Impact of Offline Boundaries on Online Information Exchange

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1.High Level Goal

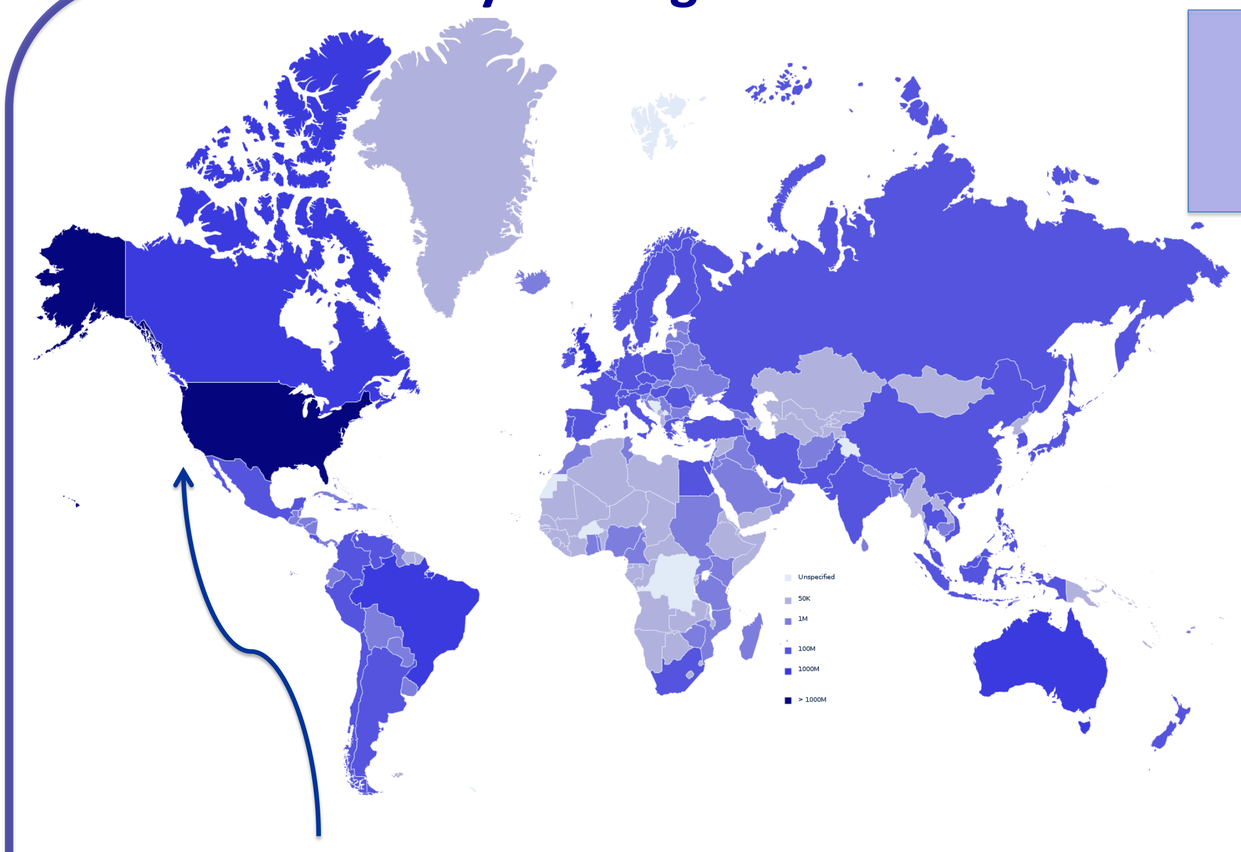
- User interactions in the offline world are affected by political, geographical, cultural, and linguistic boundaries.
- Such offline societal divisions might affect user interactions in the online world too.
- To date, few studies have investigated the impact of offline boundaries in the online world.
- High-level goal : "Understand the extent to which offline boundaries affect online user relationships and interactions on the online social networks."

2. Trading Tweets across National Boundaries

- As a first step, manifestation of these offline boundaries in the Twitter social network is analyzed.
- Aim :

  "To study how do users trade information with other users both within and across national boundaries?"
- Analyze 1.7 Billion tweets posted by 52 million Twitter users before September 2009
- Location information for 12.2 million users in the Twitter network was obtained using Bing and Yahoo Map APIs

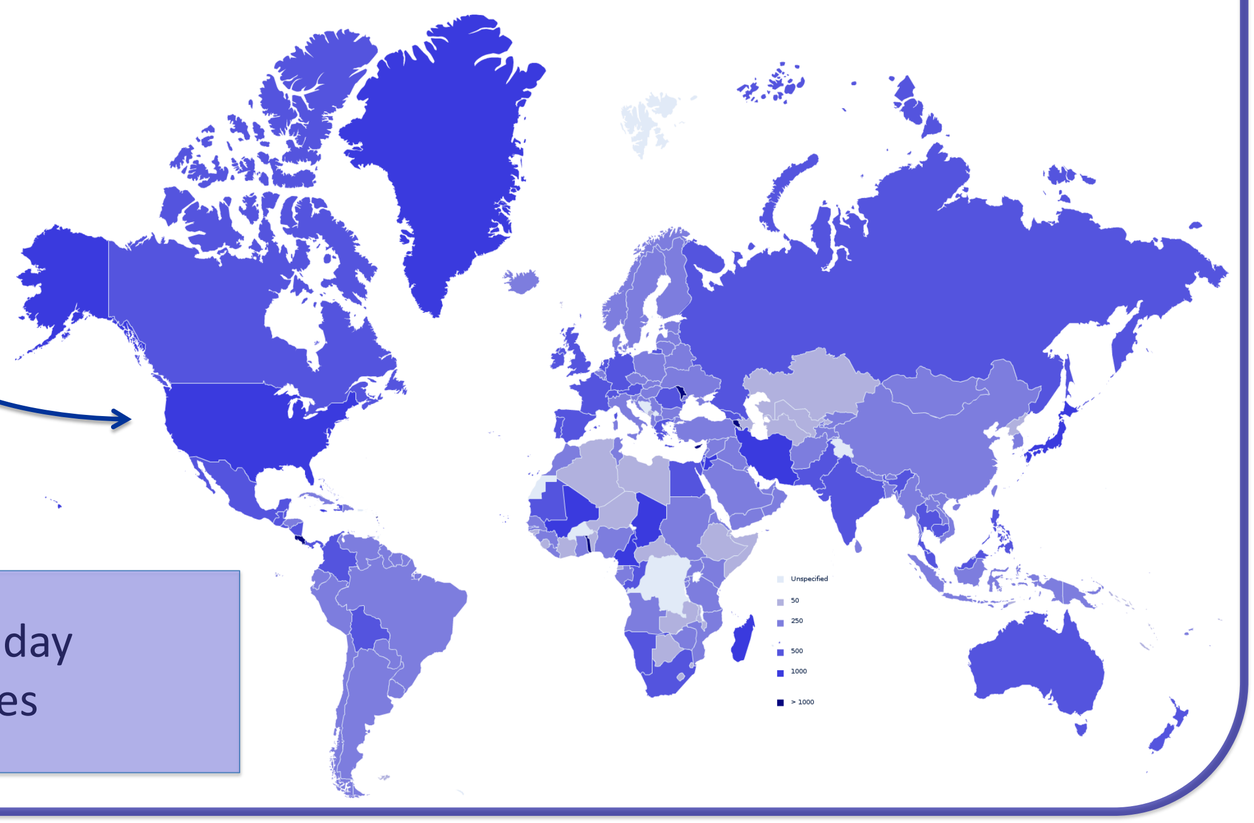
3. Preliminary Findings



Average Tweets produced per day by different countries

Small countries like Moldova, Cyprus, Armenia, Togo and Costa Rica are the top most players in per capita tweets production!

Though, USA produces the highest number of tweets per day but also has the highest number of users, therefore is not the top most in per capita tweets production!



Average Tweets produced per day per user by different countries

4. Future Directions

- Characterize information trade across more offline boundaries, such as linguistic and cultural boundaries.
- Investigate different metrics for quantizing information trade, such as URLs traded, unique URLs traded.
- Analyze the centrality or importance of individual regions to global information trade.
- Study temporal variation in information trade patterns due to unexpected events like natural disasters.
- Explore the correlations between the information trade across different regions and the social and economic development indices of these regions.

For further information about the project, please visit : www.mpi-sws.org/~juhi/Info_Trade/