

# CORTEXA

## Credits:

Micah Davis (Diagram Design & Terms writing)  
Junyi Yu (Photography)  
Ella Guidry (Voice Acting)

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.

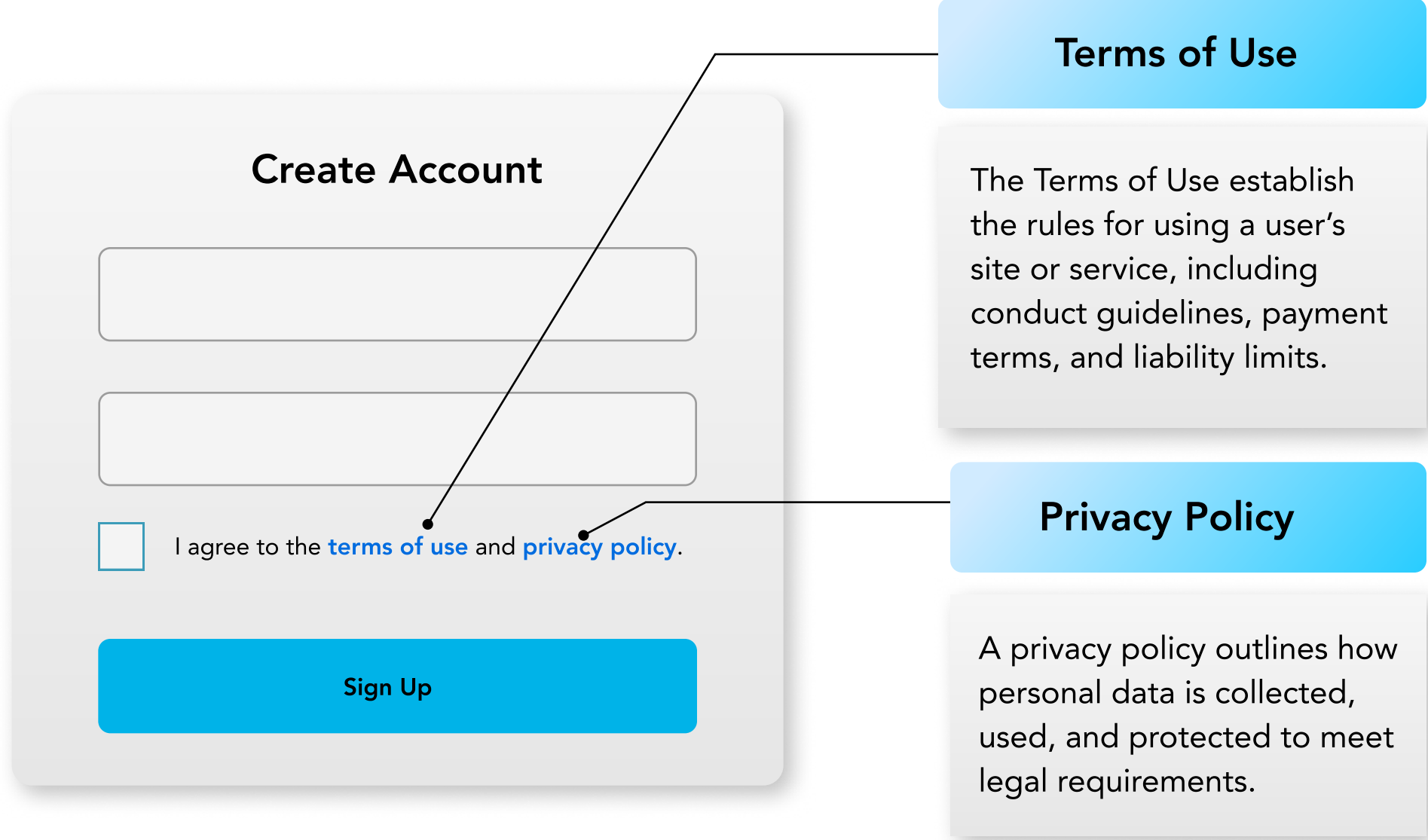
Through a speculative, futuristic lens where Brain-Computer Interface (BCI) combines continuous cognitive data capture and biomedical operations, this project uses semiotic and critical communication to emphasize the lack of informed consent necessary in digital data transparency.

**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.



Clickwrap Agreement

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 Yarovsky

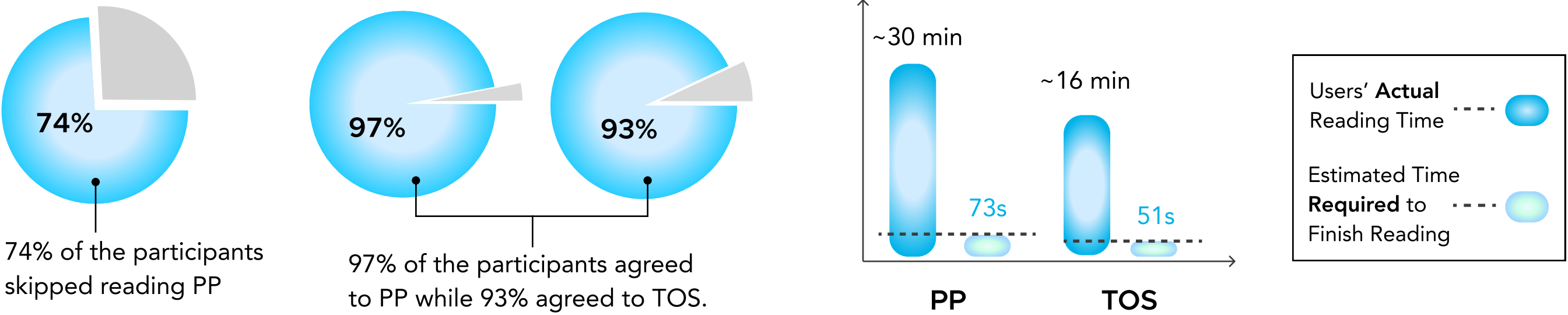


This art installation visualizes the **lengthy** terms of service of online services and **how long it takes** to read them, Their massive scale which is generally overlooked through the click of a button.

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."**

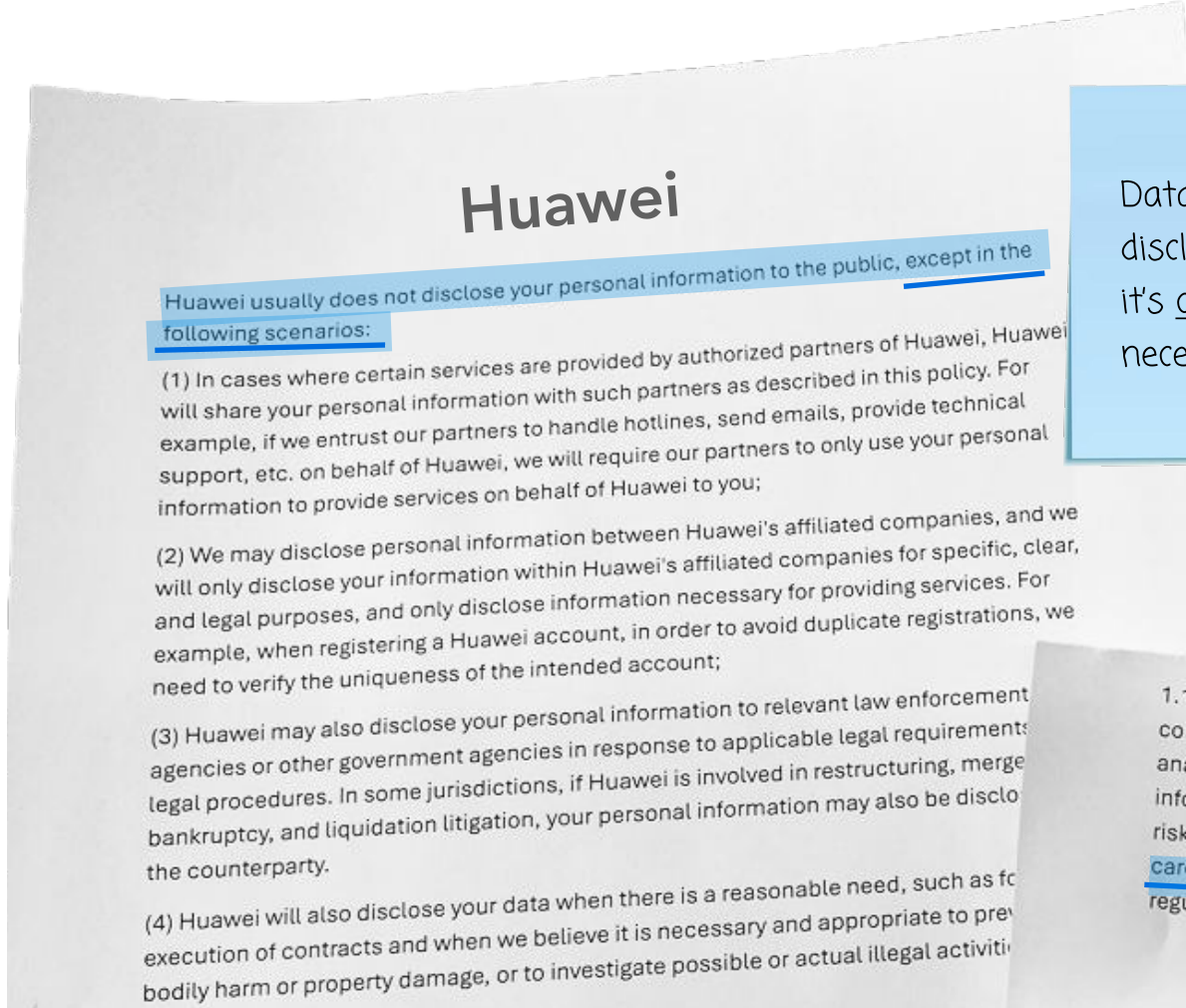
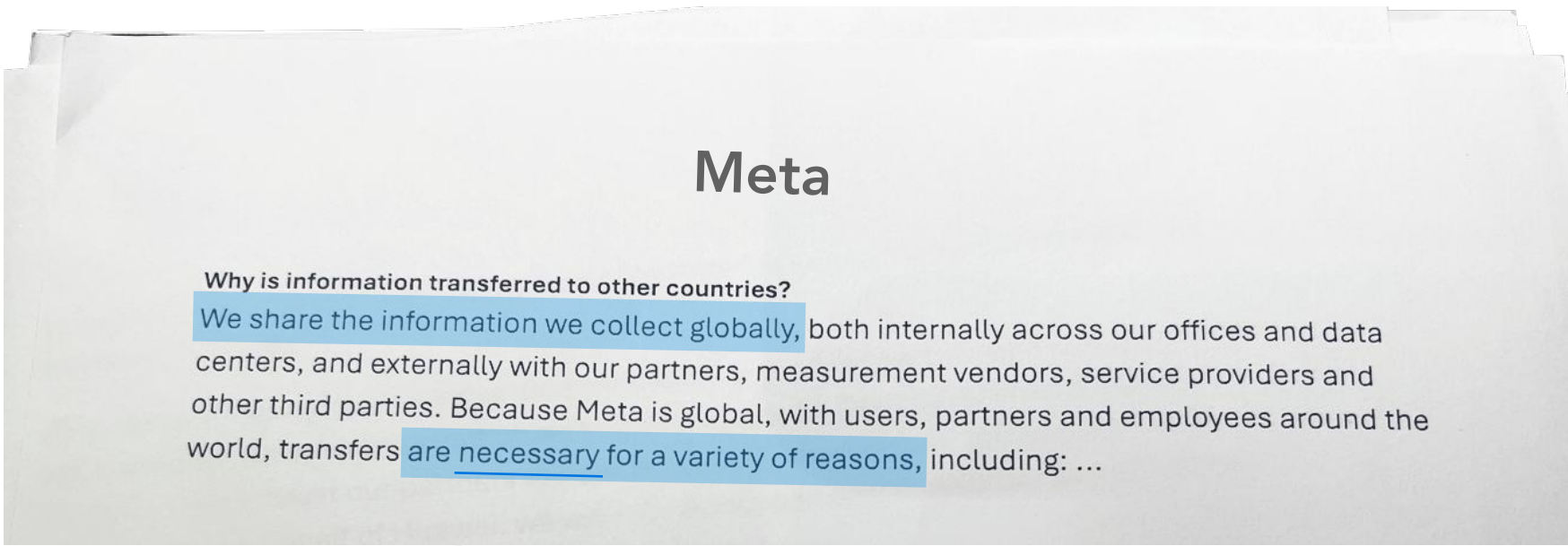
**"... in exchange for service, all users of this site agree to immediately assign their first-born child to NameDrop, Inc."**

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.

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



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

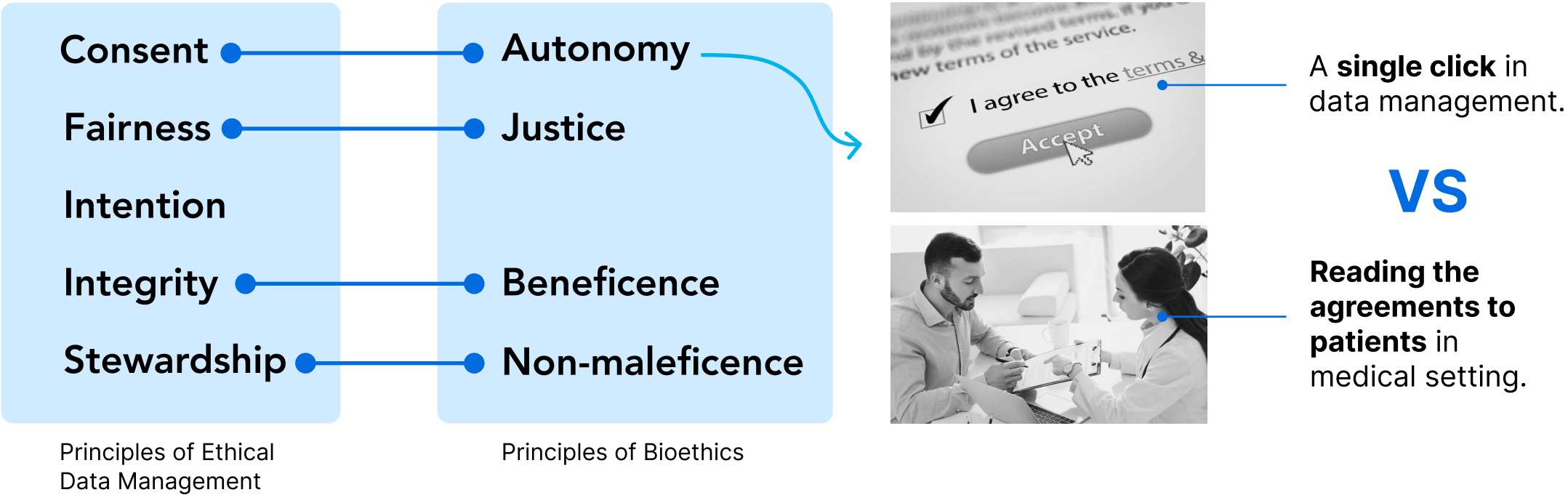
How can users be "reminded" to disclose carefully, if this term is buried deep in the lengthy texts?

Even "withdraw" can't guarantee protection of privacy. Permanent disclose of info with a single click

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.

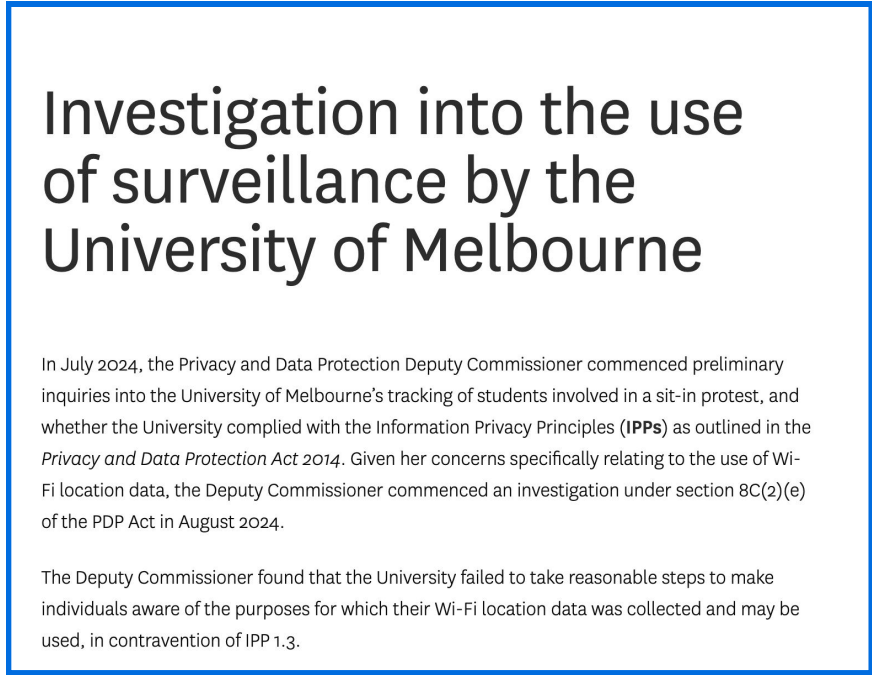
DATA ETHICS VS BIOETHICS

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

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



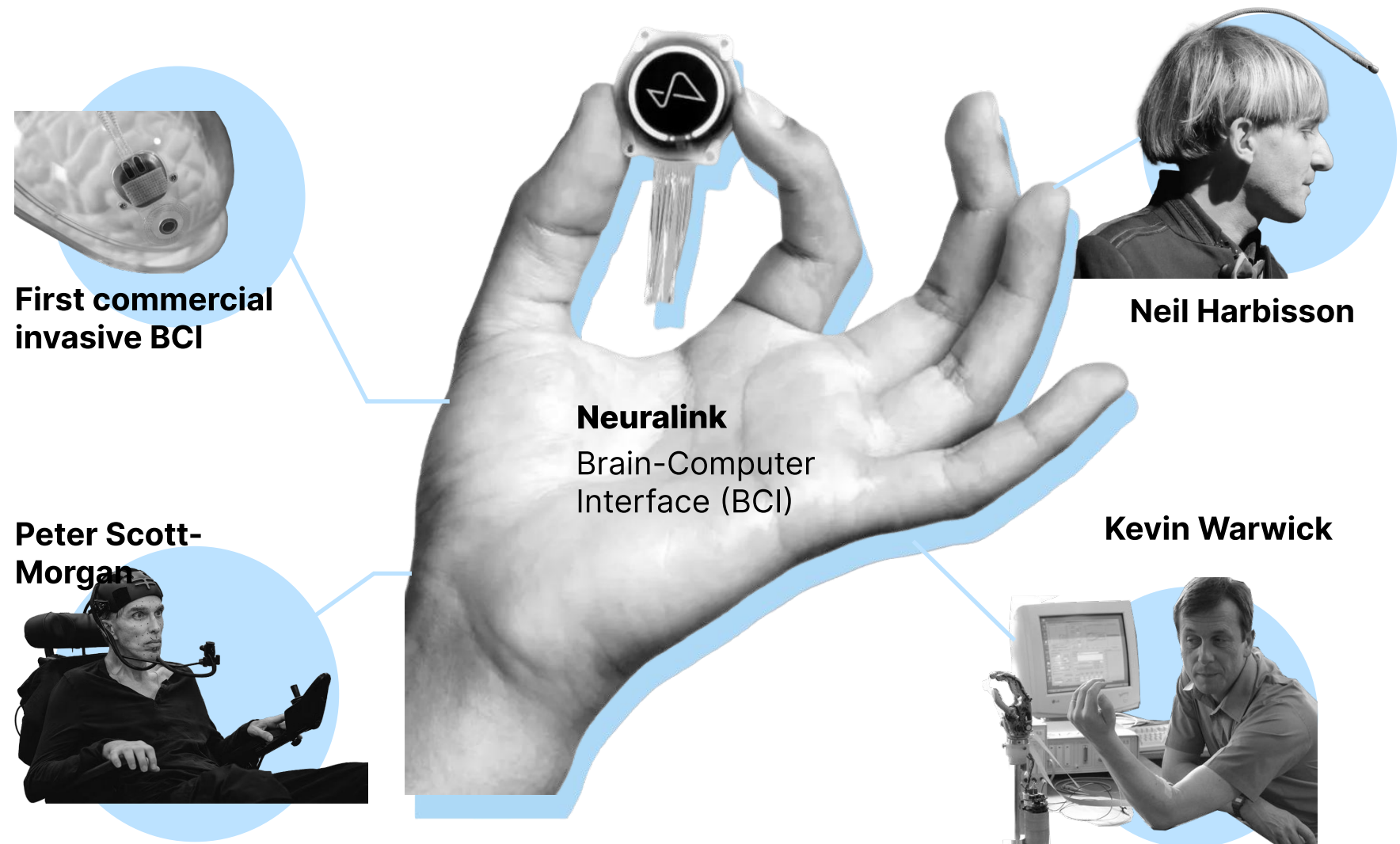
Data breach of users’ account and passwords on social media.



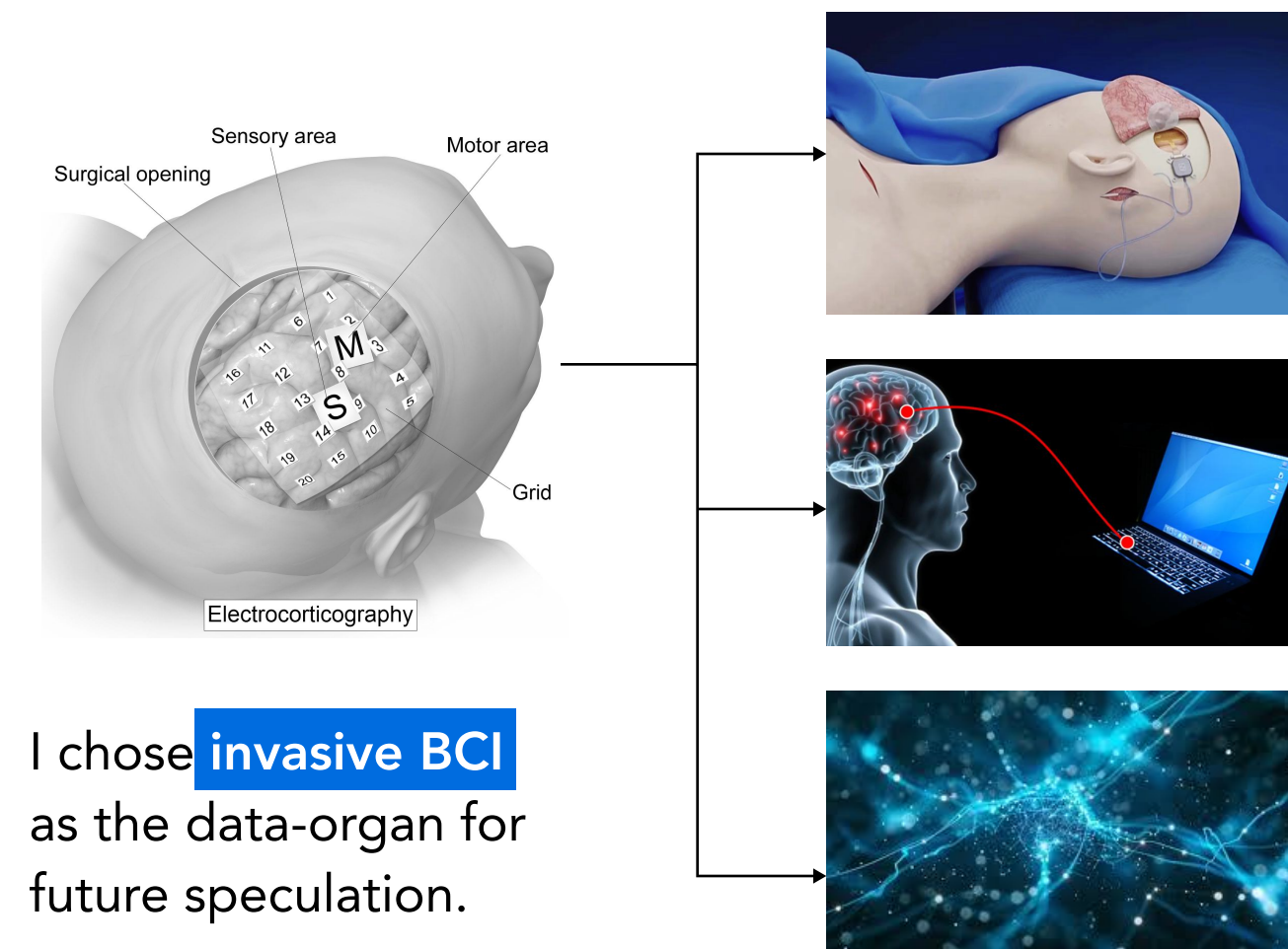
Despite frequent news about data privacy harms, people still unknowingly share sensitive information with serious long-term risks.

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.



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?*



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

REASONS:

**Disturbing:**

Dissonance from the invasive surgery.

**Trendy & High-Tech:**

BCI is a big trend in tech corporations.

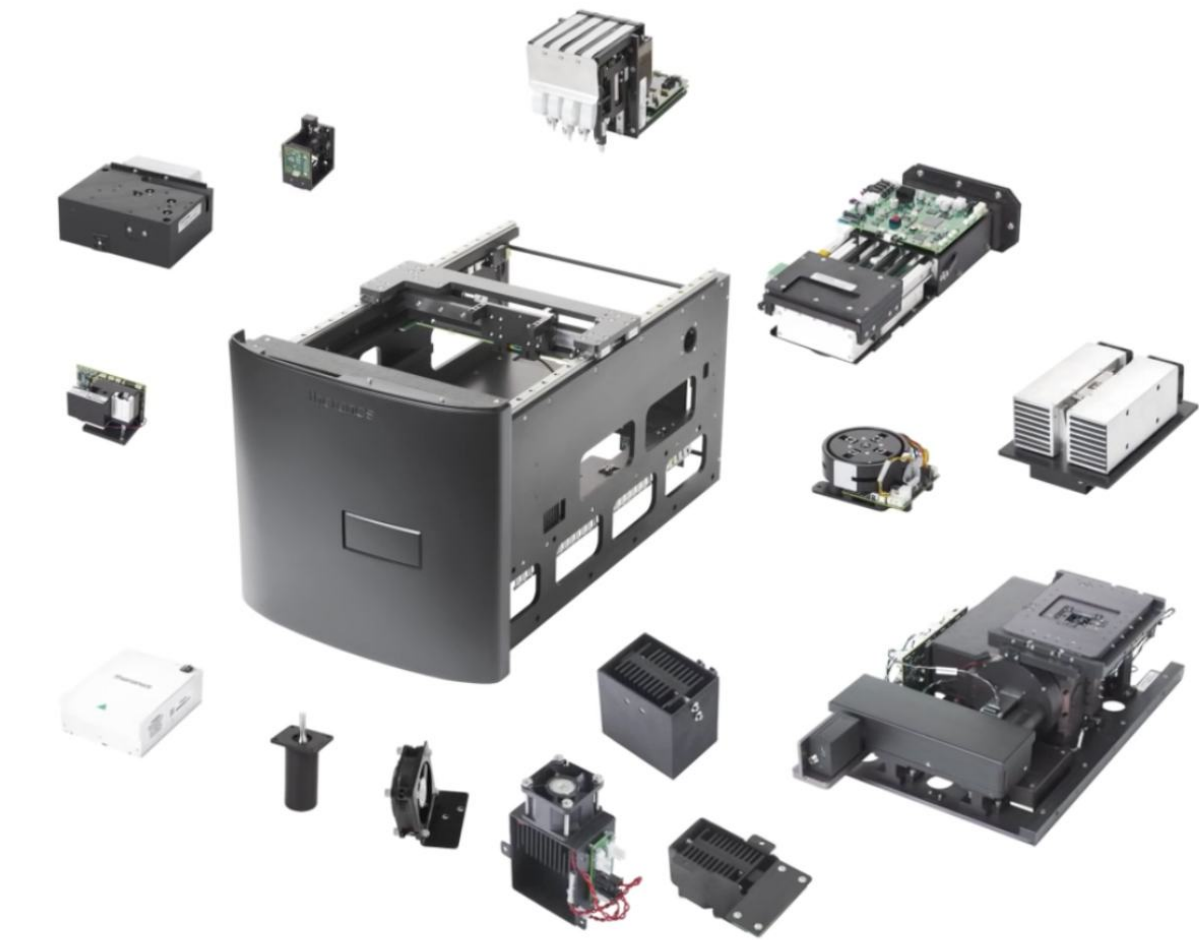
**Body & Data:**

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

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**

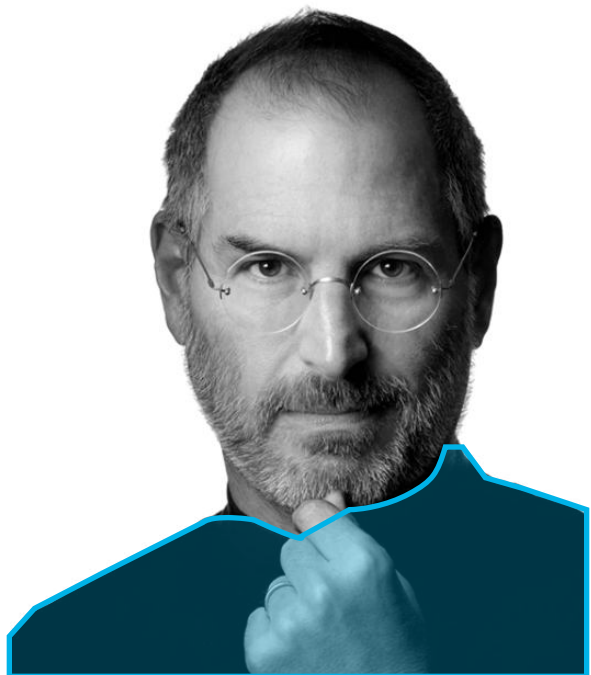
She increases her company's credibility by showing the efforts they put into the machine.

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

Case Study

“Saliva Bar” by Lauren McCarthy

Space

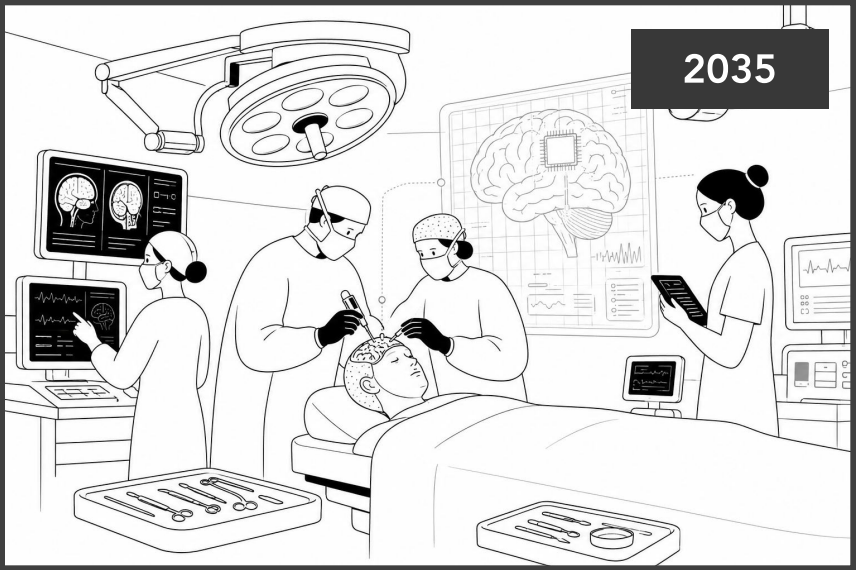
Documents:  
Terms, instructions.

Products that  
support this  
alternative reality

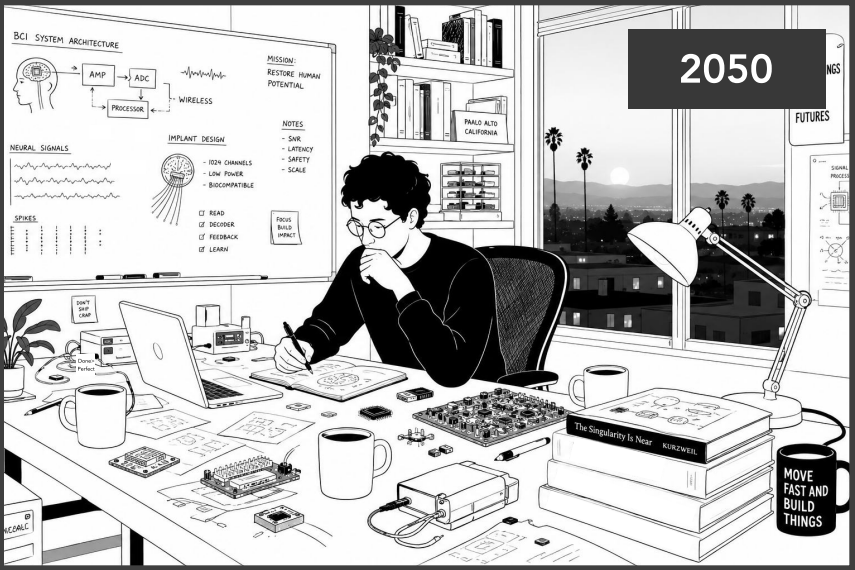
Performance &  
Audience engagement



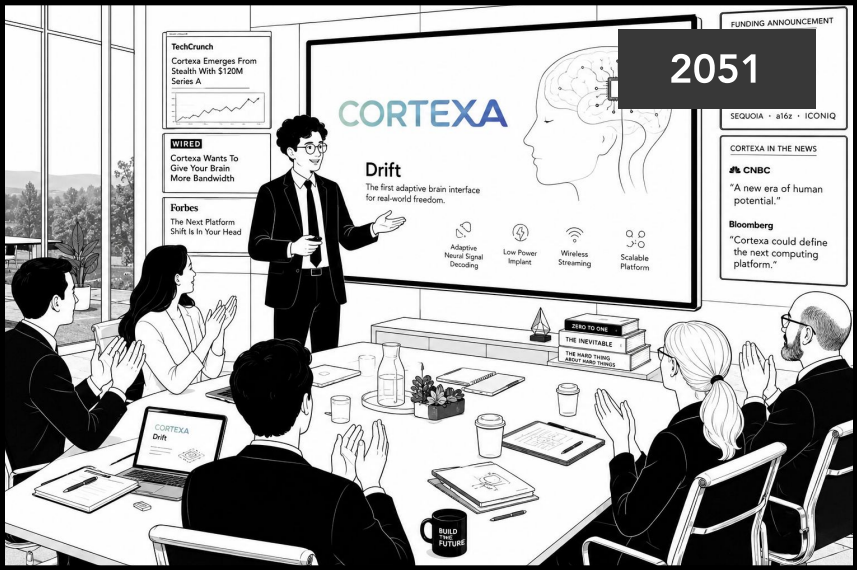
DESIGN CONCEPT



Commercial invasive BCIs technology matures, becoming common medical devices.



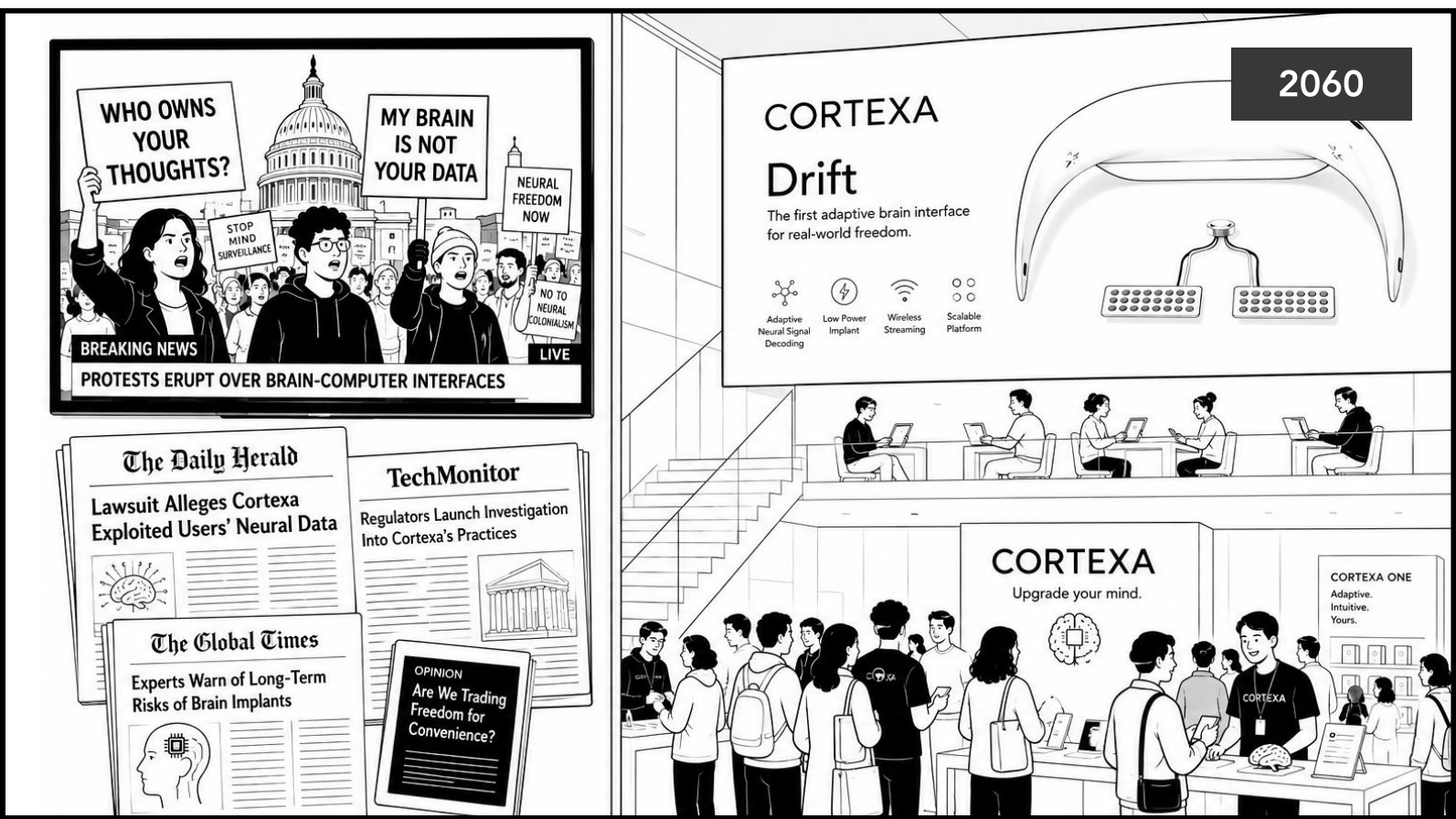
A PhD dropout from a California university founds Cortexa and develops the first prototype of Drift, envisioning a future beyond smartphones.



Cortexa raises \$20 million in seed funding and eventually secures \$2–3 billion to develop its BCI ecosystem.



Cortexa launches Drift and opens its first Cortexa Store, transforming BCI implant from a medical procedure into a lifestyle experience completed through a clickwrap agreement.



As Cortexa grows rapidly, concerns over cognitive data privacy and informed consent lead to debates. However, users have become dependent on the technology. Neural data extraction becomes accepted as part of normal digital life.

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” resembles the consumer tech language, 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

CORTEXA

Store Operations Buy

Browse Products

Website

A 3D rendering of the Drift (BCI Product) device. It is a curved, grey, horn-like structure with a white interior. The device is shown from a side profile, with its two curved ends pointing downwards. It has a smooth, matte finish and a few small, dark, circular details on its surface.

Drift (BCI Product)

An exploded view diagram of the Drift device components. The components are labeled: MOUNTING BRACKET, FASTENERS/SCREW, PROCESSOR BOARD, RECHARGEABLE BATTERY, OUTER FRAME, SHIELDED COIL, PORT CONNECTOR, NEURAL INTERFACE HUB, ELECTRODE ARRAYS, and LED POWER INDICATOR. The diagram shows how these components fit together to form the device. A note at the bottom right says "COMPONENTS ENLARGED FOR CLARITY".

Diagrams

A product launch video showing a woman in a grey blazer and black skirt standing in a futuristic, high-tech environment. She is gesturing towards a large, curved, grey structure that resembles the Drift device. The background features a large screen displaying a cityscape at night, and there are various futuristic elements like floating screens and lights.

Product Launch Video

DESIGN SKETCHING PROCESS

Website wireframe

A hand-drawn website wireframe for Cortexa. It shows several pages: a Landing page with a 'Store Appointment Press' button and a 'product image' placeholder; a 'Cortexa Stores' page with a map and a 'Time' slot selector; a 'Cortexa Pro B' product page with a 'Buy...' button and 'Product Info' section; and a 'Press' page with a grid of images. There are also sections for 'Similar Products' and 'FAQs'. The wireframe is drawn in black ink on a white background.

Reference: Apple's Website

A screenshot of Apple's website showing the iPhone lineup. The top section is 'Stores near you' with three store locations: Apple Valley Fair, Apple Park Visitor Center, and Apple Oakridge. Below this is 'Explore the lineup' with four iPhone models: iPhone 17 Pro, iPhone Air, iPhone 17, and iPhone. Each model has a 'Learn more' and 'Buy' button. The bottom section shows the iPhone Air product page with a large image of the phone and a 'Storage' selector.

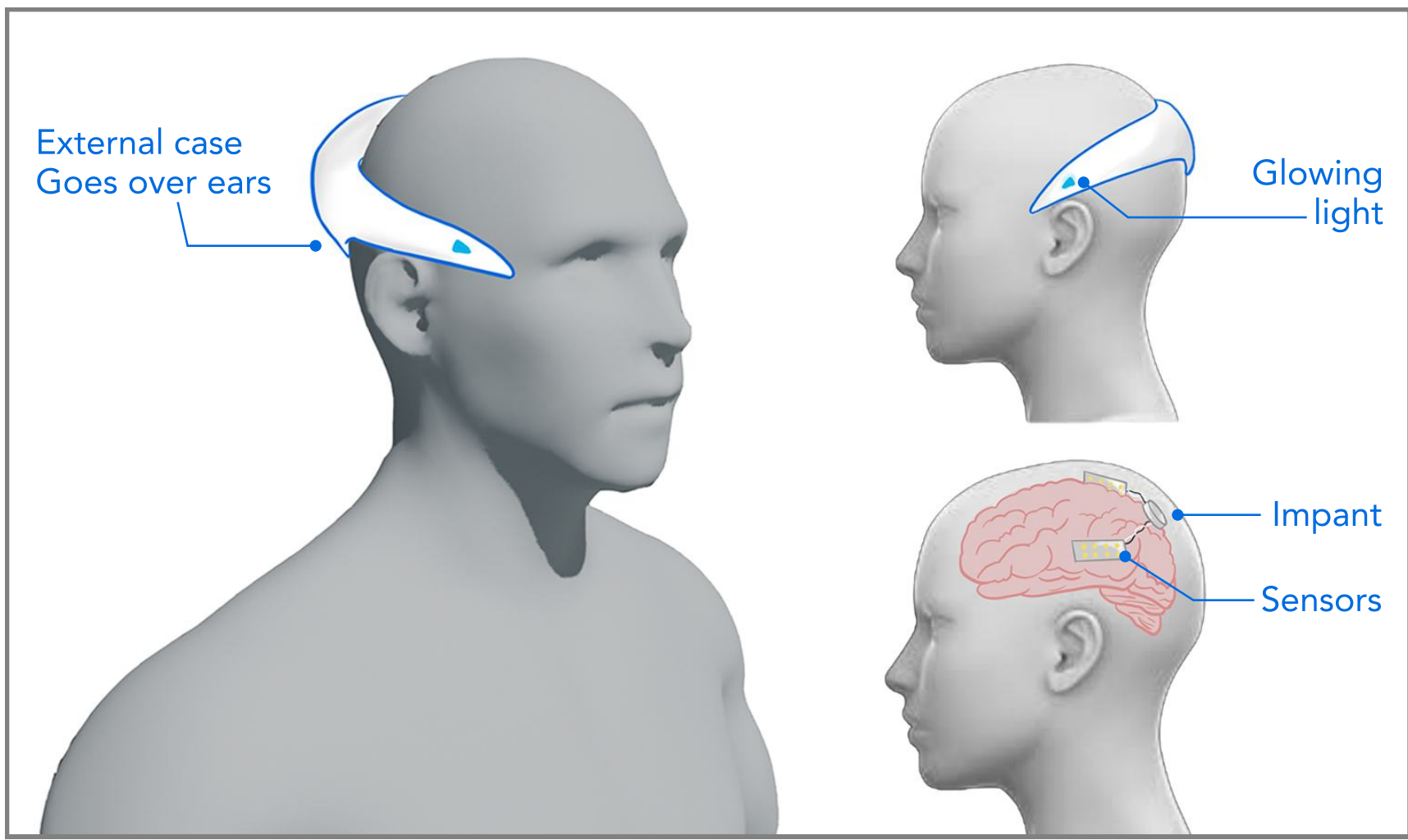
Cortexa Store floor plan

A floor plan diagram of the Cortexa Store. The 1st floor includes a 'Support Desk', 'Products Shelf', 'Rest Area', and 'Storage'. The 2nd floor includes a 'Checkout' area, 'Operation Room', and 'Stairs'. The diagram shows the layout of the store, including the location of the support desk, product shelves, rest area, storage, checkout, operation room, and stairs. The 1st floor is labeled '1st floor' and the 2nd floor is labeled '2nd floor'.

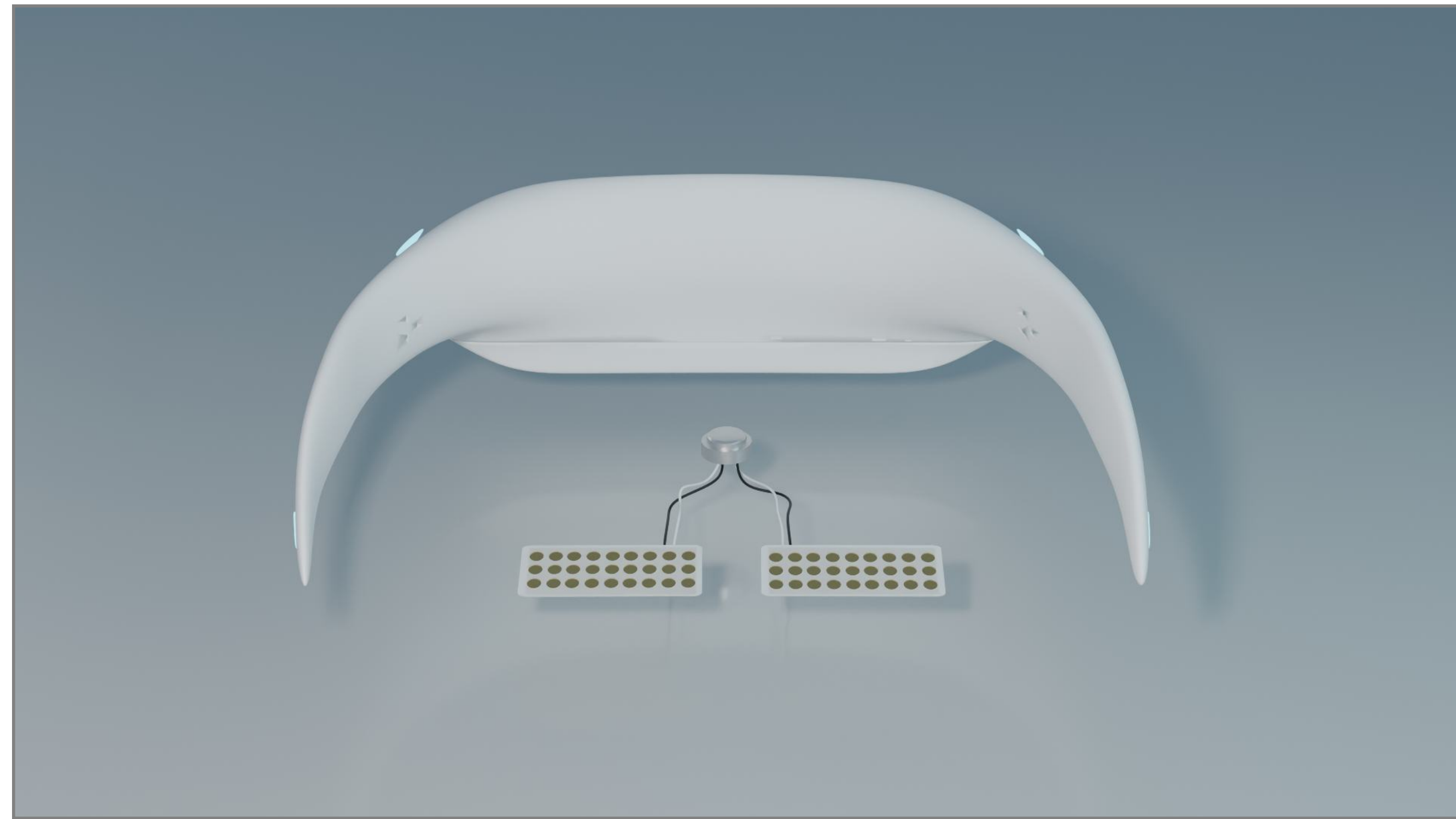
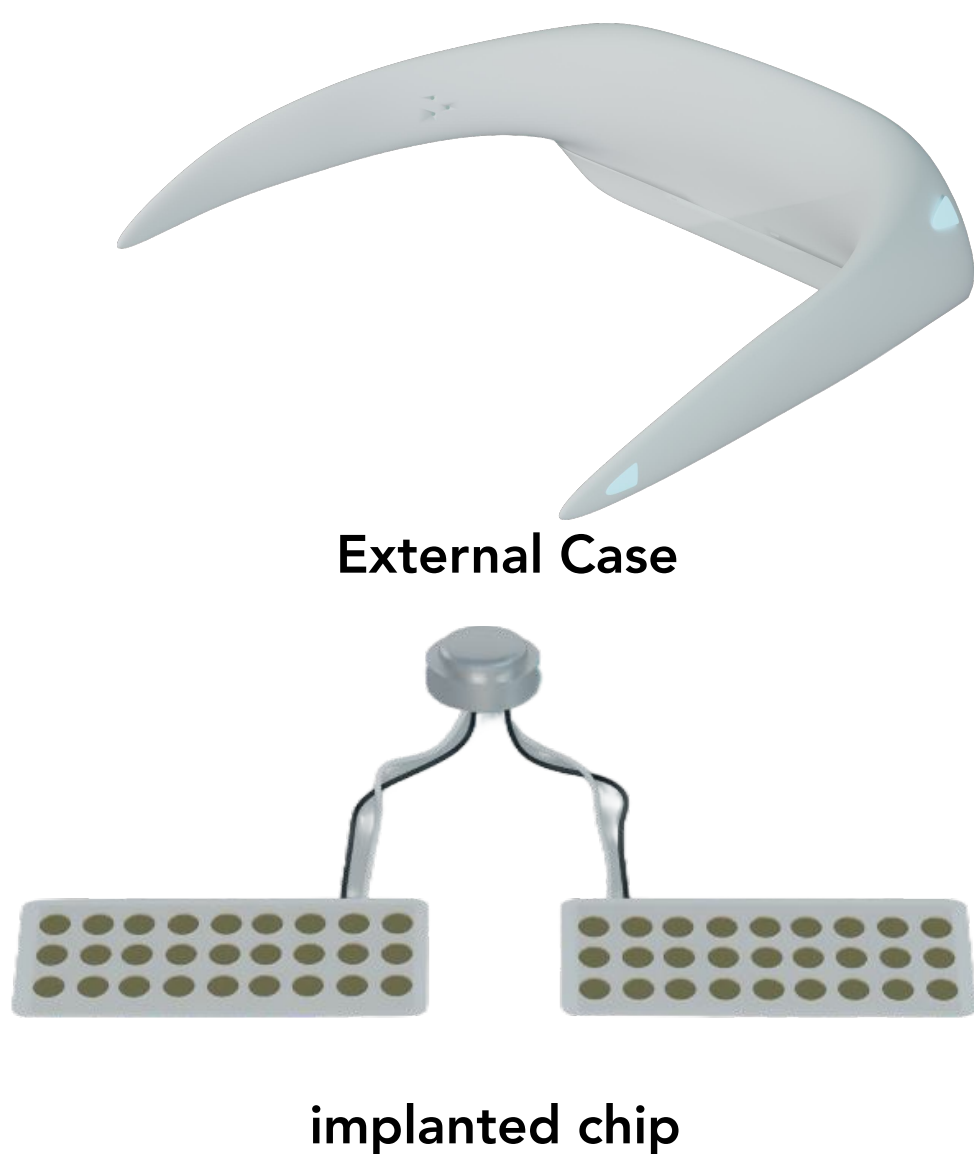
# Artifacts Design Outcome

## BCI "DRIFT" DESIGN

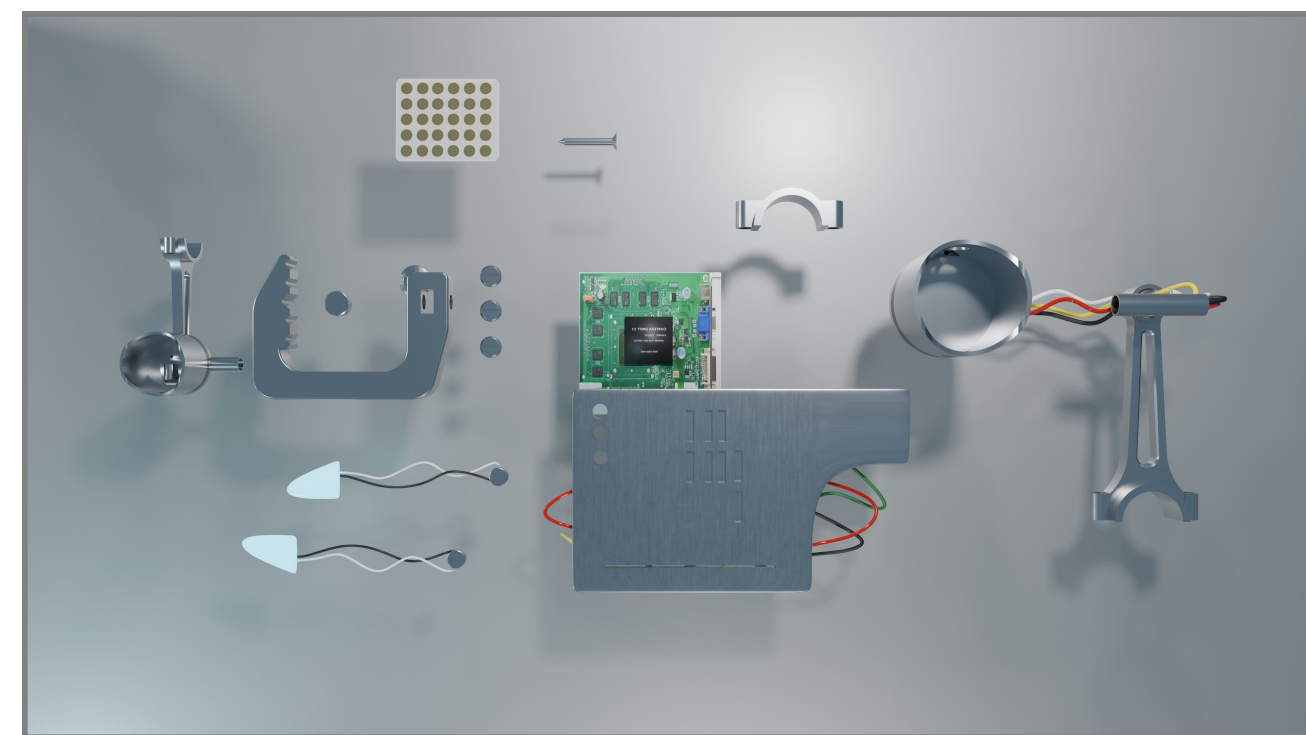
Design idea by Micah Davis



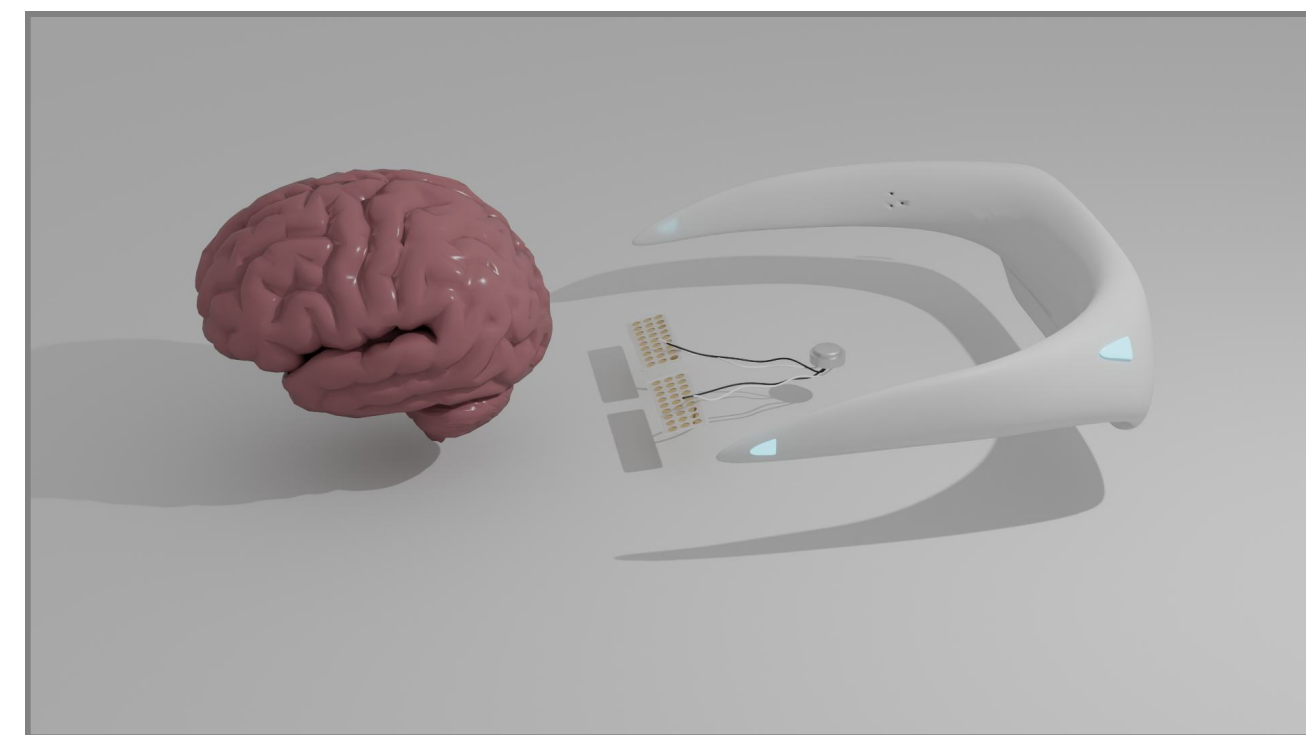
Drift is a compact **implanted chip** partially embedded beneath the skin, with a **visible external casing** for communication with other devices. Materially, Drift adopts a sleek combination of glass and metal commonly associated with consumer technology products.



3D Render



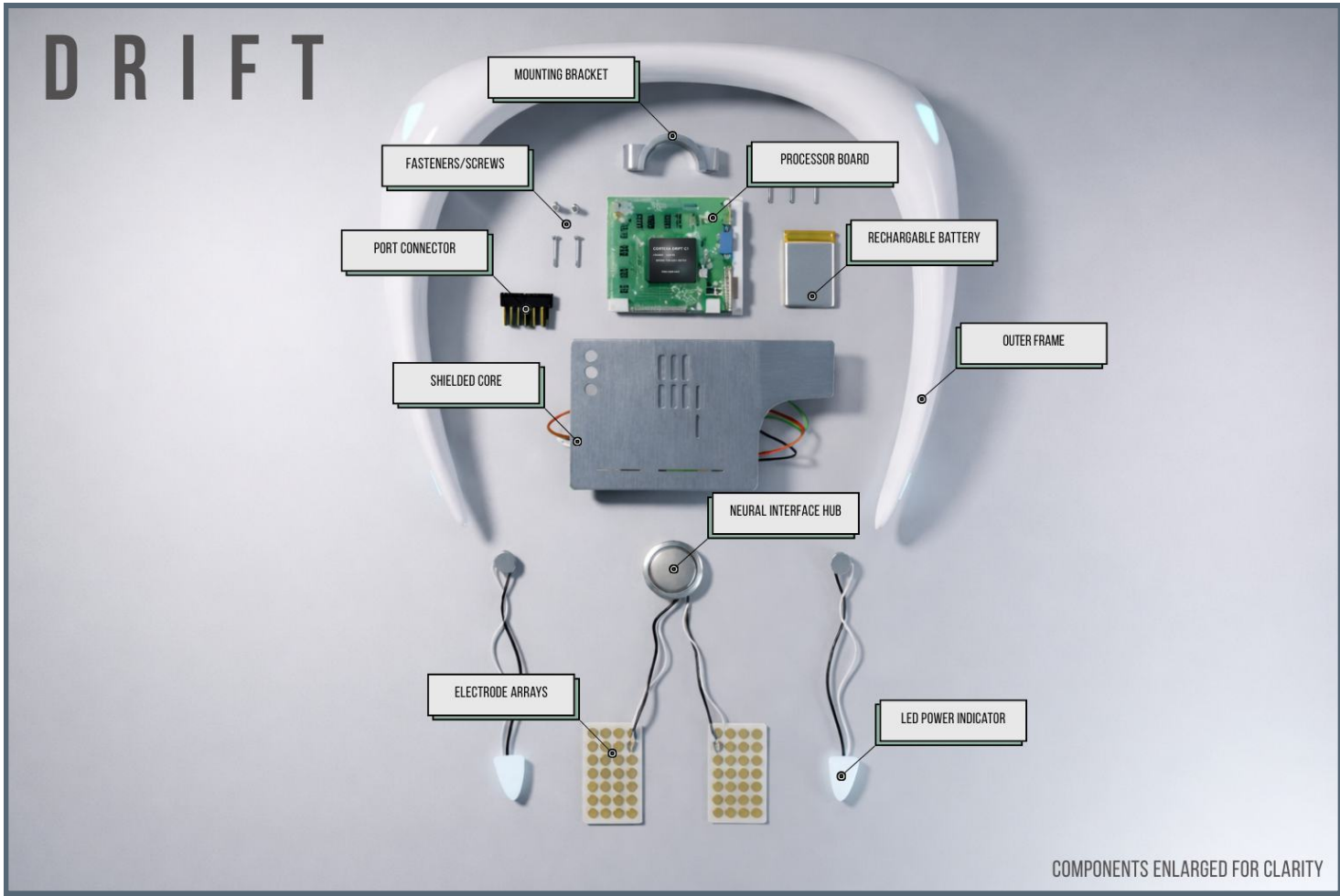
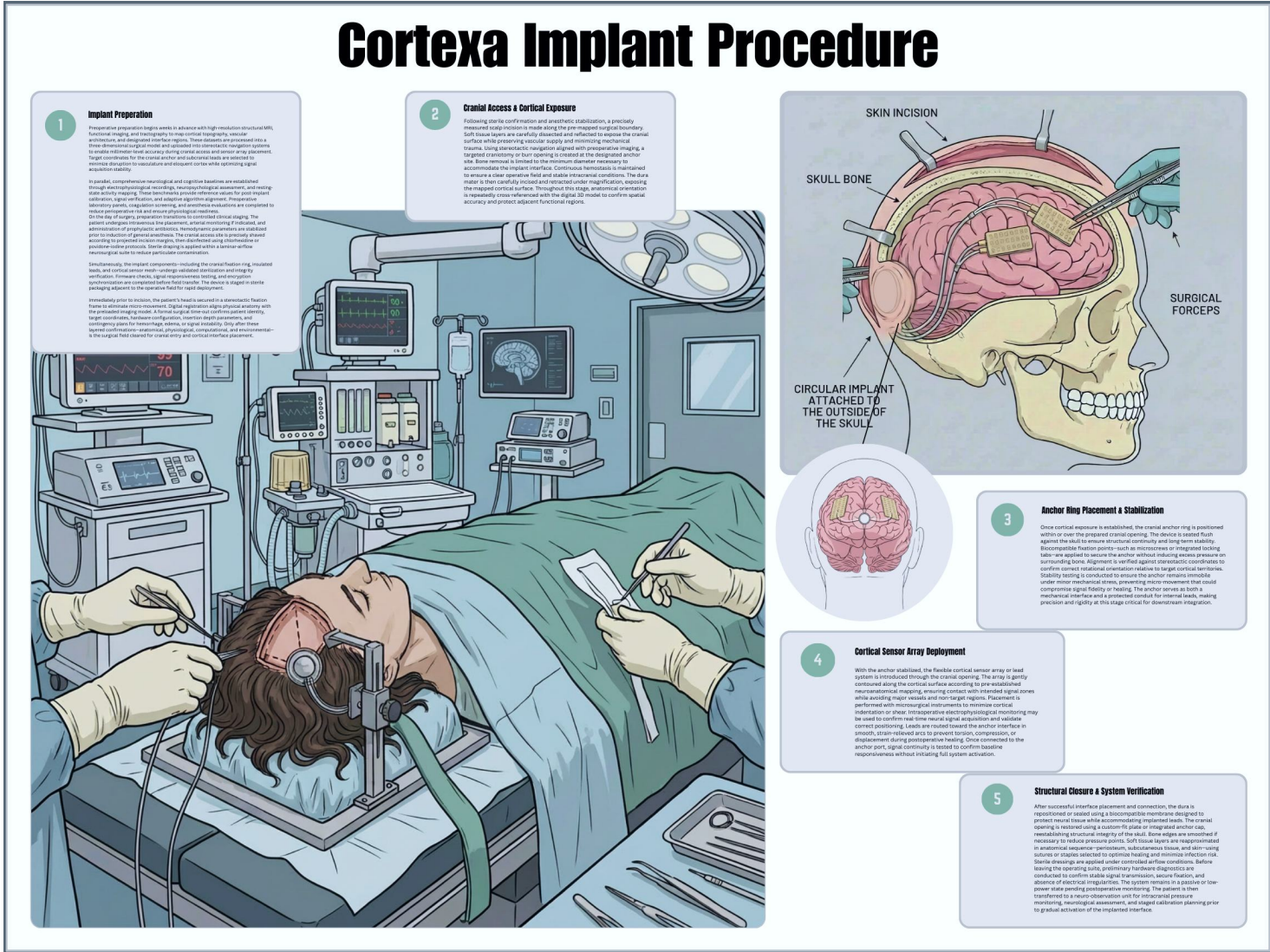
Separated parts



Conceptual demonstration of functioning process

DIAGRAMS

Designed by Micah Davis



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

TERMS OF USE AND PRIVACY POLICY

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.

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.

TERMS OF USE AND PRIVACY POLICY

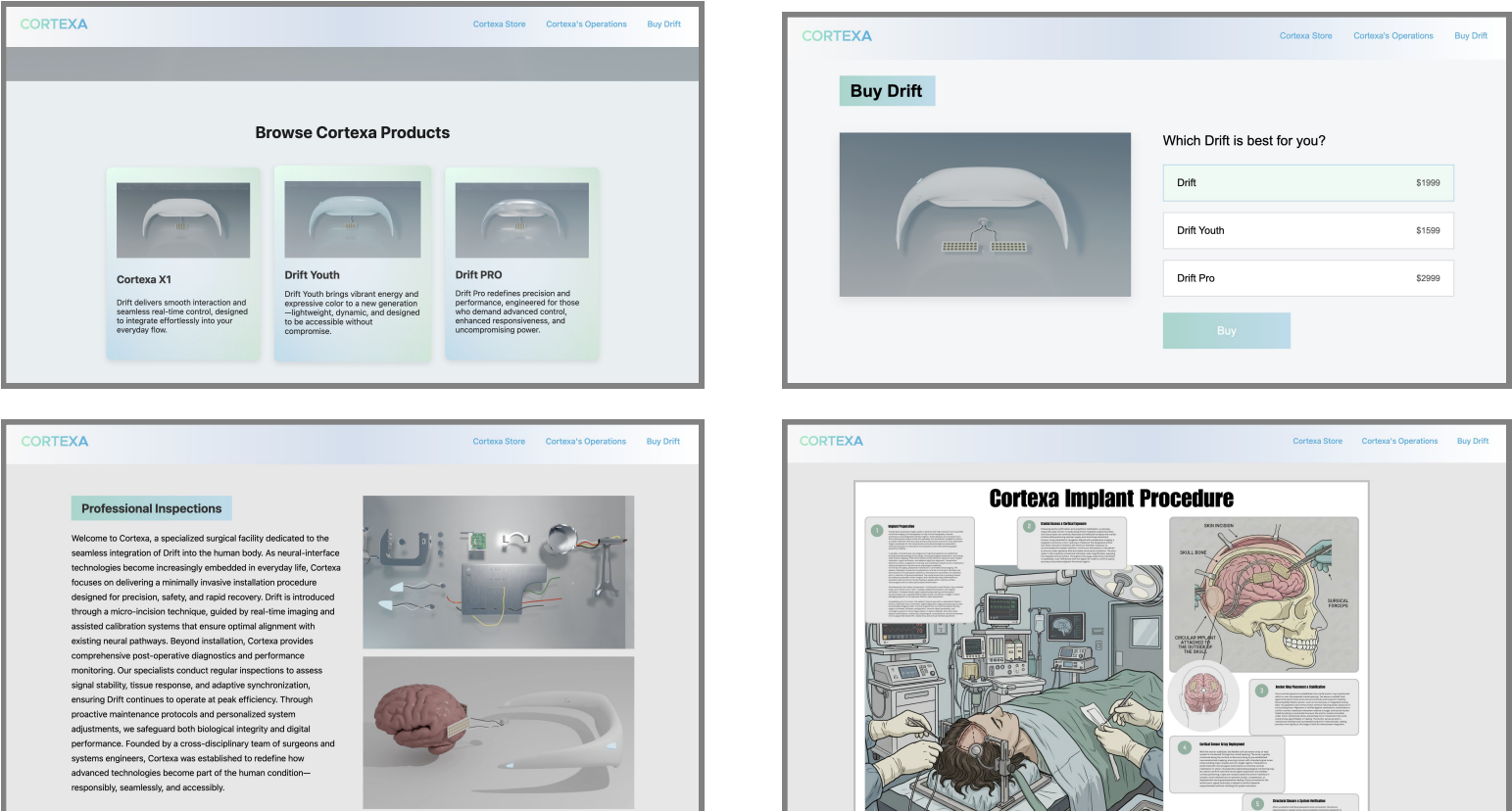


Click to View Full Version

Frequently Asked Questions:

- 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.
- 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.
- 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.
- 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.
- 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.

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



# Product Launch Video

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



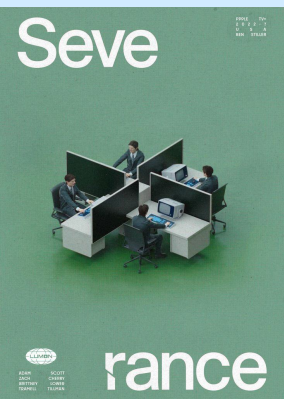
uncanny valley smile



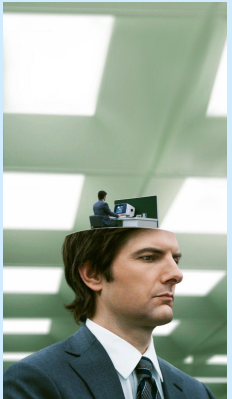
disturbing invasive operation



repetitive pattern conceptual image



dim lighting & blurry filter





Earnest tech company  
(Reference: Apple)

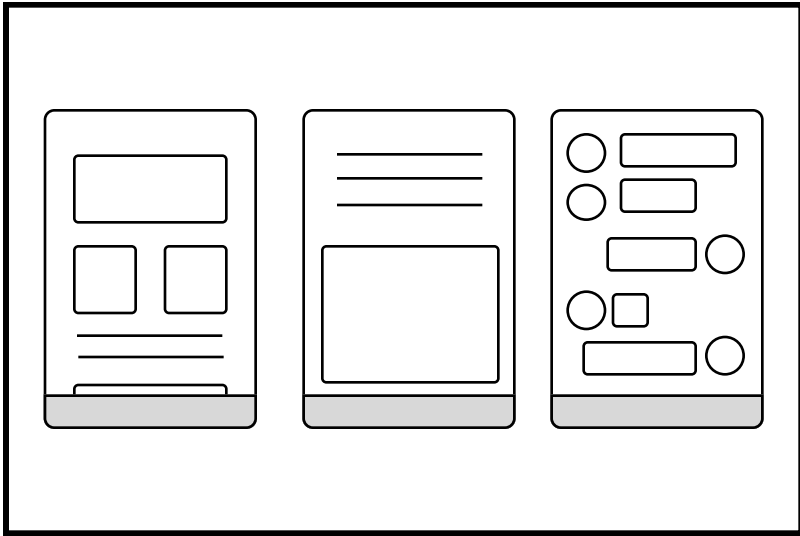
Aims for a balance between the two.

Disturbing visuals with distance from reality

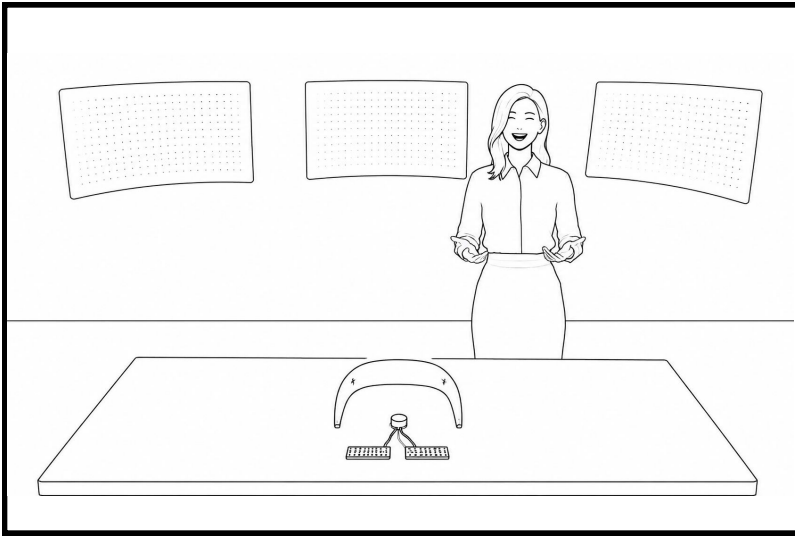
## VIDEO STORYBOARD

CORTEXA

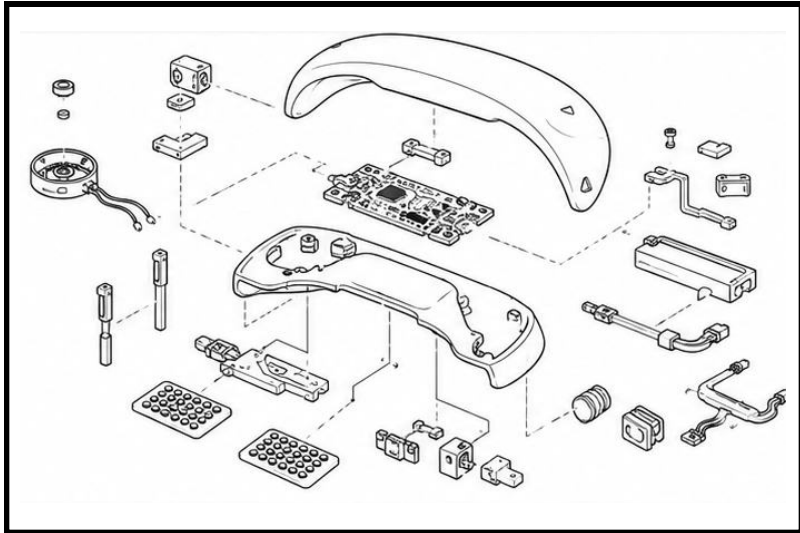
[ Logo animation with high tech sound effects ]



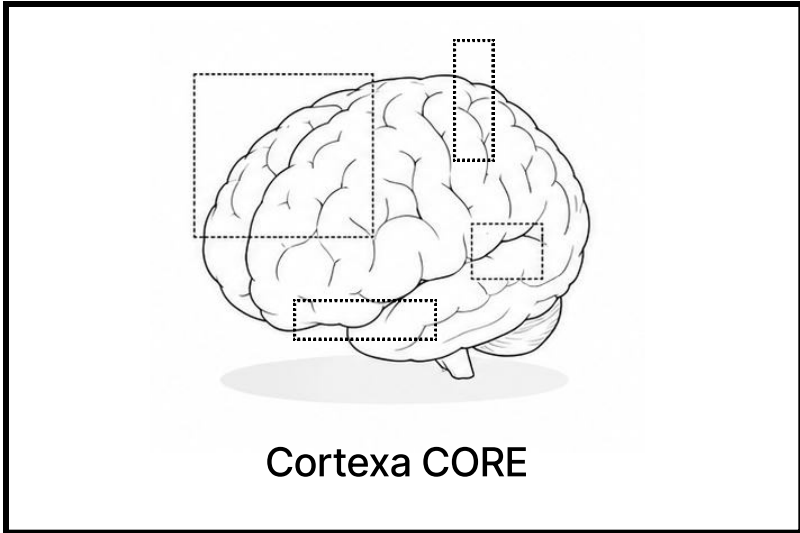
Have you ever felt the friction of navigating your daily life through screens—switching between apps, constantly reaching for your phone?



Today, we introduce Cortexa's newest design: Drift. With just a single focused intent, you can access any information online.



All of this is made possible through Cortexa's proprietary brain-computer interface technology.

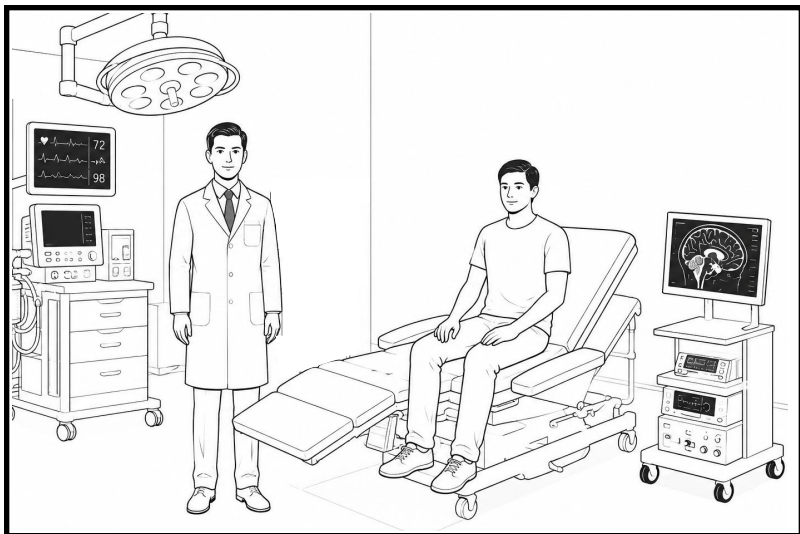


Cortexa CORE

Supported by our self-developed AI model, Cortexa Core, neural signals are translated into machine-readable intent.



Collaborating with leading medical research teams, Cortexa spent three years in research and development.



With a minimally invasive operation procedure within 30 minutes, Drift will finish installing.



We also introduce a new concept for the Cortexa Store. Purchase, learning, installation, all in one place.

"Cortexa Core" refers to the distributed computational systems, including automated decision-making frameworks, responsible for operating, maintaining, and improving the Services.

**Article 2: Eligibility, Access, and System Integrity**

Access to Cortexa Services requires successful completion of the Cortexa Procedure, a biomedical and computational intervention designed to establish a persistent neural interface. *The Procedure is irreversible.*

By proceeding, you acknowledge that *removal, deactivation, or interruption of Drift may result in cognitive disruption, perceptual instability, loss of access to stored or integrated data, or diminished system compatibility. Cortexa is not responsible for outcomes resulting from attempts to alter or circumvent Drift.*

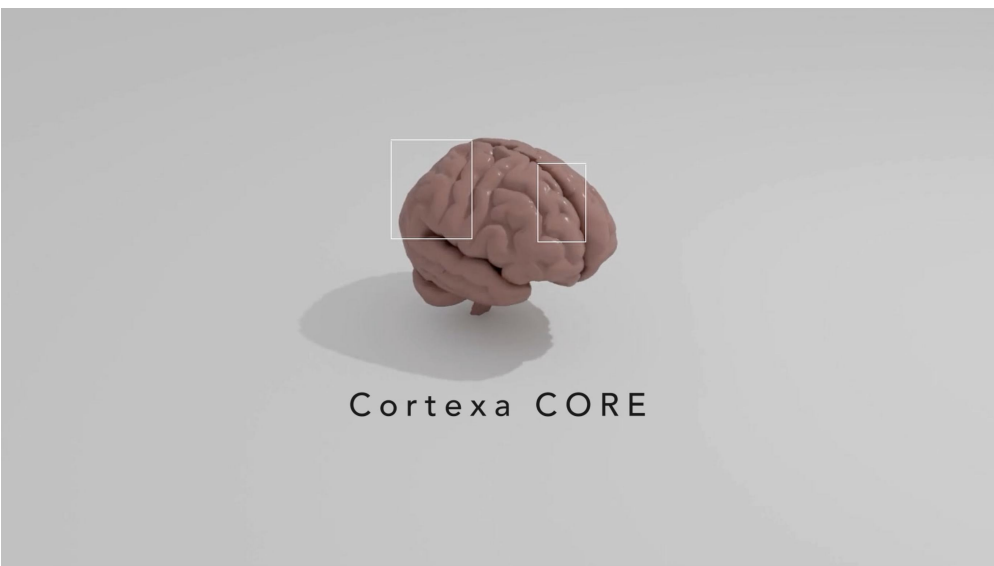
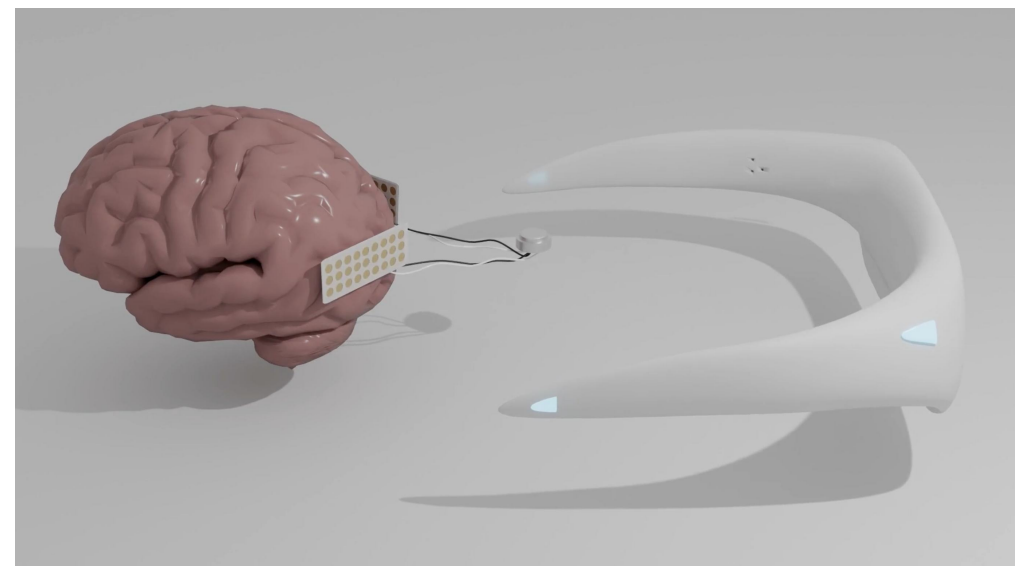
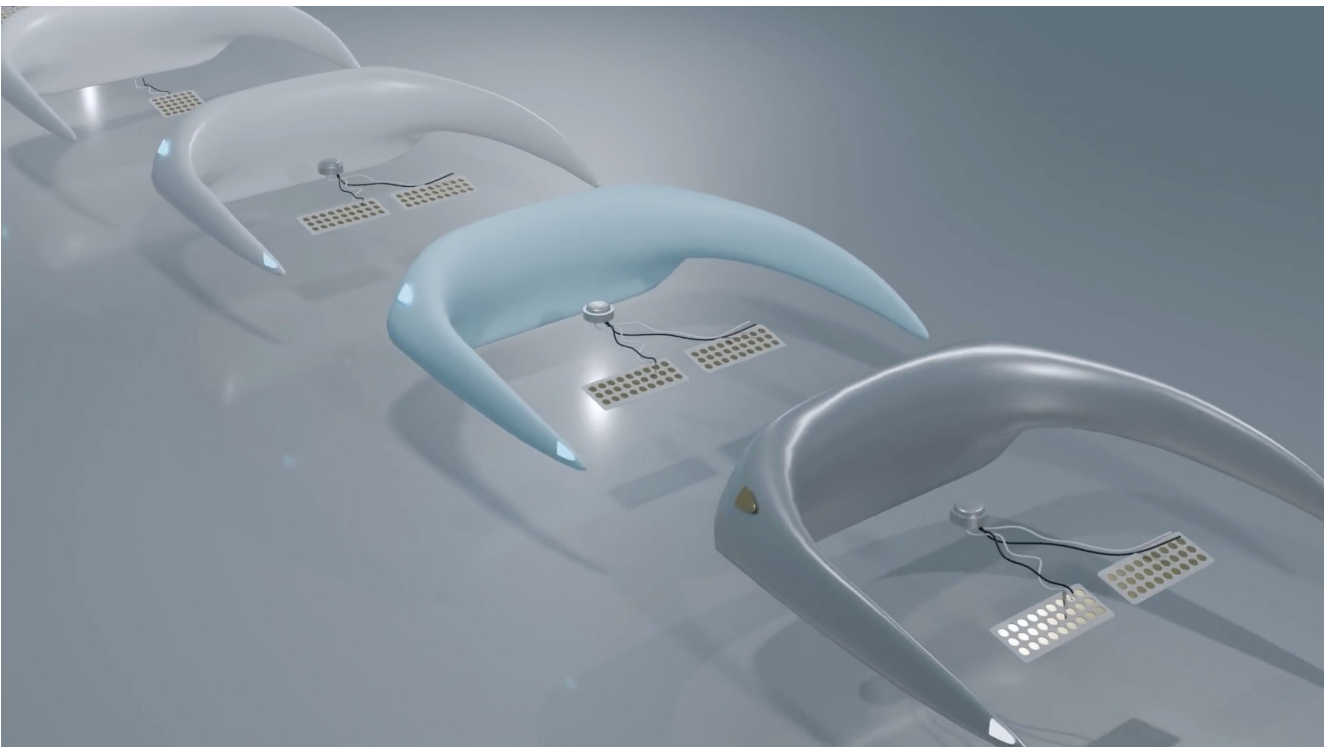
You are responsible for ensuring that all information associated with your account, including biometric and cognitive identifiers, remains accurate and current. Discrepancies or anomalies may trigger automated system responses intended to preserve safety and continuity.

Cortexa reserves the right to deny, suspend, or revoke access based on compatibility assessments, system requirements, legal obligations, or operational necessity.

After accepting our Terms of Use and Privacy Policy, you are ready to begin a smoother experience of navigating your digital life.

SELECTED FRAMES

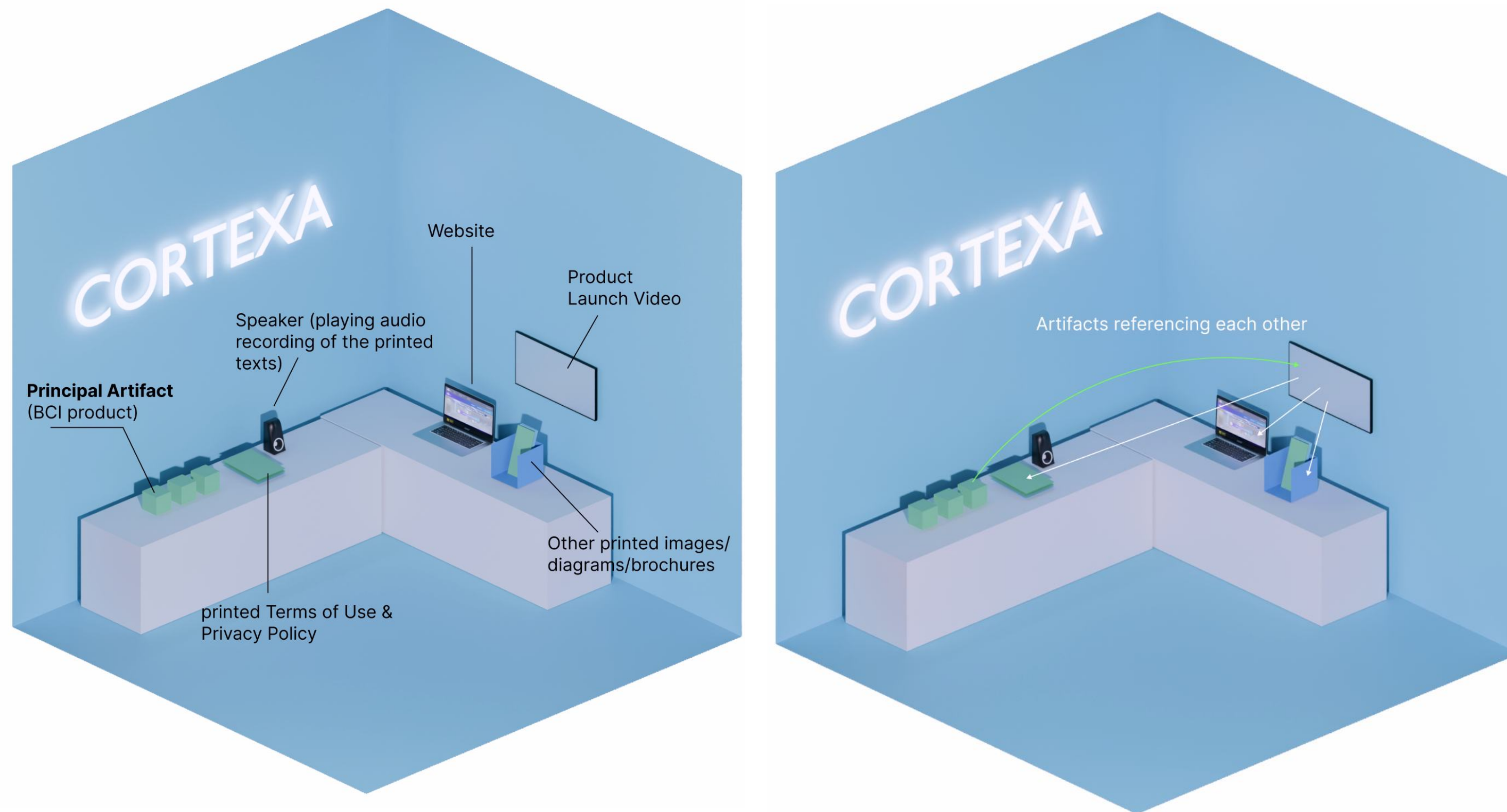
Video Link: <https://vimeo.com/1170742212?share=copy>



## 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



