UI/UX
ASSIGNMENT 1

Noise and Distraction
(Office Workspace)

-Shravani Jogi

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1 Secondary Research

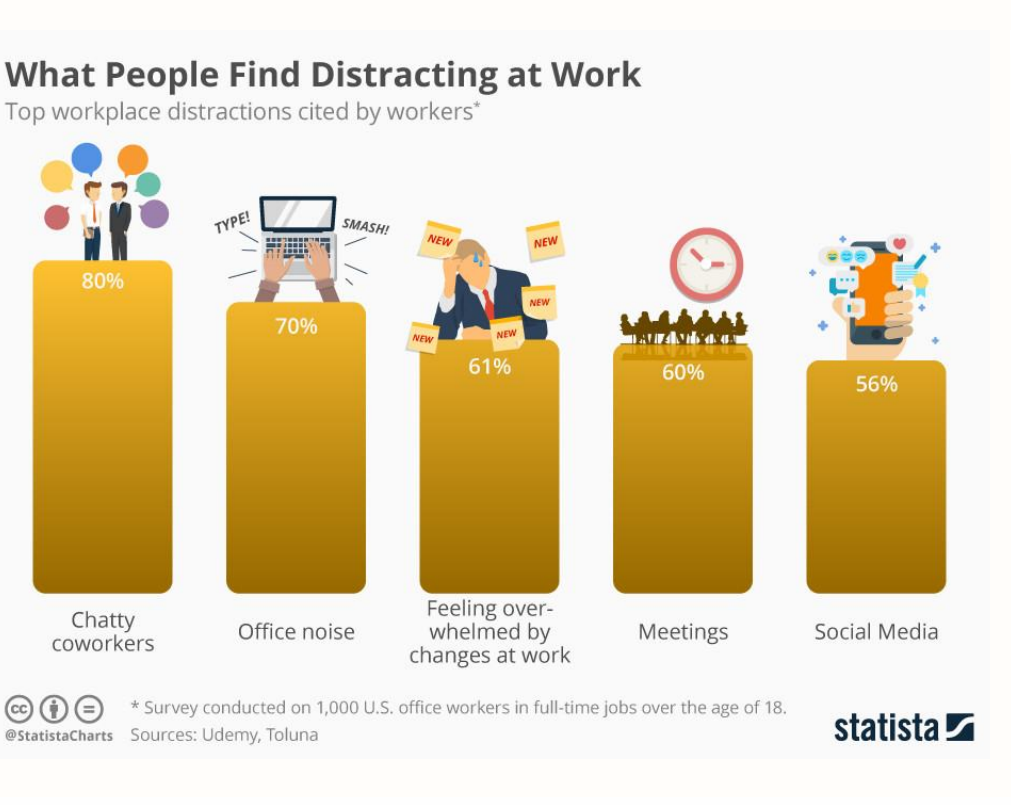
On office workspace. Then narrowed down to NOISE AND DISTRACTION IN OFFICE WORKSPACE.

5 Major Problems associated with coworking spaces a

1. Noise and Distractions
2. Lack of Privacy
3. Limited Amenities
4. Community Building and Networking
5. Scalability and Flexibility

1. Noise and Distractions

Problem: One common issue in coworking spaces is the presence of noise and distractions, which can disrupt concentration and productivity.

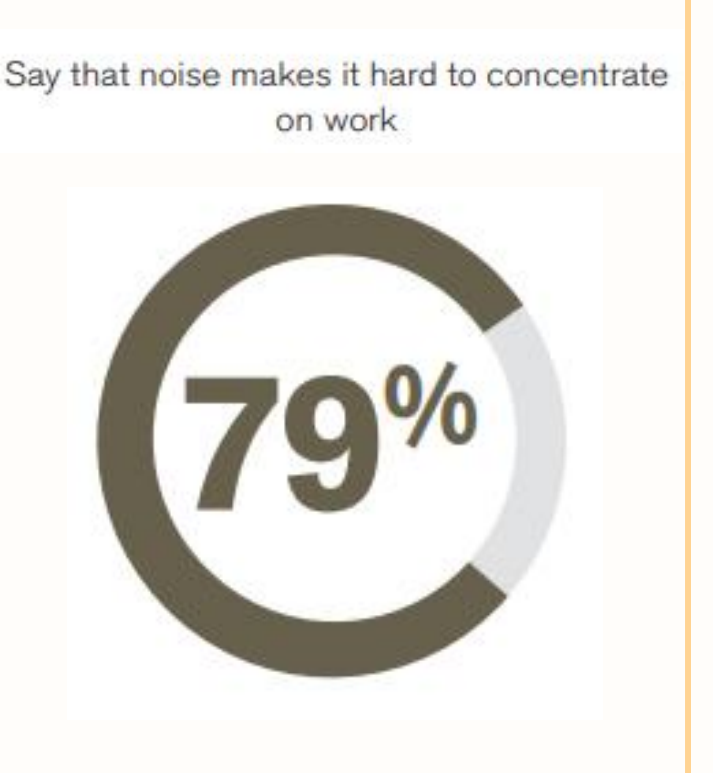


What People Find Distracting at Work

Top workplace distractions cited by workers*

* Survey conducted on 1,000 U.S. office workers in full-time jobs over the age of 18.
Sources: Udemy, Toluna
@StatistaCharts

Say that noise makes it hard to concentrate on work



What sources of noise do you notice in your workplace? In-person conversations and phone calls are the top 2 sources of office noise. Add to that the sounds of mechanical equipment like printers and HVAC systems, ringtones, and text alerts, and suddenly, background noise becomes a significant distraction. This distraction leads to stress and reduced productivity.

Workplaces that manage noise levels can significantly improve employee well-being and productivity.

How Noise Affects Well-being, Satisfaction, and Productivity

The impact of workplace noise goes beyond annoyance. It negatively affects cardiovascular and mental health, as well as cognitive tasks like reading comprehension and proofreading.

Noise also plays a major role in employees' satisfaction with their workplace environment. One study of 50,000 workers in 351 buildings revealed that the lack of speech privacy—a key contributor to noise—was the single greatest source of dissatisfaction.

Almost 30% of those in private offices identify acoustics as an element that interferes with their ability to perform their jobs. Another study shows that 70% of employees are distracted by office noise.

7. Employees will Likely Lose Over 86 Minutes of Their Working Hours Because of Distractions.

Distractions can come in different forms. Workers in all the different workplace layouts can face certain distractions like using phones, getting absent-minded, and a few others. However, research has shown that employees in open offices are **more likely to get distracted**. This can cause you to lose over 86 minutes of your work time, over an hour.

Why Workspace Noise Makes Some of us Tick

According to an article by the BBC, it's all to do with our psychological make-up and personality types. Introvert personalities are in fact most likely to struggle with common workspace noise. Anything that increases their level of arousal, like music or chatter, could be overwhelming. On the other, hand extroverts are inherently under-stimulated. They will seek out noisier environments in order to increase their level of arousal.

As well as the extrovert/introvert theory, research suggests that the more neurotic a person is, the more affected by background noise they will be. Certain people also have low 'inhibitory control' – they find it difficult to control their impulses – leading to a lower tolerance of workspace noise.

2 About Project

This project aims to address the impact of noise and distractions in Office Workspace. Data from primary research will be analyzed to identify key patterns and insights into how noise impacts different roles and to determine the most effective strategies for reducing distractions in the office.

Problem Statement

In offices nowadays, noise and distractions make it hard for people to focus on their work. The constant noise from conversations, phone calls, and movement around the office lowers productivity, increases stress, and makes work harder to complete.

Target Audience

Finance and Tech sectors.

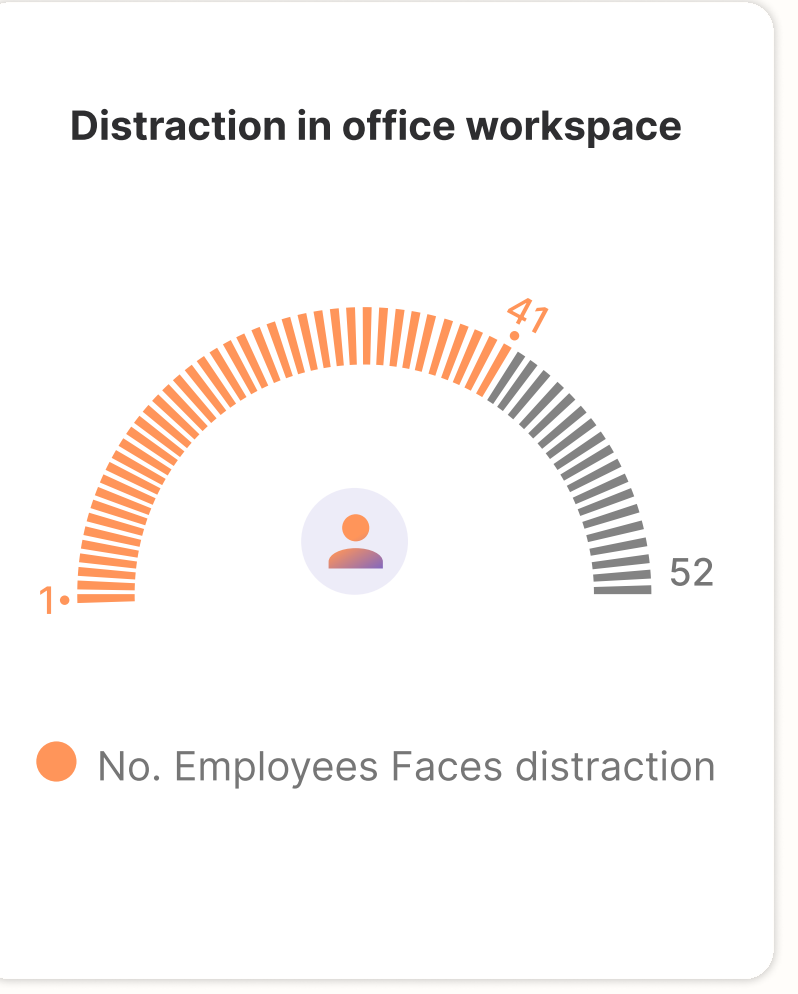
Hypothesis

Open Office Spaces lead to constant noise can make it hard to concentrate, lower productivity, and increase stress levels.

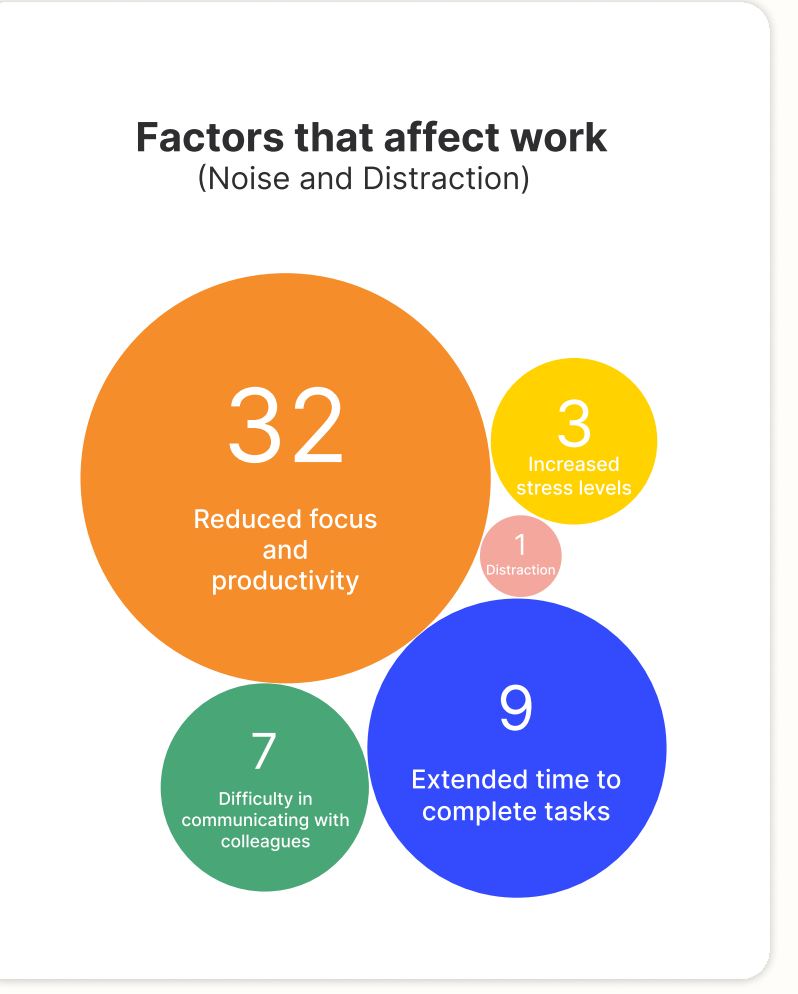
3 Quantitative Data

DATA FROM SURVEY

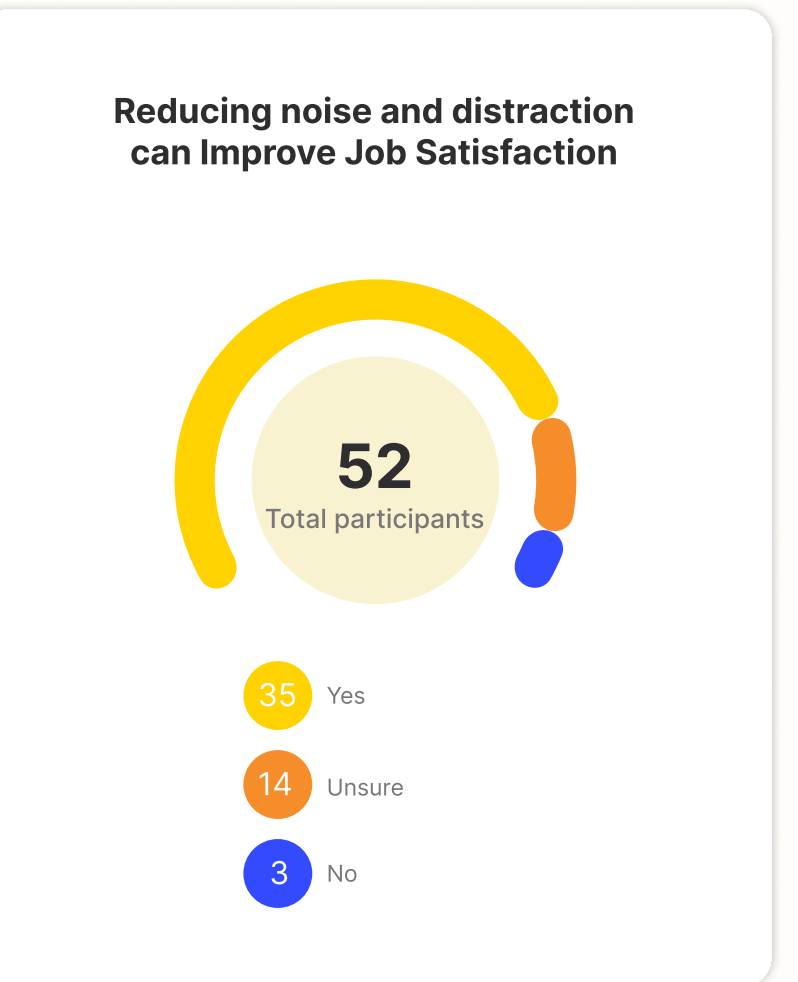
Distraction in office workspace



Factors that affect work
(Noise and Distraction)



Reducing noise and distraction can Improve Job Satisfaction



4 Qualitative Data

PEOPLE VALUABLE INSIGHT'S FROM INTERVIEW

- "Even with headphones on, I can still hear people talking and phones ringing. It's hard to stay focused when there's so much noise around."
- "There's always something going on around me people chatting, phone calls, meetings. It's tough to block it all out and focus on my work."
- "I feel unprofessional when my clients can hear everything happening in the office. I think a quieter, more private area would help me focus and build better relationships with them."

-what do they say

5 Persona

DERIVED FROM SURVEY AND INTERVIEW

Raj Sharma

"It's hard to focus when there's always something going on around me."

ABOUT

Raj Sharma works as a Senior Financial Analyst at FinEdge Finance Pvt. Ltd. He completed his graduation in Ness Wadia and has been in the finance industry for over 10 years. Rajesh is highly dedicated to his work.

AGE	35
ROLE	Finance analytics
Company	FinEdge Pvt. Ltd
LOCATION	Pune, Maharastra

NEEDS

- Need a quieter place to work so he can focus better.
- He needs a way to reduce the noise and distractions in his office for good.

FRUSTRATIONS

- Not able to meet deadlines in a noisy environment.
- Lost in his thoughts, while doing work, which makes it even harder to concentrate.

PRODUCTS USED

Headphones
Desk Dividers

CURRENT FEELINGS

Distracted Frustrated Stressed

PERSONALITY

PASSIONATE
DETAIL-ORIENTED
STRATEGIC THINKER
FAMILY-ORIENTED

6 Empathy Mapping

DERIVED FROM SURVEY AND INTERVIEW

Says

"These distractions are slowing me down and stressing me out."

"It's hard to focus with all the noise around me."

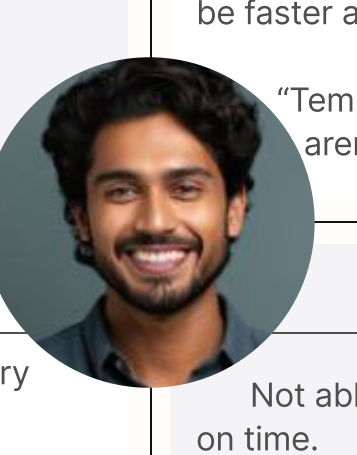
"I feel like I'm always behind because I can't concentrate."

Thinks

"I need a long-term fix for these constant distractions."

"If only I had a quieter space, my work would be faster and better."

"Temporary solutions like headphones aren't enough."



Does

Uses noise-canceling headphones to try to block out office noise.

Take breaks to clear mind when the distractions become too much.

Uses mindfulness techniques, like deep breathing, to reduce distractions.

Feels

Not able to concentrate and finish tasks on time.

He gets Stressed about the quality of work.

A peaceful workspace where he can focus.

Proved Hypothesis

Open Office Spaces lead to constant noise can make it hard to concentrate, lower productivity, and increase stress levels. ✓

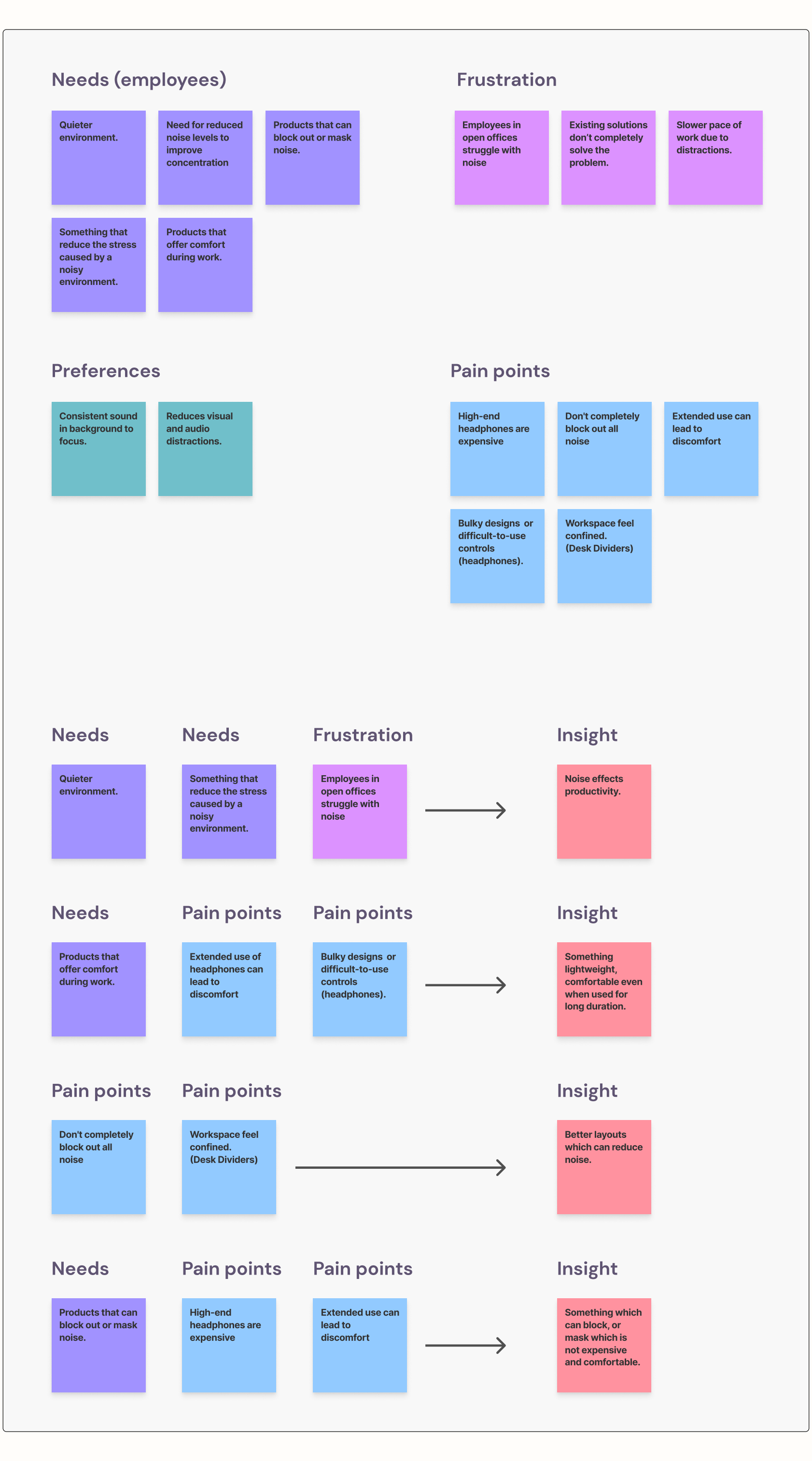
7 Competitor Analysis

DATA FROM EXISTING PRODUCT REVIEW

Competitor	Product	Product Type	Purpose	Pros	Cons
Bose Noise-Canceling Headphones 700		Headphones	Noise cancellation for office workers	High-quality sound, excellent noise cancellation, comfortable for long use	Expensive, might not block out all office noise
Sony WH-1000XM4		Headphones	Noise reduction and comfort	Long battery life, adaptive sound control, superior noise cancelation	Slightly bulky, touch controls can be finicky
Jabra Evolve2 85		Headphones	Business-focused noise cancellation	Excellent microphone for calls, comfortable fit, good battery life	Pricey, less stylish compared to consumer models
Coway Airmega 200M		White Noise Machine	Continuous white noise for office focus	Simple design, effective noise masking, quiet operation	Limited to noise masking, no multi-purpose functions
Vistaprint Desk Dividers		Desk Dividers/ Privacy Panels	Reducing visual and auditory distractions	Customizable, lightweight, easy to install	Only reduces noise partially, can feel restrictive
Focus@Will		Focus App	Helps improve concentration with background music	Customizable soundtracks, improves focus, easy to use	Subscription required, not effective for everyone
Forest		Focus App	Timed work sessions to reduce distractions	Gamified approach, promotes productivity, easy to use	Limited music choices, may not suit everyone
SoundOff Noise Masking Earbuds		Noise Masking Earbuds	Personal noise masking without music	Lightweight, comfortable, effective at blocking external noise	Limited functionality outside noise masking

8 Affinity Mapping

DATA FROM SURVEY AND INTERVIEW



Needs (employees)

- Quieter environment.
- Need for reduced noise levels to improve concentration
- Products that can block out or mask noise.
- Something that reduce the stress caused by a noisy environment.
- Products that offer comfort during work.

Frustration

- Employees in open offices struggle with noise
- Existing solutions don't completely solve the problem.
- Slower pace of work due to distractions.

Preferences

- Consistent sound in background to focus.
- Reduces visual and audio distractions.

Pain points

- High-end headphones are expensive
- Don't completely block out all noise
- Extended use can lead to discomfort
- Bulky designs or difficult-to-use controls (headphones).
- Workspace feel confined. (Desk Dividers)

Needs: Quieter environment.	Needs: Something that reduce the stress caused by a noisy environment.	Frustration: Employees in open offices struggle with noise	→	Insight: Noise effects productivity.
Needs: Products that offer comfort during work.	Pain points: Extended use of headphones can lead to discomfort	Pain points: Bulky designs or difficult-to-use controls (headphones).	→	Insight: Something lightweight, comfortable even when used for long duration.
Pain points: Don't completely block out all noise	Pain points: Workspace feel confined. (Desk Dividers)		→	Insight: Better layouts which can reduce noise.
Needs: Products that can block out or mask noise.	Pain points: High-end headphones are expensive	Pain points: Extended use can lead to discomfort	→	Insight: Something which can block, or mask which is not expensive and comfortable.

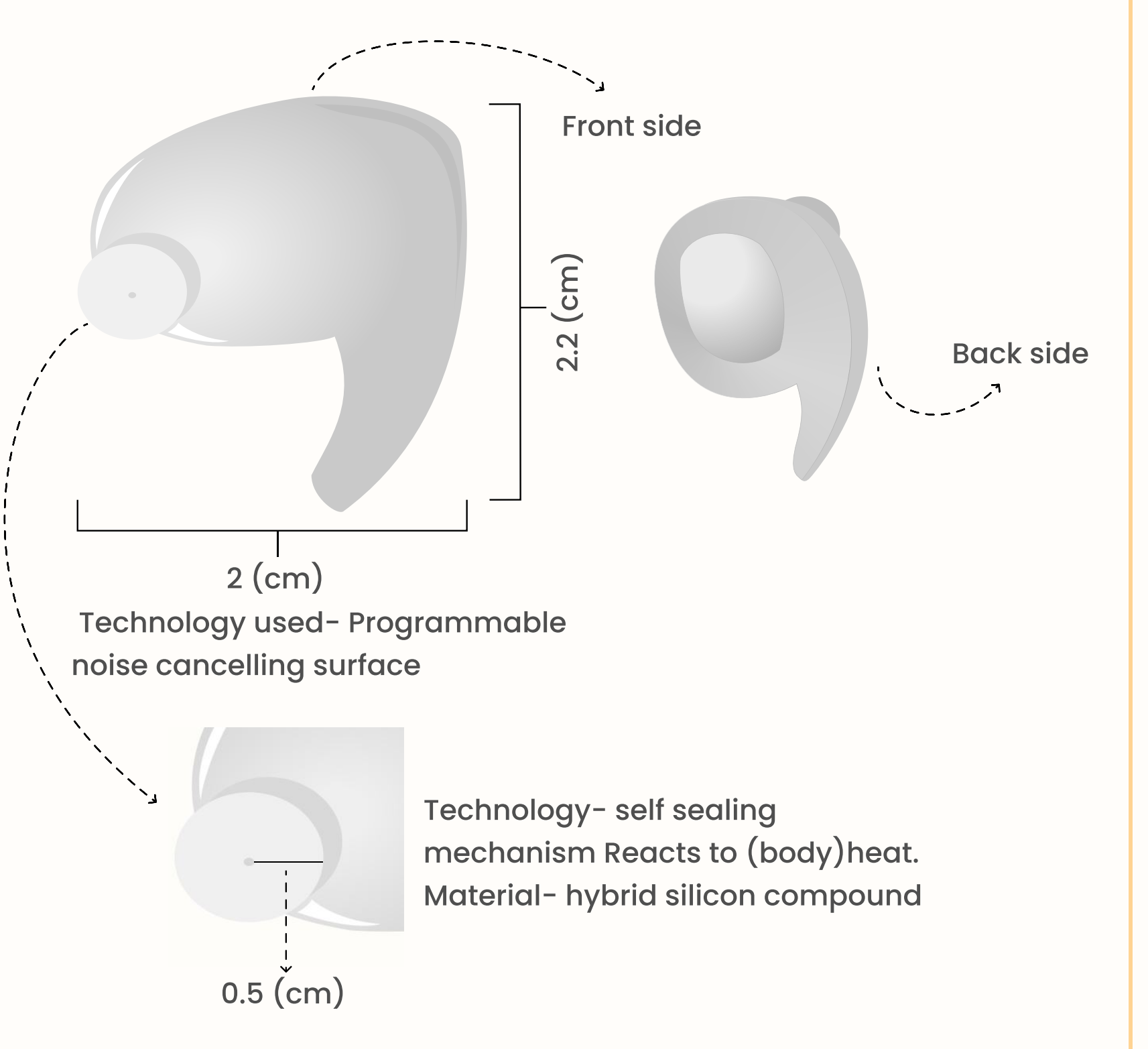
9 Ideation

To **reduce noise and distractions in office workspaces**. The aim is **to create a quieter, more focused work environment that enhances employee well-being and productivity and comfortable.**

Insights

- Something lightweight, comfortable even when used for long duration.
- Something which can block, or mask which is not expensive and comfortable.

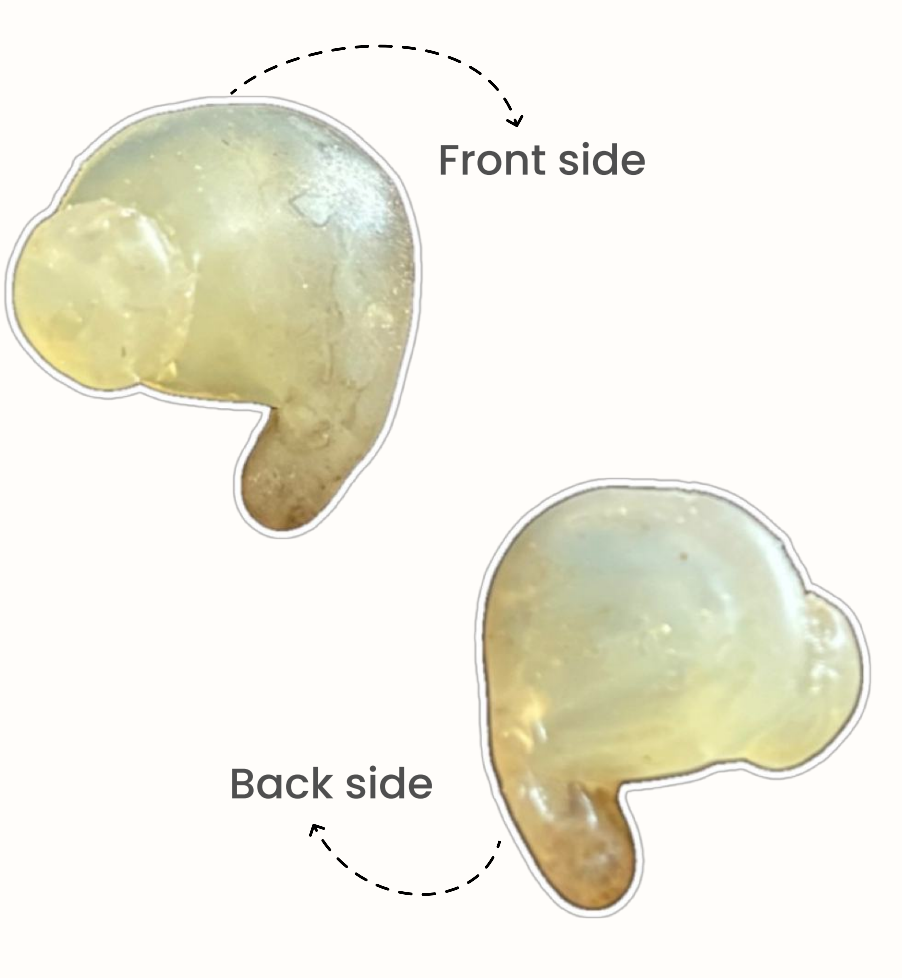
Ideate From the Insight



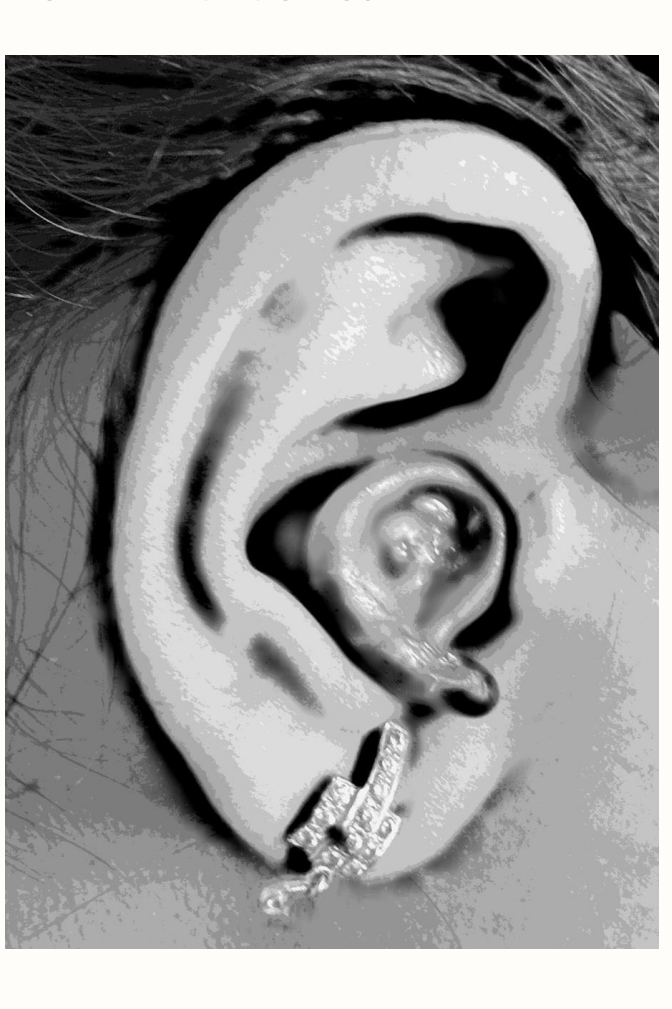
Technology used- Programmable noise cancelling surface

Technology- self sealing mechanism Reacts to (body)heat.
Material- hybrid silicon compound

Prototype



How will it fit on ear



10 Proof of Concept

Programmable Noise-Canceling Surfaces and Self-Sealing Mechanisms

Programmable Noise-Canceling Surface

The concept of "Programmable Noise-Canceling Surfaces" is a technology that **involves using reconfigurable materials or structures to actively manage and cancel unwanted noise**. These **surfaces can be programmed to adjust their acoustic properties in real-time, depending on the environment and the specific noise** they need to mitigate. This technology works by **manipulating sound waves using an array of sensors and actuators embedded within** the **surface**. These **sensors detect incoming noise**, and the **actuators then generate counteractive sound waves that interfere destructively with the noise, effectively canceling it out.**

Self-Sealing Mechanisms:

The **self-sealing mechanism often relies on advanced materials** such as **memory foam or hybrid silicone compounds.** These **materials respond to body heat and pressure**, allowing the ear tips to expand and conform to the ear canal's shape. Once inserted, **the material "seals" the canal, blocking external noise and improving sound quality.**

Advantage:

- Automatically adjusting to the user's ear canal, the self-sealing mechanism **reduces the pressure and discomfort** often associated with poorly fitting ear tips.
- A secure seal helps **block external noise**, making these ear tips ideal for environments with high levels of ambient noise.
- Users **don't need to manually adjust the ear tips** for a good fit, making them convenient and user-friendly.

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