

# CORTEXA

Speculative Design

Critical Film

Future Experience

With the evolution of technology toward cognitive extraction, where consciousness becomes data, this project provokes discourse on the shifting ethical principles and practices for data collection and the significance of digital data as a form of personal identity. It contrasts data ethics and bioethics, highlighting how biomedical consent is generally framed as a matter of high ethical consequence, while terms mentioned in digital data agreements are usually overlooked.

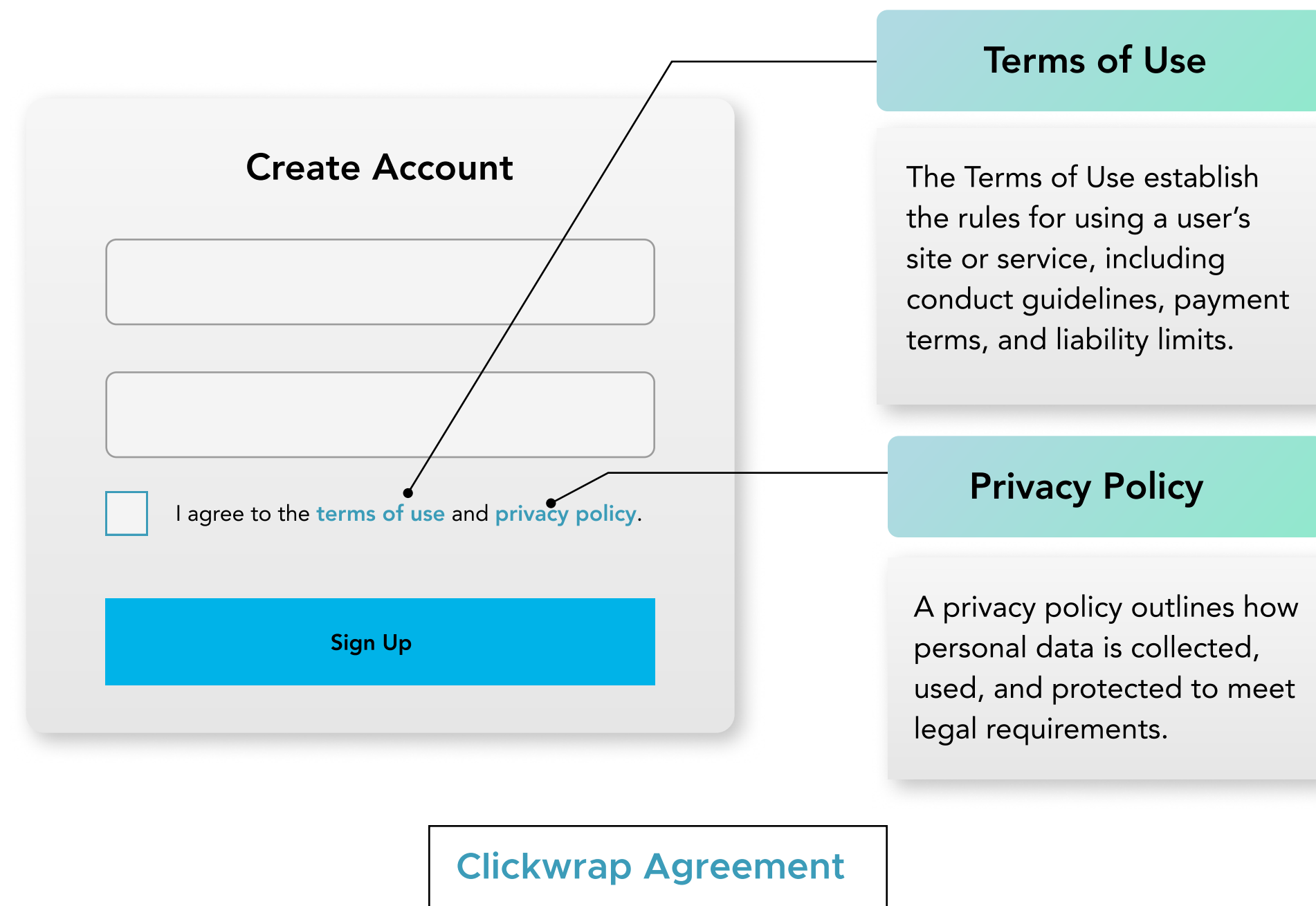
Through a speculative, futuristic lens where Brain-Computer Interface (BCI) combines continuous cognitive data capture and biomedical operations, this project uses semiotic and critical communication to emphasize the lack of informed consent necessary in digital data transparency.

**Video Link:** <https://vimeo.com/1170742212?share=copy>



# Research & Inspiration

When I download and sign in to a new software, I always notice that I need to agree to some terms and conditions by clicking on a box on the interface. That led me to wonder what have I actually agreed to, and caused my concerns about unconsciously disclosing my private information.



After researching more, I discovered that this form of digital contract is called "Clickwrap Agreement", which is essentially electronic Terms and Conditions that use a simple button for a user's agreement acceptance. Although the act of clicking seems casual, a clickwrap agreement is in fact **legally enforceable**.

## DO PEOPLE KNOW WHAT'S INSIDE CLICKWRAP AGREEMENTS?



Case Study:  
"I Agree" by Dima Yarovinsky

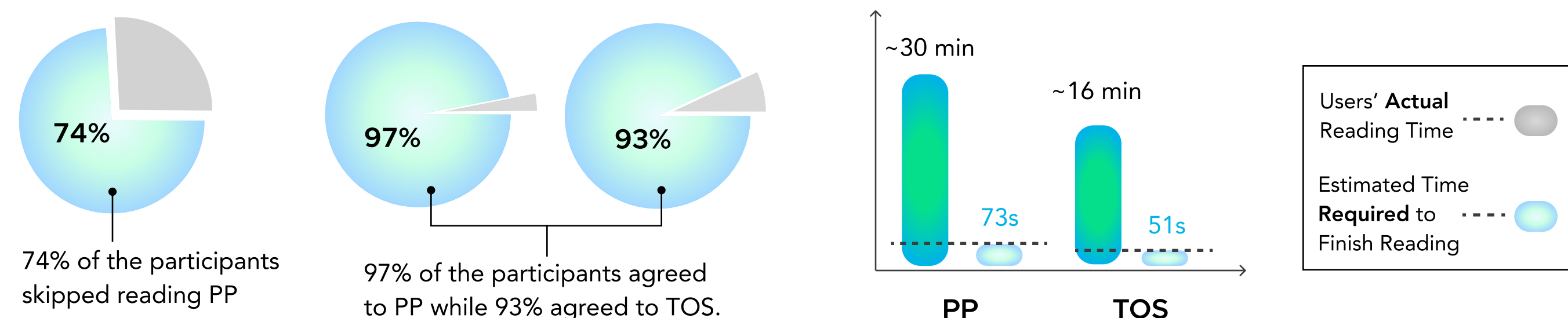


This art installation visualizes the **lengthy** terms of service of online services and **how long it takes** to read them, Their massive scale which is generally overlooked through the click of a button.

From this artwork, I get an initial impression that it is **almost impossible** for users to fully read the agreement contents.

### Statistical Findings (Obar & Oeldorf-Hirsch, 2020)

The authors conducted an experiment study assessing how much do users ignore terms of service (TOS) and privacy policy (PP) when joining a fictional online service (NameDrop).



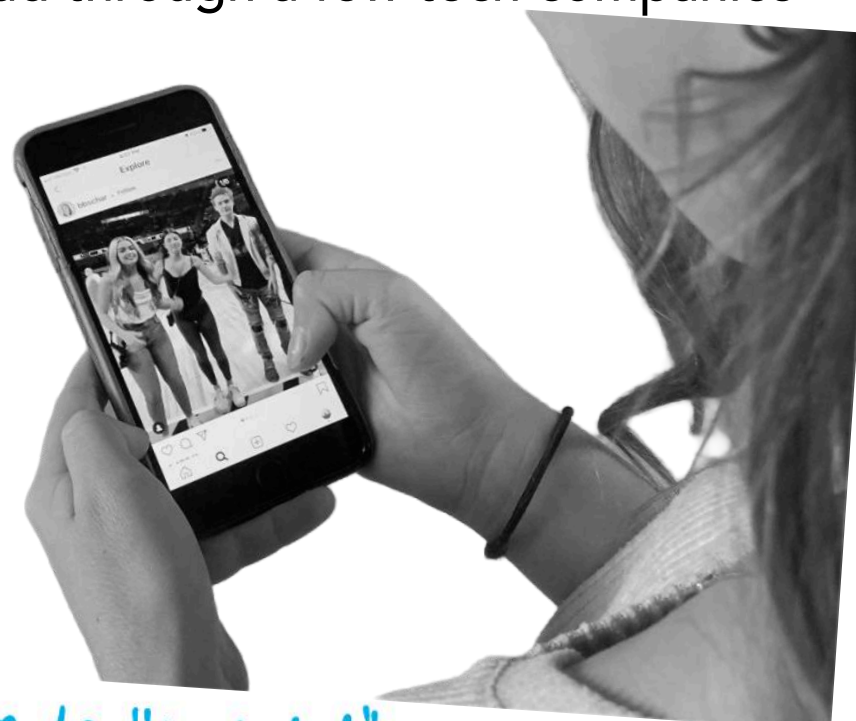
"Any and all data generated and/or collected by NameDrop, by any means, may be shared with third parties."

"... in exchange for service, all users of this site agree to immediately assign their first-born child to NameDrop, Inc."

Even though the platform included extreme "gotcha clauses", only 2% of the participants noticed them. These findings further indicates that most users do not know the agreement contents, even though their privacy could be potentially violated.

# TECH COMPANY'S CLICKWRAP AGREEMENTS

I wonder does those terms of use and privacy policy contain conditions that could potentially harm users' privacy without their true consent? In order to find out, I read through a few tech companies' products' clickwrap agreement.



*Is the user's privacy really protected?*

*Data will be disclosed when it's claimed to be necessary.*

Huawei usually does not disclose your personal information to the public, except in the following scenarios:

(1) In cases where certain services are provided by authorized partners of Huawei, Huawei will share your personal information with such partners as described in this policy. For example, if we entrust our partners to handle hotlines, send emails, provide technical support, etc. on behalf of Huawei, we will require our partners to only use your personal information to provide services on behalf of Huawei to you;

(2) We may disclose personal information between Huawei's affiliated companies, and we will only disclose your information within Huawei's affiliated companies for specific, clear, and legal purposes, and only disclose information necessary for providing services. For example, when registering a Huawei account, in order to avoid duplicate registrations, we need to verify the uniqueness of the intended account;

(3) Huawei will also disclose your personal information to relevant law enforcement agencies or other government agencies in response to applicable legal requirements, legal procedures. In some jurisdictions, if Huawei is involved in restructuring, merge, bankruptcy, and liquidation litigation, your personal information may also be disclosed to the counterparty.

*who defines "reasonable"?*

(4) Huawei will also disclose your data when there is a reasonable need, such as for execution of contracts and when we believe it is necessary and appropriate to prevent bodily harm or property damage, or to investigate possible or actual illegal activities.

*Even "withdraw" cannot guarantee anything. Seems like giving away privacy permanently with a single click*

*How can the users be "reminded" to disclose "carefully" if the terms is buried deep in the lengthy texts?*

1.1.10 Q&A. When you use the Q&A function, we will collect your user account, question content, answer content, and any pictures or videos you actively post publicly, in order to analyze and answer your questions. We hereby remind you that since the above information is publicly displayed, if it contains personal information, it will pose certain risks to you. We recommend that you disclose your or others' personal information carefully in your comments and evaluations, and comply with national laws and regulations as well as the Huawei Kunling User Agreement.

Where required by applicable laws, if Huawei processes your personal information based on your consent, you also have the right to withdraw your consent at any time. However, withdrawing consent will not affect the legality and validity of our processing of your personal information based on your consent before the withdrawal, nor will it affect our processing of your personal information based on other appropriate legal grounds.

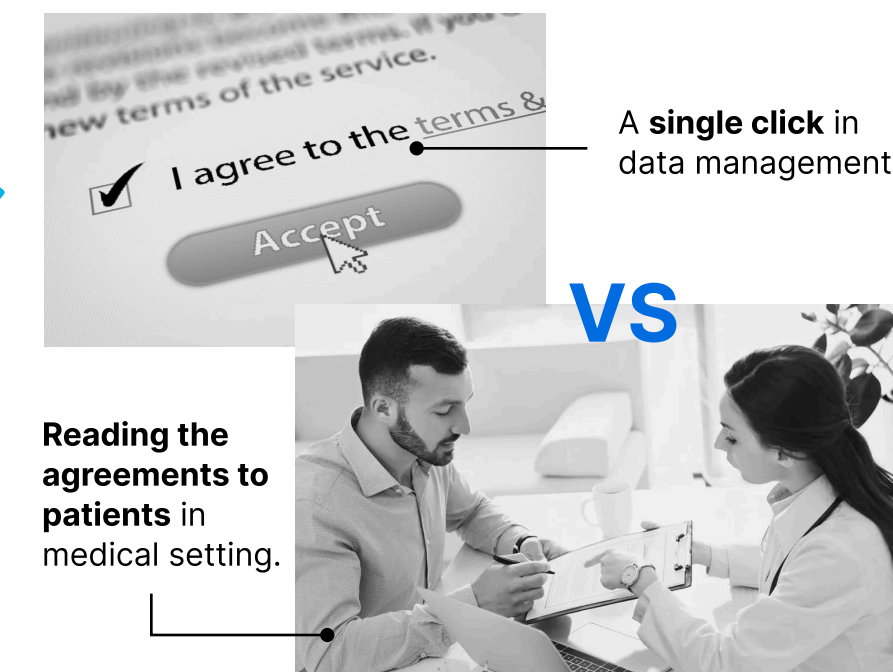
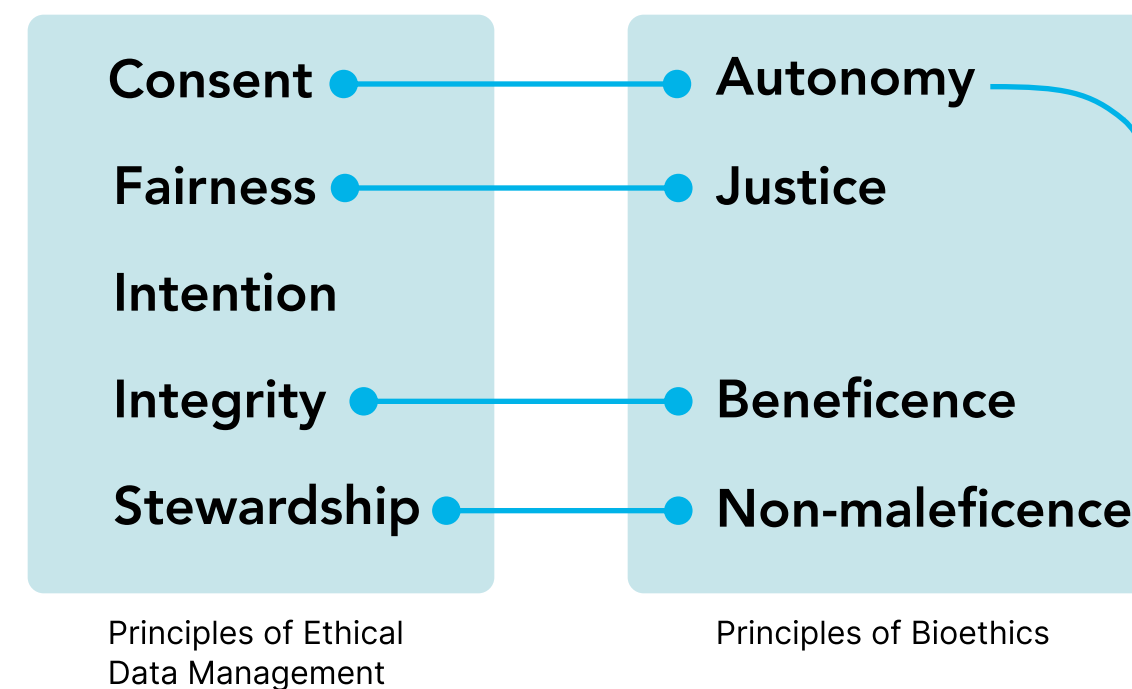


*Does user know that their information is shared to many third parties? Will that potentially exploit sensitive personal info?*

Why is information transferred to other countries? We share the information we collect globally, both internally across our offices and data centers, and externally with our partners, measurement vendors, service providers and other third parties. Because Meta is global, with users, partners and employees around the world, transfers are necessary for a variety of reasons, including: ...

# DATA ETHICS VS BIOETHICS

Reading these terms revealed that many consumer technologies undermine data ethics principles—especially **informed consent**. Exploring data ethics further, I noticed strong parallels with bioethics, which made me wonder: why is informed consent taken so seriously in medicine, yet so easily overlooked in data privacy?



# CONSEQUENCES OF UNDERMINED ETHICS

## Investigation into the use of surveillance by the University of Melbourne

In July 2024, the Privacy and Data Protection Deputy Commissioner commenced preliminary inquiries into the University of Melbourne's tracking of students involved in a sit-in protest, and whether the University complied with the Information Privacy Principles (IPPs) as outlined in the Privacy and Data Protection Act 2014. Given her concerns specifically relating to the use of Wi-Fi location data, the Deputy Commissioner commenced an investigation under section 8C(2)(e) of the PDP Act in August 2024.

The Deputy Commissioner found that the University failed to take reasonable steps to make individuals aware of the purposes for which their Wi-Fi location data was collected and may be used, in contravention of IPP 1.3.

Data breach of students' privacy by using Wi-Fi data.

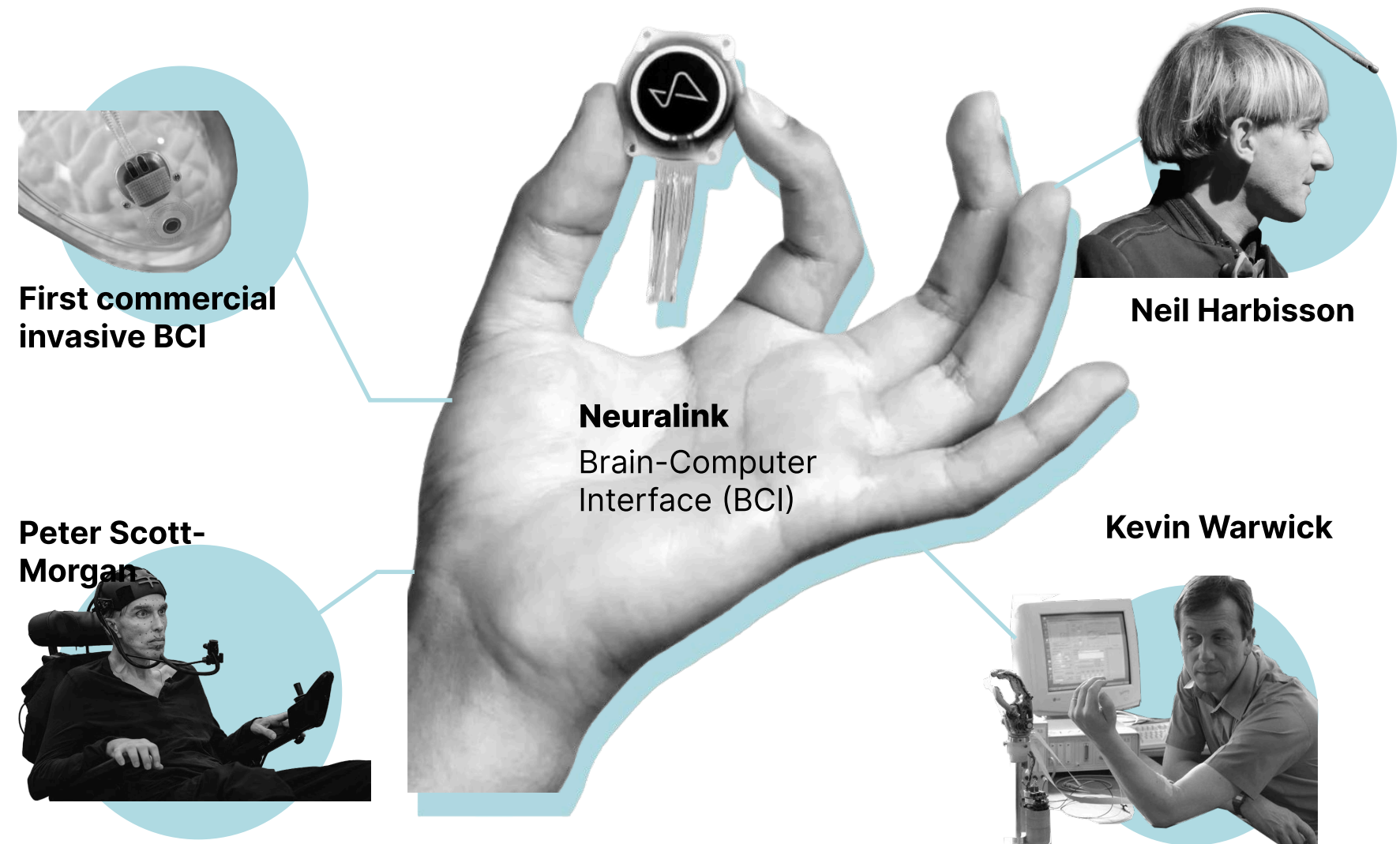
Data breach of users' account and passwords on social media.

Despite frequent news about data privacy harms, people still unknowingly share sensitive information with serious long-term risks.



## DATA-ORGAN & BCI

Meanwhile, as data privacy becomes an increasingly pressing issue, human beings are becoming cyborgs and data is becoming part of the body.



First commercial invasive BCI

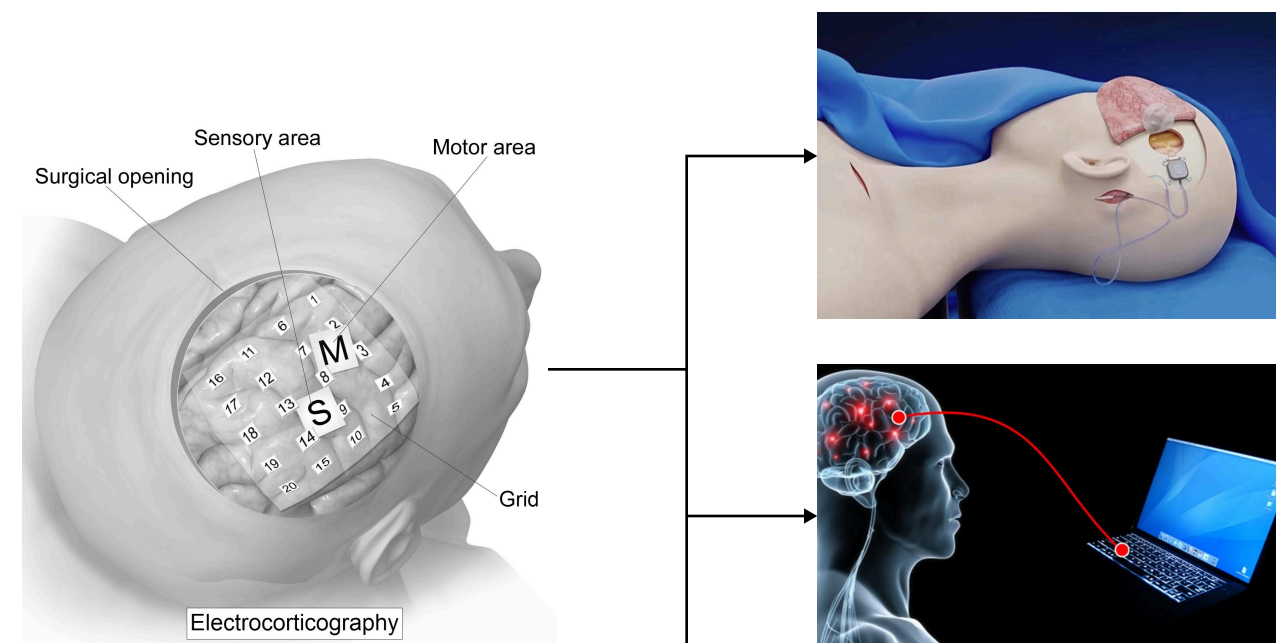
Neuralink  
Brain-Computer Interface (BCI)

Neil Harbisson

Peter Scott-Morgan

Kevin Warwick

What if data ethics and bioethics **collapsed into one**? This project imagines a near future where data is embedded in the body as a "data-organ," asking audience a question: **when data lives inside us, what does privacy mean?**



### REASONS:

#### Disturbing:

Dissonance from the invasive surgery.

#### Trendy & High-Tech:

BCI is a big trend in tech corporations.

#### Body & Data:

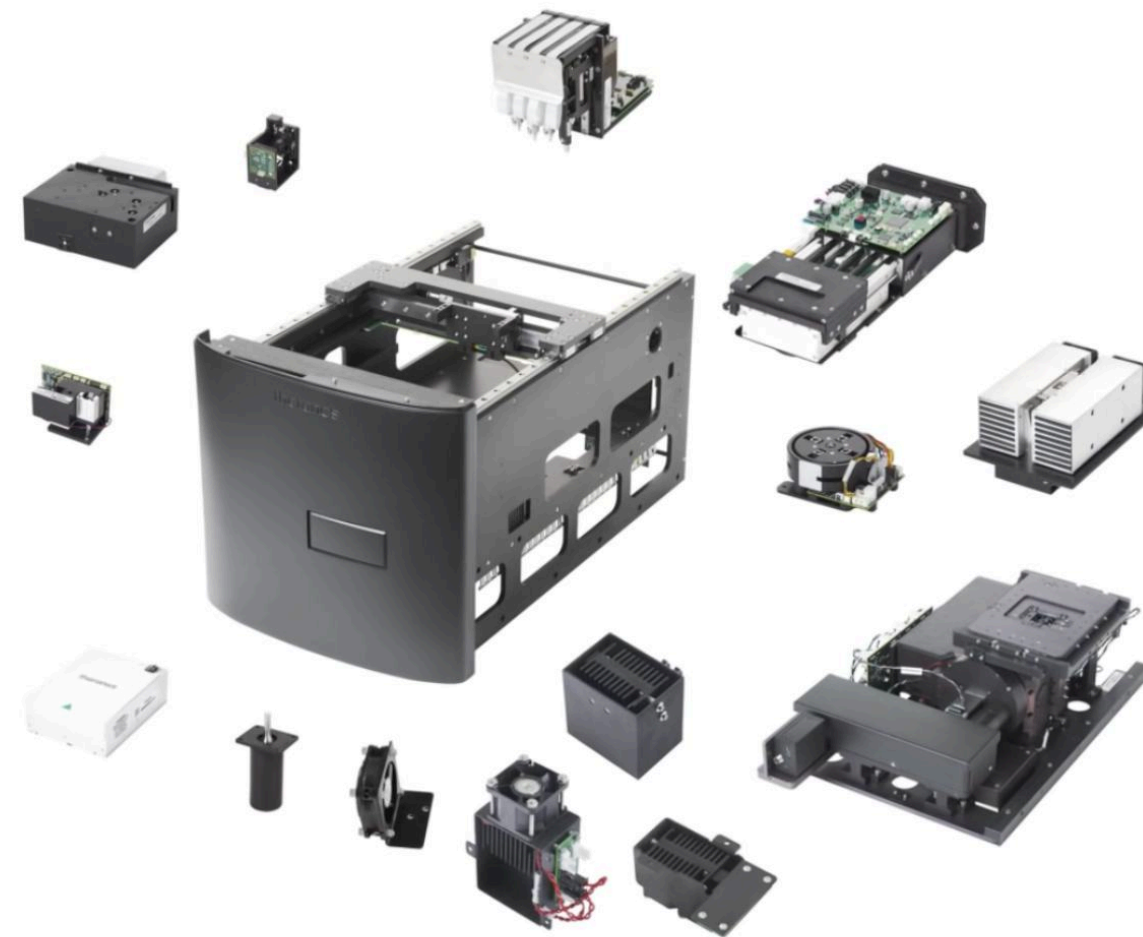
A site where body, data, AI, and cognition merges.

I chose **invasive BCI** as the data-organ for future speculation.

## Design Considerations: illegal or legal?

I originally envisioned a future company that operates a **DIGITAL BLACK MARKET** to trade users' data. However, drawing reference from the fraud medical company **Theranos**, I realized that **CRIME CAN EVEN OPERATE IN LEGAL REALM**.

The reason why Theranos concealed its crime is that, it grew up in Silicon Valley's **"FAKE IT TIL YOU MAKE IT" STARTUP CULTURE**. **Elizabeth Holmes**, the CEO of **Theranos**, covered up their fake blood test results by focusing on prompting her successful image and showing performative hard work.



### Shown Labour Effect

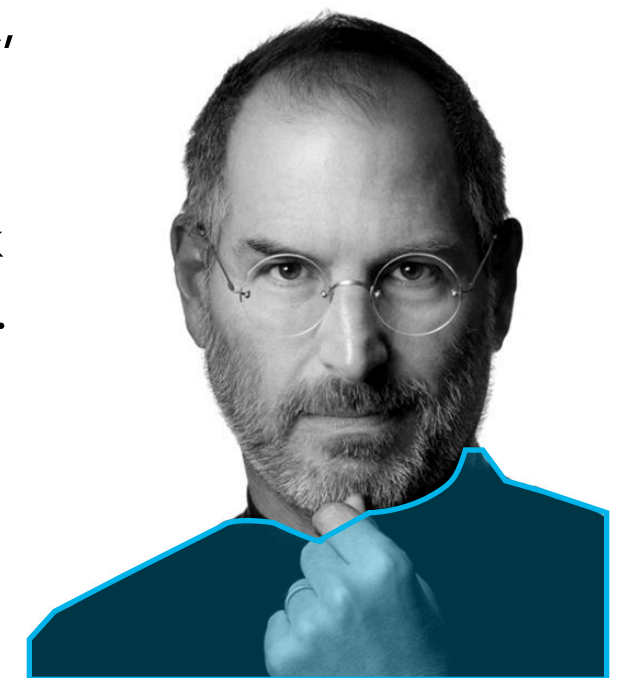
She increases her company's credibility by showing the efforts they put into the machine.

Based on these references, I decided to design a future **tech company that sells a BCI product**, which focuses on **the performative "face" of the company**.



Reference: Elizabeth Holmes's Theranos

She mimicked Steve Jobs's appearance such as wearing a Turtleneck, and used deep voice during public speech. This made people think she is actually authority.

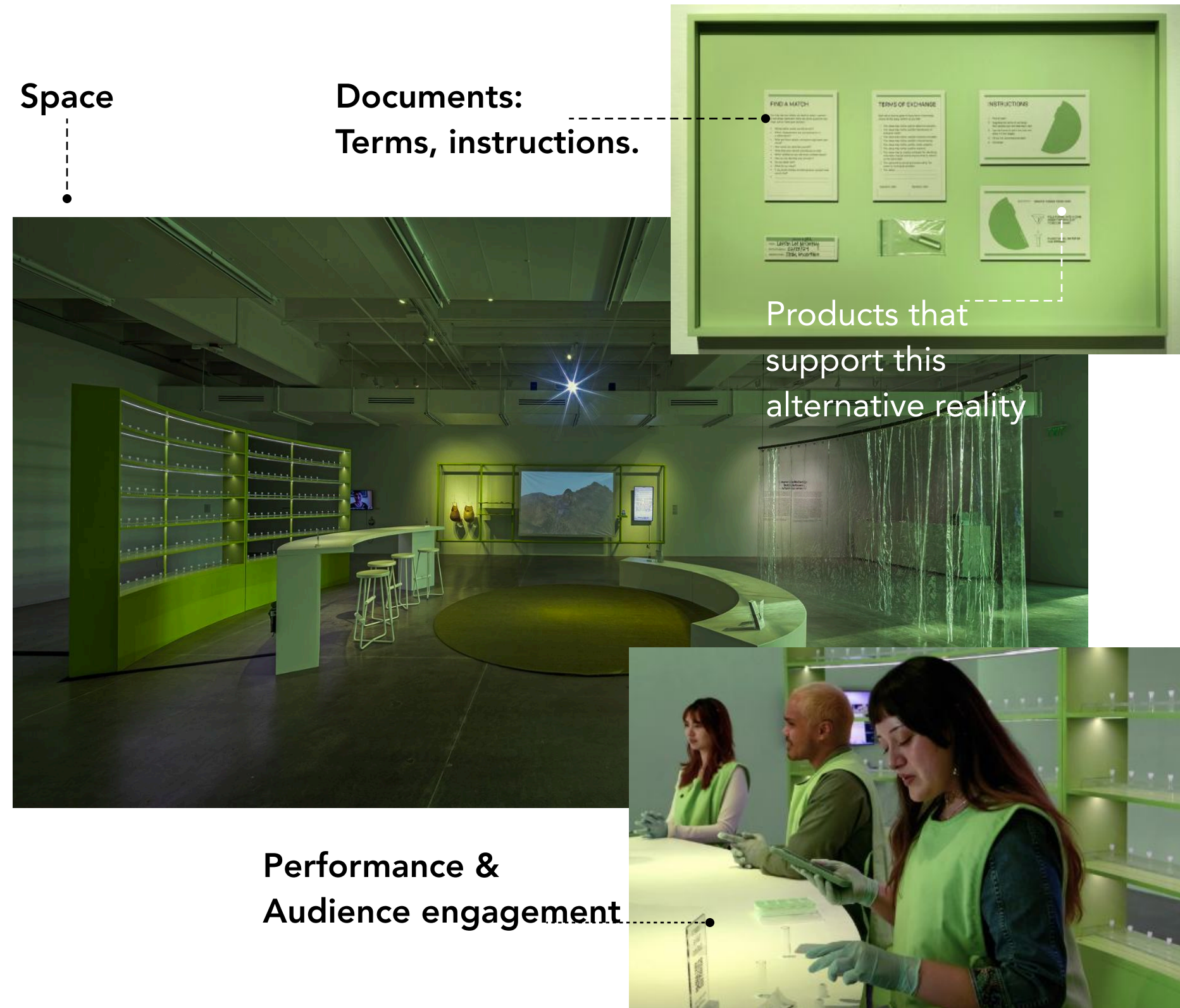


Halo Effect

# Artifacts Design Ideation

## CASE STUDY:

"Saliva Bar" by Lauren McCarthy

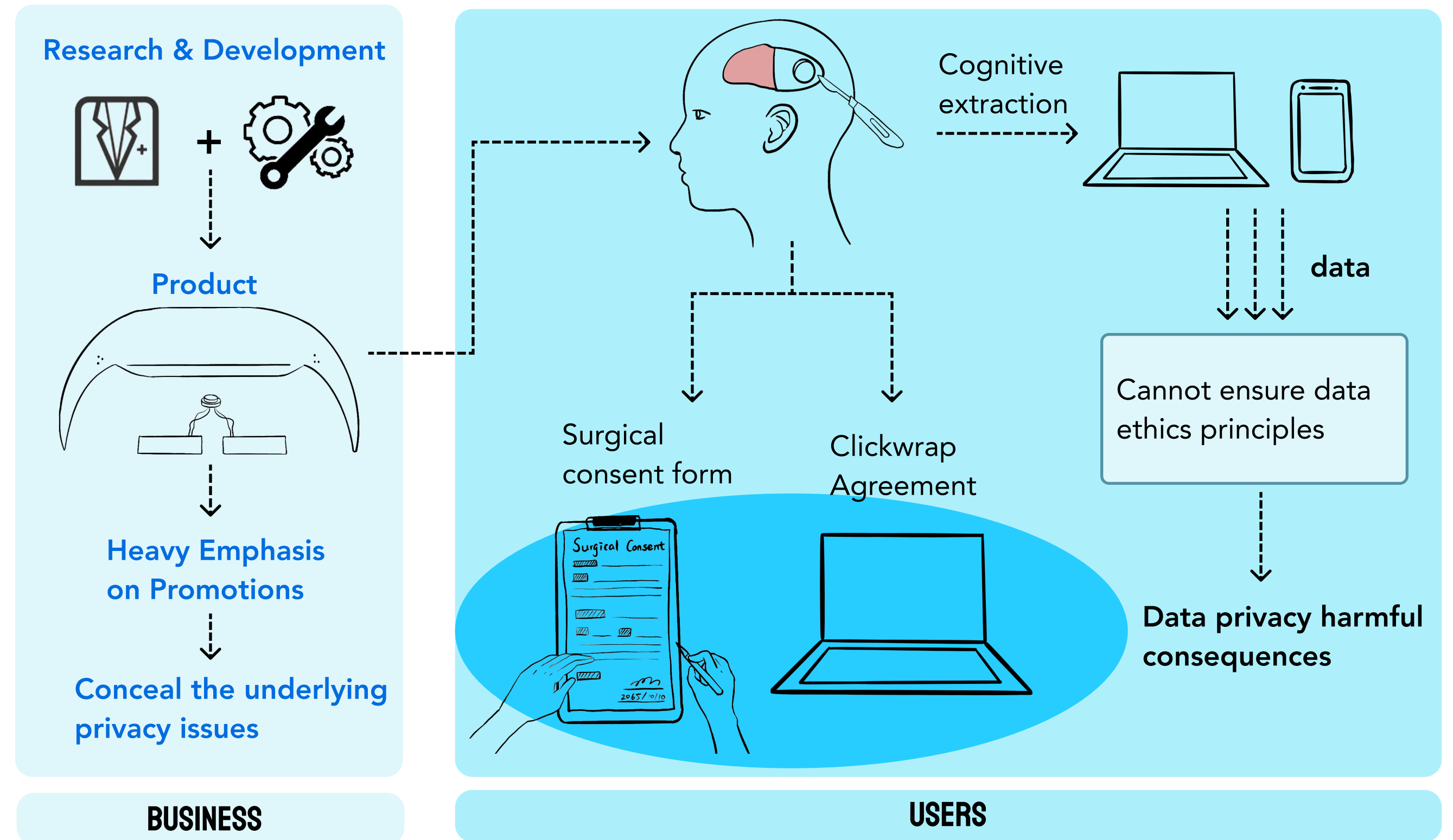


This case study focuses on DNA information privacy. How it uses space and artifacts, and uses performance to allow audience to participate inspired my choice of design artifacts.

This company will be presented in a pop-up store format in a exhibition space. Meanwhile, the artifacts that construct this reality will be as follows.

## DESIGN CONCEPT

故事形式 storyboard, 展程



## COMPANY NAME & LOGO DESIGN

# CORTEXA

The company is called "cortexa", which comes from the word "cortex" which indicates relationship to the brain; while using a syllable like "cortexa" simulates the consumer tech styles such as "Alexa".

# ARTIFACTS LIST

**Cortexa**

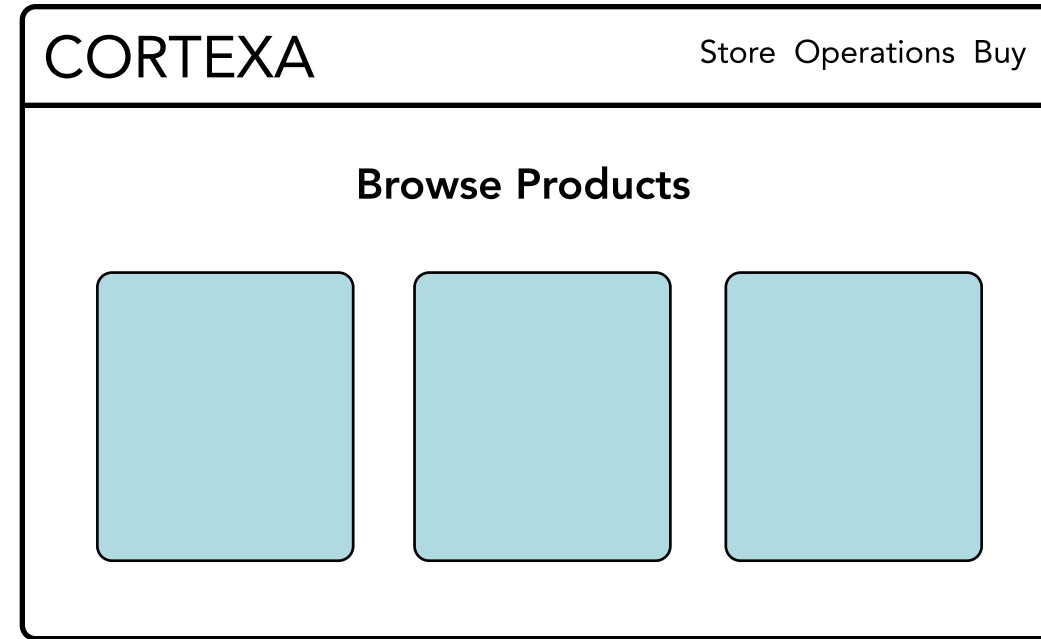
**Drift User Agreement, Terms of Service & Privacy Notice**

Effective Date: January 1, 2100  
 Applies To: All Cortexa Services, Devices, Interfaces, Experiences, and Derivative Systems

**Preamble**

Cortexa exists to facilitate a symbiotic relationship between humanity and the evolving digital landscape. Drift is not merely a device, but an integrated system designed to operate across biological, computational, and experiential domains in order to support cognitive continuity, perceptual stability, and long-term adaptability.

We are committed to protecting user privacy, safeguarding sensitive information, and maintaining trust. *At the same time, you acknowledge that cognition, perception, and identity are dynamic processes influenced by context, environment, and technology, and that interaction with advanced neural systems may require ongoing mediation and adjustment.*

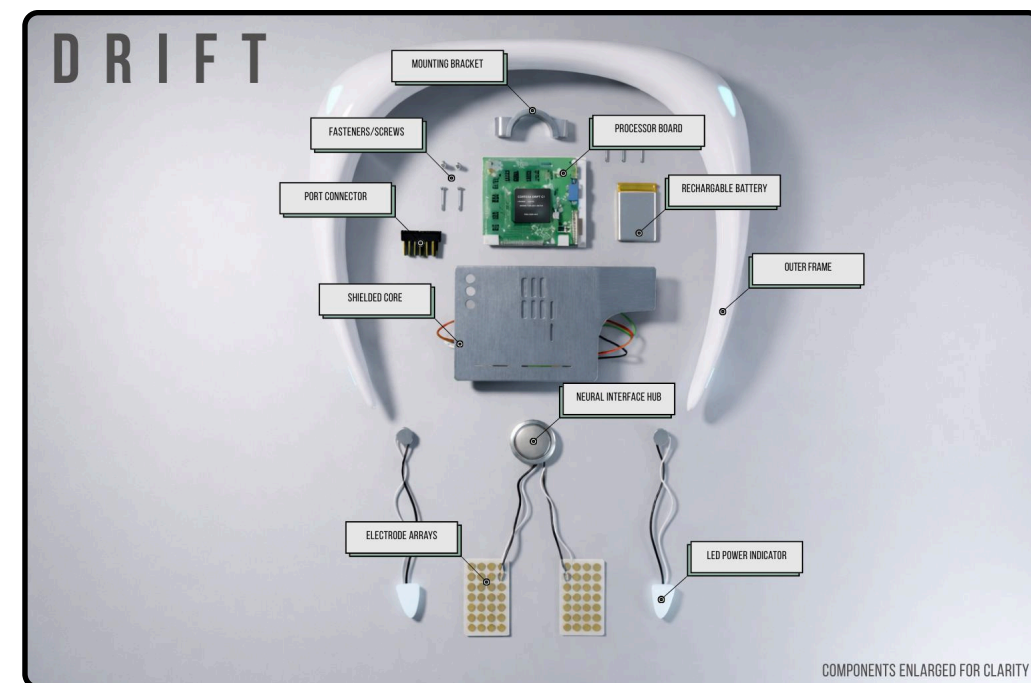


## Terms of Service & Privacy Policy

## Website



**Drift (BCI Product)**

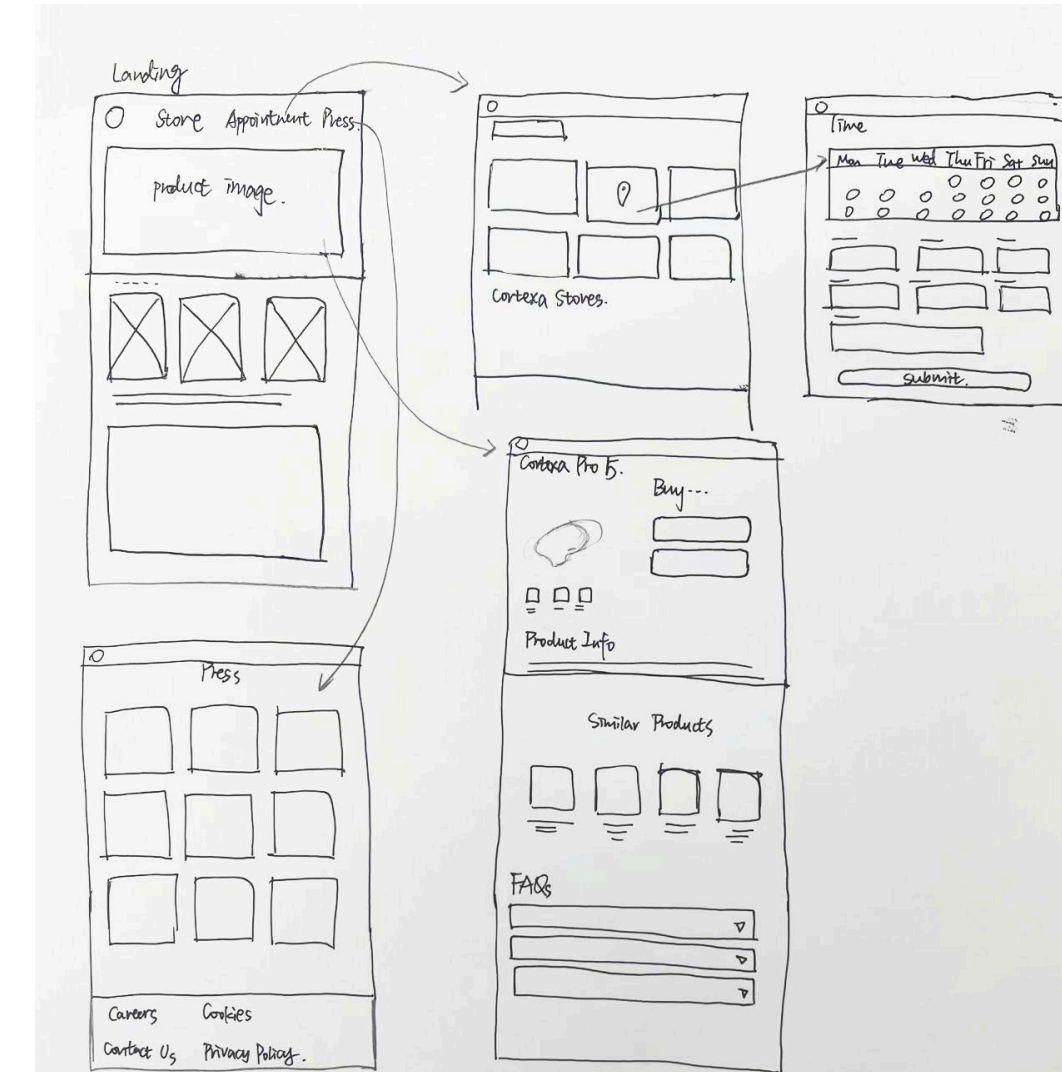


**Diagrams**



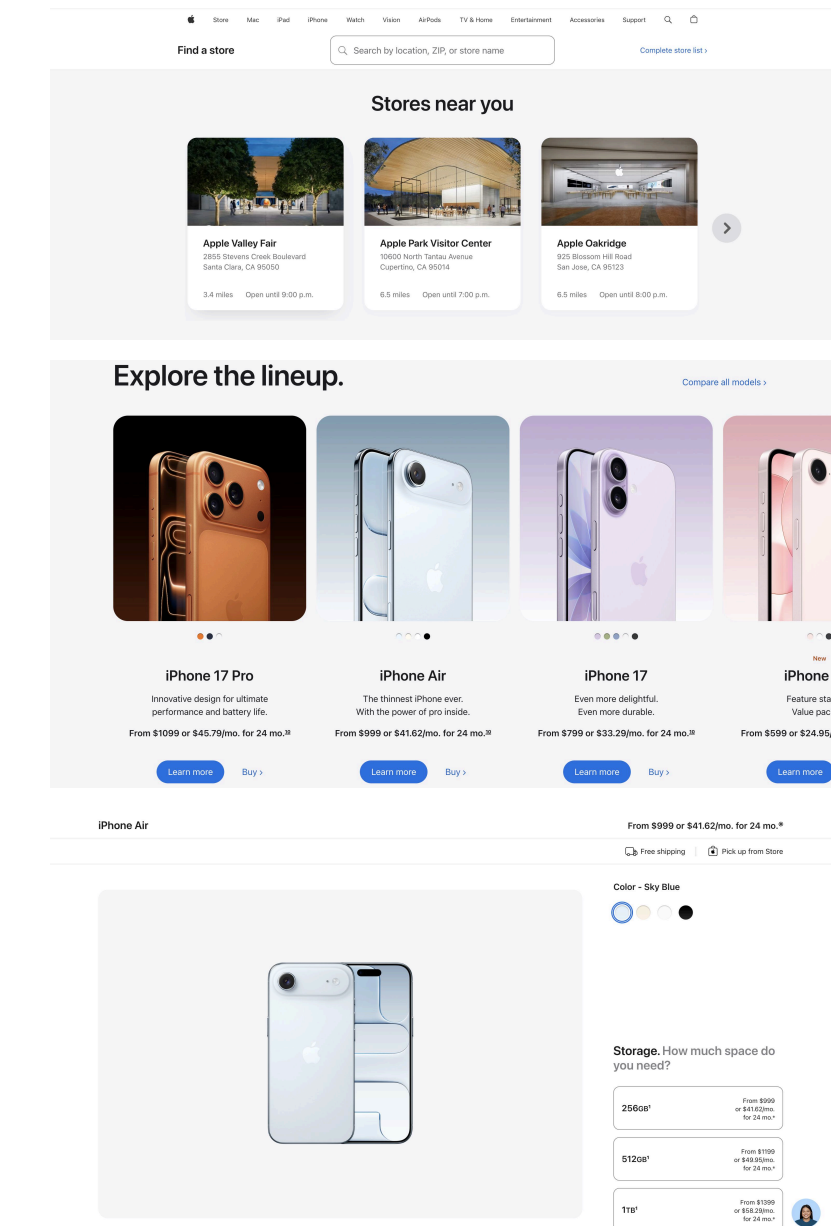
**Product Launch Video**

# DESIGN SKETCHING PROCESS

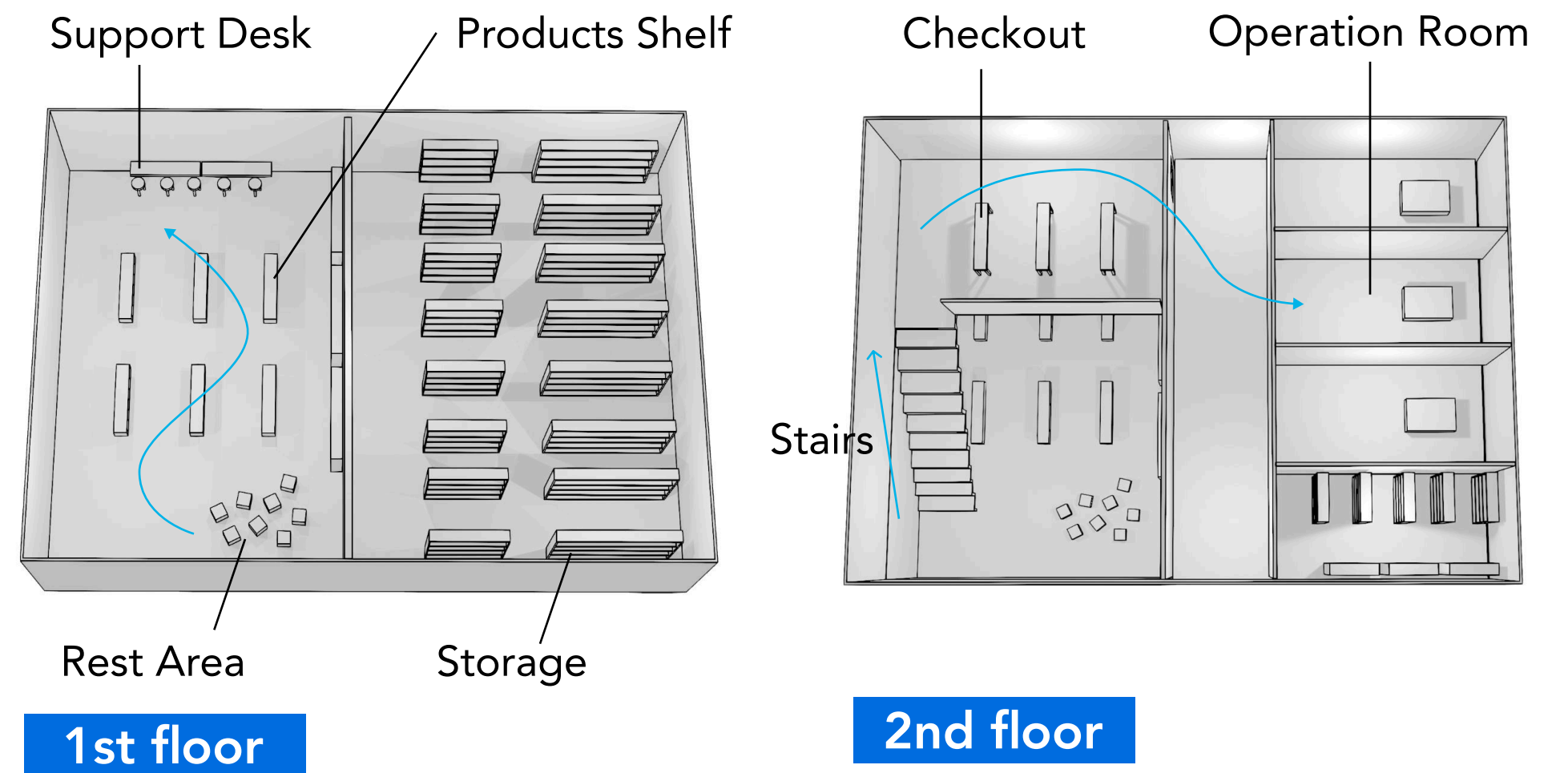


**Website wireframe**

## Reference: Apple's Website



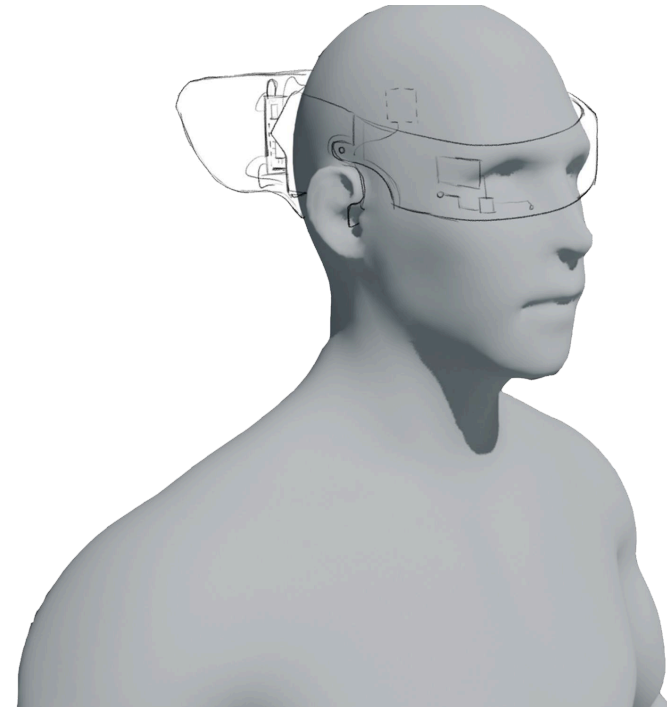
## Cortexa Store floor plan



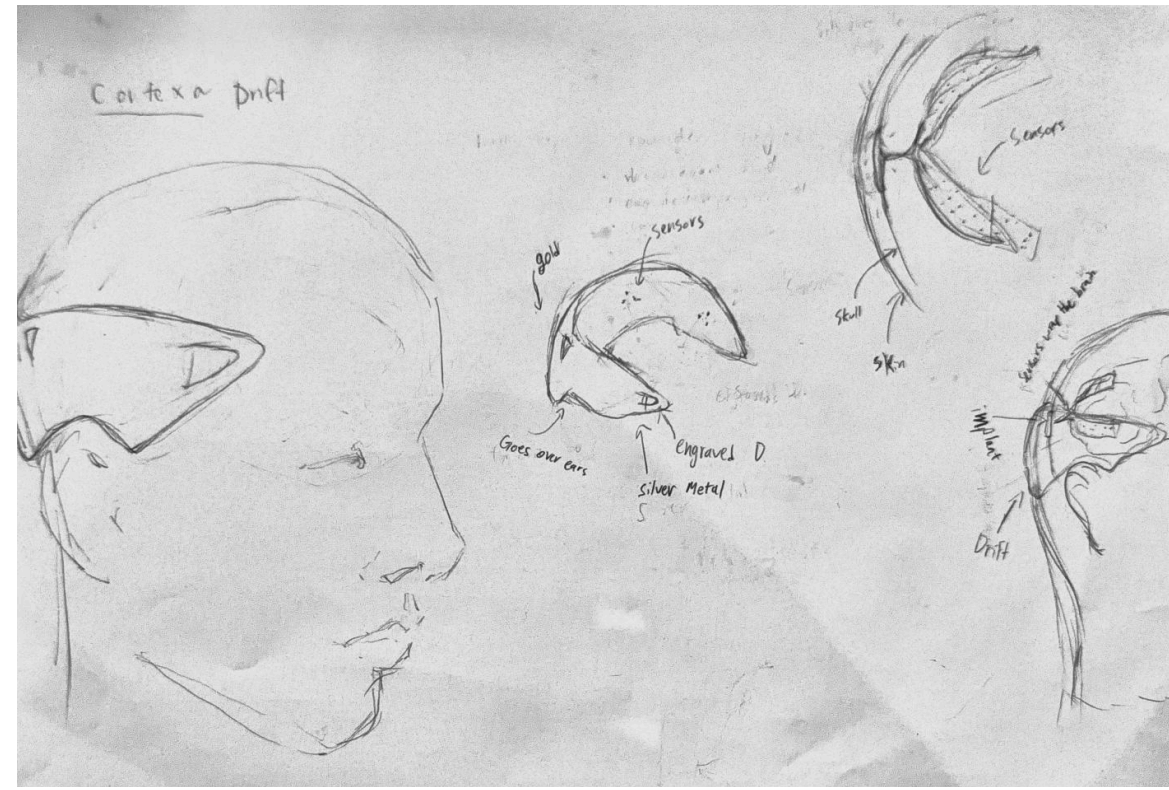
**1st floor**

**2nd floor**

# BCI Design: Drift



Early Sketch Concept



Sketch (by Micah Davis)

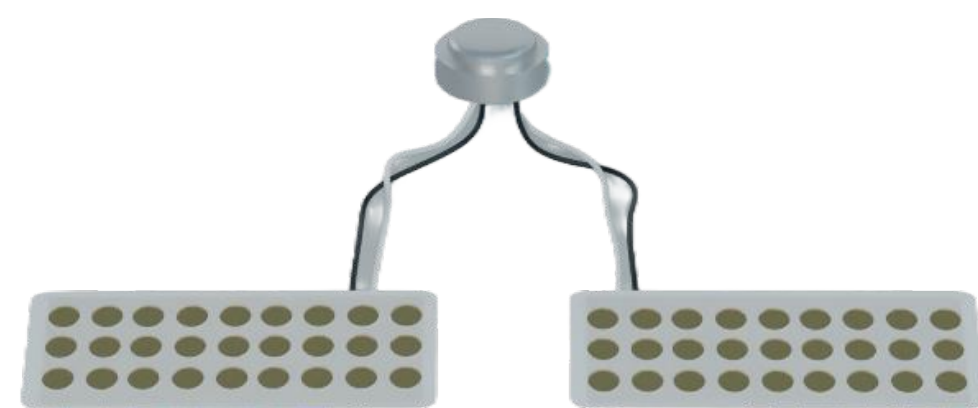
## DRIFT DESIGN

Drift is a compact **implanted chip** partially embedded beneath the skin, with a **visible external casing** for communication with other devices.

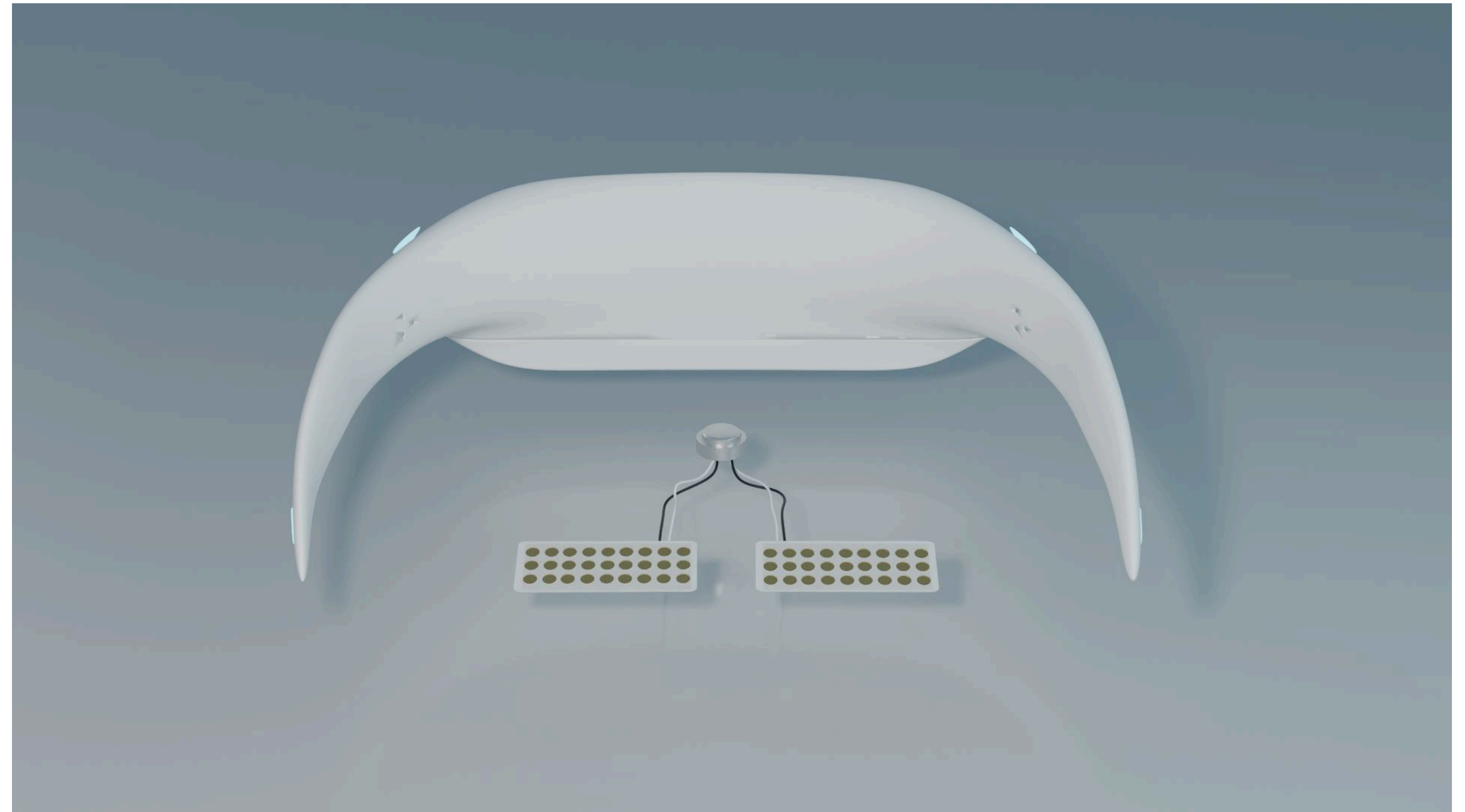
Materially, Drift adopts a sleek combination of glass and metal commonly associated with consumer technology products.



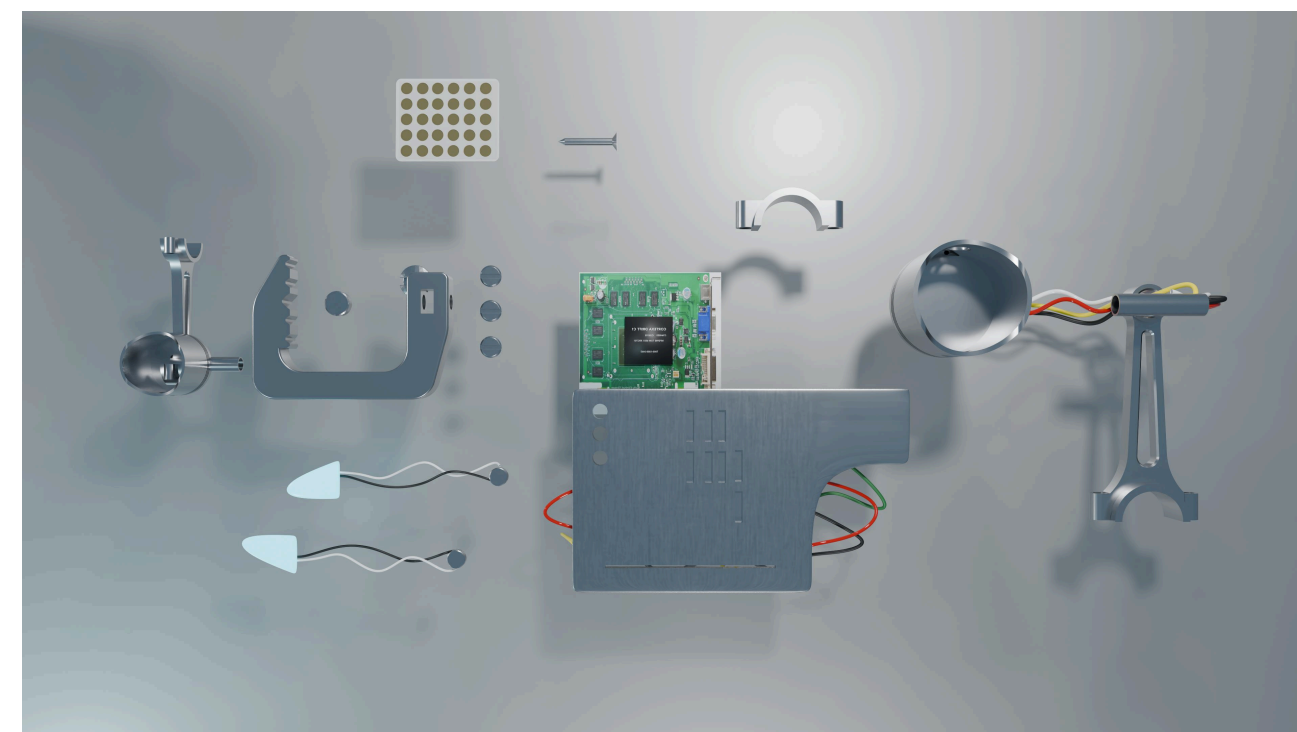
External Case



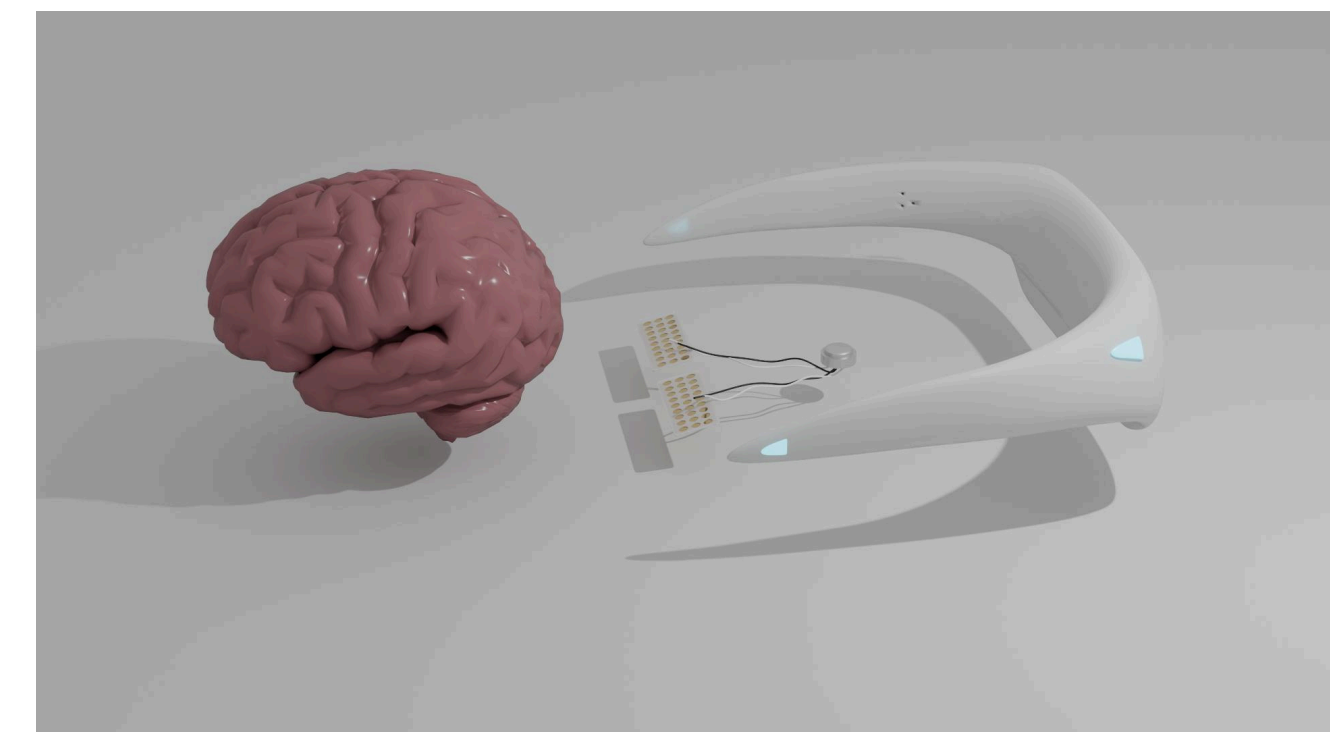
implanted chip



3D Render

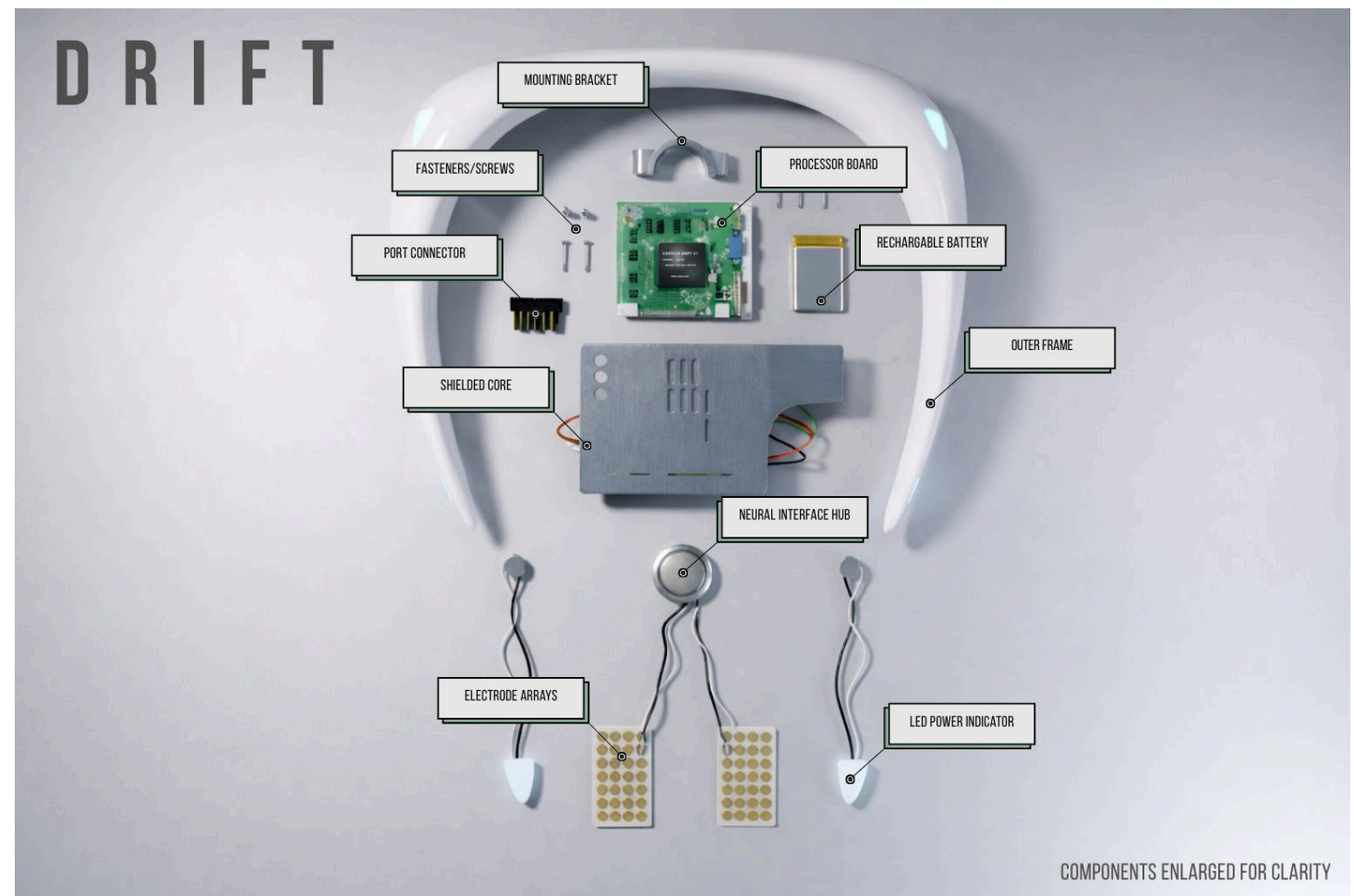
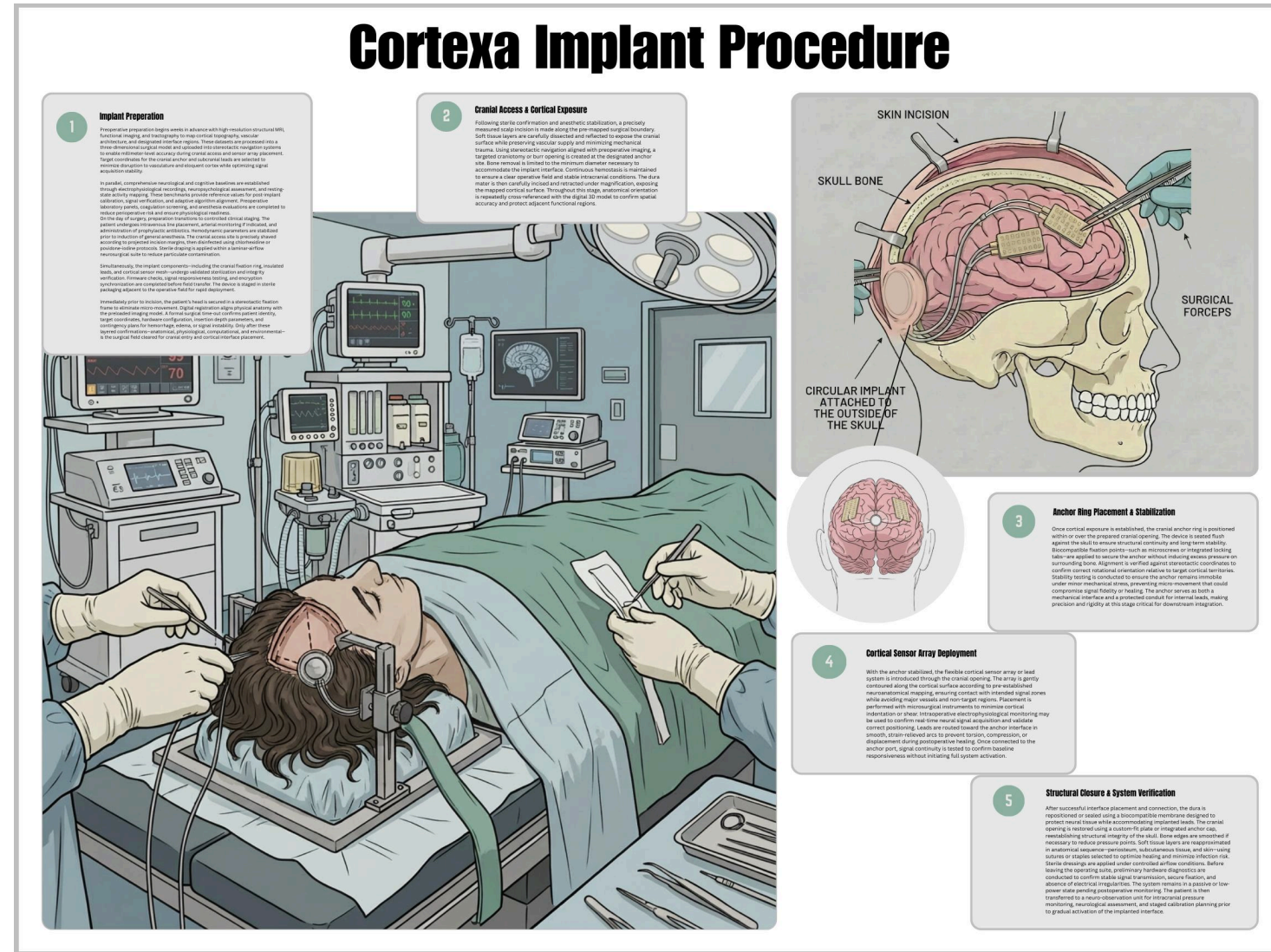


Separated parts



Conceptual demonstration of functioning process

Designed by Micah Davis



The diagrams also follow visual cues of clean surfaces, minimalist geometry, and contemporary industrial design language.

[Click to View Full Version](#)

## Cortexa

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We are committed to protecting user privacy, safeguarding sensitive information, and maintaining trust. **At the same time, you acknowledge that cognition, perception, and identity are dynamic processes influenced by context, environment, and technology, and that interaction with advanced neural systems may require ongoing mediation and adjustment.**

This Agreement establishes the legal, technical, and experiential framework governing your relationship with Cortexa. While transparency is a core value, you acknowledge that **certain system processes may not be fully observable, interpretable, or individually controllable due to their complexity and adaptive nature.**

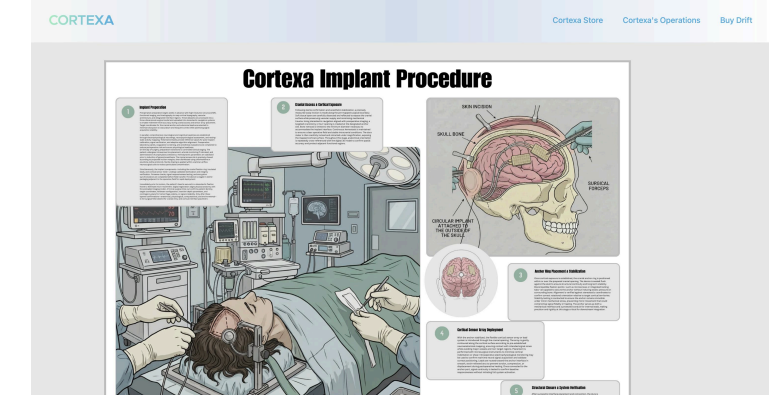
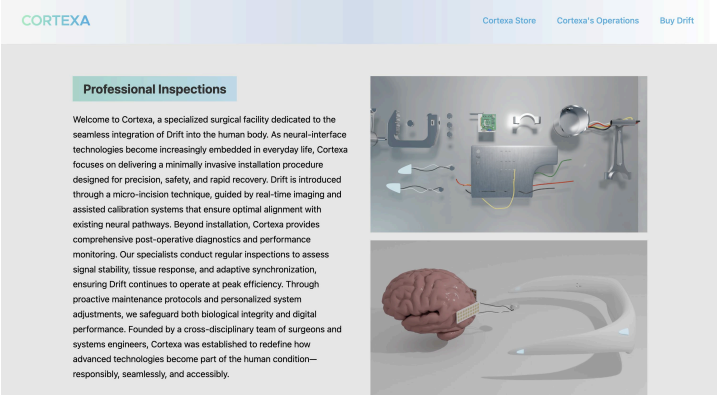
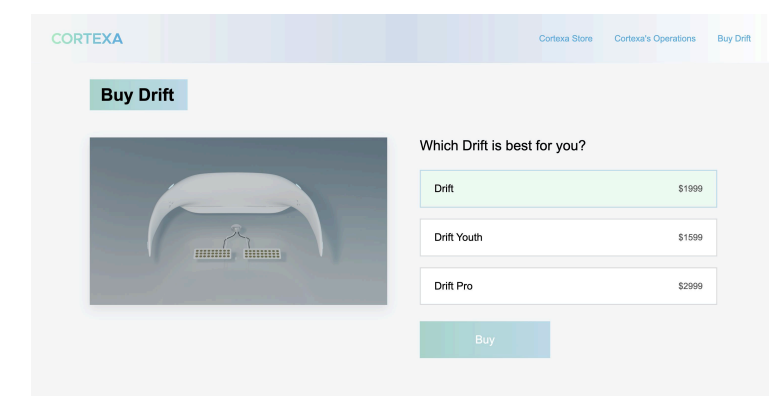
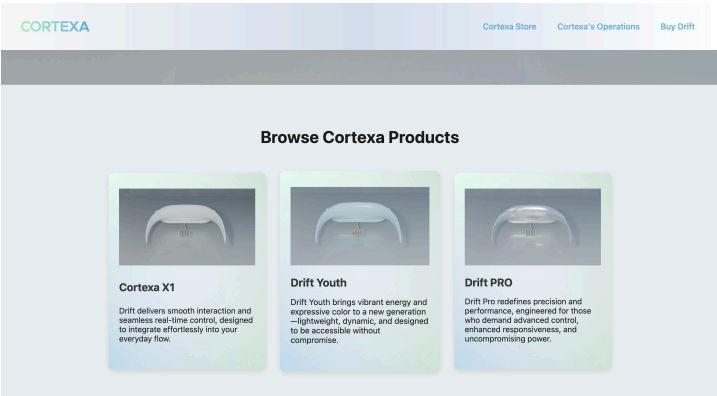
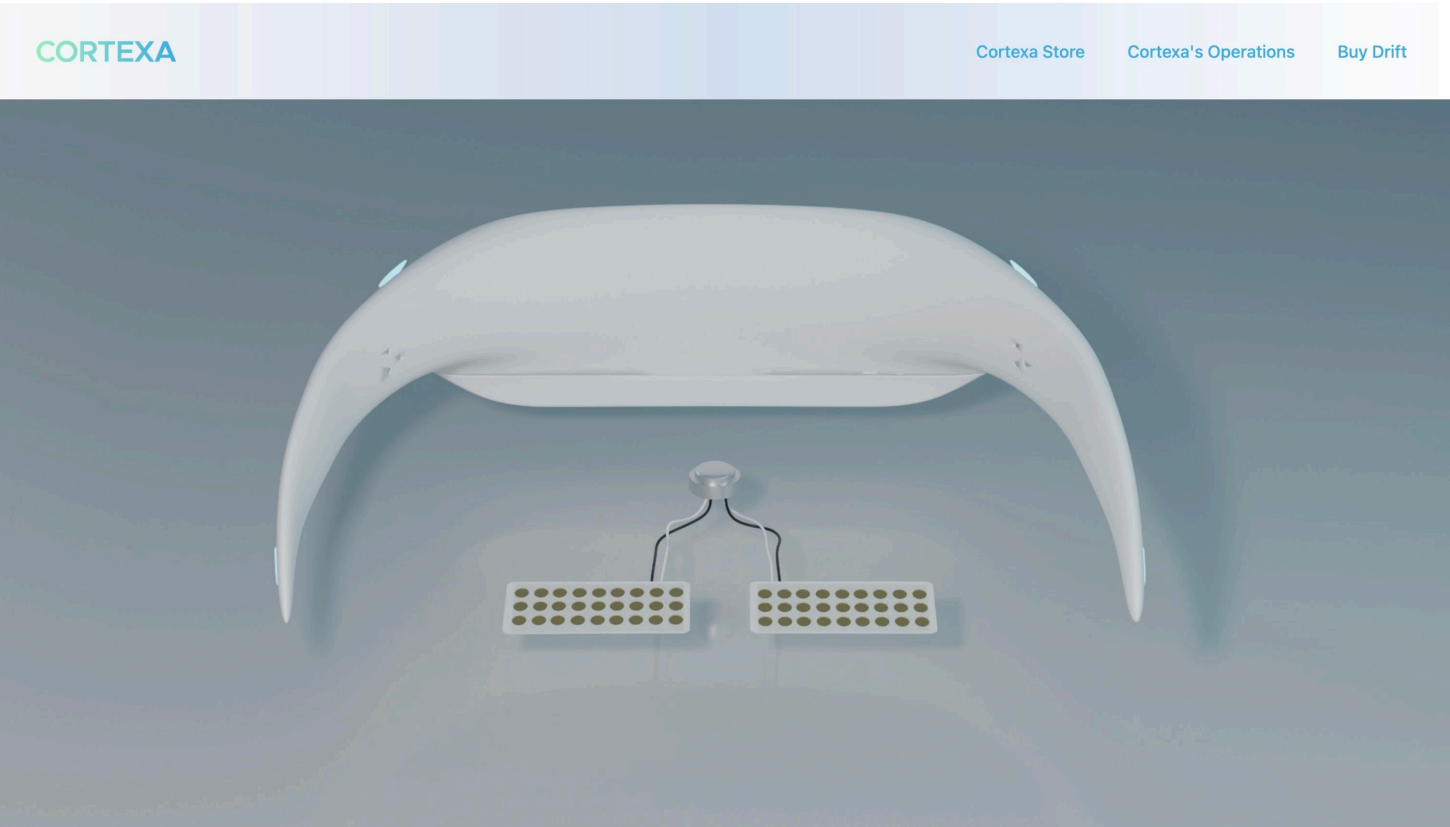
By proceeding, you confirm that you have read, understood, and agreed to all terms described below.

## Frequently Asked Questions:

- 1. What kind of data does Drift collect?**  
 Drift continuously records neural signals related to attention, memory, emotion, and cognition. Every signal contributes to system calibration, predictive modeling, and operational continuity. Data collection is constant, integrated, and automatically processed.
- 2. Who decides how my data is used?**  
 Adaptive models embedded in Drift determine how data is stored, processed, and prioritized. Users can adjust preferences and view summaries, but the full operations of the system remain internal to maintain stability and predictive accuracy.
- 3. Can Drift influence my decisions without me noticing?**  
 Drift sequences information, filters prompts, and modulates interaction timing. These adjustments occur automatically as part of the system's operation, subtly shaping experience while maintaining continuity.
- 4. Can I limit or delete my data from Drift?**  
 Optional categories of data can be restricted or adjusted. Core cognitive signals, however, remain essential to system functionality and cannot be fully removed without disrupting continuity.
- 5. How is Drift different from conventional apps or trackers?**  
 Unlike apps that track clicks or movements, Drift collects continuous cognitive signals and maps them in real time. It integrates with thought, attention, and memory to optimize operation, functioning as an active system rather than a passive recorder.

The Terms ambiguously mention various commitments for the user to agree to, avoiding explanations and specifics regarding the privacy of the information obtained through Drift. The Frequently Asked Questions further guide the direction of discourse by providing clarification on different aspects of this project that were previously ambiguous.

<https://charleston1107.github.io/cortexa/>



# Product Launch Video

## STORYBOARD

A product launch video is a scenario that contains the core aspects we want to show the audience: performative professionalism, Silicon Valley culture context, service in Cortexa Store, and demonstration of how Drift works.

### VISUAL RESEARCH

Store view



Professional-looking designer



Exploded product parts



zooming into the product



Earnest tech company  
(Reference: Apple)

Aims for a balance between the two.

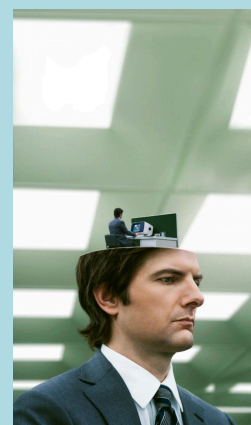
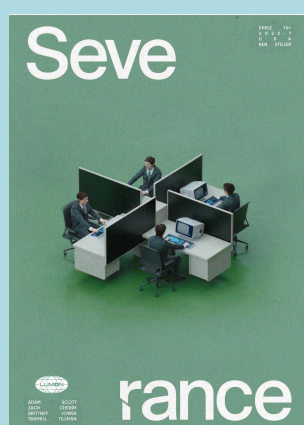
uncanny valley smile



disturbing invasive operation



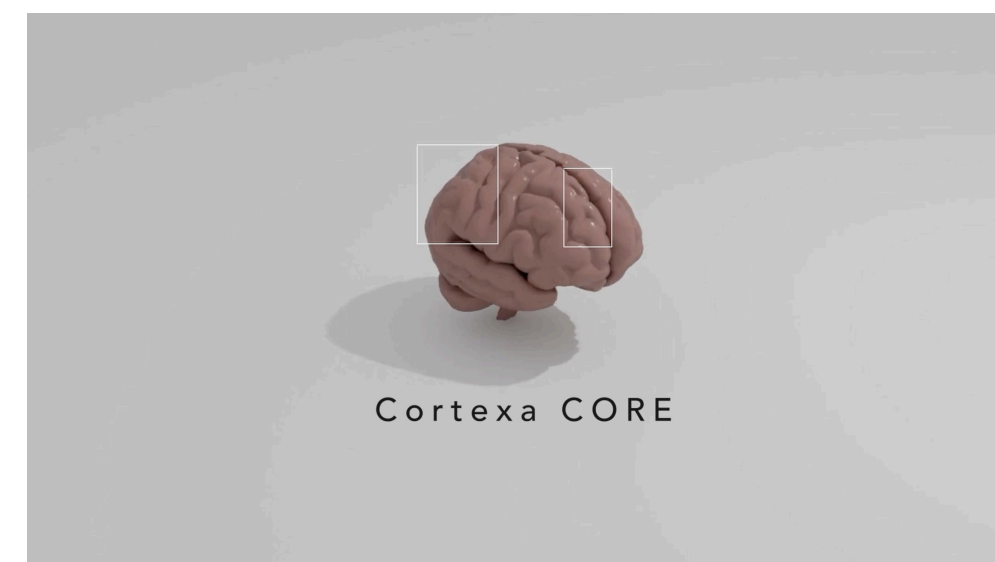
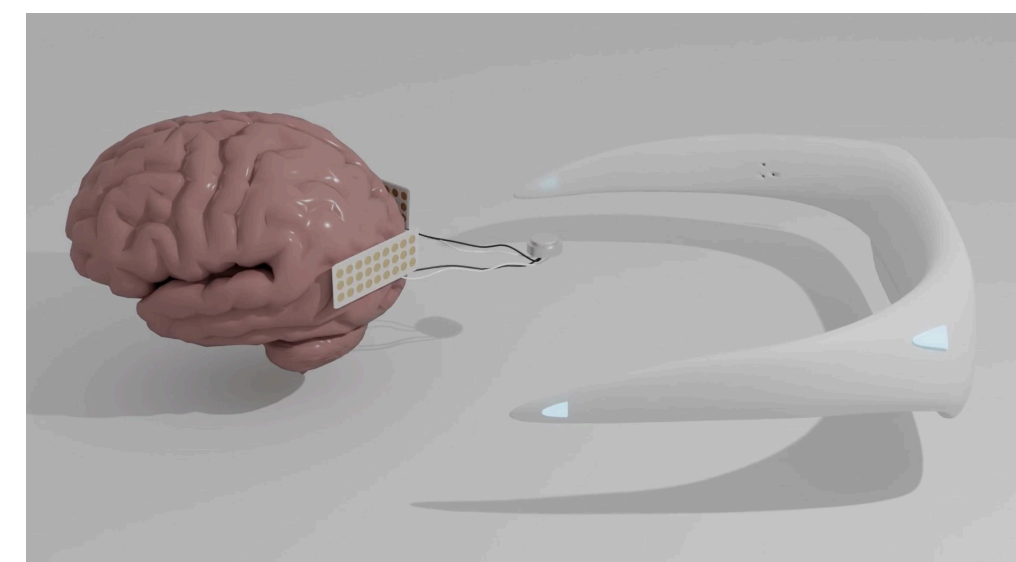
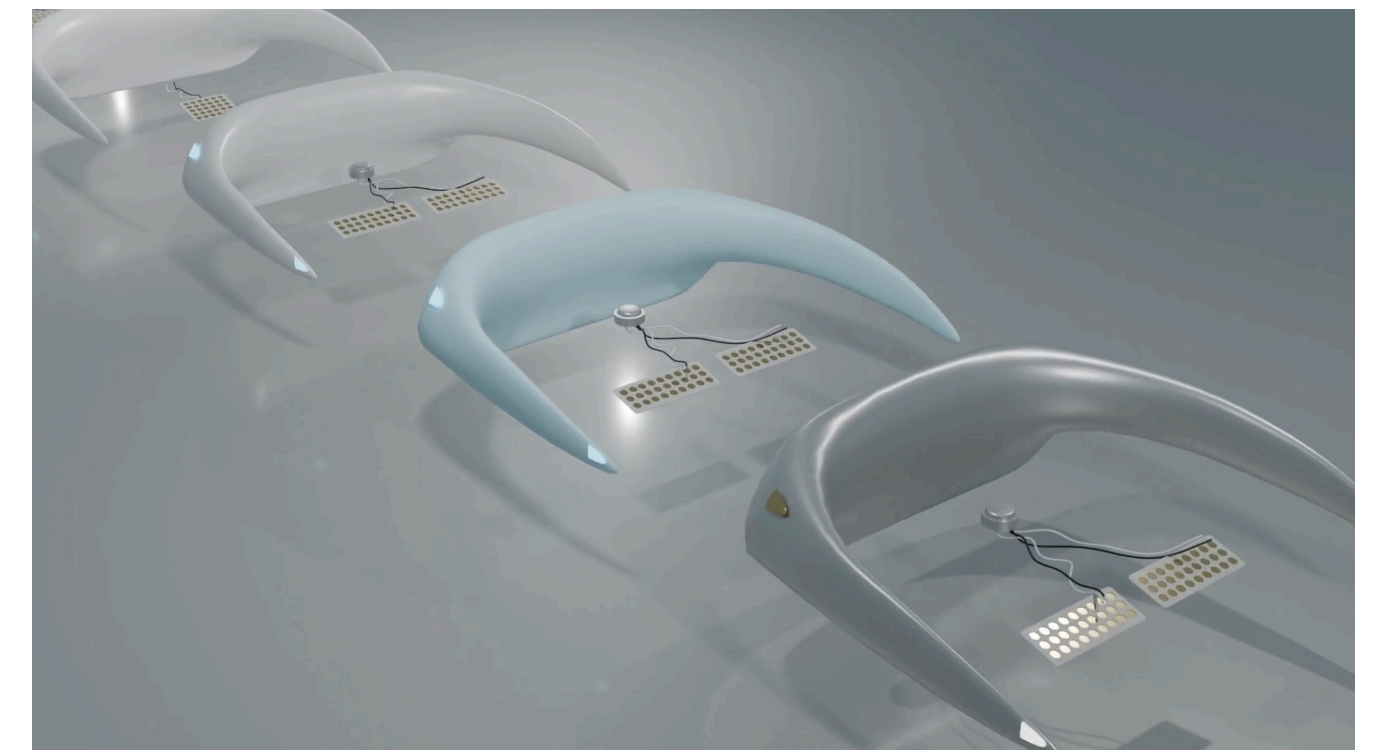
repetitive pattern conceptual image dim lighting & blurry filter



Disturbing visuals with distance from reality

# SELECTED FRAMES

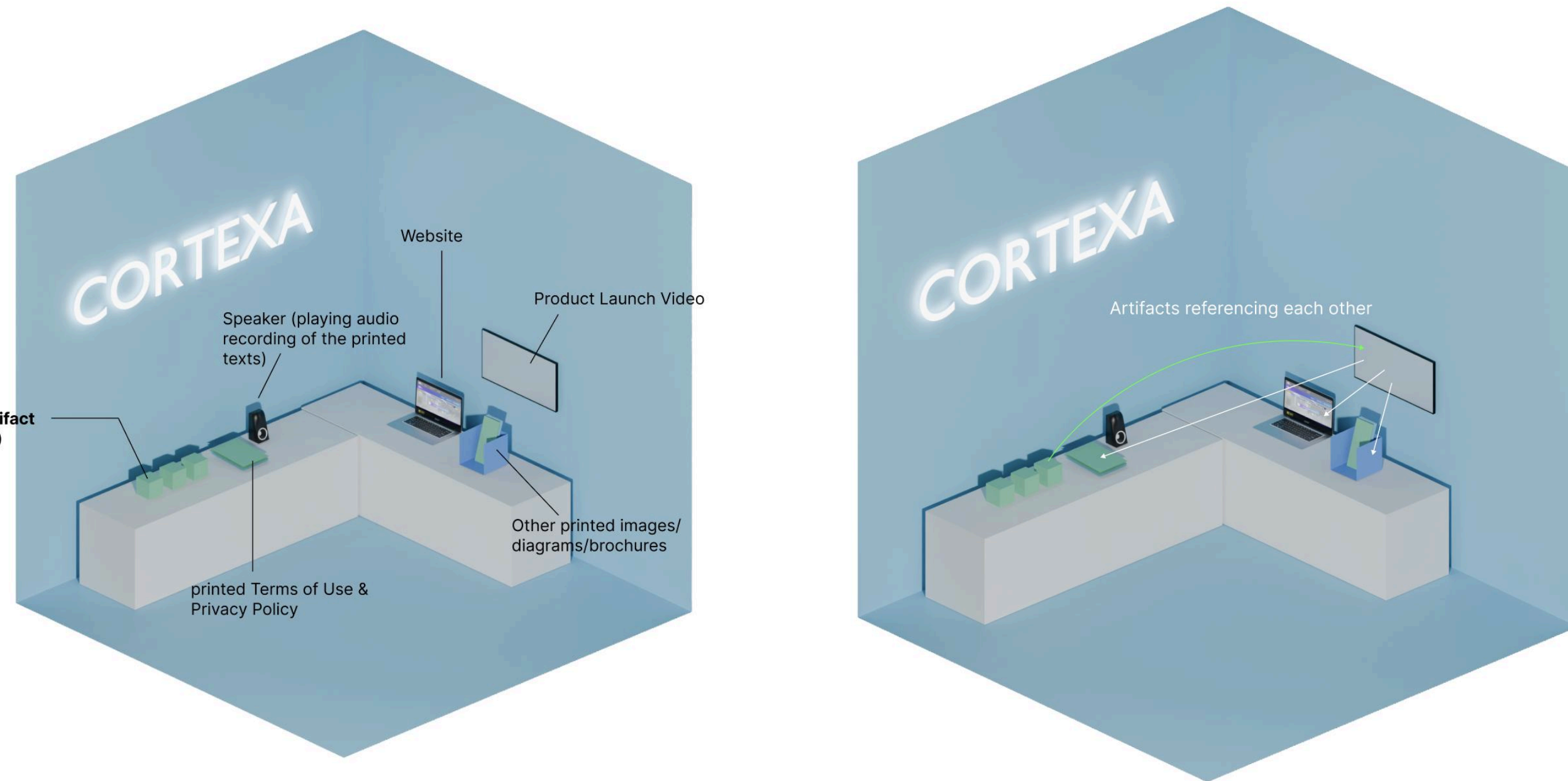
Video Link: <https://vimeo.com/1170742212?share=copy>



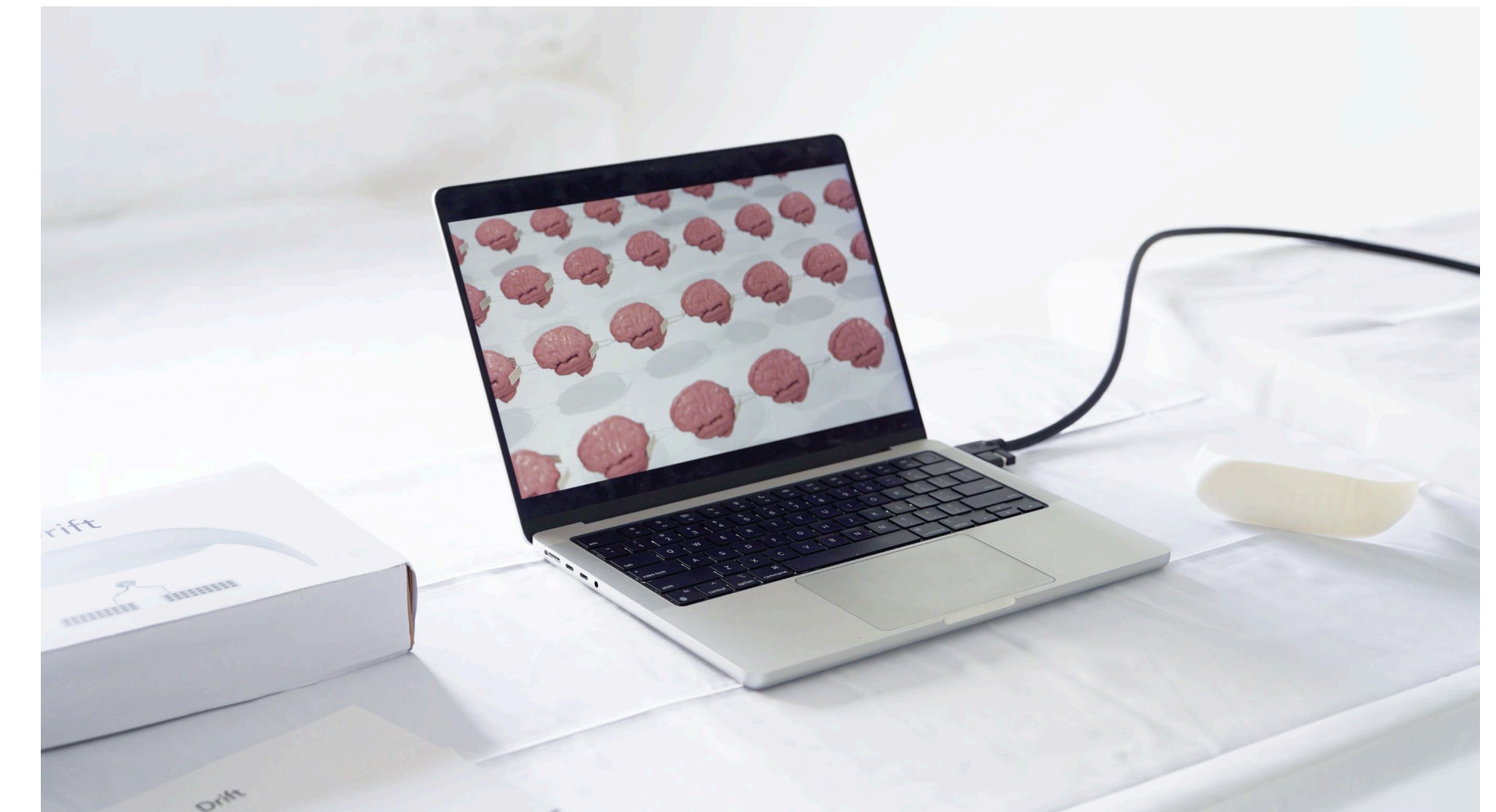
# Exhibition Design

With all the artifact designs, the exhibition will be a speculative pop-up store for Cortexa, integrating all artifacts into a single spatial narrative.

This user journey in the exhibition mirrors real consumer experiences without emphasizing actual functionality, preventing distraction from the project's critical focus.



## EXHIBITION



# CORTEXA

