DISCLOSING DATA

Making data more accessible, transparent, and understandable

Ingrid Sudbø & Amalie Sofie Bauge Skevik

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ABSTRACT

Disclosing data is a design proposal produced to facilitate a discussion surrounding our role as designers. The concept consists of nine possibility studies; each showcasing different ways of making data more accessible, transparent, and understandable.

Each possibility study focuses on a different category of data or different viewpoints within the same data category, exemplified within existing services.

The project touches upon wicked problems within topics such as privacy, big data, and tracking. These topics are extensively discussed and often presented as issues in the digital era.

This report consists of five main parts:

Introduction — Where we introduce the report, our motive, the context of our proposal and our approach to the work.

Research — Where we go through all the research we've executed through the semester.

Insights — Where we define the overall insights we gained from the research, and how this affected our scope.

Booklet — Our proposal presented as a separate booklet within this report, introduced by a manifesto, before delving into our possibility studies.

Reflections — Finally, we end the report by reflecting on the topic of making data understandable, our intention and motive for doing so, as well as our proposal and it's place in time.

Field: Interaction Design
Supervisor: Joakim Formo

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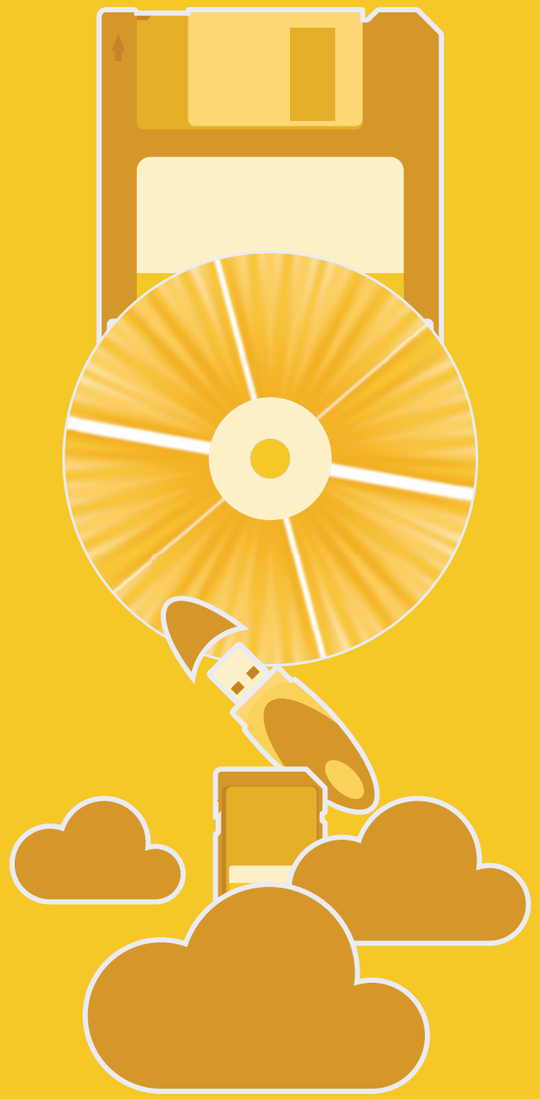
Institute of Design
The Oslo School of Architecture and Design

INTRODUCTION



DEFINITIONS

As this diploma revolves around making data more understandable, we have compiled a list of how we define certain words/phrases used.

MAAMA — The abbreviation for the five biggest companies in tech; Microsoft, Apple, Alphabet, Meta and Amazon.

Digital data — A mix between lifestyle and habitual data collected by services. This can be when you usually have your alarm on, when you're active on social media, and/or how ads are personalised for you.

Digital sphere — All digital places users interact with, be it an application on their phone, an e-mail service, a QR-code, or a streaming platform.

Metaverse — A virtual-reality space in which users can interact with a computer-generated environment and other users. [1]

Privacy — Data privacy, also called information privacy, is the aspect of information technology (I.T.) that deals with the ability an organisation or individual have to determine what can be shared with third parties. [2]

Extreme users — Users that are very engaged in different types of tracking. When we use the term "extreme users" we refer to any of the following:

- People who have to track—such as people living with diabetes
- People who engage with their data—this could be actively influencing their algorithm on services such as TikTok, or to be removing ads either because they feel the ads are far-off, doesn't concern them, or simply hit too close to home.
- Users that manually track to get insights into themselves, usually for self-improvement—this can be tracking water intake or manually tracking their workouts.

Average users — Users that use the internet. They might have a Fitbit and may have installed an ad blocker, but they are not extensively interested in tracking or privacy issues.

[1] Metaverse [Definition]
[2] Privacy [Definition]

MOTIVATION

Today, the digital sphere is often presented as an evil entity collecting your data to enrich the leaders of big tech—more specifically, the big five, known as MAAMA. This way of thinking is presented in dystopian science fiction; [3] it is in Op-Eds published in papers[4] and even as cartoons for magazines such as The New Yorker. [5]

Fear of the future and fear of new technology is not a new thing, with social movements such as the Luddites revolting against machines making textiles in the early 20th century. [6] Even Charlie Chaplin questions new technology—the industrial revolution and the assembly line in his film Modern Times (1936). In this film he presents people as being reduced from workers to cogs in the machinery.

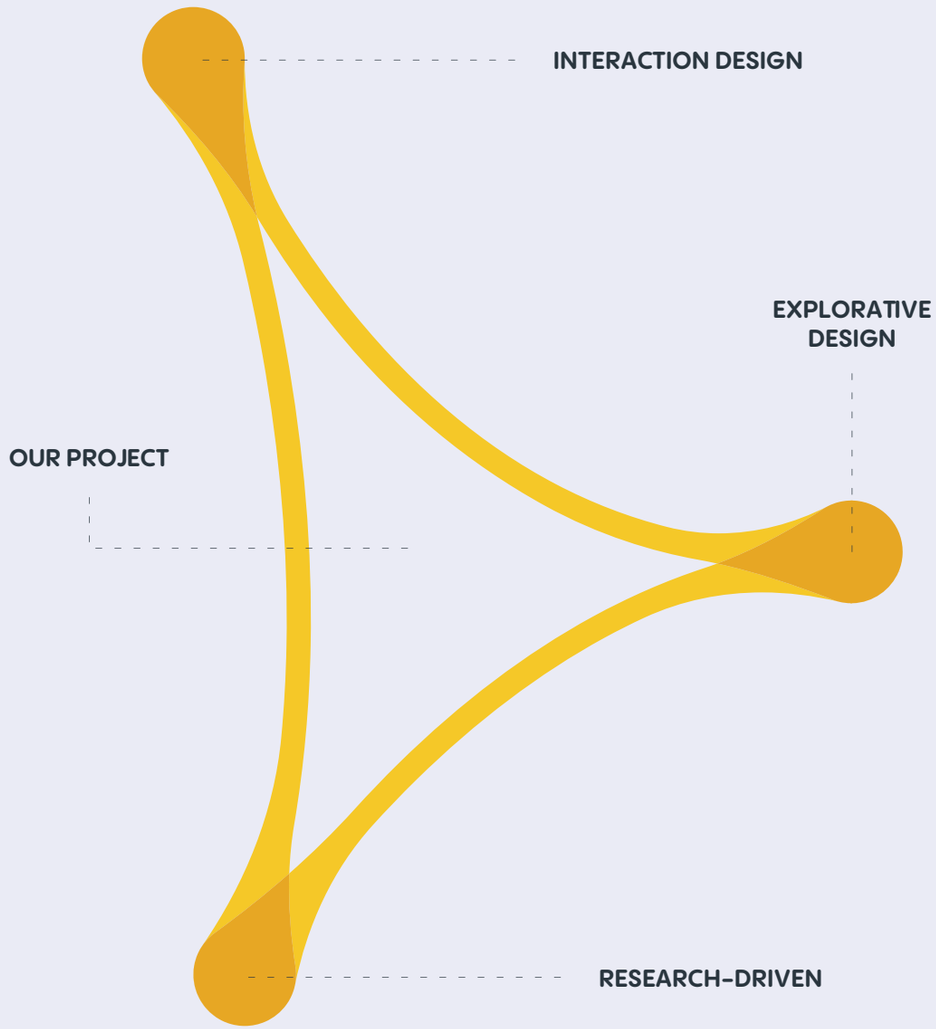
For us, growing up in a semi-digital world and seeing the evolution of the digital world, we've witnessed scepticism arise. In our personal opinion, some of it is warranted, and some is unwarranted. Data itself isn't malicious, and the information you can understand from data isn't evil—rather people can use tech for immoral actions. Information can be exceedingly crucial for mankind. Without collective data and research, it can be difficult to understand aspects of the human condition. Such as how an illness can affect different humans. We see this now in the number of women being diagnosed with ADHD. Research into ADHD was originally done on men, and women often present the disorder differently. [7] The same goes for diabetes—collective data has given us an understanding of the disease, how food affects blood sugar, as well as how insulin helps to stabilise it. Through collecting, we learn, and now an individual living with diabetes can understand their graph and regulate it with insulin. Collective data helps us understand how the world works, creating opportunities for new solutions.

To us, the fear connected to digital data is frightening. We believe that presenting big tech as evil helps fuel the idea of big tech wanting to control your every move. The idea that tech is evil opens up for conspiracy theories, which we've seen with the corona vaccine and whether or not Bill Gates put a chip in the vaccine. [8]

Our research throughout the semester has shown us that the trust between users and services is essential, and has gone missing. Data in itself is not evil, however we must acknowledge that it is of value for companies and resembles a currency. However, we want to make it clear that it's not an individual's data that is considered valuable; it is the collective data from a user group that allows us to understand habits, emotions, and behaviour, hence making data a currency. When this data collection is happening on big scale, with a few companies monopolising the market, the concentration of power becomes an issue.

To tackle this we have worked with possibility studies showing ideas of how to rebuild the trust that has gone missing, through functionality that encourage services to practice openness and transparency.

3. Bradbury, *Fahrenheit 451*; Cline, *Ready Player One*; Collins, *The Hunger Games*; Dick, *Do Androids Dream of Electric Sheep*.
4. Swisher, "Big Tech Has Helped Trash America"
5. Reuter, M., The New Yorker.
6. Encyclopedia Britannica, *Luddite*
7. Quinn, "Treating adolescent girls and women with ADHD"
8. Hotez, "COVID19 meets the antivaccine movement"



CONTEXT

Discussions surrounding privacy and digital data are increasing as our world moves further into the digital sphere—with companies such as Meta focusing on the metaverse. People question how digitalisation impacts our well-being. We wonder about what privacy we have left, and we are advised to consider what we share, why we share, where we share it, and with whom we share. Legislations are being created and changed as new research, issues, and questions arise. Surprisingly, we've found that tracking devices such as Tile, AirTag, and smartwatches are selling like crazy, and the interest in tracking is increasing—working in an electronic store, Amalie has observed this firsthand. When it comes to getting insight into ones health, habits, and possibly progress, many people are willing to share extremely personal data; our biometrics.

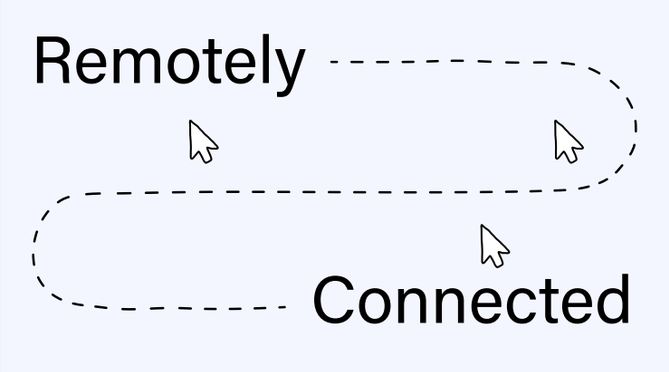
The willingness to share is present, but users question the companies they share with. Why are some willing to share human data—a mix between biometric data and data collected by wearable tracking devices—with services such as Strava, Clue and Loop (exercise, menstrual tracking and habit tracking applications) but are not willing to share this information with other services—or companies—such as Meta, Apple, and Alphabet? What makes us trust some services with our data, and not others?

INSPIRATION

We've been heavily inspired by three previous diplomas—two explorative and one conceptual, which we will go through here.

Amelia Dinh - Off/Track (2019)
In her diploma "Off/Track", Amelia Dinh explored the values connected to tracking devices, using existing products as a metric and creating a list of values connected to self-tracking. She also created a list in juxtaposition to those set values, negating the uses of tracking devices today. She did this as a means to facilitate a conversation around the values connected to our work as designers.

As our initial approach to the diploma was within the same realm—using data from tracking in a new way, her way of exploring this topic was a big inspiration for us. It gave us an understanding in how to approach our initial research.



SooYeong Song - Remotely Connected (2021)
Contrary to the other two diplomas, SooYeong Song has a more conceptual way of working in "Remotely Connected"—the diploma focuses on working from home and the social interactions that vanish. Her way of exploring many minor aspects, of a general concept influenced us greatly in our approach to the diploma and how we worked with our final proposal—exploring separate parts of a massive and intertwined topic, whilst still having one cohesive proposal.

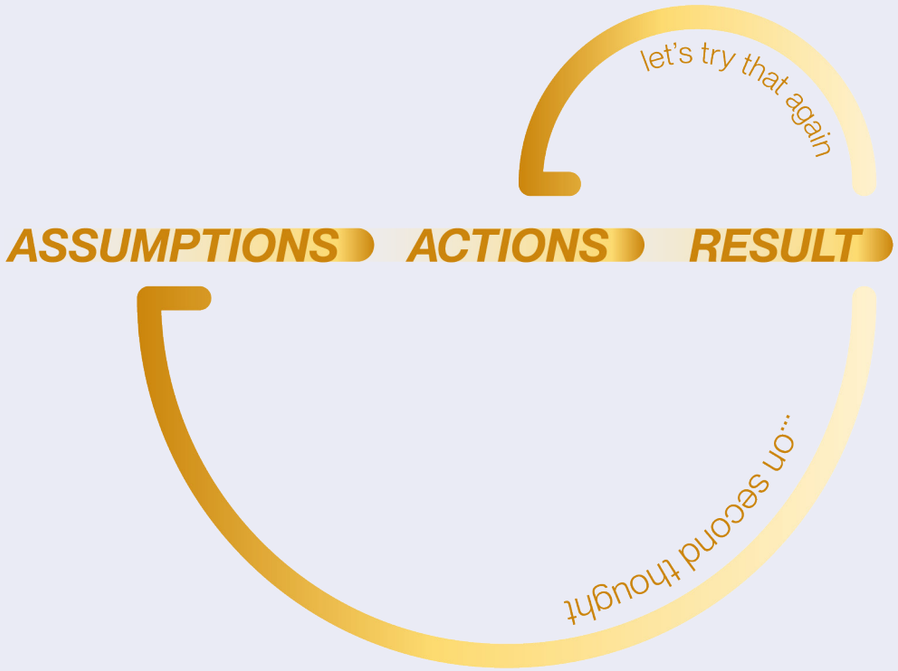
Eirunn Kvalnes - Writing With the Machine (2021)
Eirunn Kvalnes worked with Machine Learning in her diploma "Writing With the Machine"—exploring what machine learning is as a design material and what to gain from this. Her diploma was one of the reasons we understood the importance of creating datasets ourselves to fully understand what we were working with, completing a proper materialistic exploration within the digital sphere.

APPROACH

Disclosing data has been an open-ended, research-driven explorative diploma within the field of interaction design. As the project was explorative, our main goal was to let the insights guide the course of the project. This resulted in a less-than linear approach, allowing us to fully explore the spectrum of data, and what data can be.

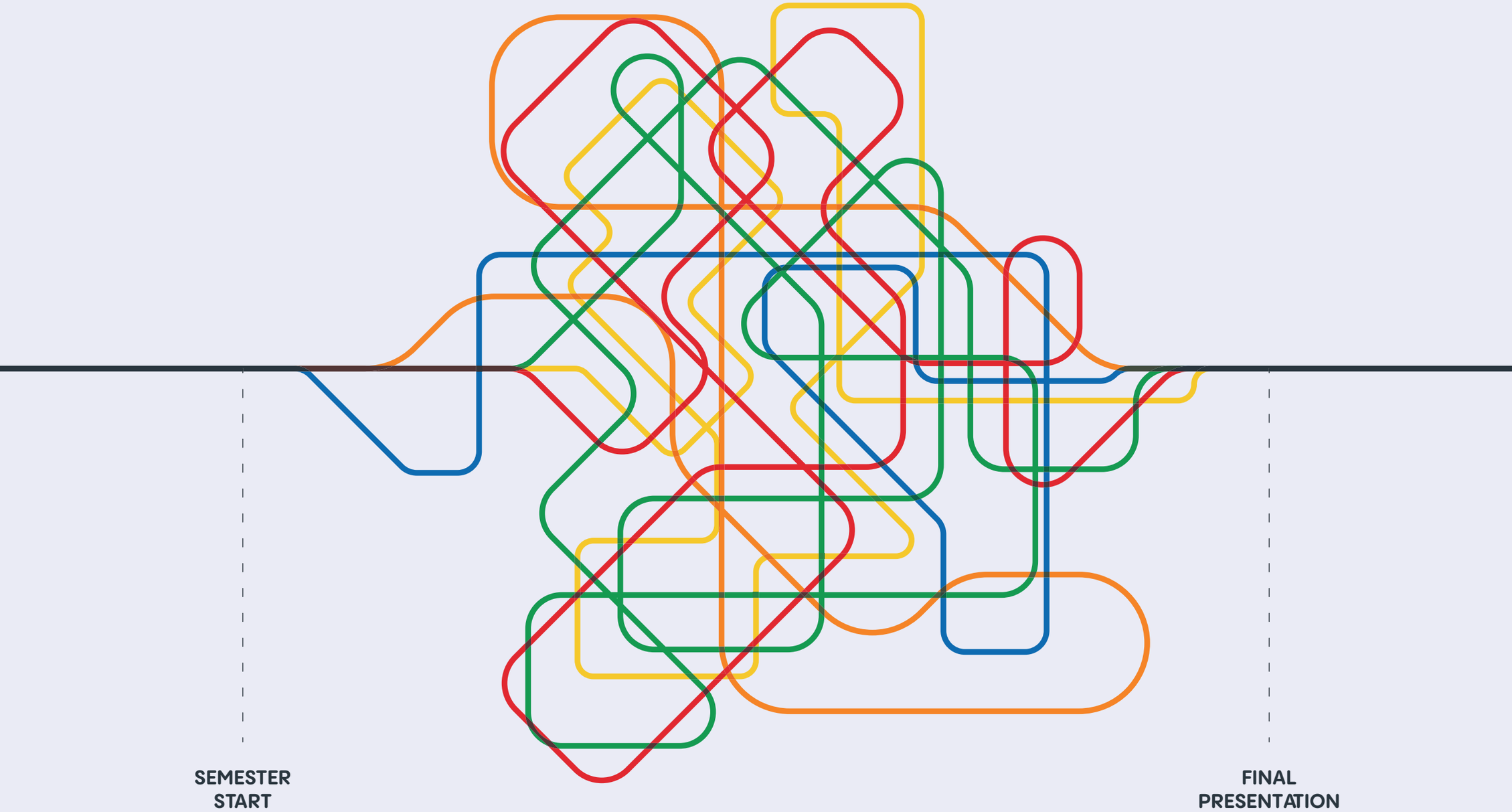
As interaction designers, we enjoy challenging the frameworks and standardised solutions offered—the technology is advancing, the users change, therefore standardise solutions need to be reworked. Even though it might seem as if the project is trying to solve a problem—it's not. Instead of solving the problem, we want to suggest change. There is not a problem to be solved, but issues that we can change. We intend to challenge the norm, and facilitate a conversation. This resulted in a project intended to be consumed by other designers, mainly within the field of interaction design.

Informed by theory, research and testing, we explored how to rework the framework within the field of interaction design. By utilising the concept of "Double-loop learning" we could create more plausible solutions. Each bit of new learning allowed for a better intertwined understanding of data. Ideas we had in the beginning, that were dismissed, would come back later to be reiterated based on new learnings—weaving in each loose thread as the project unfolded.

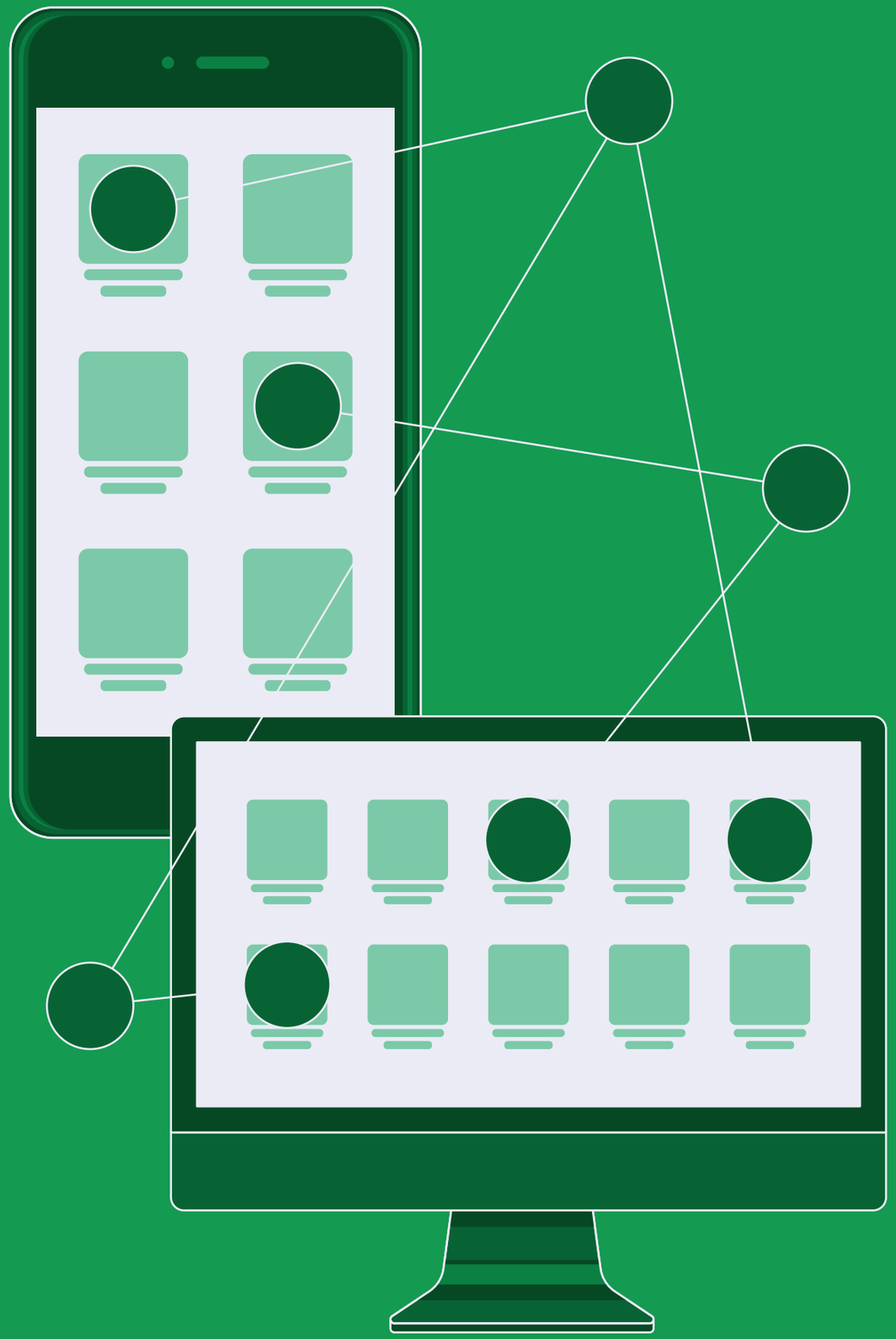


TIMELINE

This is our approach—as well as the timeline—illustrated.



RESEARCH



DESIGN METHODS

We decided to have an explorative approach on the topic of biometric data. As the topic of our diploma is data—a field that is ever-growing—we found that going back and forth between research, explorations and sketching was key. To properly be able to work with such a massive topic, choosing the right methodologies for the research was essential. Here we explain why we chose the methods we did.

Materialistic exploration — When reading Eirunn Kvalnes' diploma "Writing With The Machine" at the beginning of the semester, we realized that creating our own datasets would allow us to work with the material more hands on as a means to properly understand the material. We knew beforehand that we weren't well-versed in what data is as a design material, highlighting the importance of a materialistic exploration.

Mapping — The digital sphere is extraordinarily massive and overwhelming. To make more sense of the different types of data, we mapped; various services that use tracking in some way, wearables and what they can measure, and users' trust in different services. This allowed for a better understanding of; user experience and user needs, defining factors that influence the perception of trust in a service, and the data for the materialistic exploration.

Interviews — By using the interview-format, we could deep dive into the minds of extreme users. We hoped their expert knowledge would give us valuable insights into what it was like to have to track vs to track to optimize. Making it clear that those tracking to stay alive would have a different experience with tracking than those who track to optimize.

Workshop — Workshops, as apposed to interviews, allow for a flow of conversation between several parties. We chose to conduct a workshop in which we facilitated for a discussion between the attendees, allowing us to observe their thoughts and concerns as they evolved.

Academic research — Technology, and its evolution, is constantly being researched. Thus, a plethora of academic research could aid us in our study. We mainly looked into research from Science and Technology Studies, as it is a field that describes the digital in relation to the social, and is influential in the field of Human-Computer Interaction (HCI)/interaction design.

General research — One of our main motives for working within this field was the general public's fear of the future of tech. In order to validate this assumption, we read articles written for technology-based magazines, op-eds, editorial pieces. By reading we found validation for our thoughts. Showing the importance of not only doing academic research on a topic that concerns the general public. As designers we want our result to voice the needs of users and the general public, rather than just research.

Thumbnail sketching — As this was an explorative project, we worked mainly with thumbnail sketching to quickly get our ideas down on paper. As thumbnail sketching is quick, it allowed for multiple iterations whilst sketching.

Low fidelity sketching — In some instances—where we felt it was difficult to explain sketches—we took a few of the thumbnail sketches further in low fidelity to better communicate the content.

Figma sketching — For our possibility studies, we reworked sketches in Figma—seeing whether or not the wireframes would work, and having something more tangible to test on users. This allowed for a better understanding of the feeling of invasiveness, transparency and understanding of how the data was presented.

Testing — To keep in touch with the quick and iterative way of working, our testing was for the most part also quick and iterative. We tested with people between the ages of 20-40. These tests focused on explaining the concept and validating the need for the type of functionality we were testing, rather than focusing too much on the interactions themselves.

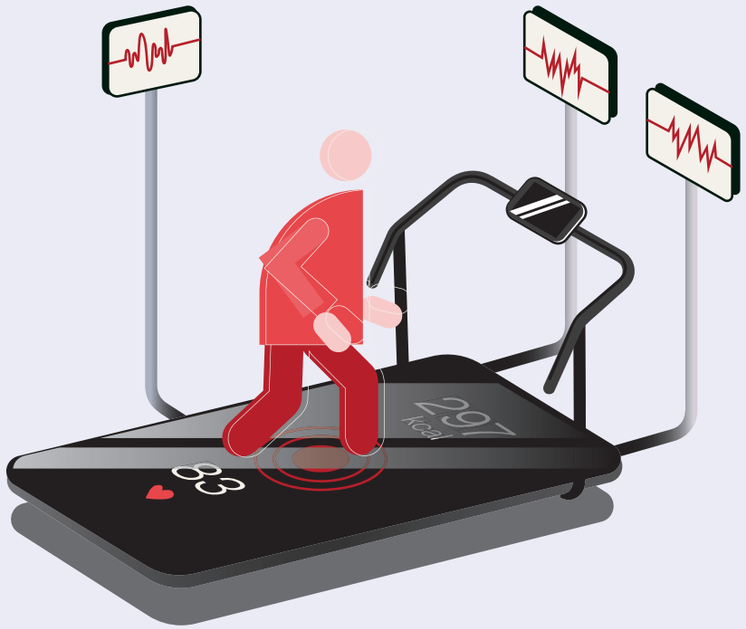
TRACKING

As we were interested in using data gathered from wearable tracking devices, there was a necessity to properly understand what kind of information that can be gathered from tracking devices.

To do this, we mapped out five different wearable watches—trying to get an overview of what the average of wearable watches can track today. Some are more advance than others, and we wanted to make sure we designed for the average.

In addition to this, we mapped data from our previous Fitbit usage, and the data from tracking our menstrual cycles.

We also mapped out different health-related services that are often connected to tracking, to get an overview of the services and how they present data.



CATEGORIES

By mapping all these different aspects of tracking, we could categorize reasons to track into three categories.

Necessity — Having to track, often related to health-issues or illnesses. Can be a preventative effort, or a as an addition to/part of treatment.

Self-Improvement — For a lot of people, tracking is to improve aspects of life. It can be tracking sleeping patterns to sleep better, or tracking exercises to live a healthier life, and everything in between.

For Fun — Some people like to track things they thing is fun. Be it the amount of tea they drink in a week or which films they've watched.

WHAT IS DATA?

What is actually data? Because we wanted to use real data to design with we first had to go down and understand what data actually is

untdown_interrupted	KICK HIM IN THE BALLS
untdown_interrupted	FIGHT HER
untdown_interrupted	
untdown_interrupted	TELL HIM MORE
untdown_interrupted	TELL HIM MORE
untdown_interrupted	THE NETFLIX 'N' LOGO
untdown_interrupted	
untdown_interrupted	
untdown_interrupted	HIT DESK
untdown_interrupted	GO BACK
untdown_interrupted	DESTROY COMPUTER
untdown_interrupted	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browseTitles	/watch/70222864?trackId=141
playback	/browse
playback	/watch/80057281?trackId=141
playback	/browse
playback	/watch/70298832?trackId=141
browseTitles	/watch/70222864?trackId=141
playback	/browse

YouTube

Liked Spider-Man (90's Cartoon) |
Kenneth Garaza
Oct 20, 2019, 7:52:33 AM CET

Products:
YouTube
Why is this here?
This activity was saved to your Google

stories

201712 201801 2018
201806 201807 2018

Malcolm X
It's a Wonderful Life
Grease
Soylent Green
Ferris Bueller's Day Off
Ben-Hur


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59	Taylor Swift
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67	Archy Marshall
68	Archy Marshall
69	Archy Marshall
70	Archy Marshall
71	Archy Marshall

amalie sofie
@amytothesophie

Your archive includes all the account data created up to the moment it was generated.

Date generated · March 22, 2022 at 1:33:39 PM GMT+1 · Estimated size · 3 MB

Home

Table of Contents

Live Audio Rooms
A list of your activity as a host, spe
You have no data in this section

Spark AR
Spark AR-related info, such as effe
You have no data in this section

Communities
Communities you manage, commu
You have no data in this section

0:02 6:43
5 hr 59 min
42 mins awake

E	F
8000	129.975
5	142.6
10	180
	-
8	84.375
1500	134.4
15	346.6666667

01 July
271% of 8,000

Advertisers
Advertisers
you in an au
use or uploa
View on Facebook

Drive
Initiated a bulk download fro
Requested 1 files and folders
Jan 28, 2022, 10:37:08 AM

Products:
Drive
Details:

Vehicle Repair & Maintenance
Video File Formats & Codecs
Visual Art & Design
Windows OS
World News

Select file options
You can choose the file format, me
to view, while JSON format allows
quality of your photos and videos,

Format
HTML

Media quality
High

Interactions you may have had with the advertiser's website, app or store

x
x
x

Tide
JDM Global

As it Was
Harry Styles

Cake
JDM Global

YouTube

Liked A NEW PLACE 2 DROWN
Topsafe
Dec 11, 2015, 12:09:34 AM CET

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YouTube
Why is this here?
This activity was saved to your Google

First name

Amalie

Last name

Sofie

About

No data

Comments

No data

Tried-Its

No data

Followees

HARDGRAFT (hardgraft)

21/05/2018	Skritt
	Avstand
	Etasjer
	Puls
	Søvn
	Cals
	Active Mins


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UNDERSTANDING DATA

As we were interested in using data gathered from wearable tracking devices, there was a necessity to properly understand what kind of information that can be gathered from tracking devices.

To do this, we mapped out five different wearable watches—trying to get an overview of what the average of wearable watches can track today. Some are more advance than others, and we wanted to make sure we designed for the average.

56	Clairo	4EVER	1 Jan 19:07	
57	SG Lewis	Better	1 Jan 19:07	
58				
59	Taylor Swift	the 1	2 Jan 01:15	
60	Taylor Swift	cardigan	2 Jan 01:19	
61	Taylor Swift	the last great american dynasty	2 Jan 01:23	
62	Taylor Swift	exile (feat. Bon Iver)	2 Jan 01:27	
63	Archy Marshall	Any God Of Yours	2 Jan 10:12	
64	Archy Marshall	Swell	2 Jan 10:16	
65	Archy Marshall	Arise Dear Brother	2 Jan 10:18	
66	Archy Marshall	Ammi Ammi	2 Jan 10:21	
67	Archy Marshall	The Sea Liner Mk 1	2 Jan 10:33	

In addition to this, we mapped data from our previous Fitbit usage, and the data from tracking our menstrual cycles.

We also mapped out different health-related services that are often connected to tracking, to get an overview of the services and how they present data.


```
19    },
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```


Data is information in digital form. When talking about big data, it's often split into three sections.

Structured — Structured data is concrete data that can inform about a user. It can be their age, their home address, contact information (phone number, email-address).

Unstructured — Unstructured data is most often left in the digital sphere, it can be tweets, the content of phone calls and emails, or even images.

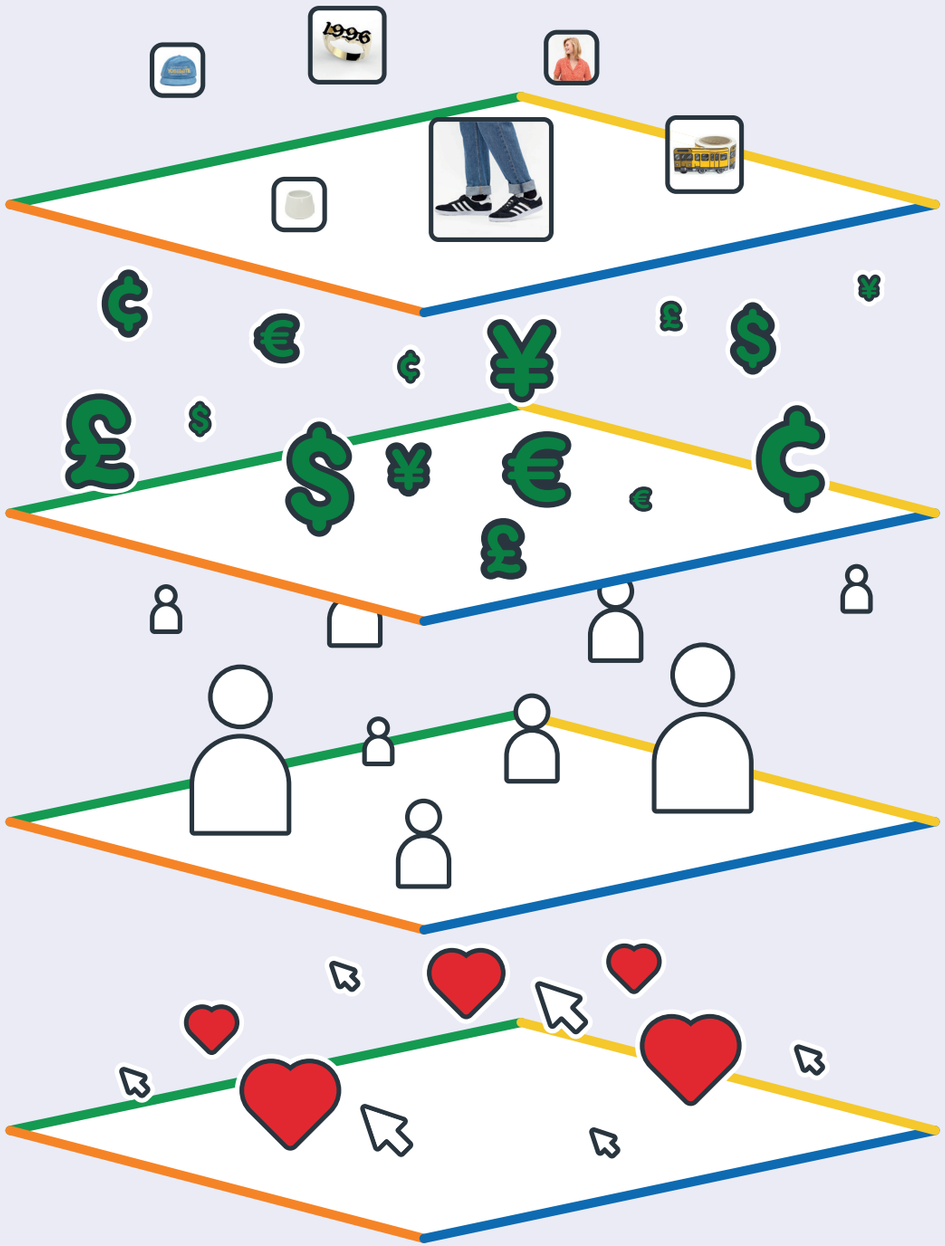
Semi-structured — Semi-structured data, on the other hand, is unstructured data connected to meta-data. This can be a tweet with a hashtag, or an image with an alt-caption.

Within these three sections of data, it becomes clear that the context of data is important. As Alissa Lorentz writes for Wired Magazine in 2013:

> "When looking at unstructured data, for instance, we may encounter the number '31' and have no idea what that number means, whether it is the number of days in the month, the amount of dollars a stock increased over the past week, or the number of items sold today."

Alissa Lorentz, With Big Data, Context is a Big Issue (2013)

We saw a video that explained how ads actually work, and how data is used. To see the video, see appendix 1. This illustration presents the most essential points of the video, read from the bottom upwards.



ADS ARE SHOWN

THE HIGHEST BIDDER BUYS AD SPACE

MATCHES AGE, LOCATION, GENDER WITH OTHER USERS WHO INTERACTED WITH THE SAME CONTENT

USER INTERACTS ONLINE

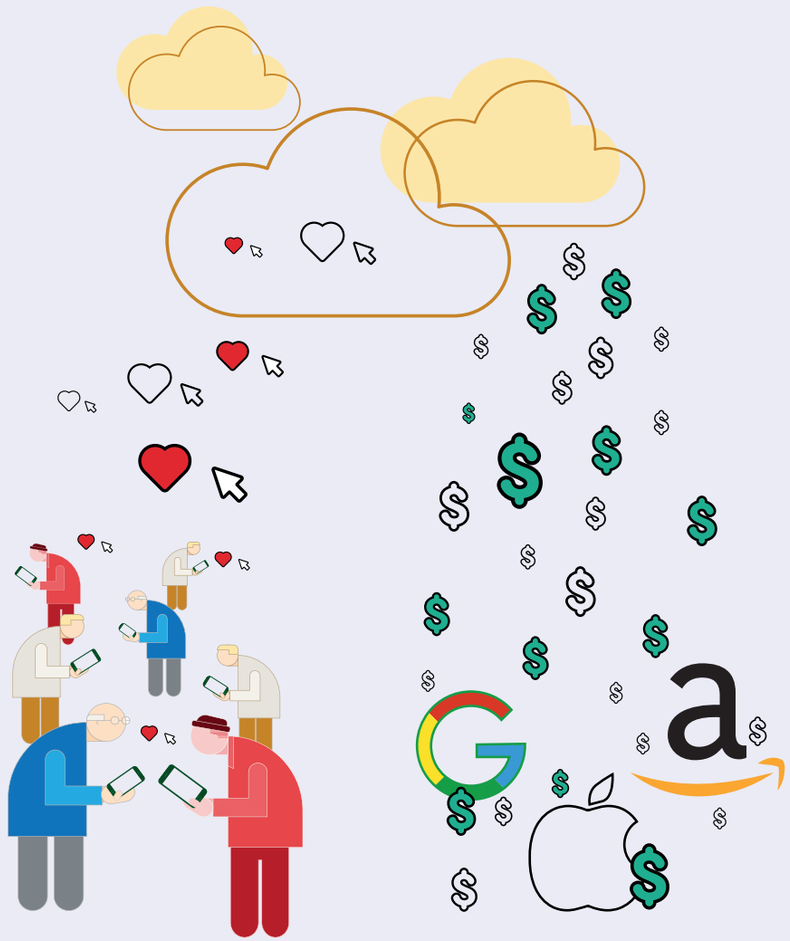
CATEGORIES OF DATA

Based on the insights into data we gained from our research, we categorized data and the intention of services into three categories. This helped us scope down, as we realized how data would be contextualized differently.

Cookies/Cache (Intention to sell) — Be more transparent with why the user gets the ads they do. Data collected as an intent to sell, or in fewer cases—intent to keep user.

Individual versus Collective (Understanding data usage) — Help users understand how they influence other users, and in turn how they are influenced.
One users individual data isn't necessarily what AI and Machine Learning can understand habits from, however, combine several users' data, and patterns might emerge.

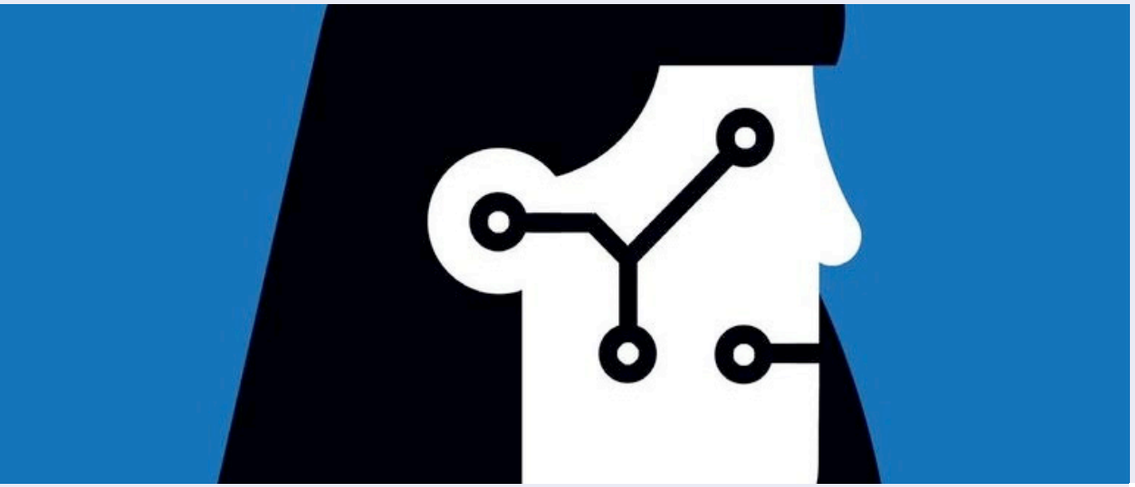
Showing Usage (Transparency) — Be more transparent in what services save about their users—this might be within the realm of structured data. When an account is created, how many times one song has been played, and more.
This transparency would remove the "request" data section services have had to implement.



READING

For the reading-research we delved into several academic papers as well as articles written for magazines and papers. There is too much research to dive into in its entirety, so we will go through the two academic articles we found to be most interesting, as well as the two articles written for magazines that validated and corresponded with our ideas. All the articles that influenced us will be included in the literature.

ACADEMIC READING

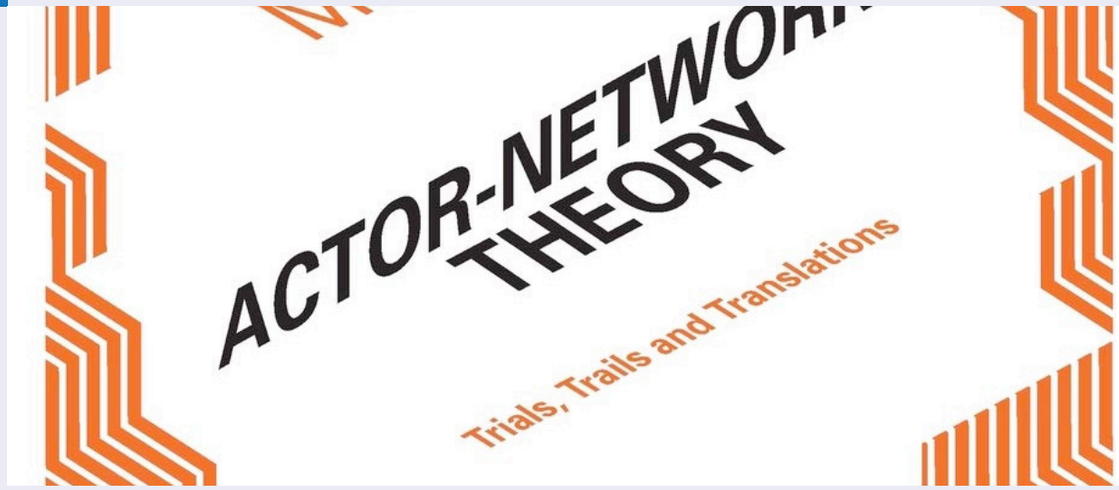


Donna Haraway - A Cyborg Manifesto (1985)
Donna Haraway was prolific in her foresight of the digital future. In her essay A Cyborg Manifesto (1985) she describes with extreme accuracy the way technology will evolved to influence our lives, outlining predictions for the increasing presence of technology in our everyday lives, in economy, in science, education, government, and more.

> "Technology is not neutral. We're inside of what we make, and it's inside of us. We're living in a world of connections – and it matters which ones get made and unmade."
>
> *Donna Haraway, A Cyborg Manifesto (1985)*

Haraway uses the metaphor of the cyborg (part human, part machine) to view the world. She rejects rigid boundaries such as culture versus nature or even man versus the machine, painting a picture of the cyborg as a sort of extension of the human, or a symbiosis. To exemplify: Humans extend themselves with a hammer, we can prolong life through medicine, and we are now doing the same with tech. These interactions, with tools that extend the self, influence back on us. She doesn't view humans as separate from nature/technology/animals/culture but as part of an evolving system. She illuminates the negatives within these systems, but points out that these broken systems can also be fixed within the rules of the same systems - not demonising tech, but instead trying to fix tech within the limitations of the tech. Of course, there might be adverse side effects of the technology, but with further development, discussion and interaction, there is pluralism and indefiniteness rather than binary perception (good vs evil/nature vs technology)'

Actor-Network Theory
Actor-Network Theory is an approach in social theory where everything in the social and natural world exists in constantly shifting networks of relationships. This means that creating social situations is just as dependent on objects, systems, processes, and ideas as the humans involved. All these actors create a network that is codependent and coevolving, implying that both power and agency are dependent on the other agents in the network; them being structural, technological, or cultural. In regard to power, it needs to be read as laying throughout the network, rather than only at a key center. [9]



Why this is relevant
Throughout our diploma we discover how interconnected the digital sphere was, in regards to how it affects individual behaviour, our culture, the infrastructure of society, economy, legislation, privacy, and the list goes on. Ingrid, having done academic writing last semester, recognized the resemblance from our research to the critical theories of organization that Actor Network Theory offers, as well as Haraway's descriptions of our co-evolvment with technology.

[9] Science Direct "Actor Network Theory".

GENERAL READING

Derek Thompson - The Real Trouble With Silicon Valley
Derek Thomson points to the current problem with Silicon Valley's extreme focus on reliably profitable endeavors, such as ad tech and cloud services: It is sapping talent from other sectors that otherwise could benefit from more invention, such as energy, health, housing, and transportation. He stresses that if they, with the help of others, shift their focus, can be of critical importance when meeting the challenges of the new century, rather than to keep chasing problems that do not matter.

"The web was once celebrated as a democratizing force and a means of escaping institutional control. But Silicon Valley's most profitable business model has been to construct expansive systems for tracking and manipulating human behavior: Together, Facebook and Google make almost 90 percent of their revenue by selling ads."

Derek Thompson, The Atlantic (2020)

Zachary Karabell - The Risk of Demonizing Silicon Valley
Zachary Karabell notes that it's not good to demonise the people with the most power within the field of technology because this creates a polarisation between the users and services.

"We humans tend to fail at balance. We either adore or revile; trust or suspect. Holding two or more contradictory truths is often beyond our collective capacities. So it is a tall order to ask (demand?) that we view the current status quo in Silicon Valley as both in deep need of reform and in deep need of respect."

Zachary Karabell, Wired Magazine (2017)

Why this is relevant
The way technology is represented in the media, it gave us useful views into what thoughts and ideas we needed to challenge, as well as giving us important validation of assumptions we had made throughout our lives.

SCIENCE FICTION

The genre of science fiction often delves into the topic of dystopian worlds, and in fewer cases, we can see the rise of utopian societies. Having both grown up being interested in Science Fiction, we've read several novels, seen a multitude of films and television series that encompasses the polarity between utopia and dystopia. For the diploma, we found going back into the realm of science fiction when considering the future of technology quite interesting and worthwhile.

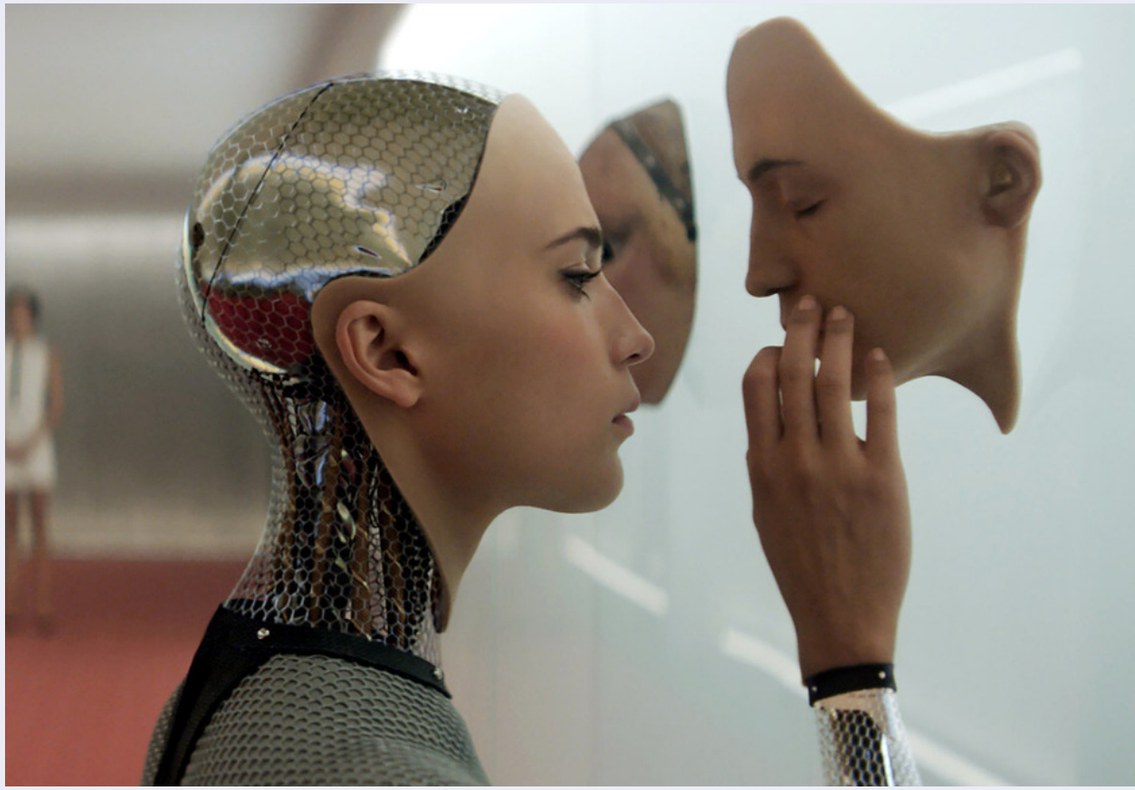
Utopia — An imagined place or state of things in which everything is perfect. [9]

Very much present, although in fewer cases, the future of technology can be visualised as a utopian. A great example of this is the universe of Star Trek—both in the television series and the films. In the narrative of Star Trek, humans have long forgone war, and spends Earth's resources working towards an exploration of the galaxy. Showing that Earth has become a utopia, allowing us to properly explore the infinite space surrounding our planet.

Dystopia — An imagined state or society in which there is great suffering or injustice, typically one that is totalitarian or post-apocalyptic. [10]

The concept of dystopia is exceedingly more common in Science Fiction than Utopia is, there being a plethora of stories to delve into. We've revisited shows such as Maniac (2018), Black Mirror (2011-2019) and Devs (2020). Films such as Ex Machina (2014), Gattaca (1997) and Matrix (1999), as well as the novels Brave New World (1932), Fahrenheit 451 (1953) and Ready Player One (2011). Whilst doing this, we realised that they don't inherently present tech as evil—just how tech is utilised by megalomaniacs. Which coincides with a lot of the research we found on people's relationship to MAAMA.

-topia — [from Greek *topos*, place]
A place with specified characteristics. [11]



Why this is relevant
We found it interesting to consider this opposition between Utopia and Dystopia when working with the future of tech. Whilst our focus for the diploma has been to rework services and application already in existence, the core is the discussion that arises when talking about the future of technology, and what we can do to change the current course. We realised, when revisiting these novels, films and tv-shows, that we did not want to be a part of either group. We do not think tech alone is going to create a utopian society, nor do we think tech is at the core of dystopia. We want to acknowledge that tech is simply there. It's neither utopian nor dystopian. It's just "-topian". Tech has no moral; tech is merely there.

9. Utopia [Definition]
10. Dystopia [Definition]
11. Topia [Definition]

INTERVIEWS

With our understanding of data based on the reading, creating datasets and some initial sketching, we had assumptions that we wanted extreme users' points of view—such as data being inaccessible or that users mainly track for self-improvement. So we turned these assumptions into questions that we wanted answers to;

Do people find data to be unavailable?

What is their relation to tracking?

What are the factors contributing to their willingness to share data?
And also—which data do they want to share (and not)?

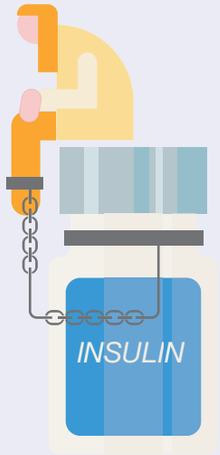
To get these assumptions either validated or disproven, we conducted interviews, which we will now go through.

INTERVIEW 1

Person with diabetes
The first interview we conducted was with 26 year old diabetic. We wanted to understand what it was like to have to track, and if we could learn something from an extreme user that could apply to general tracking, i.e. for self improvement.

"When I gave him access two years ago, I thought it would feel much more invasive than what it has been."

From the interview, our main insight was that the threshold for what feels invasive and not might be interchangeable—highlighted by this quote.

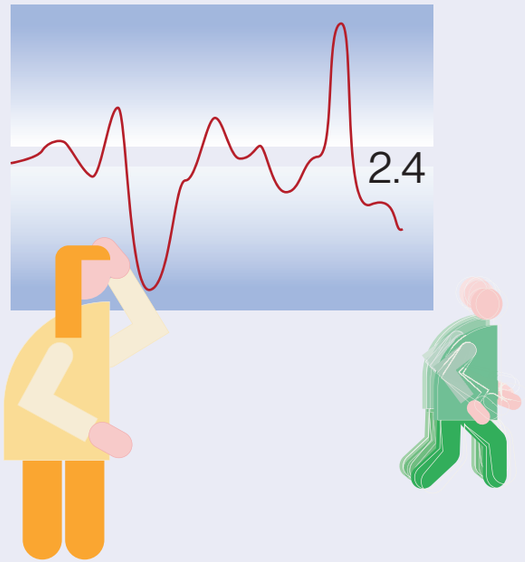


INTERVIEW 2

Parent of a child with diabetes
The second interview was with a parent of a child with diabetes. We got insight into how this affected an entire family. They told us a story of when they were checking blood sugar levels when out eating:

"We were at a restaurant, and the waiter thought we were checking the stock. Understanding data feels empowering. Being able to act upon it. I am able to understand something that seems Greek to others. To me, it makes sense. There is something cool in that."

So even though constantly tracking is tiresome, there are still aspects that bring a sense of empowerment—understanding something undecipherable to others.



INTERVIEW 3

Person in a research project
We were also fortunate enough to interview a person without diabetes that was a part of a research project where they had to track blood sugar to see the effects of exercising.

We discussed what it would feel like implementing this data into services, and whilst reflecting upon that, they said:

> "The data is still you, but it's represented differently. However, it feels like it takes away your free will. It's kinda dumb to say because it's based on you; it's just presented in a different way."

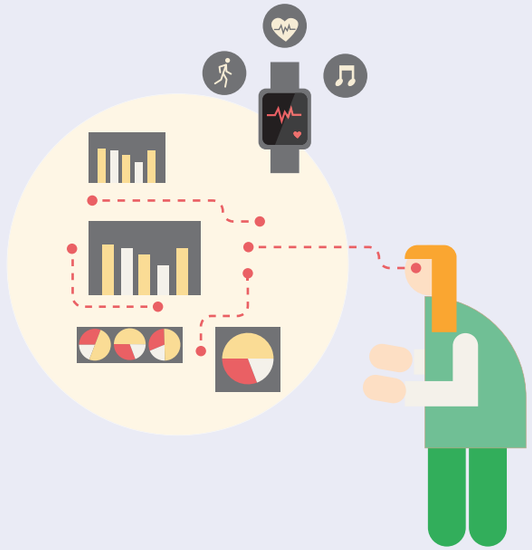
This shows that presentation is vital. If the data is presented incorrectly, it can feel like you lose control.

INTERVIEW 4

Tracking enthusiast
We also needed to understand more from the perspective of tracking for self-improvement, so we interviewed a person that has followed their exercises for over ten years as well as their menstrual cycle for four years. They said, when talking about menstrual tracking:

> "It's not like I give out my social security number, so if an application or advertiser knows when I'm on my period, I don't really care."

Even though the user proclaims not to care, it show that they cares very much about which data they share and with whom. It also shows an awareness of privacy and the value of data.



WORKSHOP

We arranged a workshop where we invited people who have experience with tracking. They might not be active trackers, but at least interested in the topic. In this workshop, we posed questions to the attendees and facilitated a discussion between them to observe their thoughts surrounding tracking, targeted advertising, sharing data, and privacy. We also asked them to expand upon some things by drawing as a way to show ideas they might not be able to vocalise.

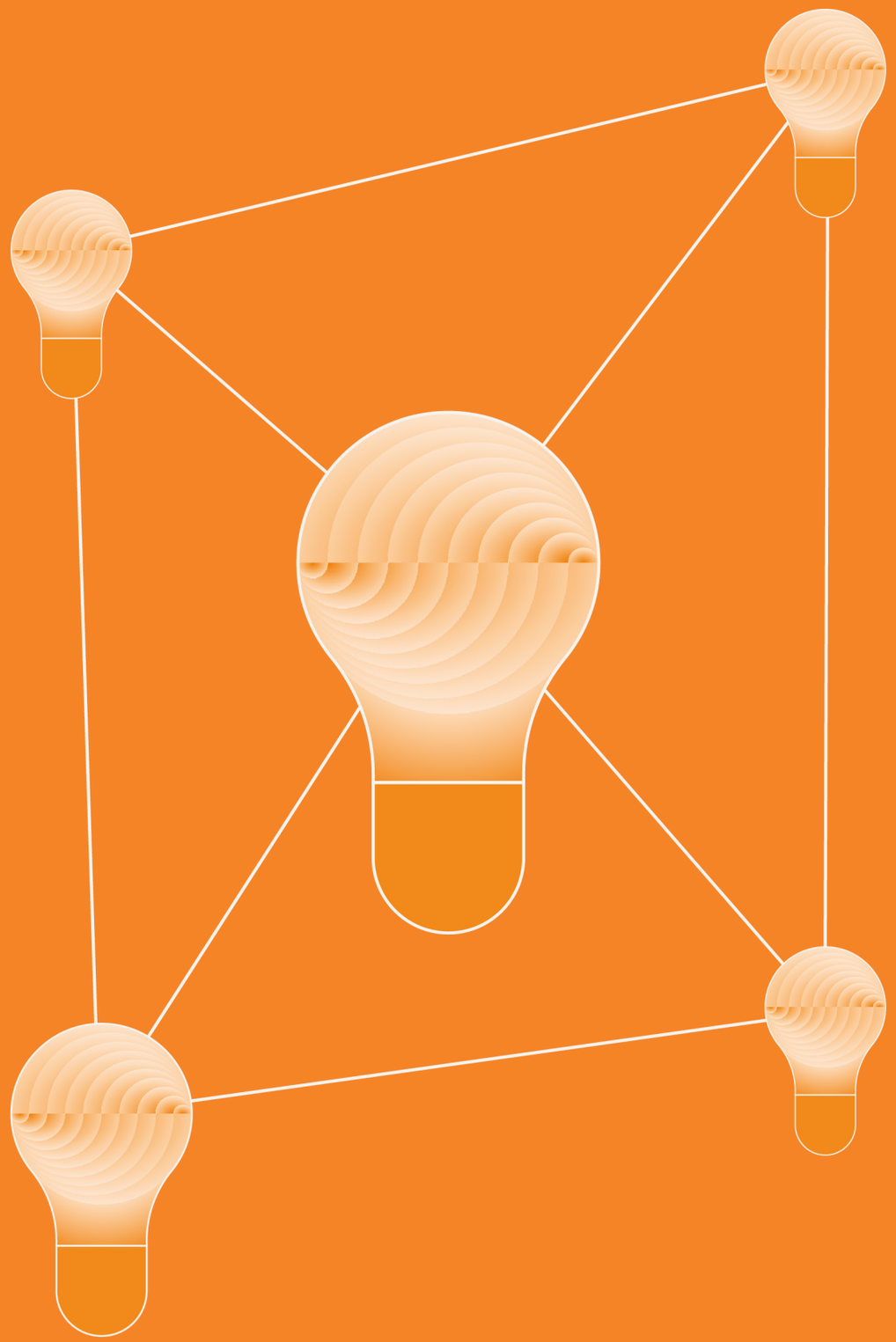
Some of our key findings were that there is a lot of scepticism towards sharing data, certain brands are more off-putting than others, and the attendees did not want to share data with MAAMA.

They remarked that they mainly track when something is wrong. You don't need to track your sleeping patterns when you sleep well.

We learned that manual input is a hassle; they wanted it to be automatic.

They also noted that targeted ads could sometimes be irritating—if they had to google things for work, it was annoying that it affected the ads they would get in their spare time. It would be nice to separate work, studies and personal life in the digital sphere.

INSIGHTS



OVERALL INSIGHTS

The insights we gained from this way of working shaped the project throughout the spring. All the insights and sketches are the basis of every choice we've made.

Here are our key insights summarised:

Users do not trust services with their data

Users are selective about what they want to share and not

The data is there, but is not approachable

The data needs to be more accessible & understandable

The motive of the services (and 3rd parties) needs to be more transparent

The current privacy functionality (cookie consent/terms of use) is not helping the user experience, and most of the time we do not read it

FINAL SCOPE

Considering the privacy challenges we face today, we propose more open data and transparency, illustrated through added functionality and micro-interactions in existing services and software:

Make data even more accessible and more understandable.

The motive of the service is more transparent.

Informs you when there is a third party involved.

Illuminate the value of individual vs collective data.

How algorithms, machine learning, and AI process data, thus contextualising it for the user.

BOOKLET

DISCLOSING DATA

Making data more accessible, transparent, and understandable

Diploma
AHO 2022
Ingrid Sudbø
Amalie Sofie Bauge Skevik

ABOUT

This booklet is designed to be read independently as a free-standing summary of our diploma, where our final proposals are presented. It is composed of a manifesto, that states the relevance of the nine possibility studies that follows. They show different ways of making data more open, transparent, and understandable, exemplified within existing software & services. The proposal showcases the categories of data that we defined in the research aspect of the (full-length) report.

Disclosing Data isn't supposed to be an answer to the issues we found. Instead, we hope that our concept can open a discussion around our role as designers to be more transparent in our work and show ways of creating more trust between services and users.

Disclosing Data
Making data more accessible, transparent, and understandable
By Ingrid Sudbø & Amalie Sofie Bauge Skevik

Field: Interaction Design
Supervisor: Joakim Formo

Spring, 2022
Institute of Design
The Oslo School of Architecture and Design

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A TRANSPARENT MANIFESTO:

Design, Technology, Privacy, and Tech-Optimism in the 21st Century

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Abstract: *With the massive challenges we face with big data, privacy, and distribution of power and agency in the digital sphere, this manifesto offers an overview of the issues in question and concludes that systemic change is needed. It illustrates how interactions designers can contribute to creating the infrastructure that is lacking. Following this manifesto, are probes for discussion, specifically possibility studies exploring functionality that encourage openness and transparency from the services. We aim to inspire others to take part in the challenge of how to rebuild a broken system.*

Introduction

Discussions surrounding privacy and digital data are increasing as our world moves further into the digital sphere. People question how digitalisation impacts our well-being. We wonder about what privacy we have left, and we are advised to consider what we share, where we share it, with whom we share, and why we share. The users voice a loss of control as the digital infrastructure has become ubiquitous in society. We have to sign in, accounts are linked, and our digital history is logged, shared, analyzed, and sold. Being part of the digital sphere is an expectation, but to do so we are paying, not with money, but with a new currency: Data. Users are, aware or not, paying their way in with the data they share, even with the seemingly "free" services, such as Google or Facebook. Silicon Valley and MAAMA (Meta, Apple, Microsoft, Amazon, and Alphabet) are demonized, seen as the big black wolf, blamed for instigating this mess, and subsequently wavering their responsibility.

Simultaneously, there is no doubt tech is here to stay. Smartphones and computers will not vanish tomorrow, more and more information from our banks, our governments, and our schools are turning digital. There is less mail and more e-mail. Computers, AI, and machine learning are automating parts of the workplace, often making it more efficient, and some tasks become easier. The demand for workforce in computer engineering, programming, robotics, machine learning, AI, etc. is increasing, creating new job opportunities. And let's be honest; isn't it nice that a smart device can keep track of our steps? Or that Google can guide us to the Airbnb, at the same time as the traveling companion is making a Venmo/MobilePay/Vipps group, so you can split expenses? Or that diabetics more easily can track blood sugar with digital solutions?

Tech-optimism

There is an increasing polarization in the narrative of tech. On one extreme, tech takes over and has immense cultural impact and power. On the other side, tracking, AI, and machine learning are seen as the solution to our every need. Growing up in a semi-digital world, we've witnessed skepticism arise. In our personal opinion, some of it is warranted, and some of it is unwarranted. Data itself isn't malicious, and the information you can understand from data isn't evil—but it can be used for good and bad purposes. Analyzing data is a way of reflecting, understanding, and learning how things work. With digitalisation, digital data has also been integrated into the infrastructure of the societal network. To us, the fear connected to digital data is frightening. Presenting big tech as evil helps fuel the idea of big tech wanting to control your every move (to earn more money), opening up for conspiracy theories, which we've seen with the corona vaccine and whether or not Bill Gates put a chip into us with it (Hotez, 2020).

We acknowledge huge structural problems with big tech. Some companies have become so powerful that we now see an immense concentration of power, capital, and problematic working conditions (Kelly, 2021). If democracy is a goal, then the current status of big tech is not practicing just that. Regulation and insight into these companies are needed. Big tech or big data, itself is not the problem, it is the underdeveloped infrastructure and regulatory framework to handle it that presents the issues. Therefore we opt for a tech optimistic approach when tackling the challenges we encounter in the digital era.

Our argument in the light of Donna Haraway and Actor-Network Theory

Throughout this diploma, our research has shown that trust between users and services is essential, but has gone missing. When doing in-depth interviews and a workshop with extreme users (tracking enthusiasts, people living with diabetes) we found that they are willing to share data with, and have greater trust in, applications and services if they understand how the data is used, such as Fitbit, Clue, and Loop (exercise, menstrual tracking, and open-source habit tracker—increasingly used by diabetics). However if the data is not displayed back to them in an intuitive manner, such as with targeted ads, or Google's/Facebook's/etc.'s "personalization", they become skeptical, and the trust drops.

These challenges have been foreseen and described in the crucially relevant essay A Cyborg Manifesto: Science, technology, and Socialist-Feminism in the Late Twentieth Century, (1985) by Donna Haraway, a distinguished Professor Emerita at the University of California, Santa Cruz. Haraway was prolific in her foresight of the digital future. A Cyborg Manifesto describes with extreme accuracy the way technology has evolved to influence our lives, outlining predictions for the increasing presence of technology in our everyday lives; in the economy, in science, education, government, and more. Her visions display a crucial opposition to the classical dualistic view of nature and technology. Cyborg thinking illuminates the fusion that is happening between human culture and technology. Technology and digitalization are tools, in the same way a hammer is a tool. It is an extension of the self, where body and tool become a cyborg — a fusion that brings new potential. At the same time she emphasizes that, with the social impact of innovation, ethics and social consciousness need to be part of the game. A broken system can be fixed within the rules of that same system. We interpret this to mean that we should not demonize all of tech, rather a reform is needed. Changing tech, within the rules of tech.

Like Haraway, Actor-Network Theory questions binary thinking. Advocates for ANT, such as Bruno Latour, argue that the inscribed divides between nature/technology/culture make us blind to the criss-cross of connections that emerge between these binaries. This redemption of dualism also applies to agency/structure and subject/object. In ANT everything in the social and natural world exists in constantly shifting networks of relationships. This means that creating social situations is just as dependent on objects, systems, processes, and ideas as the humans involved. All these actors create a network that is codependent and coevolving, implying that both power and agency are dependent on the other agents in the network; them being structural, technological, or cultural. In regards to power, it needs to be read as laying throughout the network, rather than only at a key center (Science Direct, 2009).

Our diploma aims to exemplify new functionality that can effectively transmit power

and agency from one part of the network to another, to restore network stability. In other words: We aim to restore the trust that is lacking in the digital sphere, redistributing the power and agency between the users, the services, the companies, the technology, and the culture. Increased knowledge alone does not shape the way we understand and interact with technology. Therefore we, as interaction designers, want to contribute to the infrastructure that communicates knowledge, that lets the users understand how their data is influential, how it is being used, and how it is processed, to make a space where the users feel equipped to make more informed digital choices. As designers, we have several ways of accommodating the presented needs, onboarding being one of many.

A manifestation of our findings

The insights we found through our research—the lack of trust, and a need for openness and transparency—substantiate the need for the recent legislation that has been implemented in the EU. Parallel to this diploma, a reform has been set into motion on large scale. New European GDPR laws were made in April 2022: The Digital Service Act demands more openness and transparency from the services and aims for a future with more trustworthy services, where both users are more in control of their data, where manipulative design solutions are limited, and where researchers have access to key data, which the companies previously actively has counteracted (European Commission, 2022). Within the rules of tech, we can change tech. Within the idea of social flow illustrated in ANT, we are acknowledging that there are several actors involved when trying to (re)build this infrastructure, and that the users should be an integrated part of the service development process, as opposed to simply viewed as passive consumers. And, as interaction designers, we are actors trying to influence in a way we know.

Acknowledging these ideas, this diploma encourages change, rather than keep demonizing MAAMA. Change both from the inside and the outside. From the outside, legislation does so by putting pressure on the companies and restricting their power–not to say redistributing their monopoly. From the inside, new digital solutions do so by offering a response to legislation, as well as giving more agency to users. This diploma proposes functionality that answers to the user needs we have seen in our research—a need for more trust, which we have chosen to tackle with functionality that encourages more transparency and more openness from the services.
This manifestation—the Digital Service Act—is evidence of the importance of this diploma and what it communicates. The users need change, EU legislation demands change. MAAMA is, as of now, not fulfilling these expectations.

Conclusion

This diploma offers possibility studies to start a discussion around how we can tackle the massive challenges we are facing with big data, privacy, and distribution of power and agency in the digital sphere. And we hope to encourage a future where modularity in the (digital) service structure is expected, as a service will undoubtedly coevolve and codevelop with use. These proposals are not finite. They are probes for lacking functionality that ought to be present. Functionality that is meant as a stepping stone, an intermediate, a chapter, which we hope soon to be obsolete. At this moment, the lack of trust is destabilizing the system. To rebuild trust, we need openness and transparency, bridging knowledge and public understanding of it.

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SCOPE

Considering the privacy challenges we face today, we propose more open data and transparency, illustrated through added functionality and micro-interactions in existing services and software:

Make data even more accessible and more understandable.

The motive of the service is more transparent.

Informs you when there is a third party involved.

Illuminate the value of individual vs collective data.

How algorithms, machine learning, and AI process data, thus contextualising it for the user

The concept consists of 9 possibility studies:

01: Privacy Report

02: Facebook Privacy

03: Instagram data

04: Spotify User Groups

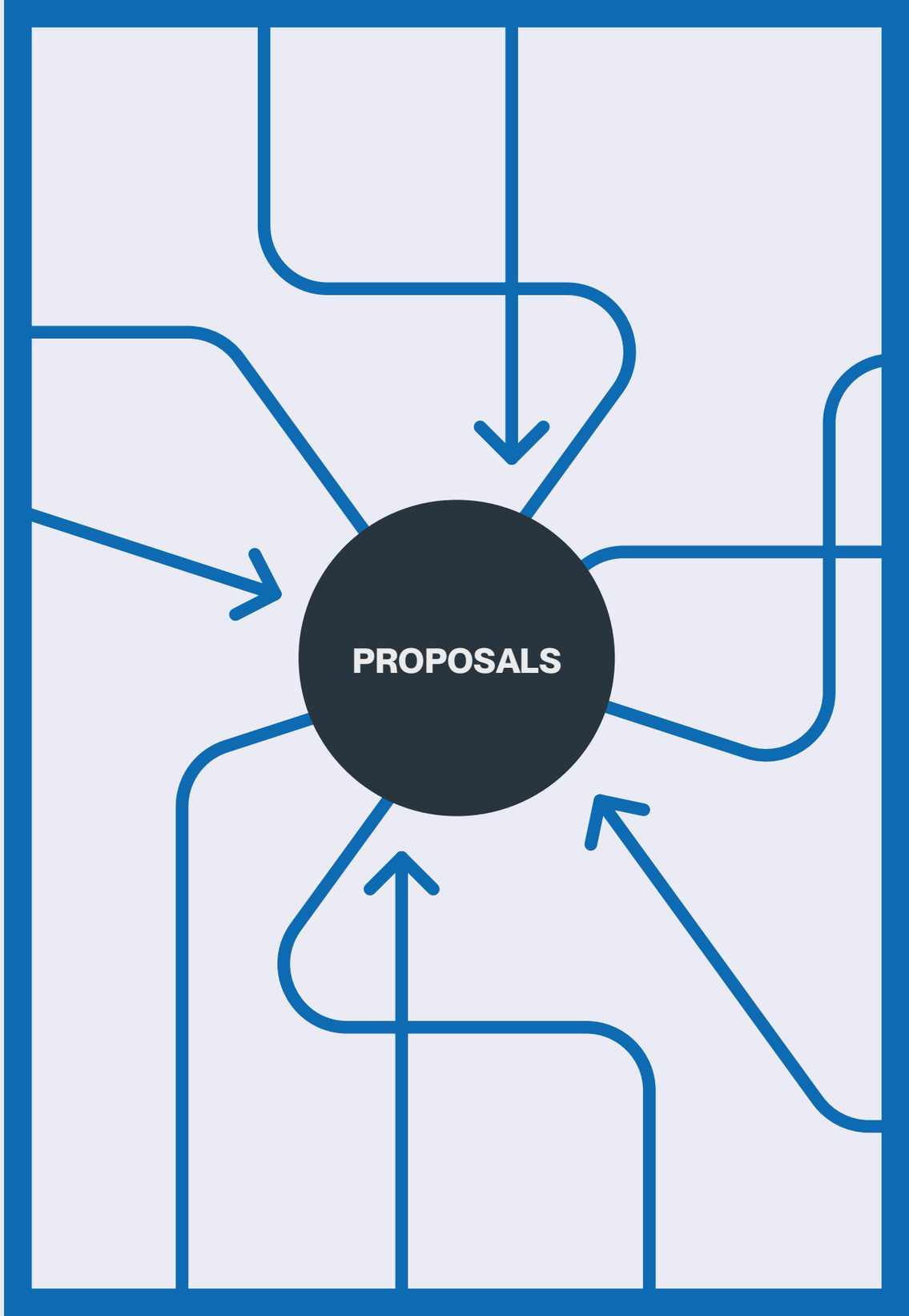
05: Oslo City Bike Campaign

06: Work mode

07: Spotify data

08: Oslo City Bike Stats

09: Instagram Likes



01: PRIVACY REPORT

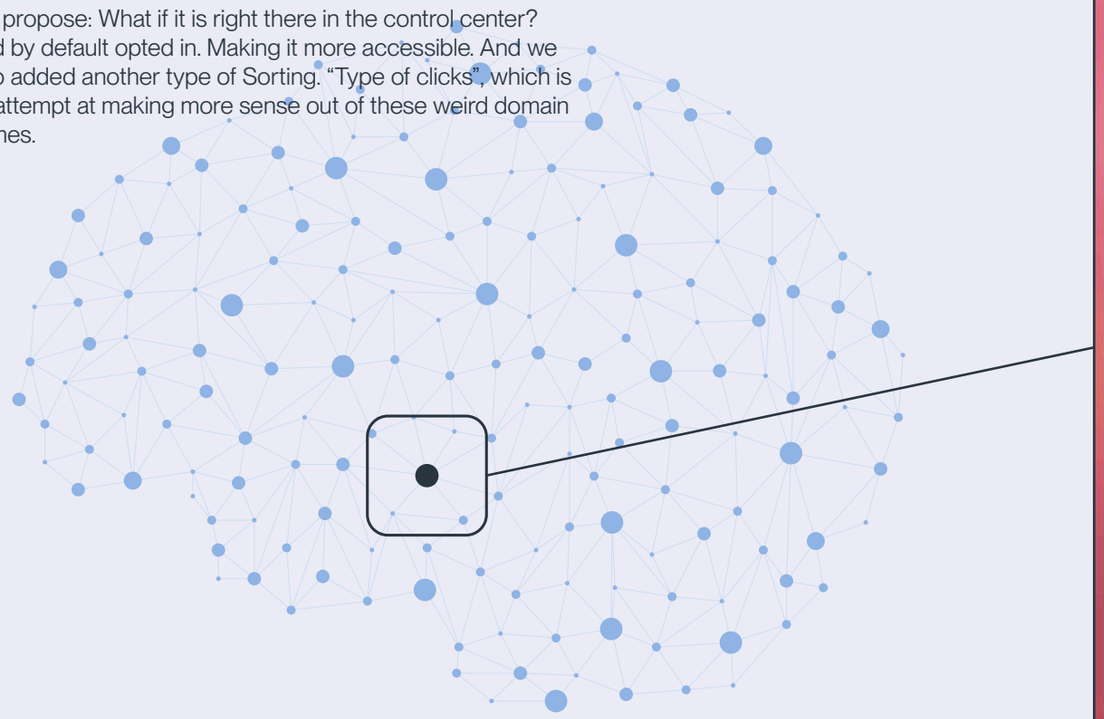
MAKING WHAT'S ALREADY THERE MORE AVAILABLE

On the iPhone, you have the option to turn on your Privacy Report. It tracks what activity your apps are up to, such as accessing your location, photos, and contacts, what networks and trackers different apps and websites are contacting, and more.

You get a sense of how things are interconnected, that data is being sent between actors. But this option is by default opted out. We turned it on on our phone, but to navigate to it, is like walking through a maze. It is hidden deep down into the user settings.

Making sense of the partially organized list of domains is challenging, as most of them are unfamiliar. However, we do get an idea of the vast amount of third parties that are being contacted every time you navigate around Spotify or Instagram.

We propose: What if it is right there in the control center? And by default opted in. Making it more accessible. And we also added another type of Sorting. "Type of clicks", which is an attempt at making more sense out of these weird domain names.



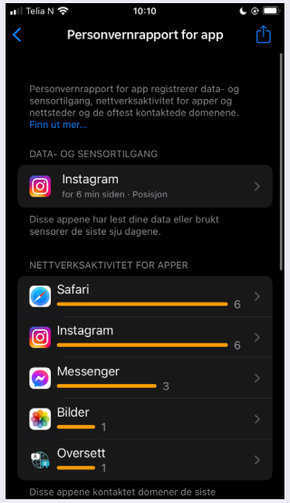
01: PRIVACY REPORT

MAKING WHAT'S ALREADY THERE MORE AVAILABLE

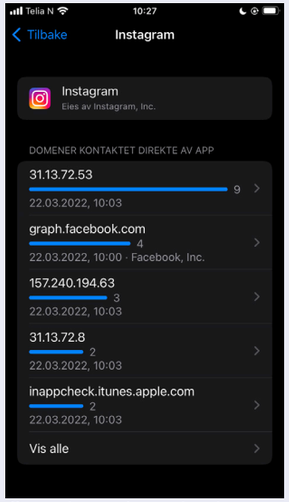
ORIGINAL PRIVACY REPORT

The Privacy Report is by default opted out. On this phone it is turned on.

Quite hidden all the way at the bottom of the Privacy Settings.

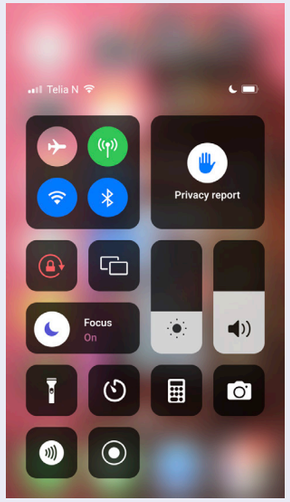


Overview when you open the Privacy Report.



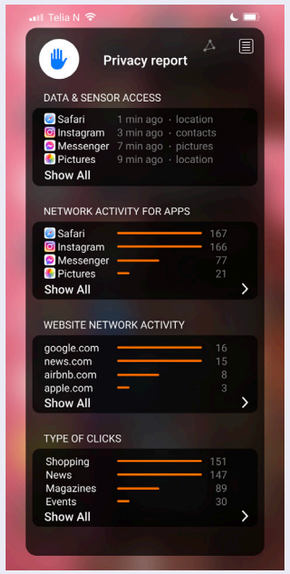
Overview when viewing what domains Instagram has contacted.

CHANGES WE PROPOSE



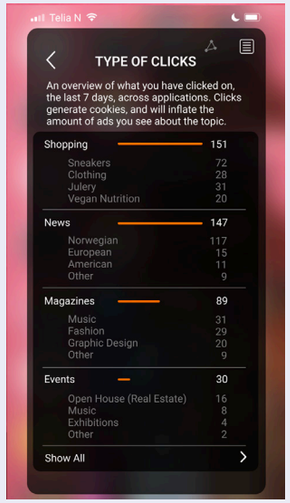
The Privacy Report is made more accessible through placing it in the Control Center, and is by default opted in.

This will onboard users—letting users know it exists.



The overview remaines the same, but another type of sorting is added:

Type of clicks

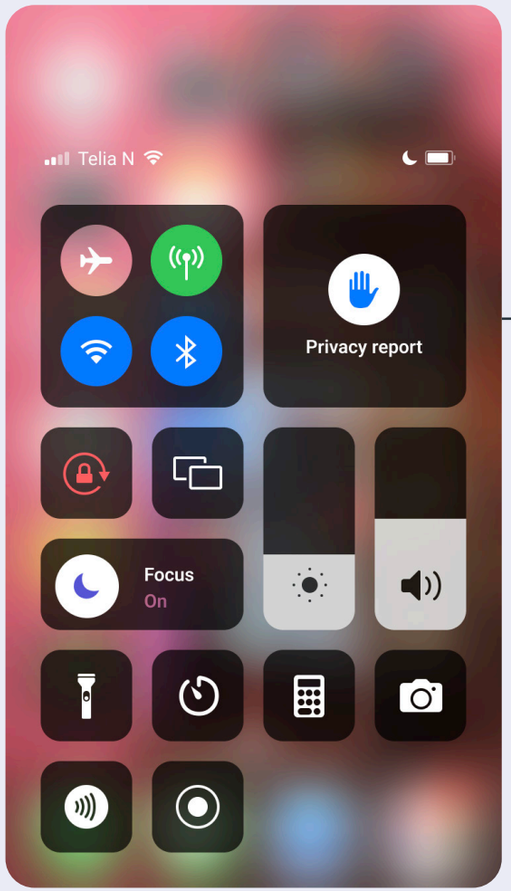


Type of clicks makes the information more digestiable for the users, sorting the obscure domain names into understandable categories.

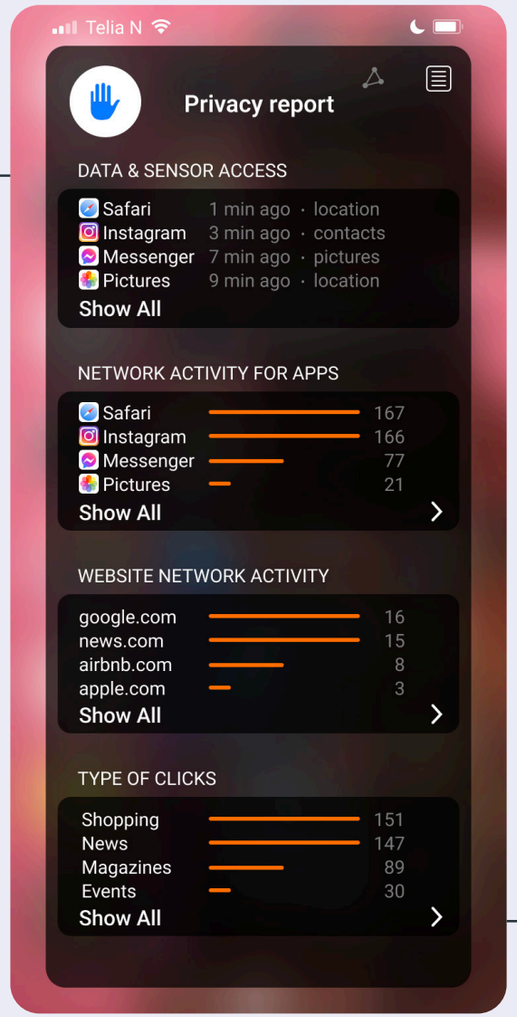
01: PRIVACY REPORT

MAKING WHAT'S ALREADY THERE MORE AVAILABLE

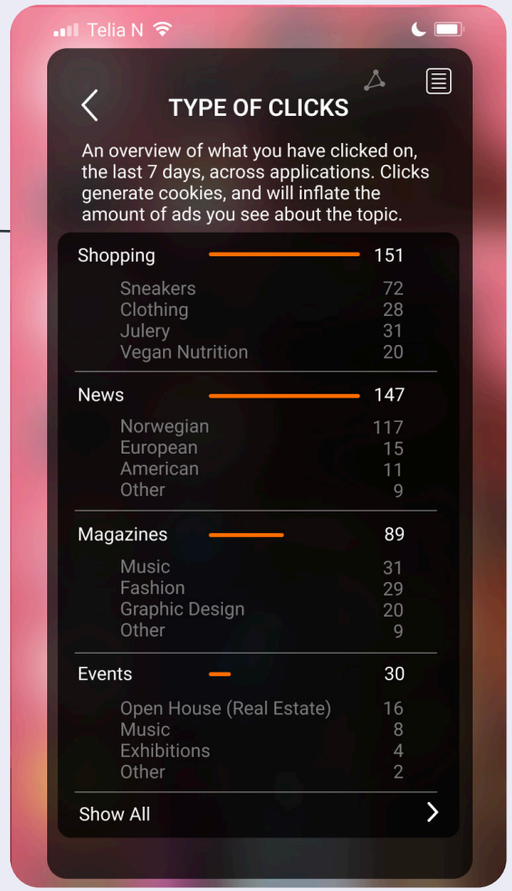
MORE ACCESSIBLE THROUGH THE CONTROL CENTER



ADDING ANOTHER TYPE OF SORTING...



...MAKING THE INFORMATION MORE UNDERSTANDABLE



01: PRIVACY REPORT

MAKING WHAT'S ALREADY THERE MORE AVAILABLE

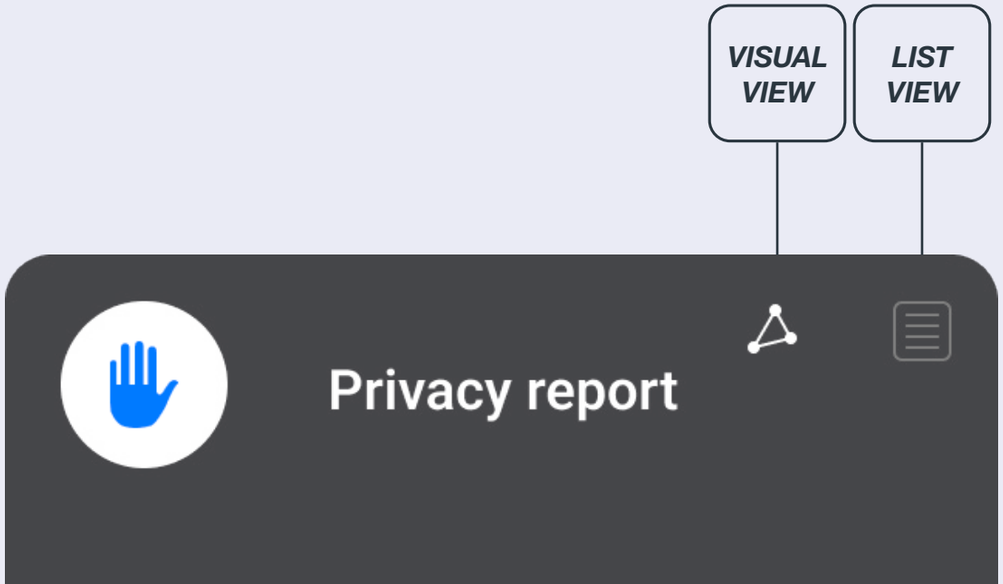
COULD THIS INFORMATION BE COMMUNICATED DIFFERENTLY?

We sketched out ideas for a visual view, as an alternative to the list view. However, as the information is complex, abstracting it into a simple animation or graphic was challenging.

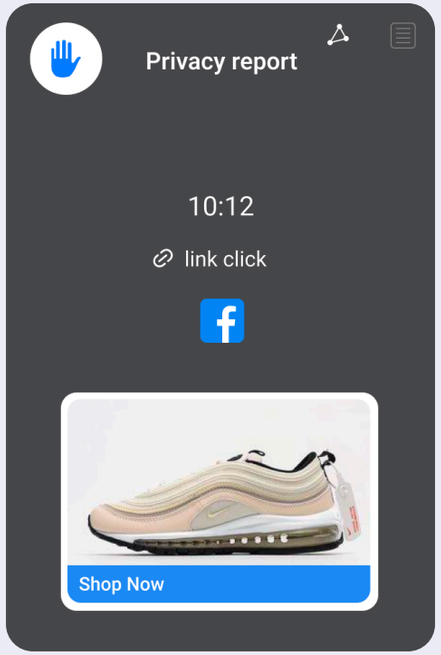
When testing we found that a visual review of your clicks would require not seeing the actual content in review, as it would mean double exposure for advertisements.

We also tried making an animation of how data "travels" between different actors. On this concept users reported that the amount of information they wanted was crucial. Finding the sweet spot requires more testing and iteration.

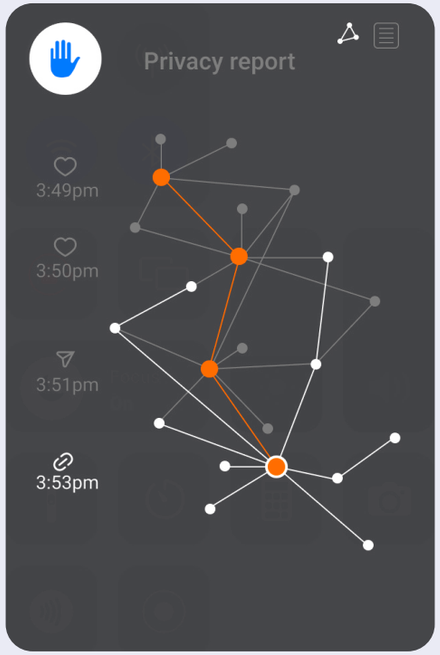
Some users also reported that they would rather have the list view, as they found numbers/statistics/lists more trustworthy. They felt an abstracted animation would probably have some interpretations pre-deciding how they would read the information. Other users appreciated the idea of presenting the data more visually.



IDEAS FOR VISUAL VIEW



Clicks in review



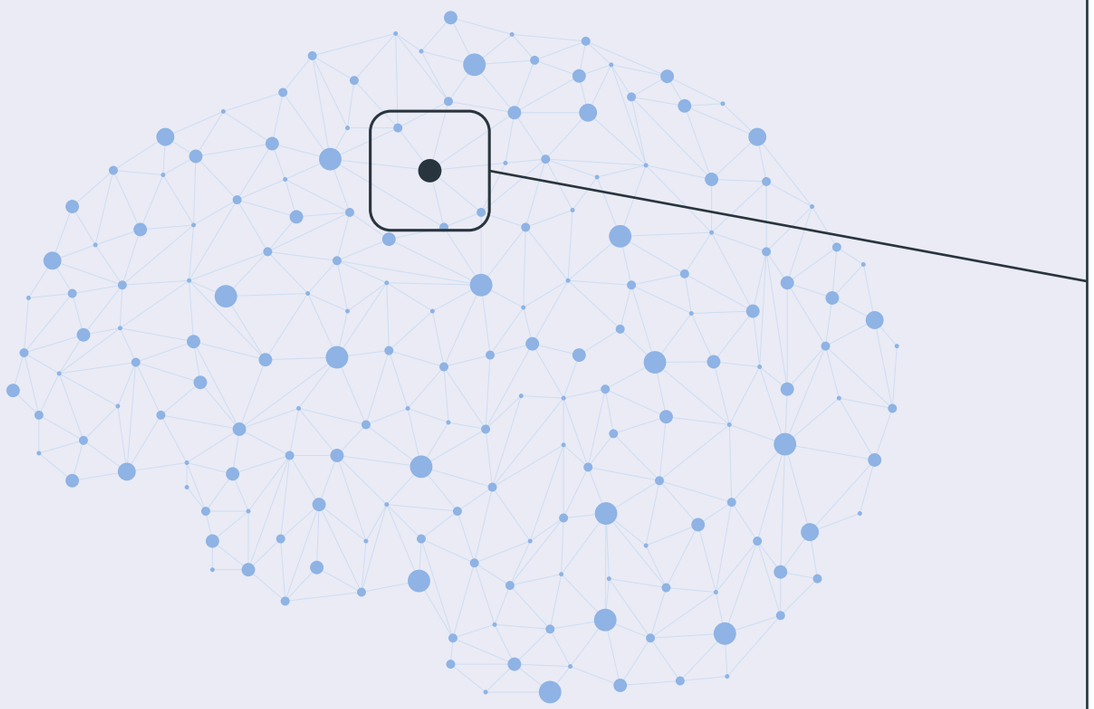
Your data animated

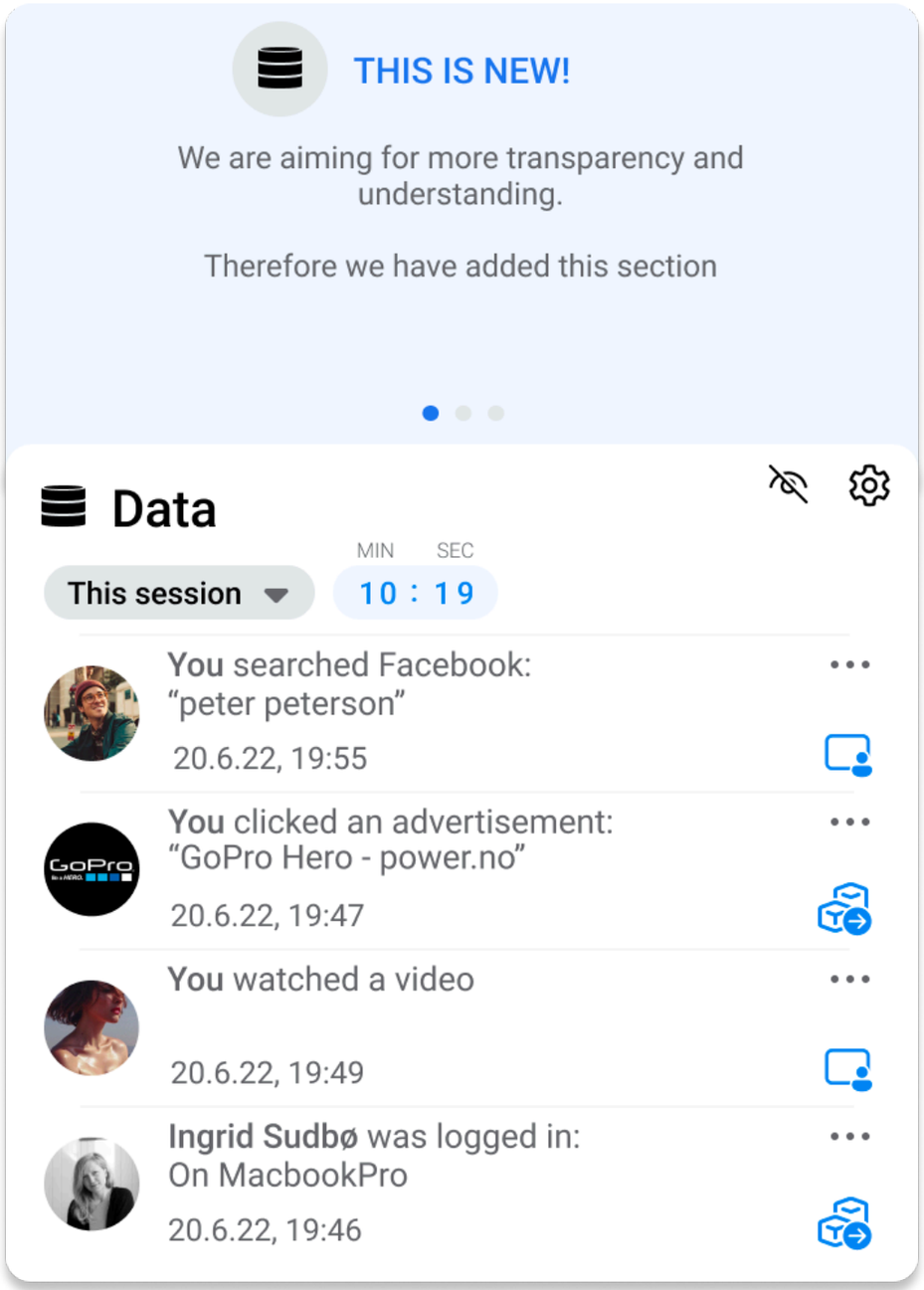
02: FACEBOOK PRIVACY

FUNCTIONALITY THAT MAKES DATA MORE ACCESSIBLE WITHIN A SERVICE

As it is obviously possible to see what third parties have been contacted within apps and websites, Why not be upfront about this while it is happening? What if you could see what cookies are used and created on the go? Or what is saved for every interaction you do with/through a service?

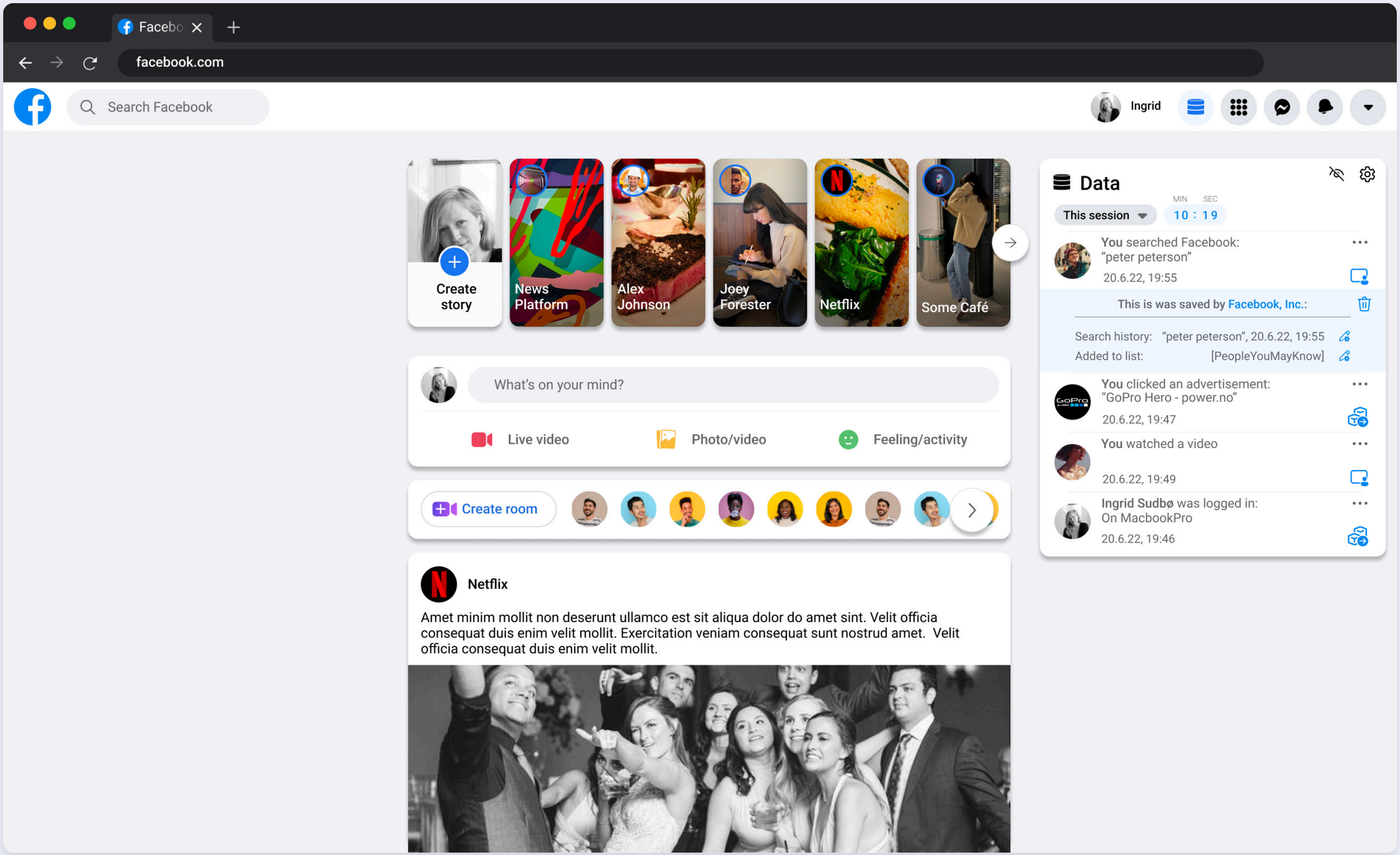
In our Facebook example we've added a Data Tile, that displays your digital history; what data has been saved to your profile, and what data has been shared with third parties.





02: FACEBOOK PRIVACY

FUNCTIONALITY THAT MAKES DATA MORE ACCESSIBLE WITHIN A SERVICE



02: FACEBOOK PRIVACY

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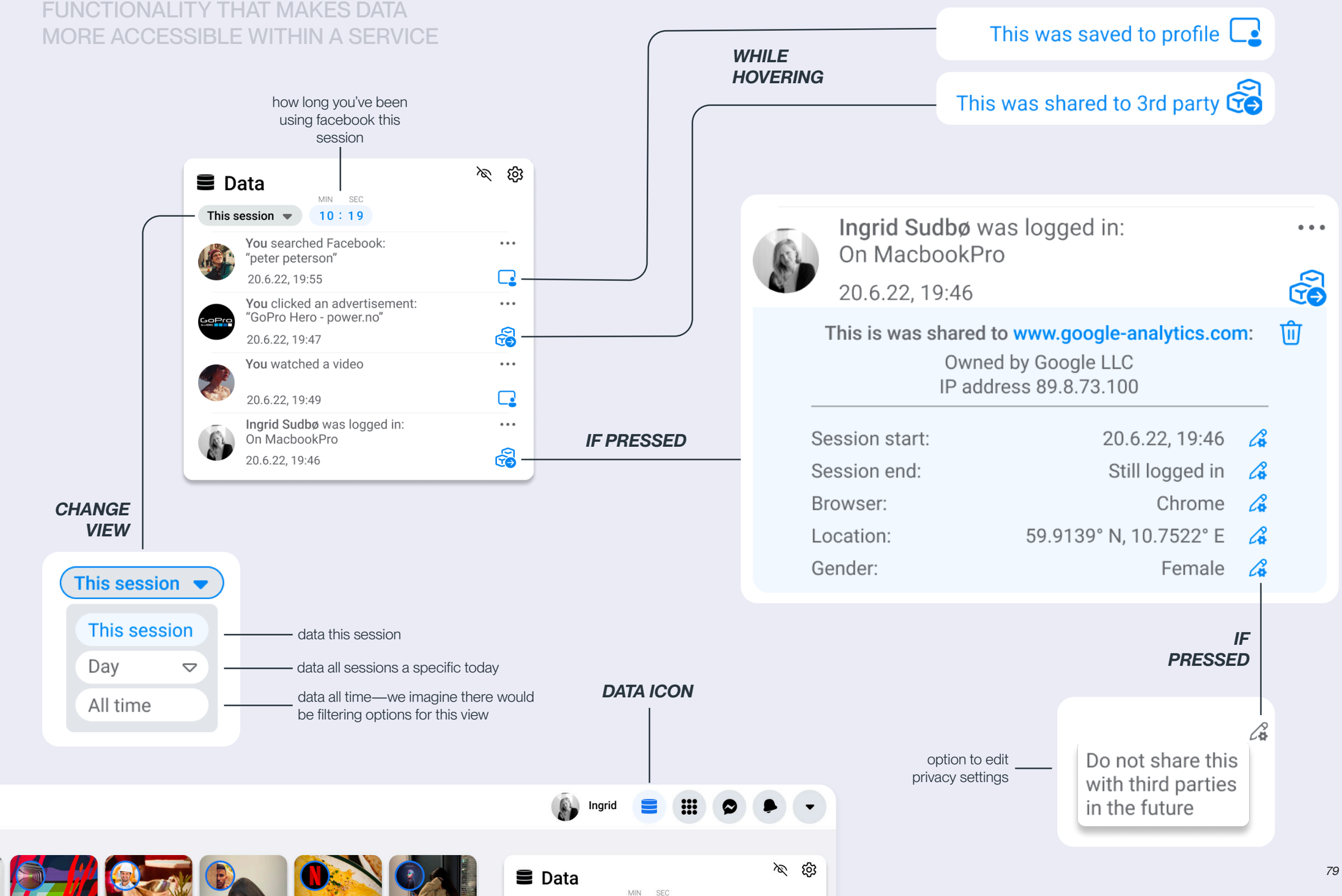
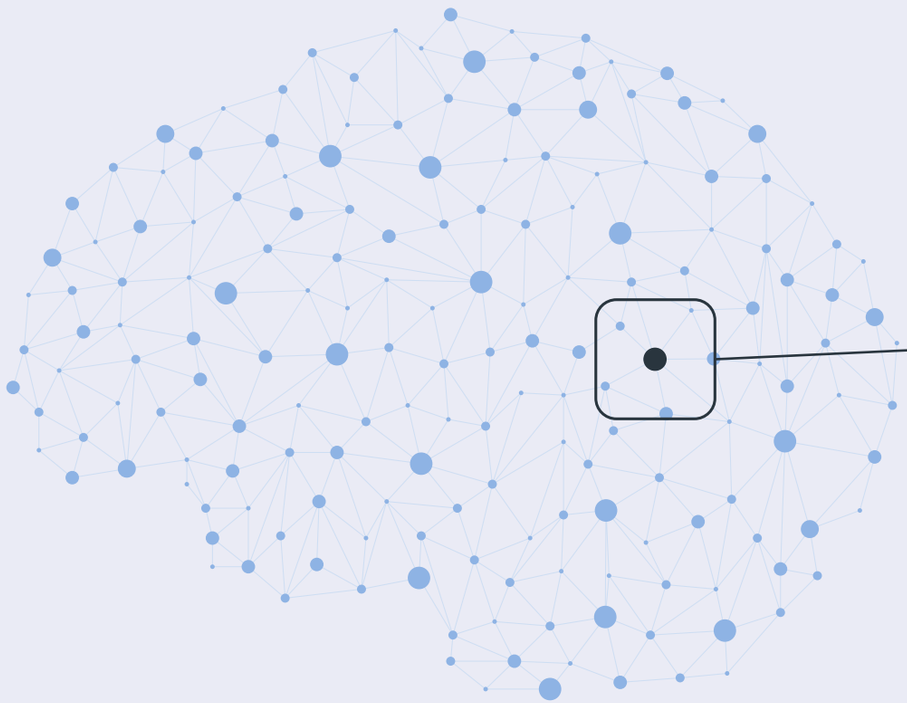
MORE ACCESSIBLE WITHIN A SERVICE

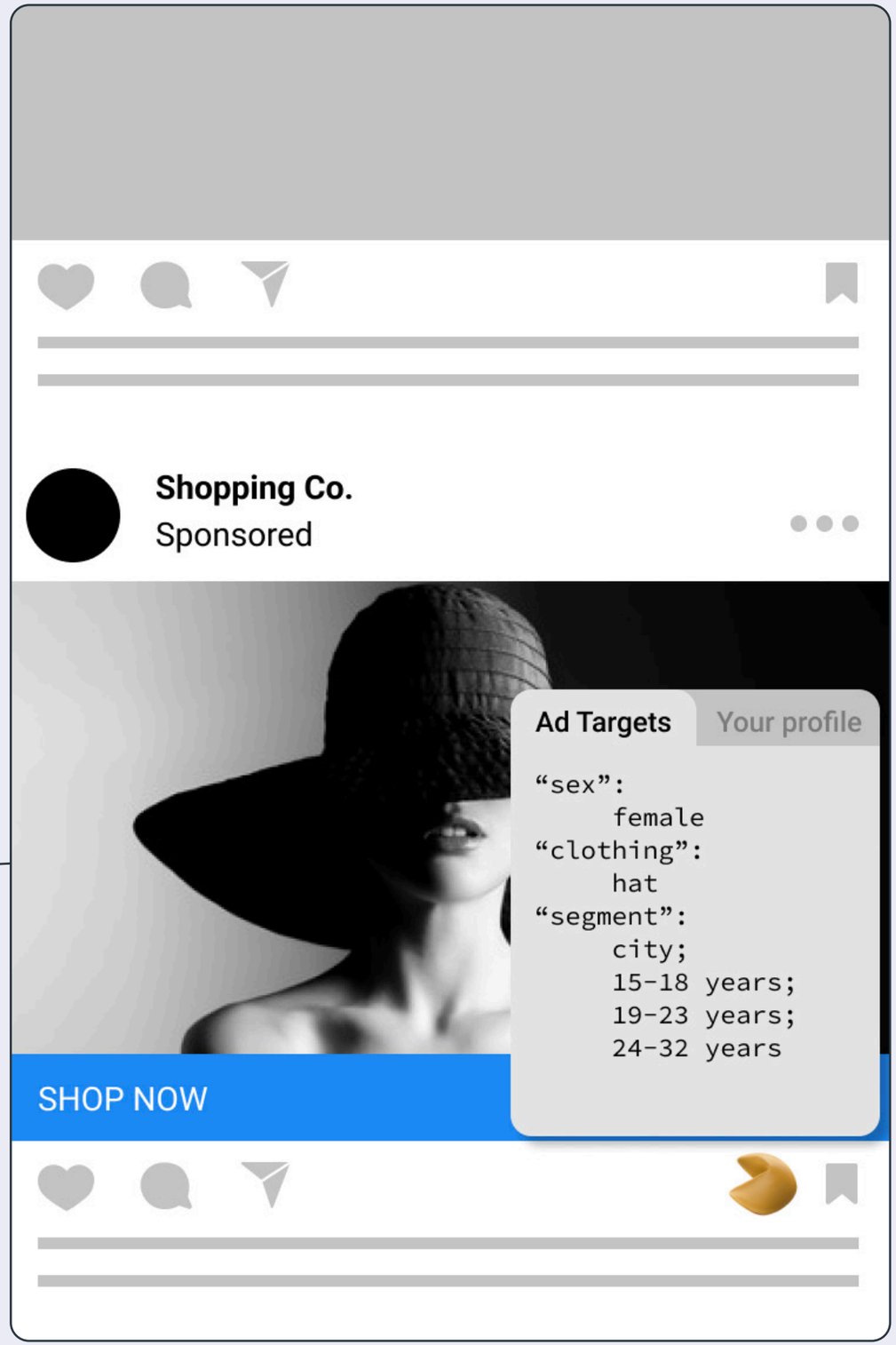


03: INSTAGRAM DATA

COOKIE/CACHE

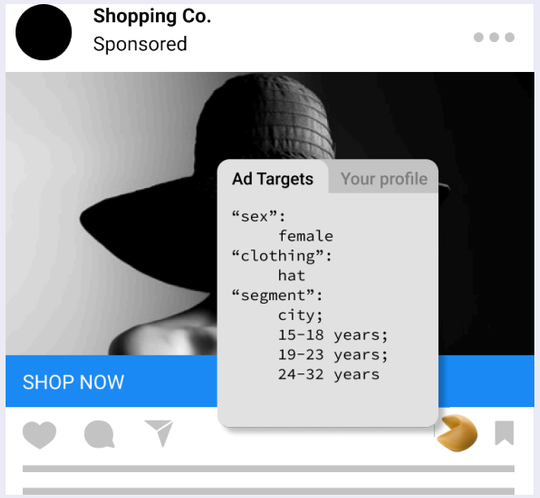
This concept is similar to Facebook Privacy. What if you could see what was saved to your profile when you clicked on ads and why you were shown them in the first place? Or if you get insight into what the Instagram algorithm assumes about you when you interact with content?





03: INSTAGRAM DATA

COOKIE/CACHE



If you press the Cookie icon you can see what type of users the ad targets

Ad Targets | Your profile

```
"sex":
     female
"clothing":
     hat
"segment":
     city;
     15-18 years;
     19-23 years;
     24-32 years
```

What type of user does the ad target?

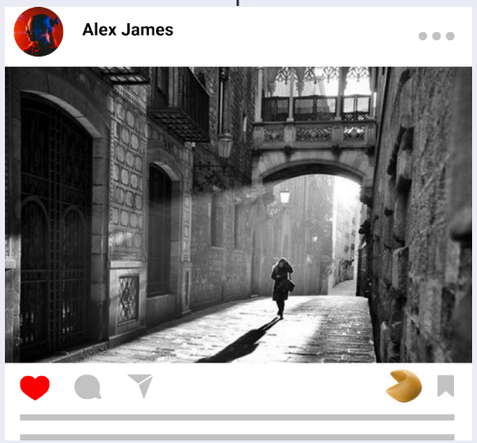
VS.

Ad Targets | **Your profile**

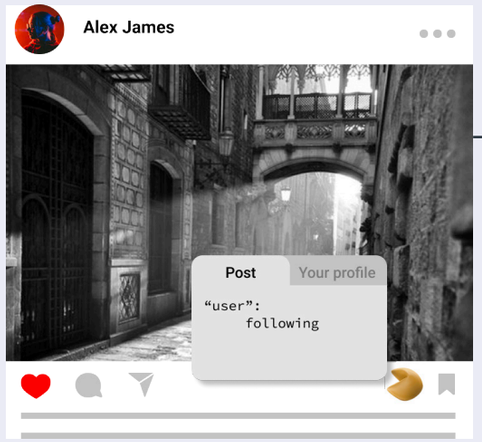
```
"sex":
     female
"age":
     23
"location":
     Oslo; Norway
"clicks":
     this ad;
     sephora;
     mini dress;
show more
```

What about you matches the target group?

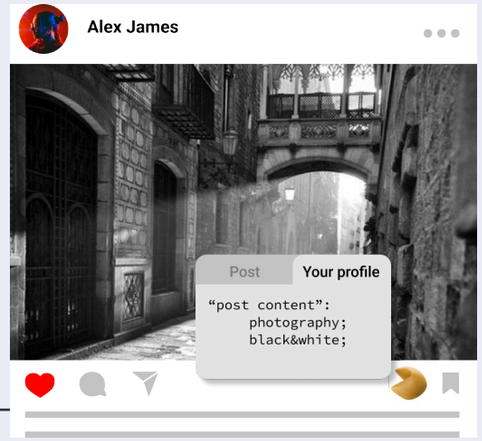
The internet remembers everything



If you like a post, a cookie icon will appear



You can press to see why you were shown the content–in this case, you follow the account



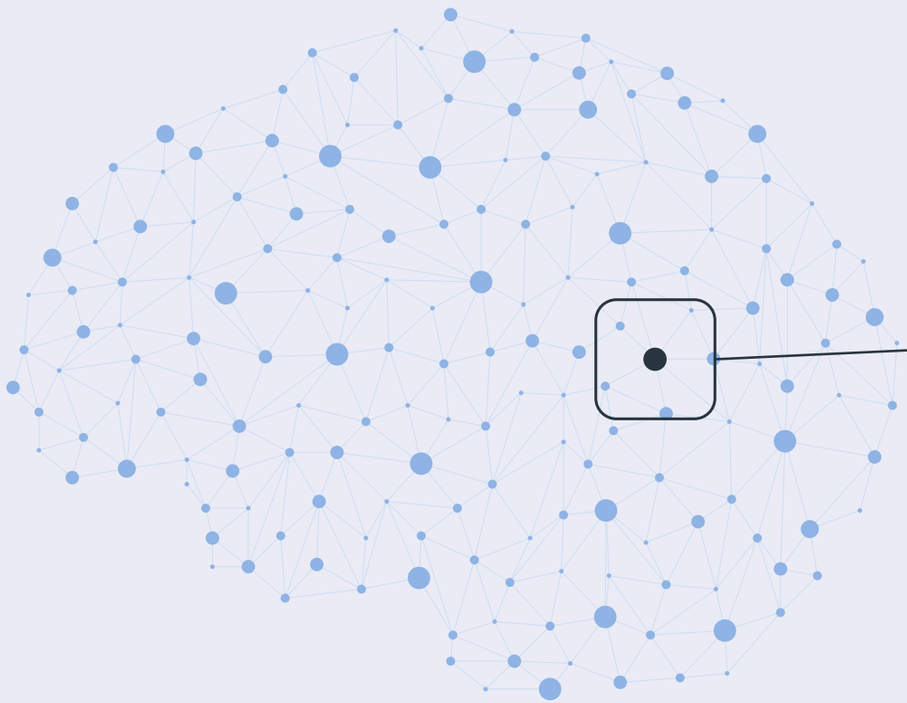
You can also see what the Instagram algorithm assumes about you after liking the post–in this case, it thinks you like photography and black&white content

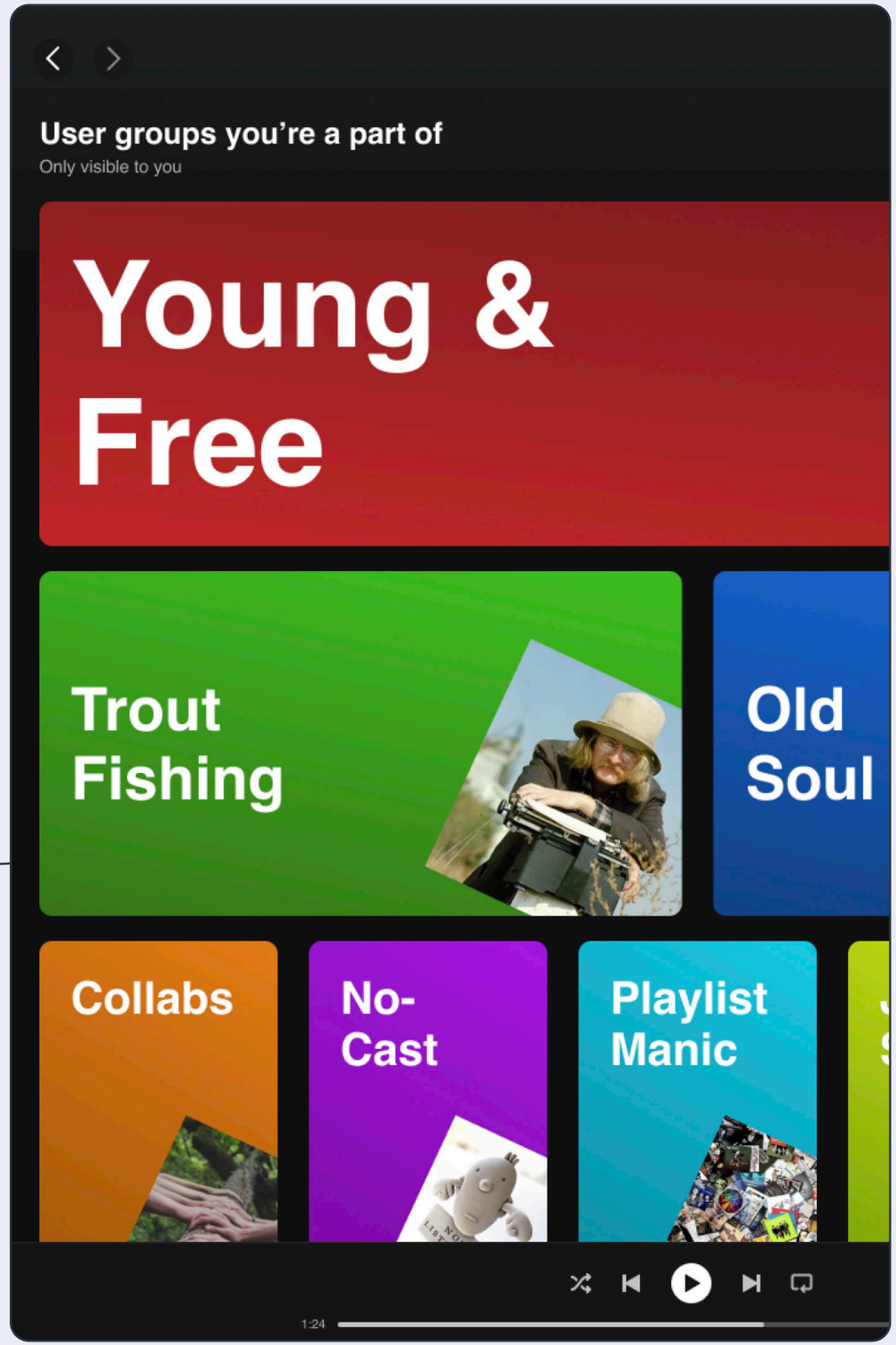
04: SPOTIFY USER GROUPS

INDIVIDUAL VS. COLLECTIVE

Why does Spotify give us the recommendations it does? We imagine that they sort their users into different types of groups.

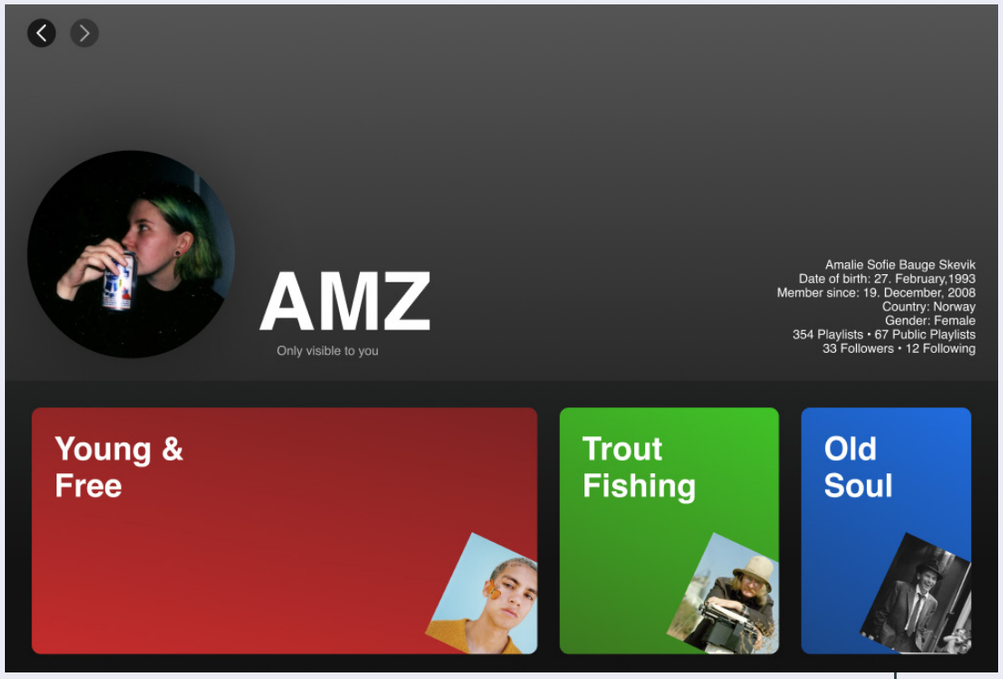
So what if you could see and understand these user groups—even seeing which playlists, musicians and podcasts they recommend to users within the different user groups?



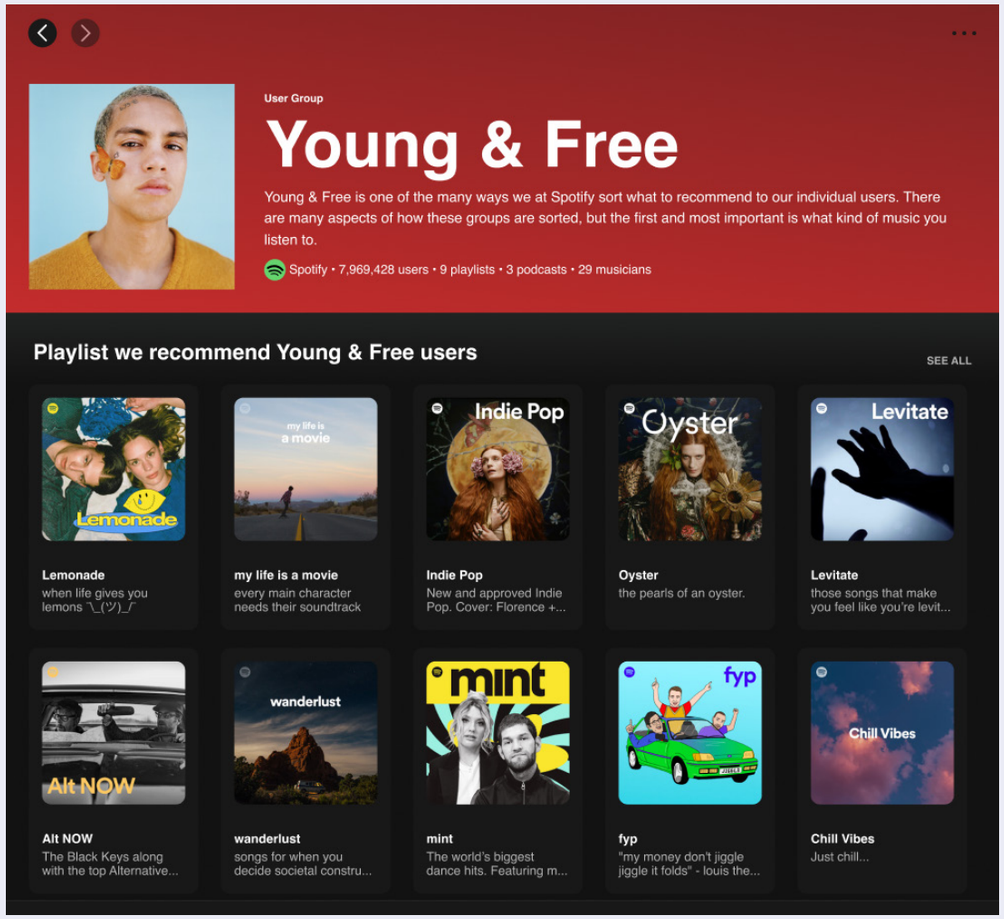


04: SPOTIFY USER GROUPS

INDIVIDUAL VS. COLLECTIVE



When entering your profile in the desktop app you're instantly introduced to the user groups Spotify have placed you in.



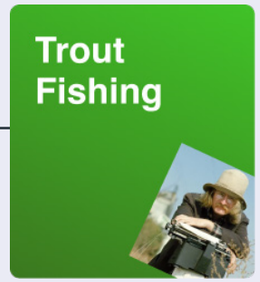
When clicking a user group, you're redirected to a new page in which you get information on who is a part of the user group, as well as which playlists, musicians and podcasts that they recommend to the users within this group

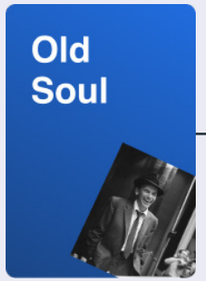
04: SPOTIFY USER GROUPS

INDIVIDUAL VS. COLLECTIVE

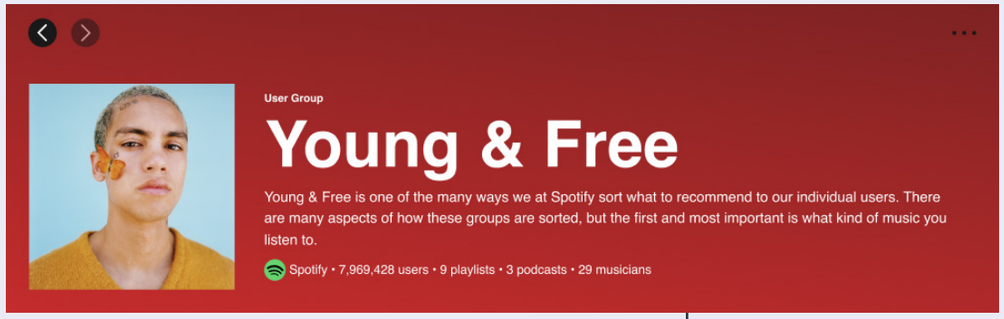
The size of the cards are defined by the order in which you've been sorted into them

Based on how Spotify already presents cards for genres, playlists and podcasts.



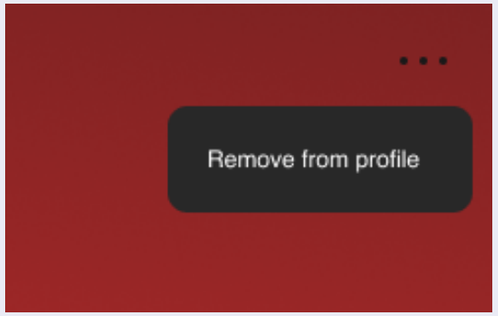


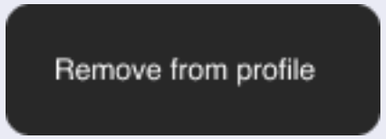
The music and podcasts you listen to will affect which user groups Spotify places you in



When on a user group page, the user can also chose to remove the user group, if they would like to not get these recommendations

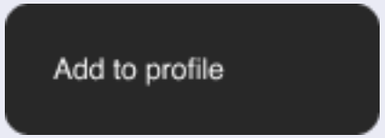
When clicking on the meatballs menu (the ellipsis), a new card appears, allowing the user to remove the user group from their profile.





There is nothing else on the card but the option to remove it from the profile.

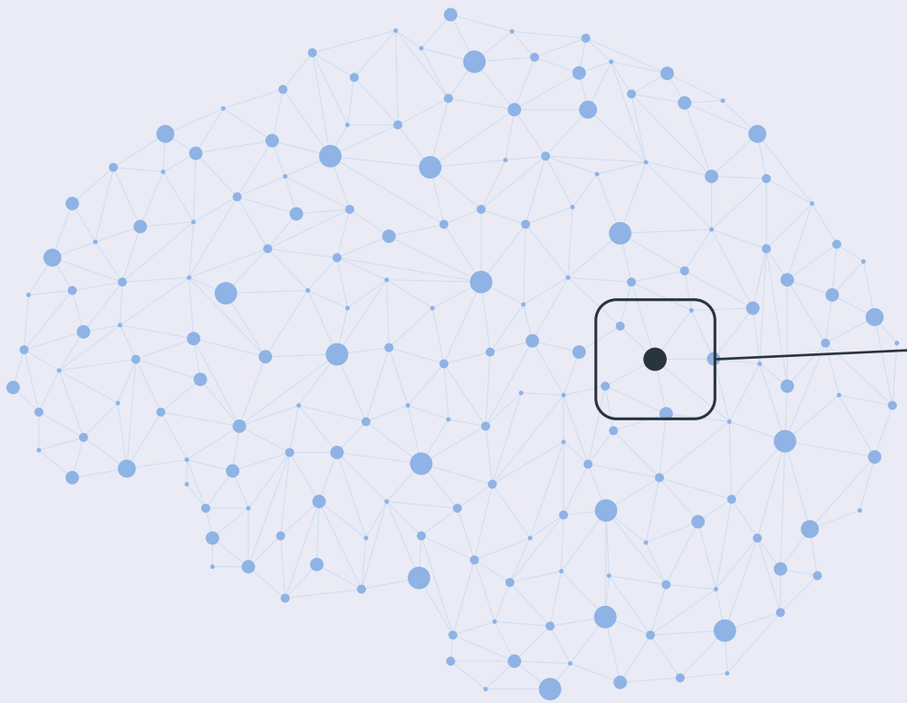
However, if the user enters a user group they're not part of the option to add instead appears.

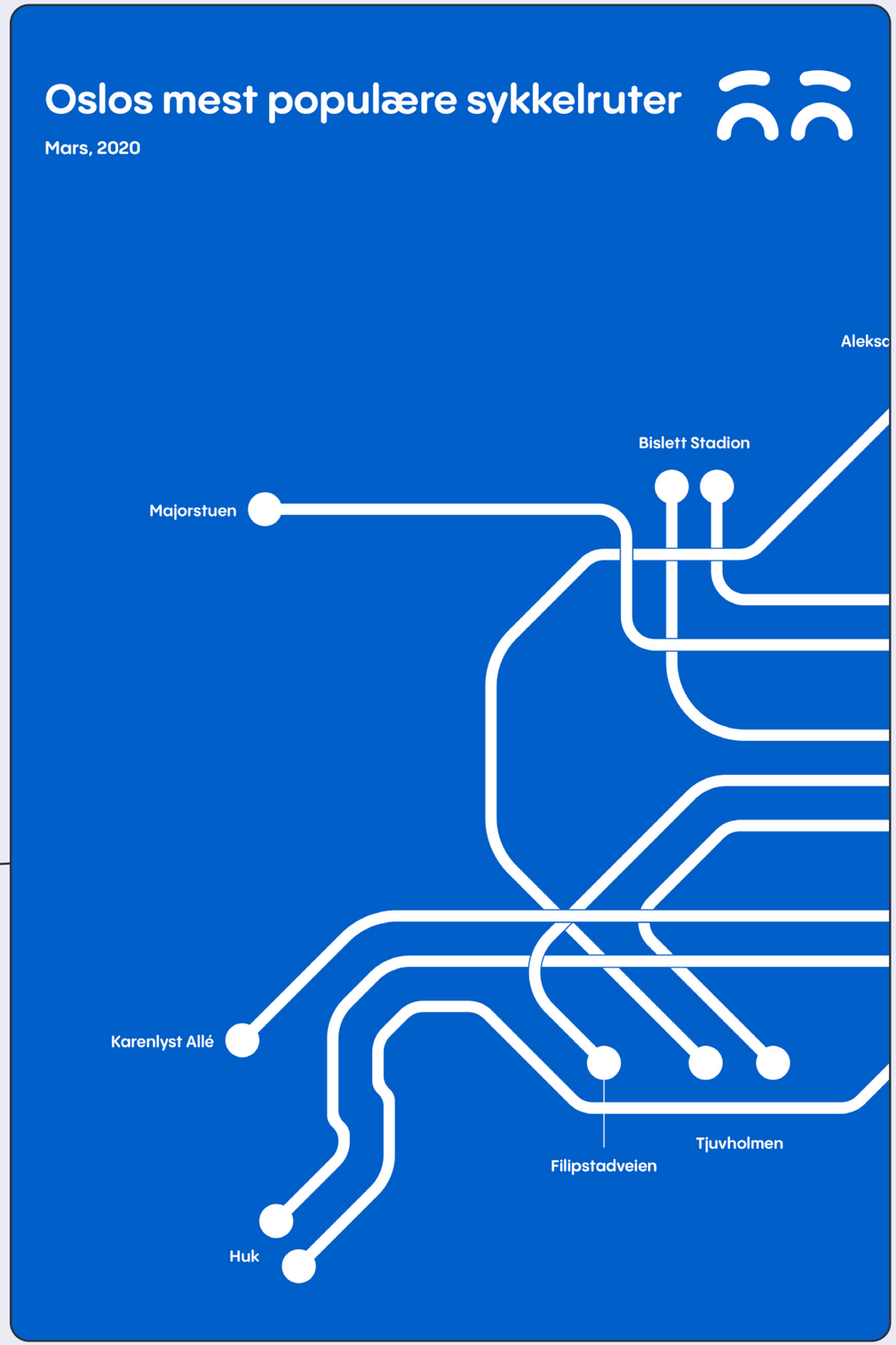


05: OSLO CITY BIKE CAMPAIGN

INDIVIDUAL VS. COLLECTIVE

Going back to some of our initial sketches, we realised that Oslo City Bike had an interesting point of view regarding how it could present individual versus collective data. Creating a marketing campaign that highlights the most commonly used routes for a set time could illustrate to users how they affect the overall traffic flow. Implementing a feature that allows the users to see their own personal most-used routes opens up an understanding of the correlation between the users' habits and the overall offer.

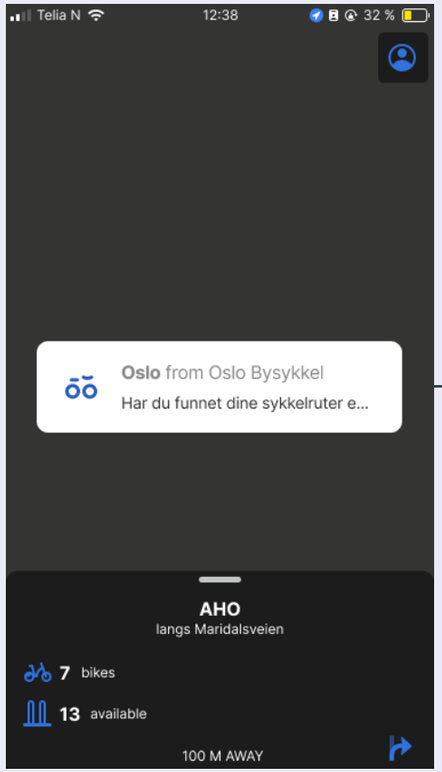




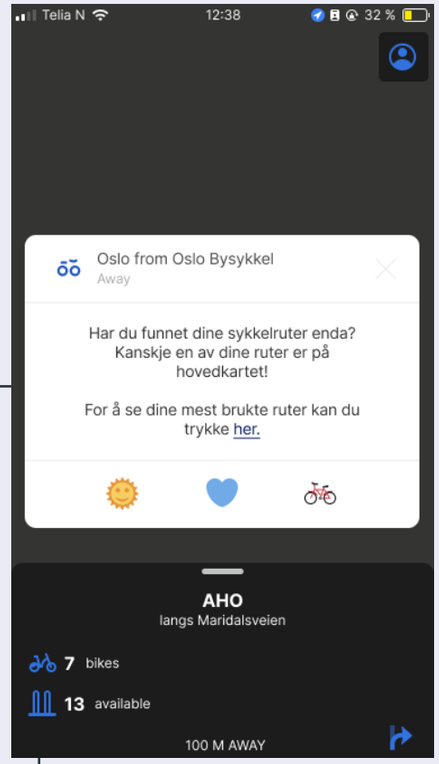
05: OSLO CITY BIKE CAMPAIGN

INDIVIDUAL VS. COLLECTIVE

The campaign would be placed in different parts of the city, to show this information to as many users as possible. Subway stations, or along the City Bike parking stations.



When opening the app up, after the campaign has started you get a message from City Bike.

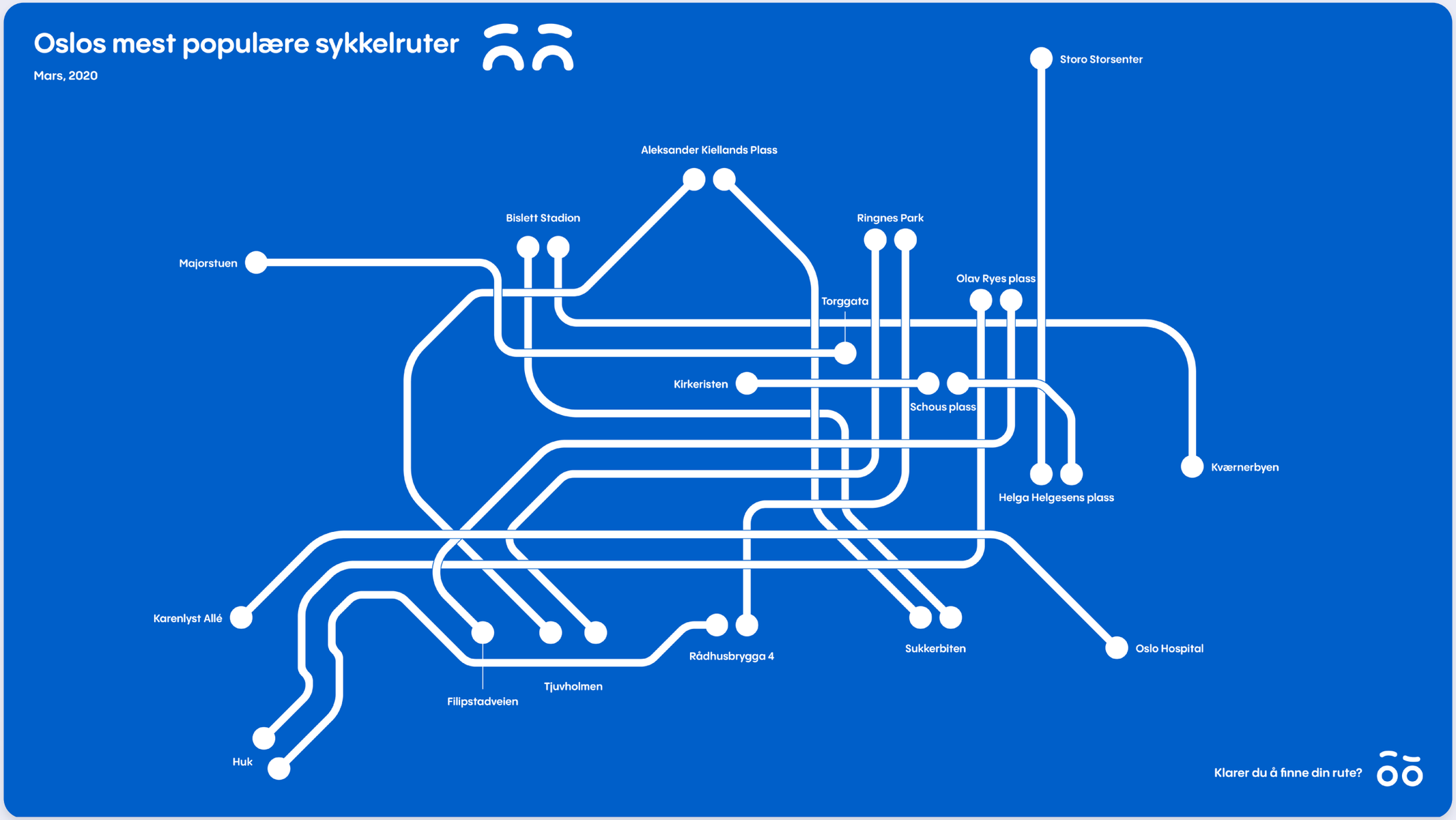


This message leads you your most used routes—also presented as a message.

By showing the user their individual routes, in the app, they can compare them to the campaign that is across the city. Perhaps they have a better understandinthey want to use the routes most commonly used, or use a different one.

05: OSLO CITY BIKE CAMPAIGN

INDIVIDUAL VS. COLLECTIVE



06: WORK MODE

PERSONALIZATION

This possibility study is based on users' want to organise their digital life, categorising their data to, in turn, make it more understandable.

In the same way, you have a private, or incognito mode on web browsers, in which fewer cookies will be tracked; we imagine there could be a work mode. You could click on work mode in the same area where you would click a button for incognito—making this mode easy and accessible for the users who prefer to differentiate.

To make the user more aware of which mode they're in, we added a separate colour scheme and highlighted the work-mode button.

As one of our findings was a lack of onboarding, we've also looked at how an onboarding could look for this new feature.

It could even change how services such as Google present what they assume about you. If you realise that "Oh! Classical music should be in the work category" you can drag it over if you want the data organised.

Work mode: What it really means

Firefox calls it work mode, Chrome calls it job mode. Both let you browse the web seperating where you browse whilst working and where you browse on your own time.

What Job/Work Mode Does

Job or work mode separates the cookies saved to your browser for an optimized user experience. Tired of getting ads from work-related queries—job or work mode is for you.

What Job/Work Mode Doesn't Do

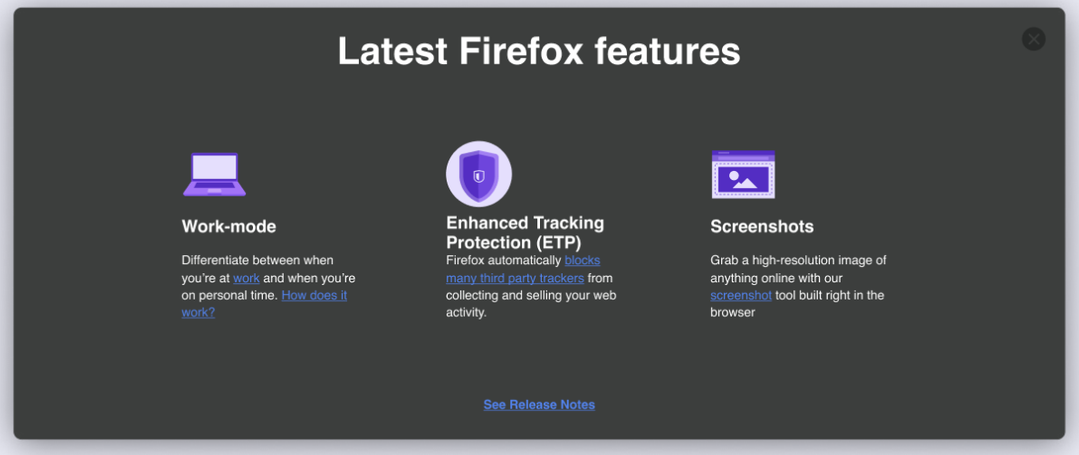
Job browsing, or work mode, cannot actually split what's being tracked on you. Job/Work mode simply sorts the cookies, or what tracks you, based on how you want them sorted. Sometimes you have to search for something when you're at work, that doesn't reflect what you're actually interested in. No worries! Switch between regular browsing and job browsing, or work mode. We'll do the organizing for you.

Why use Job/Work mode?

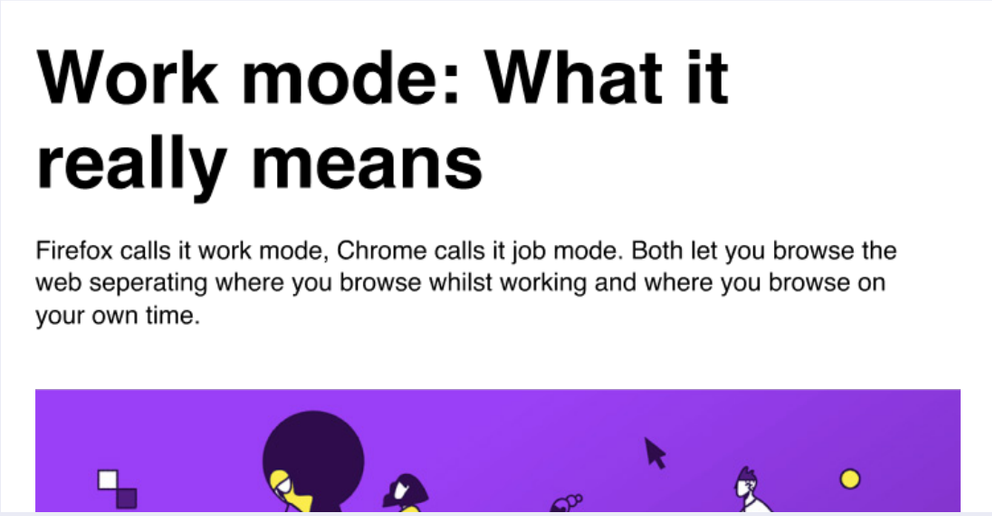
06: WORK MODE

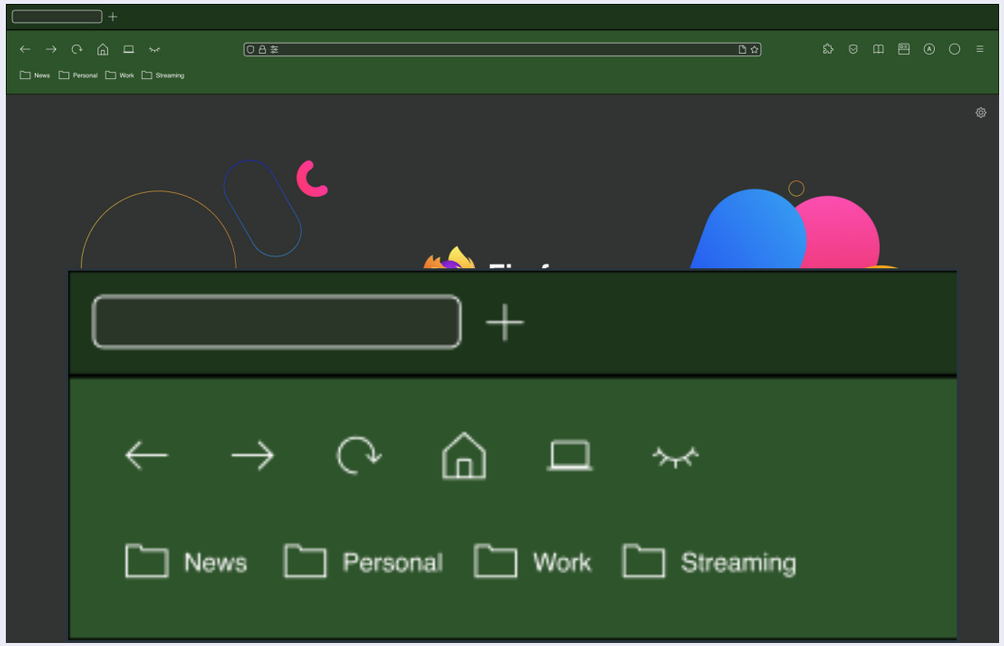
PERSONALIZATION

Because Work-mode is a new feature, it is introduced the first time you open the browser, in the same way that firefox always announces new features.

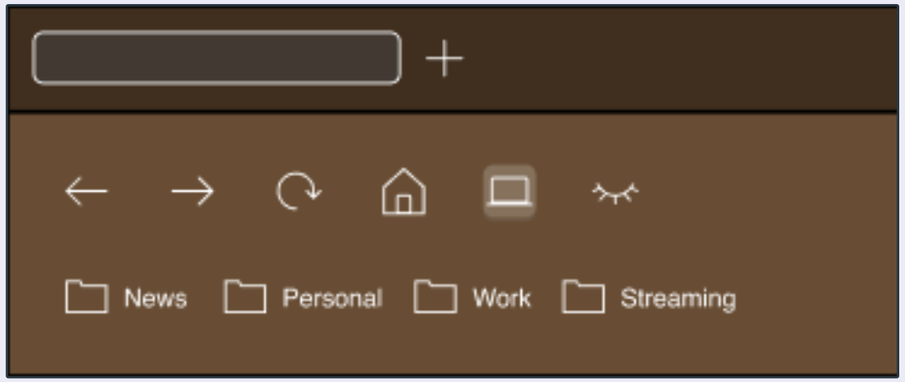


This introduction leads you to a webpage in which work mode is explained.





Because the browsers now have three different browsing modes (regular, work and private)—we suggest a organising in which each mode has a set colour scheme. Green for regular, Orange for work and purple for private—based on the firefox logo colour scheme.



VS.

When in "regular" mode the button is simply there

When in "work" mode, the button is highlighted to indicate that you're in work mode.

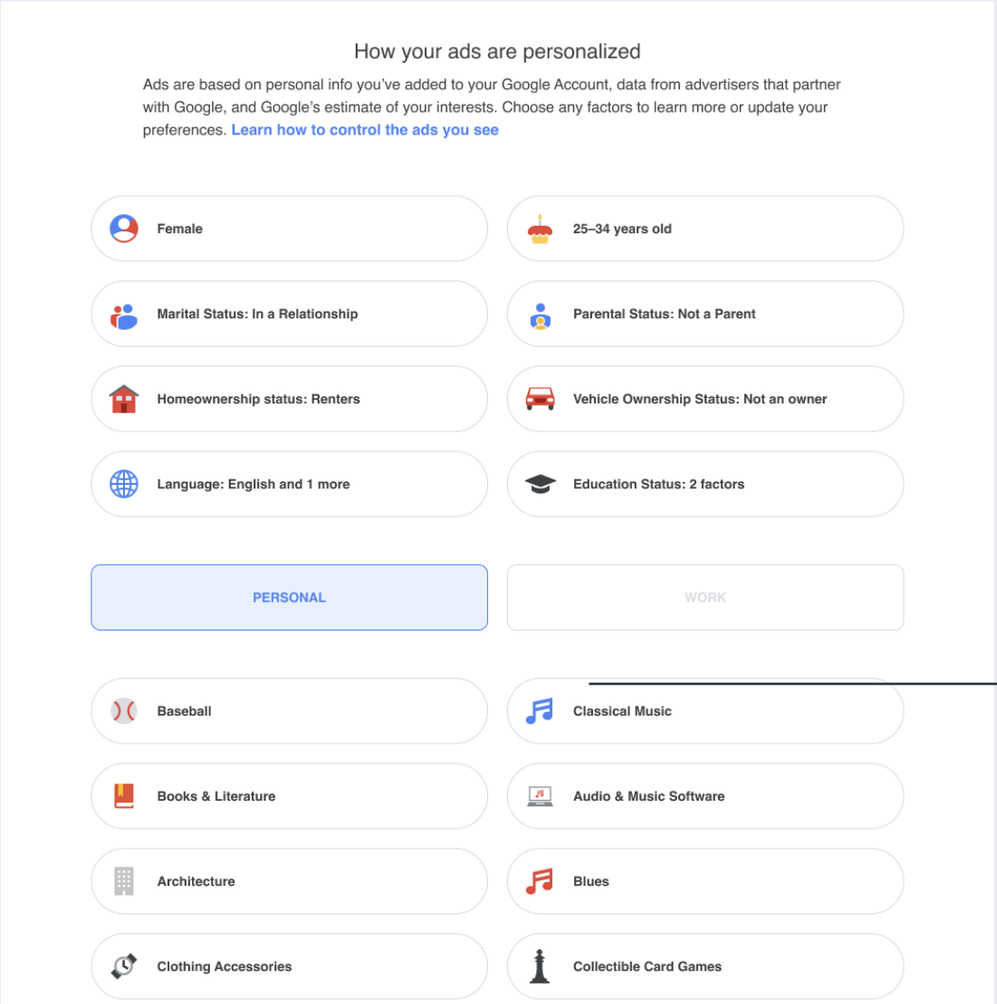
06: WORK MODE

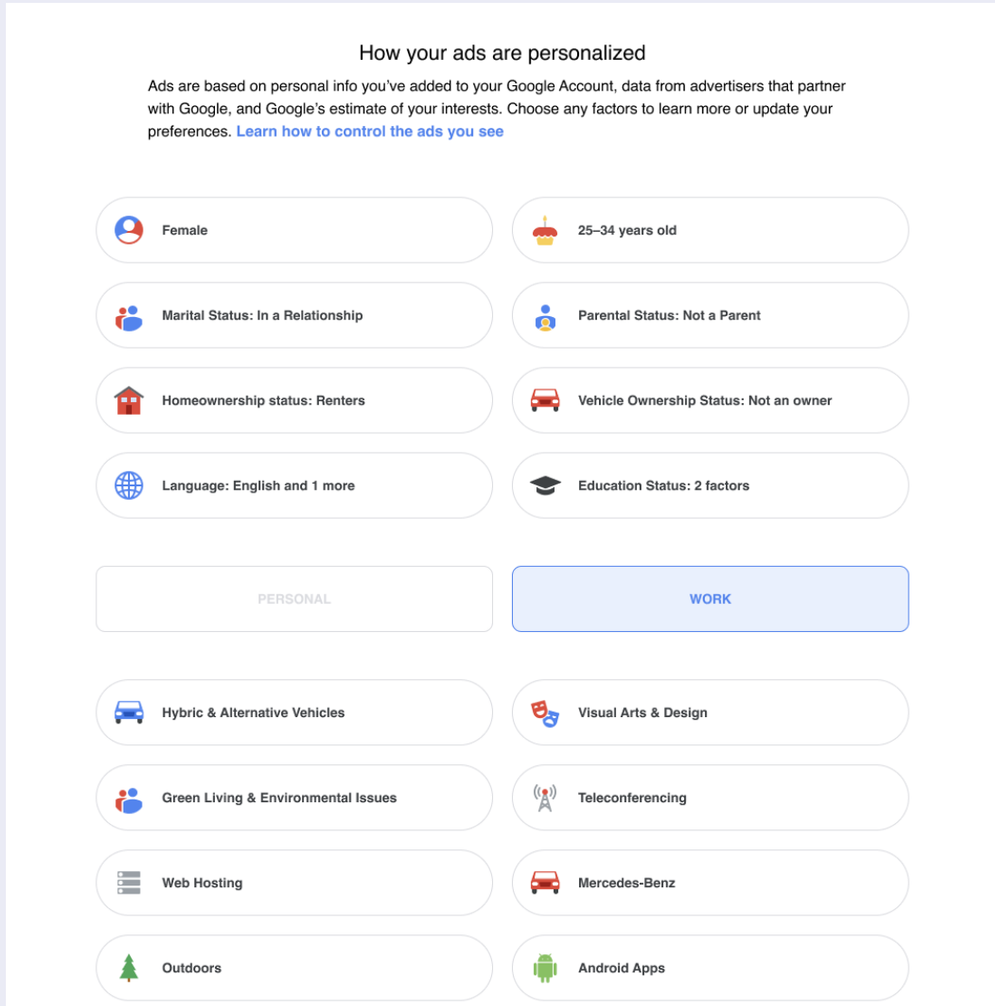
PERSONALIZATION

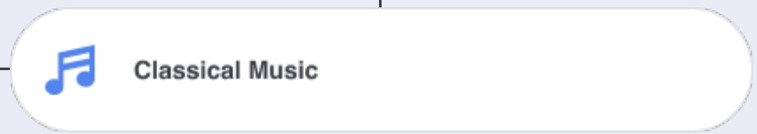
We even imagine this to influence other services, such as Google.

Here we can see how Google's interface has changed so that the users can sort their data into personal or work.

Some of what Google assumes about you wouldn't go into the sorting—regardless of whether or not you're at work, you are still within the same age group, the same gender, and know the same amount of languages.



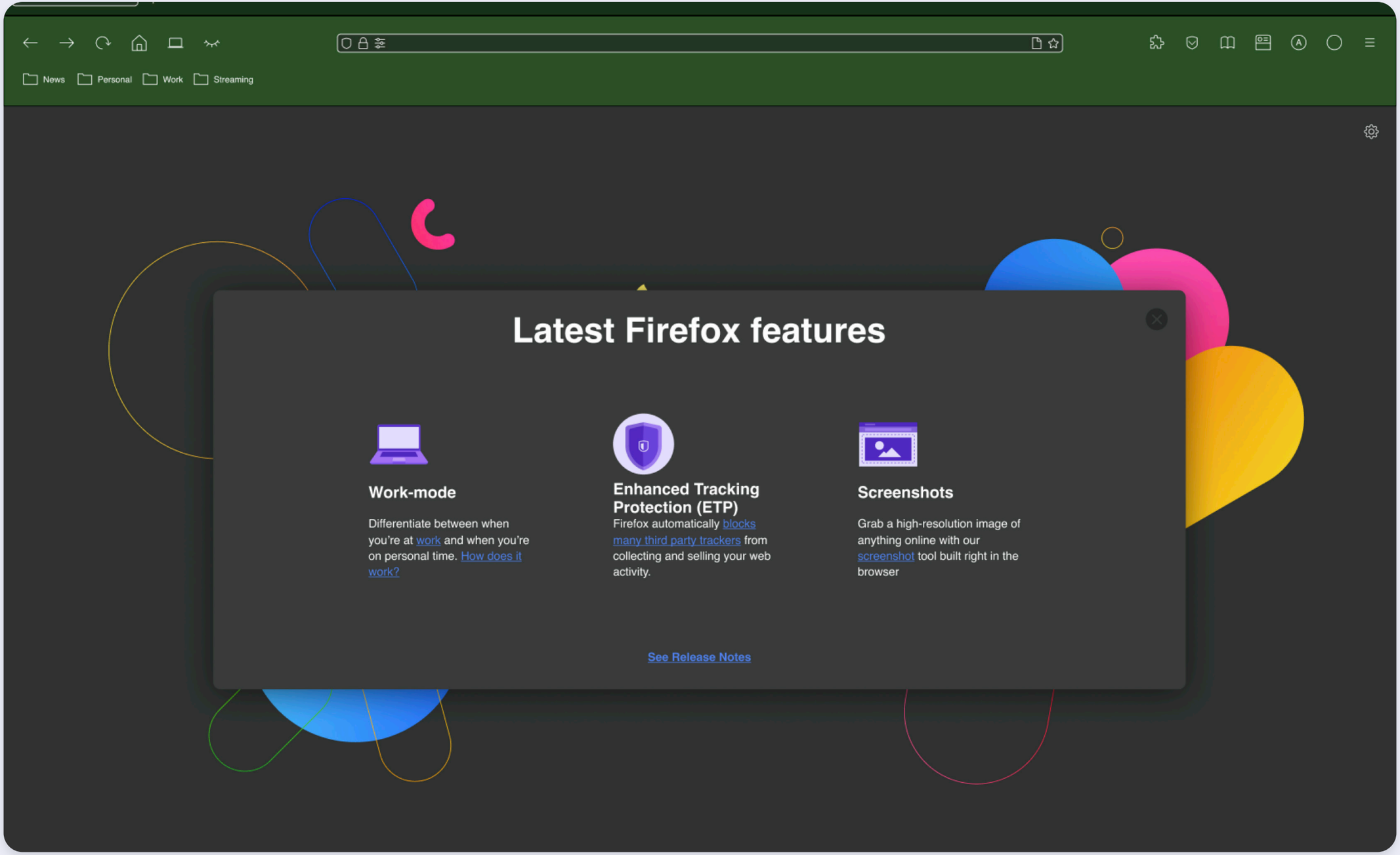




If the user doesn't want one of the assumed facts—such as that they listen to classical music in their spare time—they can drag it over to the other mode

06: WORK MODE

PERSONALIZATION

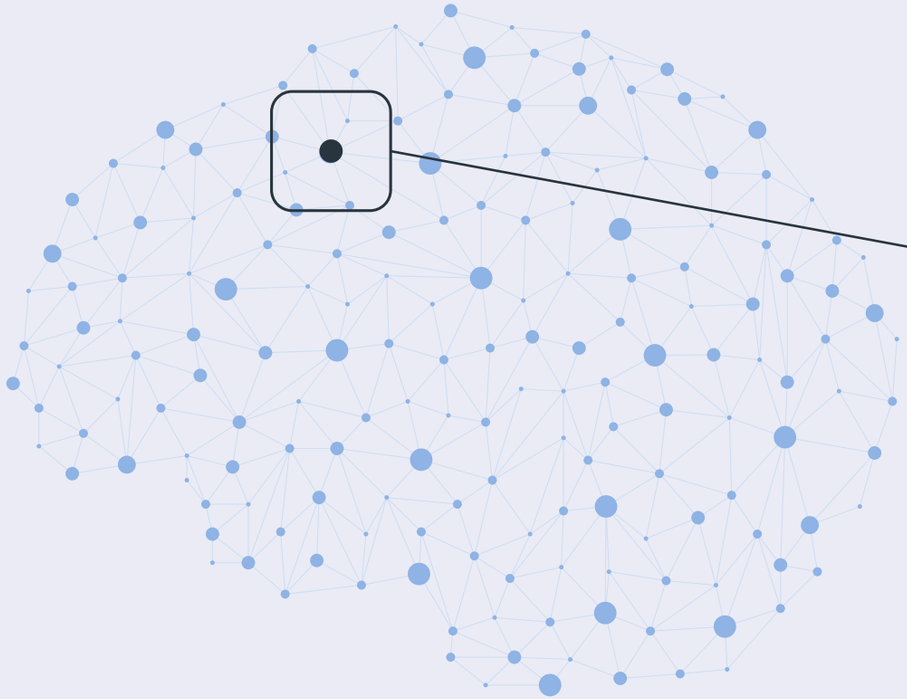


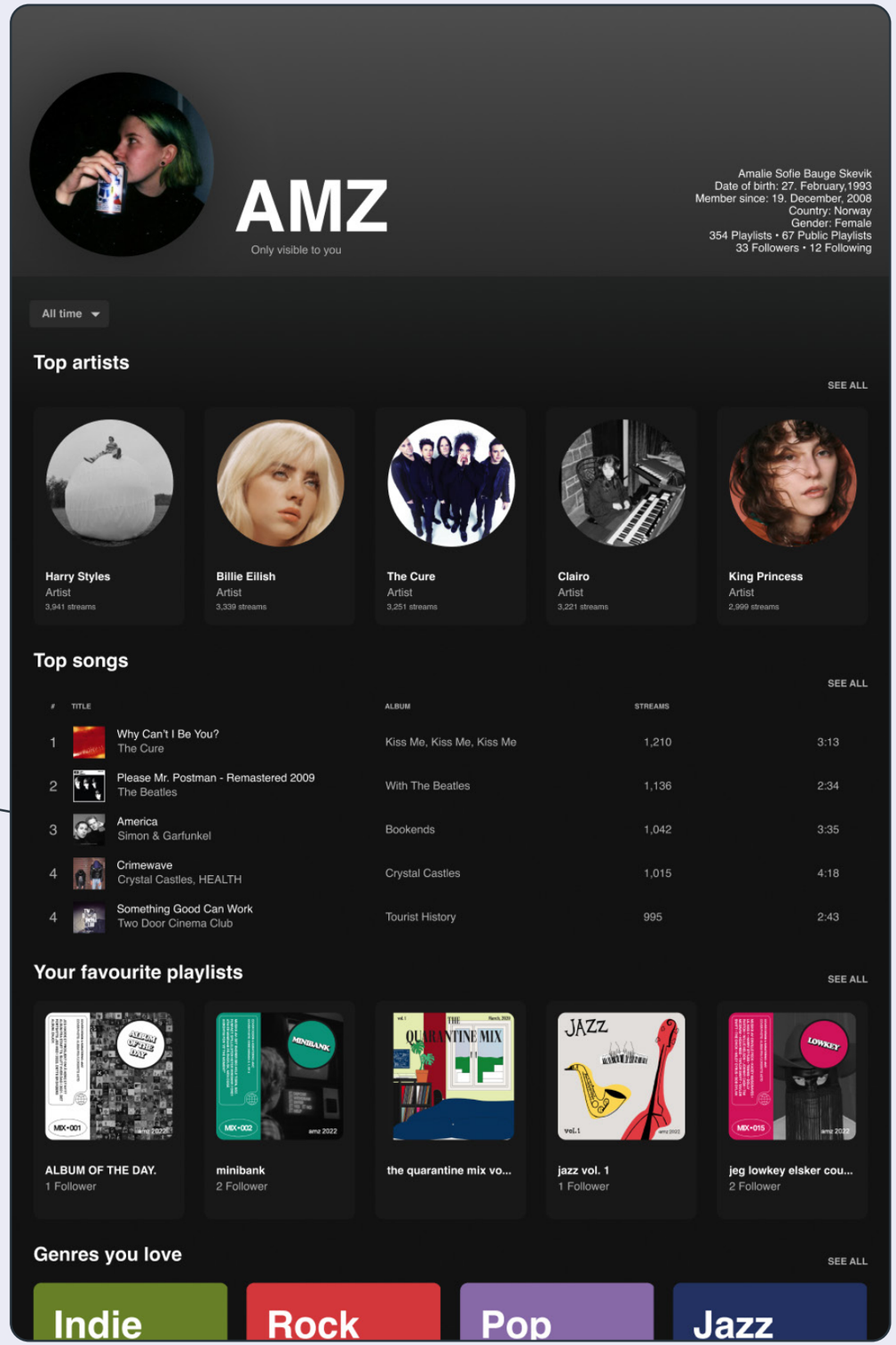
07: SPOTIFY DATA

SHOWING USER DATA

We used Spotify to showcase possibilities of showing usage—a service we've used throughout the diploma. Spotify already has a way of delivering data to its users; it happens at the end of the year and, for some people, is known as Spotify wrapped day. It is a huge event for a lot of Spotify's users. So they've already looked at how they can show the users their data, but integrating this as a part of the service could make the data more understandable for the average user.

What if you could, within Spotify, see the number of streams you have on the songs you listen to, sorted by the day you created Spotify till now, or even just the past week? We know external services allow you to do this, such as last.fm, but our research has shown us that this is more for the extreme user.





07: SPOTIFY DATA

SHOWING USER DATA

There is a lot of information Spotify has on it's users that's difficult to get unless you request the data they've saved on you.
When you created the account and the total amount of playlists you have—not only the public ones.

Amalie Sofie Bauge Skevik
Date of birth: 27. February,1993
Member since: 19. December, 2008
Country: Norway
Gender: Female
354 Playlists • 67 Public Playlists
33 Followers • 12 Following

AMZ

Only visible to you

We propose showing this to the users, on their profile—making sure this is only visible for the users.

Harry Styles
Artist
3,941 streams

When seeing the artists you listen to the most, you see the total amount of times you've streamed that artist.

Billie Eilish
Artist
3,339 streams

This would also be made visible when seeing the overview of the users Top songs. Sorted by total amount of streams.

Top songs

SEE ALL

#	TITLE	ALBUM	STREAMS	
1	Why Can't I Be You? The Cure	Kiss Me, Kiss Me, Kiss Me	1,210	3:13
2	Please Mr. Postman - Remastered 2009 The Beatles	With The Beatles	1,136	2:34
3	America Simon & Garfunkel	Bookends	1,042	3:35
4	Crimewave Crystal Castles, HEALTH	Crystal Castles	1,015	4:18
4	Something Good Can Work Two Door Cinema Club	Tourist History	995	2:43

All time

Sort by

All time

This year

This month

Today

From
19/12/2008
To
31/03/2022

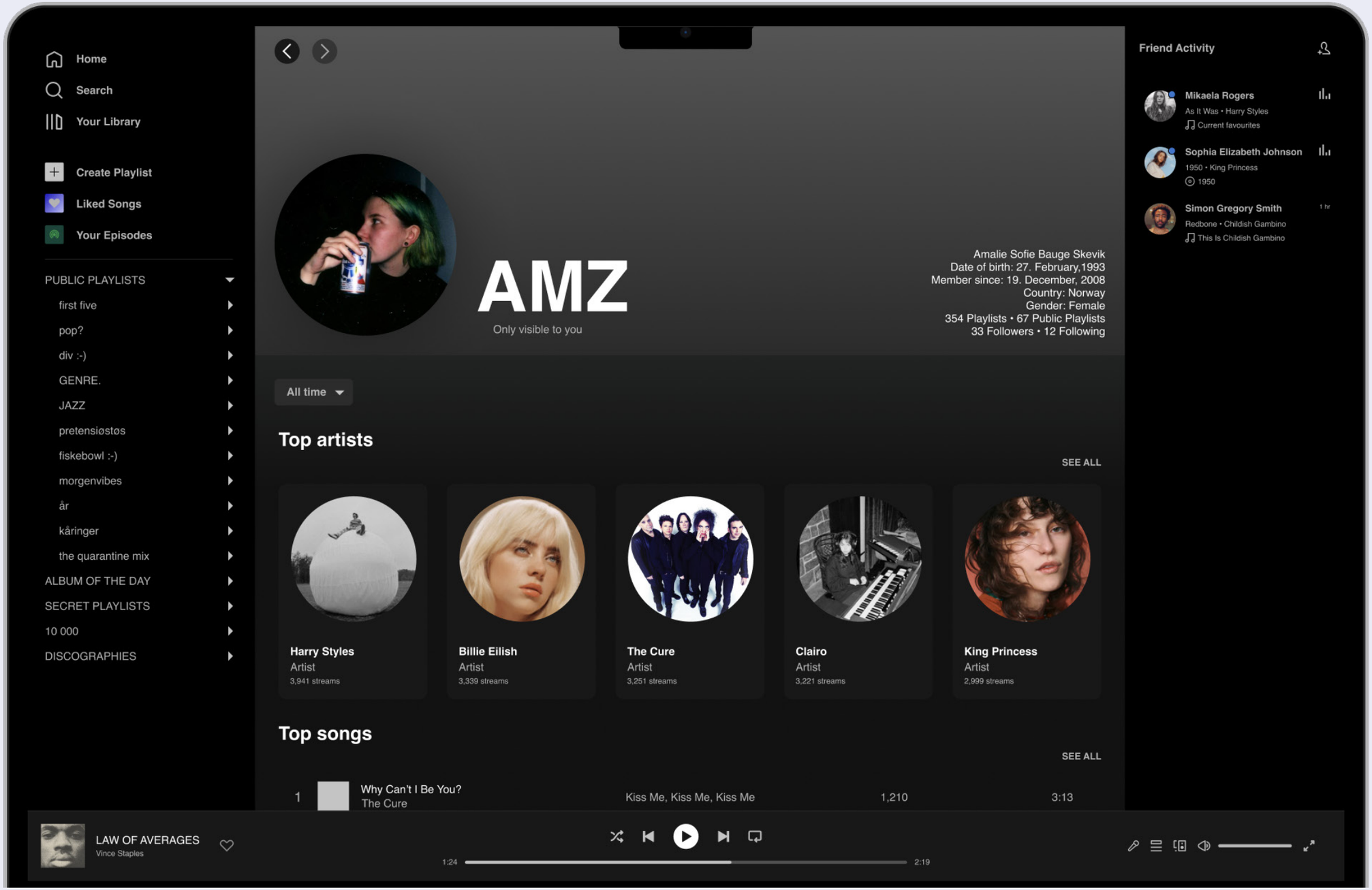
The user would also be able to sort their data by different time periods.

All time, this year, or even just today—if you want to know just how many times you listened to that new release.

This illustred by the sorting menu that the users already know how to use—making the change less challenging for the users.

07: SPOTIFY DATA

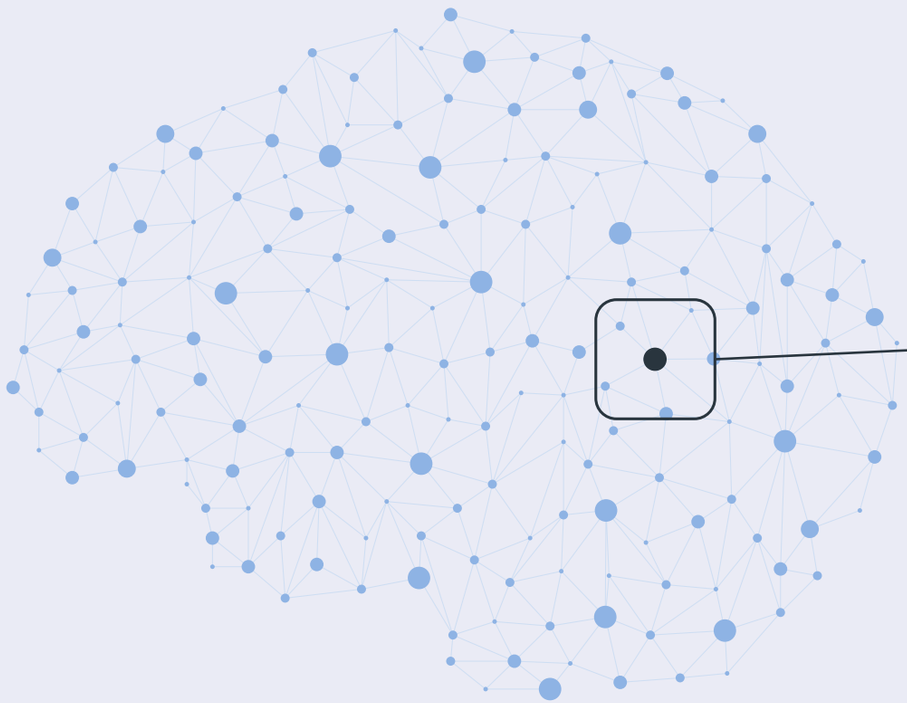
SHOWING USER DATA

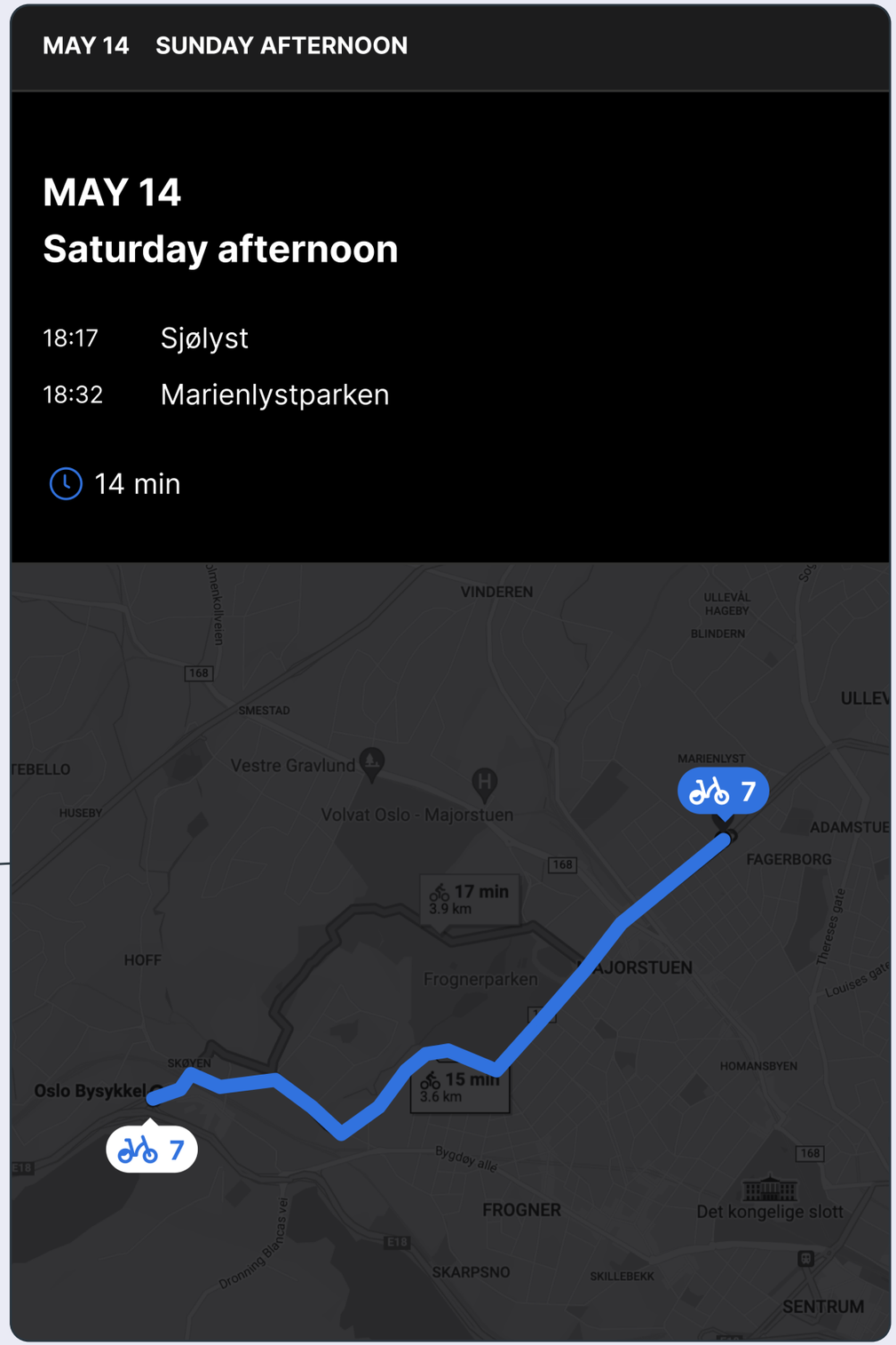


08: OSLO CITY BIKE STATS

SHOW MORE DATA

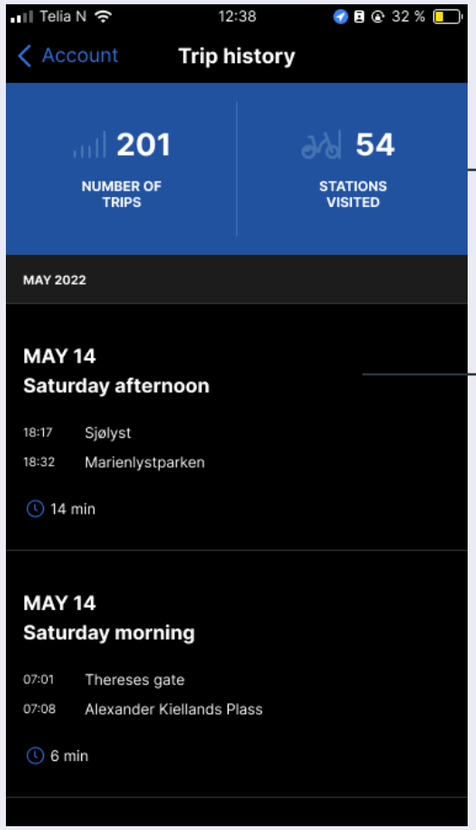
Within the Oslo City Bike application, you can see stats on when you picked up a bike, when you returned it, and the length of a ride. You can compile the data to get an overview of which stations you use the most, the average length of your rides, and other fun tidbits like that, but this isn't actually presented within the application. We propose that these bits of analysed data could be delivered even more clearly and allow the user to select specific time frames for this information. Our research has shown us that having this type of organisation gives the user a sense of control over their own data, which builds trust.



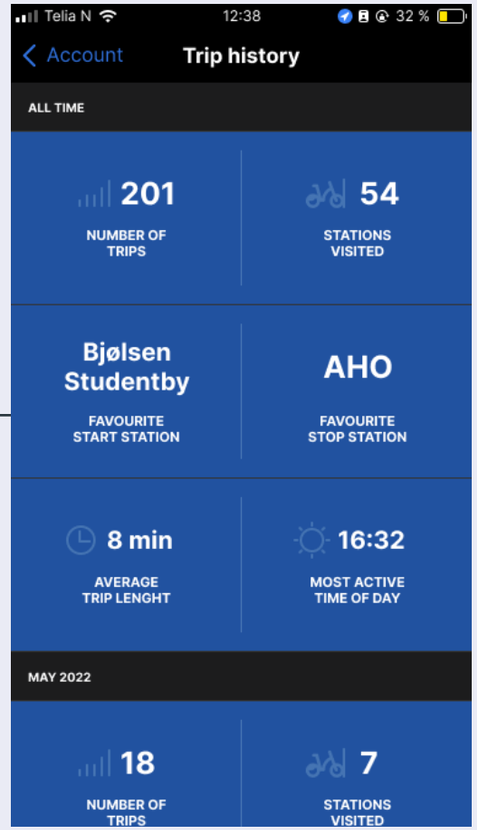


08: OSLO CITY BIKE STATS

SHOW MORE DATA



There is some information on the total amount of trips and stations visited by the user, but we propose showing some more data, analysed by an AI

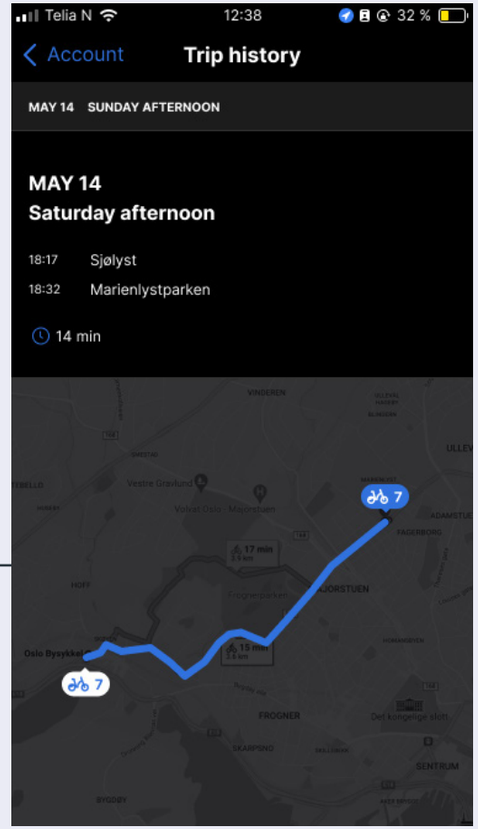


Perhaps they could show which station you most often start at, as well as which ones you most often stop at.

It could tell the users the overall average trip length, as well as when the users use City Bike the most.

Further we can explore sorting this information on a month-by-month basis.

If the user wants to see more in depth information on a specific trip, they can click the trip.

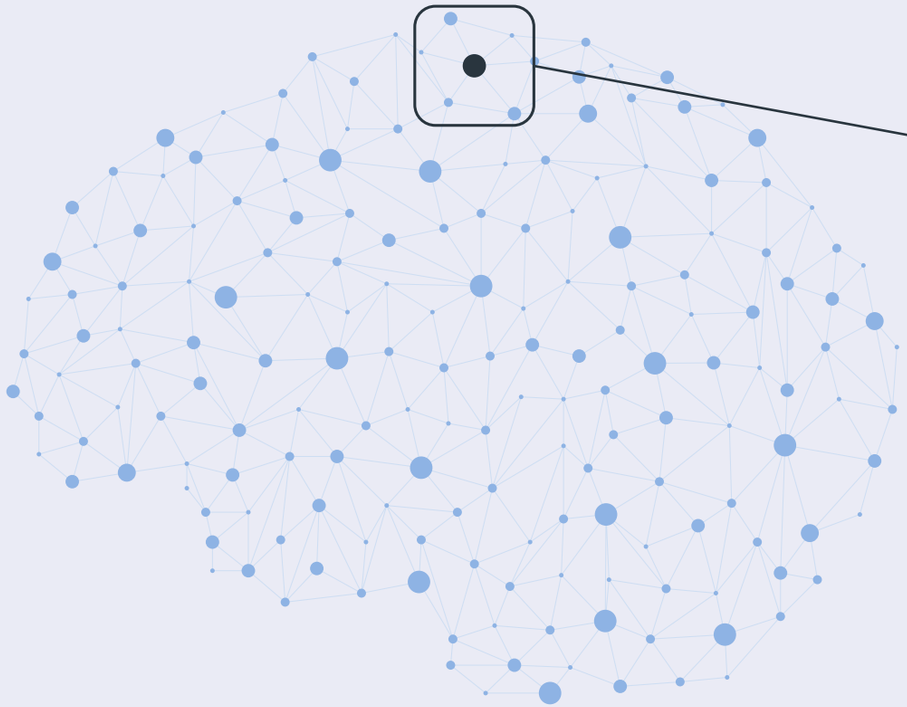


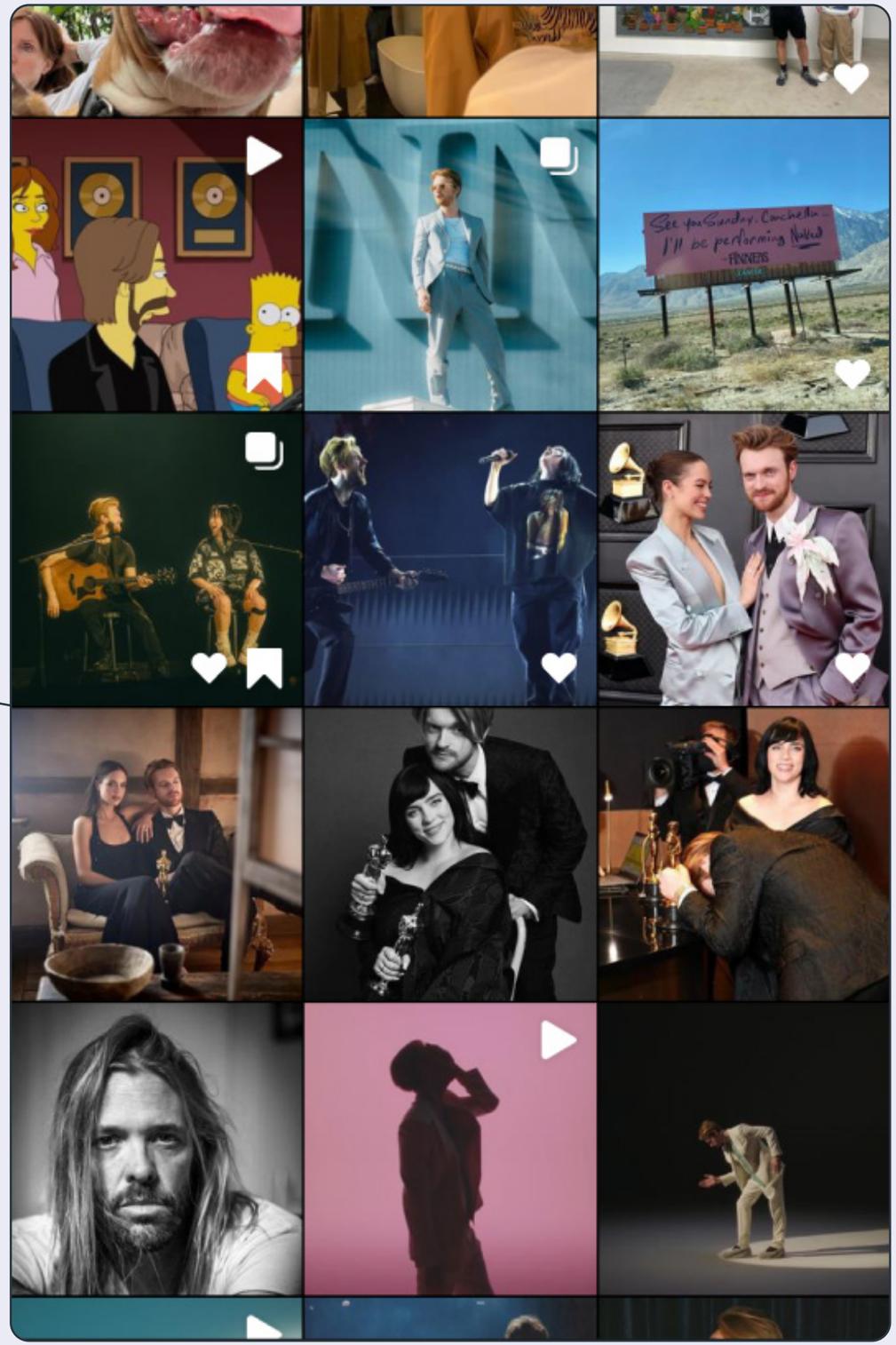
This opens up for the user to see which route they biked.

09: INSTAGRAM LIKES

SHOW MORE DATA

Within Instagram, there is the possibility to see everything you've liked, but if you enter a specific user's profile, you can only see which posts you've hearted if you're on the posts. Why not show which posts you've liked, while on the overview?

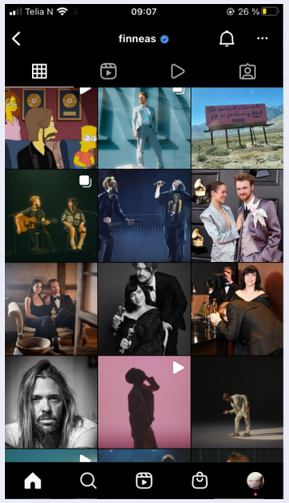




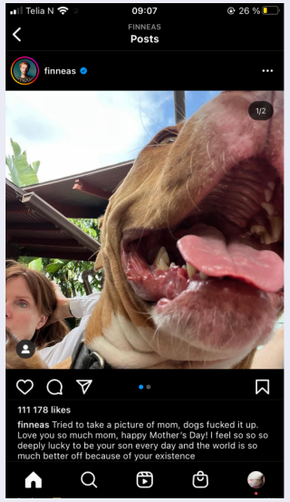
09: INSTAGRAM LIKES

SHOW MORE DATA

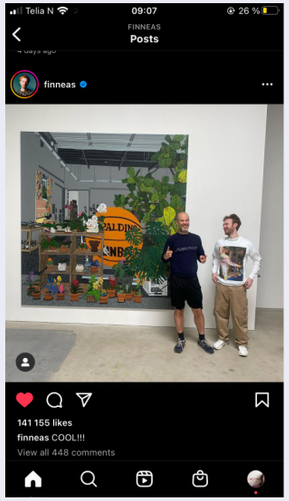
INSTAGRAM TODAY



On the profile overview, you cannot see which posts you've liked and saved.

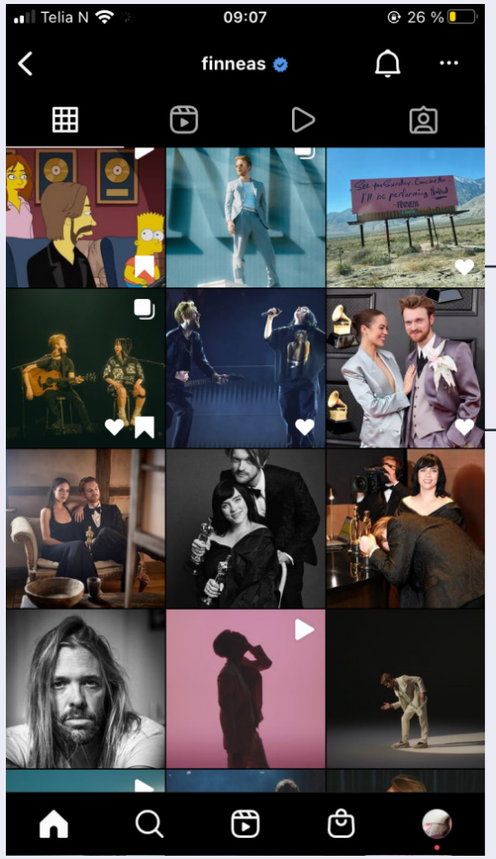


You have to go into a post to see if you've liked or saved it

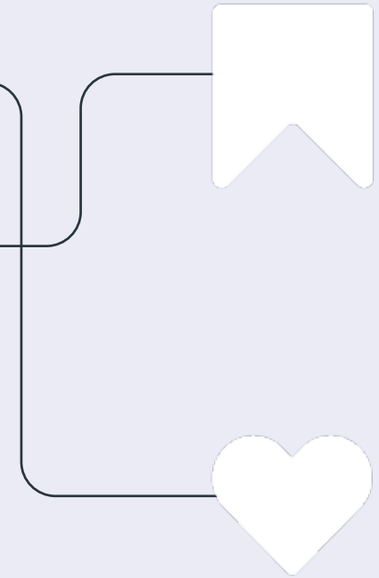


Here you can scroll down to check, or exit and enter a new post.

CHANGES WE PROPOSE

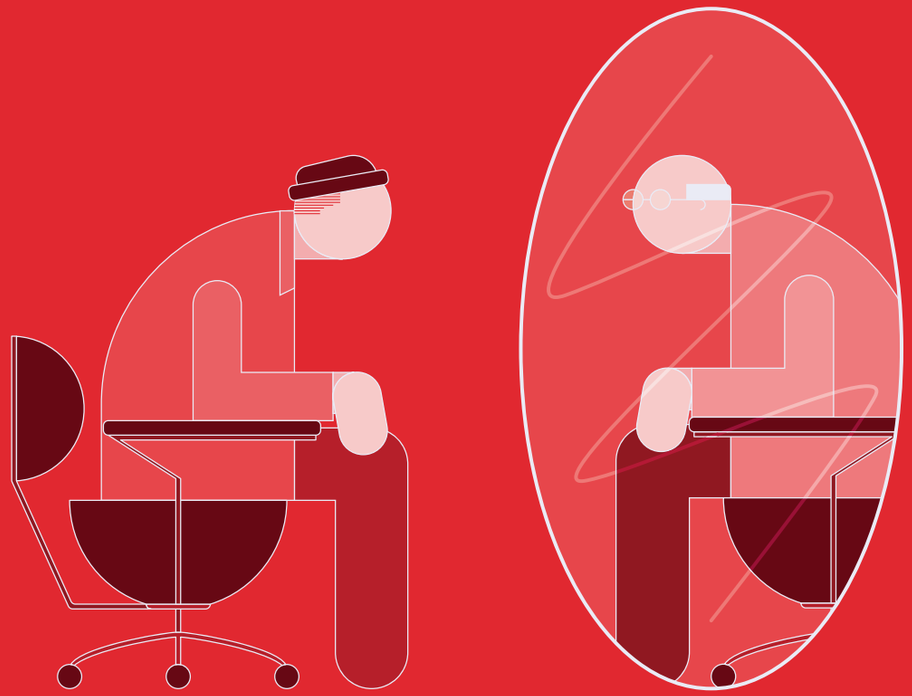


Make the likes visible on the profile. As Instagram has added the icon for a video and a photoset (a post with more photos than one), they could also implement likes and saved.



This would simply reuse the icons users are familliar with.

REFLECTIONS



ON THE PROJECT

Looking back on the evolution of the project, we realise that the timing was, for us, impeccable. The changes that occurred (in GDPR legislation) between January and May changed the course of our project, as well as informed us that we were in the right creative space. Data became more approachable when requested, new EU laws focused on making intention more clear, and Elon Musk's vision of a more open and transparent Twitter. All these things happened as the diploma explored these topics.

Early on we were determined to have a tech-optimistic approach. Even though we were discouraged when we realised we were touching upon several wicked problems, we managed to stay positive. Rather than simply pointing fingers, without opting a solution, we offer proposals that not only adresses issues, but encourage specific action. The digital sphere is dynamic, constantly changing and evolving, and trust is essential for this evolution to aid all actors. Our diploma is not meant as a solution (world problems can not be solved in 6 months), rather looking towards how one can explore solutions. We hope this diploma inspires, empowers, and encourages other designers to opt change.

ON OUR ROLE AS DESIGNERS

Through out this project we have really appreciated the designerly approach. Sketching, reading, understanding, iterating, dismissing, revisiting, reframing, rescoping, reconsidering, and finally bringing it all together, into something we are truly proud of. The ideas we dismissed turned useful, the unrelated findings became related, the valleys we (so many times), ended up in, turned to mountain tops with a view. It became evident that we actually have been doing this for five years: We are experienced. We are trained. We have through our five years at AHO developed, into self sufficient, skilled, soon to be design graduates.

CONCEPTUAL FEEDBACK

People get enthused when talking about our diploma. They express the importance of such functionality.

Almost everyone said something along the lines of:

> "There is a huge need for that. Glad to hear someone is working on this"

or:

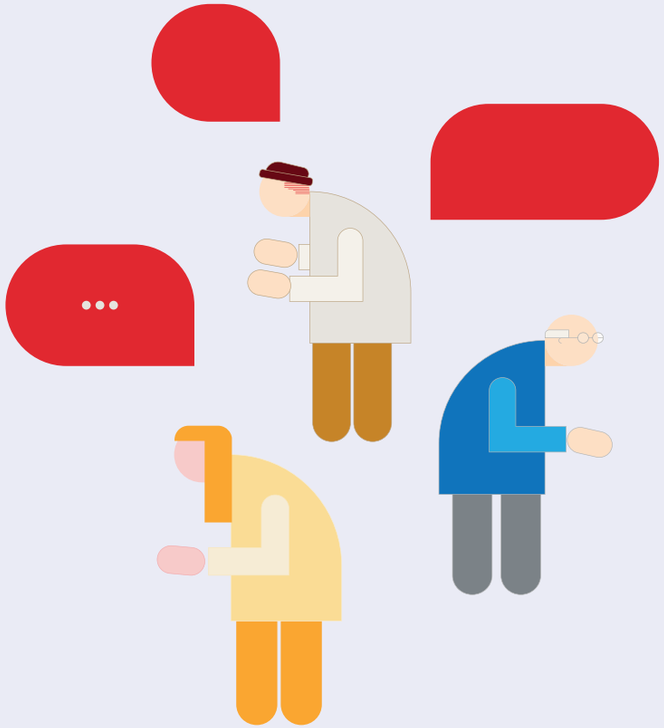
> "These concepts feel like something that already exists. Why isn't it already there?"

Some functionality similar to this does exist. However, most of the time we do not read the terms of use or simply consent to cookies because it covers the entire interface, and we want to get on with our task.

In our proposals we have attempted to improve this experience, by making data more available, open and transparent, viewing the users as allies, rather than passive consumers. We think the users should know what is happening behind the screen and believe this will create more trust.

When getting feedback on the specific Possibility Studies, it was mixed. The difference in knowledge to how data collection works influenced how much data they wanted displayed, and in what manner they wanted it displayed. They also raised valid points/questions, such as users becoming bored with the functionality, and whether it would become unnecessary with time, as users get a better understanding of individual data, collective data, and the processing of data.

We think this feedback reflects both the complexity of the issues, the challenging job it is to design functionality for this, as well as the need for this type of functionality. These concepts are simply meant as probes for discussion. As we have stressed, the lacking infrastructure should be codeveloped, and will continue to evolve, shaped by several actors. To start building is a necessity, and to include the users and their feedback in the process is key.



CONCEPTUAL EVIDENCING

The New York Times

E.U. Takes Aim at Big Tech's Power With Landmark Digital Act

The Digital Markets Act is the most sweeping legislation to regulate tech since a European privacy law was passed in 2018.

[Screen dump from nytimes.com]

Throughout the project GDPR and transparency kept coming up in the media. As the semester evolved the EU passed a new law, stating that the intention of data usage needed to be more open.

[Screen dump from vice.com]

Data Marketplace Selling Info About Who Uses Period Tracking Apps

The data could be a potential first step to identifying the users of a specific app in a post-abortion rights America.

By Joseph Cox

May 17, 2022, 7:05pm Share Tweet Snap

MORE LIKE THIS

Tech

SafeGraph Investor Selling His Stake.

Elon Musk bought Twitter—wanting to make it more "transparent and understandable". The exact words we chose to use when explaining the concept. (Whether or not Elon Musk will actually make Twitter better is another question).

How Elon's Twitter could look

You've probably heard: **Elon Musk is trying to buy Twitter**, with the rationale that it's a philanthropic move to preserve and promote democracy.

Whether or not he's successful, it's encouraged conversations about free speech, the role of social media and how a more transparent Twitter could theoretically work.

Undoubtedly a major asset in Elon's playbook will be the user experience. Not necessarily improving it from the typical lens of ***conversions***, but rather with the goal of ***transparency and understanding***.

So how could his incarnation of Twitter look? And how could clever UX help promote transparency and freedom of speech?

[Screen dump from builtformars.com]

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http://last.fm/

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Thank you to Mosse Sjåstad
for feedback, tips, and encouragement throughout.

Thank you to Lars Marcus Vedeler
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Thank you to our family and friends.
We appreciate the patience.

Thank you to our fellow students.
All discussions this semester were insightful & educational.

A&I

“Important work.”

Rachel Troye, Prorektor, The Oslo School of Architecture and Design

“You presented the information very well—you talk about the topic in a way that shows you’ve reflected a lot and understand what you’re doing.”

Joakim Formo, Intitute of Design, The Oslo School of Architecture and Design

“It’s nice that you’re neutral”

Nina Bjørnstad, Intitute of Design, The Oslo School of Architecture and Design

“Great that you’re talking about how you’re not gonna solve the problem, so a rich exploration is a valuable thing to do.”

Mosse Sjåstad, Intitute of Design, The Oslo School of Architecture and Design

“There is a huge need for that. Glad to hear someone is working on this”

Pretty much everyone

Amalie Sofie Bauge Skevik (left)
Ingrid Sudbø (right)