# UNDERSTANDING THE PROBLEM SPACE

**What is Digital Wellbeing**
It is about having a healthy, intentional relationship with technology so it enhances your life rather than detracts from it.

**Need**
To see what phone usage actually looks like and understand what's the reason behind it.

**What internet research tells about the human behaviour**

- **Phone sessions per day are rising:** users averaged 72 daily in 2020, with current figures expected to be significantly higher.
- **Sessions are becoming more frequent:** 50% start within 3 minutes of the previous one.
- **Most sessions are short and unconsidered:** 70% last under two minutes, with a median of just 53 seconds.

Link

**What iOS currently offers for digital wellbeing**

- **Monitoring**: Screen Time dashboard
- **Limiting**: App Limits, Downtime, Communication Limits
- **Filtering**: Focus Modes, DND, Notification Summary
- **Restricting**: Content & Privacy Restrictions, Always Allowed
- **Physical**: Screen Distance

Current Look

**The Problem**
Current digital wellbeing tools show the numbers, but never helps to understand what those numbers actually mean for habits and emotions which makes tools feel pointless.

**How users currently tackle their screen time**

| Action | Why | Impact |
|---|---|---|
| Install third party apps | Want external discipline | Short term, quickly abondoned |
| Delete Apps | Removing source feels decisive | Habit shifts to another app |
| Mentally restrict themselves | Believe willpower should suffice | Exhausts mental energy daily |
| Do nothing | Problem feels "not bad enough" | Creates chronic guilt |
| Set timers/ focus modes | Want hard automatic boundaries | Bypassed almost every time |
| Check screen time report | Want to quantify the problem | Guilt without any insight |
| Turn off notification | Blame external triggers | Self- initiated pickups continue |

**The Pattern:** Every approach targets visible behavior that is time spent, apps opened, notifications received. None address the emotional triggers driving that behavior.

# THE LANDSCAPE: WHAT EXISTS AND WHAT'S MISSING

Detailed analysis

## The current landscape

| Tool | Key Features | Limitations |
|---|---|---|
| iOS Screen Time | Usage tracking, app limits, downtime | Easy to bypass with "Ignore Limit" |
| Android Digital Wellbeing | App timers, focus mode, bedtime | Basic features, can be disabled |
| Forest | Gamified timer, grow trees, whitelist | Paid features; just motivates |
| Opal | AI blocking, deep focus, analytics | Subscription based |
| OneSec | 5-second delay, friction tactic | doesn't fully block, limited free version |

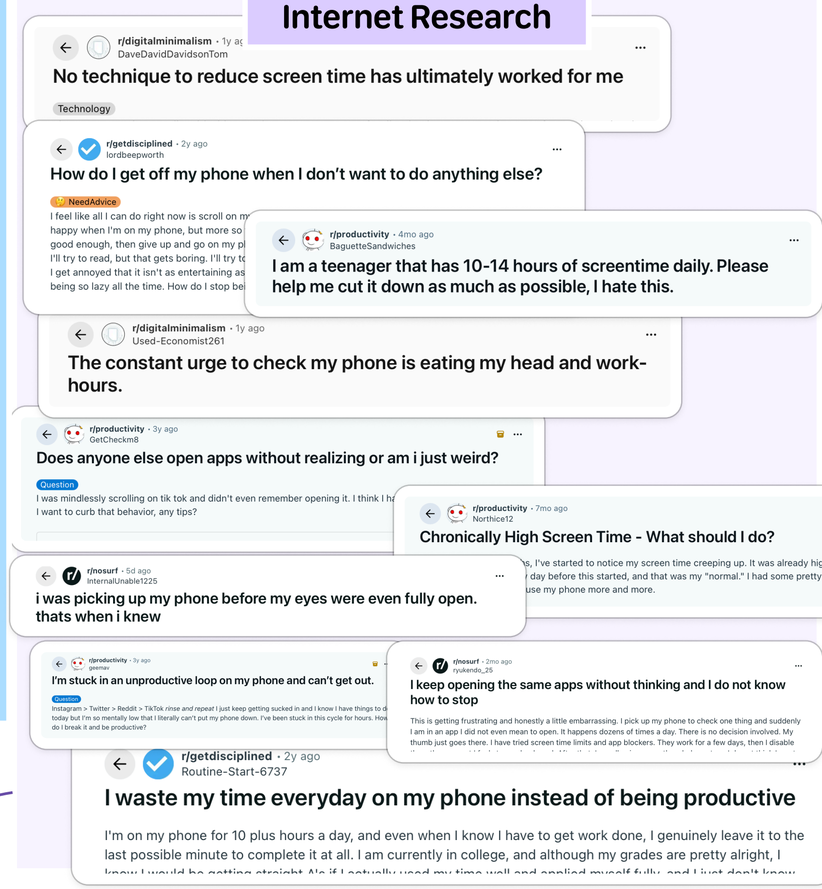
OS level

Third party Apps

## Learning from Apple's Own Ecosystem

| App | Why Used | How It Works | What We Learn |
|---|---|---|---|
| Apple Health | Track health metrics | Correlates cross-metric patterns | "Connect behavior to context" |
| Photos Memories | Relive past moments | Surfaces time-based emotional context | "Link behavior to emotional moments" |
| Siri Suggestions | Quick app access | Surfaces unconscious behavioral routines | "Reveal invisible habit patterns" |

## Internet Research



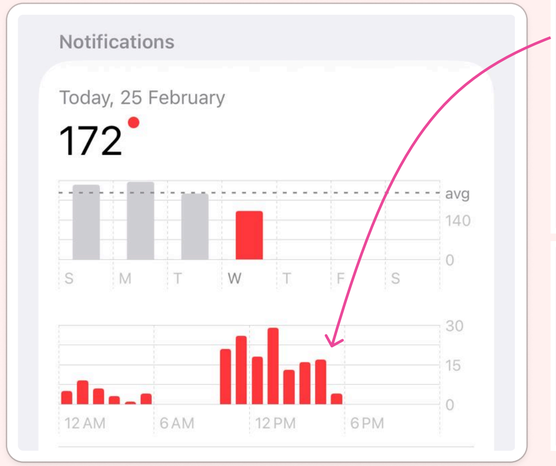

## Insights from internet research

- Screen time feels too high
- Do not remember opening apps
- Focus and quality of life visibly affected

# WHY SCREEN TIME FAILS - Feature Audit and User Journey

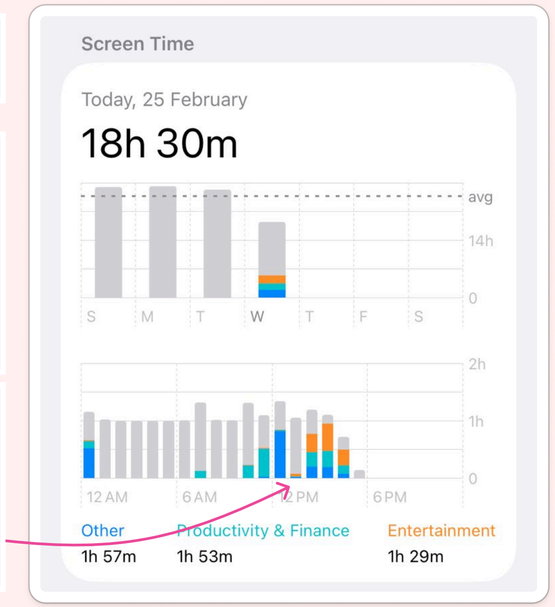
Detailed ux analysis and user journey

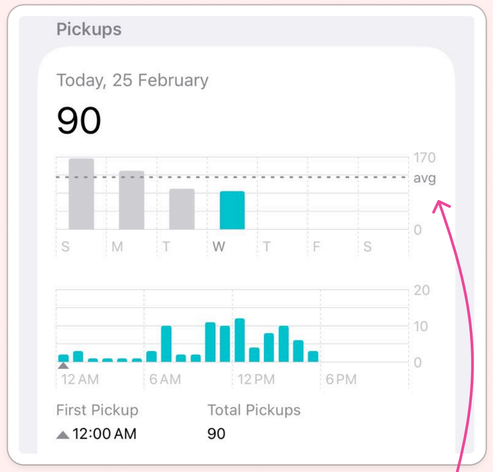
## What Screen Time shows vs what the user actually needs




The timewise spike shows nothing about what was happening in the user's real life.

Doesn't explain why behind the screen time spike

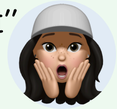



Doesn't explain how 100 pickups became user's normal

"Screen Time gives users four data views - total time, app categories, pickup counts, and notifications. All of them answer '**how much**' and '**when**,' but not '**why**' or life context behind it"

## How users interact with Screen Time - User Journey

| | **Trigger** ⟶ | **Data Shock** ⟶ | **Dead End** ⟶ | **Restriction** ⟶ | **Override** ⟶ | **Abandonment** |
|---|---|---|---|---|---|---|
| What happens | Find themselves using their phone too much | Opens Screen Time and see high usage numbers | Taps into details, find more number make it more confusing | Sets App Limits, enables Downtime | Hits limit, taps "Ignore Limit" or disable Downtime | Stops opening Screen Time |
| What users think | "I'm on my phone too much" | "9h 44m? That can't be right"  | "But WHY was Sunday bad?" | "I'll just set limits, this will fix it" | "I'll just check one thing." 20 min later "I did it again." | "I already know I use it too much. The number doesn't help." |
| What users feel | Guilt, loss of control | Shock, then shame | Frustration | Brief optimism | Defeat | Resignation |

# WHO ARE WE BUILDING FOR

**Target Segment**

Young working adults aged 25-35 (late Gen Z and core Millennials) - people who already know they're on their phone too much, have tried to fix it, and failed.

**Why this segment**

Detailed link

1. **They already recognize it** - acknowledge their phone usage is too high
2. **They're actively trying to change** - trying to reduce their screen time
3. **They feel the consequences in real time** - losing focus and productivity
4. **They've looked for help and nothing has worked** - tried different screen time tools

**Market Sizing**

In-depth analysis

| | | |
|---|---|---|
| TAM | All iPhone users aged 25- 35 | ~387M |
| SAM | Aware of their phone usage | ~302M |
| SOM | Users who have tried to fix it and failed | ~74M |

**Unmet Needs**

- **Explanation over data :** They can see how much time they lose. They cannot see why it keeps happening.
- **A tool that matches their self-awareness :** They have tried everything. They are not looking for restrictions. They are looking for insight.

**Arjun Desai, 27, Senior Frontend Developer, Pune**

"I read a 40-minute article about attention exploitation, on my phone, at 2 AM."

**Profile** : Consumes Twitter/X, Hacker News, and YouTube disguised as professional learning. Averages 5h 18m daily. Built his own blocker app, used it for four days, then disabled it.

**Pain Points :** He has all the knowledge about phone addiction but none of the emotional clarity about his own behaviour. He knows the science, yet has never asked himself what he is avoiding.

**Goals :** To develop genuine self-awareness about what drives his usage and to make intentional choices about where his attention goes.

**JTBD:** "When I choose YouTube over my side project again, I want to understand the reasoning behind that choice, so I can start making more intentional decisions about where my attention goes."

**Priya Menon, 25, Product Marketing Manager, Bangalore**

"I've hit 'Ignore Limit' so many times it's basically a reflex now."

**Profile** : Uses Instagram and YouTube Shorts as emotional relief between work tasks. Averages 6h 42m daily. Has tried Screen Time limits, grayscale mode, and app deletion, all failed within days.

**Pain Points :** She knows how much she scrolls, but not why she keeps reaching for it. The data shows hours lost, never the emotion that started it.

**Goals :** To understand the emotional triggers behind her usage and build self-awareness rather than rely on willpower alone.

**JTBD:** "When I'm scrolling at 1 AM, I want to understand what brought me here, so I can address the cause instead of blaming myself."

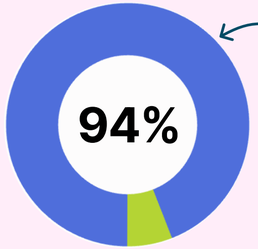
# SURVEY INSIGHTS

Detailed analysis of survey insights

**Hypothesis :** Unplanned phone pickups are triggered by a **moment of discomfort** like boredom, anxiety, a transition, something unresolved. Because this happens at **low conscious awareness** and repeats many times a day, users have no visibility into what is actually driving their usage.

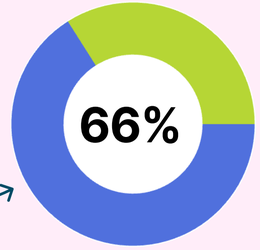
**Survey Insights** (31 responses)

Survey Link




said they feel they use their phone more than they would like.

66% reached for their phone right **after finishing a task** which is the highest trigger.




- **50%** feel guilty after seeing their screen time report
- **55%** have tried a focus mode or app timer at least once.
- **94%** do not use any third-party app for phone management.

**User Interview Responses** (6 users)

| User Quotes | Interpretations |
|---|---|
| "I check my phone between every task. I told myself it was a break, but honestly I don't even know what I'm looking for." | He was escaping the gap between tasks to avoid the discomfort of not knowing what comes next. |
| "When I see my screen time I feel bad for like two minutes, then I forget about it. There is nothing to actually do with that number." | Data without context produces guilt, not change. The number is meaningless without the story behind it. |
| "I pick up my phone a lot after meetings. I think my brain just needs to decompress but I don't know a better way to do it." | She had already detected the trigger pattern herself but had no language for it and no tool to confirm it. |
| "I use my phone most when I am procrastinating. I know it in the moment but I still do it. Knowing doesn't stop me." | She is already aware about her phone usage. What's missing is the context about her pattern over time so it stops feeling like a one-off. |

**Recall Walkthrough Insights** (3 users)

**Observation 1 :** In nearly every session, users recalled reaching for their phone right after a **structured activity ended** like a meal, a work task, an episode. The moment routine gave way to an **open interval**, the **phone filled it**. Not out of desire, but out of having nothing defined to do next.

**Observation 2 :** Most users could recall only one deliberate unlock across their entire day. For everything else, they had no explanation, just habit, they said. The **pickup had come before any intention** was formed.

# FRAMING PROBLEM IN DETAIL

Must see ⟶ Connecting the dots and understanding the whys

## The Problem Chain: From Behavior to Root Cause

### 1. Always There

Phones have become a constant physical presence in modern life

### 2. Discomfort Strikes

Any **discomfort** like boredom, fatigue, anxiety triggers an immediate escape and the **brain looks for the quickest way out.**

### 3. Nearest Exit

The phone is the **fastest exit available**.
It is zero friction, always accessible, and instantly rewarding.

### 4. Invisible Repetition

This happens many times a day, and over time it becomes **subconscious muscle memory**. The behavior repeats until it no longer requires a decision, the hand moves before the mind does.

### 5. Shock of the Number

As a result, when screen time numbers surface, they feel shocking. The data reveals a number that does not match how the user experienced their day.

### 6. Try Fix

So they try to restrict themselves with timers, app limits, focus modes, third party apps.

### 7. Still Broken

Nothing works Because the phone was never the problem. The **discomfort driving the behavior** is still there, still unnamed.

### 8. The True Problem

Users can see exactly how much time they spend on their phone, but have no way of understanding "why". Throughout the day, moments of **discomfort** trigger **unconscious pickups** that happen **below conscious awareness**. Because none of it felt intentional, users struggle to interpret their own usage reports which tells "what" and "when" .Without the **emotional context** behind each pickup, screen time numbers produce guilt but no real understanding.

### 9. What They Actually Want

What they want:

- To name that feeling
- To relate it to their life context

So that they have something meaningful to act on and genuinely reflect upon.

## Value generated by solving this problem

### For the bussiness

Solving this problem strengthens user trust in the iOS ecosystem. When users feel their phone understands them rather than judges them, their relationship with the platform deepens

### For the users

Users will have an explanation for their own behavior. That shifts the relationship with their phone from guilt and frustration to genuine self-awareness

## Who are the customers facing the problem?

Young working adults aged 25-35 who are digitally self-aware. They are aware about their phone usage, have tried to fix it, and failed. This segment feels the friction most acutely and is most motivated to find something that works.

## How do we know its a real problem

- 94% of surveyed users feel they use their phone more than they would like, and 66% reach for it without any conscious intention.
- 55% have already tried existing tools to change their behavior, but failed.

## Why should we solve this problem now?

- Screen time is rising and shows no sign of slowing down.
- Existing tool has failed to meaningfully reflect users.
- Awareness around mental health and digital wellbeing has never been higher.
- On-device AI and passive sensing are finally mature enough to make this possible

# SOLUTION EXPLORATION: HOW SHOULD INSIGHTS BE PRESENTED TO THE USER?

Detailed Solution Framing and Prioritization

## Solution 1: Behavioral Insight Engine

- An AI-powered insight engine that passively collects phone behavior and life context signals. It learns what's normal for each user over time and surfaces daily and weekly causal insights explaining "why" and emotions behind their usage.
- This model runs on-device to ensure privacy and gets smarter through user feedback
- Weekly personalized memoji sticker that reflects behavioral patterns, making self awareness feel shareable.

**Why this Solution:**
It connects phone usage behavior with life context to understand the emotional triggers behind their screen time.

## Solution 2: Guided Self-Reflection

- A guided self-reflection mode where users explore their phone behavior through personalized questions generated from their usage patterns. Users can also edit existing questions or write their own for the AI to answer.
- Over time, as more data is collected, the quality of questions and insights improves as the model trains continuously alongside the user's phone usage data.

**Why this Solution:**
Helps users explore the question in their own words through structured reflection.
**Why not this Solution:**
Requires consistent user effort, making it unsustainable for long-term retention.

## Solution 3: Real Time Awareness

- A real-time awareness system that detects unconscious pickup patterns as they happen and delivers a subtle contextual prompt in the moment followed by a question prompt.
- The system identifies when is the user entering the pickup cluster zone and intervenes before the behavior completes, creating a pause between the automatic urge and the action.

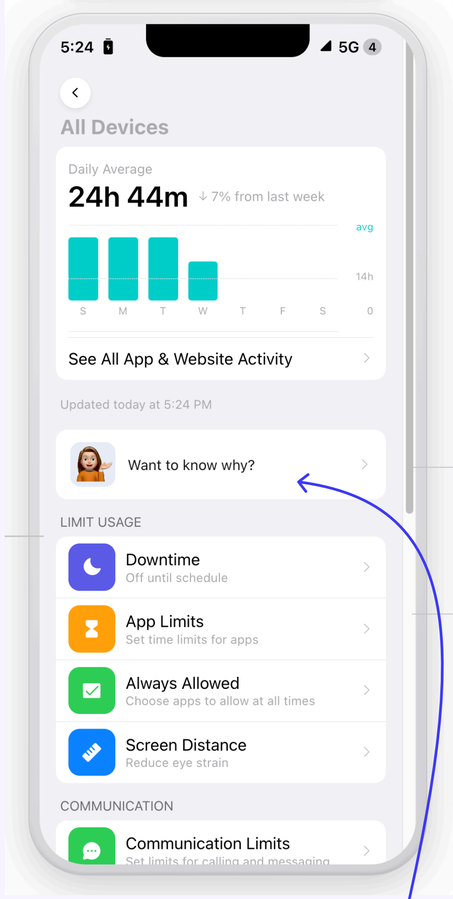
**Why this Solution:**
It let users to self-reflect in that exact moment before the unconscious behavior completes.
**Why not this Solution:**
Intervening in the moment risks feeling intrusive, which compromises emotional safety and user trust

| Solutions | User effort | User research signal | Behaviour personalization over time | Emotional safety | Trust Impact | Long term retention |
|---|---|---|---|---|---|---|
| Solution 1 | Low | High | High | Medium | High | High |
| Solution 2 | High | Medium | High | High | High | Low |
| Solution 3 | None | Medium | Medium | Low | Medium | Medium |

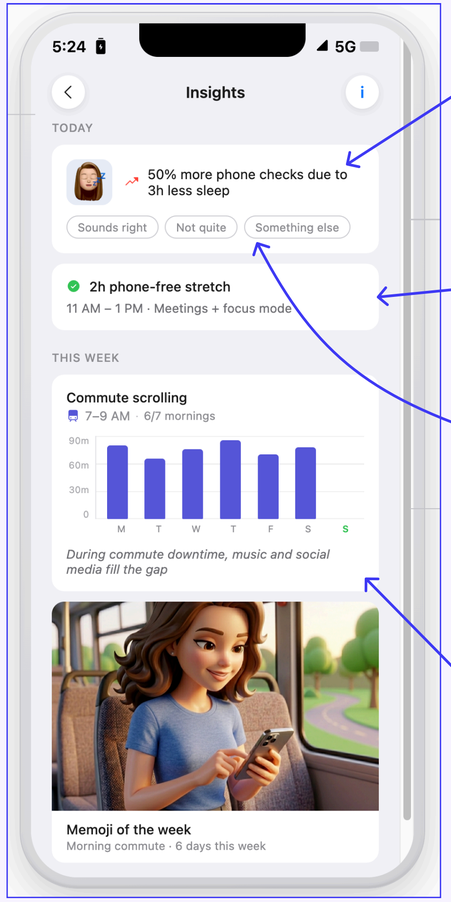
# SOLUTION IN ACTION

Prototype and Wireframe

## First Page




## Second Page



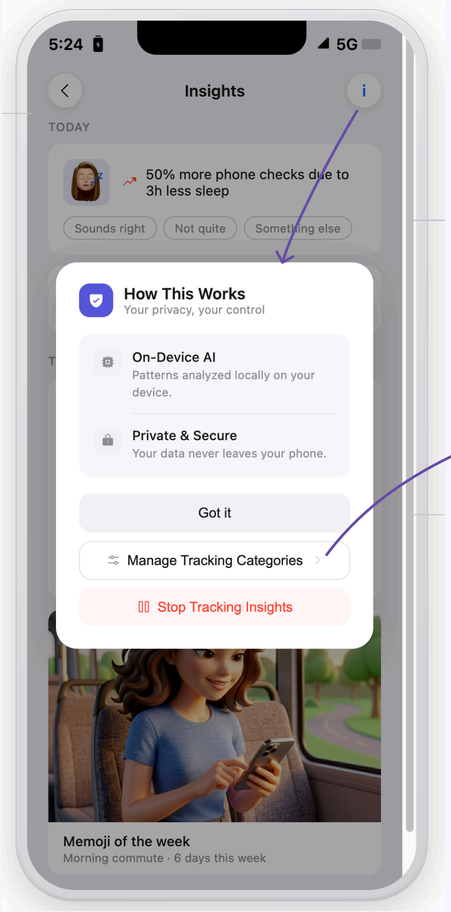

The top of the page highlights the major issue that day.

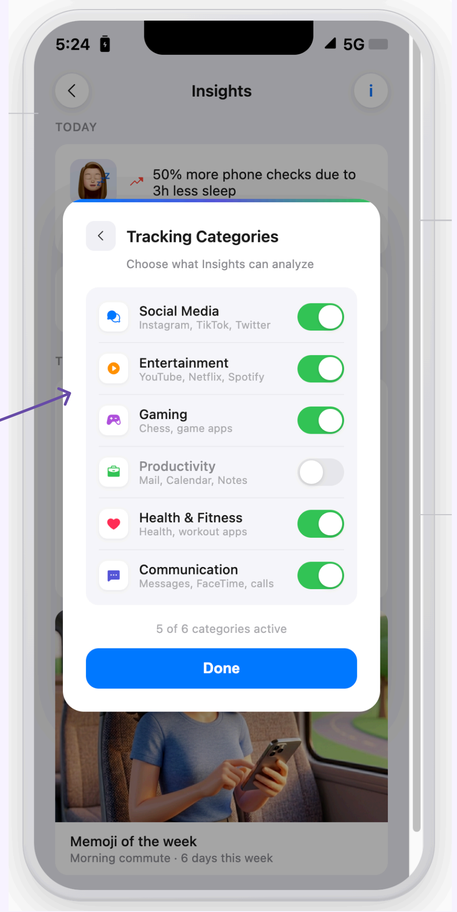
The highlight is followed by a positive observation the same day.

AI might make errors and users can disagree with the conclusions provided

The weekly section shows the most dominant pattern discovered that week. Followed by a memoji that

## Trust and Control




The insight button is placed just below the daily average bar

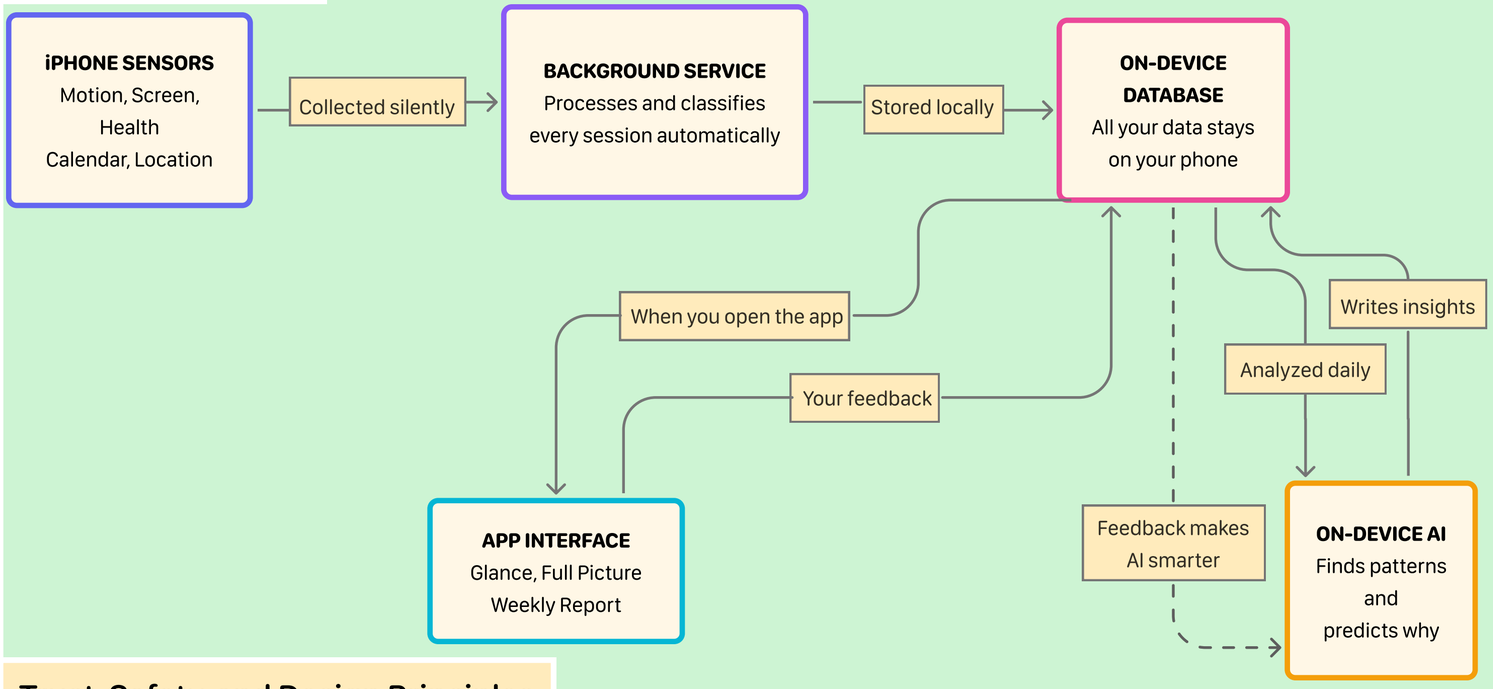
Generates weekly behavior Memoji Sticker
**WHY**: Makes self-awareness feel personal and shareable instead of clinical and guilt-driven

Users can allow/stop the tracking of certain applications/sections, or stop the tracking completely. On-Device AI further ensures that none of the user data is misused.

# TECHNICAL ARCHITECTURE AND DESIGN PRINCIPLES

AI Model Diagram & Understanding the Solution in Detail

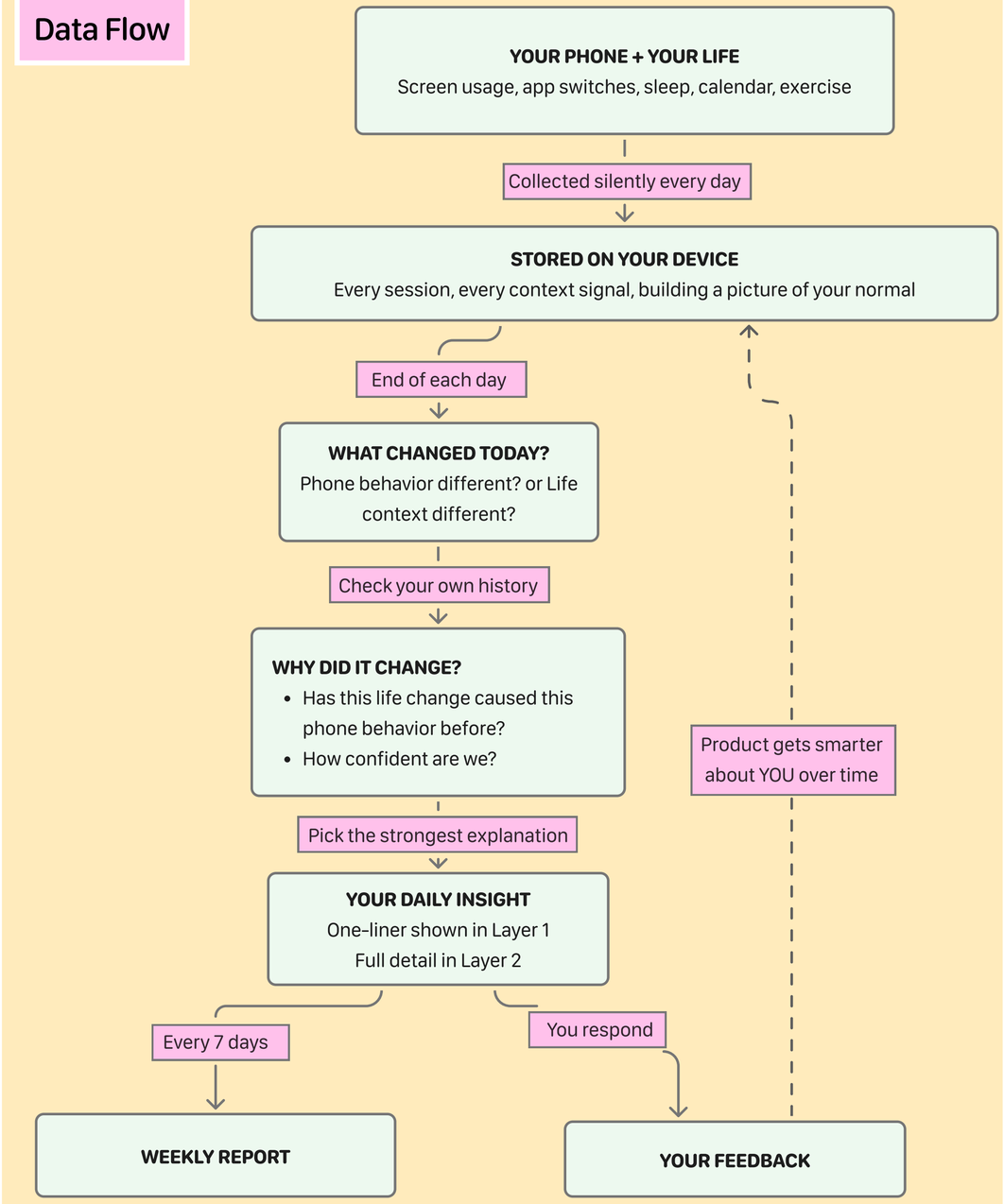
## System Architecture




## Trust, Safety, and Design Principles

- **Data and Privacy :** The engine is powered by a CoreML model that runs entirely on-device. All data is processed and stored locally on the user's phone, ensuring privacy is built into the architecture itself.
- **Permissions and Control :** Users can revoke, or modify any tracking category at any time. Every data source requires explicit opt-in, with a clear option to pause or stop entirely.
- **Designed for Glanceability :** The interface distills rich behavioral context into concise, scannable statements. Long insights are reduced to few words, minimizing cognitive overwhelm.
- **Emotional Safety :** Insights are framed as explanations, never judgments. The system never shames, never prescribes action, and never uses language that induces guilt or anxiety.

## Data Flow



# SUCCESS METRICS & BEHAVIORAL RISKS

Detailed-analysis

| Success Dimension | Metric Type | Metric | Definition | Why | Target |
|---|---|---|---|---|---|
| Understanding (Is the AI getting it right?) | North Star Metric | Insight Affirmation Rate | % of insights where user taps "Sounds right" | Confirms the AI understood them | 55–60% |
| Hook effectiveness | Leading | "Want to know why" tap rate | % of main screen sessions where user taps the insight entry point | First signal that the hook is landing and curiosity is real | 60–70% |
| Meaningful engagement (Are users engaging deeper?) | Lagging | Model accuracy trend | ‘‘Sounds right’’ to ‘‘Not quite’’ ratio per user over 8 weeks | Proves the AI actually gets smarter over time | ~55% → ~75% |
| Trust (Do users feel safe?) | Guardrail | "Stop Tracking" tap rate | % users who tap ‘‘Stop Tracking Insights’’ | Total product rejection signal | <10% |
| Trust | Guardrail | Consecutive "Not quite"/’’Something else’’ | Users with more "Not quite" than ‘‘Sounds right’’ | Model is consistently wrong, trust eroding | Watch for >3 |
| Meaningful engagement (Are users engaging deeper?) | Guardrail | Feedback silence rate | % of users who never tap any feedback button | No feedback = model can't learn | <50% |

**Risk** Insight Fatigue: When the same pattern surfaces repeatedly, it loses signal value – becoming noise rather than a meaningful observation.

**Mitigation:** Once a user acknowledges a pattern, the system retires it. It re-emerges only when something meaningfully changes – a spike, a sudden absence, a context shift.

**Risk** Life Context Collapse: Big events like job loss and a forming habit look identical in the data – producing insights that are not just wrong, but poorly timed at the moment a user is most vulnerable.

**Mitigation:** When patterns shift beyond a threshold, the model suspends interpretation and surfaces one open prompt – "Your patterns look different this week. Anything going on?" The response anchors context for the weeks that follow. When confidence is low, ask rather than assume.