Paper(s) discussed

(1) David Kempe, Jon Kleinberg, and Éva Tardos. 2003. Maximizing the spread of influence through a social network.

(2) Romero, D.M., Galuba, W., Asur, S., Huberman, B.A. (2011). Influence and Passivity in Social Media.

Summary

(1) The paper "Maximizing the Spread of Influence through a Social Network" explores the problem of influence maximization, which involves identifying the most influential individuals in a social network in order to spread a message or idea as widely as possible. The paper presents two models for the spread of influence in a social network: the independent cascade model and the linear threshold model. It also describes several algorithms for influence maximization, including greedy algorithms, submodular optimization, and heuristic methods.

(2) The paper "Influence and Passivity in Social Media" explores the relationship between users' levels of activity or passivity on social media platforms and their susceptibility to influence. The authors argue that passive behavior, such as simply scrolling through a newsfeed or liking posts, can make users more susceptible to influence from others who are more active in promoting their ideas or messages.

Pros

(1)
- The paper highlights the importance of understanding the structure and dynamics of social networks in order to effectively maximize influence, and discusses the potential ethical concerns associated with influence maximization.

- The paper provides insights and recommendations for future research in the field of influence maximization, such as the need for more realistic models of social network behavior and the integration of multiple sources of influence.

(2)
- The paper addresses an important topic with significant implications for individuals, organizations, and policymakers.

- The authors provide a comprehensive overview of the factors that contribute to users' levels of passivity or activity on social media platforms, and their impact on susceptibility to influence.

Cons

(1)
- The paper assumes a relatively narrow definition of influence as the spread of a specific message or idea, which may not fully capture the complexity of social influence.
- The paper primarily focuses on algorithmic approaches to influence maximization and does not explore the role of non-algorithmic factors, such as interpersonal relationships and cultural norms.
- The paper does not address the potential biases or limitations of the data sources used to support its claims, which could affect the validity of the findings.

(2)
- The paper primarily focuses on the role of individual users in shaping the spread of information and ideas on social media platforms, and does not delve deeply into the broader social, political, and economic factors that shape the landscape of online influence.
- The paper does not provide a clear definition of what constitutes "influence" or how it should be measured, which could limit the applicability of the insights presented.

Questions for discussion

(1)
- What are some of the most common algorithms used for influence maximization, and how do they work?
- How do real-world factors such as the limited reach of social media platforms and the presence of multiple competing sources of influence affect the spread of influence in a social network?
- What are some of the practical applications of influence maximization, and how can it be used to benefit businesses, governments, and other organizations?

(2)
- How does the use of algorithms to curate content on social media platforms affect users' levels of passivity or activity, and how does it impact the spread of influence?
- What are some of the implications of the research presented in the paper for the design of social media platforms, and how can these insights be used to promote positive social outcomes?
- How does the concept of "echo chambers" relate to the ideas presented in the paper, and what are some of the potential consequences of echo chambers for the spread of influence and the formation of public opinion?

(1) Presentation and Discussion Feedback

Name of Presenters: Shreya and Yunqi

How was the presentation? Did it help you?

I thought the presentation was very informative and well-done. The speaker was clearly knowledgeable about the topic and did a great job of breaking down complex concepts into easy-to-understand terms. I also appreciated the use of visuals and examples to help reinforce the main ideas. Overall, I thought the presentation was a great use of my time.

Feedback for the presenters:

- The style of presentations could be better, a key point can be talking with the audience more instead of reading through the slides.

- In general, a less technical and equation-based would be easier to follow, but since the audience were considered experts or at least familiar with the concepts, I'd say they did a great job.

Novel points raised during the presentation or discussion that you thought were crucial. Carefully consider all issues raised and list only those you feel were most important.

I feel like this part was covered above but I will state, or maybe repeat, one points.

- The discussion on how reachable social media platforms are and how they affect the subject was a very promising, and also, Yunqi's answer was a great suggestion to model the various connections using multiplex networks so we can appropriately model the phenomena seen in real-world cases.

(2) Presentation and Discussion Feedback

Name of Presenters: Sidharth, Robert and Harshi

How was the presentation? Did it help you?

In terms of how the presentation was, I thought it was really well put together. The speaker was engaging and kept the audience's attention throughout the entire talk. I came away with a much better understanding of the topic. The speakers provided a lot of practical advice and actionable steps.

Feedback for the presenters:

- The sections that each speaker covered were chosen thoughtfully and they went through their point very well.

Novel points raised during the presentation or discussion that you thought were crucial. Carefully consider all issues raised and list only those you feel were most important.

The final part of the presentations, given to us by Sid, was very interesting, the way it was shown that how popularity and influence were two very different things was awesome and the way we could see how less popular accounts could be influential and also, the way bots were shown producing tweets consisting the word "tea" was great.