

Privacy and Information Goods

- Individuals Have Strong Privacy Expectations in Information Goods
- Backed by Norms and Laws
 - Legal Protections Against Compelled
 - (1) Association with ideas
 - (2) Disclosure of purchasing and borrowing records
 - Information Goods Providers Generally Protect Privacy
 - Scrutiny of subpoenas
 - Internal best practices
 - Culture of confidentiality

RFID and Information Goods: Privacy Threats

- Information disclosure
 - No Access Control
 - Radio Transmissions and Eavesdropping
- Standardized Labeling
 - (embedded information, and ids to database records)
- Tracking
 - Point - to - Point
 - Individual - to - Individual
- Invisibility (tags; readers)
- Joining Data
- Ubiquitous and distributed

Differences Between Retailers and Libraries

Usage Setting	Retail	Library
Radio Frequency	915 MHz	13.56 MHz
Read Range	20-30 ft	1 - 4 ft. depending on the size of the antenna
Cost	\$0.20 (\$0.05 within five years)	\$0.50-0.70
Existing Standards	ISO 18000-6	No Standard
Labeling Protocols	EPC: 96-bit globally unique ID	No Standard
Other Differences	Single Pass Inventory	Revolving inventory

Differences Between Retailers and Libraries

Retail

Library



EPC Version 1 . Penguin Publishers
Catcher In the Rye . Copy # 51,034



456 293 292 495

EPC V1 Penguin Catcher In the Rye 00051034
Header Manager Object Class Serial Number

456 293 292 495

Conclusions, Solutions and Recommendations

- With respect to information goods, RFID pose a substantial privacy risk that violates established public policy.
 - Individuals won't be aware of it and it will be difficult to avoid.

Possible solutions approaches (inadequate mitigation)

- Killing tags
- Anonymous IDs
- Write minimal information to tags and obscure it

A Role for the FTC

- A formal technical and policy assessment of RFID technology
- Guidance for businesses that use RFID to avoid such harms to consumers.
 - Fair Information Practices.
- Establish certain practices as “unfair” and/or “deceptive”
 - Information goods tags should not directly reveal subject matter nor make it easy to discover