Inappropriate Use of Surveys, Cambridge Analytica (2018)

1. Overview

The Cambridge Analytica scandal (Confessore, New York Times, 2018) represents one of the clearest examples of surveys being used for purposes far beyond the participants' understanding.
What appeared to be an innocent Facebook personality quiz became a large-scale data-harvesting operation that influenced political campaigns across the United States and the United Kingdom.

2. What actually happened

A Cambridge academic, Dr. Aleksandr Kogan, created a Facebook app called This Is Your Digital Life. Around 270,000 users were paid to complete a psychological survey linked to their Facebook accounts. Because of Facebook's API design at that time, the app also accessed information about each participant's friends, names, Likes, locations, and other personal details, resulting in data from up to 87 million people being collected without consent.

The data were sold to Cambridge Analytica, a political consulting firm that used it to build psychographic profiles. These profiles were used to micro-target voters with highly tailored political advertisements during events such as the 2016 US Presidential Election and the UK Brexit referendum. Thus, a seemingly harmless academic survey was repurposed for large-scale political influence and commercial gain.

3. Why it was used

Surveys provide structured, interpretable features (examples: personality traits, attitudes) that can feed predictive models. By linking survey results to Facebook "Likes" and other metadata, Cambridge Analytica could infer users' openness, extroversion, or political leaning.
Such data are highly valuable for behavioural advertising, enabling campaigns to deliver messages designed to exploit emotional triggers. The motivation was therefore both monetary and political, demonstrating how research tools can be weaponised when ethical safeguards are weak.

4. Ethical and social implications

Perspective	Key Issues	Discussion
Ethical	Informed consent violated	Only direct participants consented; their friends did not. Consent was deceptive, as users were told the data were for "academic research."
	Purpose limitation ignored	Data collected for research were sold for political marketing—classic function creep.
	Respect for autonomy undermined	People were profiled and targeted without knowledge or control.
Social	Manipulation and mistrust	Psychographic targeting reinforced polarisation and eroded public trust in social media and research surveys.
	Erosion of privacy norms	Users realised that ordinary online quizzes could expose sensitive psychological information.

5. Legal and regulatory impact

- Facebook was fined $5 billion (FTC, 2019) in the US for deceptive privacy practices.
- The UK Information Commissioner's Office imposed a £500,000 fine, the maximum under the pre-GDPR Data Protection Act 1998.
- Under today's GDPR (Article 5), such behaviour would breach principles of lawfulness, fairness, transparency, and purpose limitation. These enforcement actions marked a turning point in global data-protection awareness.

6. Professional responsibilities of data scientists

According to the ACM Code of Ethics (2018) and the BCS Code of Conduct, professionals must:

- Respect privacy and obtain valid, informed consent.
- Avoid deception and secondary use of data without permission.
- Ensure transparency of purpose and processing.
- Prioritise the public good over organisational gain.

The Cambridge Analytica case shows what happens when these duties are ignored, trust collapses, reputations are destroyed, and entire platforms face regulatory scrutiny.

7. Lessons learned

1. Never disguise data-collection intent. State clearly how responses will be used and by whom.
2. Minimise data. Do not collect information about third parties (friends, contacts) without their explicit consent.
3. Separate research from marketing. Any repurposing requires renewed, specific consent.
4. Embed ethical review. Every survey-based project should undergo formal ethics assessment covering purpose, consent wording, retention, and security.

8. Conclusion

Cambridge Analytica transformed a simple survey into a political-profiling machine. From an ethical and professional standpoint, it demonstrates how weak consent, unclear purpose, and profit motives can turn legitimate research into manipulation. For data scientists, it is a reminder that responsible data handling is not optional, it is foundational to trustworthy analytics and sustainable public confidence.

References

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