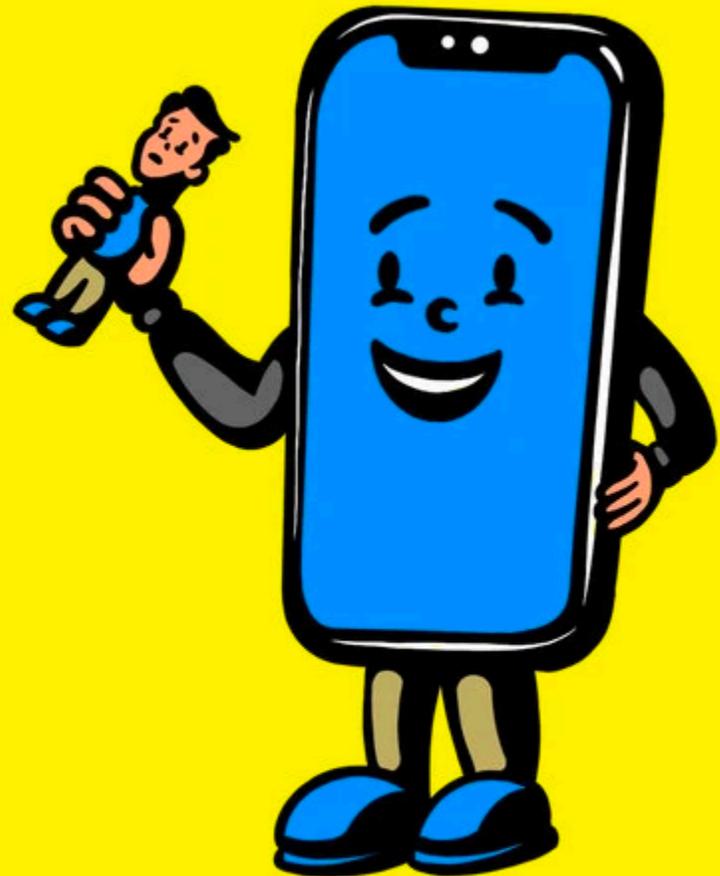




**2007**



**2019**

Credit: Zak Tebbal

<https://www.nytimes.com/2019/01/25/opinion/sunday/steve-jobs-never-wanted-us-to-use-our-iphones-like-this.html>

# Agenda

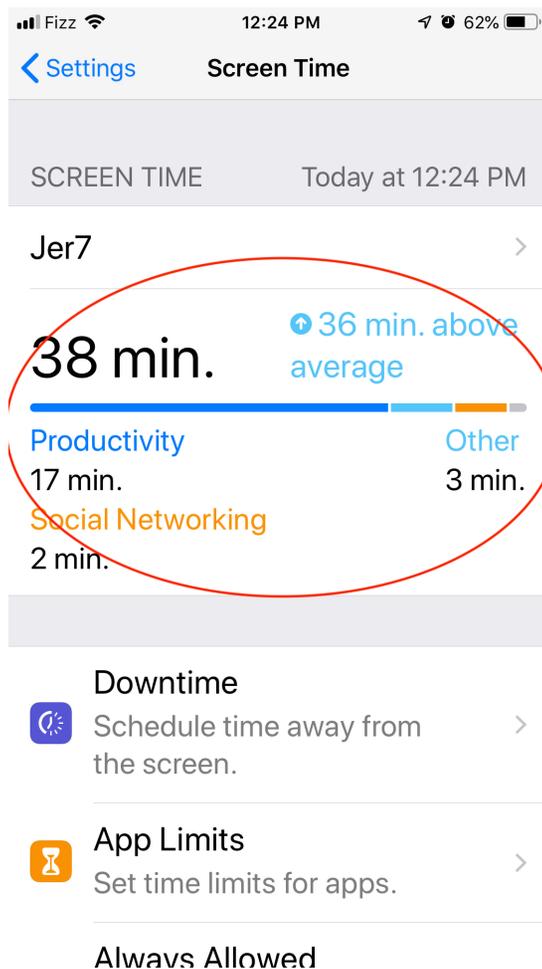
- Consider current smartphone usage patterns
- Brainstorm techniques to improve human control over technology
- Consider to what degree existing tools facilitate such improvements

# Your smartphone use in the past week

- How many hours did you use your phone?
- How many notifications did you receive?
- How many times did you pick up (unlock) your phone?
- How much time did you spend on social networking apps?

# iOS

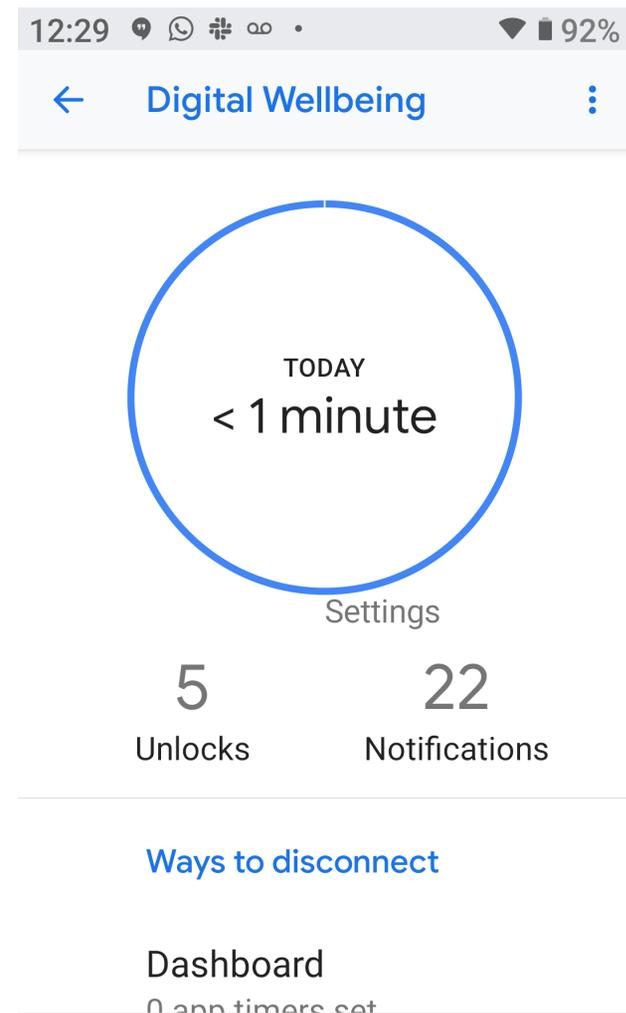
## Settings -> Screen Time



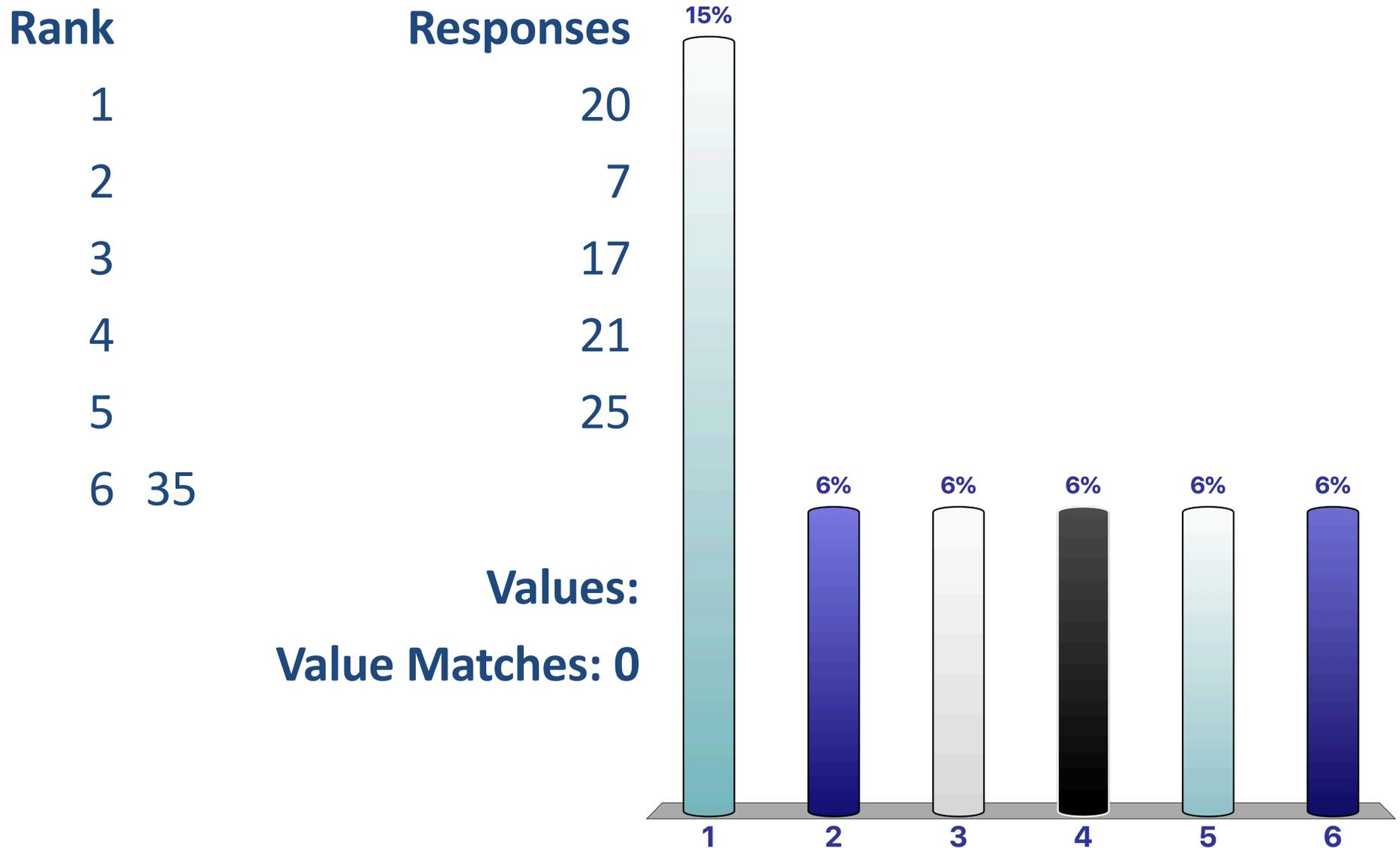
Click here to get the details

# Android

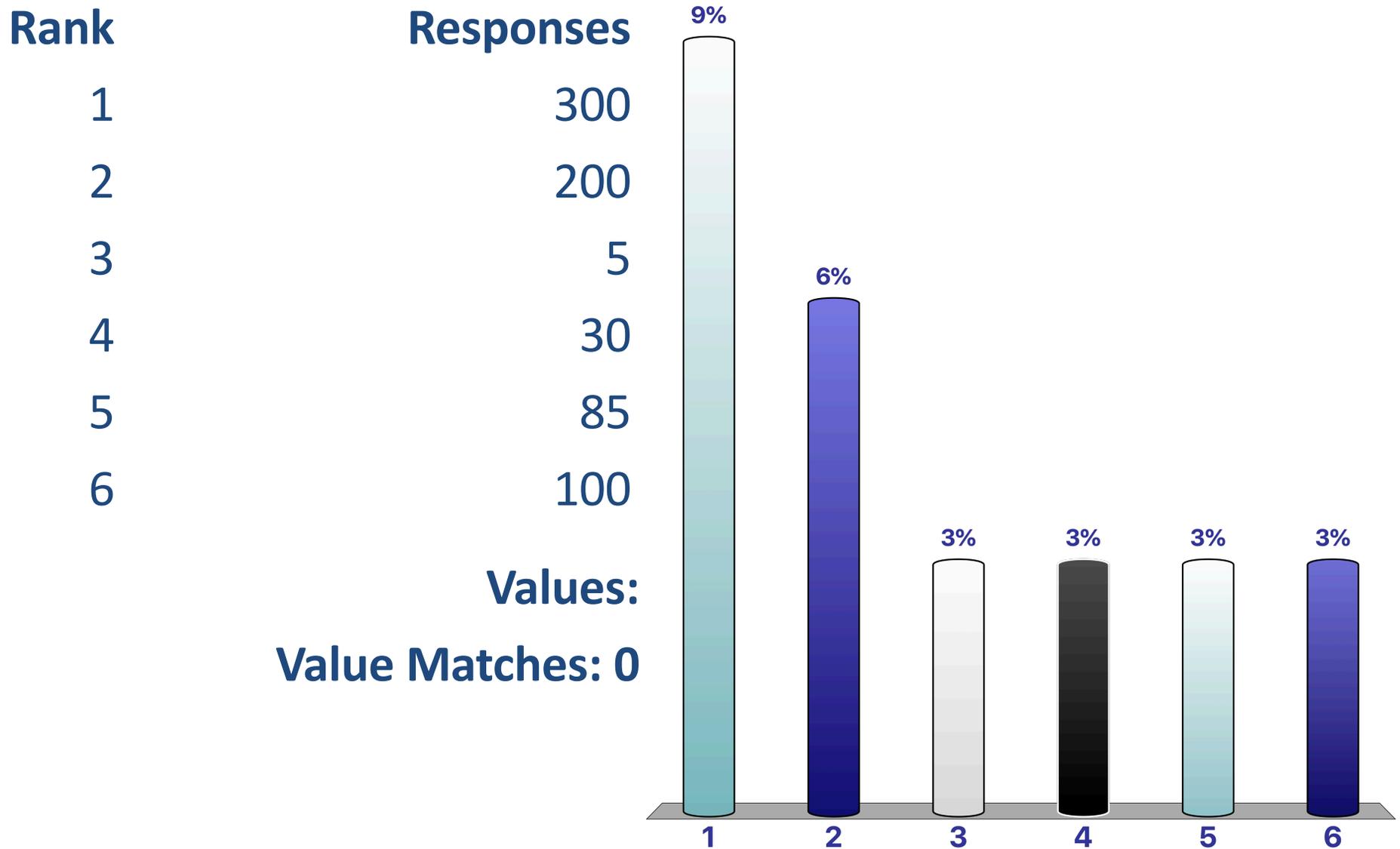
## Settings -> Digital Wellbeing



# How many hours did you use your phone last week?



# How many notifications did you receive last week?

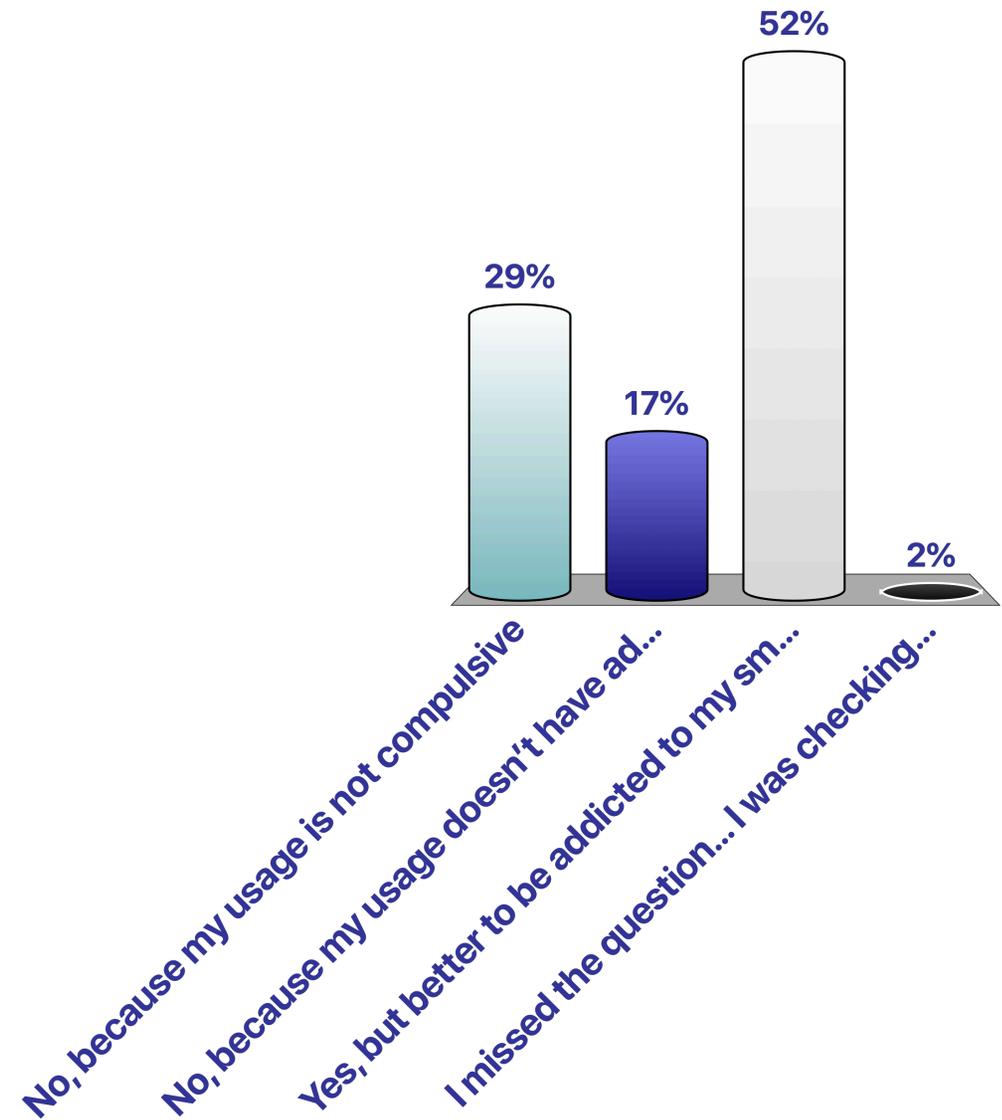


*Addiction is a brain disorder characterized by compulsive engagement in rewarding stimuli despite adverse consequences.*

[en.wikipedia.org/wiki/Addiction](https://en.wikipedia.org/wiki/Addiction)

# Does my smartphone use constitute an “addiction”?

- A. No, because my usage is not compulsive
- B. No, because my usage doesn't have adverse consequences
- C. Yes, but better to be addicted to my smartphone than drugs or alcohol
- D. I missed the question... I was checking Instagram



# Exercise (3 minutes)

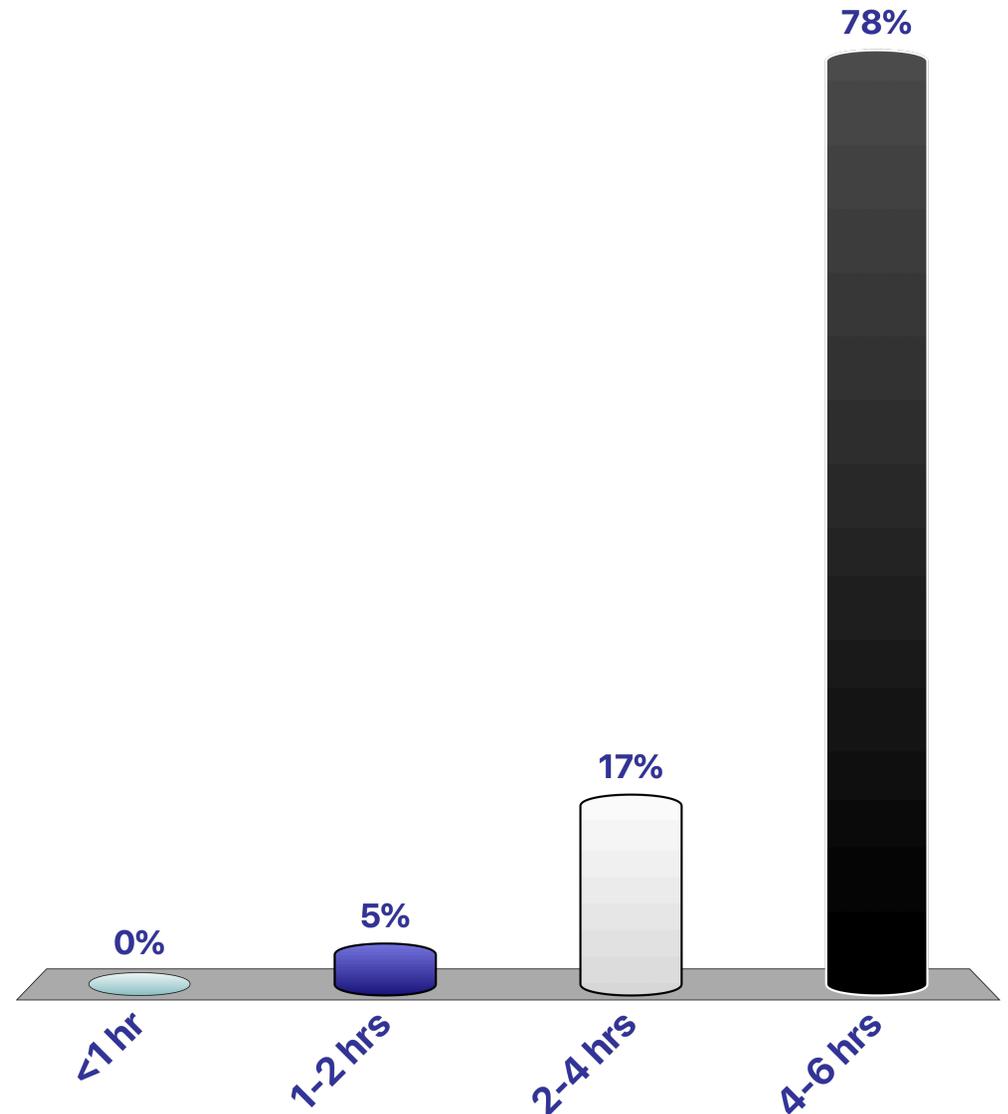
- Tristan Harris wrote, “If you’re an app, how do you keep people hooked? Turn yourself into a slot machine.”
- Make a list of your “slot machine” app examples

## Exercise part 2 (10 minutes)

- In pairs, brainstorm how a “slot machine blocker” could work to let you continue to benefit from these apps without them being so addictive

# What is your “ideal daily time in front of a screen”?

- A. <1 hr
- B. 1-2 hrs
- C. 2-4 hrs
- D. 4-6 hrs



DRIVING WHILE  
DISTRACTED

# Americans devote more than 10 hours a day to screen time, and growing

By **Jacqueline Howard**, CNN

🕒 Updated 4:22 PM ET, Fri July 29, 2016

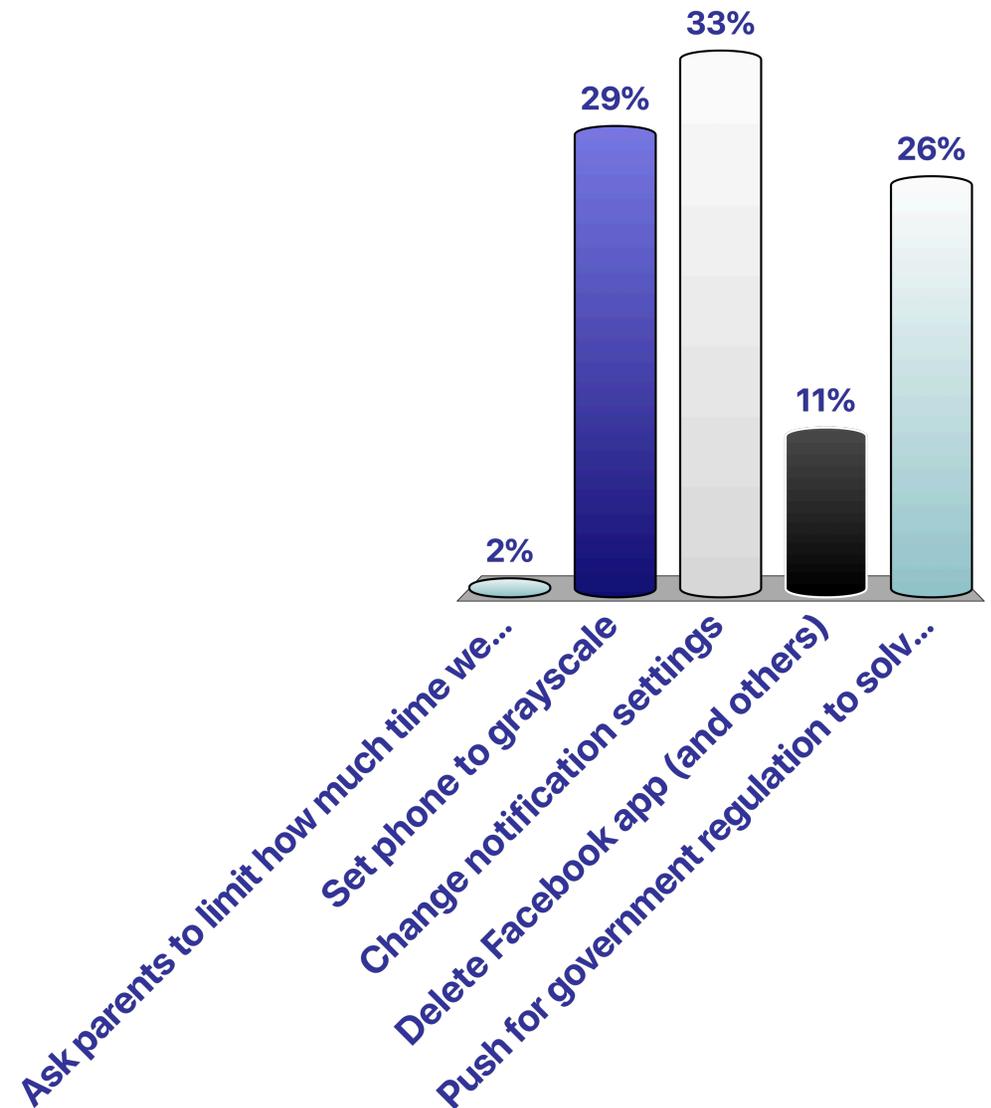
# New York Times with Steve Jobs, 2010



Asking whether his children liked the new [iPad] device, Jobs replied: "They haven't used it. We limit how much technology our kids use at home."

# Which of these solutions did Tristan Harris suggest?

- A. Ask parents to limit how much time we use our gadgets
- B. Set phone to grayscale
- C. Change notification settings
- D. Delete Facebook app (and others)
- E. Push for government regulation to solve the problem



# Group Exercise (30 minutes)

- Using existing tools and apps available for your device(s), set up your phone so that it:
  - Prevents notifications from disturbing/interrupting during:
    - class time and (ostensible) sleeping hours
    - any time you are driving a motor vehicle
    - when you're in the middle of a job interview
  - Prevents you from pickup up (unlocking) the device more than ten times in a single hour

# Homework: Complete by Sep. 10

- Readings and videos
  - Gould, The 1984 Olympic Message System
  - IBM, Cost justifying ease of use
- Submit your yearbook entry – entries will start to be posted today
  
- Erratum from Tuesday's slides – we'll be doing Exercise 1: Design Critique in class; this is not homework

# Gould, The 1984 Olympic Message System

- Important case study employing design principles that have become known as “user-centered design” (after Don Norman coined the term in 1986)
- How many systems built since then are rolled out on time, under budget, and no serious bugs?
- Teaches several important lessons about how this approach can be followed in other systems designs



# IBM, Cost justifying ease of ease\*

- Short article from ~2001, also from IBM
- Makes the business case for focus on HCI
- Reinforces the \$1/10/100 rule from software engineering regarding the value of design for usability

\* NB: to read this article, you'll first need to complete the yearbook entry to obtain the password!

# Don Norman Videos

- User-Centered Design
- Conceptual Models

# Project Planning

- Time to start talking to each other as you prepare to form groups
- Look at yearbook entries
- Use Moodle to discuss preliminary ideas