The Realities of Disclosure Risks in the Age of Dark Patterns and Big Data

Ramon Abraham A. Sarmiento

I. Abstract:

This proposal aims to explore the realities of disclosure risks in the current big data landscape, examining implications for individuals, society, and the evolving ethical landscape. The pervasive use of dark patterns in data collection has sparked significant ethical and legal debates on balancing confidentiality & privacy obligations with the need for precise research data. Thus, this paper seeks to shed light on the legal and ethical dilemmas of these disclosure risks arising from the intersection of data privacy, statistical data usage, and the employment of dark patterns, such as the possible insufficiency of existing data protection measures and their possible obsolesce in the age of Big Data.

II. Introduction:

The rapid digitization of our lives has led to an explosion of data generation and collection, which in turn may have changed the validity of the current frameworks that measure and minimize disclosure risks. The truth is that much of this collection and processing has been benign but there are documented cases of both misuse and data breaches. Notwithstanding the potential increase in disclosure risk, the statistical analysis of this data holds immense potential for societal progress. Thus, the need for societal progress, raises profound concerns regarding data privacy and ethical use of statistical data, particularly disclosure risk and its attendant harms. These concerns are not a purely academic matter but may also inform the willingness of individuals and business to provide sensitive information in support of research and statistical initiatives. The use of dark patterns in digital interfaces exacerbates these concerns by manipulating user behavior without their informed consent. This proposal seeks to delve into these intricate ethical quandaries to provide a comprehensive understanding of the possible insufficiency of existing data protection measures and their possible obsolesce in the age of Big Data.

III. Objectives:

1. Investigate the ethical implications of utilizing and sharing statistical data in relation to data privacy concerns arising from dark patterns, particularly disclosure risks.
2. Examine the prevalence, mechanisms, and impact of dark patterns on user decision-making in the willingness of individuals and business to provide sensitive data with a focus on the privacy paradox.
3. Evaluate the ethical and legal frameworks governing the minimization of disclosure risks in statistical data and the deployment of dark patterns.
4. Explore the current regulatory approaches to mitigate unethical practices while promoting responsible data usage taking into consideration the current General Data Protection Framework in the European Union as well as the United States Statistical.

IV. Methodology:

Classification: GENERAL

This research will adopt a multi-faceted methodology, including:

- Literature review: Analyzing scholarly articles, ethical frameworks, and industry reports on data privacy, statistical data analysis, and dark patterns.
- Case studies: Investigating real-world instances of disclosure risks, data misuse and dark pattern implementation in digital platforms across various sectors. A potential case study would be to potentially reverse the k-anonymization of publicly disclosed data sets by pairing them with data sets purchased from data brokers. These purchased data sets were likely gained via dark patterns.
- Ethical analysis: Applying ethical theories and frameworks to critically assess the moral implications of data usage and dark pattern deployment.

V. Significance:

Understanding the ethical dimensions of data privacy, statistical data analysis, and dark patterns is crucial in minimizing disclosure risks in the use of statistical data. This paper aims to contribute to academia, industry, and policymaking by providing insights that foster ethical decision-making regarding the reality of disclosure risks without making any recommendation as to practices to be pursued by government agencies and other data providers.

VI. Conclusion:

As technology continues to evolve, ethical considerations surrounding data privacy, statistical analysis, and dark patterns become increasingly complex and have served to greatly increase probable disclosure risks. This proposal seeks to unravel these complexities, offering a nuanced understanding of the ethical challenges and possible insufficiency of existing data protection measures and their possible obsolesce in the age of Big Data.

Classification: GENERAL