(Intellectual) Ownership of Consumers’ Information in the IoT

A New Proposed Taxonomy for Personal Data

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Different problems…

- Inadequacy of actual taxonomy of Personal data
- A problem of ownership in the IoT: the grey area

A common solution!

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The need for a new taxonomy: the *grey area* between IP and Data Protection

- Data mining and innovative profiling
- Algorithms of personality
- Customer data as (database sui generis right or, better) Trade Secret of companies => Cognitive property
  - Right to be forgotten vs. Integrity of Companies’ IP
  - Right to access vs. Right to secrecy of trade
  - Right to data portability vs. competition law

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A new taxonomy

Two interesting caveats:

- This new taxonomy is transversal to the other categories:
  - In particular, sensitive data can well coexist with this new taxonomy

- It is already “in” the law: this is not a proposal “de iure condendo”
A starting point

The degree of relationship between individuals and data.

- The proper definition of Personal data, at article 4(1), GDPR
- “any information relating to an identified or identifiable natural person ‘data subject’ ”

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Two connected variables:

- The degree of relationship between data and subjects (y)
- The degree of intellectual activity of businesses in processing data (x).
A new taxonomy of Personal Data

Relationship Data - individuals

“Strong relationship” Data

“Intermediate relationship” Data

“Weak relationship” Data

Intellectual Activity of Business

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Data processing

“Strong relationship”

“Intermediate relationship”

“Weak relationship”

Data which companies derive from data mining and are about present life

Predictive Data

Data Provided directly by consumers

Relationship Data - individuals

Intellectual Activity of Business

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The first division: who “produces” which data

- **Data Provided directly (or produced) by individuals**
- **Data extracted (or produced) by businesses**

- "Strong relationship"
- "Intermediate relationship"
- "Weak relationship"

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The second division: verifiability

“Strong relationship”

“Intermediate relationship”

“Weak relationship”

Relationship Data - individuals

Future

Present

Intellectual Activity of Business

True (verifiable)

Probable (non verifiable)

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Concrete Examples of each category

- **Strong relationship**
- **Intermediate relationship**
- **Weak relationship**

**Registration Forms**
- Participation at an event, trips.
- Friendship
- Political preferences

**User generated content**
- Life expectancy, creditworthiness, possible future illnesses

**Processed Data**

**Intellectual Activity of Business**

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Rights at issue per each category

“Strong relationship”

Right to Data portability

Right to be forgotten

Right to access

Right to rectification

“Intermediate relationship”

Right to Data portability

Right to be forgotten

Right to access

Right to rectification

“Weak relationship”

Right to information

Right not to be subjected to automated profiling

Relationship Data - individuals

Intellectual Activity of Business

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“Strong relationship” data

- Explicitly provided by consumers, and not just on which consumers has given consent (e.g. cookies)
- Every control right, including Data Portability, Article 18 GDPR: “data which [the data subject] has provided to a controller” (and where the processing is automated and based on consent, or on a contract).
- User-generated content, Joint-controlling (article 24, GDPR).
“Intermediate relationship” data

- Any data not directly provided, but verifiable in the present life (e.g. trips, preferences, friendships, etc.)
- Here the intellectual activity of business grows, but as such data are verifiable in the present, their relationship with individuals is strong.
- No right to data portability, but right to access cannot be denied (minimum intellectual effort of companies)
- All other control rights
“Weak relationship” data

- Here the intellectual activity of businesses is total.
- No control rights.
- Not just “decisions” or “evaluations”.

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Data processing

Intellectual Activity of Businesses

Processed Data

Consumers' vulnerability

Information Asymmetry of consumers

Relationship Data - individuals

“Strong relationship” Data

“Intermediate relationship” Data

“Weak relationship” Data

Bigger risks in terms of consequences of processing (e.g. discrimination)

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Protecting consumers’ vulnerability

A change of paradigm: from control rights to “reaction rights”
- Right to information about the processing (vs. right to access to the content of the processing), art. 14, GDPR.
- Right not to be subjected to automated decisions referred to personality (not for pre-contractual relationship), art. 20, GDPR.

Profile generation vs. Profile application
- Consumers can react to the consequences of processing, but it is not necessary to control the content of the processing
- Misleading action (Art. 6, 2005/29/EC) ⇔ Right to information (art. 14, GDPR)

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Thank you!

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