

Thesis Project Portfolio

Exploration of Cybersecurity Vulnerabilities and User Awareness on Social Media Platforms

(Technical Report)

Social Contract Between Users and Social Media Platforms: An analysis of Personal Data Privacy on TikTok

(STS Research Paper)

An Undergraduate Thesis

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Sociotechnical Synthesis

Social media is a fast-growing technology whose scale is unprecedented and, therefore, it is all the more important to dive deeper into understanding its many different stakeholders.

Analyzing how users use social media as well as the vulnerabilities they are exposed to is all the more important given the copious amounts of data users share on those platforms. Our technical project aims to analyze an onslaught of new cybersecurity challenges in this new age of big data as well as the user's awareness of it on social media. Are users truly aware of what they give up in exchange for participating in social media? It turns out that the majority of social media users are not aware of how their personal data is being used and collected online and even if they are it does not change their behavior. Moreover, another important conclusion of this project was that cybersecurity threats are complex and often ingrained in the technology of social media itself and it is often out of the hands of the users to avoid these cybersecurity vulnerabilities.

My STS thesis aims to understand the relationship between social media platforms and their users in the context of a social contract framework and how the government plays a role in regulating the issues that result in this relationship. In the scope of this framework, users have certain privacy expectations for how social media platforms handle their data and the platforms have a responsibility to be transparent about their practices and keep the best interests of their users in mind. However, using a case study of TikTok has shown this relationship is not a reality. Furthermore, the government has a long way to go in their attempt to effectively regulate data privacy on social media platforms.

The two projects together dive deep into all the different aspects of social media and the relationships between its stakeholders. Both projects have been successful in answering the questions we set out to explore. Understanding how users understand and interact with social

media was an important topic to analyze, however, one aspect of social media that should be explored further is the question of how to influence and change user behavior. My research has shown that knowledge does not often lead to better behaviors so the question is: what does?

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