



Designing the Ultimate Tracking Device

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Aim



Not to design the ultimate tracking device.

(sorry).

Aim

To explore requirements and concerns about tracking people by designing a hypothetical “perfect” wearable tracking device which is designed not to be removed.

This is **conceptual**: not worried about feasibility or how device will work.

We want to explore the issues around tracking people through “design fiction”/“speculative design”.

You’ll be working with those on your table: the goal is discussion, not design!

Stages

- 1) Decide on Scenario**
- 2) Core Definition – Who, What, Why?**
- 3) Practicalities**
- 4) Sociotechnical Analysis**
- 5) Conclusions and Discussion**

Scenario

- 1) Introduce yourselves!
- 2) Decide: who will be tracked, and what will be tracked about them?

You could design a device to track different types of people if you so wish.

Possible scenarios:

Alcohol monitor;

Geofencing for house arrest;

Tracking of dementia patients to address purposeful walking;

Parental tracking of children;

Core Definition

- 1. Who will be tracked?**
- 2. What is the purpose of being tracked?**
- 3. In what circumstances will tracking take place?**
- 4. Will the tracking be consensual or involuntary?**
- 5. Who will be doing the tracking?**
- 6. What is the minimum frequency with which tracking data must be collected?**
- 7. What data are required from the tracking devices and how will it be used?**

Practicalities

- 1. What size and how visible should the tracking device be?**
- 2. How and where will it be secured, if at all?**
- 3. How will it be removed, and by whom?**
- 4. How will tampering be prevented?**
- 5. How are data collected, stored and accessed, and by whom?**
- 6. Will the data be believable? What errors might be generated in the way it is being captured?**

Sociotechnical Analysis

1. **People** – which other stakeholders are affected by the device?
Who benefits and who loses out?
2. **Infrastructure** – what infrastructure might the device require?
3. **Culture/Society** – what broader social problems might arise from the use of the device?
4. **Processes/Procedures** – what are the legal and operational processes that will be needed to support the device?
5. **Technology** – how might the technology be abused or misused?
6. **Goals/Visions/Values** – How well does the device fit with the goals and values of interested parties – the wearer, significant others, relevant authorities and so on?

Summing Up



Get your thoughts summarised on a sheet

Stick it up on the wall!