

# How Twitter Discusses Facebook Libra

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Introduction / Motivation

Facebook Libra is a potentially disruptive new **cryptocurrency** being proposed and developed by the social media giant, Facebook. According to the Libra white paper, the objective of this currency is to provide access to a financial system for those in impoverished nations.

The **2017 World Bank Global Findex Report** found that there are an estimated **1 billion** people around the world who have a mobile device, yet no access to a bank or financial institution. Furthermore, within this group, roughly **480 million** people have access to an internet connection.

However, not everyone is so optimistic about this new venture, as Facebook has found itself in recent scandals such as the Cambridge Analytica scandal. This controversy has attracted critique and skepticism of Libra.

In anticipation of its release, we decided to collect Twitter data to analyze and examine the nature of the discourse surrounding Facebook Libra on Twitter and produced several research questions to guide our efforts.

Research Questions

- What are the key words, topics and/or themes surrounding the discussion of Facebook Libra among Twitter users?
- What are the perceived sentiments of Twitter users surrounding the discussion of Facebook Libra?
- Do news controversies involving Facebook or Mark Zuckerberg affect the Twitter discussion of Facebook Libra?
- What are the social network characteristics of the Twitter discussion involving Facebook Libra? Who are the key influencers in this network?

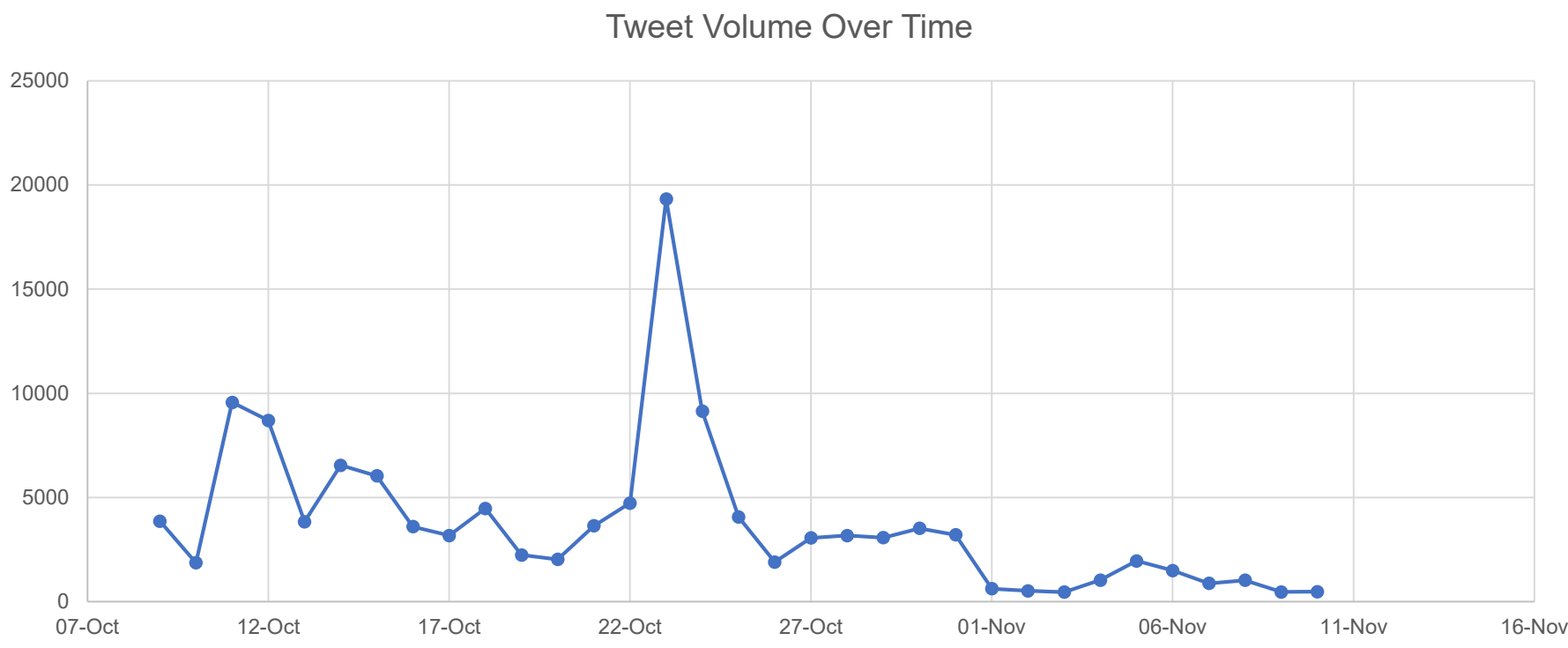


Figure 1: Initial Sample of Tweet Volume, Over Time

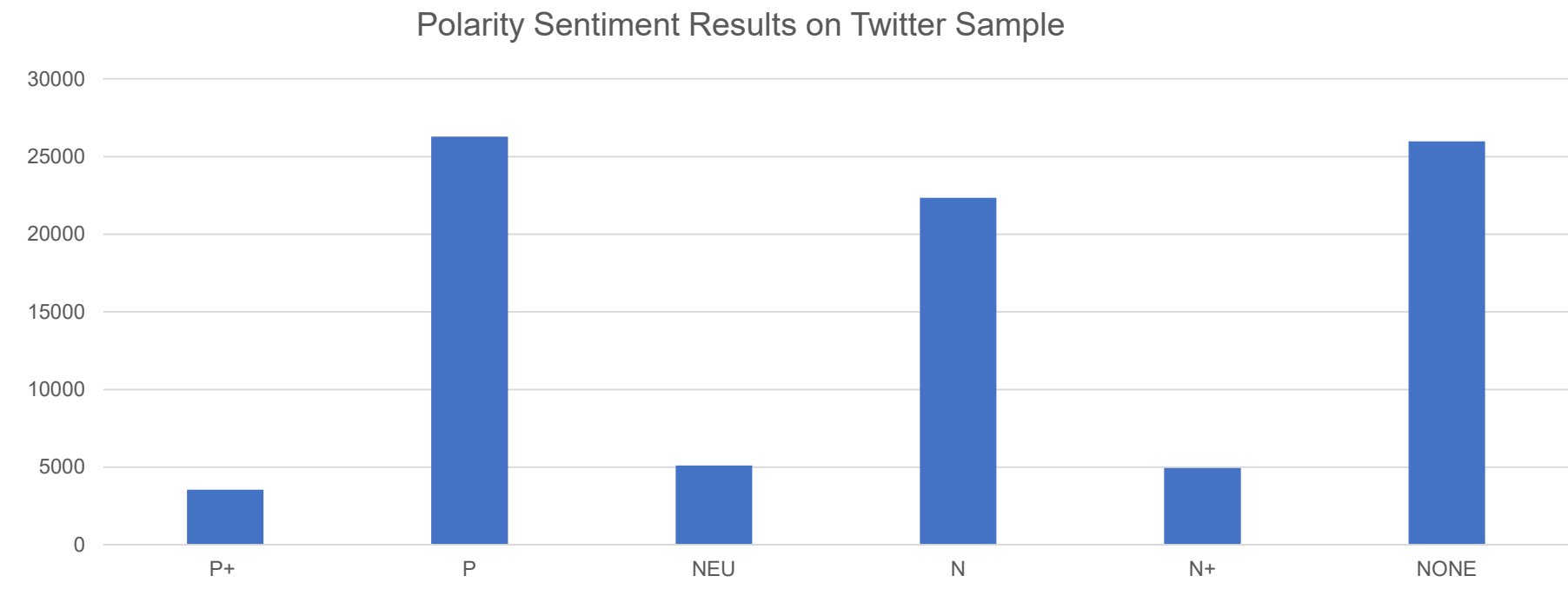


Figure 2: Results of Sentiment analysis

Results

- The results of the text analysis reveal several themes/topics within the broader discussion of Facebook Libra on Twitter. These topics/themes include the **Facebook Libra entity** itself, **The Libra Association**, **Mark Zuckerberg**, and the **cryptocurrency** element of Facebook Libra.
- The results of the sentiment analysis reveal that the Twitter users discussing Facebook Libra are polarized between **positive** and **negative** sentiments but also a large group of users have **no polarity sentiment** towards **Facebook Libra**. Furthermore, 77.8% of tweets collected contained **objective sentiments**, while 22.2% contained **subjective sentiments**. 86.3% of the tweets contained **emotional agreement sentiments** while 13.7% contained **emotional disagreement sentiments**. Lastly, 99.3% of the tweets contained **non-ironic sentiments** while only 0.7% contained **ironic sentiments**.
- The results suggest that news controversies involving **Mark Zuckerberg** and **Facebook** do cause an effect on the Twitter discourse, observed effects include both a spike in the volume of tweets and a spike in the frequency in mentioning Mark Zuckerberg as a keyword, although further research is required to assess if there was a impact on perceived sentiments.
- The results of the SNA reveal that both the **Name Network** and **Chain Network** are quite large, decentralized, and fragmented. The modularity was low indicating that much of the discourse is one sided. Both networks contained low reciprocity indicating that there are distinct sub-communities within the networks however they do not frequently interact with each other. We were able to identify some key influencers within certain clusters of each network, but ultimately their influence over the flow of information is limited due to the nature of each network. These influencers include the Facebook Twitter account, Facebook Libra Twitter account, the Visa Twitter account and the Fox Business News account.

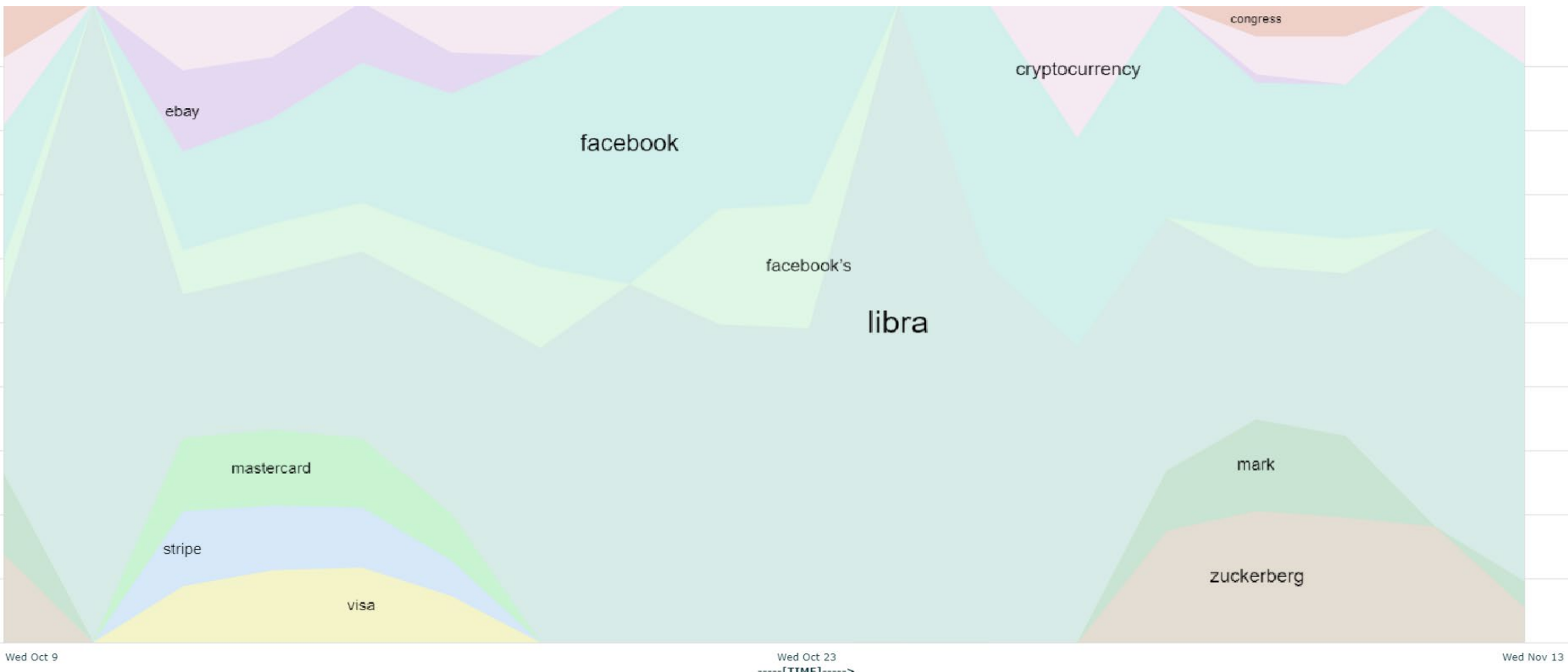


Figure 3 : Key Words Over Time

Data Collection and Analysis

To answer these questions we used a data collection software Netlytic, to collect tweets that mentioned both “Facebook” and “Libra” in the same sentence. The initial sample of 115563 tweets was subsequently cleaned for bots, non-English languages (for text and sentiment analyses) and irrelevant tweets such as those pertaining to the horoscope Libra. The final sample contained 88243 tweets.

- Used a ‘Netnography’ methodological approach.
- Performed a Social Network Analysis (SNA) to examine the network characteristics of the Twitter sample.
- Conducted a Text Analysis on the Twitter sample which included a key word extractor and key words over time visualization.
- Used a sentiment analysis software MeaningCloud to analyze the Twitter data to discover the perceived sentiments.

Implications

- Facebook Libra’s social media marketing teams should employ efforts to increase the amount of tweets with positive polarity sentiments, while decreasing the volume of tweets with negative sentiments and attempt to sway those with no sentiment at all in order to improve brand image.
- The Facebook and Facebook Libra Twitter accounts should take advantage of their influence (even if it is limited) within the network to ensure that the information flowing across the network is accurate and reliable.
- As news controversies involving Facebook and Mark Zuckerberg do influence the Twitter discussion, the extent is still unknown. As a safeguard, Facebook should avoid scandals and news controversies involving their company and CEO and invest in PR particularly on social media platforms such as Twitter to mitigate potential negative fallout resulting from these scandals.
- The media and news stakeholders should acknowledge and be wary of their potential influence on discourse occurring within social media platforms.

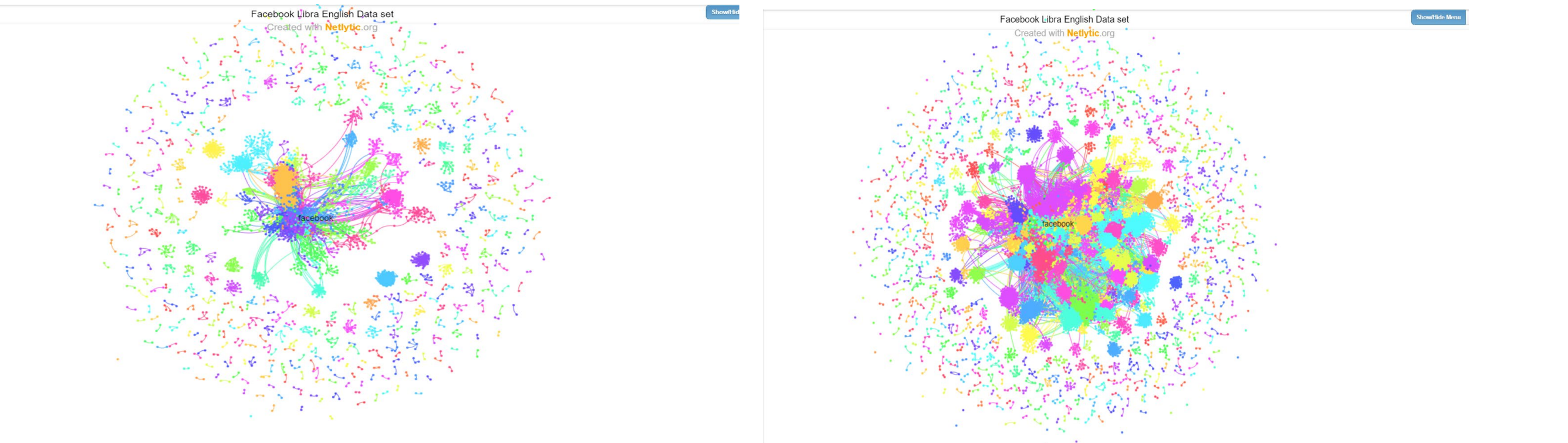


Figure 4: Name Network (Who Mentions Whom)    Figure 5: Chain Network (Who Replies to Whom)