Project 01

TO PERSUADE & INFORM

JINLIN WANG PROFESSOR RHONDA ARNTSEN

Smartphone Usage & Addiction

OVERVIEW

It's pretty evident that our smart phones have become **irreplaceable resources** that we simply can't live without. Most people can't even imagine going a day without one – and why would anyone want to? Smart phones give us everything we need to communicate quickly, get through the day, and entertain ourselves. When I realize how much I rely on my phone which affects my sleeping and working performances, I decided to move forward on this topic.

DATA SOURCES



CTATICT

Number of smartphone users in the United States from 2009 to 2040

https://0-www-statista-com.library.scad.edu/ statistics/201182/forecast-of-smartphone-users-in-theus/

Forecast number of mobile users worldwide from 2020 to 2025

https://0-www-statista-com.library.scad.edu/ statistics/218984/number-of-global-mobile-userssince-2010/

Time spent with nonvoice activities on mobile phones every day in the United States from 2019 to 2023

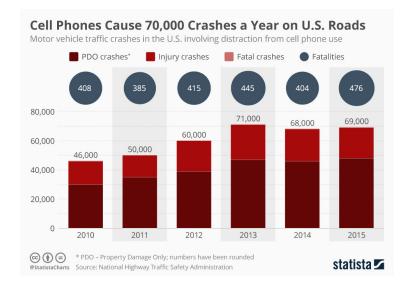
https://0-www-statista-com.library.scad.edu/ statistics/1045353/mobile-device-daily-usage-time-inthe-us/

Cell Phones Cause 70,000 Crashes a Year on U.S. Roads

https://www.statista.com/chart/9041/crashes-involving-cell-phone-use/

Time spent using smartphone per week in the United States in 2021, by age

https://0-www-statista-com.library.scad.edu/ statistics/1310218/time-spent-using-smartphone-age-us/



02

ONLINE SERVEY

Smartphone Addiction Statistics (2022)

- Teens and parent smartphone addiction
- Excessive phone usage
- Daily interruptions from smartphone use
- COVID-19 smartphone addiction statistics

https://www.slicktext.com/blog/2019/10/smartphone-addiction-statistics/

2022 Cell Phone Usage Statistics: How Obsessed Are We?

https://www.reviews.org/mobile/cell-phone-addiction/

A third of Americans live in a household with 3 or more smartphones

https://www.pewresearch.org/fact-tank/2017/05/25/a-third-of-americans-live-in-a-household-with-three-or-more-smartphones/

O^2

ARTICLE

When kids get their first cell phones around the world

https://www.cnn.com/2017/12/11/health/cell-phones-for-kids-parenting-without-borders-explainer-intl/index.html

Rise of smartphone injuries

https://www.dailymail.co.uk/health/article-3310195/Risesmartphone-injuries-43-people-walked-glued-screen-60-dropped-phone-face-reading.html

Texting and Driving Accident Statistics

https://www.cnn.com/2014/11/25/living/10-signs-smartphone-addiction-digital-life/index.html

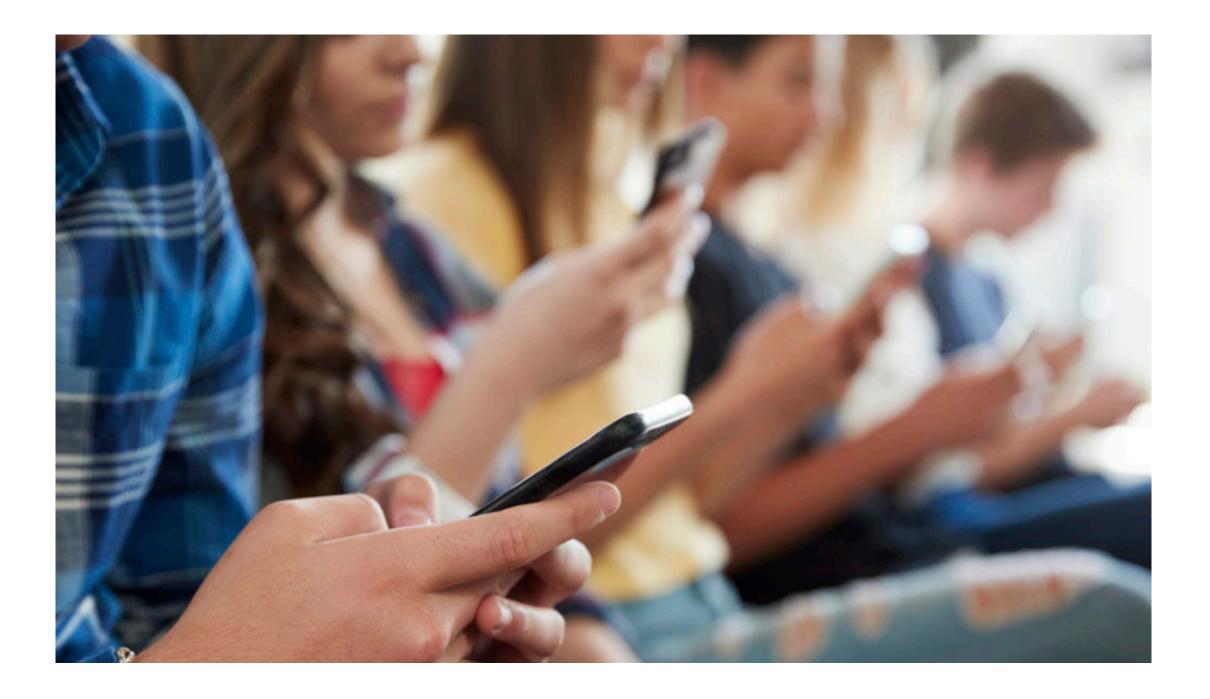
Is your child ready for a phone?

https://www.cnn.com/2016/05/19/health/questions-kids-cell-phone/index.html

Smartphone Usage & Addiction

DATA ANALYSIS

There are around 7.26 billion mobile phone users worldwide. Mobile phone technology has made people's life much more easier. In a recent study by the Pew Research Center, nearly 50 per cent of adults reported they "couldn't live without" their phones. However, phone usage comes with some consequences. Smartphones have strong impacts on people's mental and physical wellness. People are being negatively distracted by mobile devices, and 66% of the population shows signs of nomophobia ("no-mobile-phone phobia.") - the fear of being without their phones. Excessive screen time will also cause physical strain to eyes and body; using digital devices right before bedtime makes it much harder for people to fall asleep. 'Smartphone pinky', other injuries or even accidents can be caused by phones.



Design Proposal

CONTENT

The idea of this concept is to show the impacts of using cellphones among families. Cellphones can make people feel more connected, but they also can distract them and their families from connecting with each other in person. The fact that smart phone is actually pulling us farther apart and negatively affecting our interpersonal relationships. And considering how busy families are today, all the time we spend on phones is a heavy price to pay.

TWO SIDES

Instead of showing the good or bad of using smartphones, I want to use data show the both positive and negative sides to people, and let them to decide whether they want to control their phones or be manipulated. Every coin has two sides, and you can choose which side you want to see and believe.



POSITIVE

Show the advantages and conveniences of using phones (communication, entertainment, sources, etc.)

02

NEGATIVE

Show the consequences of phone addiction. (Lose human connections and harms for physical health)

INFORM

I want to inform people (parents) the signs and the impacts of cellphone addiction for their children themselves. Let them know they need to focus more on bonding families through in-person communications rather than stuck on screens. For example, using the data that shows how many hours that people spend on their phones, how often do they check on their phones, and their attitudes of giving their children cellphones.

PERSUASION

I want to persuade people (teenagers) to minimize cellphone usage through the data of teenagers' selfreflections of using phones, how long do they spend on phones weekly, and the conflicts with their parents by using phones.

AUDIENCE 01

Parents

- Age 29 49
- Use and give their children smartphones

AUDIENCE 02

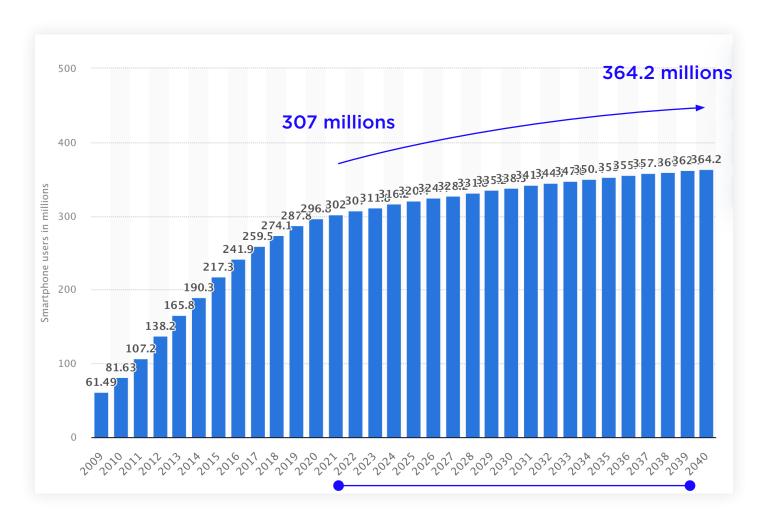
Teenagers

- Age 13 19
- Have smartphone

Research Content

QUANTITATIVE DATA

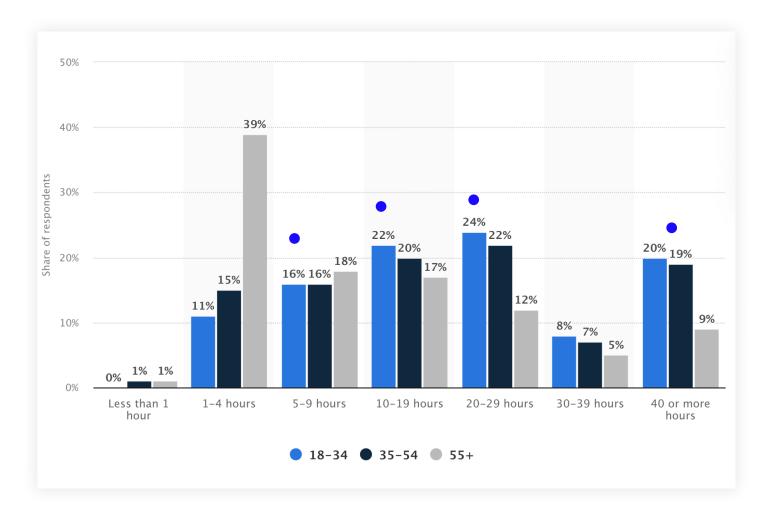
O1 Numbers of smartphone users in the U.S. (2009-2040)



Show the rising trends of how many people using smartphone in the near future.

https://0-www-statista-com.library.scad.edu/ statistics/201182/forecast-of-smartphone-users-in-the-us/ 12 Time spent

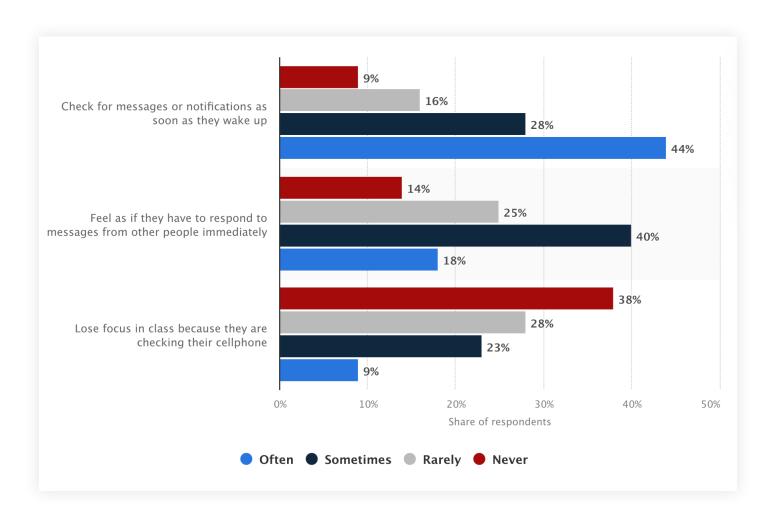
Time spent using smartphone weekly in the U.S. by age



Show the average time people who are 18-24 spent on their phones every week.

https://0-www-statista-com.library.scad.edu/ statistics/1310218/time-spent-using-smartphone-age-us/ 03

Frequency of smartphone notification activities of teenagers in the United States as of April 2018



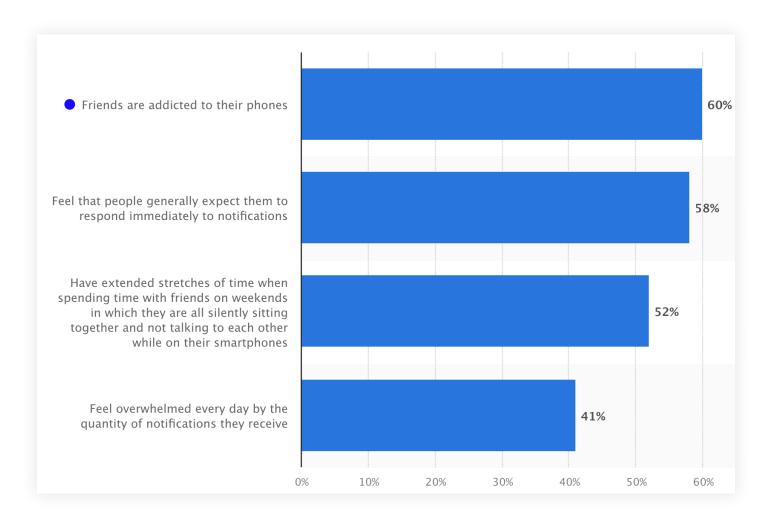
Show teenagers' behaviors and frequency of checking phone notification activities.

https://0-www-statista-com.library.scad.edu/ statistics/912068/teens-frequency-smartphone-activities-usa/

Research Content

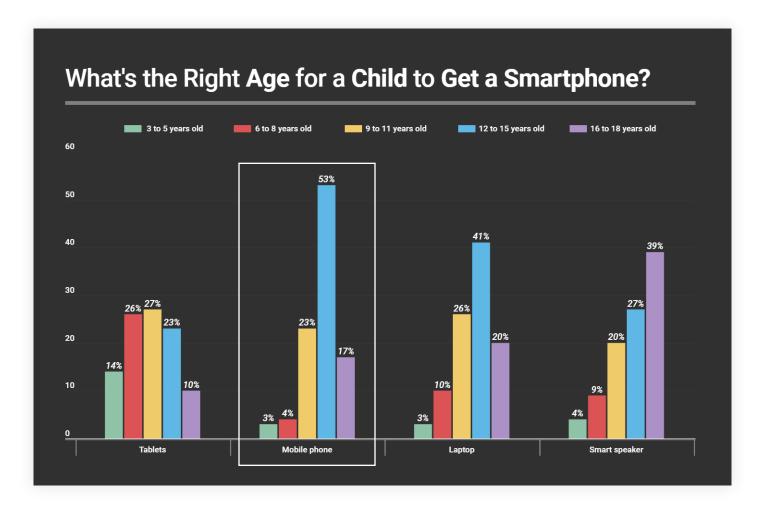
QUANTITATIVE DATA

Attitudes of teenage smartphone users in the United States towards their phone as of April 2018



Show teen smartphone users' (13-18) attitudes towards their phone.

https://O-www-statista-com.library.scad.edu/ statistics/900918/teen-smartphone-user-attitude-towards-their-phone/ According to Parents, 12 to 15 Is the Appropriate Age Bracket for Kids to Have Smartphones (Survey)



Show the perspective of parents: when is the appropriate time to get a child a phone.

https://www.digitalinformationworld. com/2020/01/what-is-the-appropriate-agefor-kids-to-have-smartphones.html O6 'Teenage zombies' consumed by phones Parents have a problem, too

Nearly 80% of teens in the new survey said they checked their phones hourly, and 72% said they felt the need to immediately respond to texts and social networking messages. Thirty-six percent of parents said they argued with their child daily about device use, and 77% of parents feel their children get distracted by their devices and don't pay attention when they are together at least a few times per week.

27% of parents feel they are addicted to their mobile devices, while nearly the same number of teens, **28%**, believe their parents are addicted, according to the poll.

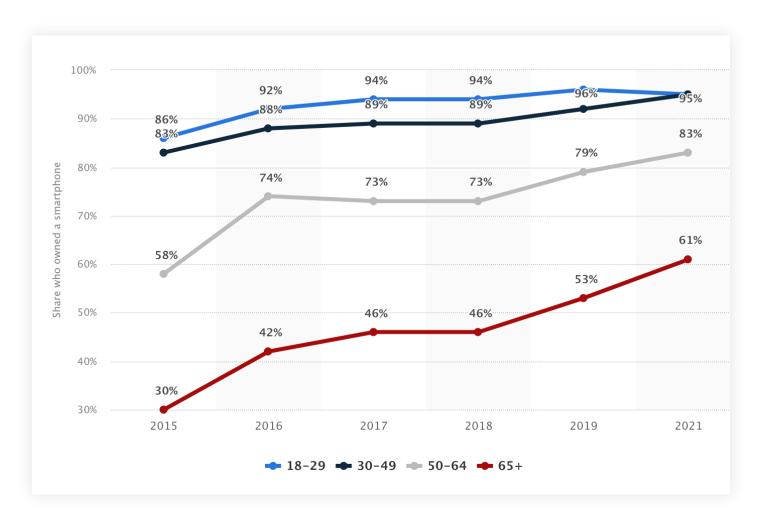
69% of parents check their devices at least hourly compared to the 78% of teens who say they do that, and nearly half, 48%, of parents feel they need to immediately respond to texts and social networking messages. More than half, 56%, of parents admit checking their mobile devices while driving and nearly the same number, 52%, very often or occasionally try to cut down the amount of time they spend on devices.

https://www.cnn.com/2016/05/03/health/teens-cell-phone-addiction-parents/index.html

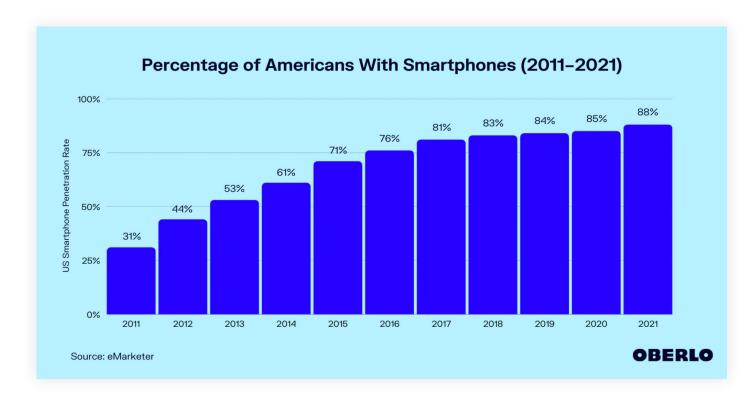
Research Content

QUANTITATIVE DATA

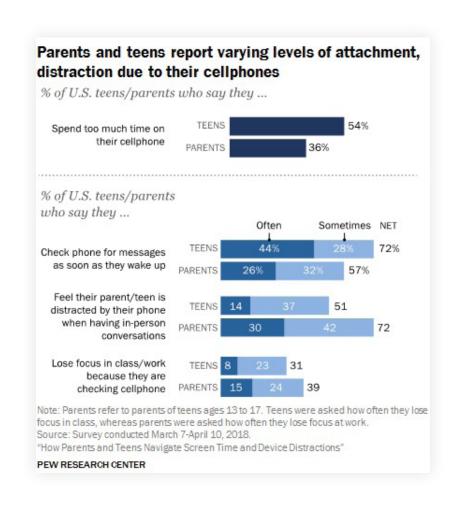
 $\mathbf{O7}$ Share of adults in the United States who owned a smartphone



Percentage of Americans with Smartphones



How Teens and Parents Navigate Screen Time and Device Distractions



Show the percentage of young generations who owned phones

https://www.statista.com/statistics/489255/ percentage-of-us-smartphone-owners-byage-group/ Show how many Americans have cellphones from 2011 to 2021

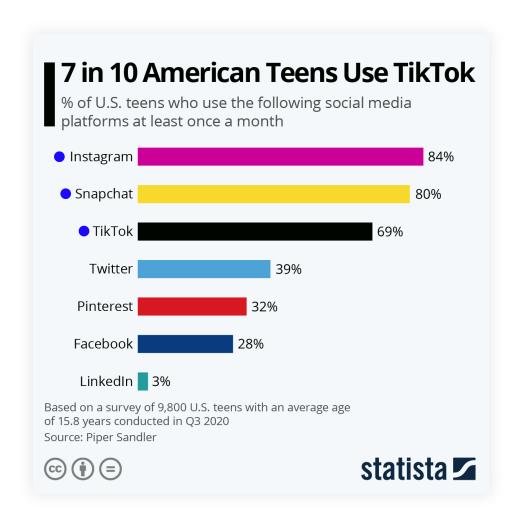
https://www.oberlo.com/statistics/how-many-americans-have-smartphones Show teens' and parents' thoughts of their cellphone usage

https://www.pewresearch.org/internet/2018/08/22/how-teens-and-parents-navigate-screen-time-and-device-distractions/

Research Content

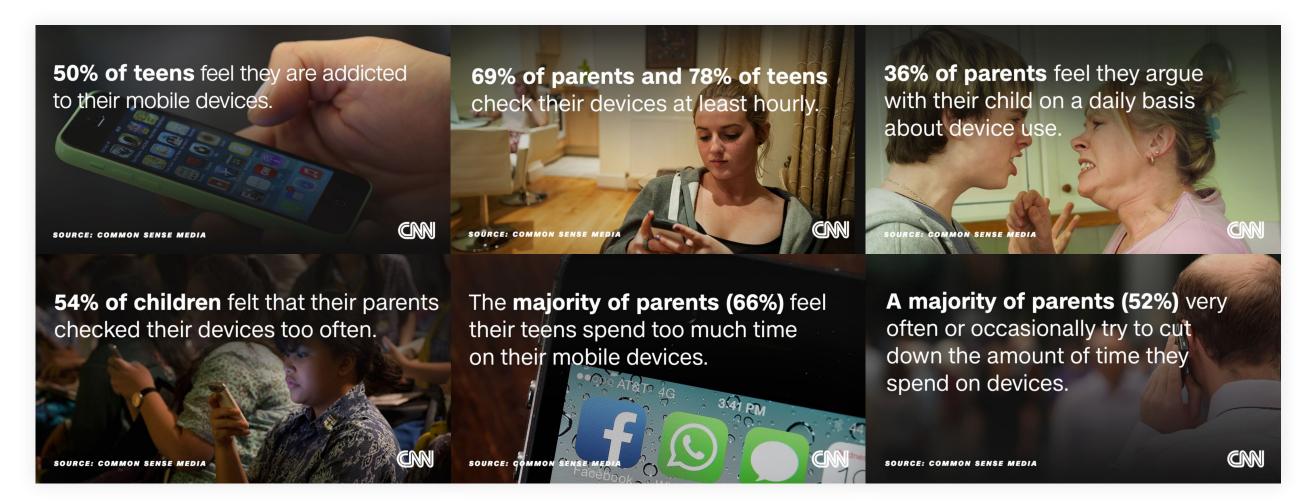
QUANTITATIVE DATA

O1 Teens' social media usage



Show which is the most popular app that teens usually use

https://www.statista.com/chart/22446/ most-used-social-media-platforms-by-us-teens/#:~:text=According%20 to%20the%20survey%20conducted,and%20 28%20percent%20for%20Facebook. 02 Conflicts between parents and teenagers caused by phone usage



Show teenagers' behaviors and frequency of checking phone notification activities.

https://www.cnn.com/2017/12/11/health/cell-phones-for-kids-parenting-without-borders-explainer-intl/index.html

Research Content

QUALITATIVE DATA

03

Online quiz: Smartphone Abuse Test

61% of respondents in the survey said they regularly sleep with their cell or smartphone turned on under their pillow or next to their bed, and more than 50% feel uncomfortable when they leave their smartphone at home or in the car, or when they have no service or their phone is broken.

Greenfield, who is also author of "Virtual Addiction: Help for Netheads, Cyber Freaks and Those Who Love Them," says **fewer people would actually be classified as addicted to their devices.** That number is around 10 to 12%, according to his latest research.

https://www.cnn.com/2014/11/25/living/10-signs-smartphone-addiction-digital-life/index.html

10 signs you might be addicted to your smartphone

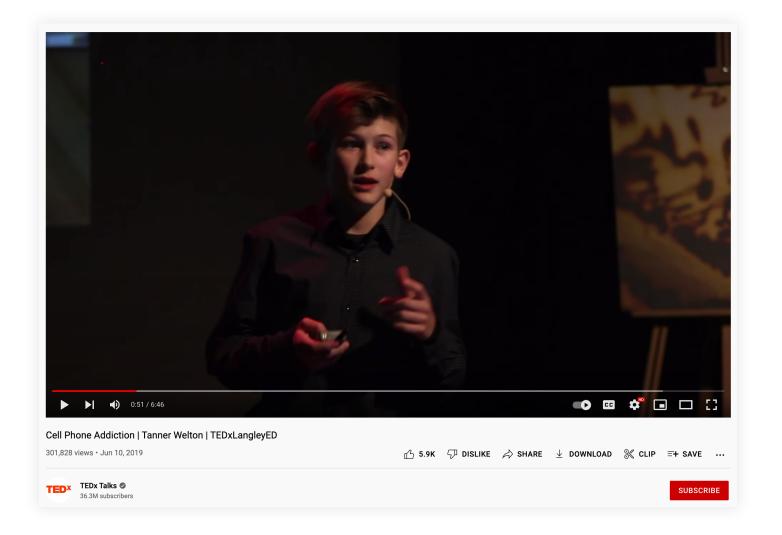
- 1. When you check your phone to see the current temperature instead of opening a window, and/or when you check your phone to see the current time instead of looking at the watch that's right on your wrist. (I just did this!)
- 2. When you have to consciously say to your spouse "Let's put our phones away" while watching TV because it's more common that they're out than away.
- 3. If you are answering emails in a dimly lit reception area while waiting for your massage therapist to destress you, you may have a problem.
- 4. When your kids have to text you their carry-out orders because you've lost the ability to retain information that is not received on your phone.
- 5. When you hope you hit a bunch of red lights on the way home so you can comment on a Facebook post.

- 6. When one of your daughter's first drawings of you has a BlackBerry in your hand.
- 7. When you wake up, you grab your phone and check it before you get up to pee.
- 8. When you drop a phone on your face because you're dozing off.
- 9. When you choose your clothing based on the best pockets to hold your phone.
- 10. When you are staring at photos you took on your phone while the actual moment is taking place right in front of you.

Research Content

QUALITATIVE DATA

O4 TED Talks & personal stories of phone addiction



Tanner Welton is a grade 8 student who draws people in while entertaining them about his personal experiences pertaining to social interactions and common cell phone usage amongst the youth of today.



good vibes only 9 months ago

I am 13 years old and I was a victim of cell addiction. It wasn't a problem when I looked at my phone and played numerous videos for hours but then later own I noticed some changes in myself. Being distant with my family members, having anxiety problems and a lot of temper in the sense I get angry really easily for small things and I also became poor in studies. I just wanna give a small advice to students my age, phone addiction makes you loose a lot of things and yourself. I recommend you all to take very less time in front of the screen, cause once you get addicted it's hard to come back to reality instead lets take care of ourselves and focus for our future.

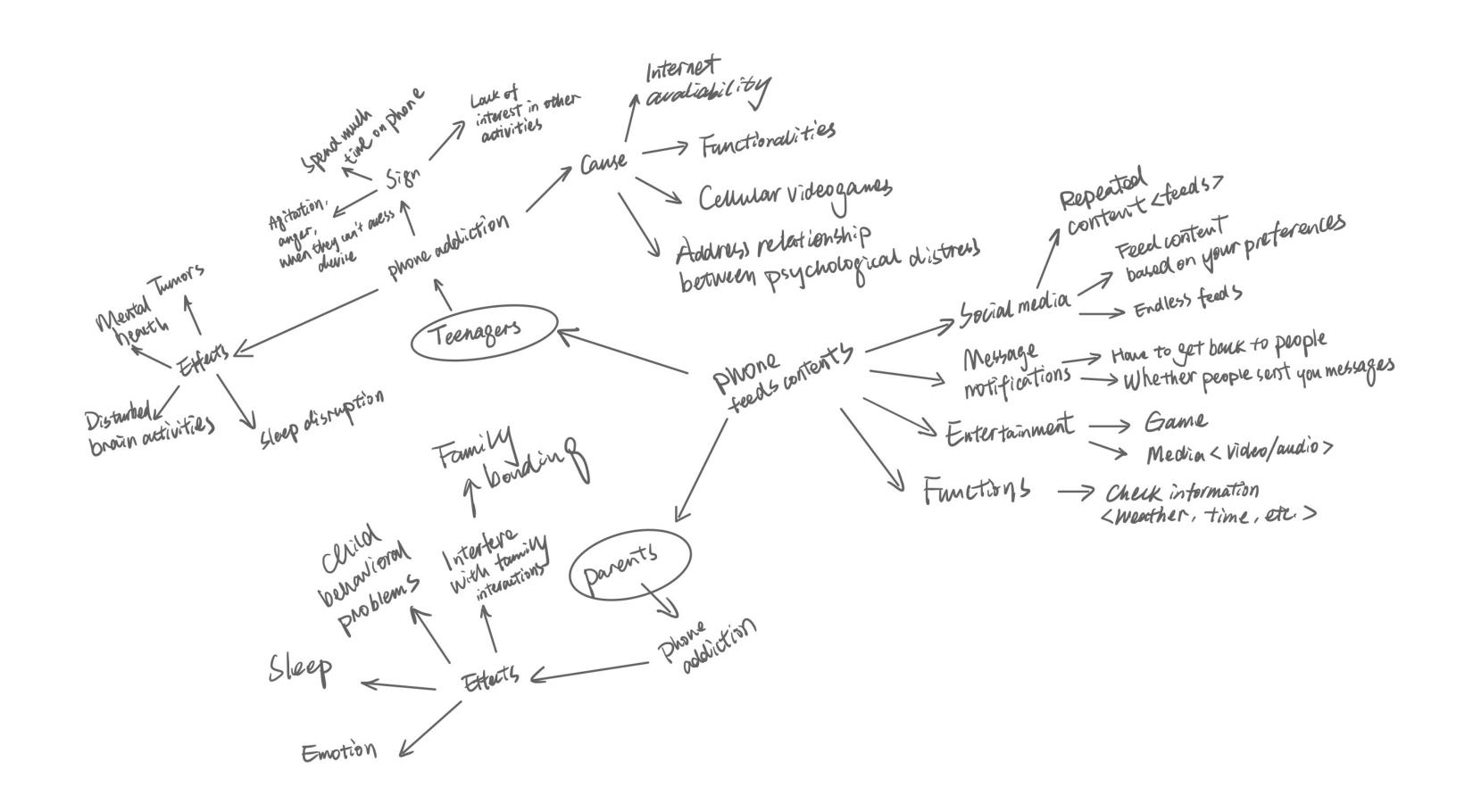
占 72 尔 REPLY

- 80% of children check their phones every 5 minutes.
- His family members are panic when they can't find their phones.
- Parents are starting to put their children to detoxify them of phone usage.
- People are too busy on their devices even it's on a date.
- People don't even talk to eachother in the same household.
- Families text each other in the same house.
- People pay more attention on their phone rather than the person in front of them. (Phubbing)
- People forget about human connection.
- People are high-energy before go to bed if they check their phones.
- Digital eye strains, increasing illness, and car accidents.

"Your time is limited so don't waste it living someone else's life."

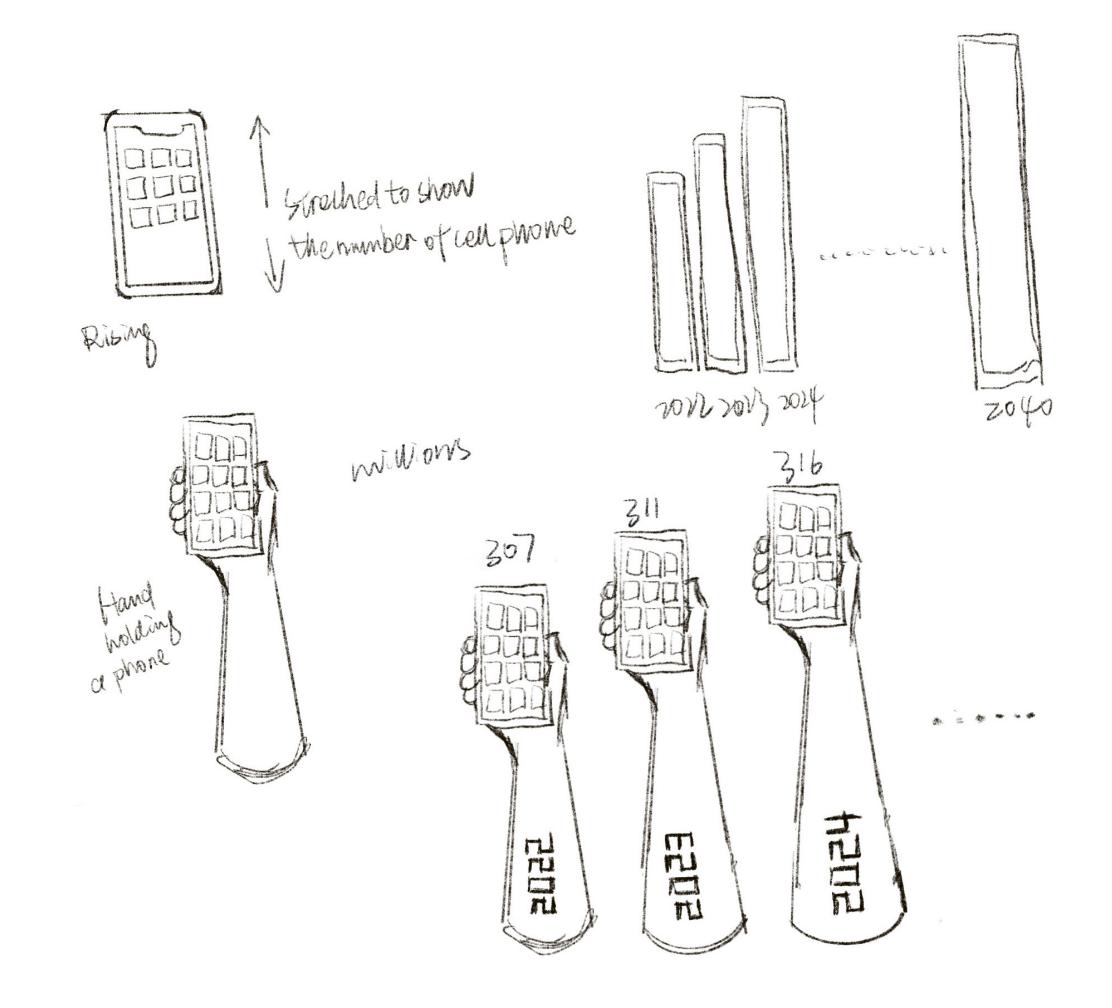
Steve Jobs

Brainstorming



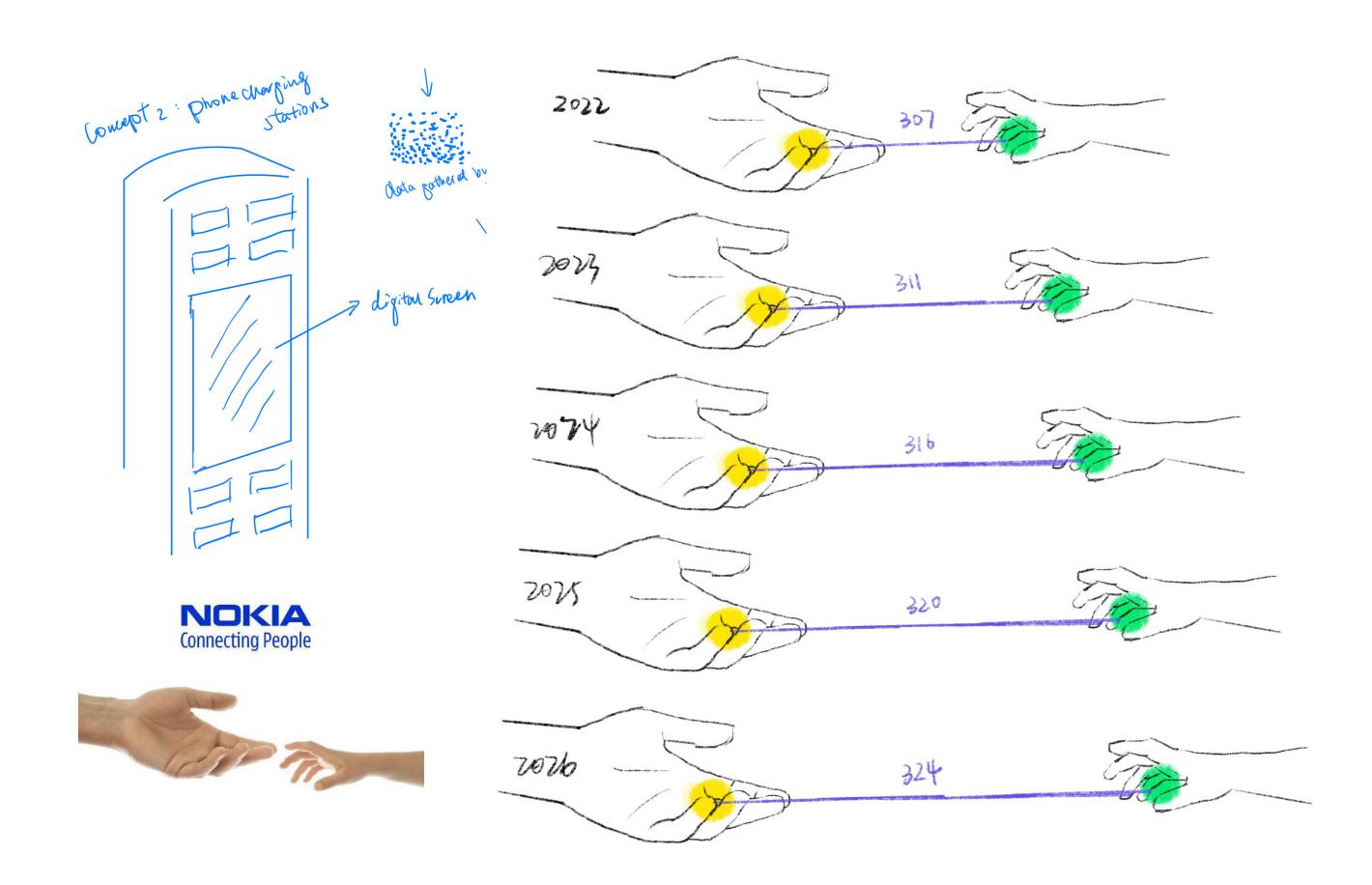
INFORM

I brainstormed 2 ways to show the quantitative data: one is to stretch the phone/arm and show the amount of smartphone users.



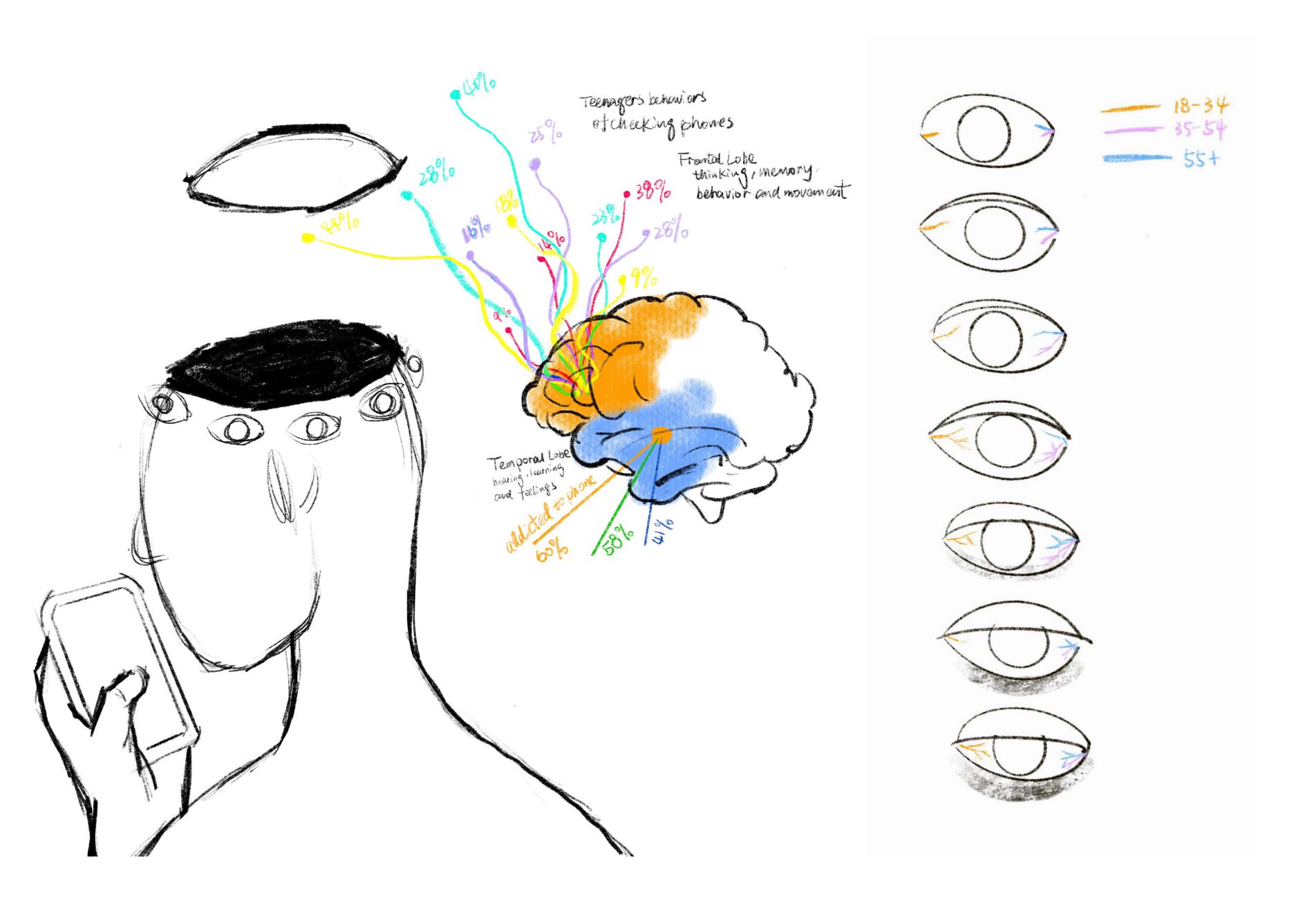
PERSUADE

For my persuade idea, I want to use the classic idea of Nokia hands to show the data. Phones can connect people, but can also cut down the face to face communications among people.



PERSUADE

I also thought of using a brain as the main subject and showing the impacts that phone usage has on the different areas of the brain.



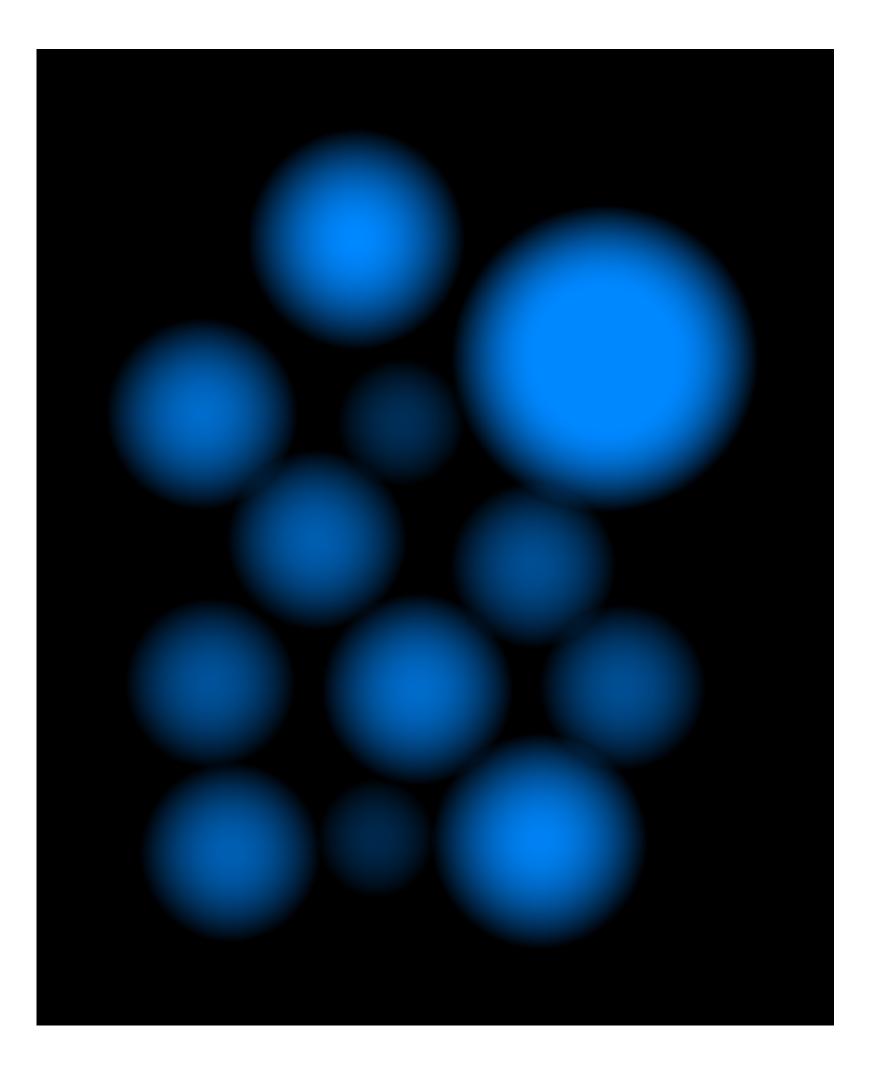
Ideation 02

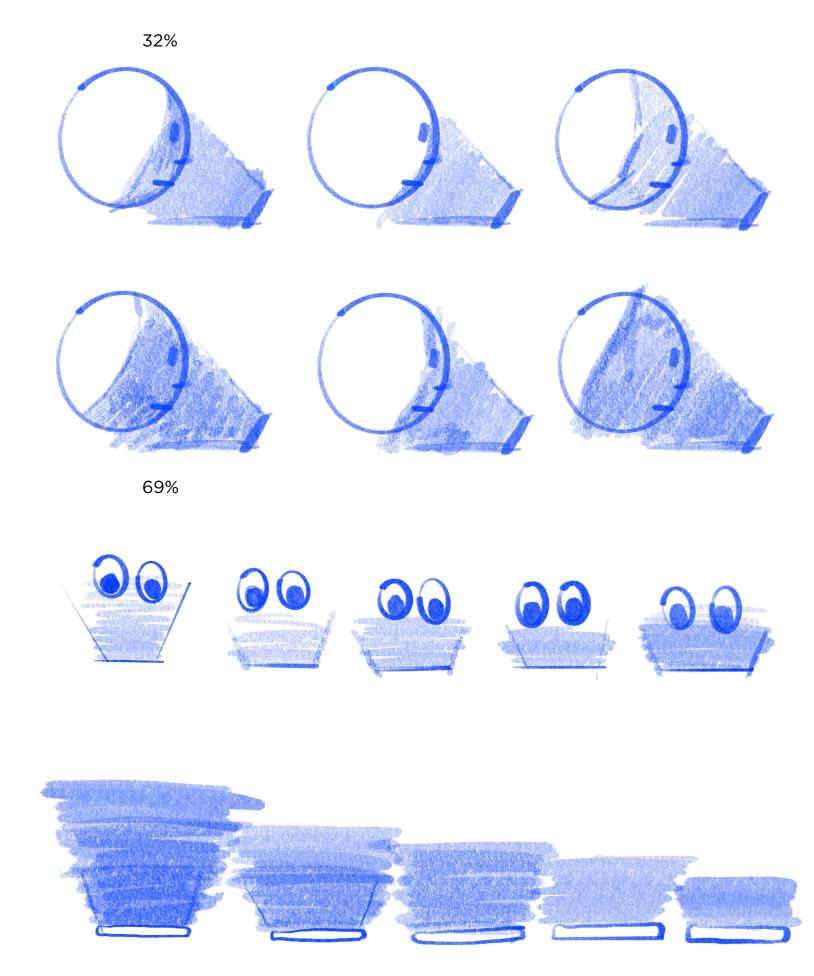
INFORM

Check phones before bed or during the late night is a common scenario which happens everyday. I wanna use the area of light to show the data of teenagers' social media usage.

MEDIUM

Posters





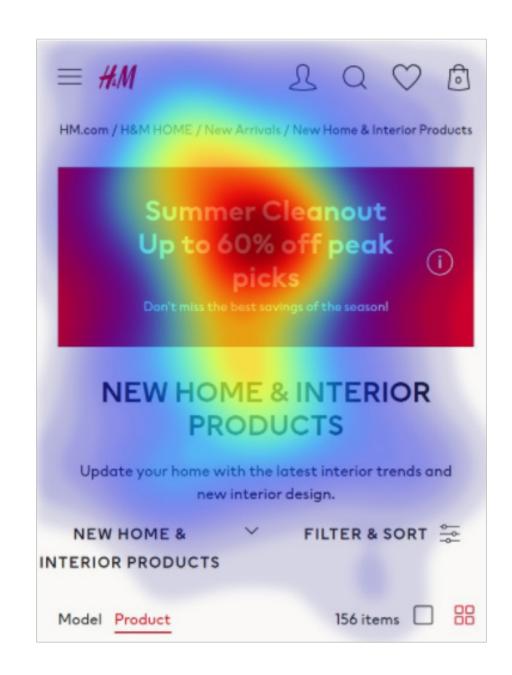
Ideation 02

INFORM

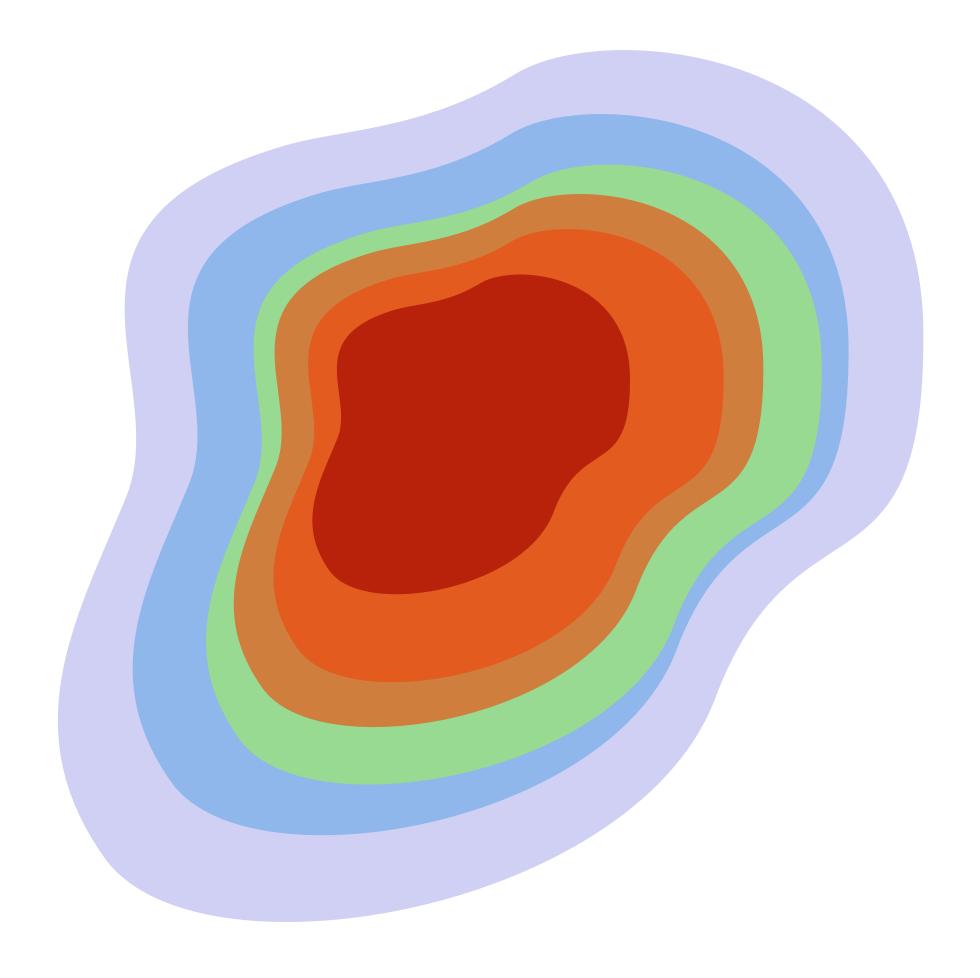
Using eye-tracking heat map to show the frequency of people using cellphones.

MEDIUM

Posters



Eye-tracking heat map to show the frequency of people using cellphones.

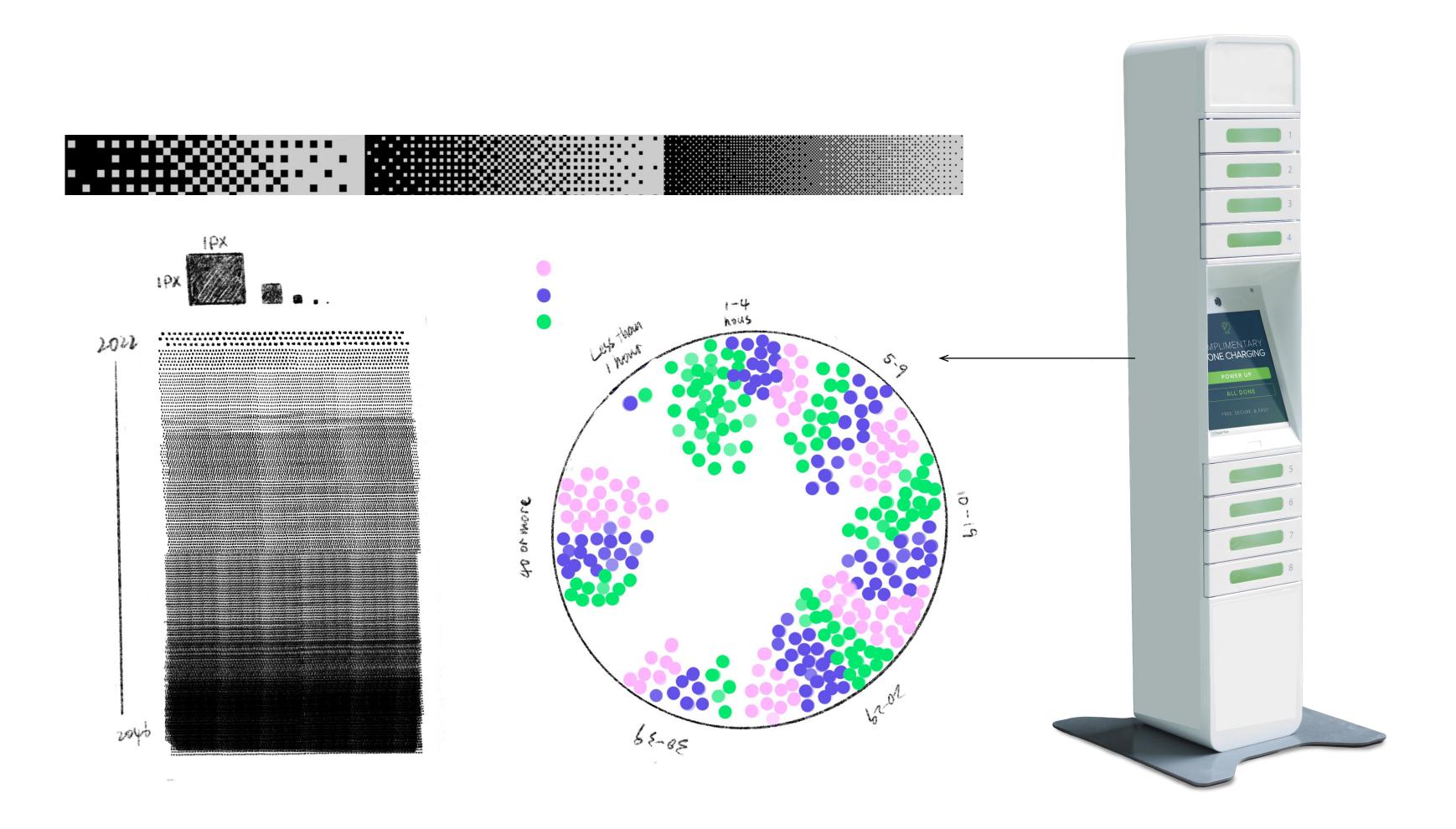


PERSUASION

When people put their phones into the charging station, their phones will get locked for the charing time that they picked. Using pixels and dots to show the quantitative data of smartphone usage.

MEDIUM

On external surface of phone charging stations.



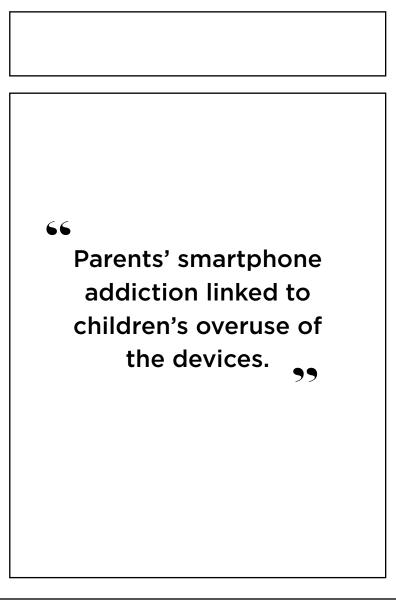
Ideation 03 / Inform

MEDIUM

Newspaper

NARRATIVE & DATA POINT

- More and more people have mobile phones; it plays a important role in people's daily life. <The overview of the mobile phone ownership data, phone usage by age, and people's average screen time.>
- How would people know whether they're addicted to their phones? Sending the message to people and letting them to aware the symptom of phone addiction.
 The data of smartphone user behaviors and teenage smartphone addiction.
 Qualitative data that shows the signs of phone addiction.>
- How to minimize the conflicts between
 parents and teenagers generated by phone
 usage and strengthen family bonding.
 <Smartphone usage data in school, phone
 usage frequency, qualitative data related to
 parents and teenagers thoughts towards
 each other.>



You could be addicted to your cellphone and don't even notice that.

Cellphone usage can ruing your family time and relationships

You might "contribute" to your children's phone addiction

Cover SPREAD

Children overuse of Cellphone usage can devices could lead to lead to less family time parents smartphone and relationships addiction

99

These factors could further contribute to teenagers overuse of smartphone devices

BACK

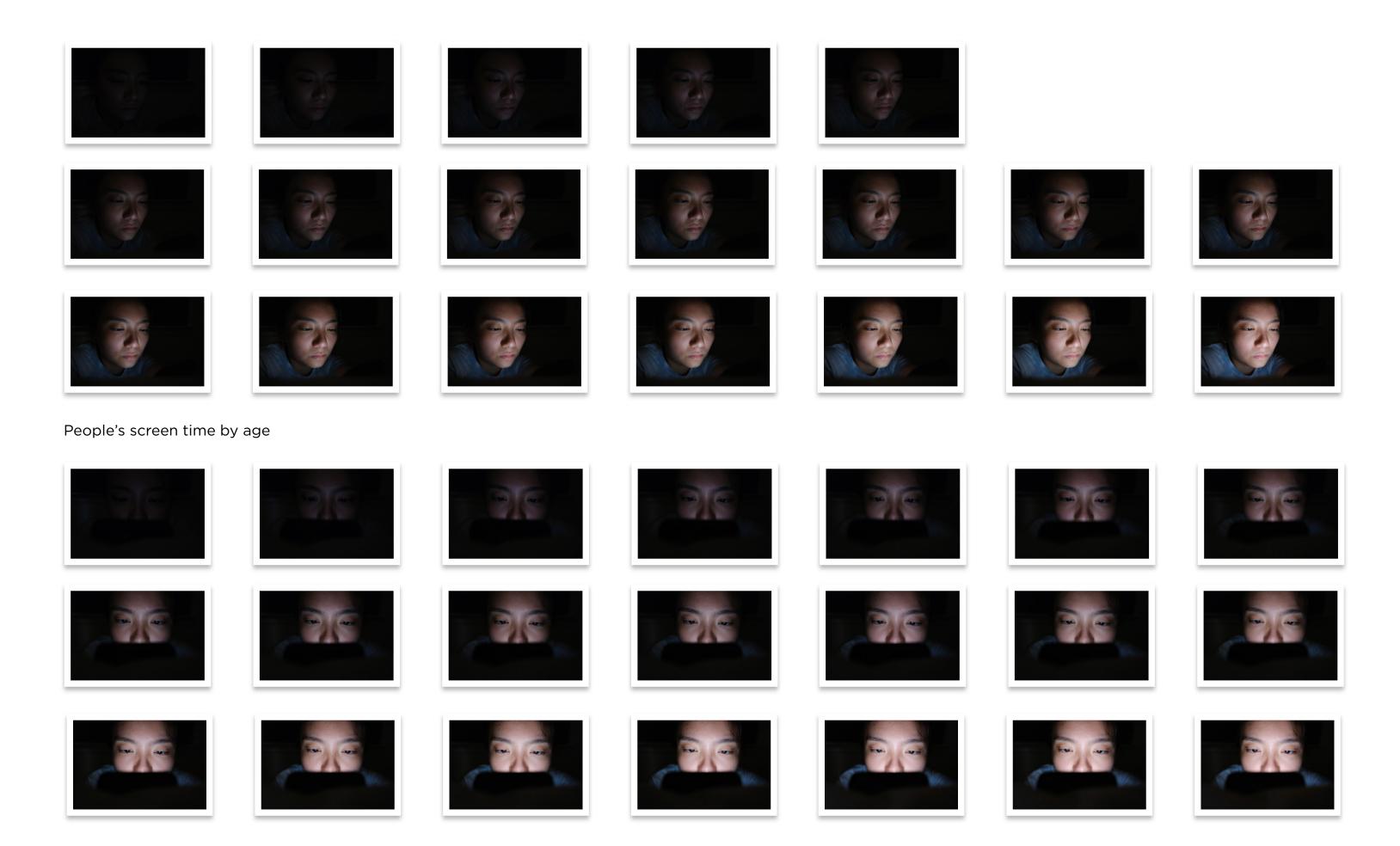
Ideation 03 / Inform

MEDIUM

Newspaper

FORM

Use photos which show the illuminate area on the face while people check their phones before bad and deliver the phone usage time data to audiences.



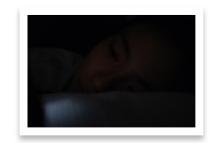
Ideation 03 / Inform

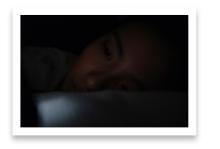
MEDIUM

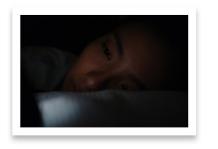
Newspaper

FORM

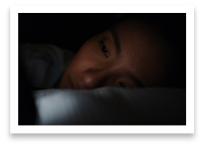
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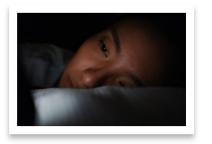


































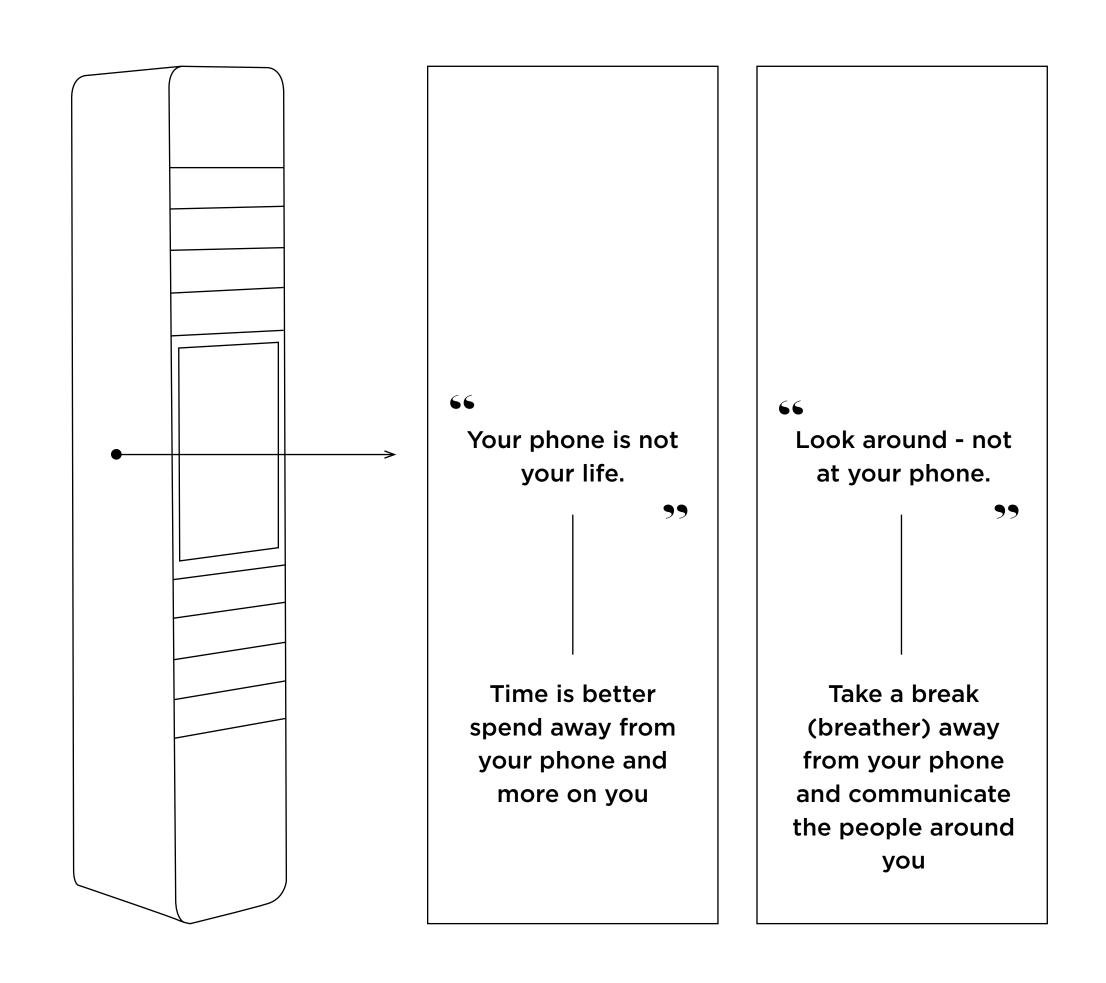
Ideation 03 / Persuasion

MEDIUM

On external surface of phone charging stations

NARRATIVE & DATA POINT

- Large amount of people are phone users, especially young generations. <The overview of the mobile phone ownership data, phone usage by age, and people's average screen time.>
- Teenagers' potential behavioral problems
 will be caused by inappropriate phone
 usage. <The data of smartphone user
 behaviors, teenage smartphone addiction
 and phone usage data in school. Qualitative
 data that shows the signs of phone
 addiction.>
- Let teenagers cutting down the screen time and communicate more with the surrounded people and their families.
 <Phone usage frequency, qualitative data related to parents and teenagers thoughts towards each other.>



Ideation 04 / Inform

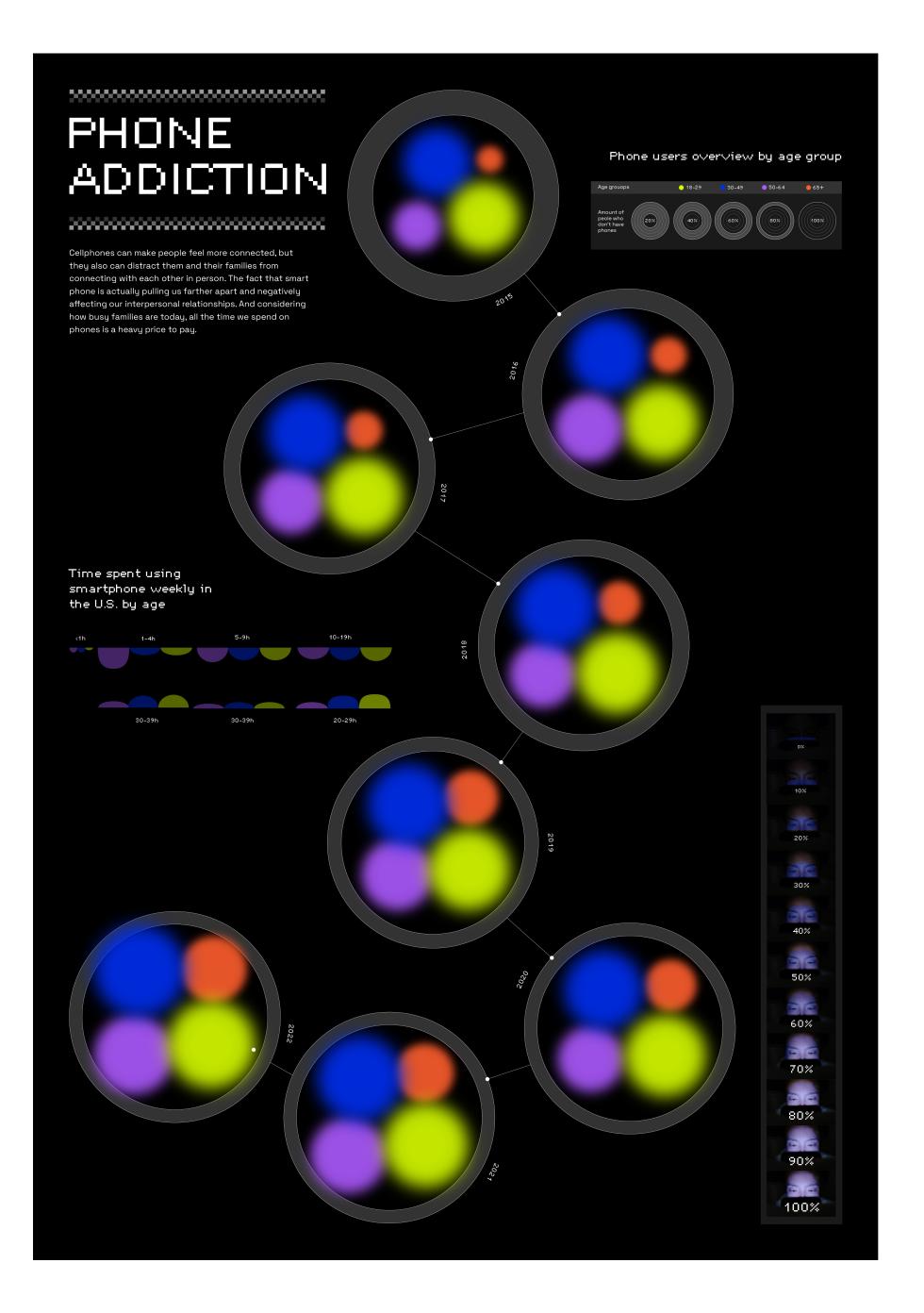
MEDIUM

Flyer

NARRATIVE & DATA POINT

- More and more people have mobile phones; it plays a important role in people's daily life. <The overview of the mobile phone ownership data, phone usage by age, and people's average screen time.>
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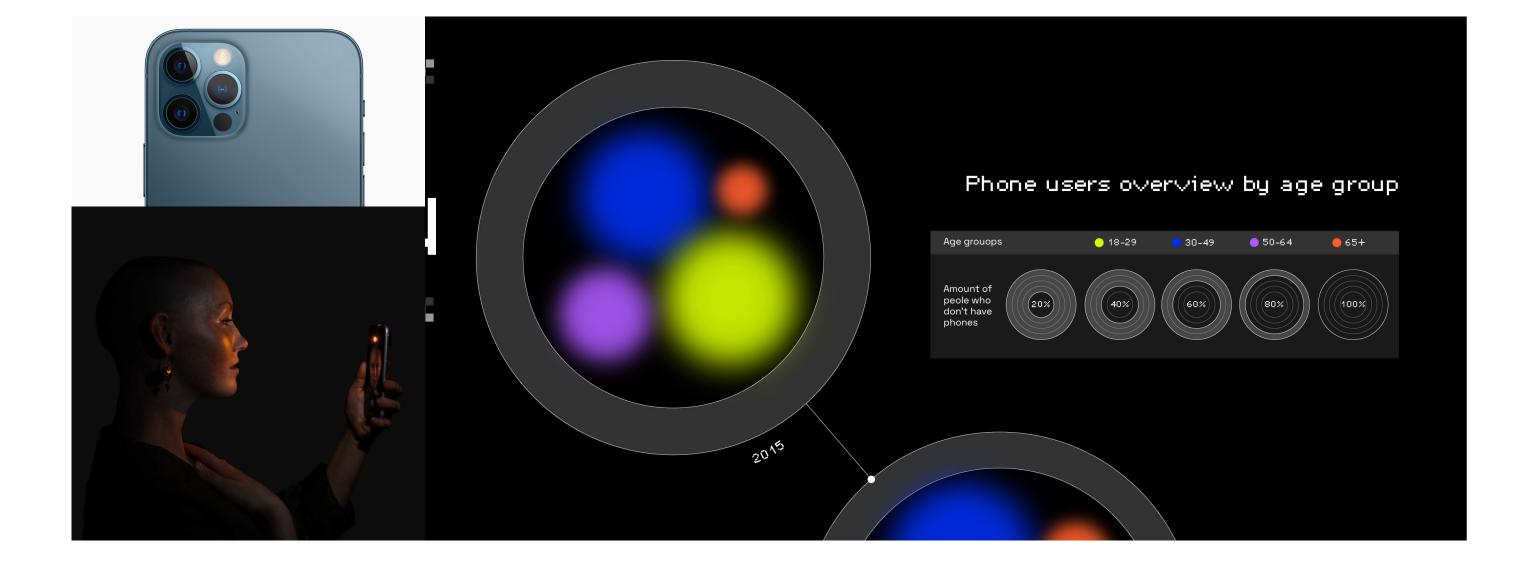
Parents' overuse of devices could lead to children's smartphone addiction



Ideation 04 / Inform

DATA IN CONTEXT

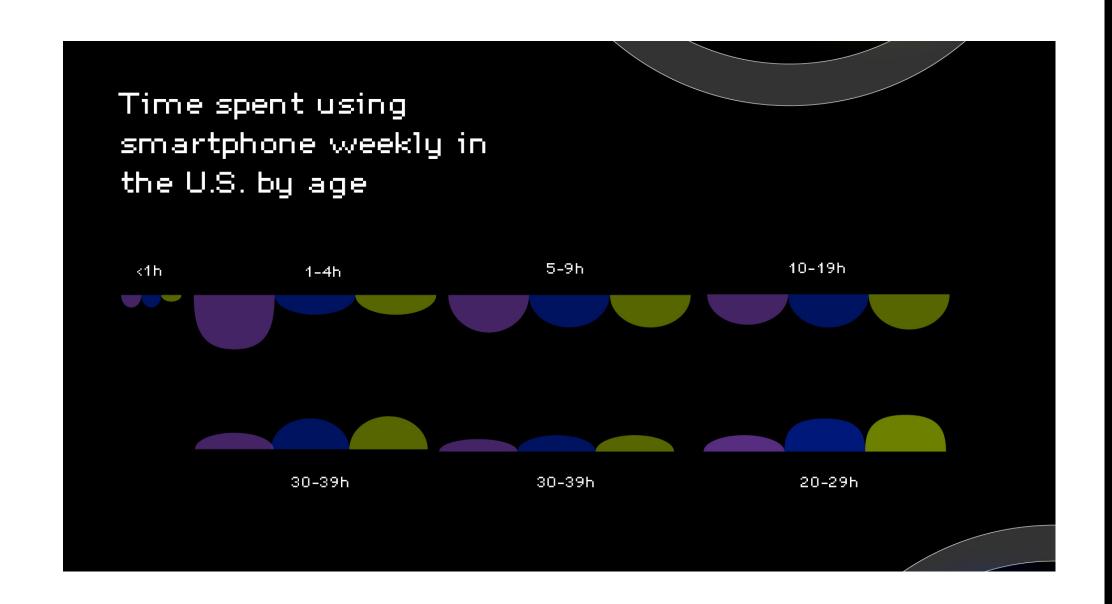
I got the inspiration from the camera of the phone and the light generated by it; I consider them in a more abstract way like how people are attracted by these factors. I use them to show the data people in the United States who owned a smartphone by age group and data in general.

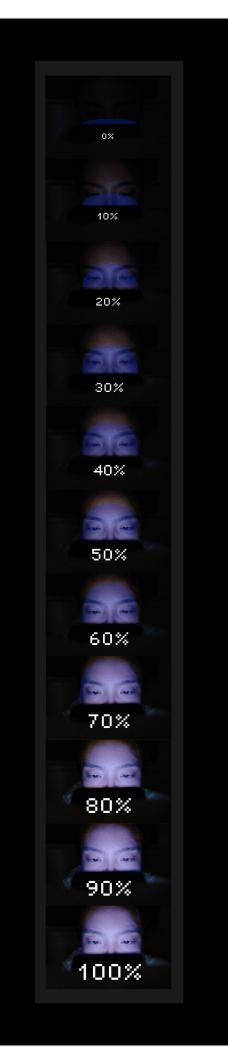


Ideation 04 / Inform

DATA IN CONTEXT

I use the visual language of showing different area of spaces that my face was illuminate by the cellphone to show different data.





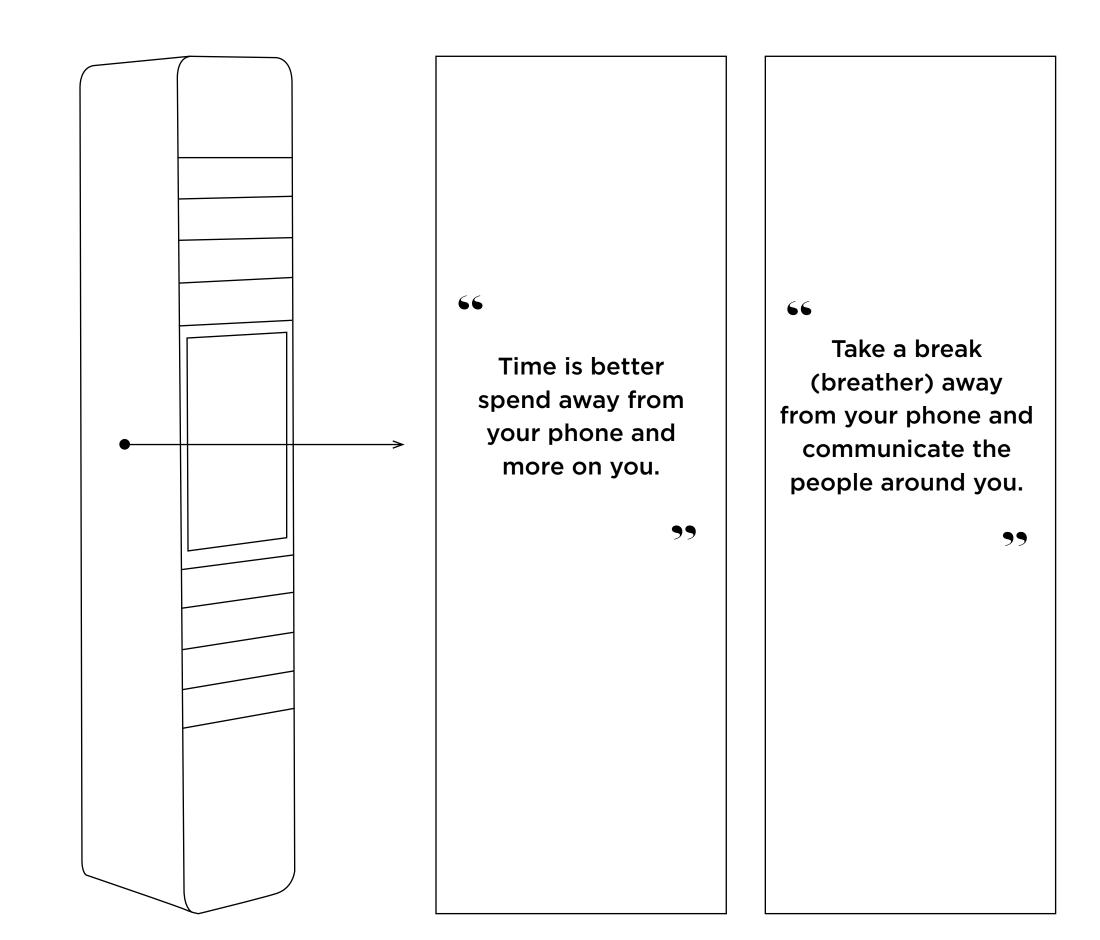
Ideation 04 / Persuasion

MEDIUM

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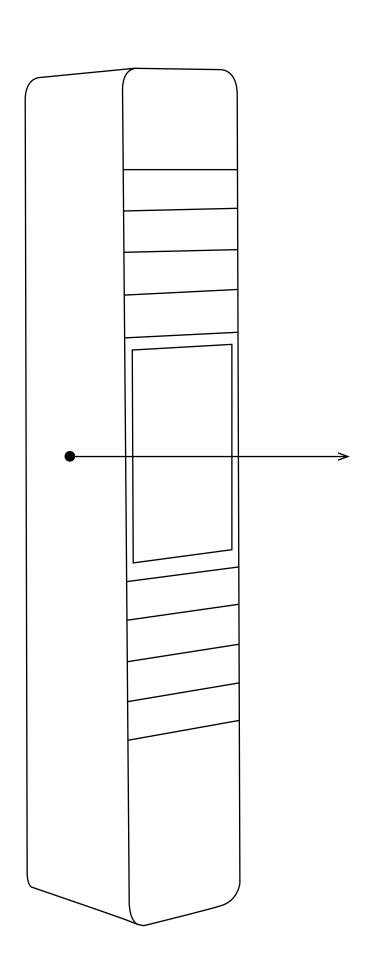


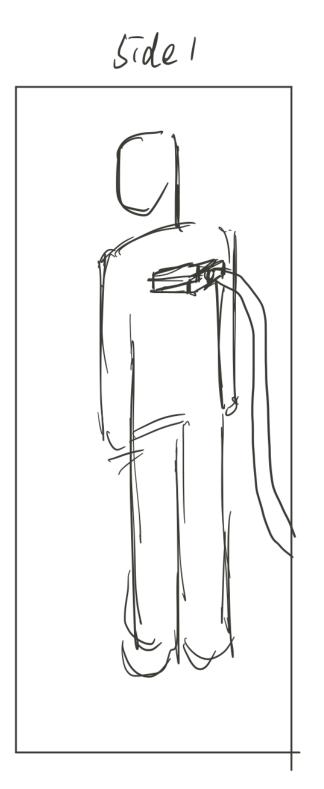
I updated the language which will show on the phone charging station to make it more acceptable to the audiences.

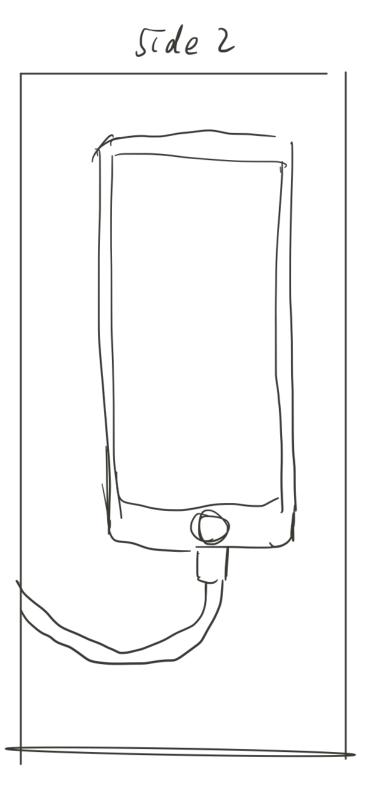
Ideation 04/Persuasion

VISUAL

On external surface of phone charging stations, I want to use illustrations to show the data to the young audiences: A person is charging by his cellphones.







Project O1: Final Imagery

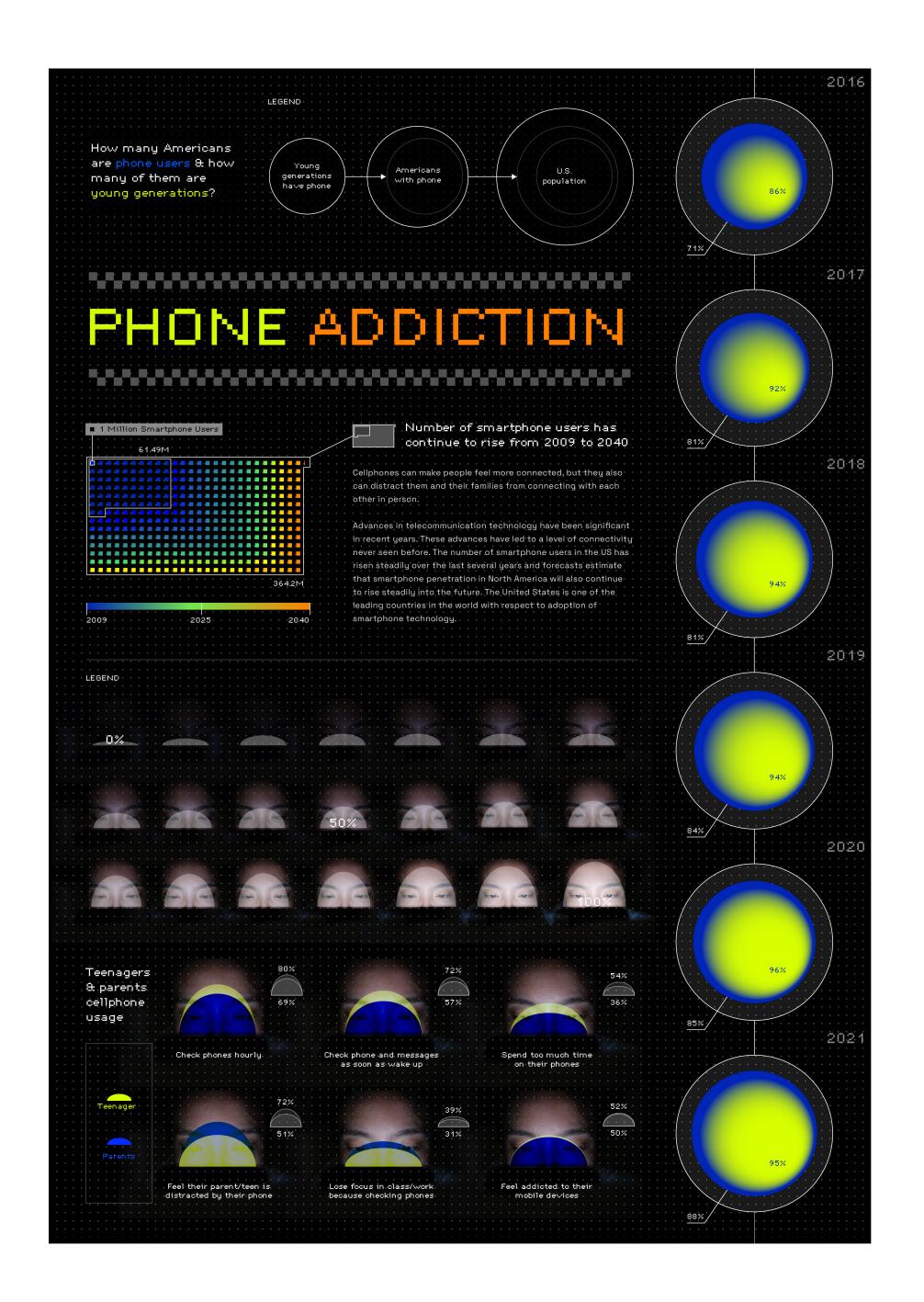
TO PERSUADE & INFORM

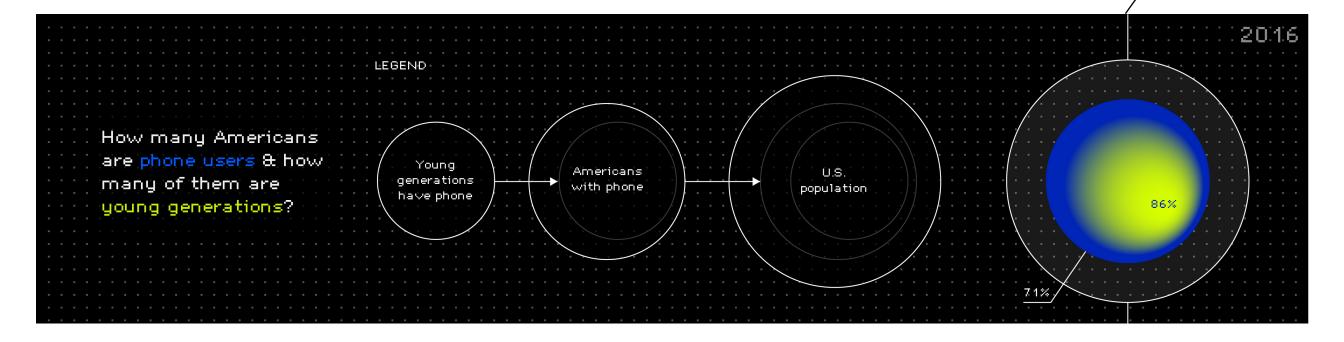
JINLIN WANG PROFESSOR RHONDA ARNTSEN

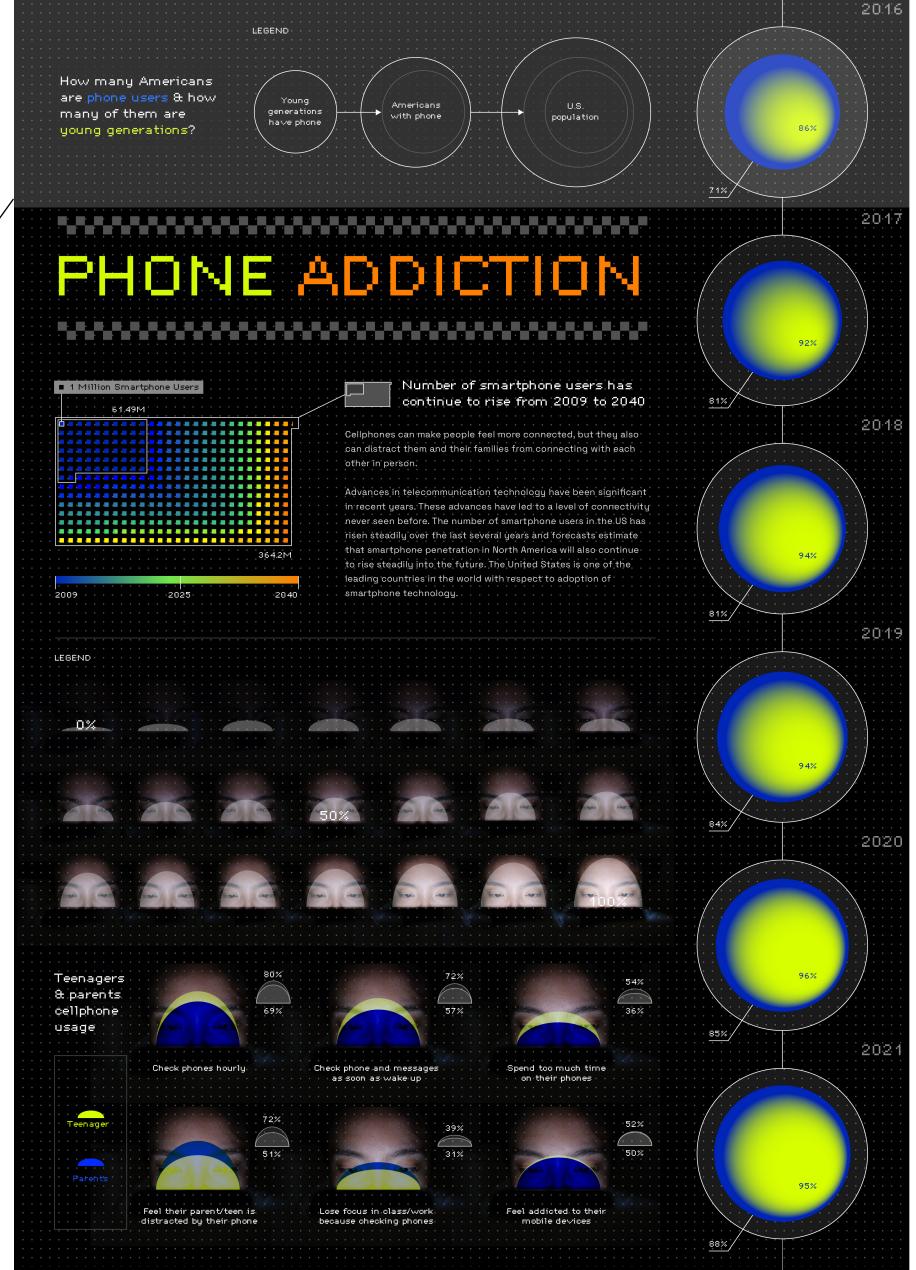
Inform Solution

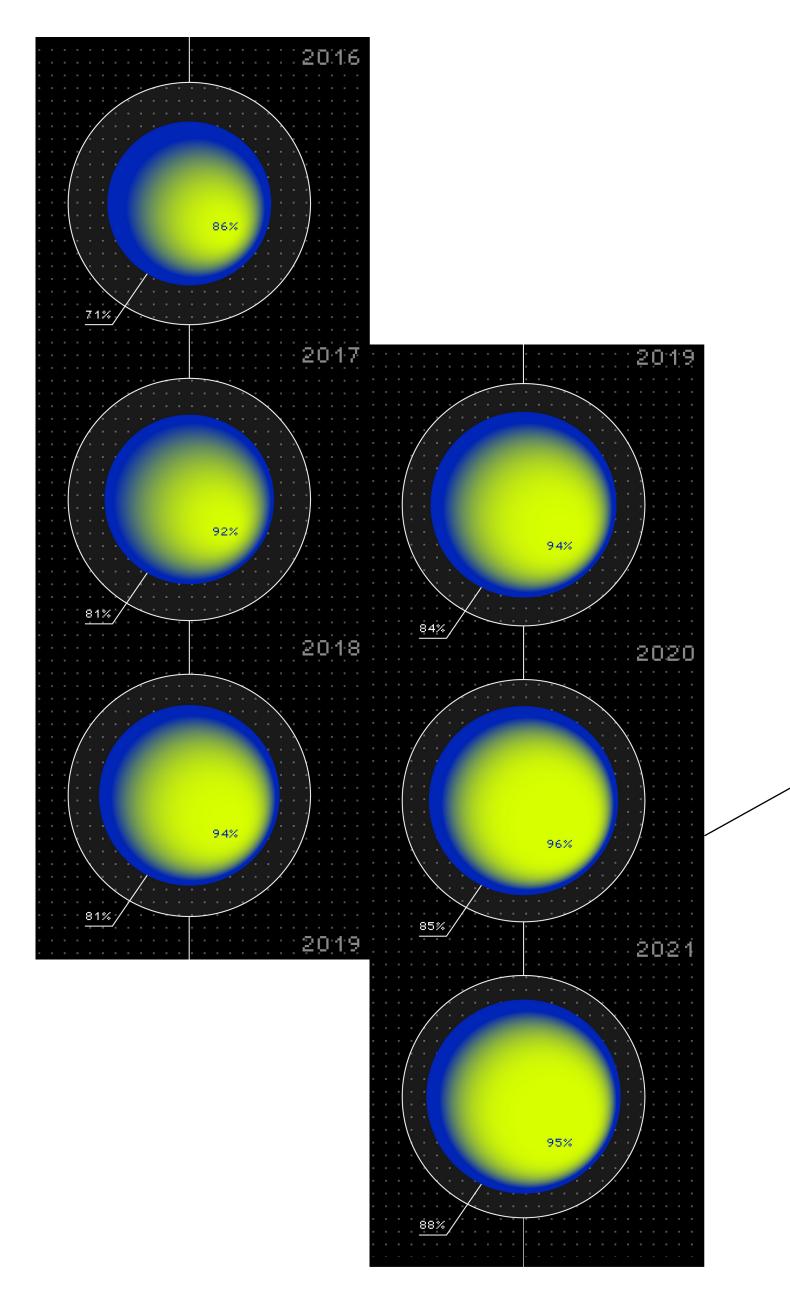
DESIGN

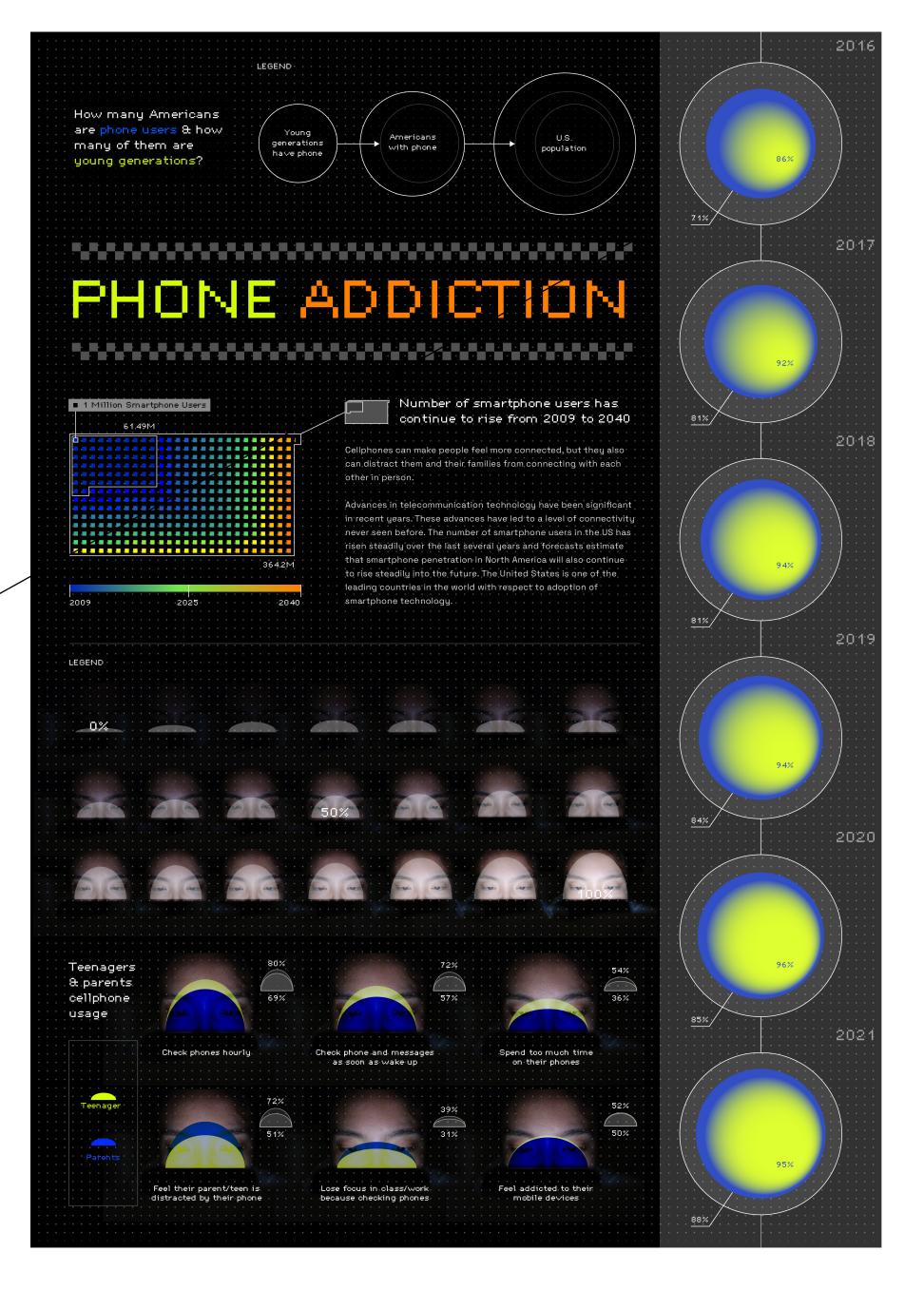
A flyer (350mm*550mm) usually comes with newspapers.



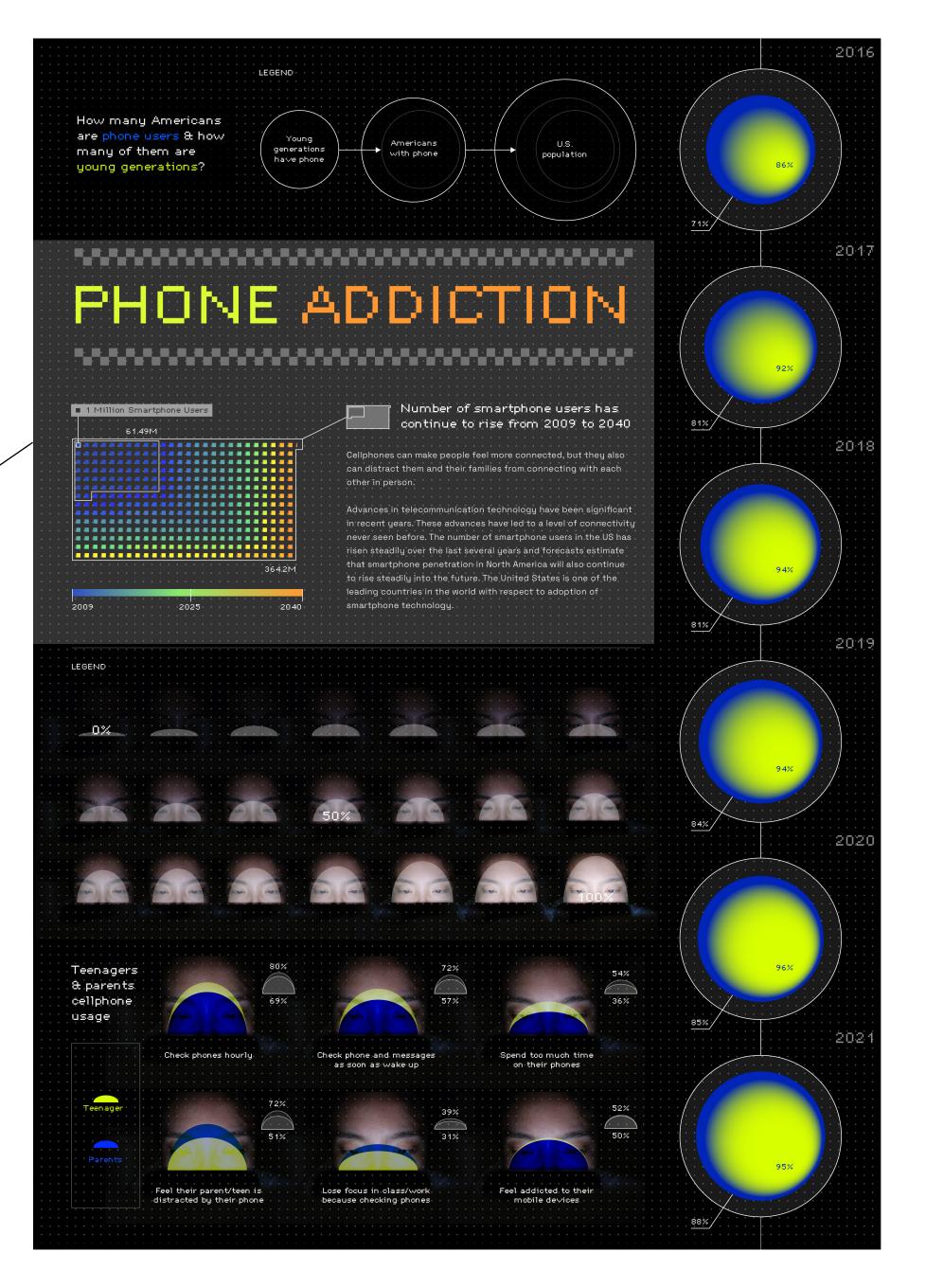


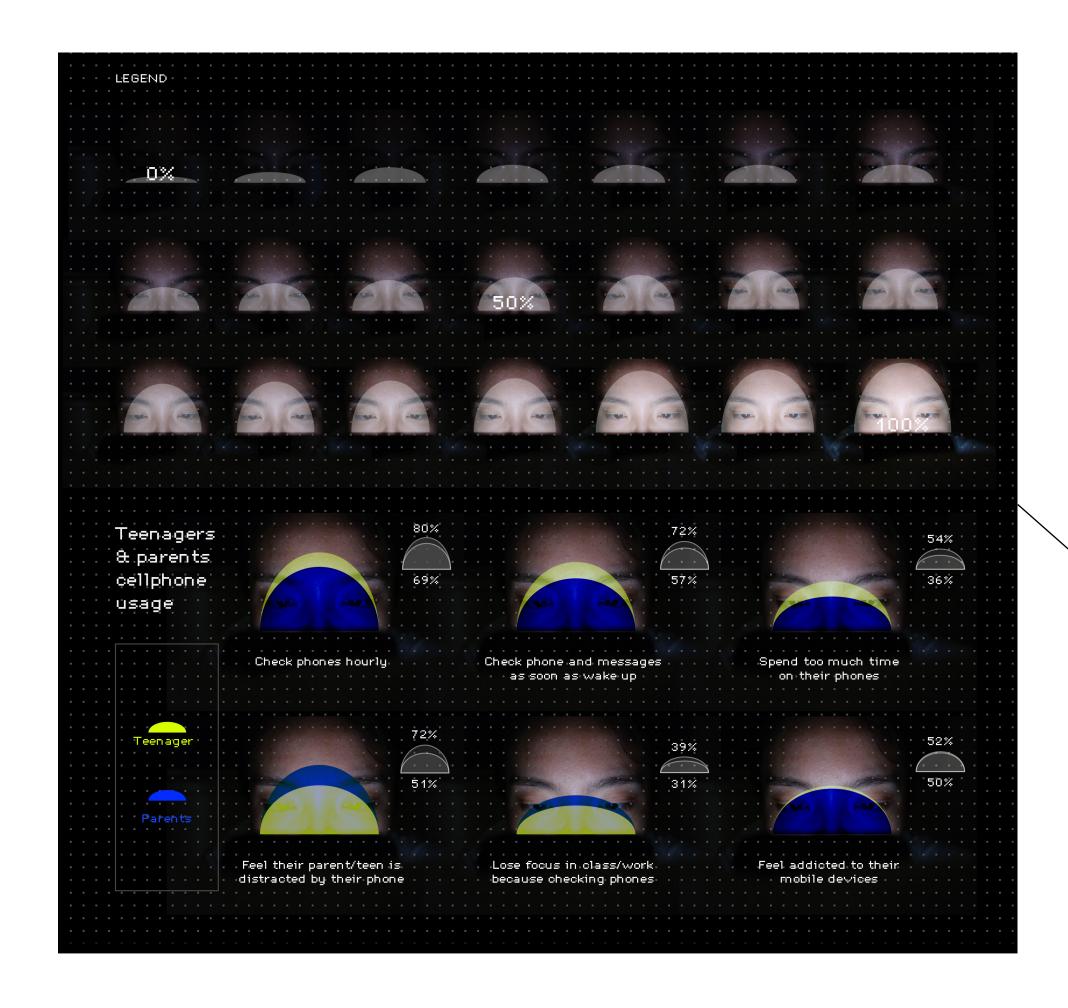


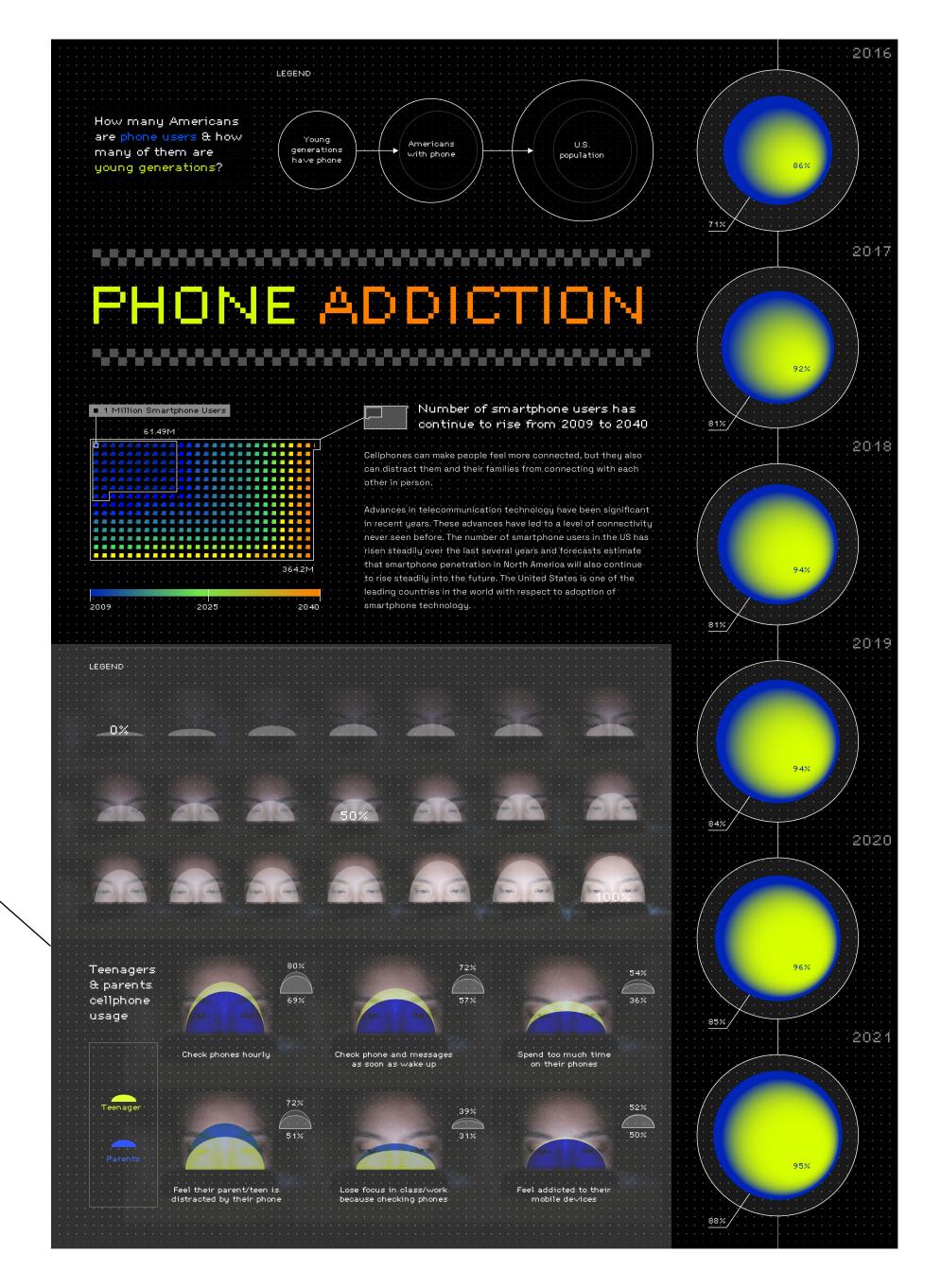






















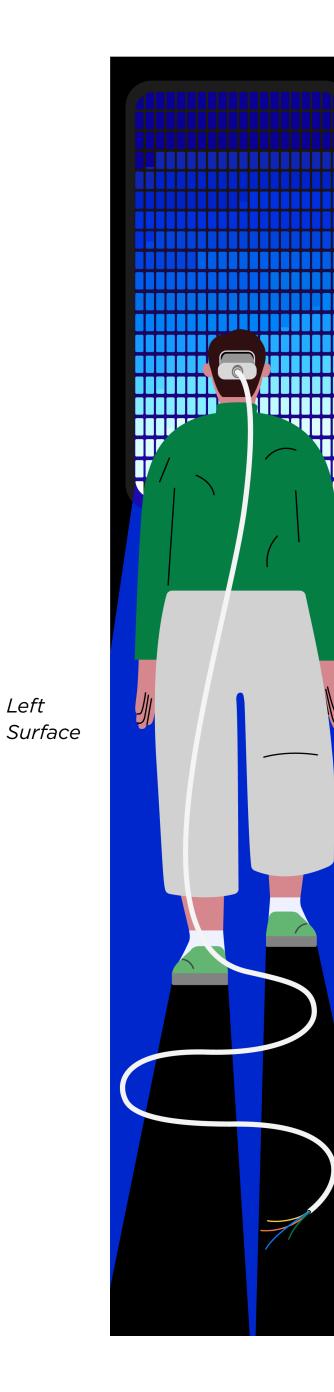




Persuade Solution

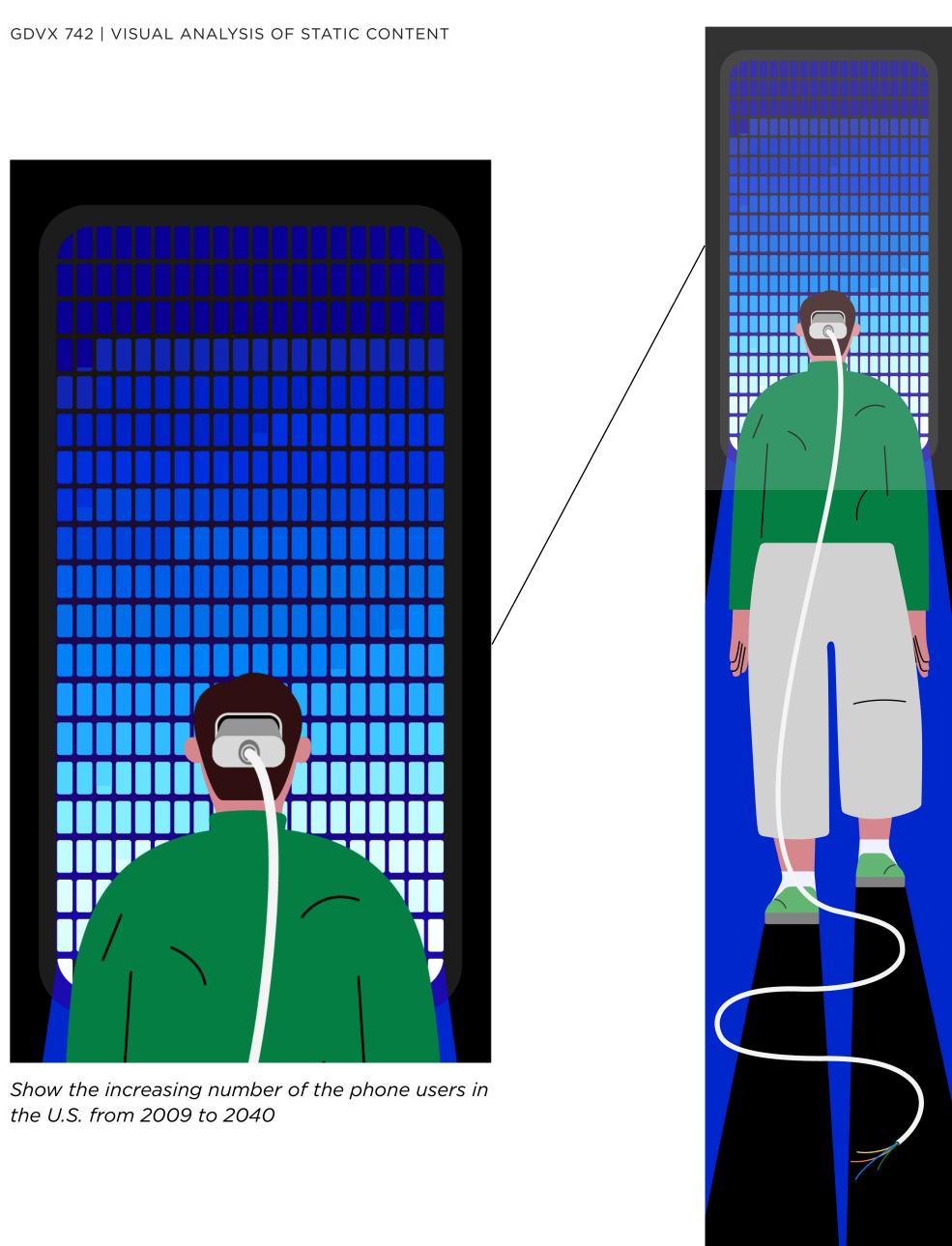
DESIGN

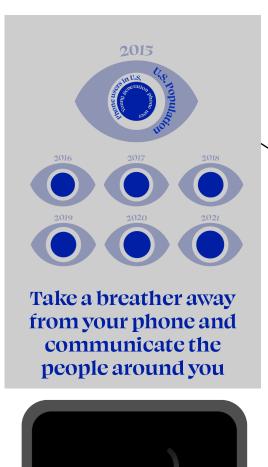
A painting on phone charging stations at school.



Left





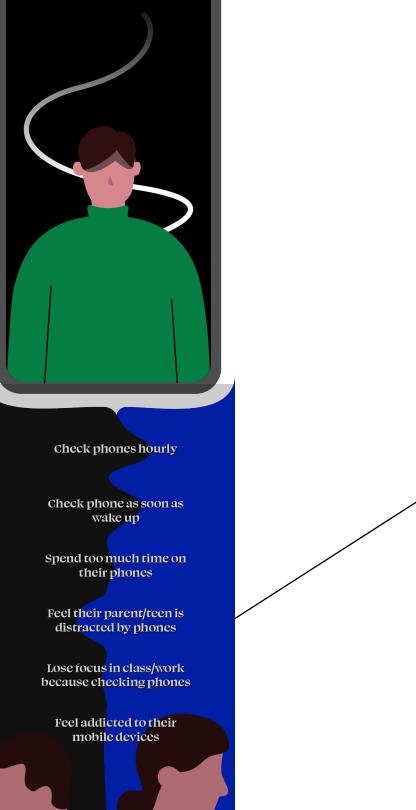


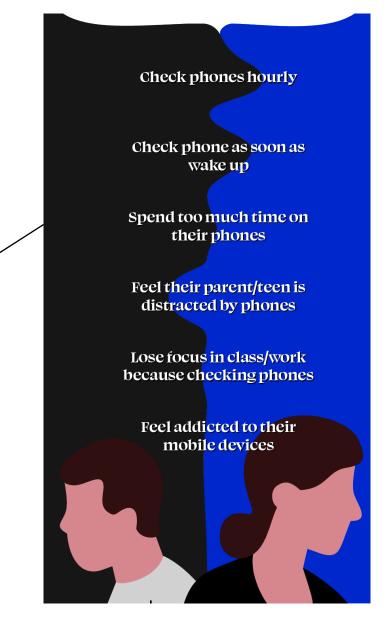


2015

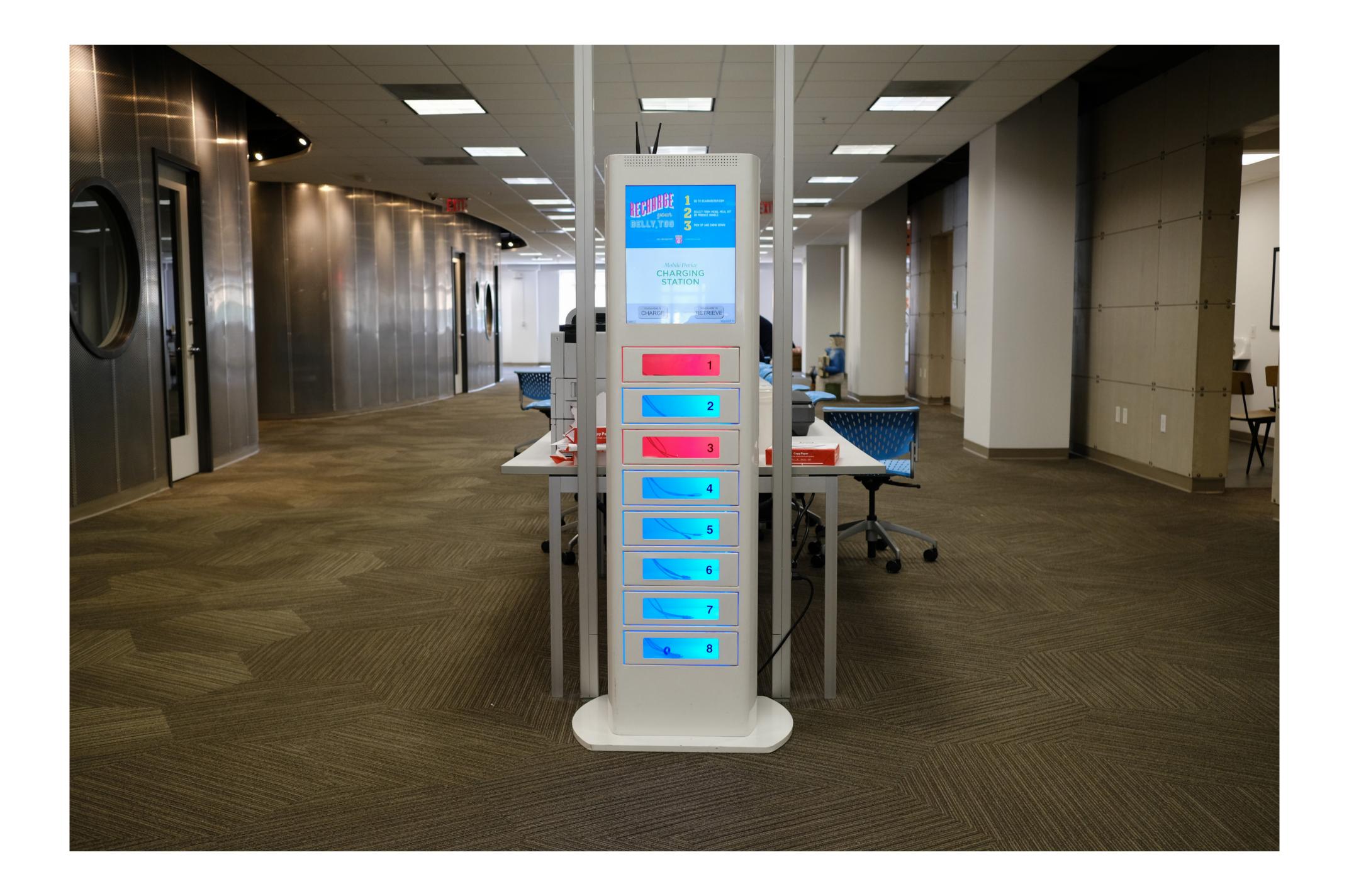
communicate the

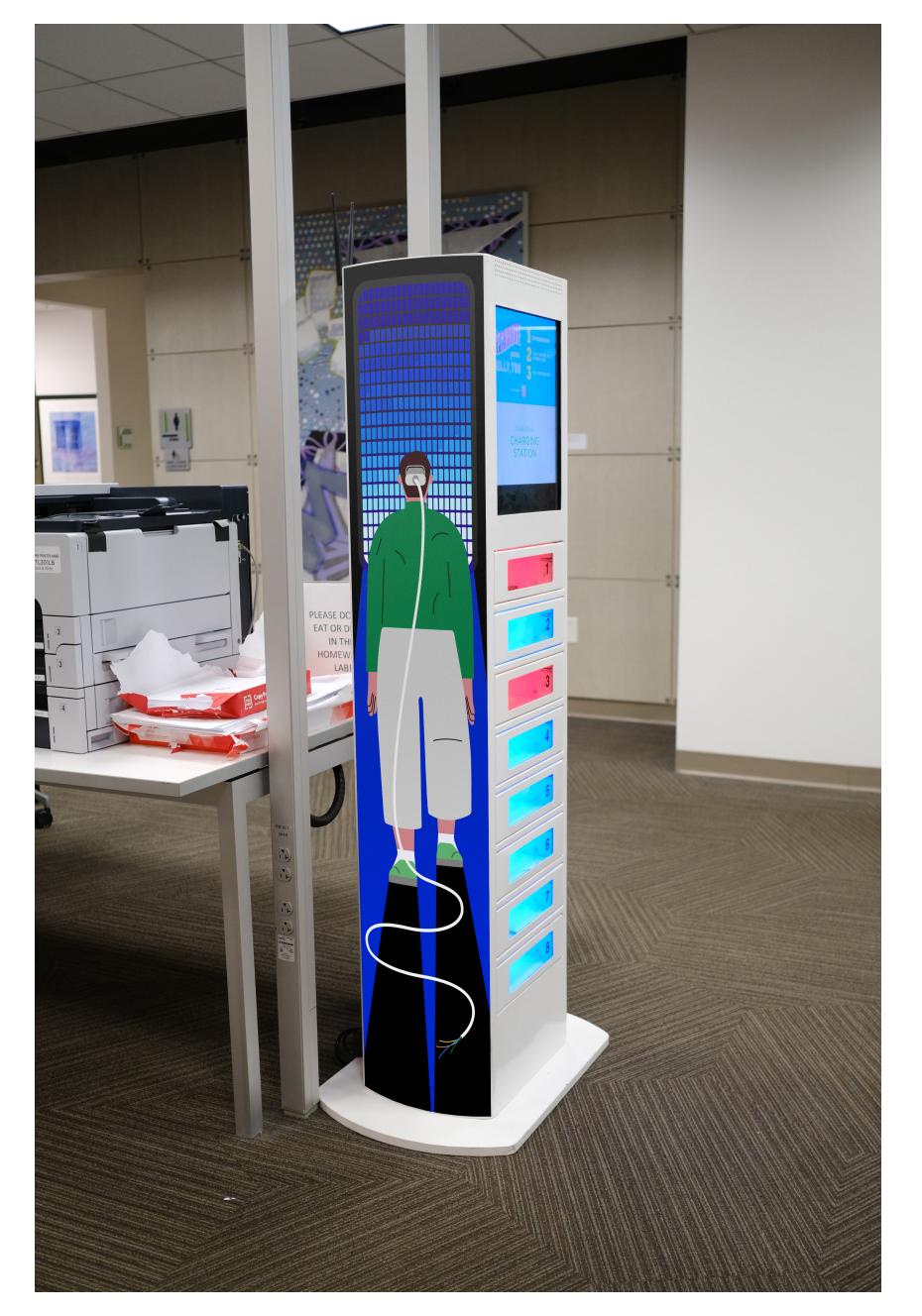
people around you

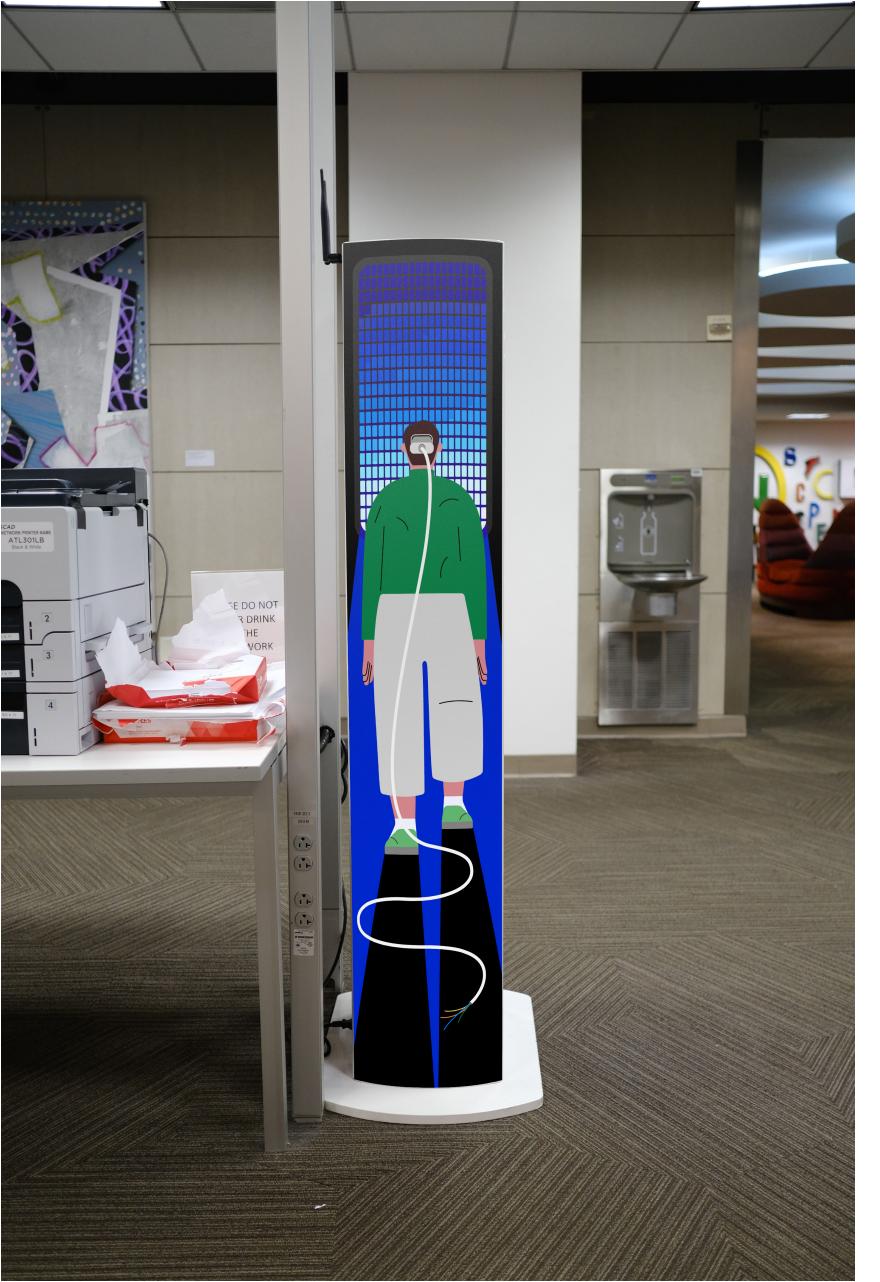




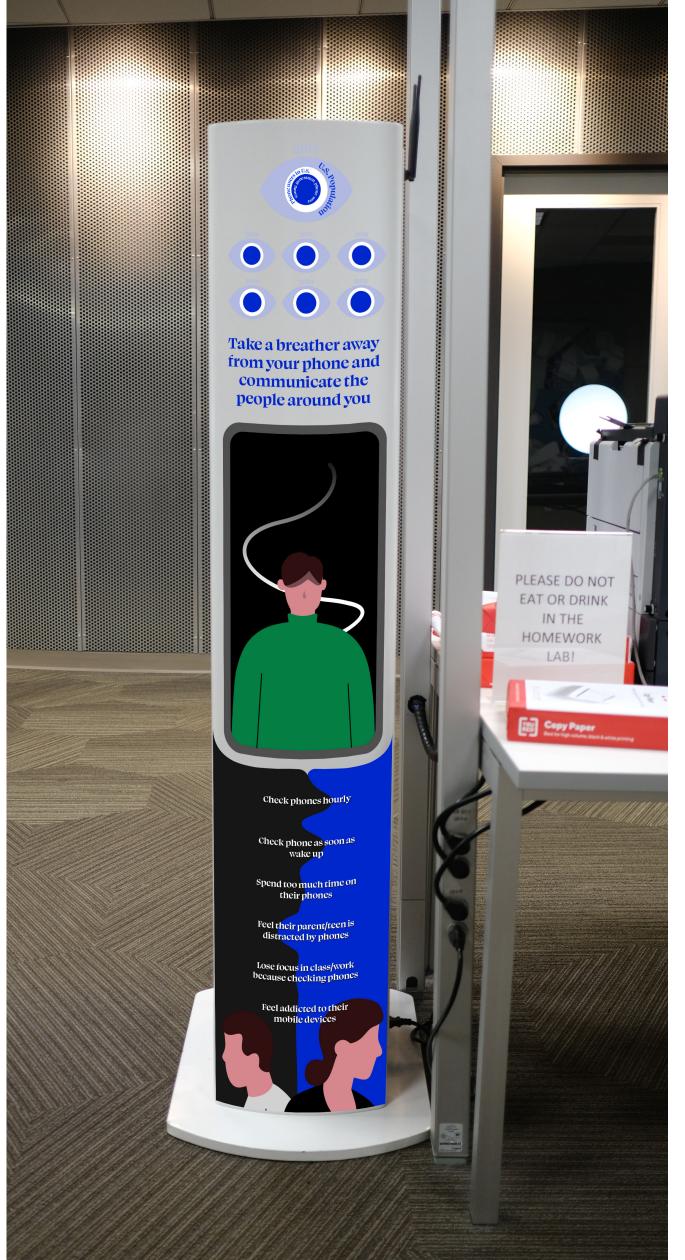
Teens' and parents' cellphone usage data













Thank you