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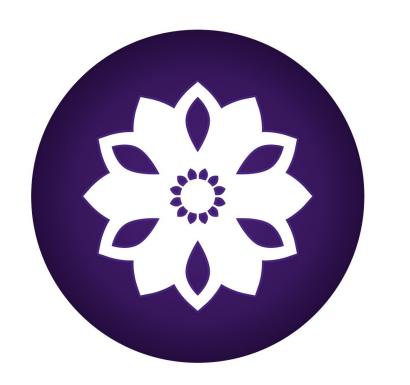
Measures Biosignals



Behavior Tracking



Personalized
Recommendations



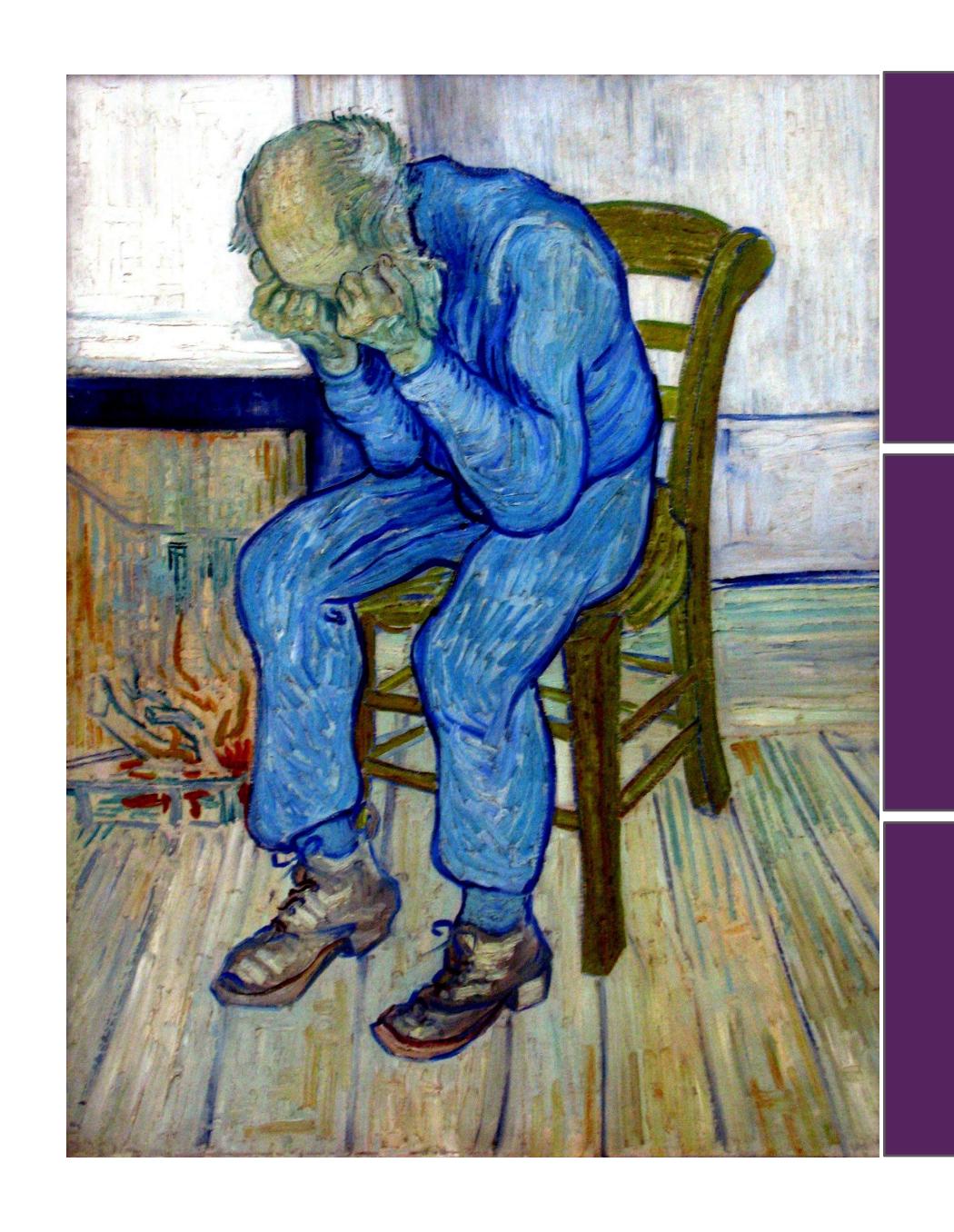
Emotional Balance Strategies

### Video

The best way for us to illustrate what our application does is through a short demo

https://www.youtube.com/watch?v=ntxkWkO-r4s





### 16 million

...US adults had at least one major depressive episode in 2012

50%

...of Americans with major depression do not seek treatment for mental illness

1 in 5

...suffer from a mental health condition

### What is Depression?

"Depressed mood or a loss of interest or pleasure in daily activities for more than two weeks." - DSM-IV

OUR TARGET USER: people with a mild, chronic form of depression that resemble Persistent Depressive Disorder

#### Our Focus

# What our project aims to do

Help users' gain control over the feelings and thoughts associated with depression and combat them with positive ways of thinking.

# What our product will NOT do

Our product does not aim to diagnose mental illness, tackle the root of one's depression or attempt to solve their problems.



#### Competitive Landscape - Stage of Depression

#### **Pre-Diagnosis**











SPIRE







#### **Post-Diagnosis**



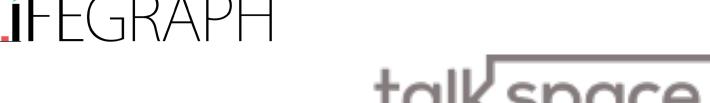
















joyable



#### Competitive Landscape - Level of Intervention







#### **Mindfulness**









Informational











jeyable

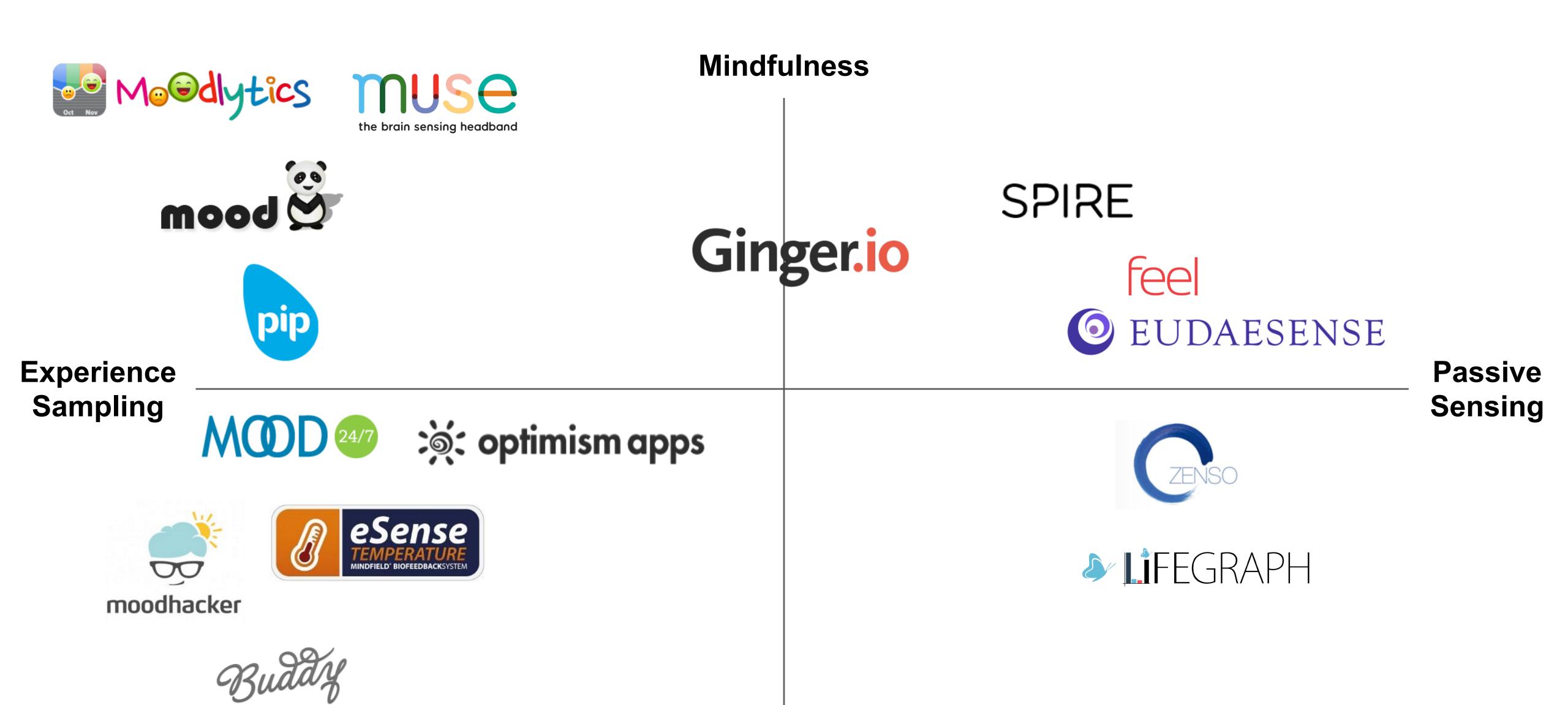


Interventional

lantern

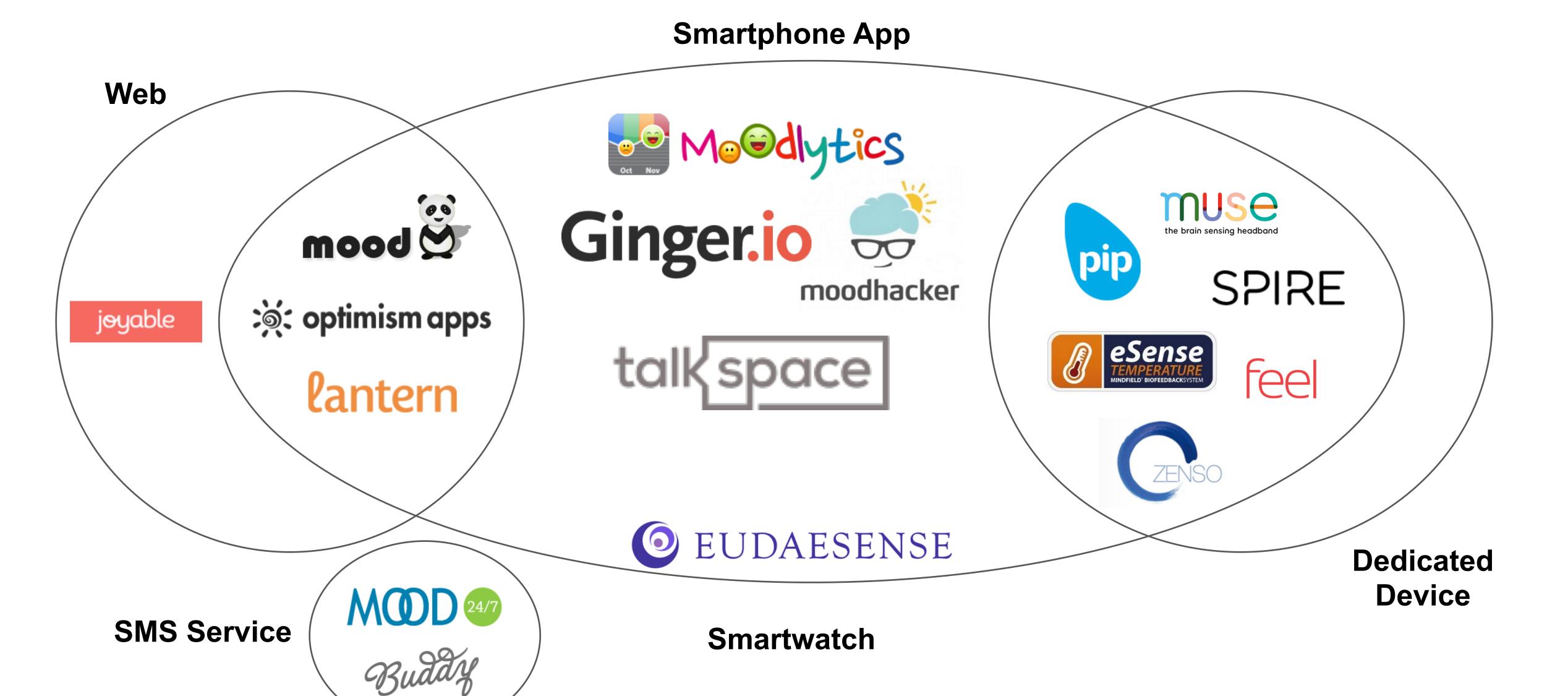
**Maintenance** 

#### Competitive Landscape - Data Collection



**Maintenance** 

#### Competitive Landscape - Tech Platform



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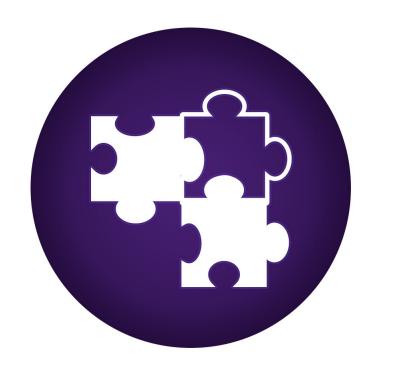
Data-Driven



Timely Micro-Interventions



Unobtrusive



Customized
Recommendations



### User Research: Expert Interview Findings



"CBT-i provides research-proven methods for treating insomnia. Relevant methods could be establishing good sleep hygiene and mindfulness training."



"Important to ask open ended questions, paraphrase what has been said, and give the patient a voice."



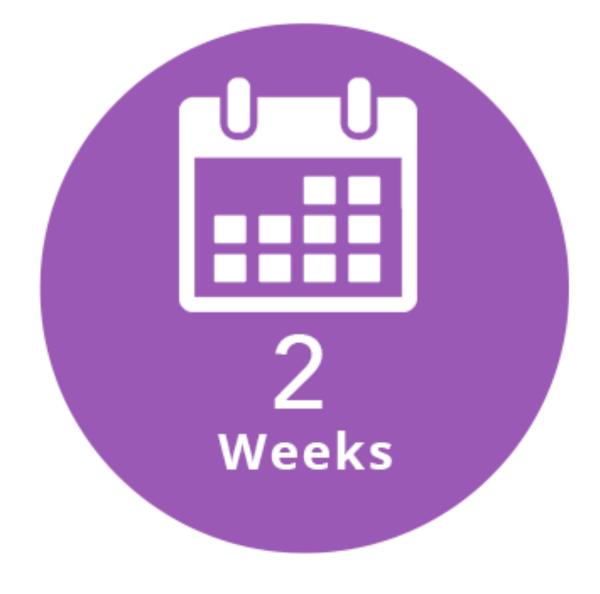
"There is an emotional piece to speaking with a human that would be challenging for technology to capture."

### User Research: Diary Study

#### Research Questions

How do people feel about sleep and its contribution to overall health and wellness?







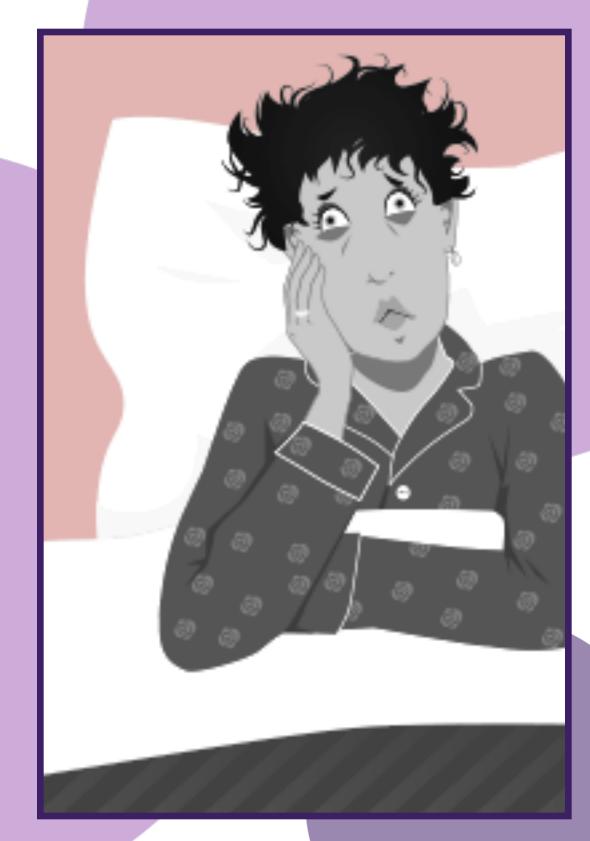
### User Research: Diary Studies Findings



Guilty to go to bed

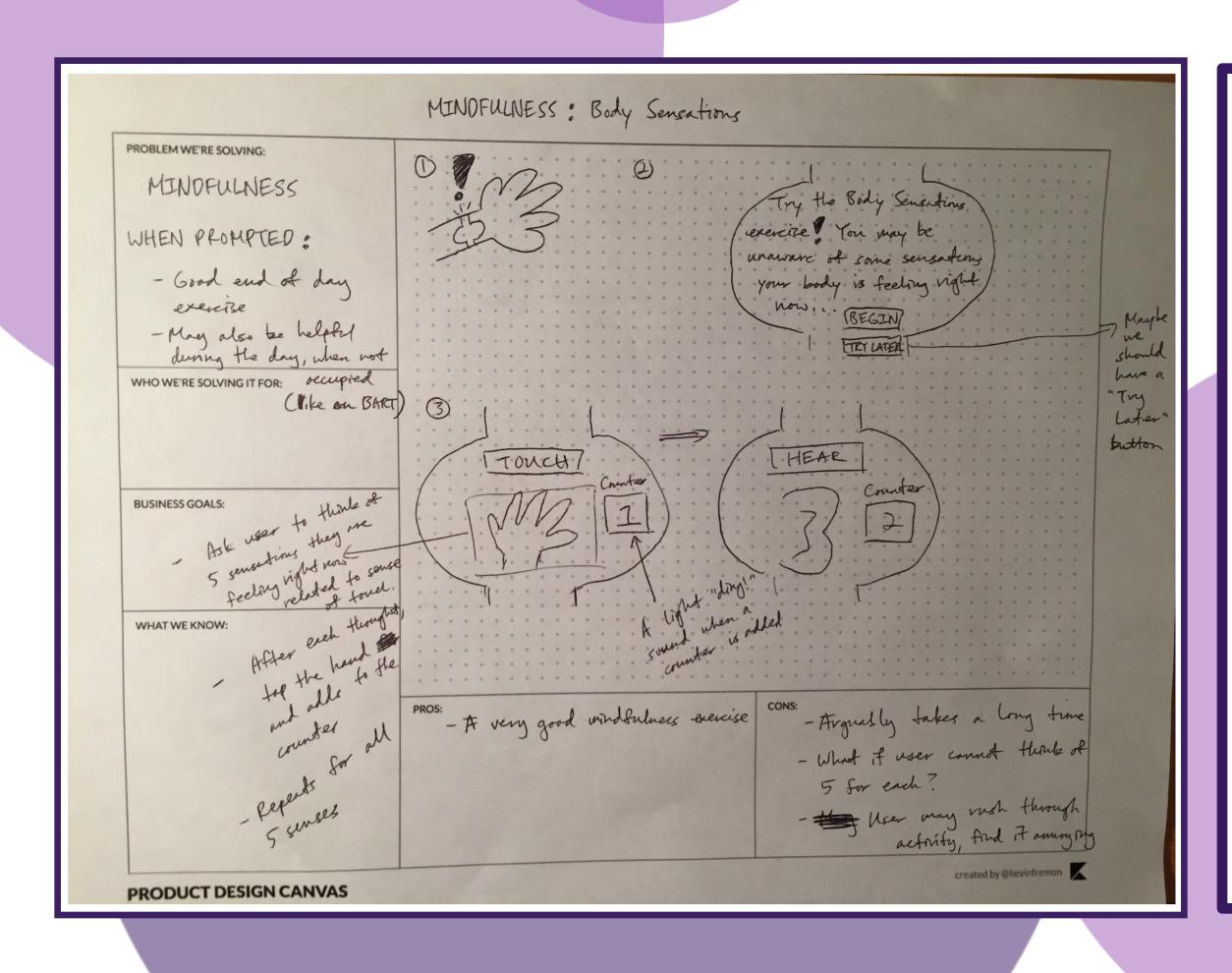


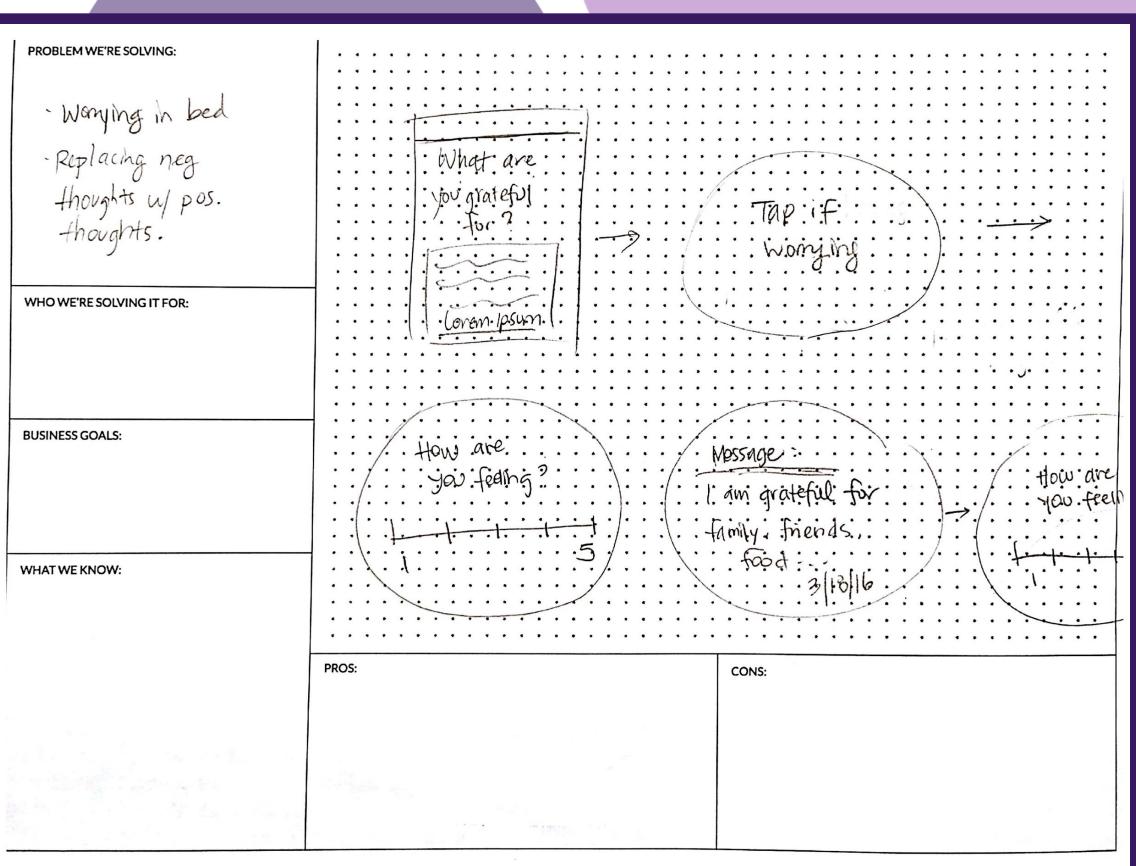
Difficulty falling asleep



Waking up in the night

### Paper Mockups





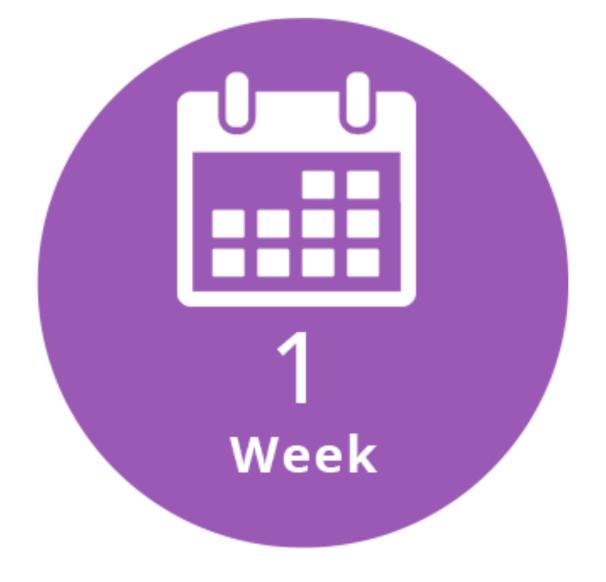
### User Research: Surveys

#### Research Questions

What is our user's relationship with sleep?

What is our user's relationship with using technology for health and wellness?







### User Research: Survey Findings

People reported different sleep habits and have varying definitions of a good night's sleep

Respondents seemed to have basic understanding of the relationship between mood and sleep

The majority of respondents had morning and evening routines and indicated general awareness of good and bad sleep habits



#### User Research: Interviews

#### Research Questions

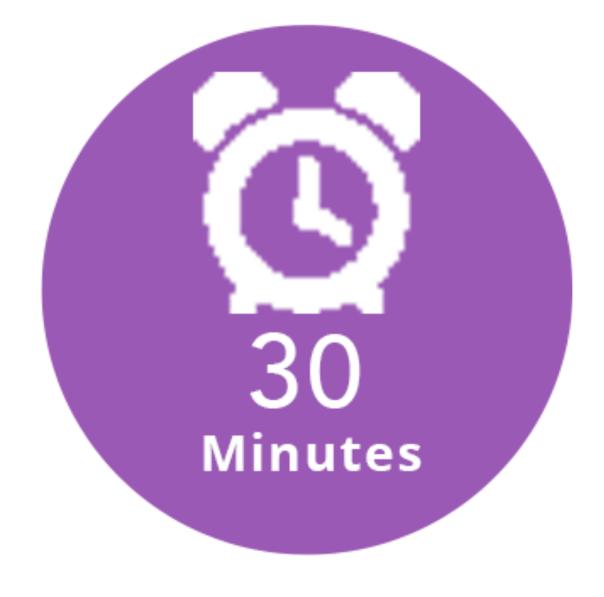
Do interviewees have a morning and evening routine?

How do they define ideal sleep?

How do they use technology for health and wellness?

Do they use wearable technologies?





### User Research: Interview Findings

Interviewees tended to go against their own better judgement on sleep.

"I definitely know that I shouldn't be looking at a screen couple hours before I'm trying to go to bed..."

Interviewees indicated a preference for smartwatches over fitness trackers.

"[Fitbit] seemed single dimensioned...failed to provide clear tracking so that was annoying"

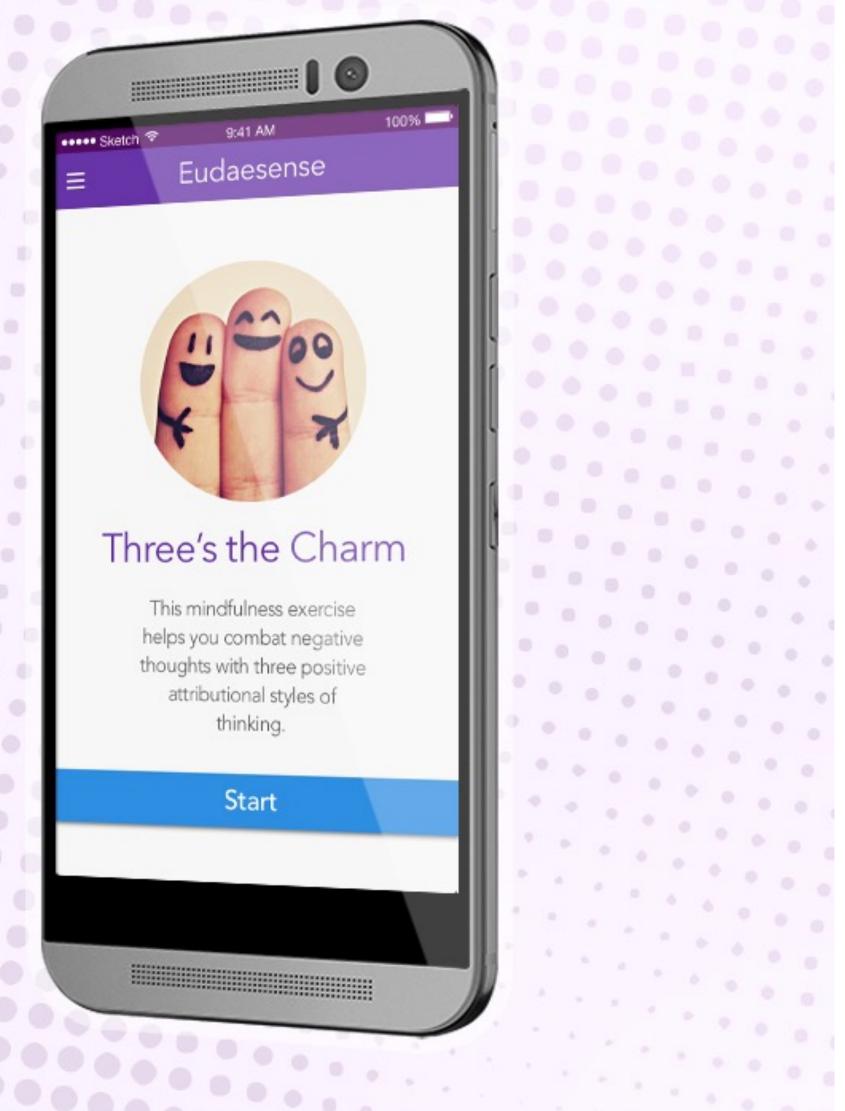
Interviewees didn't want to be bombarded with notifications from a smartwatch.

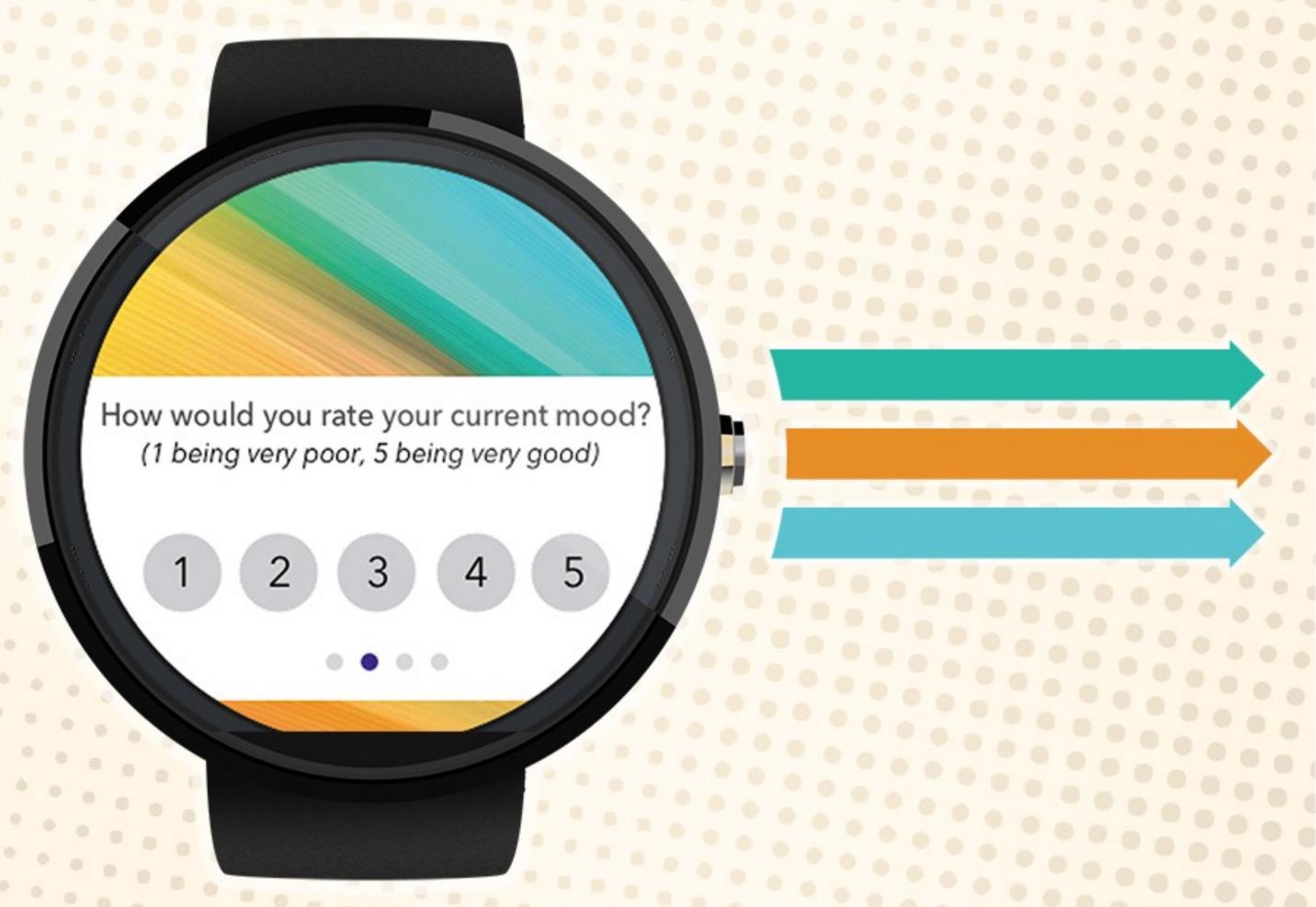
"You need to go somewhere?"
"No I just got a notification on my watch"

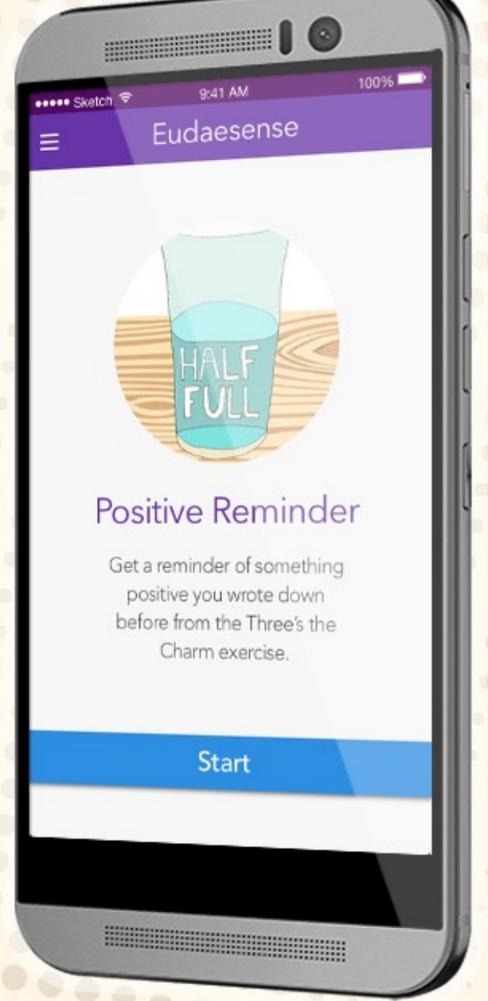


### Three's the Charn



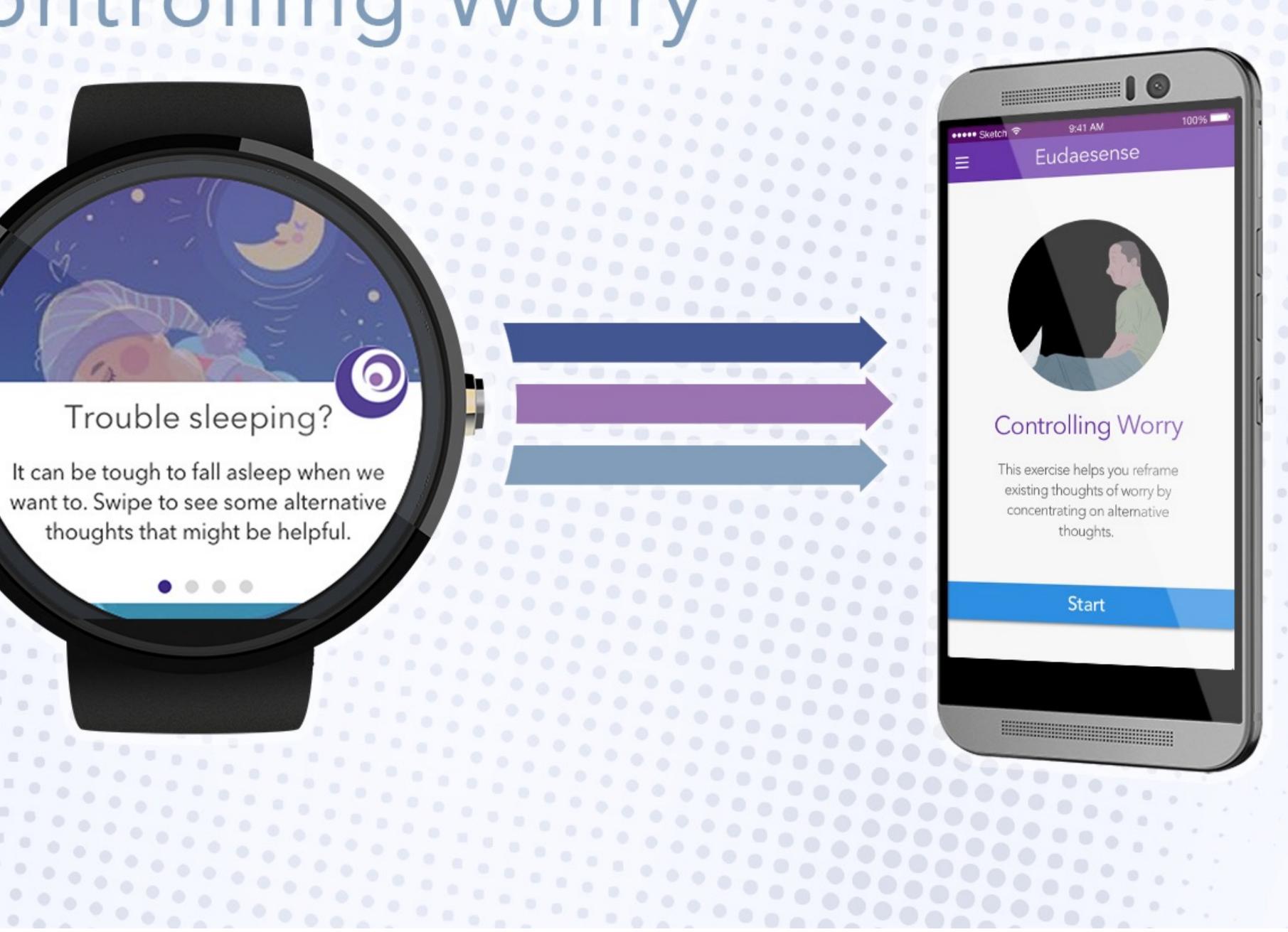


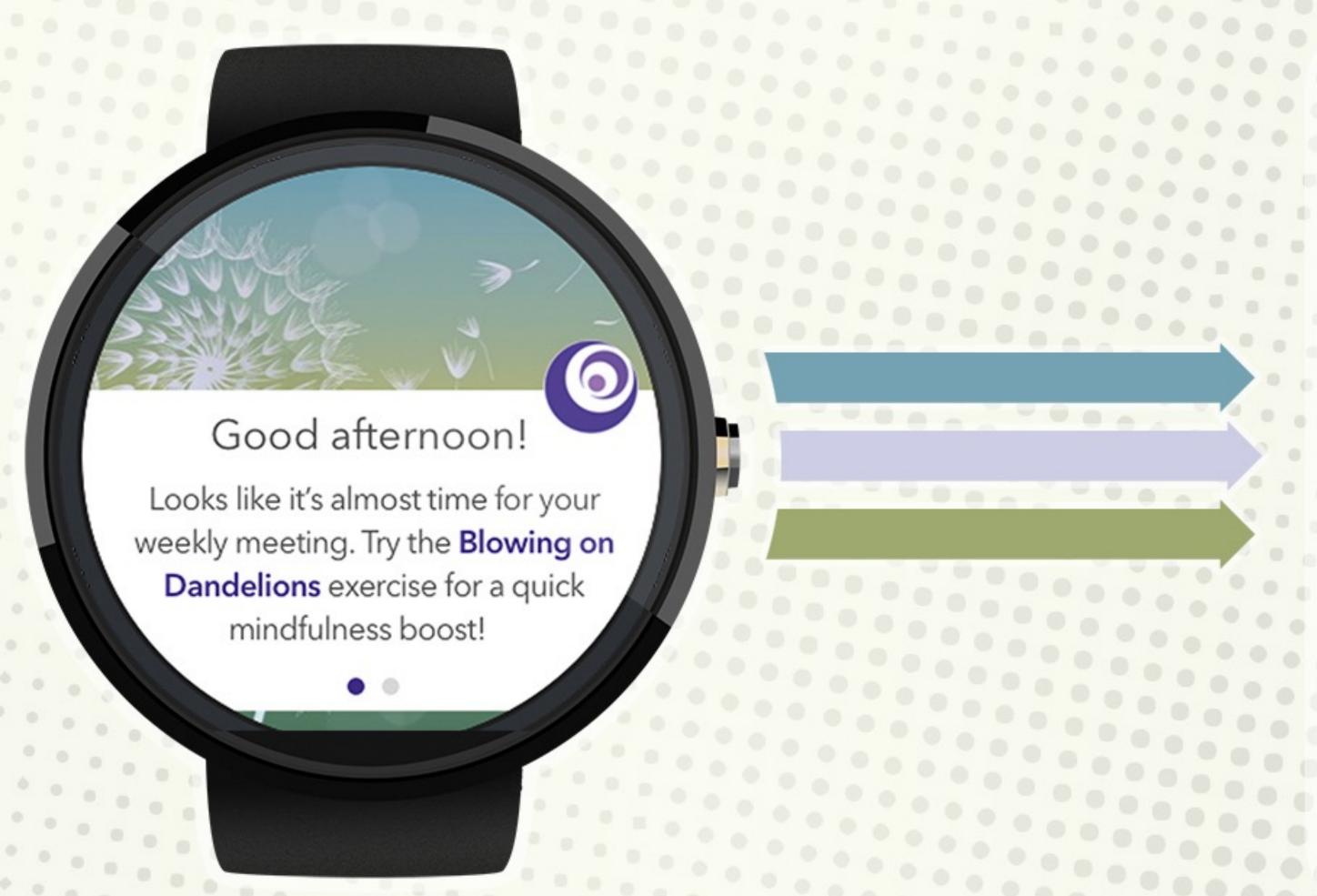




Positive Reminder









## Blowing on Dandelions

### User Research: Usability Study

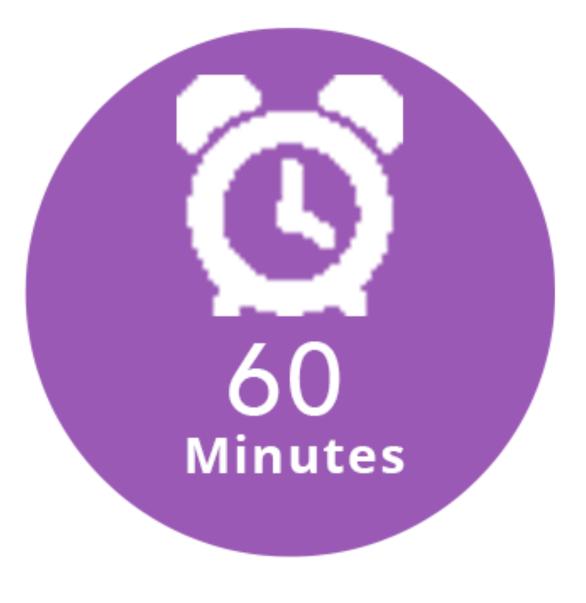
#### Research Questions

Which features are the most captivating?

Which features are the most useful?

What are the most appropriate times users would want to receive notifications?







### User Research: Usability Study Findings

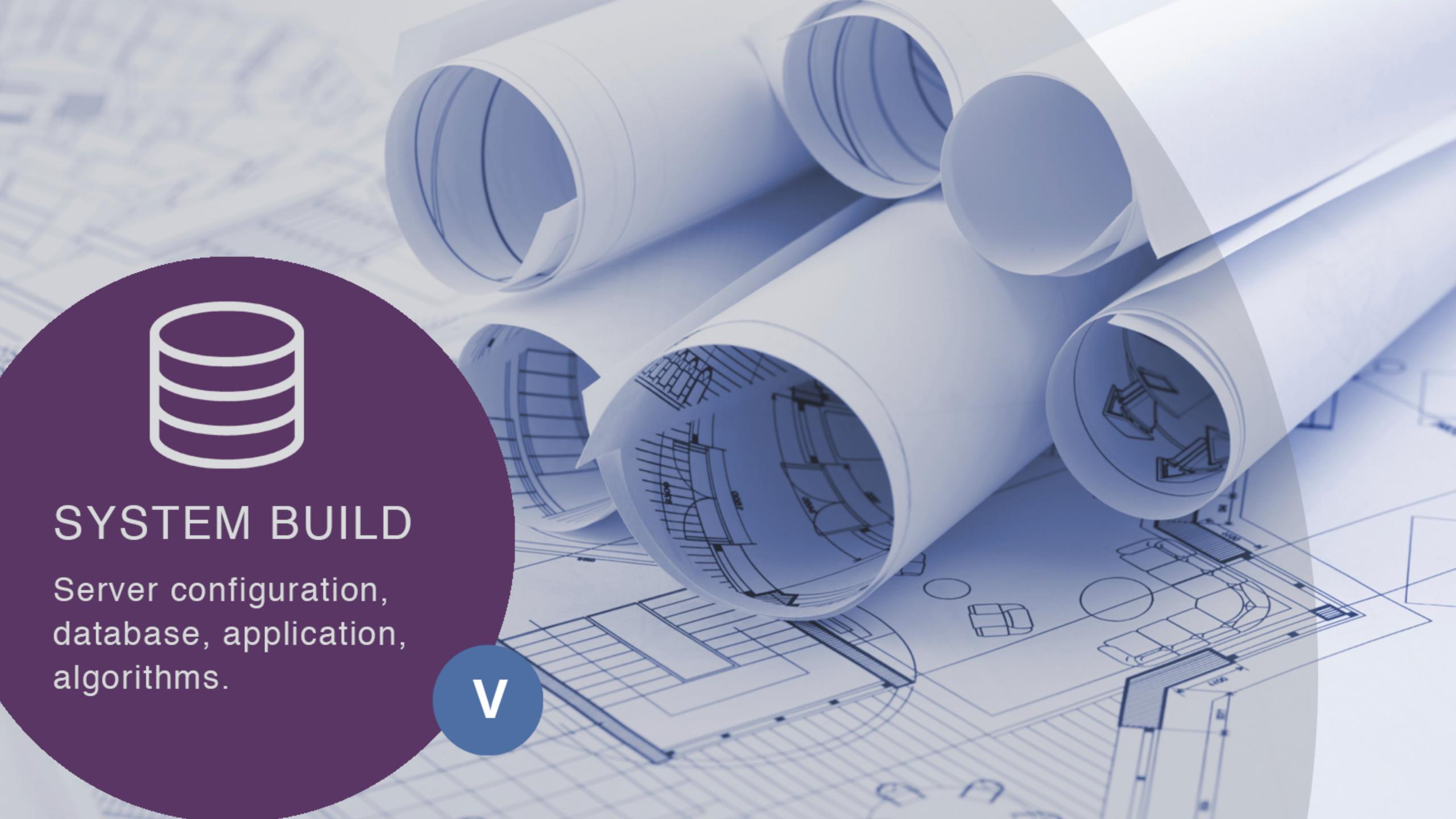
3 out of the 4 interventions received an overall positive response.

Controlling Worry intervention received the most negative responses.

Navigation elements were not always intuitive, especially in the smartphone designs.

Color selection was at times thought to be too bright and unfitting for our application.

Images did not always fit the theme of the intervention on the smartwatch.





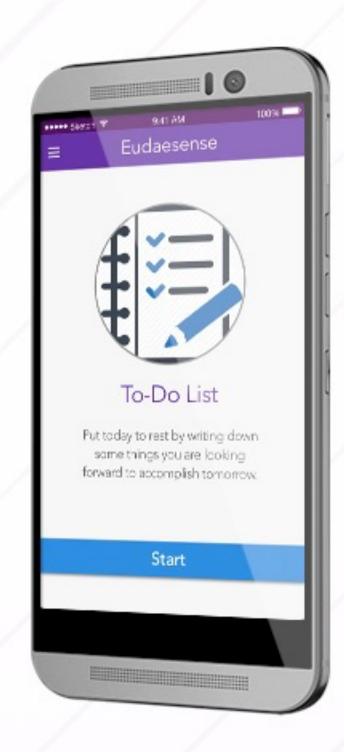
System



Architecture











### Research Study: Data Collection

#### Research Questions

Can we predict mood from wearable sensor data?

Can we collect and process data in real time?







### Future Iterations

Funded Study Additional Data

Improved Interventions







