Content Virality and popularity on Facebook

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Theoretical Background

This study empirically examines viral and popular content of extreme political groups on Facebook. Nahon and Hemsley (2013), define virality as "a social information flow process in which many people simultaneously transmit a specific item of information within a short period of time within their social networks, when the information item spreads beyond their social networks to other networks, often remote, leading to a steep rise in the number of people exposed to content".

The concept of popularity has been generally described as a situation where many people love, admire, or support (a person or content), and has several different manners of reference, including "popular culture", consumption of popular content and measurement of popularity.

Nowadays, due to the increased use of the Internet, social networks and the various applications, the ability of companies and organizations to collect individual information on data usage (i.e. exposure and acceptance of content), is unprecedented.

The aim of this study is first to categorize the data collected from the social network "Facebook" into four groups: “viral”, “popular”, “both viral and popular” and “neither”, based on the definitions aforementioned, using the case study of extreme political groups. Secondly, we utilize the data collected in order to determine the characteristics influence content behavior (i.e. its affiliation to one of the four groups). Lastly, we propose a regression model, predicting the potential of content going viral.

Research Hypotheses

H1-H4: There is a distinct difference between number of Shares, Comments, Likes and Other reactions for each category. For "only viral" and "viral and popular" categories the number will be significantly higher.

H5-H8: There is a distinct difference between maximum Share rate, Comment rate, Like Rate and Other reaction rate for each category. For the "only viral" and "viral and popular" categories the number will be significantly higher.

H9: There is a distinct difference between the number of followers for each category. For "only viral" and "neither" the number will be significantly lower.

H14: The activity indices maximal share rate, comments rate, "likes" rate, other responses rate and number of followers can predict the virality of the content.

H15-H20: There is a correlation between justification of the group, use of intimidation and emotion, attempt to recruit, providing useful information and expression of support or opposition and the affiliation to one of the four categories.

Methods & Data

A software program, which can register the behavior of content on public Facebook pages, was utilized. The program collected information on social sharing and speed of acceleration, i.e., the number of likes and other reactions, comments, shares, and number of followers, which in turn indicated content behavior and determined its classification. The data was gathered from a period of seven months, with up to 32 days of sampling, and 10 to 130 different measurements for each post. Resulting in a corpus of the size of 29,002 posts and 23,494,227 samples from which 1,436 posts that were classified as "viral", 1,757 as "popular", 736 classified as "both" and 26,545 classified as "neither". Furthermore, a quantitative content analysis was performed for 50 random samples, from each of the four categories to inspect the factors that lead the content becoming viral or popular.

Results

• The number of followers was found as a hampering factor for virality (F(3, 28,998)=536.73, p<0.05)
• A logistic regression model was performed displaying that virality can be predicted with a total variance explanation of 59.3%.
• Quantitative content analysis has shown that posts that appeal to emotional aspect or fear do not tend to go viral, but content that explains or justify the group's cause do tend to become viral.

Conclusions

• Contents of pages with a low number of followers were affiliated to the groups "viral" and "neither". In other words, content belonging to "viral" and "neither" categories was found to have fewer followers than popular and viral and popular categories.
• A clear affiliation of the content to a certain origination, persona etc. affects its behavior in online social networks. It is possible that the providence of affiliation is due to the desire to give credibility to the content being distributed or to a sense of belonging, patriotism, or nationalism.
• Providing explanations and justifications for the purposes of the organization has been found to be an essential part of the nature of the content, thereby influencing how it behaves in social networks (Berger, 2016).
• Expressing support or opposition in the content contributes to the potential of the content to become viral.
• Using content identified with a particular party, as well as expressing support or resistance, seems to contribute to the individual's sense of belonging to the imagined in-group (Anderson, 2006).
• Mapping the popular and viral content, and the reasons for their being as such, enabled us to build a prediction model that provides information about the various factors that allow identification of content that may be popular, viral or popular and viral. Thus, on the one hand, we can understand how to improve the permeability of messages to target groups, and how, as organizations or individuals, to deal with the dissemination of content perceived as negative for us.

References