



**PERSONAL INFORMATION: THE BENEFITS
AND RISKS OF DE-IDENTIFICATION**

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Who We Are

- The Future of Privacy Forum (FPF) is a Washington, DC based think tank that seeks to advance responsible data practices. The forum is led by Internet privacy experts Jules Polonetsky and Christopher Wolf and includes an advisory board comprised of leading figures from industry, academia, law and advocacy groups.



What are the Risks? De-Identification and Re-Identification Risk Analysis

- Swire: Who are the Attackers on “anonymized data”?
 - Insiders “peeping”
 - Outside hackers intruding
 - Public
- Sweeney: Find ways to share data widely but without re-identification
- Emam: Study revealed half of attacks on health data and other half were demonstration attacks by researchers
- Acquisti: Facial recognition and risks associated with combining technologies



What are the Benefits of De-Identification?

- Data yields great benefits of to society
- Slim chance of re-identification
- Strong tool to protect privacy



Common Secondary Uses of De-Identified Data: How are governments using data?

- Yu: Courts have relied on practical obscurity
 - Court records have SS#'s, informants, critical information
 - Some privacy controls implemented
 - SS#, birth year, last four digits of financial info, address
- Rocca: Pilot Sentinel Project will augment existing safety systems
- Barth-Jones: Some methods to de-identify data can mess up stats and lead to bad decisions



Data Use for Consumer Services

- Venugopal: Google translate has moved from 3 languages to 63 languages purely on generic, publicly available data
- Cohen: Microsoft location database contains de-identified info without any info specific to the user
 - Data derived from crowd sourcing
- Supreme Court Case on GPS tracking, US v. Jones



Advertising and Marketing Uses and Concerns

- Ho: Privacy concerns when IP databases contain Zip or Zip plus 4 or household information
 - Bering Media use of double-blind architecture
- Blum: Quantcast aggregates patterns of surfing behavior, no PII collected
- Magee: FTC acknowledged that there was no longer a bright line between PII and non-PII
 - Shifted approach to look at whether data could be linked to a consumer/user
- Brookman: Consider parties involved
 - 1st party use
 - 3rd party analytics firms
 - Cross-site data



Legal Perspectives on Anonymization: Daniel Solove Law Review Article: The PII Problem Privacy and a New Concept of Personally Identifiable Information (PII)

- Basic assumption behind the relevant statutes is that their applicability will turn on whether PII is present. (Note: no uniform definition of PII in information privacy law)
- Definitions that do exist are unsatisfactory
- Article introduces a new concept of PII
- Its model of PII 2.0 protects information that relates either to an "identified" or "identifiable" person, but that associates different legal interests with each category
- Flexible approach also provides the safeguard of treating identifiable information with a substantial risk of being identified as a form of identified data
- PII 2.0 represents a way beyond the reductionist reading of PII in the U.S., and the expansionist reading in the EU
- PII cannot be abandoned, and the PII 2.0 concept is essential as a way to define regulatory boundaries



Legal Perspectives on Anonymization

- Yakowitz: Proposal for a legal safe harbor for researchers to use data
 - Data commons is great for "information justice"
 - Must be accessible
 - Re-identification attacks are difficult and costly
- Geiger: Concern with long-term viability of de-identification standards



Thank You!



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Watch the Conference here: www.futureofprivacy.org/de-identification-workshop/

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