

## INTERNET PRIVACY AND EU DATA PROTECTION

Data Protection and Datafication, Big Data  
and Internet-of-Things, Artificial  
Intelligence, Machine Learning (etc.)

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personal data & special data  
•  
transparency  
•  
consent or other processing ground  
•  
data minimisation  
•  
purpose specification and limitation  
•  
profiling  
•  
etc.

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## Rasterfahndung

*Typically RAF-terrorists use cash and pay their electricity bill in person at the utility (to keep their apartments associated with a false name)*



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## credit score

- *a numerical expression based on a level analysis of a person's credit files, to represent the creditworthiness of the person.*
- *primarily based on a credit report information typically sourced from credit bureaus.*
- *to evaluate the potential risk posed by lending money to consumers and to mitigate losses due to bad debt*



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### online profiling or behavioral advertizing

- *advertising based on observation of behavior of individuals over time*
- *seeks to study characteristics of this behaviour through actions*
- *to develop a specific profile and provide these individuals with advertisements tailored to their interests*

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### ethnic profiling

- *stopping or detaining the driver of a vehicle based on the determination that a person of that race, ethnicity, or national origin is unlikely to own or possess that specific make or model of vehicle*
- *stopping or detaining an individual based on the determination that a person of that race, ethnicity, or national origin does not belong in a specific part of town or a specific place*

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## search results

CJEU 13 May 2014,  
C-131/12 (Google  
Spain)

*37. Also, the organisation and aggregation of information published on the internet that are effected by search engines with the aim of facilitating their users' access to that information may, when users carry out their search on the basis of an individual's name, result in them obtaining through the list of results a structured overview of the information relating to that individual that can be found on the internet enabling them to establish a more or less detailed profile of the data subject*



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## profiling and automated decision making

automated processing of personal data consisting of the use of personal data to *evaluate* certain personal aspects relating to a natural person

in particular to *analyse* or *predict* aspects concerning that natural person's

- performance at work
- economic situation
- health
- personal preferences
- interests
- reliability
- behaviour
- location or movements



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## rules for profiling

### a right

- not to be subject to a decision based **solely** on automated processing, including profiling,
- which produces **legal effects** concerning him or her
- or similarly **significantly affects** him or her

### exceptions

- (a) necessary for entering into, or performance of, a **contract** between the data subject and a data controller
- (b) authorised by Union or Member State **law** to which the controller is subject and which also lays down suitable measures to safeguard the data subject's rights and freedoms and legitimate interests
- (c) based on the data subject's explicit **consent**.

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## datafication

every **breath** you take  
every **move** you make  
every **bond** you break  
every **step** you take...

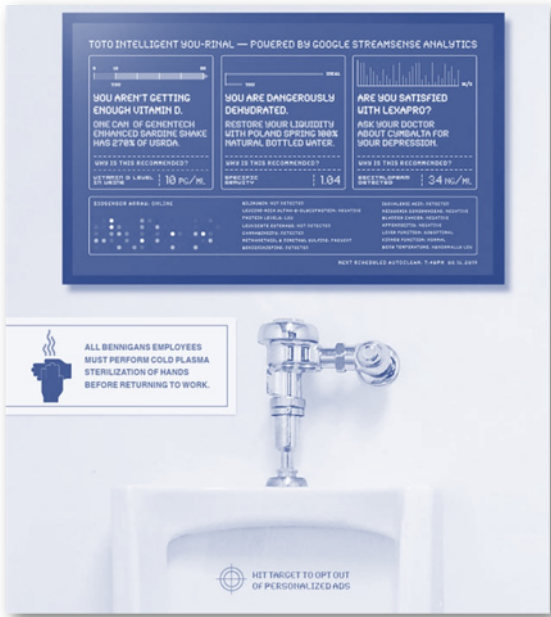
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datafication [*dey•tuh•fi•key•shuh•n*]

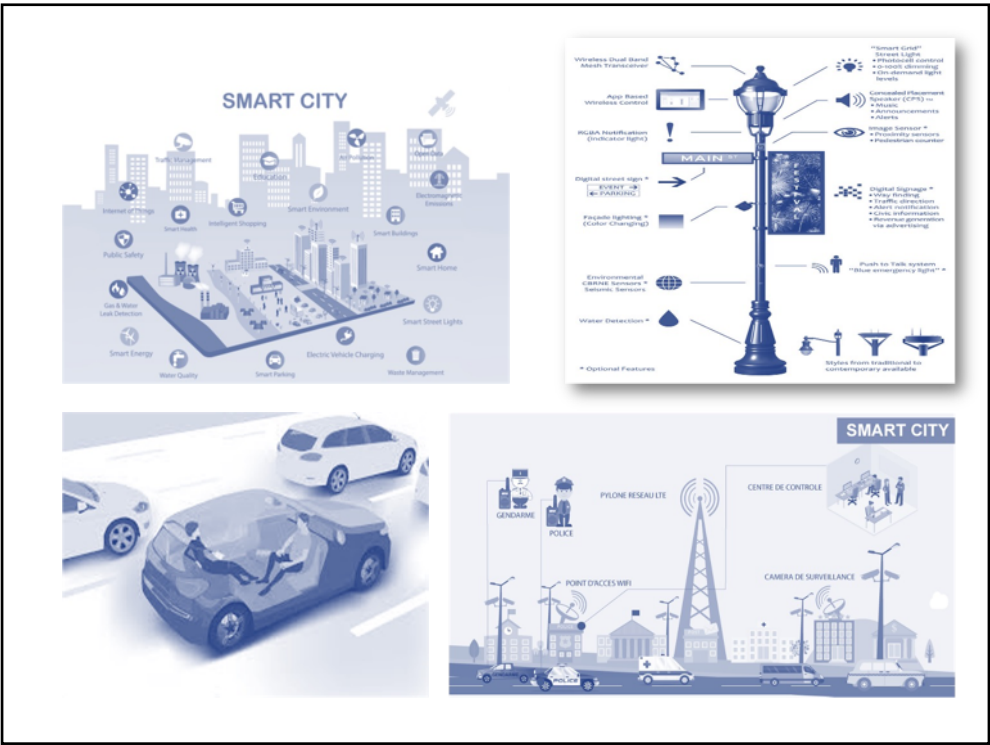
a modern technological trend turning many aspects of our life into **computerized data** and transforming this information into **new forms of value** [Mayer-Schönberger & Cukier 2013]



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Amstelveen, 07 February 2017

## Test at Schiphol: boarding quickly and easily using facial recognition

Summary

Schiphol Airport has started a test with KLM involving "biometric boarding" - one-off boarding without showing your boarding pass or passport. Passengers board the aircraft quickly and easily using a special door that recognises passengers by their faces.



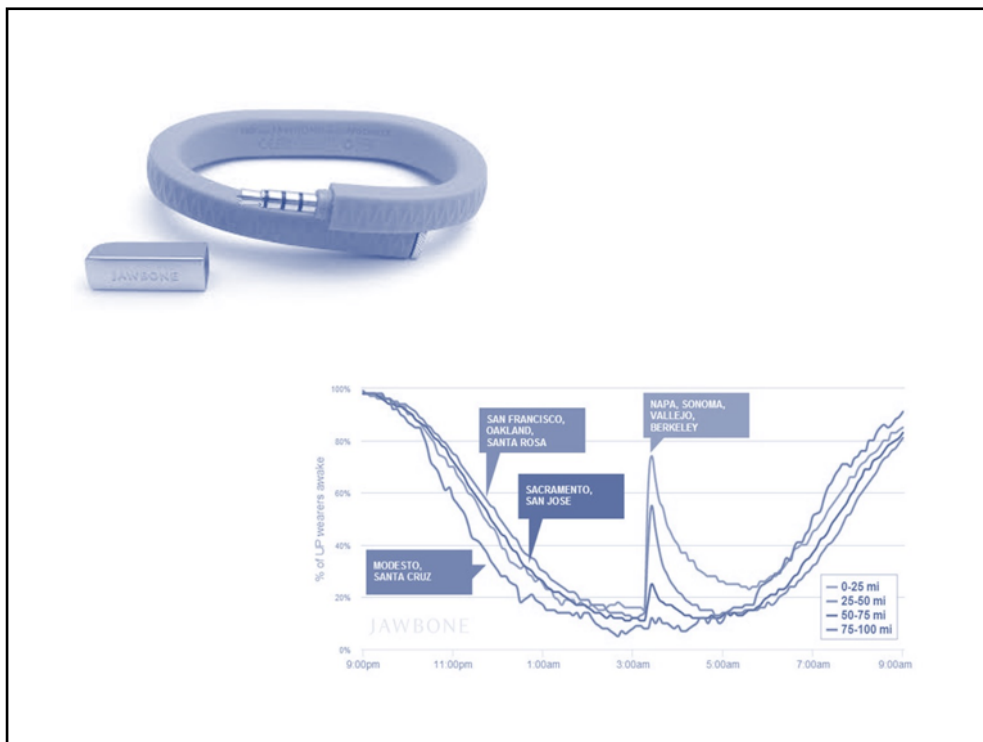
With the help of this test, Schiphol and KLM want to study the technology of facial recognition - the system's speed, reliability, and user-friendliness. They will also examine the boarding process and the passenger experience. The ultimate aim is to make the boarding process as quick and easy as possible for our passengers. The test period will last a minimum of three months.

It will take place at a specially selected gate at the airport. Boarding with facial recognition will require passengers to register first. In the waiting area near the gate, there will be a special registration kiosk. KLM staff will assist the passengers.

Registration involves scanning the passport, the boarding pass, and the passenger's face. In the interest of privacy, the data will be used only for the test. Following boarding, all personal data will be erased. All data storage in the registration kiosk is erased after ten hours.



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*Big Data is a generalized, **imprecise term** that refers to the use of large data sets in data-science and **predictive analytics** [Mayer-Schönberger & Cukier 2013]*

*Big data can be used to identify more general trends and correlations but it can also be processed in order to **directly affect individuals** [WP29 2013]*

*high-**v**olume, high-**v**elocity and high-**v**ariety information assets that demand cost-effective, innovative forms of information processing for enhanced insight and **decision making** [www.gartner.com/it-glossary/big-data]*

*unprecedented computational power and sophistication make possible **unexpected discoveries**, innovations, and advancements in our quality of life [Whitehouse 2014]*

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### distinctive aspects of big data analytics

- use of algorithms → *profiling and automated decision-making (art. 22 GDPR)*
- opacity of the processing → *transparency (art. 12-14 GDPR)*
- tendency to collect 'all the data' → *data minimization (art. 5.1 GDPR)*
- repurposing of data, and → *purpose limitation (art. 5.1b GDPR)*
- use of new types of data

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«function creep»

*(in British) noun the gradual widening of the use of a technology or system beyond the purpose for which it was originally intended, esp. when this leads to potential invasion of privacy*

CCTV for safety at school & kissing girls...

test of learning capabilities and problem families

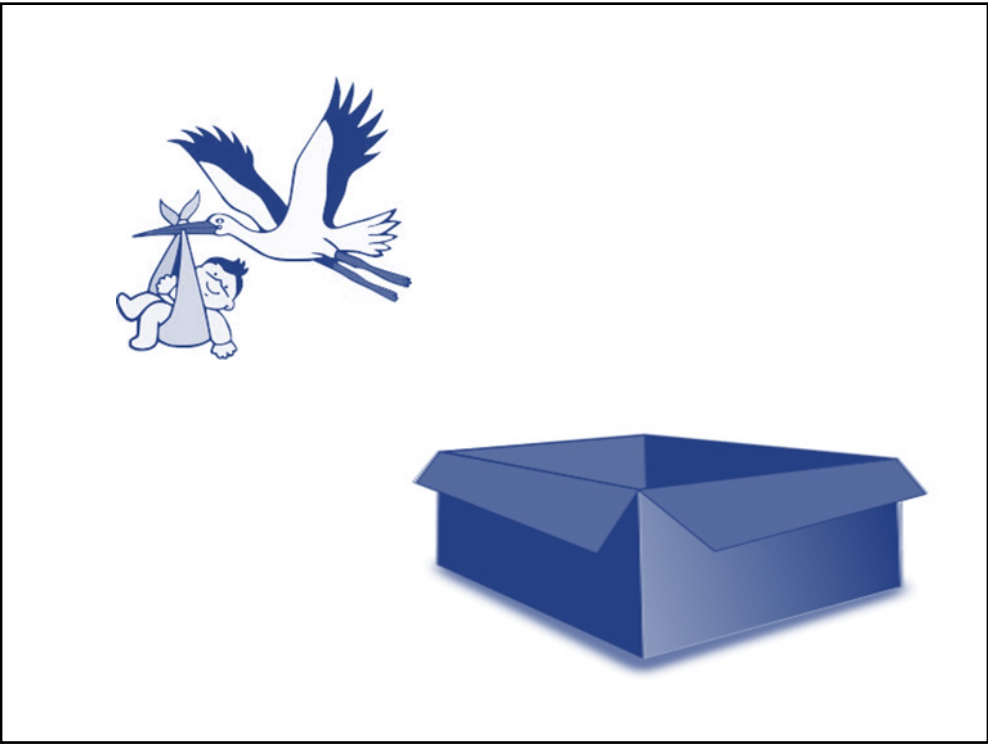
facial recognition & shorten waiting time & surveillance

pizzadelivery & health insurance

public transport card & distribution of cost & security

etcetera...

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in a big-data age most **innovative secondary** uses [of data] haven't been imagined when the data is first collected. How can companies provide **notice** for a purpose that has yet to exist? How can individuals give informed **consent** to an unknown...?

[Mayer-Schönberger & Cukier 2013]

free, specific, informed and unambiguous 'opt-in' consent **would almost always be required**, otherwise further use cannot be considered compatible

[WP29 2013]

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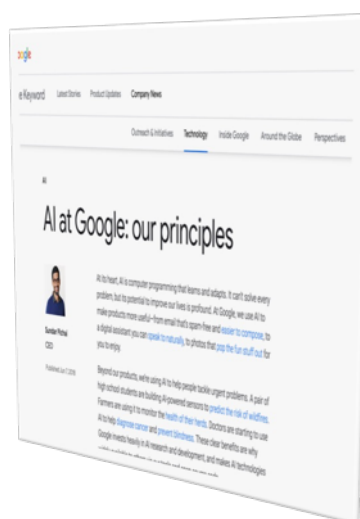
## AI-principles

**human centric** – deploy AI only if there is a clear benefit for people and society | *no unfair bias*

**human control** – our processes will remain within human control | *no black box*

**human accountability** – we will remain accountable | *no blaming the algorithm*

**human decision making** – transparency about decisions and underlying reasoning | *review and appeal*



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### AI Principles

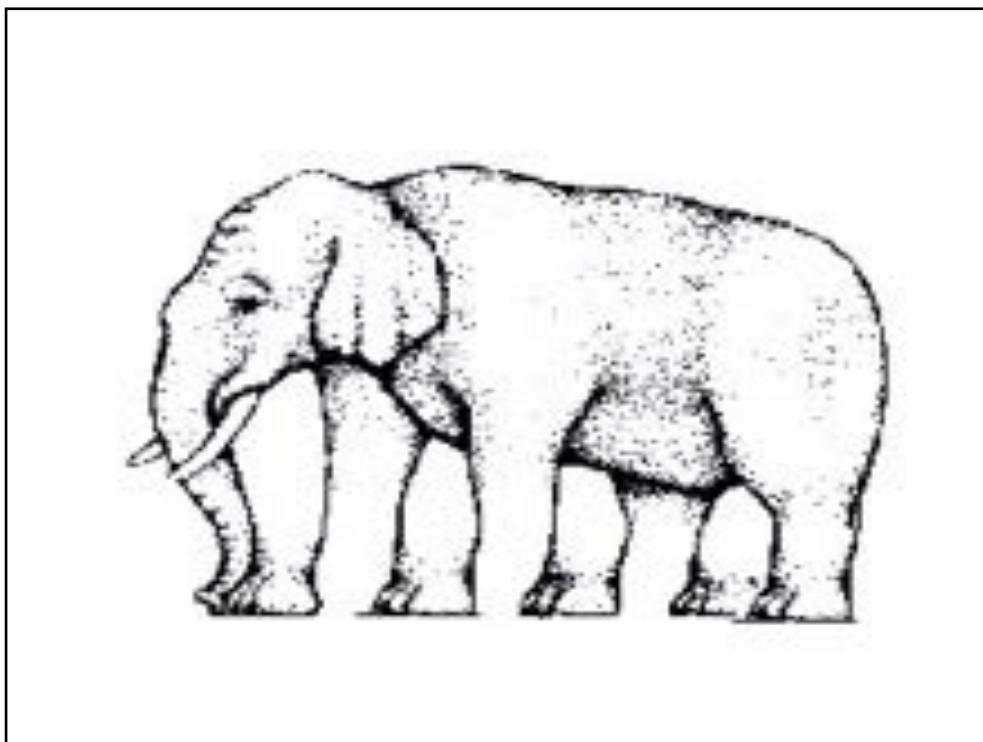
- human agency and oversight
- technical robustness and safety
- privacy and data governance
- transparency
- diversity, non-discrimination and fairness
- societal and environmental well-being
- accountability



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