

NEED FINDING - PT. 2

POVS

We met...

- * Camryn, a high school junior taking 3 AP classes

We were amazed to realize...

- * she gets easily distracted, spending hours online shopping before bed or watching Netflix, even when she is tired & ready to go to bed
- * she thinks the default alarm snooze time is too long & the sound is too abrupt

It would be game changing if...

- * users could control phone usage before bed to prevent distraction & unnecessarily lost sleep time
- * users could tailor their alarms to their sleep habits

We met...

- * Rotto, a student athlete with severe sleep apnea

We were amazed to realize...

- * he thinks that all of his work for the day has to be done before he can go to bed, causing anxiety
- * he was unaware of his poor sleep quality before being diagnosed & treated

It would be game changing if...

- * users could take advantage of self-imposed work breakpoints to better manage sleep time
- * users could have some sort of rating for their quality of sleep compared to others

We met...

- * Tara, a young accountant who has an hour commute to work

We were amazed to realize...

- * she wakes up every morning at 5:45am and is ready in 20 mins or less, but feels groggy for a while after waking up
- * she lays out everything for the next day before bed

It would be game changing if...

- * users could become alert faster after waking up
- * users could speed up their nightly routine to get to bed earlier

HMWS

- ... tailor user's sleep habits to alarms?
- ... use additional stimuli to assist in waking up user?
- ... optimize snooze efficiency?
- ... change user's wake up routine to divorce from snooze?
- ... **inspire accountability to user's bedtime goals?**
- ... limit user's distractions before bedtime?
- ... **make waking up more enjoyable for user?**
- ... control user's usage of technology immediately before bed?
- ... make user's body produce more melatonin to help falling asleep?
- ... utilize user's time browsing web before bed to help them fall asleep?
- ... make user want to hear their alarm?
- ... give user alternative to loud, abrupt alarm?
- ... turn sleep into game that can be won?
- ... create community of users with shared healthy sleep habits & goals?
- ... optimize user's sleep environment?

#1 How might we make waking up more enjoyable for the user?

- ... tell user when he/she is too tired to be productive?
- ... tell user when he/she is not getting a quality night of sleep?
- ... calm user down before bed?
- ... improve user's overall quality of sleep?
- ... **hold user accountable to pre-set work breakpoints & bedtime goals?**
- ... help user identify sleep apnea/other sleep inhibitors?
- ... relieve user of work-related anxieties to improve sleep quality?
- ... allow user to be both morning & night person?
- ... leverage naps to make user more productive?
- ... get user away from screens right before bed?
- ... explore non-traditional sleep patterns?
- ... break assumption that getting more sleep means working less/lower productivity?
- ... **reward user for healthy sleep habits?**
- ... help user maintain stable sleep habits rather than relying on extremes (i.e. all nighter / sleep until noon)?
- ... help user prioritize tasks versus hours of sleep?

#2 How might we inspire accountability to set & accomplish bedtime goals?

- ... optimize user's timing of nightly routines & preparation for next day?
- ... create sense of user accountability to sleep goals?
- ... help user plan ahead rather than day-by-day, saving time at night?
- ... maximize user's commute times as part of morning routine?
- ... **help user feel more alert when he/she wakes up (eliminating groggy feeling without coffee)?**
- ... make waking up more exciting for user?
- ... help user allocate more time to his/her morning by getting to bed earlier?
- ... **change user's bed to make it less appealing to stay in?**
- ... make waking up more like being terrified (a primal experience with adrenaline rush)?
- ... compute best alarm time based on when user falls asleep?
- ... **coordinate user's morning routine & commute based on traffic?**
- ... help user set achievable sleep goals?

#3 How might we help users feel more alert when they wake up?

Solutions

- * customizable alarm snooze time
- * user selected sound style (i.e. loud & abrupt, gradual increase)
- * incorporate natural light into wake time
- * reward users for waking up on time with small 'prizes' that accumulate with consistency
- * incorporate favorite songs/playlists into wake up routine
- * use natural REM sleep cycles to optimize wake up time
- * simplify/minimize morning tasks by helping user prepare for next day before bedtime
- * **record user's morning routine before leaving to set alarm based on leaving time rather than wakeup time**
- * make checking phone right away when waking up a process that effectively wakes user up
- * alarm that has funny YouTube/GIF clips to watch right when user wakes up
- * **set app that is linked to alarm & opened after wake up (i.e. Twitter, email, etc.)**
- * lock user's phone for short time period after alarm is turned off so user can't use it right, forcing him/her to wake up & not lay in bed checking phone

#1 Make waking up more enjoyable with customizable 'smart' alarm

- * create 'self-help' group or community of users who have similar sleep goals & daily schedules & report their progress
- * negative reinforcement for not waking up on time (i.e. notify fellow users about oversleeping, losing cash rewards)
- * set bedtime goal that causes phone to go into 'sleep mode' (i.e. no access except for emergencies)
- * **track user's daily activities/tasks & last sleep in order to tell user when he/she should take a nap or go to bed**
- * set activity to do to turn off alarm (i.e. selfie, movement, etc.)
- * alert user next day about sleep quality based on what was tracked from the night before (i.e. movements, sounds, etc.)
- * **track sleep debt & recommend sleep goals**
- * distribute work over different days & adjust sleep goals according to weekly schedule to maintain stable sleep habits
- * game in which users compete to wake up at set times
- * track external stimuli during night to identify what causes interruptions to sleep & lower sleep quality
- * induce immediate sleep by controlling bedtime routine at least 1 hour before (i.e. all technology turns off, all lights go off, etc.)
- * track bedtime routine & timing through user logs

#2 Track sleep debt & recommend personalized sleep goals

- * **change environment when it's time for user to wake up (i.e. auto cold bed)**
- * alarm that doesn't stop making sounds or vibrating until user gets out of bed or leaves room
- * positive reinforcement upon getting up or leaving room (i.e. favorite music, phone access, funny gif/image)
- * negative reinforcement for missing goals or bad habits (i.e. least favorite music, lack of phone access)
- * alarm that requires brain puzzle to shut off
- * collect & store videos & articles to be used for improving morning wake up
- * shower becomes only cold water starting 20 mins after alarm forcing user to get out of bed & start morning routine
- * auto brew coffee on wakeup
- * make user's phone clock run fast randomly (i.e. 10 mins ahead of actual time)
- * **inversely correlate alarm intensity with user's quality of sleep (i.e. more intense with lower quality sleep)**
- * use ambient cues so that wake up comes easier
- * **set tasks to be completed when user wake ups**

#3 Change environment when it's time to wake up

Experience Prototypes

iWake Watch
(wearable)

Wake Up Call
(phone app)

Rise&Shine
(phone app + external hardware)