

Appendix

Envisioning future experience for online data privacy

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Master thesis

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August 2025

Appendix: cases from news

The image displays a collection of 30 news snippets arranged in a grid on a light gray dot grid background. Each snippet consists of a title, a description, a link icon, and a green 'Idea' tag. The snippets are as follows:

- Elon Musk's X is changing its privacy policy to allow third parties to train AI on your posts** (Idea tag)
- LinkedIn is training AI models on your data** (Idea tag)
- Uber concealed a hack that affected 57 million customers and drivers** (Idea tag)
- Criteo's Tracking Cookies without consent** (Idea tag)
- Jolla debuts privacy-focused AI hardware** (Idea tag)
- Google Maps is making a big privacy change to protect your location history** (Idea tag)
- Chromebooks for Dutch education sector: no more known high risks** (Idea tag)
- "Allow Location Permissions to unlock reminders. Get a reminder when you're in the store so you never forget to grab the items you need!"** (Idea tag)
- Google's latest Privacy Sandbox gambit could pit user choice against tracking** (Idea tag)
- How to delete the data Google has on you** (Idea tag)
- TikTok processing children's data without their parental consent** (Idea tag)
- FTC Staff Report Finds Large Social Media and Video Streaming Companies Have Engaged in Vast Surveillance of Users with Lax Privacy Controls and Inadequate Safeguards for Kids and Teens** (Idea tag)
- PayPal is building an ad network based on your Venmo data** (Idea tag)
- Google Meet, Microsoft Teams, and WebEx are collecting more customer data than they appear to be** (Idea tag)
- Lawsuit claims Zoom illegally shared user data with Facebook** (Idea tag)
- Facebook sharing personal data with external developers and other partners** (Idea tag)
- Certain companies sharing combined data with third parties** (Idea tag)
- Selling something through Vinted? There goes your privacy** (Idea tag)
- Hospitals are selling treasure troves of medical data — what could go wrong?** (Idea tag)
- Selling something through Vinted? There goes your privacy** (Idea tag)
- Online age verification is coming, and privacy is on the chopping block** (Idea tag)
- Google's 'Project Nightingale' Gathers Personal Health Data on Millions of Americans** (Idea tag)
- Facebook Tracking Non-Users** (Idea tag)
- Hospitals are selling treasure troves of medical data — what could go wrong?** (Idea tag)
- Meta faces another EU privacy challenge over 'pay for privacy' consent choice** (Idea tag)
- Meta faces another EU privacy challenge over 'pay for privacy' consent choice** (Idea tag)

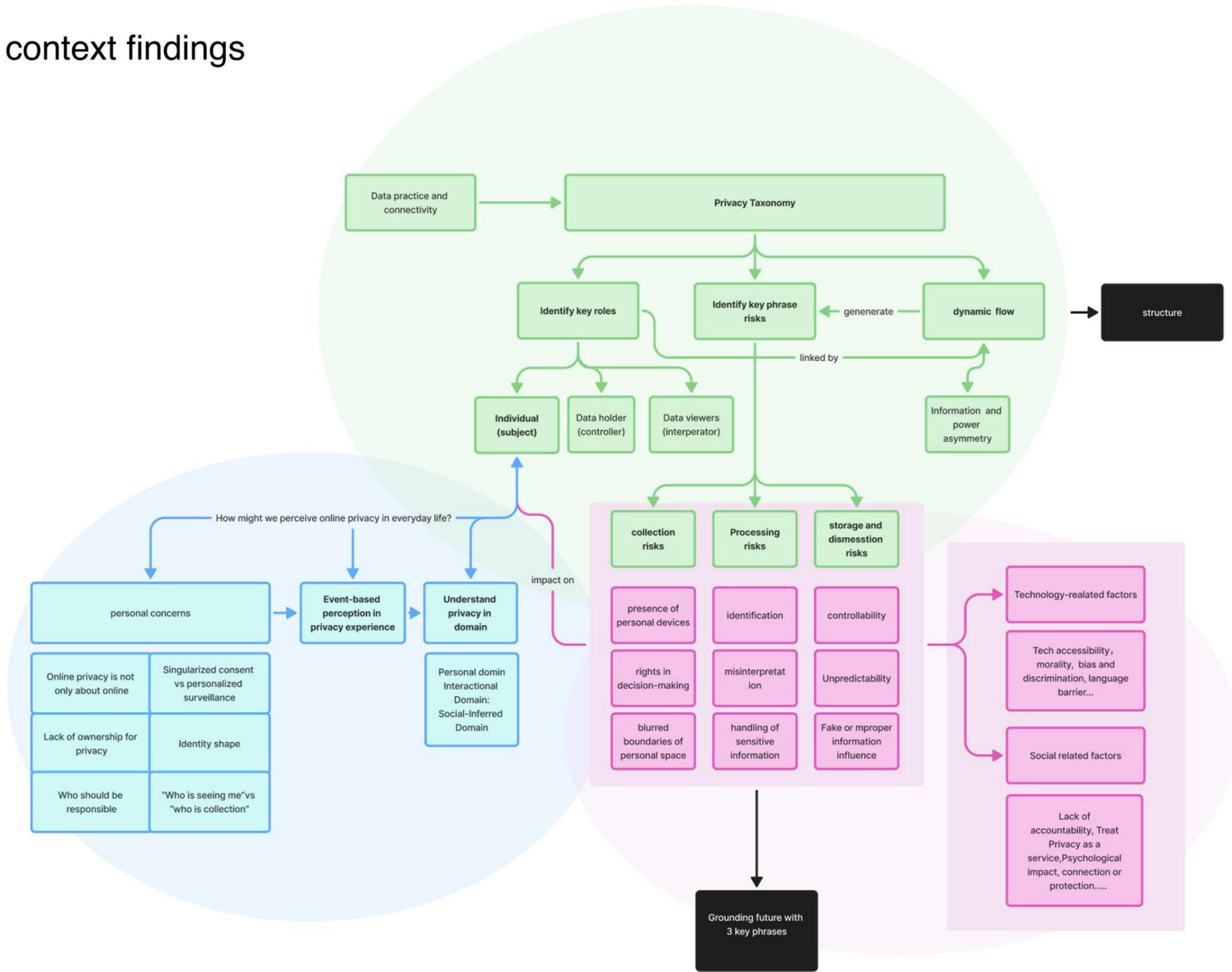
Red callout boxes with text are placed next to several snippets:

- Out of expectation** (next to Uber snippet)
- broken acces** (next to Criteo snippet)
- Some method for addressing high risks is undisclosed.** (next to Chromebooks snippet)
- Gathering an intimate picture of a person's life** (next to Location Permissions snippet)
- Exclusion** (next to FTC snippet)
- Exclusion: privacy is cost** (next to PayPal snippet)
- Out of expectation** (next to Google Meet snippet)
- identity** (next to Vinted snippet)
- Sensitive data is collected or dissemination** (next to Project Nightingale snippet)

A green callout box with text is placed between the Google Maps and Chromebooks snippets:

- Isolation services to gain privacy**

Appendix: context findings

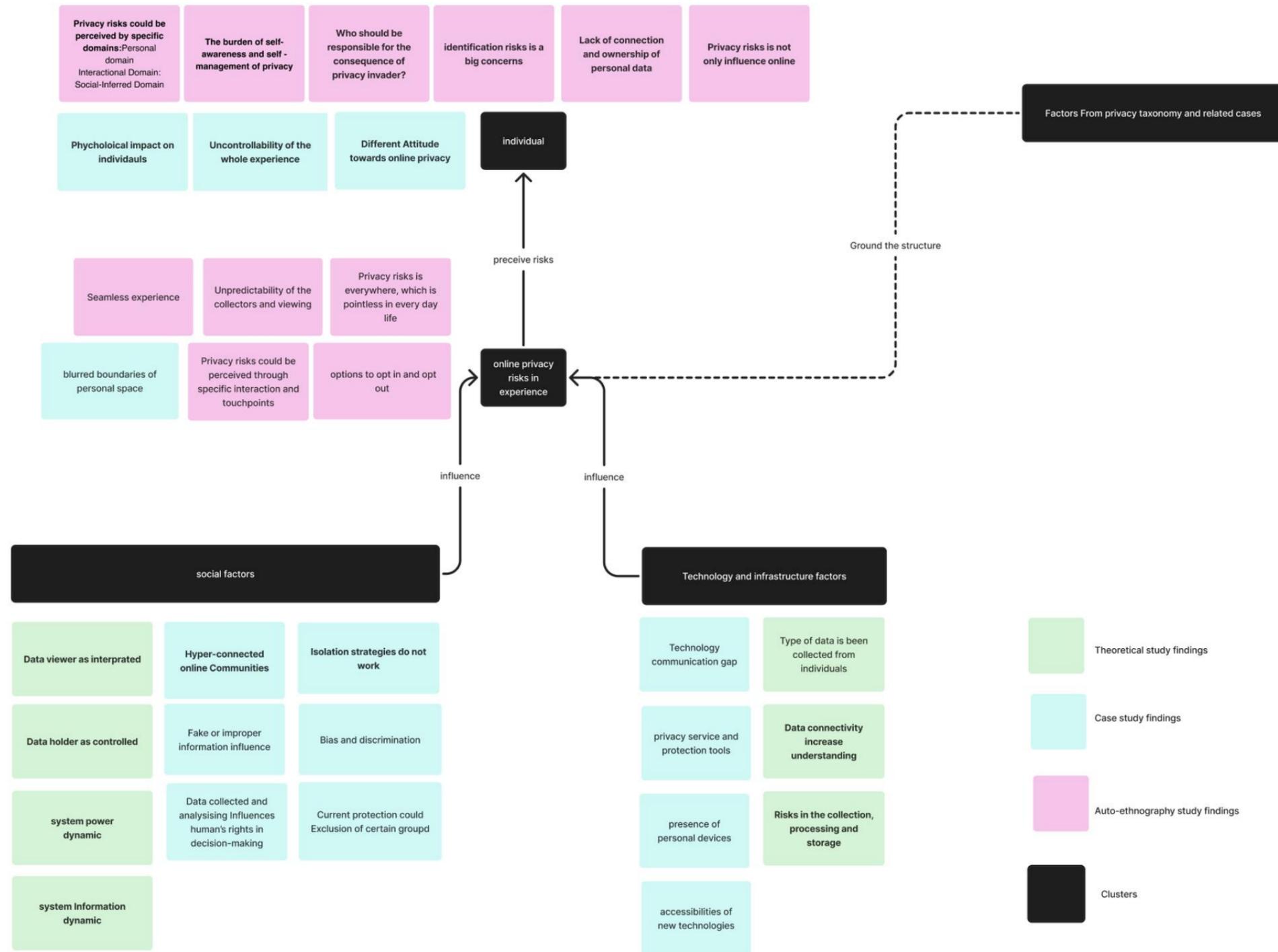


personal concerns	
Online privacy is not only about online	Singularized consent vs personalized surveillance
Lack of ownership for privacy	Identity shape
Who should be responsible	"Who is seeing me" vs "who is collection"

collection risks	Processing risks	storage and dismesstion risks
presence of personal devices	identification	controllability
rights in decision-making	misinterpretation	Unpredictability
blurred boundaries of personal space	handling of sensitive information	Fake or mproper information influence

- Technology-related factors
- Tech accessibility, morality, bias and discrimination, language barrier...
- Social related factors
- Lack of accountability, Treat Privacy as a service, Psychological impact, connection or protection.....

Appendix: context findings



Appendix: Design of sensitive materials

Introduction about this sensitizing booklet

Hello there 🤖,

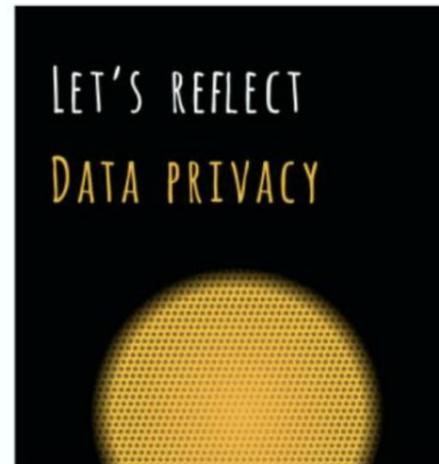
Thank you for participating in my research! This study is part of my graduation project, reflecting on **your online data privacy**. Your experiences and opinions about online data collection are incredibly valuable. Together, we can explore how individuals like you have the ability to influence change for the future!

The research consists of two parts:

- **A Sensitizing Booklet with 4 exercises (each taking about 5 minutes to complete).**
- 1 hour workshop scheduled after the booklet is completed.

The booklet is designed to immerse you in the topic and help better prepare for the testing session.

There's no right or wrong answer—please feel free to share your thoughts openly and honestly. Your opinions are invaluable to this project!



Day 1: What personal data is passively shared online?

There are two main goals for the first day exercise: 1. Help the participants have an overview understanding the digital data landscape. Dive into the context. 2. Invite the participants to identify personal data types. Reflect on what data is collected and why it matters.

Day 2: Aware of data privacy risks

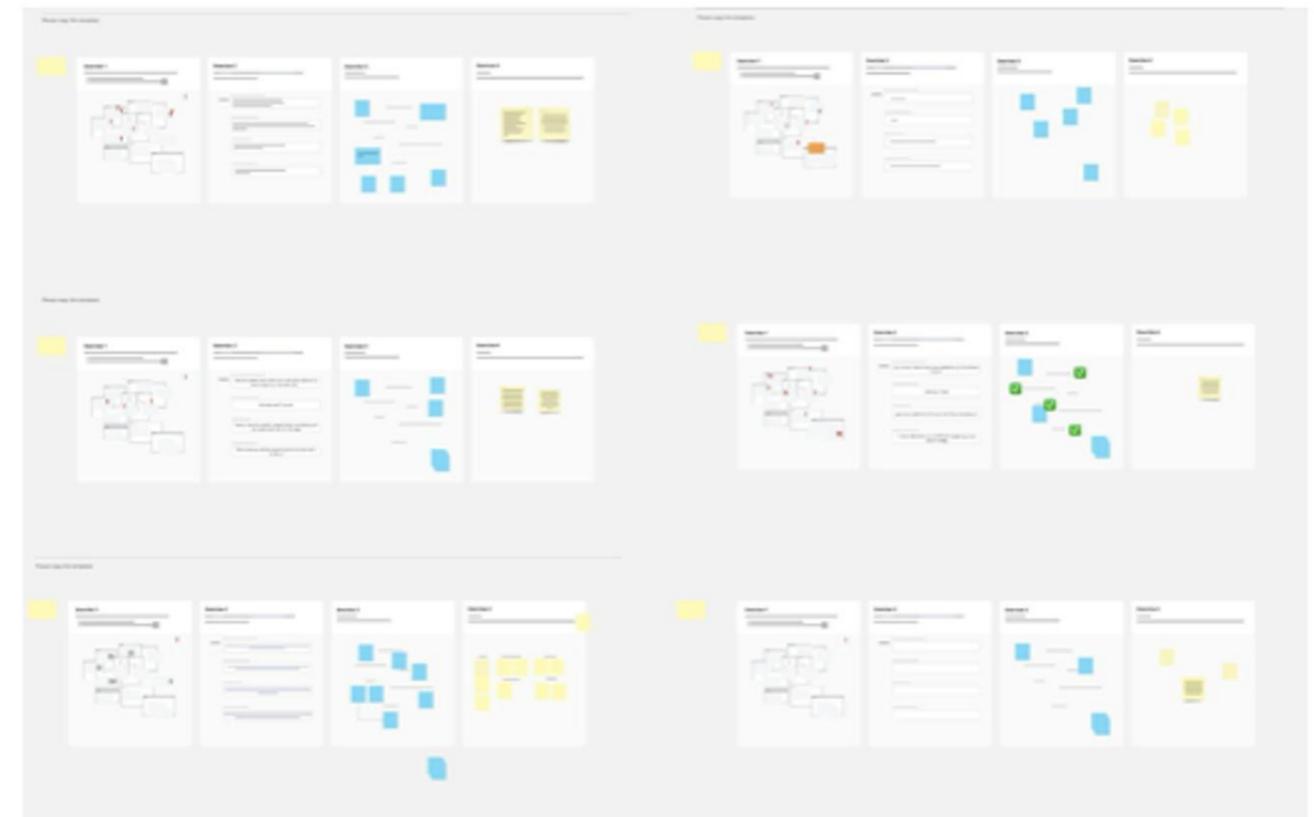
This exercise aims to invite participants reflect on the specific moments in the contexts in when and how data is being collected and how they realize the privacy issues. Through "What" "Who" "When" questions to make them reflect concrete moments in their daily lives.

Day 3: How would you describe it in your own words?

participants will be encouraged to define privacy in their own words, recognizing that privacy is a subjective and deeply personal concept. This exercise allows them to explore what privacy means in their daily lives, drawing from their cultural backgrounds, values, and personal experiences. To inspire reflection, they will be presented with key terms related to privacy (Solove, 2010). This reflection also fosters they think about the expectations of privacy.

Day 4: How do you think digital data privacy influences life?

On the fourth day, participants will reflect on how digital data privacy influences their lives, considering both its benefits and risks. This open-ended question encourages them to brainstorm the potential impact of data privacy currently, as well as in the future.



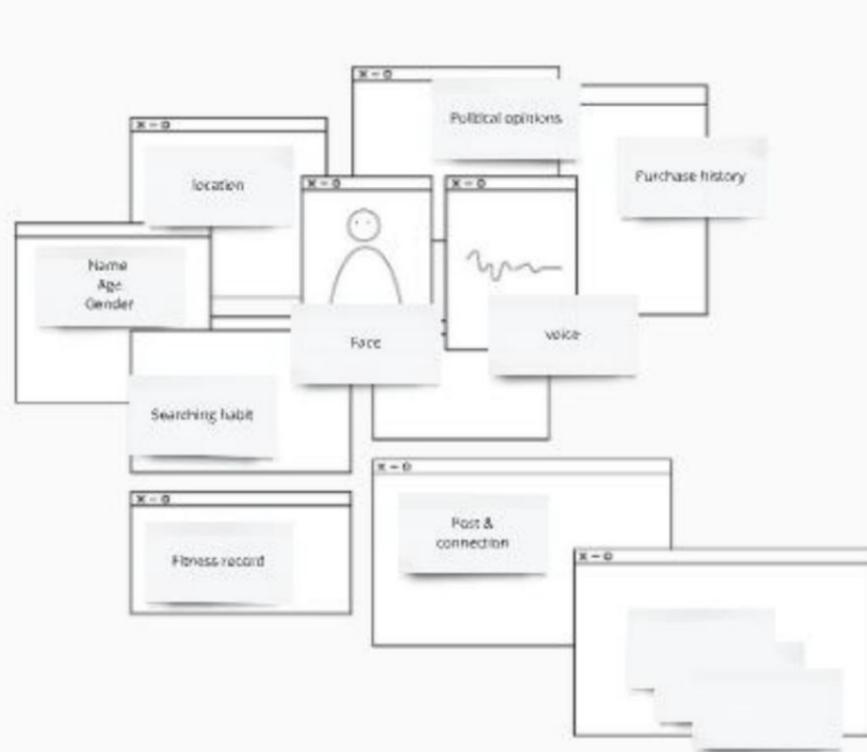
Appendix: Design of sensitive materials

Exercise 1 Template

Exercise 1

Your digital data is collected and processed through your online activities...

1. What personal data is passively shared online?
2. What data is important or sensitive to you? Please mark it with. **!**.



Exercise 2 Template

Exercise 2

What **moment** made you notice that **your digital data was at risk online**?

Please reflect ONE specific experience

I noticed which data was collected at that moment

who (which server) was collecting

my data was used for...

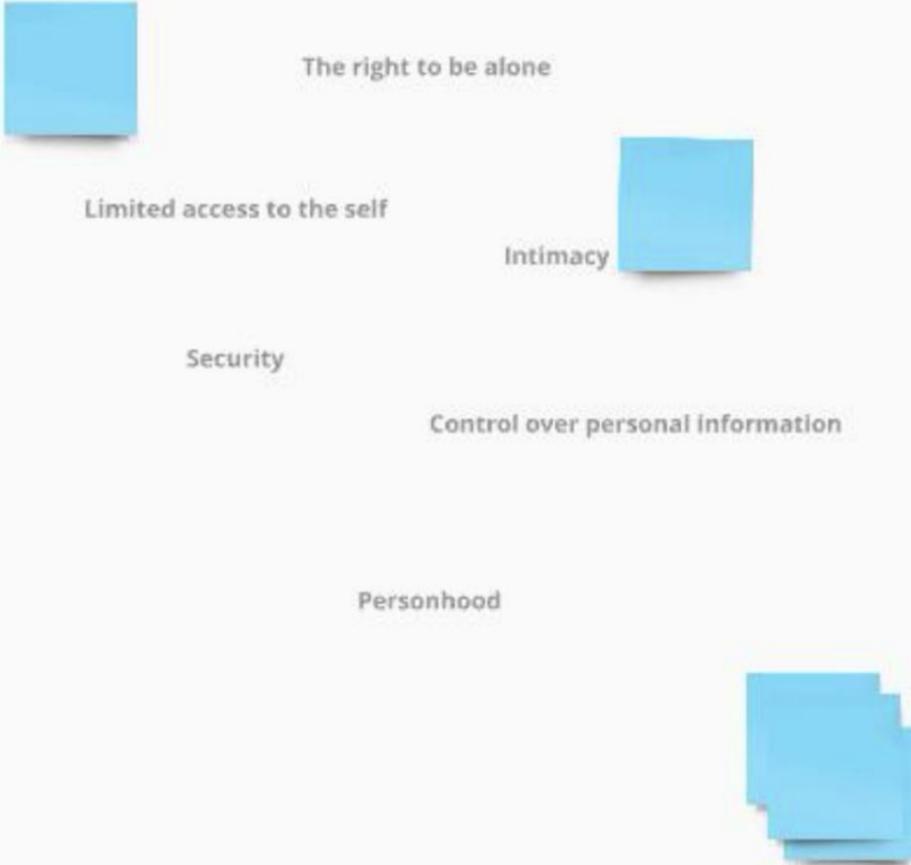
Other things you might aware...

Appendix: Design of sensitive materials

Exercise 3 Template

Exercise 3

Define "Privacy"
Could you describe privacy in your own words?



Exercise 4 Template

Exercise 4

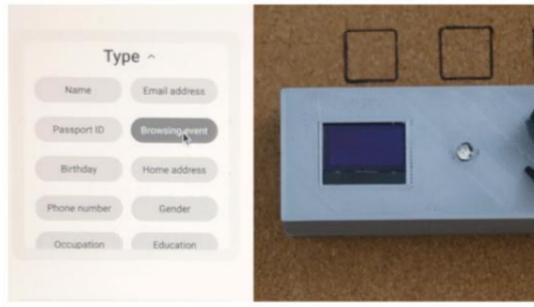
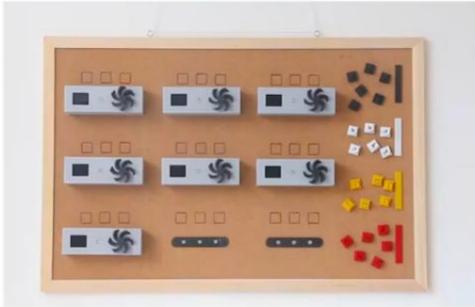
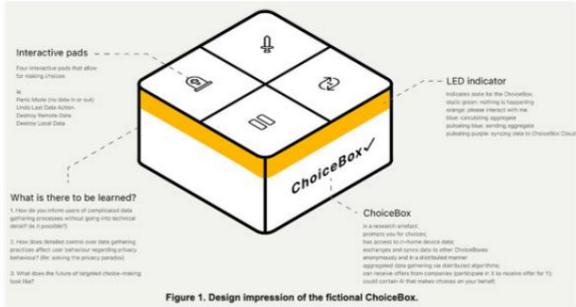
Spark Time
From the present to the future, how do you think your online data privacy influence your life?



Appendix: Speculative design- new voice

Search strategies: keywords "Speculative design"/"critical design"+ "Digital surveillance" / "data privacy" /

Project name	Topic	Audience	tool
Rationalizing Dark Patterns: Examining the Process of Designing Privacy UX Through Speculative Enactments https://research.tue.nl/en/publications/rationalizing-dark-patterns-examining-the-process-of-designing-pr	explore the responsibilities and issues about the "Dark pattern"	Designers	"Choice box" Enactment
Exploring student control over data privacy through speculative design https://sparkjournal.arts.ac.uk/index.php/spark/article/view/53/78	"soft paternalism" nudge + the metaphor of data as a currency consider the impact on the social system of the class or university from a data economy	student using digital learning	Fictitious "KnowledgeTree" system controlling the data privacy
What if data protection embraced foresight and speculative design? https://aura.abdn.ac.uk/bitstream/handle/2164/19006/Rossi_et_al_DRS_What_if_data_VOR.pdf?sequence=1	a first step towards a better understanding of how foresight and speculation can contribute to data protection policy-making	French data protection authority and citizens	fiction website
Netflix's Black Mirror S01E03: The Entire History of You	"The entire history of you"--permanent data	Individuals	Fictional movie
Centralization of data https://www.helloshivam.com/work/thesis-explorations	1. Reflect how is data taken away from us 2. Reflect what data is taken away from us 3. Reflect how much is our data worth	Individuals	design artifacts
Who is surveillant- New surveillance plan https://2021.rca.ac.uk/students/hao-liu/	speculative new relationship between the users and digital products	Individuals	Interactive design artifacts with granulated and timely informed all actions to users



KnowledgeTrees

Index: 100 | Total Private: 3913 | Total Released: 530 | Left to Spend: 190

Compare with Friends | Get Recommendations

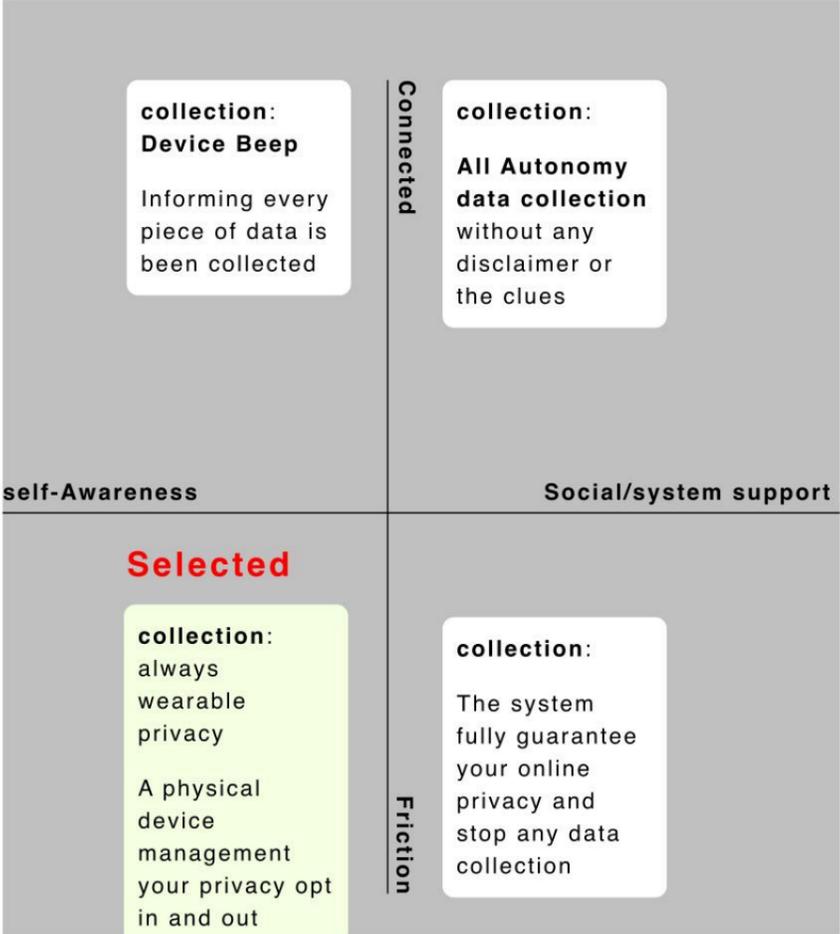
Learning Objects

Action Taken	Data Generated: 1318	Private Data: 1068	Released Data: 250
Lecture Videos	680	View Data	Release Data
Homework Attempts	355	View Data	Release Data
Practice Problems	130	View Data	Release Data
Practice Quizzes	150	View Data	Release Data

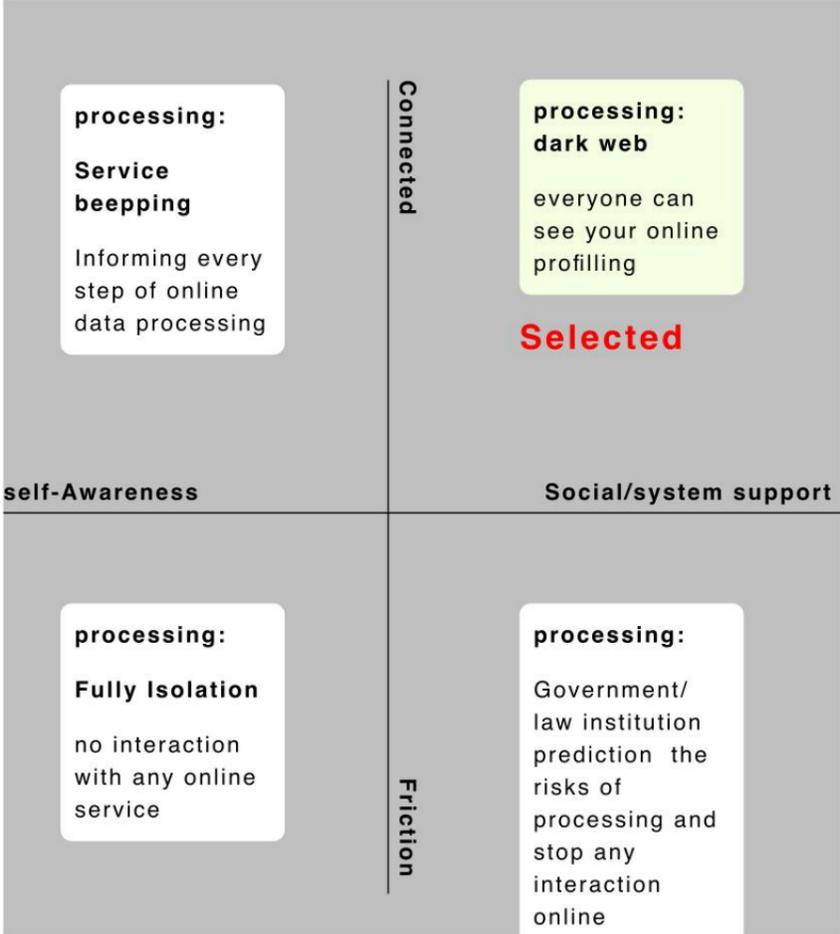
Clickstream Data



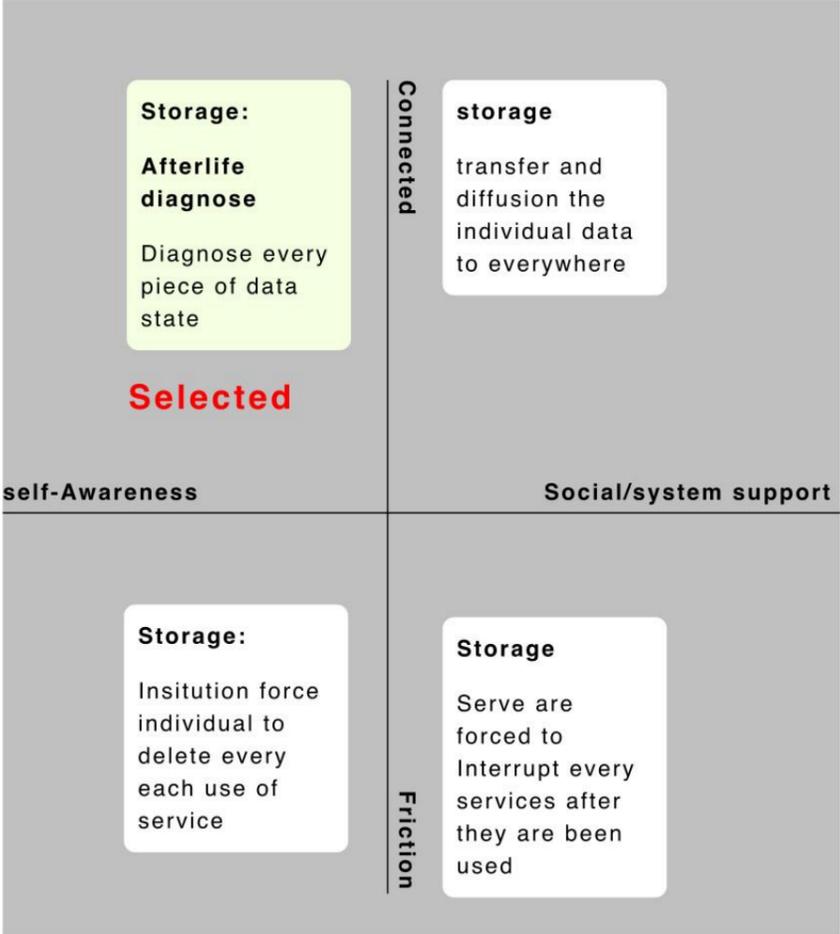
Appendix: future matrix buildings



Future matrix of collection

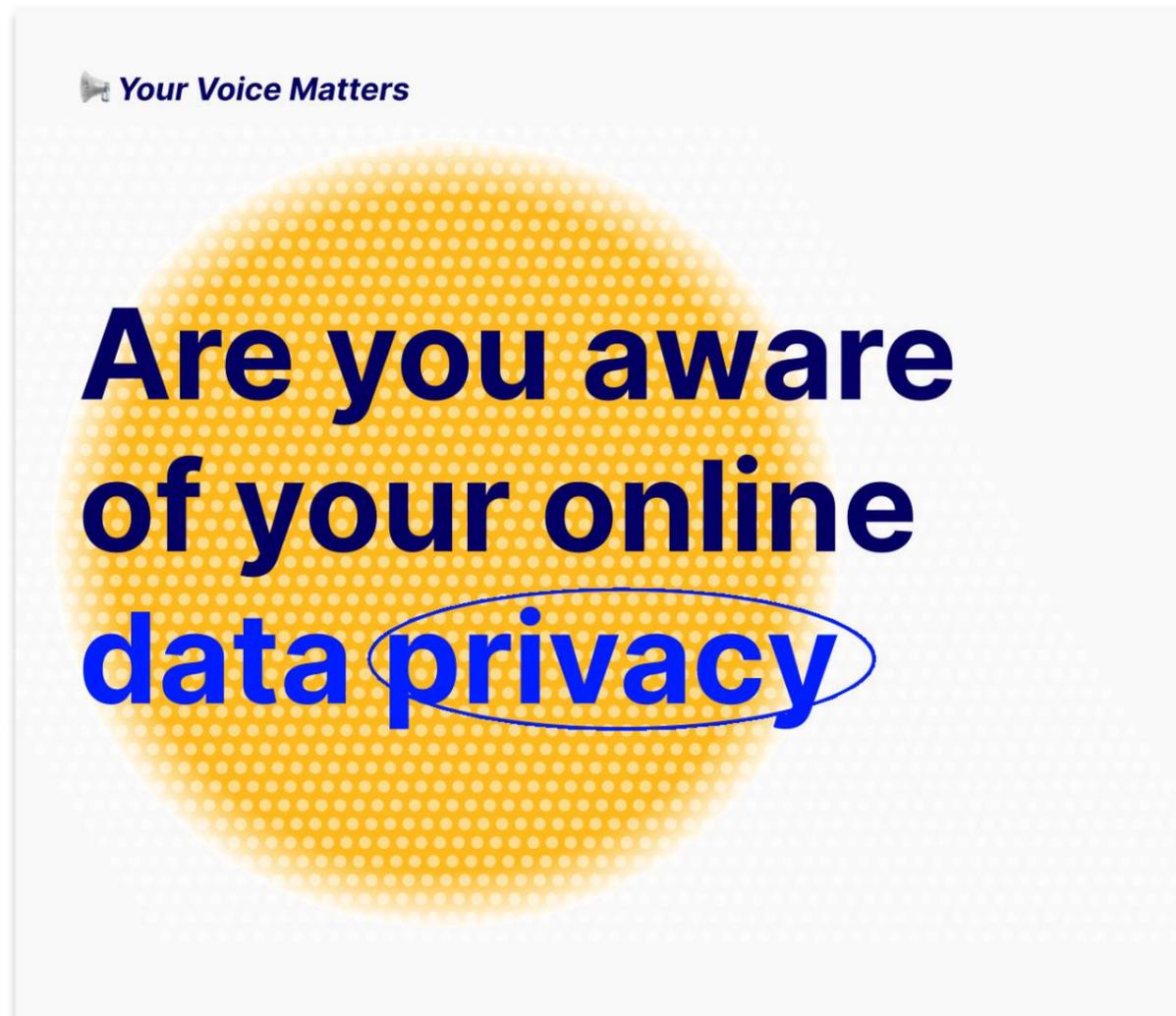


Future matrix of processing



Future matrix of storage

Appendix: workshop poster and audio guide



Appendix-workshop material

Audio guide [Script]

In 2040, as large-scale data collection reaches its peak, every individual's digital data is continuously updated on the 'dark web.' This website synthesizes scattered data pieces into complete digital profiles. Employers, friends, strangers—even hackers—can view and comment on these profiles. And so can you.

To counter large-scale data collection, new privacy-focused products have emerged.

One such product is the Data Box Belt, designed for physical control over data access and withdrawal. For example, when inserting your location data card into the box, a prompt appears:

"Your location data is being requested by Shop.com. Sharing this data will enable:

- Tailored shopping reminders when you're near a store.
- Your location will be tracked at all times and may be shared with third-party advertisers."

If you remove the card, access is revoked immediately. The system responds:

"Location data access revoked. Service disabled. Your location is no longer accessible online."

You make the decisions.

Another product is the Data Diagnostic Kit, which continuously monitors your data exposure risks.

"Your data status: Red. Your data is vulnerable. Please take immediate action."

USER: "Vulnerable? What does that even mean?"

"Testing your data again... Please wait."

(A pause. Then a new status appears.)

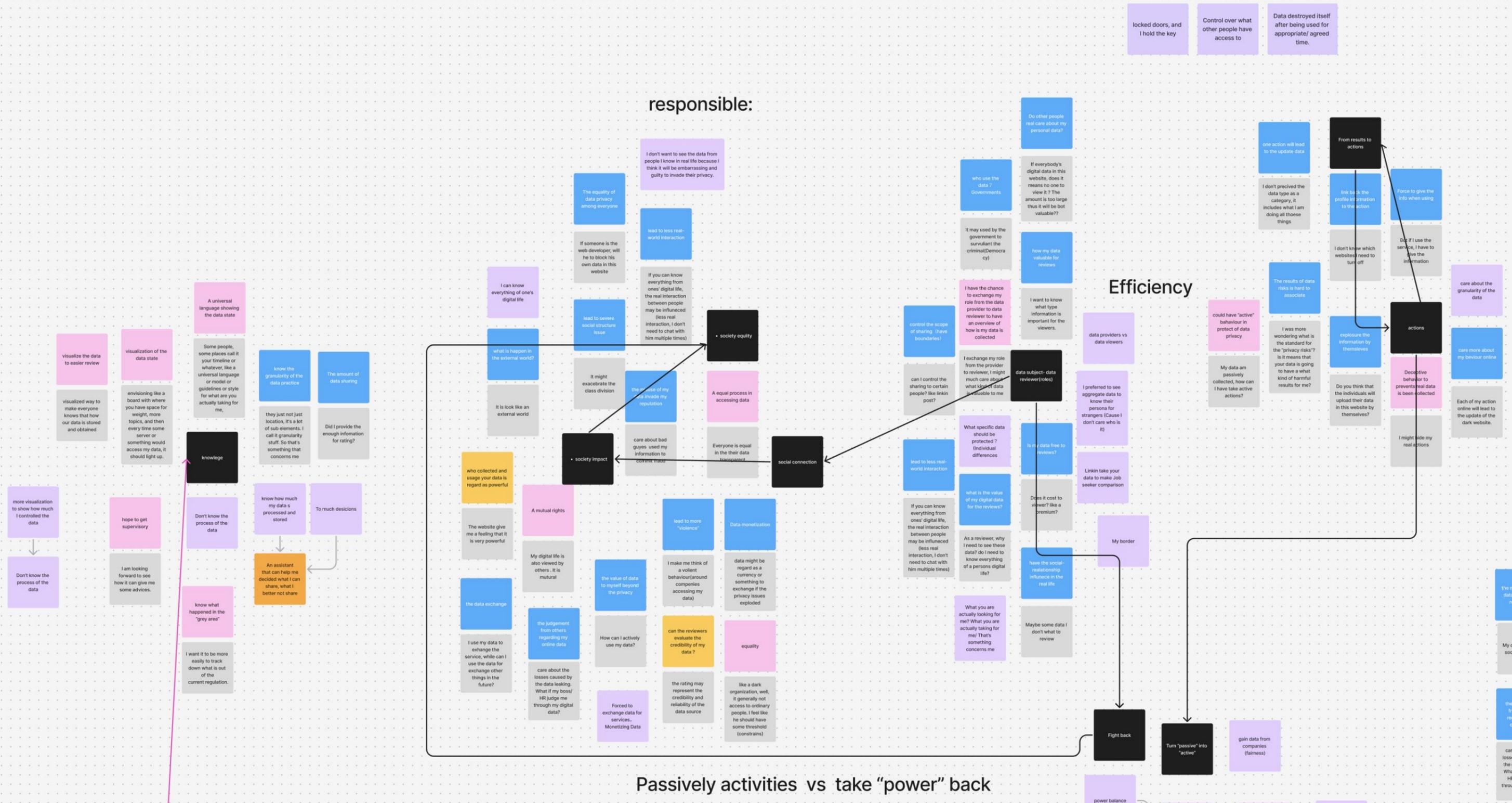
"Your data status: Black. Your data has entered an unregulated zone. Our system can no longer assess the risks."

Yet, the Diagnostic Data Kit keeps speaking, its mechanical voice unwavering.

"Testing your data... Please wait."

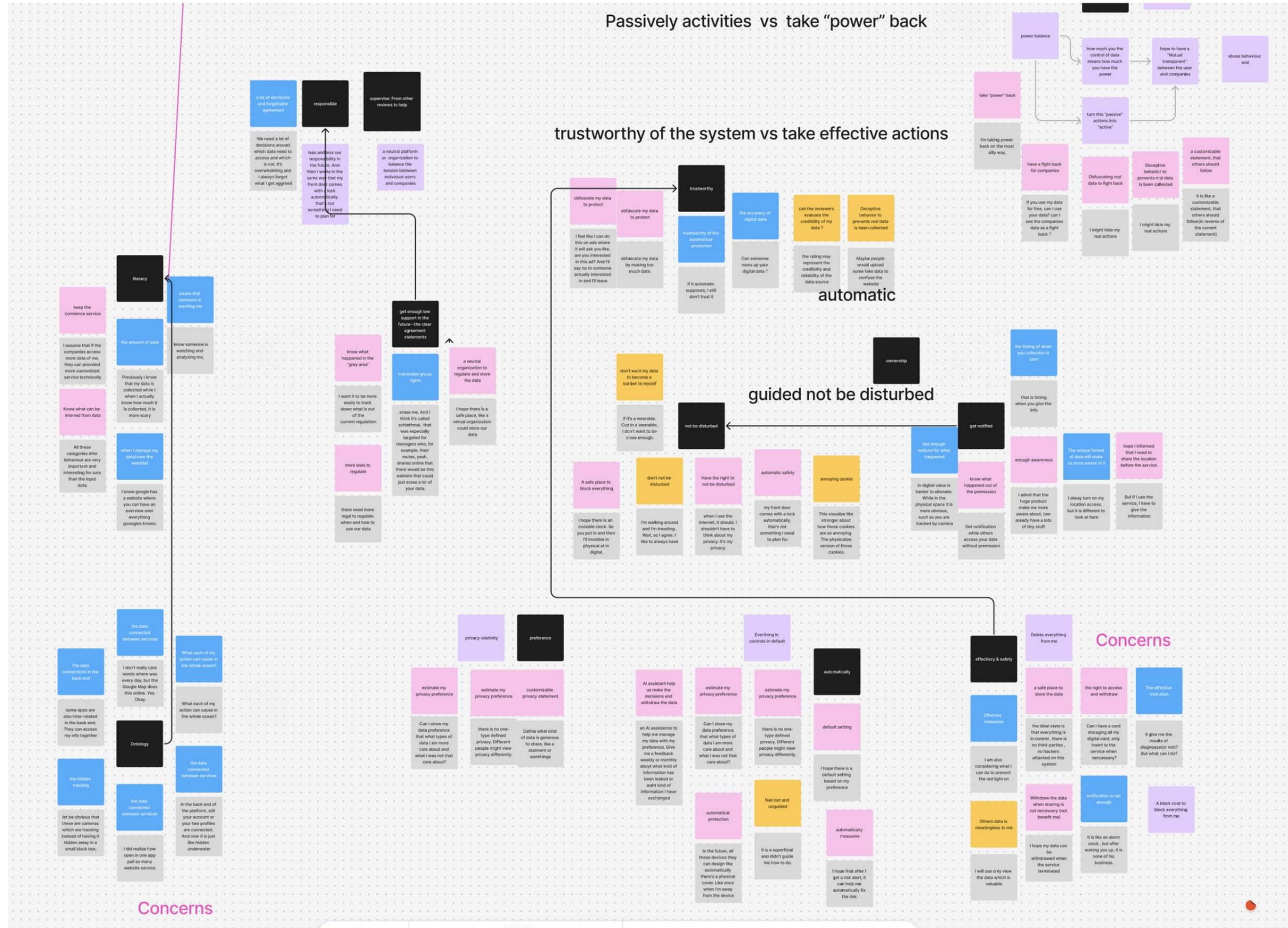
Appendix: workshop Findings

<https://www.figma.com/board/bvNrRgQjPqnWALxrnaEzD1/ANALYSIS?node-id=0-1&t=69A7vK3JACWUPWnZ-1>



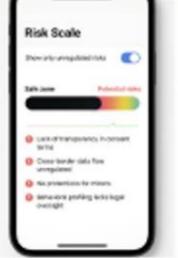
Appendix: workshop Findings

<https://www.figma.com/board/bvNrRgQjPqnWALxrnaEZD1/ANALYSIS?node-id=0-1&t=69A7vK3JACWUPWnZ-1>



Appendix:

Plausible future workshop materials



Risk Scale
Show or hide potential risks

Risk level:

- ⚠️ Lack of transparency in smart home
- ⚠️ Clear border data flow
- ⚠️ No consent for photos
- ⚠️ No data profiling and huge oversight

Preset scale inform users about what is safe and highlight potential risks



The lighting sticker informs that the data is being collected.



The reverse telescope lets you see what data reviewers see about you.



Actnow button—withdraw all your online data immediately.



The deceptive mask helps hide your physical data and separates it from your digital identity.



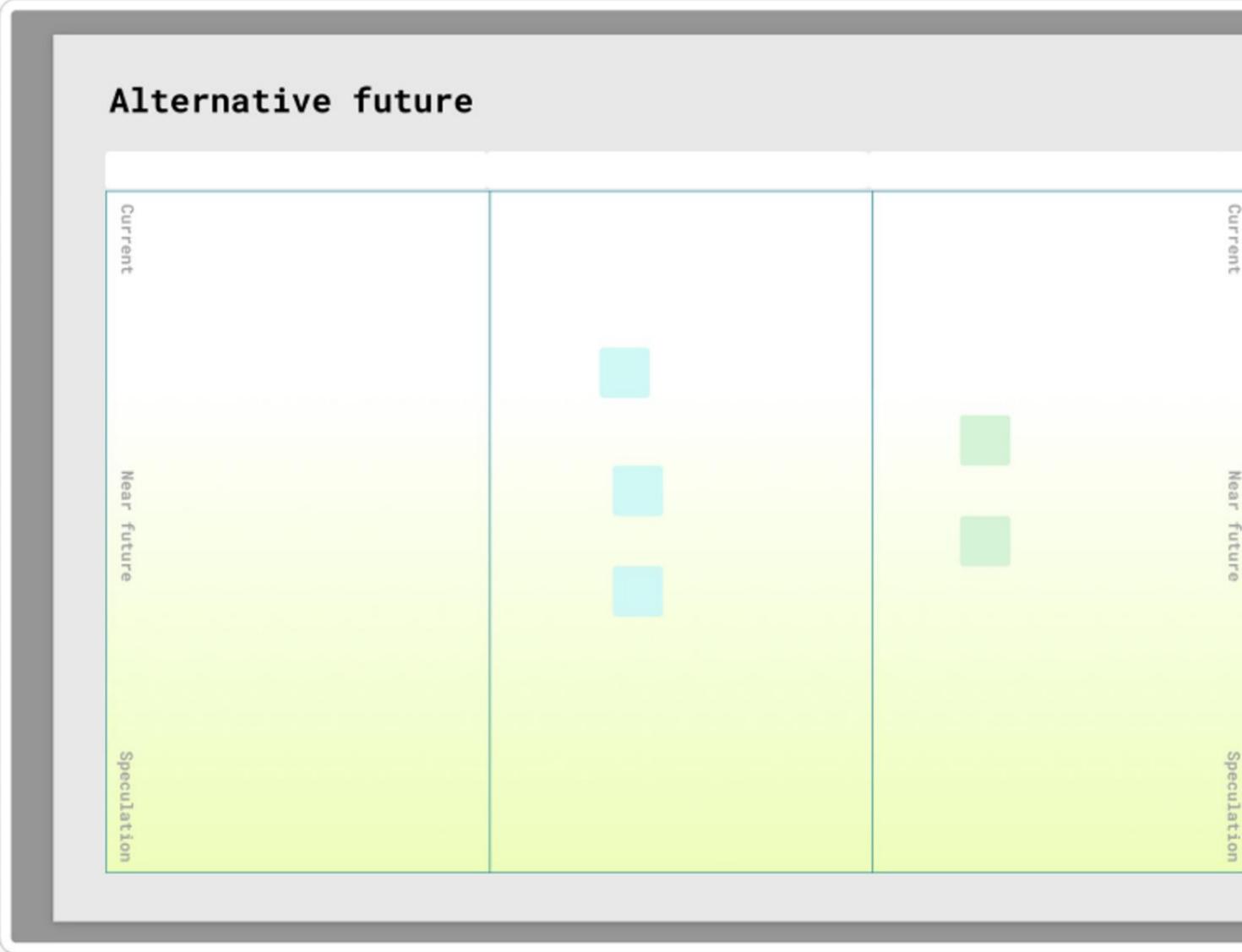
Colored smoke visually warns people of a data leak in real time



DataPhonograph constantly records how your data is collected, turning it into music

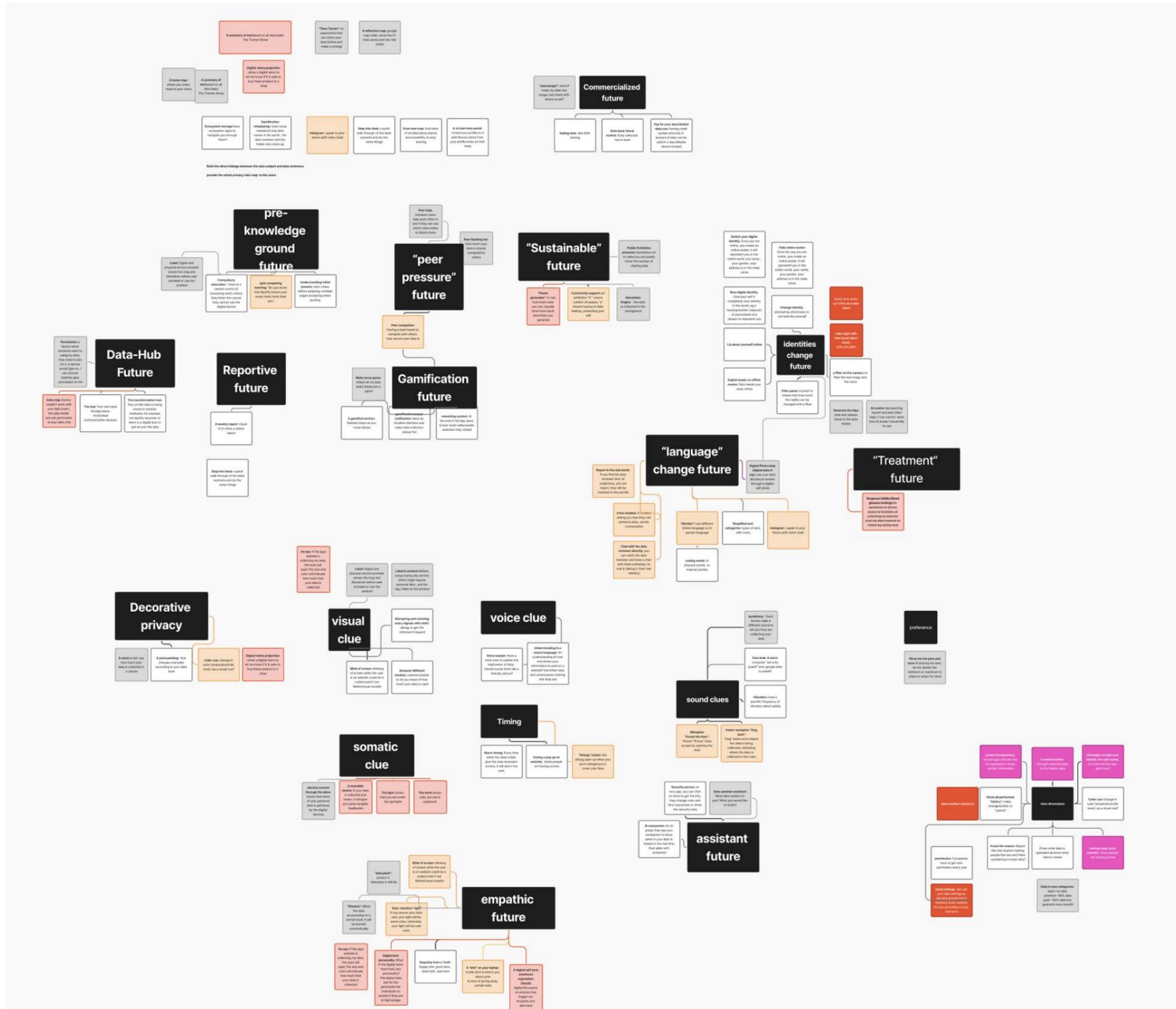


Personalized Postcard delivers a weekly data report, transformed into an painting.



Appendix

Plausible future workshop findings



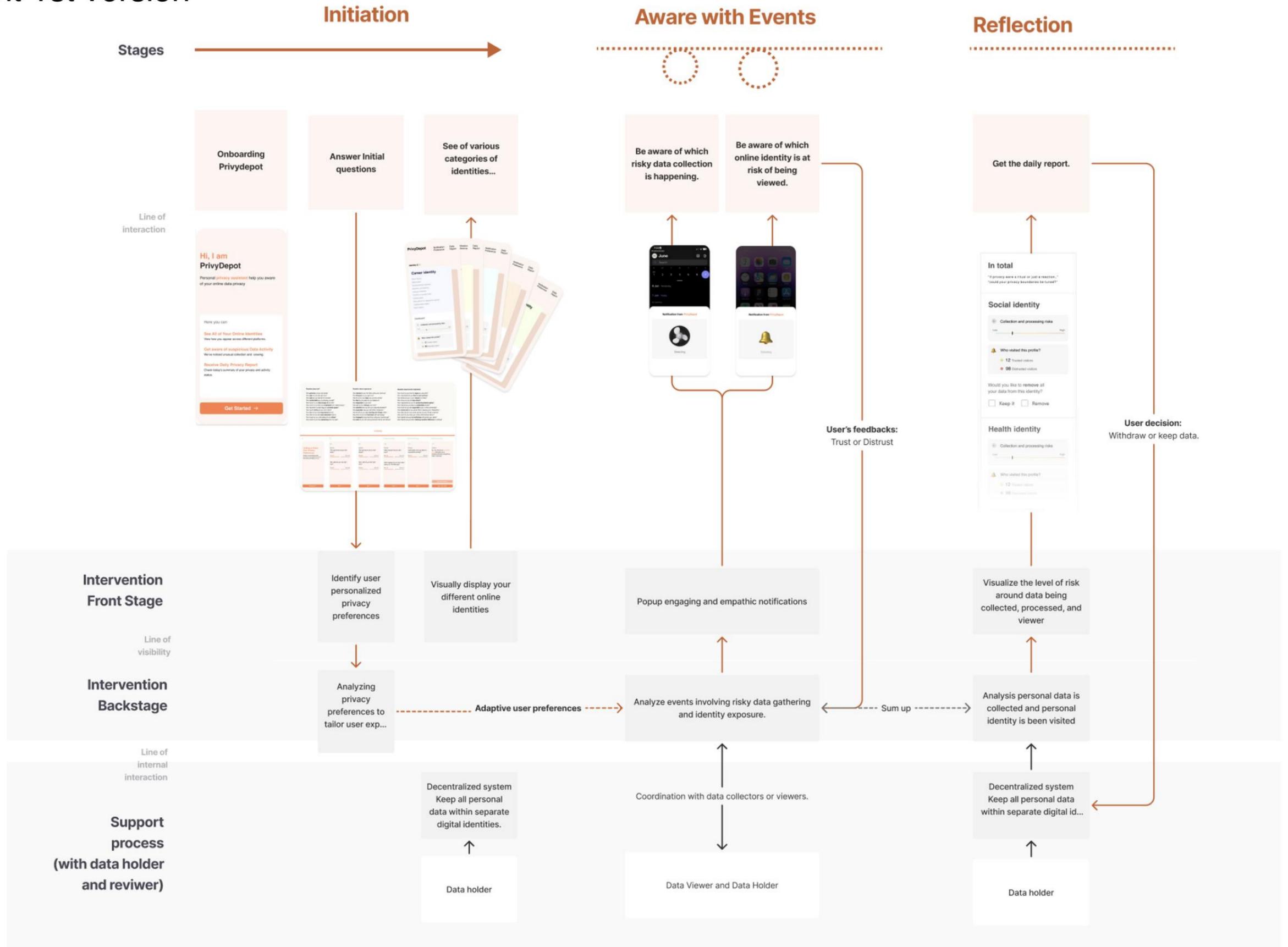
Appendix

Plausible future workshop findings

 Knowledge	Create a dynamic pixel art display that changes every day depending on your personal data usage or activity level.	Implement color temperature shifts—ranging from cool to warm hues—as intuitive visual cues to communicate varying levels of risk.	Design a daily Daily Briefing: Each morning, your device provides a clear, visual report detailing how and where your data has been used over yesterday.	Design a diagnostic kit that does not collect user data but instead scans existing data repositories to assess and inform users of their current safety or health status.	Design a visual interface that translates users' data usage into an equivalent amount of electricity generated, making data activity feel tangible and energetically impactful.	Design a system where a virtual or ambient "dog" barks once to signal data collection, with the direction or tone indicating where in the physical or digital space the data is being gathered.	
	 Identity	Visualize a product's digital twin in-store to help users understand and assess its privacy implications before purchase.	Implement a camera filter that modifies both visual and audio inputs in real time, allowing users to mask their real image and voice for enhanced privacy and identity control.	Design a communication system where users can adopt a distinct "Martian" persona, using a different language style online than they do in person, to reflect contextual identity and protect personal expression.	Design a filter panel that visually demonstrates the extent to which reality can be altered through filters, allowing users to adjust and understand the impact of each modification.	Create a role-based login panel where users choose their access level (e.g., 20%, 50%, 80% data sharing), clearly showing how much data they're sharing and what features or insights that level unlocks.	Create a digital self with dynamic facial expressions that reflect emotional states—like anxiety—to evoke user empathy and raise awareness about data exposure or digital well-being.
		 Ownership	Allow users to create a customizable avatar that represents both themselves and their data (using anonymized or fictional data), giving them full control over the avatar's appearance and data representation.	Enable users to create and switch to a fully customizable digital identity—complete with name, gender, and address—that represents them exclusively in the online or metaverse environment.	Design a physically owned data model—such as a portable device or encrypted drive—that users can hold, store, and manage offline, ensuring complete control and tangible ownership of their personal data and AI.		
 Efficiency	Design a personal data key that must be inserted for devices to function—giving users full control over when and how their data is accessed.		Create a personal data hub that acts as a central, user-controlled storage space, managing and directing how data is shared with individual communication devices and platforms.	Design a system that grants users the power to retract their data even after it has been used, reinforcing ongoing control and ownership over personal information.			
	 Personalization	provide the quiz for customize service,"eg. "Did you know that Spotify might understand your music taste better than you do"	A gamified virtual world experience where your personal data leak history is visualized, explored, and reflected through interactive gameplay	Launch a personal and secure data storage space, centered around individual control and local access through your own communication devices.	Create an engaging, conversational chatbot that playfully asks users how they'd like their data to be preserved, fostering awareness and user-driven data decisions through dialogue.	Design a system that recognizes when a user is in their designated "privacy home"—a physical or digital space with enhanced protections—and automatically adjusts data sharing settings to maximum privacy	
		 Behavioral Feedback	Design a popup window that alerts users when there are risks involved, clearly listing who has access to the relevant information or system.	Design a system where each device emits a unique sound whenever it collects data, creating a symphony of audible cues to make data activity perceptible and intuitive.	Design an ambient light system that changes color based on the security of your data—warm hues indicating safety and cool tones signaling vulnerability—to provide an intuitive emotional cue.	Create an interactive interface where data access requests are represented by a "knock," and users must actively "open the door" to grant permission, emphasizing intentional and consent-based data sharing.	Design a system that releases different amounts and colors of virtual smoke to visually represent how much of your data is being used and what type, making data flow more intuitive and sensory.
 Responsibility	Design a personal data key that must be inserted for devices to function—giving users full control over when and how their data is accessed.		Implement a daily data access limiter that allows users to set boundaries on how much of their personal data can be accessed or shared within a 24-hour period.	Providing a smart "airbag" mask that automatically activates to obscure a user's face when digital or physical privacy risks are detected, offering real-time protective masking.	Implement a real-time alarm system that notifies users immediately whenever a data holder grants access to a data reviewer, ensuring full transparency and timely awareness.		
	 Credibility	Design aLabel system: A required notice that appears before users engage with a digital or physical product—clearly showing key information, data use disclaimers, and service intentions to ensure informed consent."	Design a feedback system that 'scores' suspicious websites based on privacy, security, and trustworthiness—alerting users through visual cues or gamified warnings.	Provide users with a way to report suspicious data reviewers anonymously, triggering a real-world verification process to ensure accountability beyond the digital space.	Integrate a friendly voice assistant that provides clear, conversational explanations about the implications of data use, offering guidance as if from a trusted friend.	Design an interactive assistant that guides users through a reflective conversation—like a seminar—asking what data matters to them and what they're comfortable sharing, to support informed and personalized data decisions.	Design a "Screen of Integrity" system that visually separates what service providers can and cannot see about the user, creating transparency and building trust through clear, symbolic boundaries.
		 Equity and judgement	Enable anonymous, real-time chat between users and data reviewers, allowing transparent discussion without revealing either party's true identity.	A collaborative system where users assist each other by checking what personal data is publicly visible and informing others to improve awareness and privacy.	Create a natural language interface that clearly explains how, where, and why your information is used on a website, identifies risks or unnecessary sharing, and actively intervenes to prevent it when needed.	Design a peer ranking system that shows users how much of their data is shared compared to others, fostering awareness, reflection, and informed control through social comparison.	Build an AI judge that assesses whether the way your data is used is fair, ethical, and necessary—intervening when misuse or overreach is detected.

Appendix

Serviceblueprint 1st version



Appendix

Action-enabling app

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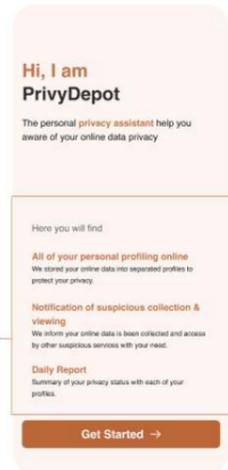
Initiation question could be...

<p>Question about self</p> <p>How generous do you feel today? How safe do you feel right now? How calm do you feel at this moment? How comfortable are you sharing yourself? How much do you take charge of your life? How much do you feel you understand your online privacy? How important is protecting your personal space? How much control do you want online? How often do you feel empowered online? How often do you feel misunderstood online? How much do you value taking time to reflect? How much do you like expressing your true self?</p>	<p>Question about experience</p> <p>How relaxed do you feel when using your devices? How focused are you right now? How much do you enjoy your current activity? How fast do you adapt to new situations? How organized do you feel? How well do you manage your time? How satisfied are you with your account protection? How enjoyable was your last online interaction? How much do you enjoy learning new things online? How often do you feel frustrated with technology? How engaged do you feel when using your favorite app? How safe do you feel sharing personal stories with others?</p>	<p>Question about social implication</p> <p>How much do you trust the apps you use daily? How responsible do you feel for your actions? How aware are you of your impact on others? How willing are you to help others? How responsible are you for protecting shared spaces? How hopeful are you about a sustainable society? How much do you feel supported by your online community? How concerned are you about others misusing your information? How often do you worry about privacy for your friends or family? How much do you think your online actions affect others? How hopeful are you that technology will protect your rights? How hopeful are you about making a positive difference in society?</p>
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Initiation

Reflection

Onboarding



Onboarding



2



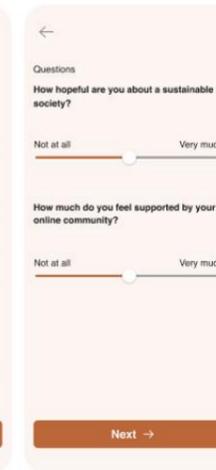
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Onboarding



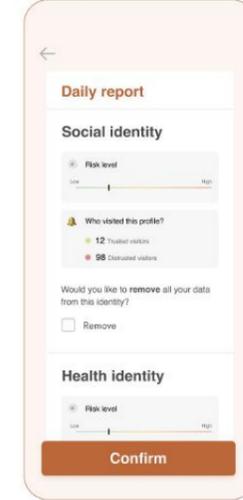
Onboarding



Onboarding



6



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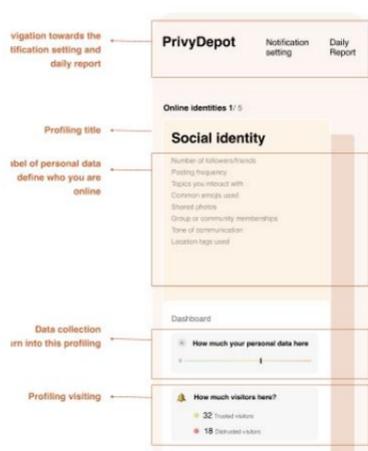


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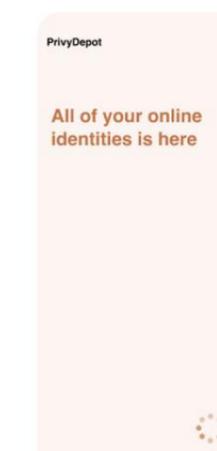


Initiation

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4



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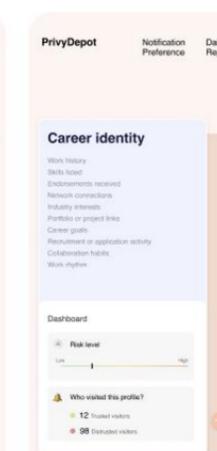
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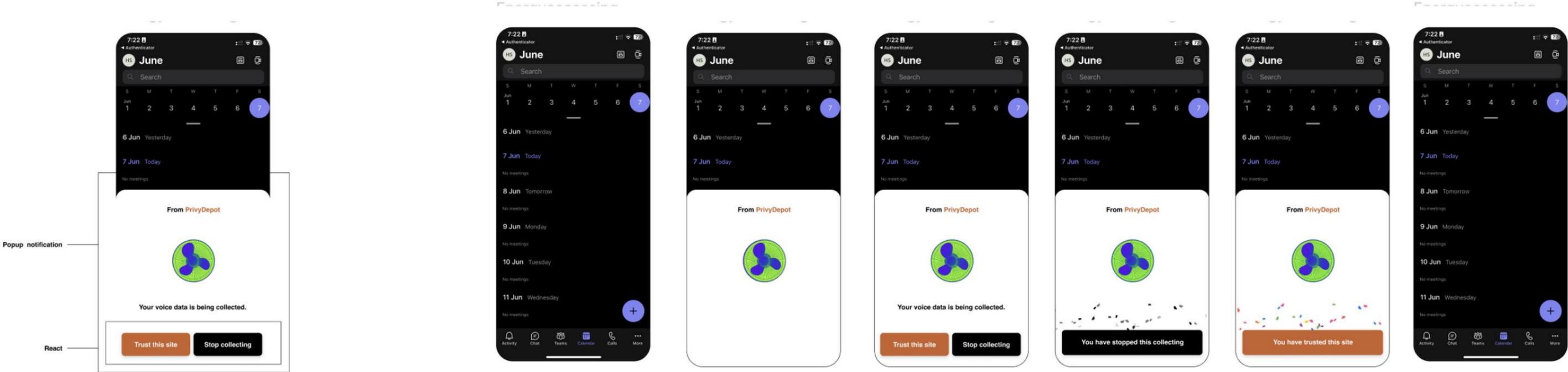


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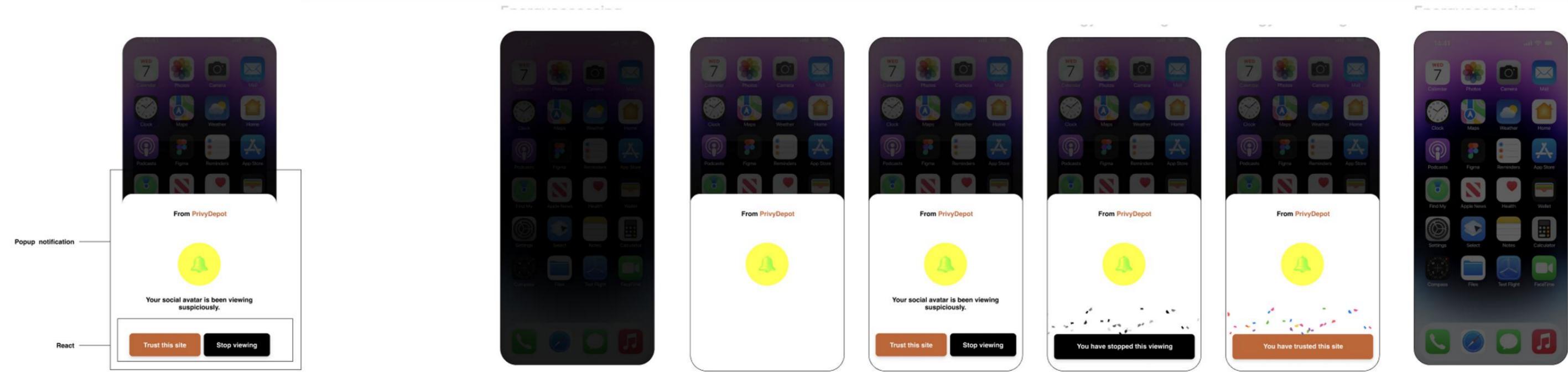


Appendix: Action-enabling app

Aware in the environment



Aware in the environment



Appendix: Evaluation

Question card

1. What do you think this APP is USED for? *

2. What do you think this APP is MADE for? *

3. WHO do you think would make an APP like this? *

4. What STORY do you think this APP tells about the future? *

5. What story do you think this APP tells about how people EXPERIENCE future privacy system?

Future scenario

14 PM During work



Future scenario

19 PM At Gym



Future scenario

10AM Office Workspace



Future scenario

11AM Grocery store



Monment 1.

Intentify your EMOTION

Emotion :

Intensify

 0 1 2 3 4 5 6 7 8 9 10

Next →

Page 3

Monment 2.

Intentify your EMOTION

Emotion :

Intensify

 0 1 2 3 4 5 6 7 8 9 10

The Background story

Share your opinion...

Appendix: Project brief



IDE Master Graduation Project

Project team, procedural checks and Personal Project Brief

In this document the agreements made between student and supervisory team about the student's IDE Master Graduation Project are set out. This document may also include involvement of an external client, however does not cover any legal matters student and client (might) agree upon. Next to that, this document facilitates the required procedural checks:

- Student defines the team, what the student is going to do/deliver and how that will come about
- Chair of the supervisory team signs, to formally approve the project's setup / Project brief
- SSC E&SA (Shared Service Centre, Education & Student Affairs) report on the student's registration and study progress
- IDE's Board of Examiners confirms the proposed supervisory team on their eligibility, and whether the student is allowed to start the Graduation Project

STUDENT DATA & MASTER PROGRAMME

Complete all fields and indicate which master(s) you are in

Family name	Sheng	IDE master(s) IPD	<input type="checkbox"/>	Dfl	<input checked="" type="checkbox"/>	SPD	<input type="checkbox"/>
Initials		2 nd non-IDE master					
Given name	Haoyue	Individual programme (date of approval)					
Student number	5540151	Medisign	<input type="checkbox"/>				
		HPM	<input type="checkbox"/>				

SUPERVISORY TEAM

Fill in the required information of supervisory team members. If applicable, company mentor is added as 2nd mentor

Chair	Giulia Calabretta	dept./section	DOS/ DVE	<p>! Ensure a heterogeneous team. In case you wish to include team members from the same section, explain why.</p> <p>! Chair should request the IDE Board of Examiners for approval when a non-IDE mentor is proposed. Include CV and motivation letter.</p> <p>! 2nd mentor only applies when a client is involved.</p>
mentor	Davide M. Parrilli	dept./section	DOS/ DVE	
2 nd mentor				
client:				
city:		country:		
optional comments	Dr. Parrilli is an expert in design for privacy, and Prof. Calabretta specializes in design practices adapted to new technologies. Their specialized knowledge and perspectives could offer valuable support in this emerging topic.			

APPROVAL OF CHAIR on PROJECT PROPOSAL / PROJECT BRIEF -> to be filled in by the Chair of the supervisory team

Sign for approval (Chair)

Giulia Calabretta
Digitally signed by Giulia Calabretta
Date: 2024.12.06 16:49:14 +01'00'

Name G. Calabretta Date 06/12/2024 Signature _____



Personal Project Brief – IDE Master Graduation Project

CHECK ON STUDY PROGRESS

To be filled in by SSC E&SA (Shared Service Centre, Education & Student Affairs), after approval of the project brief by the chair. The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total _____ EC

Of which, taking conditional requirements into account, can be part of the exam programme _____ EC

<input type="checkbox"/>	YES	all 1 st year master courses passed
<input type="checkbox"/>	NO	missing 1 st year courses

Comments: _____

Sign for approval (SSC E&SA)

Name _____ Date _____ Signature _____

APPROVAL OF BOARD OF EXAMINERS IDE on SUPERVISORY TEAM -> to be checked and filled in by IDE's Board of Examiners

Does the composition of the Supervisory Team comply with regulations?

Comments: _____

<input type="checkbox"/>	YES	Supervisory Team approved
<input type="checkbox"/>	NO	Supervisory Team not approved

Based on study progress, students is ...

Comments: _____

<input type="checkbox"/>	ALLOWED	to start the graduation project
<input type="checkbox"/>	NOT allowed	to start the graduation project

Sign for approval (BoEx)

Name _____ Date _____ Signature _____

Name student Haoyue Sheng Student number 5540151

PROJECT TITLE, INTRODUCTION, PROBLEM DEFINITION and ASSIGNMENT

Complete all fields, keep information clear, specific and concise

Project title Envisioning the future experience of online data privacy

Please state the title of your graduation project (above). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

Introduction

Describe the context of your project here; What is the domain in which your project takes place? Who are the main stakeholders and what interests are at stake? Describe the opportunities (and limitations) in this domain to better serve the stakeholder interests. (max 250 words)

The rapid development of online services has led to highly optimized digital experiences. However, this growth has also raised significant concerns about personal data privacy. In a world dominated by surveillance capitalism (Zuboff, 2023), personal data collection has become pervasive, with corporations exploiting this information for profit. For example, cookies are tracking user actions and preferences. On the service-provided side, the collected individual data traces become digital footprints (Lambiotte & Kosinski, 2014) without clear user permission. Due to this, the end-users are exposed to possible privacy violations and misuse with no clear view of how their data is being accessed, used, and shared.

This project plans to set within the context of online data privacy, exploring the privacy of users' online experiences with the data collection processes they encounter. In the current privacy discussion, the individuals, as the subject of privacy, are always excluded as non-rule makers. Privacy cannot be limited to data security but also be regarded as a fundamental human right that protects individual autonomy, freedom, and dignity (Mulligan et al., 2020).

Moreover, while current efforts to address privacy issues focus on legal (eg. GDPR) and technological solutions (eg. data lifecycle), there is a lack of attention to the situational, real-world experiences of users. This project will employ speculative design methods, including design fictions and artifacts, to challenge existing norms and invite proactive discussions about privacy practices. The project has the potential to engage everyone in rethinking their relationship with online data privacy and encourage a paradigm shift for the future.

Reference: https://docs.google.com/document/d/1e1_nbdVjH0IgnlihkZwvfGJPIgxaXZruGa7dJZjYpMs/edit?usp=sharing

→ space available for images / figures on next page

introduction (continued): space for images

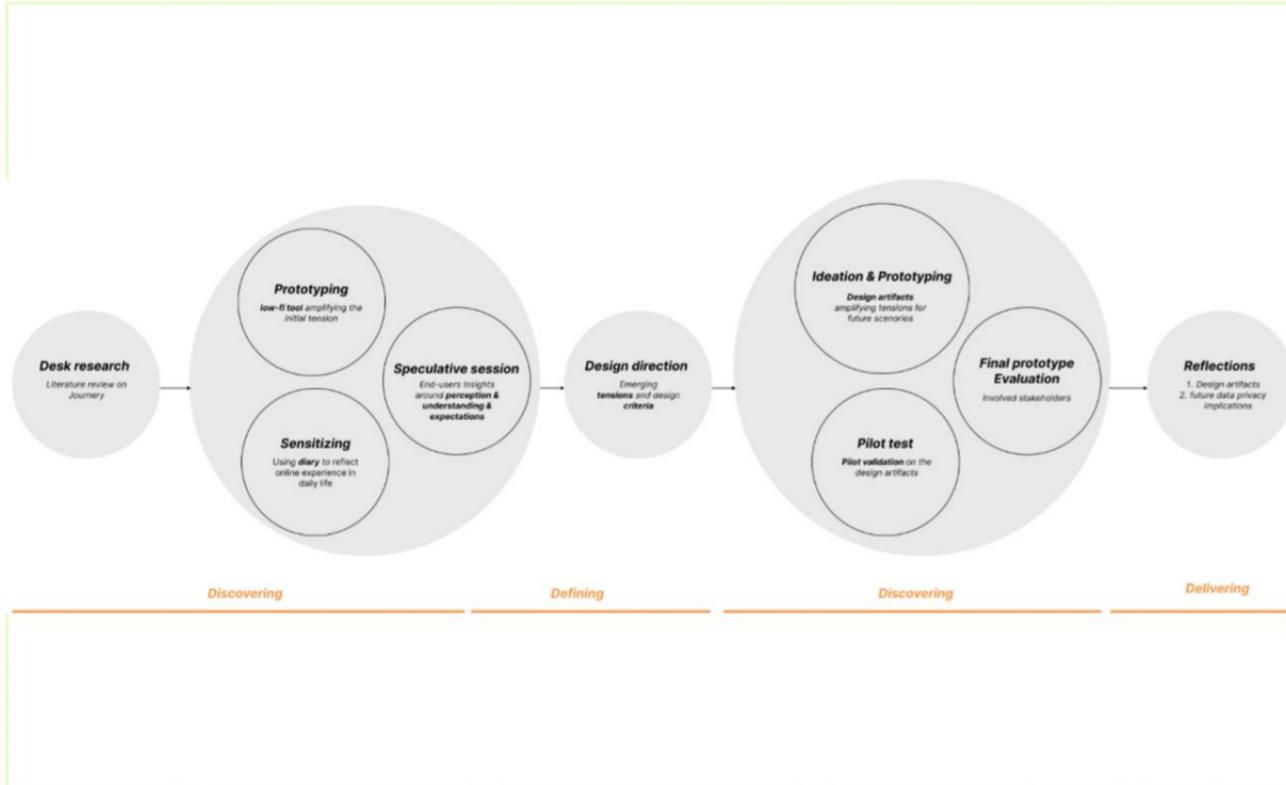


image / figure 1 An overview of the project

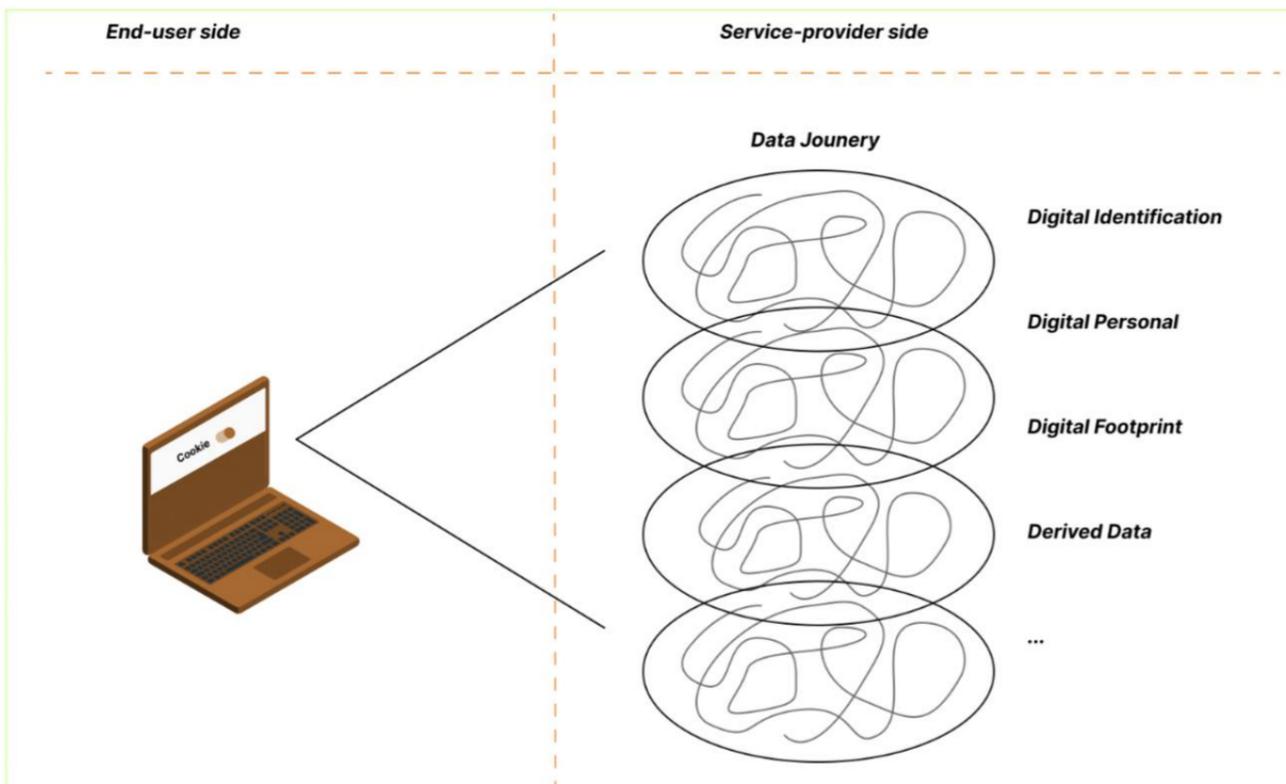


image / figure 2 A visual of the "Cookie" experience with the data collection process

Problem Definition

What problem do you want to solve in the context described in the introduction, and within the available time frame of 100 working days? (= Master Graduation Project of 30 EC). What opportunities do you see to create added value for the described stakeholders? Substantiate your choice. (max 200 words)

The main challenge in engaging individuals in the privacy discussion is that the data collection processes users encounter are inherently virtual and often go unnoticed. Previous research on the "privacy paradox" illustrates a persistent inconsistency between end-users privacy attitudes and behaviors, where they unintentionally trade privacy for convenience (Norberg, 2007). While there is no unified theory to explain this, factors such as a lack of awareness and information asymmetry between users and current online data-collection systems could be one plausible explanation (Kokolakis, 2017). Additionally, interfaces with "dark patterns" (Nelissen et al., 2022) often leave users unaware of what personal data is accessed, for what purposes, and the associated risks. This lack of transparency makes it very difficult for users to express their privacy preferences effectively.

When facing these challenges, research-through-design (Stappers & Giaccardi, 2017) with speculative design approaches will play a crucial role in this project. Using "information asymmetries" and "privacy awareness" as starting points, the project will explore the context and then define design directions. The project will address two key questions: 1. How do individuals perceive their online privacy experiences? 2. How can design help individuals to reflect on and envision their private experiences?

Assignment

This is the most important part of the project brief because it will give a clear direction of what you are heading for. Formulate an assignment to yourself regarding what you expect to deliver as result at the end of your project. (1 sentence) As you graduate as an industrial design engineer, your assignment will start with a verb (Design/Investigate/Validate/Create), and you may use the green text format:

My project aims to empower individuals to reflect and envision the privacy of their online data collection experiences. The expected outcomes are design artifacts that could be a means for the alternative future and provide future ethical and social design implications.

Then explain your project approach to carrying out your graduation project and what research and design methods you plan to use to generate your design solution (max 150 words)

The project will follow the double diamond model (Design Council, 2005):

1. Discover: I will do desk research on the user and service side of the data collection journey, and the reasons behind the current privacy challenge. If possible, I will supplement this with interviews with other back-end stakeholders. I will then begin the initial research-through-design (Stappers & Giaccardi, 2017) practice aimed at gathering insights into how individuals perceive their current data collection experience. This will include the following parts: a. Sensitizing users to the reflection of their daily online experience, b. prototyping the first speculative tool for the speculative session, c. experiencing the tool and gathering opinions on the speculative session.
2. Definition: I will first analyze and code the data about how users potentially perceive/understand/anticipate their privacy. Themes with new tensions will emerge in this set. Then I will define the design directions and design criteria.
3. Development: I will ideate each tension/theme under related scenarios. I will prototype artifacts and evaluate them with users as well as involve other related stakeholders.
4. Deliver: 1. Design artefacts. 2. The reflections and implications for future online privacy systems. 3. Final thesis.

Project planning and key moments

To make visible how you plan to spend your time, you must make a planning for the full project. You are advised to use a Gantt chart format to show the different phases of your project, deliverables you have in mind, meetings and in-between deadlines. Keep in mind that all activities should fit within the given run time of 100 working days. Your planning should include a **kick-off meeting**, **mid-term evaluation meeting**, **green light meeting** and **graduation ceremony**. Please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any (for instance because of holidays or parallel course activities).

Make sure to attach the full plan to this project brief. The four key moment dates must be filled in below

Kick off meeting	<u>26/11/2024</u>
Mid-term evaluation	<u>11/02/2025</u>
Green light meeting	<u>10/04/2025</u>
Graduation ceremony	<u>08/05/2025</u>

In exceptional cases (part of) the Graduation Project may need to be scheduled part-time. Indicate here if such applies to your project

Part of project scheduled part-time	<input type="checkbox"/>
For how many project weeks	
Number of project days per week	

Comments:
Gantt chart: https://kqbzunnsq7.feishu.cn/sheets/Lu0YsZNfJhIMSzt3IsPcm2Cqnl?from=from_copylink

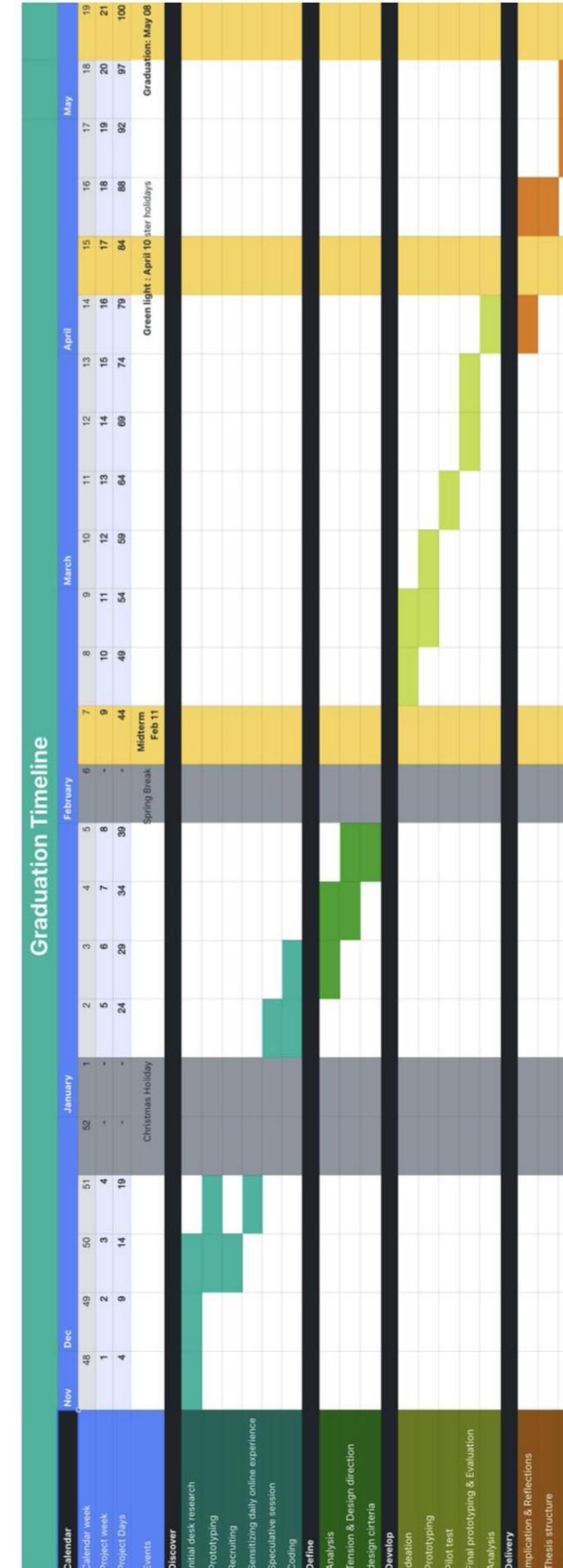
Motivation and personal ambitions

Explain why you wish to start this project, what competencies you want to prove or develop (e.g. competencies acquired in your MSc programme, electives, extra-curricular activities or other).

Optionally, describe whether you have some personal learning ambitions which you explicitly want to address in this project, on top of the learning objectives of the Graduation Project itself. You might think of e.g. acquiring in depth knowledge on a specific subject, broadening your competencies or experimenting with a specific tool or methodology. Personal learning ambitions are limited to a maximum number of five.

(200 words max)

During my previous internships at internet companies, I learned that privacy is a very important aspect that tends to be overlooked in the daily online activities. Privacy goes beyond mere compliance—it's about empowerment: enabling users to proactively engage with privacy concerns and view it as an integral part of their digital interactions. Through this project, I hope to reframe privacy as an accessible and essential component of digital life, investigate the root causes of current privacy challenges, and underscore their importance. As I work on this project, I'm eager to enhance my speculative design abilities, using design not just to solve functional problems but to address complex ethical issues and create impact beyond usability and profit. I plan to seek inspiration from diverse perspectives and gather data that deepens my understanding of user needs and concerns. This approach will allow me to explore alternative solutions that challenge conventional practices and encourage a more engaged and ethical digital experience.



Gantt chart: https://kqbzunnsq7.feishu.cn/sheets/Lu0YsZNfJhIMSzt3IsPcm2Cqnl?from=from_copylink