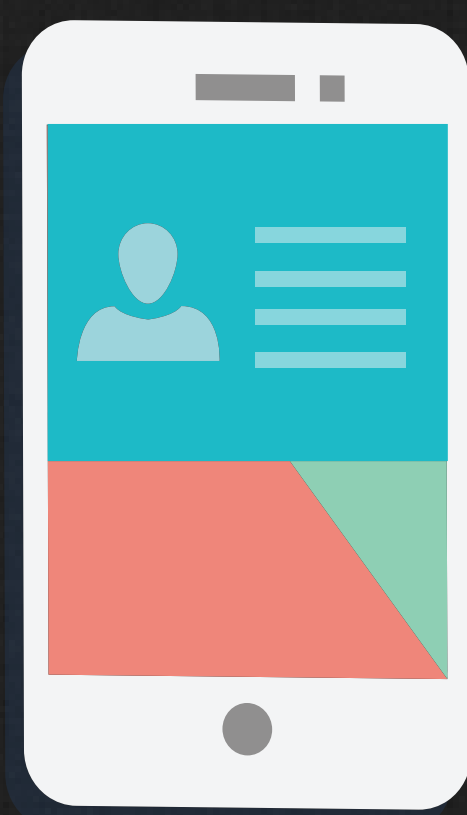# Rare diseases and Twitter Big Data based analysis of #RareDisease in an interdisciplinary approach
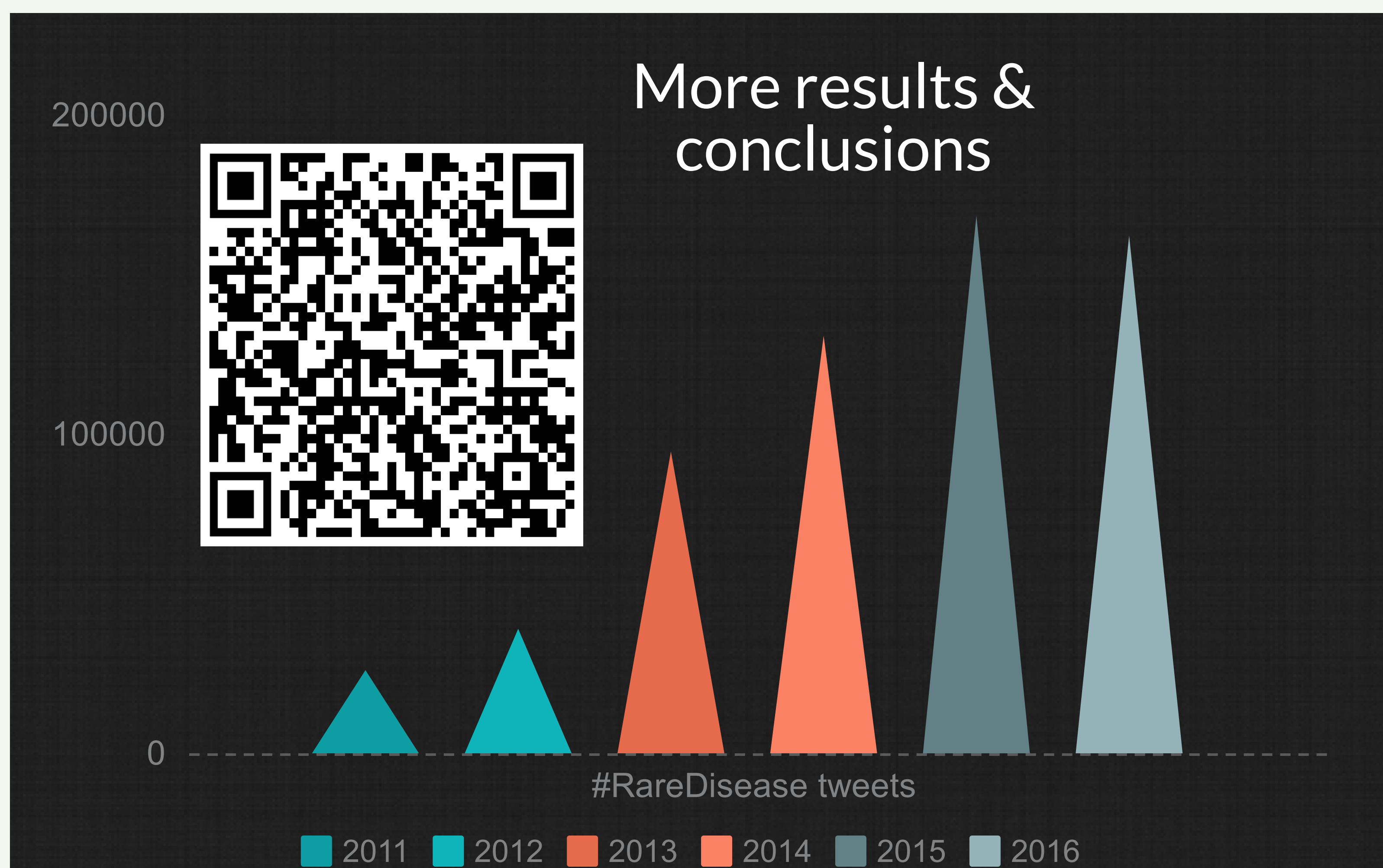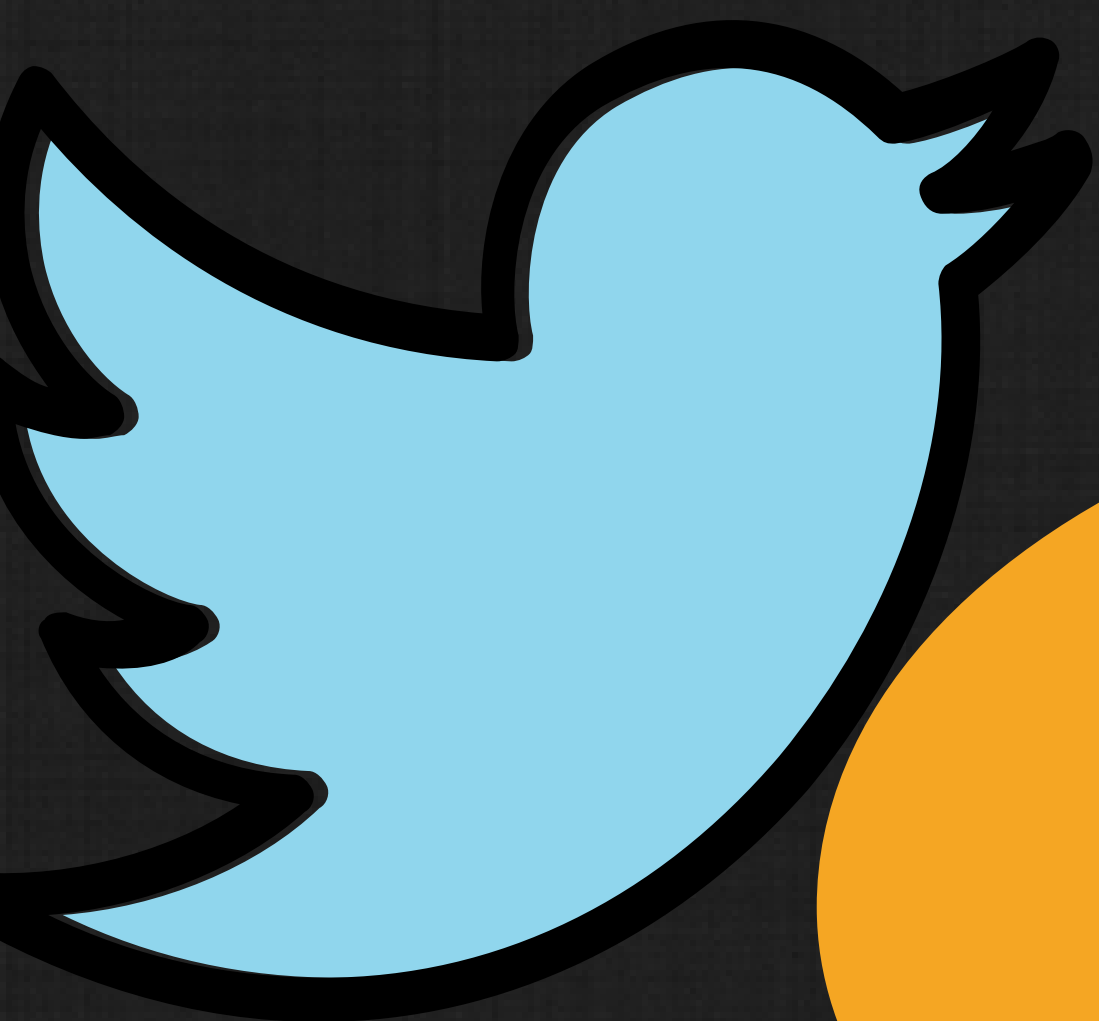
Summary

The aim of our research is to report, in a Big Data-based analysis what characterizes one of the most important US social media platforms, which has been operating for years in the topic of rare diseases. For this, we investigated the social media communication of #RareDisease on Twitter, its tweet traffic and characteristics so that we can explore the peculiarities of the interaction happening in the communication space, as well as the patterns of the relationships between patients and various stakeholders, and the contents published.

Methodology

For the Big Data analysis, the database of social media analytics company Symplur was used. We chose #RareDisease because from hashtags monitored by Symplur dealing with rare diseases the hashtag with the most tweets was #RareDisease, which also has the longest monitoring period in comparison to the others.

In our study, 6 years of tweet traffic was processed between 30.10.2011-30.10.2017, and it was a starting point in our methodology that in the period examined the maximum character limit allowed for content was still 140 in the period examined. Our methodology proposition requiring further research are the circle of users showing behavioural anomalies, and the high number of unidentifiable tweeters from the stakeholder analysis aspect. A detailed study of these might help a deeper exploration of the agenda, and the decrease of the number of robot-like users performing spam activities.

More results & conclusions

200000

100000

0

#RareDisease tweets

■ 2011　■ 2012　■ 2013　■ 2014　■ 2015　■ 2016

Author: Sára Simon
PhD student, ELTE Eötvös Loránd University, Budapest, Hungary

Co-author: Prof. Dr. György Csepeli
ELTE Eötvös Loránd University, Budapest, Hungary, iASK