

An Investigation of the Relationship Between Privacy Crisis, Public Discourse on Privacy, and Key Performance Indicators at Facebook (2004-2021)

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Abstract : We use Facebook as a case study to investigate the complex relationship between the firm's public discourse (and actions) surrounding data privacy and the performance of a business model based on monetizing user's data. We do so by looking at the evolution of public discourse over time (2004-2021) and relate topics to revenue and stock market evolution. Drawing from archival sources like Zuckerberg We use LDA topic modelling algorithm to reveal 19 topics regrouped in 6 major themes. We first show how, by using persuasive and convincing language that promises better protection of consumer data usage, but also emphasizes greater user control over their own data, the privacy issue is being reframed as one of greater user control and responsibility. Second, we aim to understand and put a value on the extent to which privacy disclosures have a potential impact on the financial performance of social media firms. There we found significant relationship between the topics pertaining to privacy and social media/technology, sentiment score and stock market prices. Revenue is found to be impacted by topics pertaining to politics and new product and service innovations while number of active users is not impacted by the topics unless moderated by external control variables like Return on Assets and Brand Equity.

Keywords : public discourses, data protection, social media, privacy, topic modeling, business models, financial performance

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