

Public

Who owns the data?

Can we have your votes please?

Tom Hoogenboom, System Engineering, ASML

SASG meeting
6-feb-2018 | Veldhoven | v3

Agenda 62nd SASG meeting “Who Owns the Data”

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09.30 Reception & informal get together

09.45 Introduction ASML Tom Hoogenboom (ASML)

10.10 -1-: Teaser **Tom Hoogenboom (ASML)**

10.25 -2- : Data @ ASML **Luuk Bressers (ASML)**

11.05 Break

11.15 -3-: Data in products & services: What are the stakes? **Roelof Hamberg (Oce)**

12.00 **Lunch**

13.00 Guided tour (Experience Center)

14:30 -4-: Digital data under the law **Arnoud Engelfriet (ICTRecht)**

15:20 -5-: Brief reminder teaser Tom **Tom Hoogenboom**

15.30 Break

15.45 Discussion

16.40 Reporting Back / Plenary discussion

16.55 Wrap-up / conclusions

17.00 End

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Background and purpose

Today, the floor will open for you to discuss the ownership of data.

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And the related questions

- what is the value of data?
- Who can use 'my' data and for what purpose?

Once we have the legal/privacy part clear:

- can we deliver the technical means to protect our data and detect incursions?

This teaser invites you to collect your thoughts and sharpen your judgement in preparation for the rest of the day.

Disclaimer: the views presented are those of the author and not necessarily those of ASML.

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Simplistic

$$1 + 1 = 3$$

$$1 + 1 = 3$$

} End of intro

Proceed to company presentation () ;

Then continue

{

Simplistic

$$1 \text{ €} + 1 \text{ €} \geq 3 \text{ €}$$

Data is not fungible

1 € worth of data

1 € worth of data

+

≥ 3 € worth of data

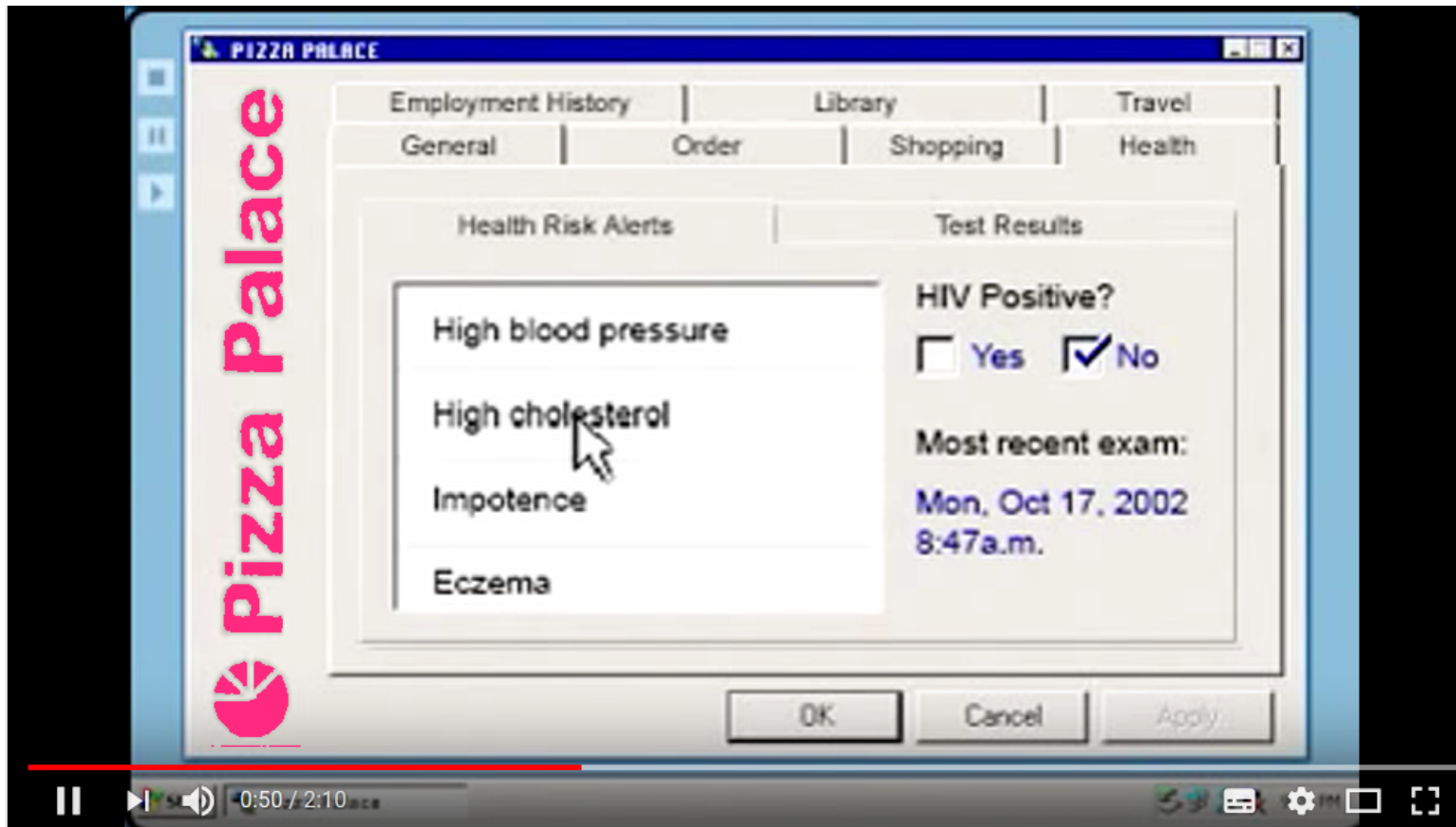
Combining data adds value!

Check: The right to combine data:

<https://www.youtube.com/watch?v=RNJI9EEcsoE>

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Introduction: The right to combine data

<https://www.youtube.com/watch?v=RNJI9EEcsoE>

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The image shows a screenshot of a web browser displaying the Pizza Palace website. The website has a blue header with the text "PIZZA PALACE" and a vertical logo on the left that says "Pizza Palace" in pink. The main content area is divided into several sections: "Employment History", "Library", "General", "Order", "Shopping", and "Health Risk Alerts". The "Health Risk Alerts" section is currently active and displays a list of health conditions: "High blood pressure", "High cholesterol", "Impotence", and "Eczema". A mouse cursor is hovering over "High cholesterol". To the right of this list, there is a section for "HIV P..." with a "No" option selected. Below this, it says "Most recent exam: Mon, Oct 17, 2002 8:47a.m.". At the bottom of the dialog box are buttons for "OK", "Cancel", and "Apply". A large yellow speech bubble with a blue border is overlaid on the right side of the dialog box, containing the text "Did this ever happen to you?". The screenshot is taken from a video player, as evidenced by the playback controls at the bottom, including a pause button, a progress bar showing 0:50 / 2:10, and various system icons.

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The right to track your data

Did you ever
track your data?

The right to track your data

I did tracking – even before the days of internet:

Philips Telephone Directory

The image shows a scan of a Philips Telephone Directory page. A blue rectangular box highlights a specific entry in the directory. The entry is: "T.O.M. Hoogenboom, PMS, 040-...". The rest of the directory page is visible but mostly illegible due to the scan quality and the focus on the highlighted entry.

T.O.M. Hoogenboom, PMS, 040-...

Typo, should be T.L.M.

The right to track your data: consider this:

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The right to track your data: consider this:



Do you see the value,
Do you see this as
win-win?

Today

- Keep these questions and concerns handy
 - During the presentations
 - During the breaks
 - During the discussions sessions

Scenario for the discussion session (scripted reality)

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Definitions matter

Ownership matters?

Let's assume it does, there is some some value,
you can exploit

This slide to
remain hidden

Contrast with

- Stone money in Polynesia
- Bitcoin
 - Bitcoin wallet
- Book, CD, Patent
 - Not the form, but the content, not the 0's and 1's but what they 'mean'
- Your social media footprint → Watson – ask audience to submit a story – and why did you not do this? Or : was is correct

So you bought a toaster, a multi-million machine, a CRM system

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Check

Definitions

Definitions matter

Yellow
note

Ownership

Role based Access:
Right to

Definitions matter

Yellow
note

Ownership – access – access control list

own == right to change ACL?

Role based Access:

Right to **use** – who can use?

who can use for what purpose?

what about the value added (VAT on data?)

Right to **change** – do we still do that? Or just add data?

Right to **delete** – who can delete?

Definitions matter

Yellow
note

Ownership – access – access control list
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Role based Access:

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Right to **know** about it / index -> metadata -> Ownership – access – ACL

Full circle



Definitions matter

Yellow
note

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Proxies – e.g. doctors assistant (or your assistant to access the doctor?)
value is in 'health'

Full circle



Sub-theme: 'value'

Stone money – clear ownership?

The extrinsic (perceived) value of a specific stone is based not only on its size and craftsmanship, but also on its history.

Value stays if stone is accidentally dropped overboard during transport.

So you can ‘own’ a stone, and transfer its value even if it is at the bottom of the Pacific Ocean



Presentation of Yapese stone money for FSM (Federated States of Micronesia) inauguration.

Bitcoin



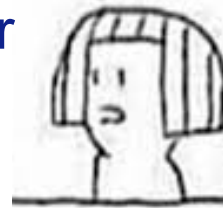
“My daughter’s wish for a birthday gift is a wallet”

“A wallet?”



“A wallet for BitCoin”

“A bitcoin is \$12368! Why would she ask for \$14328? What would she buy in the store tomorrow for 2 dollars?”



Bitcoin – perceived value

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Bitcoin – perceived value

A bitcoin is just 'data',
right?

Bitcoin – perceived value

Who actually has a wallet
(and is willing to answer this question)?

Why?

Bitcoin – actual value

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Bitcoin – actual value

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Bitcoin = data = value

Value == what you can do with it for your benefit

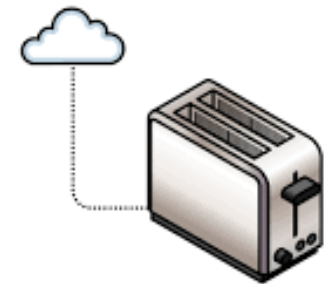
- Sit and wait
 - Price may go up
 - Little contribution to the world economy
- Simplify trade
 - Eliminate non-value-added steps in a payment chain
 - Fewer MJoules spent for the same benefit
- Open up new possibilities
 - Enable smart contracts – e.g. a philanthropic gift: proof of delivery

Simple example

You bought a toaster (IoT enabled)

Who owns the data inside?

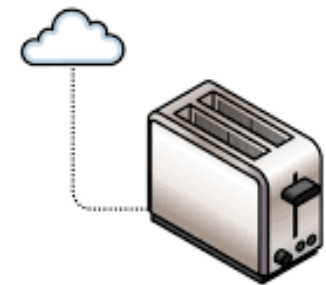
- The personalized settings? A: ...
- The SW? A: ...
- The IoT SW stack? A: ...
- The usage pattern? A: ...
- The 'content' (white or brown) A: ...



You bought a toaster (IoT enabled)

Who can **use** the data inside? And for what purpose?

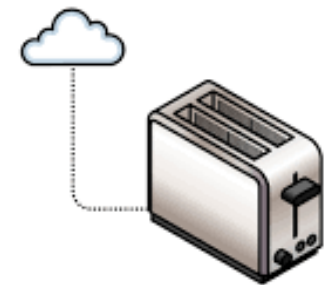
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You bought a toaster (IoT enabled)

Do you (does the owner) need **protection** (technical, legal)?

- The personalized settings? A: ...
- The SW? A: ...
- The IoT SW stack? A: ...
- The usage pattern? A: ...
- The 'content' (white or brown) A: ...



You bought a multi-million machine, e.g. a CRM SW, or an MRI system?

Who owns the data inside?

- The personalized settings? A: ...
- The CRM/MRI SW stack? A: ...
- The usage pattern? A: ...
- The 'content' (images, text) A: ...



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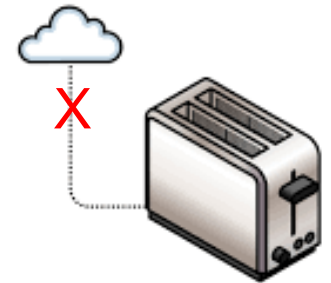
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For the toaster, protection is simple

→ Just pull the plug (disable Wifi or whatever)

- . But you would probably not be able to prove that that works...
- . You'd have no way to detect intrusion → need to trust someone

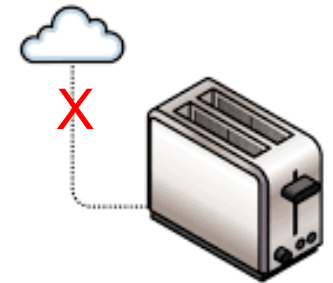


For the CRM system / MRI : not so simple

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For the CRM system / MRI : not so simple, right?

→ Do we have BKM's (best known methods)?



End of discussion?