Fake News is Real: A Multimodal Analysis of Actors and Social Platforms

Neha ChaudhuriProf. Indranil Bose (Chairperson)	
MIS Group, Prof. Uttam K. Sarkar	
IIM Calcutta Prof. Sanjiv D. Vaidya	

Abstract

Online social platforms have evolved from purely social networking websites to marketing platforms, decision-making tools for businesses, governments, and institutions, as well as information broadcast platforms for digital news media. While these platforms promote a democratic nature of information creation, they also suffer from lack of formal monitoring as well as mechanisms to trace the original source of shared information. Among the several challenges that arise due to their complex roles, the risks associated with the spread of fake news and misinformation on social platforms have led to widespread anxiety in recent times. However, academic research in this domain is still scant and fragmented. Hence, this research has adopted a multifaceted and multi-method approach for studying the spread of fake news on online social platforms including understanding the nature of the fake content itself, identifying platform-dependent extrinsic factors and examining how user networks contribute to their spread on these platforms.

Existing research has found that users translate their trust on interpersonal relationships on these platforms into their trust on content shared by their peers, past findings are limited regarding the impact of this trust on users' vulnerability to fake news. Therefore, in the first study, we have examined the impact of strength of interpersonal ties between platform users on perceived trustworthiness of news received through different modes of communication across multiple social platforms. Furthermore, our review of literature revealed that social media platforms (such as Facebook and Twitter) have been increasingly implementing various nudging measures, including flagging fake news content, to improve the dwindling trust and overall perceptions of users. However, similar content-based mechanisms on social messaging platforms (such as WhatsApp) would fail because of the encrypted nature of

conversations on these platforms. WhatsApp has implemented the 'forwarded' tag which informs users if the received news article had simply been forwarded by the sender. Therefore, in the second study, we have conducted an experiment to also examine different approaches to implementing such nudging tags on social messaging platforms. Specifically, we have proposed and compared the effectiveness of a new nudging tag as compared to the already implemented 'forwarded tag'. We have found that while both the tags were effective, their effectiveness in dissuading users from trusting fake news improved significantly when we employed an informational intervention that simply informed users about the accurate meaning of the tags and their importance. This in turn also positively influenced users' perceptions about the platforms' responsiveness and their engagement intentions. The third study has finally investigated whether the contents of user comments and the contents of the corresponding fake news impact how users engage with them on social media platforms, by applying topic modelling on a large dataset of fake news articles posted on Facebook along with the user comments. We have also shown that adding nuanced interaction effects of factors to the analytical framework will add conceptual richness and improve the predictive ability and reliability of similar future models.

The findings of this thesis have important academic as well as managerial implications and hope to nurture new avenues of research that study the impact of interacting factors on a wide range of contexts.