

Data Governance – Building Trust

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*The views are of the author only
and not of
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What are RFID tags?

- ⇒ RFID tag is more than an invisible bar code!
Allows ubiquitous data gathering - *remotely!*
- ⇒ 3 types of RFID tags:
 - Battery Less (Passive – the most common),
 - Battery Assisted (Semi-Passive – improved reception),
 - Battery Powered (Active – with processing power)
- ⇒ RFID is an **enabling** technology which has tremendous potential for societal uses (like Internet of today which *includes misuses!*)
- ⇒ Problem: Whom to trust in “data mining”?

A common sense “Proportionality” is needed!

RFID data Governance

- ⇒ Problems with **data ownership and control**
 - Data on the tags itself ⇒ who controls it?
 - Back-end databases ⇒ who controls them?
 - Difference between single user's data and the aggregate of all of the data?
 - Legal jurisdiction ⇒ server location? Citizenship?
 - Enterprise ⇒ data for economic activity
 - Citizens ⇒ openness, transparency and safeguards?
- ⇒ Globalisation ⇒ global solution needed but needs to take into account EU / other regional cultural diversity
- ⇒ Data retention time-frame ⇒ How long is reasonable?

Potential data usages

- ⇒ Recommender Systems (see ack. 2)
 - Profiling for targeted adverts/recommendations
- ⇒ Private Enterprises (closed RFID systems)
 - Supply Chain / Product management
 - Profiling for marketing of products + services
- ⇒ Governments
 - Public Interests such as security, health-care, ...
- ⇒ Consumers will consent if:
 - *Richer life-style, personalisation, ease of data “control”*
 - *trust in data mining entities and (legal) recourse*

Governance

- ⇒ Who can be **trusted**?
Government ⇒ “Big Brother” scenarios ?
Private Enterprise ⇒ Profit motivations?
- ⇒ Answer depends on cultural background
 - USA ⇒ “Let market force decide”
 - Europe / Asia ⇒ “Government as Caretaker/Protector”
 - Generational Gap ⇒ Youth more comfortable
- ⇒ **No black or white magic answers!**
 - Technologies are global (Internet and Internet of Things)
 - Trust & Privacy concepts are culturally diverse!
 - No Trust = No (global) business! Trust becomes the key!

One definition of Privacy

Privacy in the Anglo-Saxon world is commonly associated with the **right to be left alone**; i.e. “My Home is My Castle”

Legal search warrant needed to search a person’s belongings.

However, what happens when data is held by others?

Who owns the data?

What jurisdiction applies?



Another definition of Privacy

⇒ **In 1983** the German Federal Constitutional Court ruled that: *"[...] in the context of modern data processing, the protection of the individual against unlimited collection, storage, use and disclosure of his/her personal data is encompassed by **the general personal rights of the individual to determine in principle the disclosure and use of his/her personal data.** Limitations to this **informational self-determination** are allowed only in case of **overriding public interest.**"*

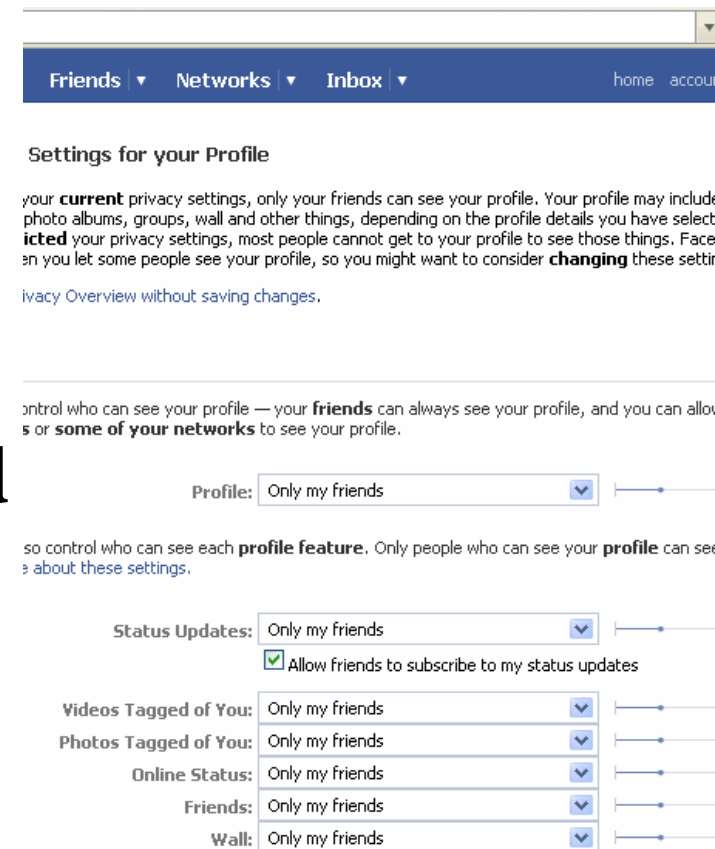
Informational self-determination

The right of the individual to decide what information about self should be:

➤ collected and communicated to others;

and

➤ under what circumstances



The screenshot shows the 'Settings for your Profile' section of a Facebook profile. It includes a navigation bar with 'Friends', 'Networks', and 'Inbox'. The main content area is titled 'Settings for your Profile' and contains several paragraphs of text explaining privacy settings. Below the text are several dropdown menus for setting privacy for different profile features, all currently set to 'Only my friends'. A checkbox for 'Allow friends to subscribe to my status updates' is checked.

Settings for your Profile

your **current** privacy settings, only your friends can see your profile. Your profile may include photo albums, groups, wall and other things, depending on the profile details you have selected. **icTed** your privacy settings, most people cannot get to your profile to see those things. Face in you let some people see your profile, so you might want to consider **changing** these settings.

Privacy Overview without saving changes.

control who can see your profile — your **friends** can always see your profile, and you can allow **some of your networks** to see your profile.

Profile: Only my friends

so control who can see each **profile feature**. Only people who can see your **profile** can see **about** these settings.

Status Updates: Only my friends
 Allow friends to subscribe to my status updates

Videos Tagged of You: Only my friends

Photos Tagged of You: Only my friends

Online Status: Only my friends

Friends: Only my friends

Wall: Only my friends

Need for Standards

- ⇒ Not restricted to RFID but all “data capture”
- ⇒ Formal (ESO) standards for inclusiveness
- ⇒ Standards for data usage and interoperability of different “closed systems” (personalisation)
- ⇒ Standards for simpler, consistent and **transparent** data manipulation (by users also)
- ⇒ Customer Trust = More business!

Today's Standards

- ➔ Today many closed systems (c.f. EPCglobal) and based on powerful business models on use of data
- ➔ Ad-hoc private approaches which are then “standardised”
- ➔ No “interoperability” between closed systems
- ➔ No customer empowerment as data owner is “master”
- ➔ Lack of transparency creates mistrust

Potential for:

- ➔ Formal Standards Bodies such as ESOs for transparency
- ➔ Naming / numbering in public domain (public good)
(Intergovernmental UN agency like ITU for global buy-in?)

Conclusions

- ➔ RFID as an enabling technology will bring many societal benefits (just like Internet)
- ➔ Generational and cultural differences drive concerns for take-up of the usage (trust)
- ➔ Data Governance will be the key to general public's wide spread acceptance of RFID technology
- ➔ (ESO) Standards for personal informational self determination (on data capture and modification) across many consumer applications
- ➔ No new EU Legislation for the moment

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e-mail: n.lathia@cs.ucl.ac.uk
- ➔ http://en.wikipedia.org/wiki/Informational_Self-Determination

Thank You!

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