

Usability and user profiling

(how to really understand your audience)

Users

“One most unfortunate product is the type of engineer who does not realize that *in order to apply the fruits of science for the benefit of mankind*, he must not only grasp the principles of science, but must also *know the needs and aspirations, the possibilities and the frailties*, of those whom he would serve.”

— Vannevar Bush

"Wholly new forms of encyclopaedias will appear, ready made with a mesh of associative trails running through them"

— Vannevar Bush, "As We May Think",
The Atlantic Monthly, July 1945.

What's the cost of considering usability and the user in a project?

- How much will it cost to *not* consider usability?
- The cost of getting it wrong – vs the cost of getting it right. (See useit.com)
- Designing for the user means giving the user what they want. Why would you want to do anything else?
- *Any* product or system will fail in the end if it:
 - Does not do what the user needs or wants
 - Is inappropriate for the user

WE
THINK IT
SHOULD SAY
S'UP
COS THE
KIDS SAY
S'UP

Why not simply define 'good' interfaces?

Well...

- There is an infinite variety of tasks and users
- Guidelines can be too vague: *'give adequate feedback'*, *'make the system enjoyable'*
- How do you define and relate to users?

Desire lines, desire paths



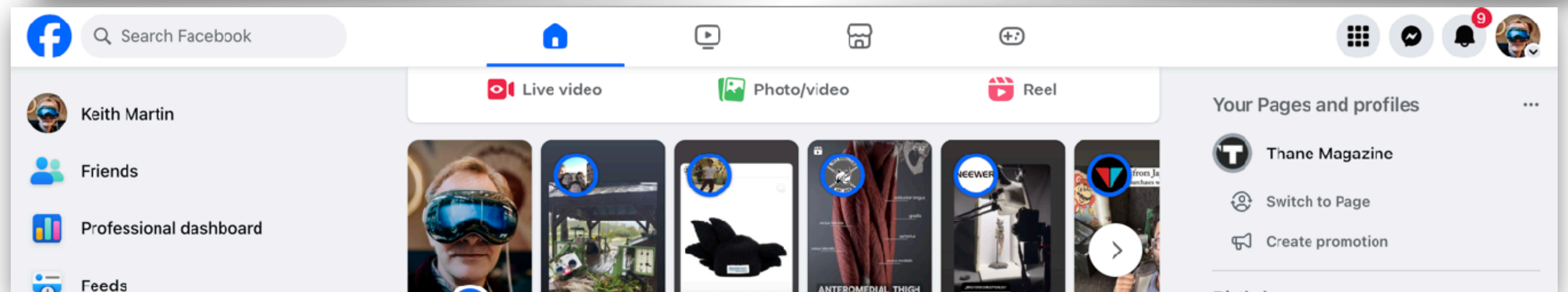
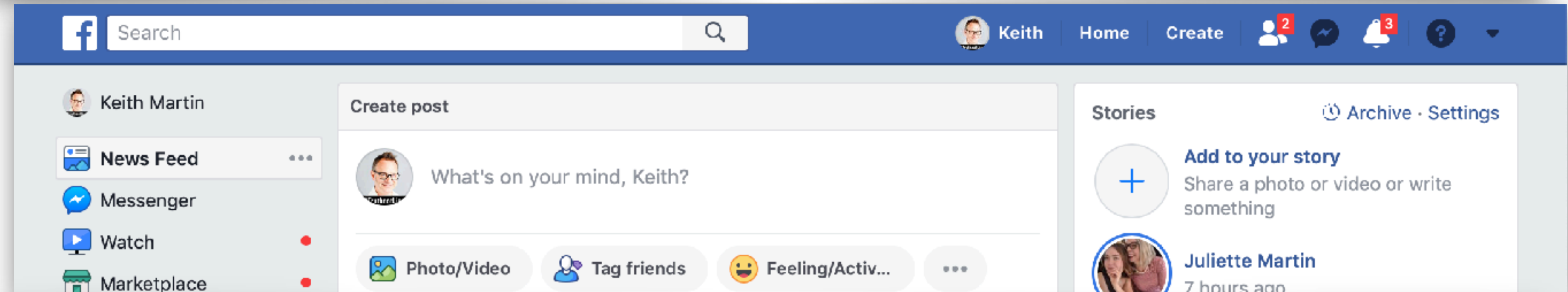
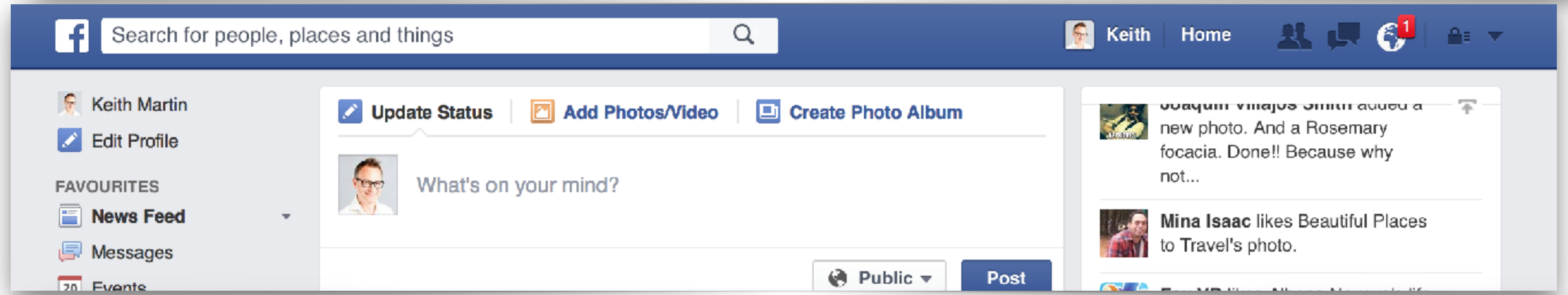
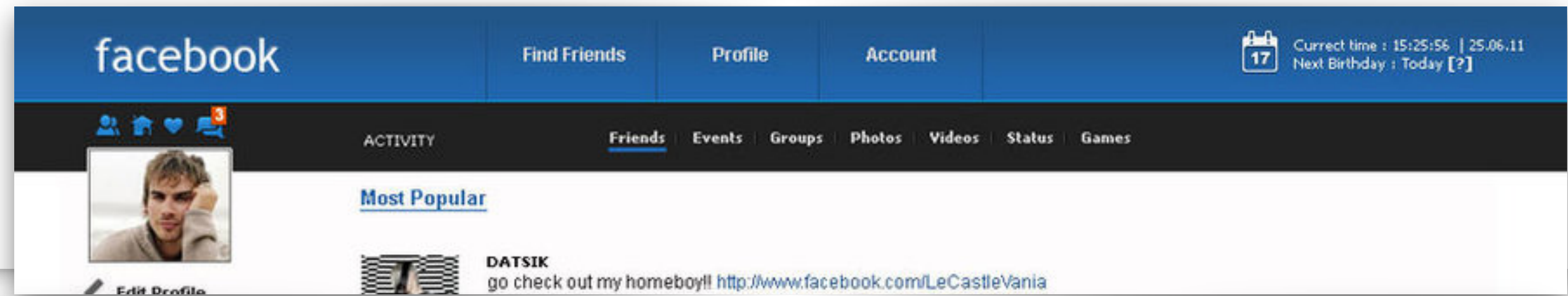
Facebook UI

2011

2016

2019

2024



What does the user want?

How do you figure out what the user wants?

- User profiling
- Interviews with users
- Surveys
- User observation

Do these activities early on, and with the involvement of the project stakeholders

*Irish
People
Can't
Read
Italics*

Audience profile

Overview of the target market: the range of different likely users

- Gender?
- Age range?
- Social classification?
- Education level?
- Etc...



THE TARGET AUDIENCE IS
MALES AND FEMALES
AGED ZERO AND UP

Creating a user profile

- Description
- Characteristics
- Reasons for using the product
- What are they interested in?
- What are they looking for?
- Experience and expectations?

Etc.

What is user profiling?

The process of establishing knowledge about the users:

- Who they are
- Why they would use the product
- What tasks or processes they would do or follow

What is user profiling?

The process of establishing knowledge about the users (in more detail):

- Who are they? (*Child, elderly, professional, scientist, male, female, IT literate or not...*)
- What is their goal when using the product?
(*For example, withdraw cash, pay bills, find movie time, chat, gaming, research, cook, wash...*)
- What are the tasks involved? (*For example to apply for leave: check schedule, get leave application form from admin, fill in the form, get supervisor to approve, get manager to approve, inform scheduler, inform colleagues, go on leave.*)

*I'm the
target
market*

&

**I don't
like it!**

Get personal

- Basics: What's the user's name? How old are they? Where do they live? Physical characteristics? Are they single, or what?
- Personal: Interests? Hobbies? Typical mood? Indulgences? Beliefs?
- Professional: Job? Salary?
- Skills: task experience, other relevant skills...
- Preferences: efficiency, enjoyment...
- Usage: Why would they use the product? What for? When in their day? Where? How would they use it? How often? For how long?



subscriber

Name **Gregory**

Age **42**

Area of residence **Beirut**

Mode of Transport **Private**

Status **Single**

Interests and Hobbies **Design, art, current affairs, travel, performance art, movies, world culture and heritage**
Enjoys shopping for **books, notebooks, cameras, vintage wines, paying for travels**

Favorite brands **Camper, Leica,**

When splurging they **buy a work of art**

Occupation **Art/design historian and college professor**

Job Specifics **Prepare class lecture for design/art students about various subjects related to history of fine arts**

Annual Income Range **£35.000-40.000**

Website usage

Reasons **Staying up to date, looking for inspiration, sourcing material that would be relevant to his students**

Time (specify if regular) **Regularly, once a week**

Space **At work/home**

Mood **Attentive, curious**

Behavior **Browsing, Would stop to read an article, tends to go for sections he has previously visited, looks at news**

Average session **30 minutes**



User profiles and scenarios **ca:ben**





Name **Alice**
Age **23**
Area of residence **Maida Vale**
Mode of Transport **Public**
Status **Single**

Interests and Hobbies **Design, fashion, art, music, cakes**
Enjoys shopping for **Clothes, women's accessories, books,**
When splurging they **buy high street make up**
Favorite brands **Topshop, Asos, Accessorize,**
Occupation **English Graduate, magazine intern**
Job Specifics **Help around, occasionally draft copies,**
Annual Income Range **£16.000-20.000**

Website usage

Reasons **Interested in the content, Looking for distraction/ inspiration**

Time (specify if regular) **Regularly, Every day**

Space **At work**

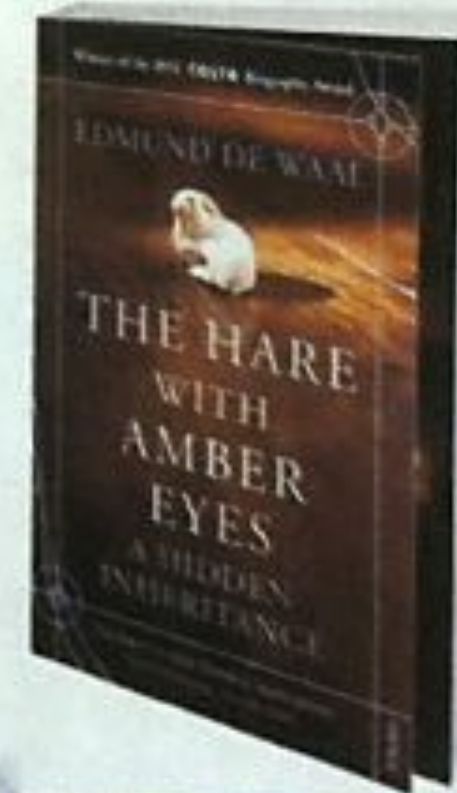
Mood **Casual**

Behavior **Browsing patiently, stops to see slide shows, read articles, would occasionally comment on features/news.**

Shares her findings on social media, proud of her 'discovery'

Average session **20-30 minutes**

User profiles and scenarios **ca:ben**



Get visual

Casey O'Donnelly
 "You can't



Anna Sheppard
 "Life is better when shared"
 23 yo
 Lives **Victoria, USA**
 Job **Curator**
 Studied at **UGA**




Traits

 Social & Confident
 Curious, tasteful & Brilliant
 Hardworker & Cultured
 Cheerful & Generous
 Compassionate

Interests

 HAWAII
 Gigs Events 1+/Week
 Like nice DESIGN & layout
 Art
 Yoga
 Cultural Readings
 Festivals in Summer
 Collect
 Make up

Music Behaviour

 Eclectic taste
 Subscribed to music channels on YouTube
 Friends guidance
 Listen to radio

Favourite Bands

Prince James Blake Kate Bush
 Beyonce Alt J

Music Related Platform

Soundcloud iTunes Hypemachine
 Youtube Spotify Facebook



Frustrations:

- Have to be committed to find new content
- Suggestions are not really good
- Too much services
- Collecting medias on separate platforms

Key goals:

- Find a service/blog that fits her tastes
- No brainier recommendations
- One platform that regroup all type of medias

UK
 engineer

5%



On the Go
 40% Home

On the Go
 40% Home

content
 on different

media

on a blog
 "ter" lists quickly

platforms synced

Infographic style?

ALWAYS CONNECTED

63%  73% 

adult smartphone owners in the US **don't go an hour without checking their phone** ²

75% of Millennials are disconnected for an hour or less per day ²

50% check their phones before they sleep and after they wake up ⁴



OPINIONATED & SHARES IT

34%    

have turned to **social media** to air their feelings about a company.

26%  express dissatisfaction

23%  share companies or products they like ⁵

46% feel they can be brutally honest online

51% aim to influence others when they express their preferences online ⁵

TRUST IS CONVENIENCE



69%

said they are more likely to buy from a brand that talks publicly about its CSR results ²

>88% 

think companies should try to achieve their business goals while improving society and the environment ¹¹

VALUE CONSCIOUS

41% practice "showrooming" ⁶

>50% of Millennials use four or more sources to help them make their purchase decision ¹




REQUIRES IMMEDIACY

89% having access to real-time product availability would influence their shopping choices ⁶

Walmart's Site to Store service



Use real (fake) names



Nick James
Male, 26
Software Engineer
Passionate Runner

NARRATIVE
James is interested in a lot of sports, including football cricket tennis etc. Besides he used participate in a lot of physical activities like cycling, trekking, mountaineering etc.

PERSONALITY
Passionate Energetic
Adaptive Personable
Resourceful Creative

EXPECTATIONS / GOALS
- Search nearby sports venues
- Connect with similar sport-enthusiast people.
- Play local tournaments.
- Participate in local trekking events.

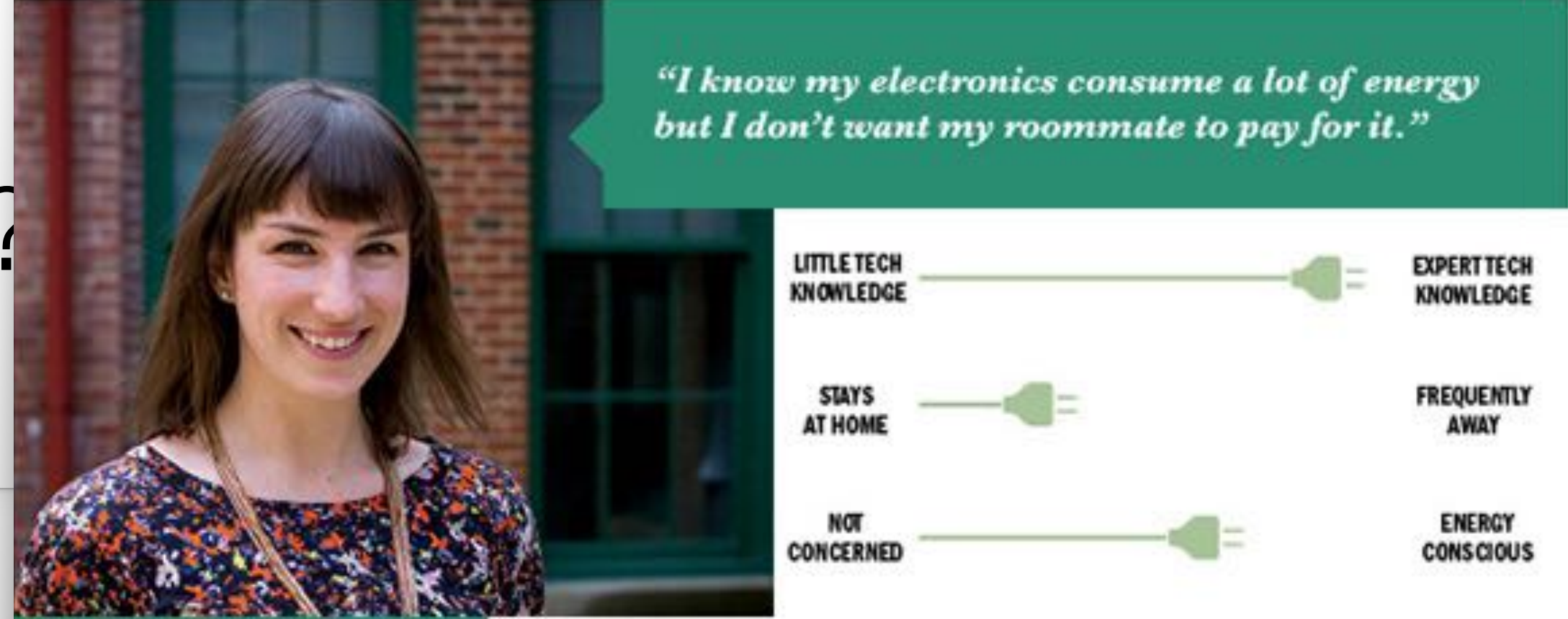
QUOTE
"I'm looking for a medium to connect with different sportsmen in my locality."

EXPERTISE
🖥️ 📱 📲

KEYWORDS
Sports / fitness / mobile apps

LIKES	DISLIKES
Cycling	Lazying around
Trekking	Unproductive days
Football	Not getting a break
Nature	Uncompetitiveness

A day in the life of your user?



Sara Knight

AGE 26
LOCATION AUSTIN, TX
MARITAL STATUS SINGLE
KIDS NONE
LIVING 2 BR APARTMENT
OCCUPATION IT SPECIALIST
SALARY 41K
EDUCATION BACHELOR'S

ABOUT SARA

Sara Knight has been living with her roommate, Julia Palmer, for 2 years. Sara is a hardcore gamer and has a lot of electronics, including multiple game consoles and computers. Sara prefers to stay home most nights and usually watches television or streams herself playing video games online. Julia is more social and prefers to go out to bars or hang out with friends. The girls each pay half of the bills, although they both know that Sara's room most likely consumes more energy than Julia's room. Julia has asked Sara in the past to try and become more energy conscious to keep their bill low.

HABITS

- Sara is forgetful and often leaves her tv, game consoles, or computers on for long periods of time.
- She usually has several electronics on at once, such as watching television and playing video games at the same time.
- Sara frequently keeps the A/C on because her room becomes hot from running all of her electronics.

MOTIVATORS

- Sara doesn't want her roommate to pay more than her fair share of the energy bill.
- Leaving her electronics on for too long may cause them to overheat or become damaged.

GOALS

- Lower monthly bills
- Reduce the amount of energy that Sara personally uses

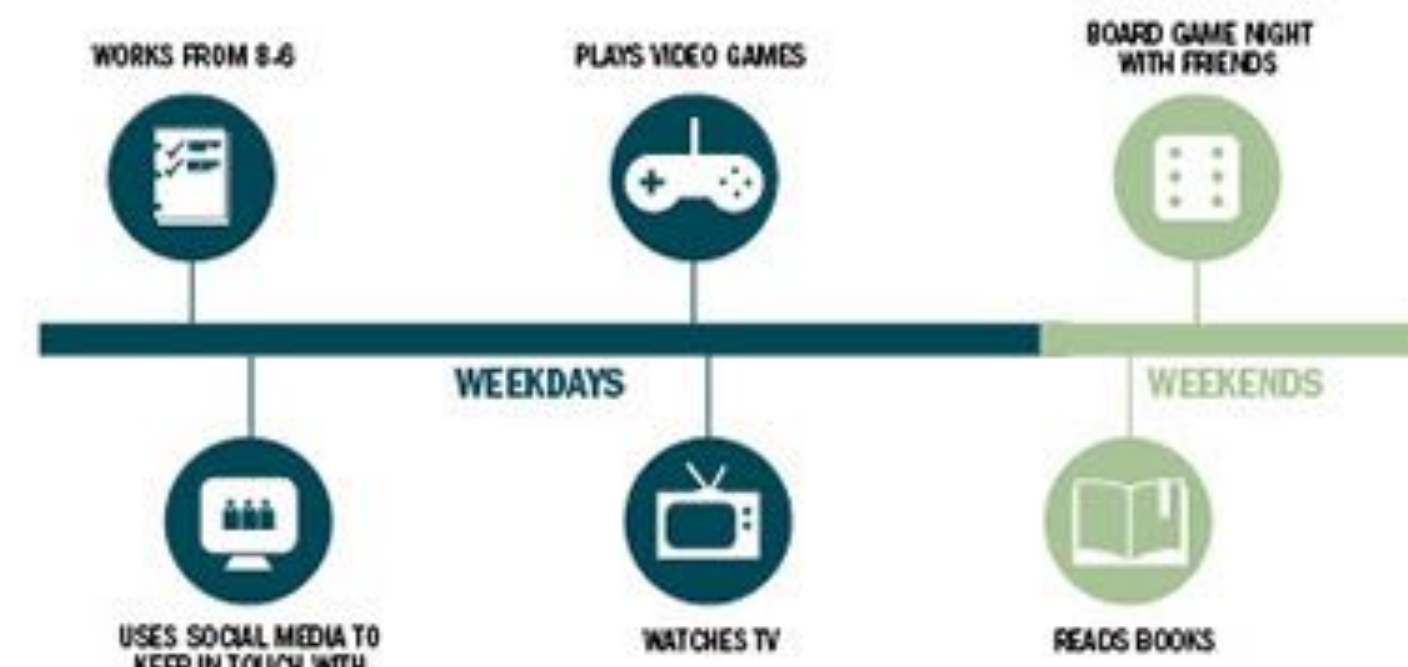
DEVICES USED



AVERAGE MONTHLY USAGE



DAILY ACTIVITIES



User profiles

A user profile *should*

- Characterise the preferences, behaviours and attitudes of a typical user
- Reflect common (relevant) user types
- Define the target market

A user profile *shouldn't*

- Be of a real person
- Be an aggregate picture of the whole market
- Be the only thing you rely on!

Where is the product used?

- Office, laboratory, POS? (i.e. while standing or sitting, in a crowded place? What are the effects of environment?)
- Are users under stress or pressure, are they distracted?
- Is confidentiality required? (How is information displayed)
- What kind of lighting conditions are normal?
- Surrounding noise levels?



What's the relationship between the user and the product?

- Does this involve personal data?
- Is it always accessed from the same device?
- do multiple users move between machines?
- Is there common data?
- Is it used concurrently or passed sequentially between users?
- Is access to data limited in some way?

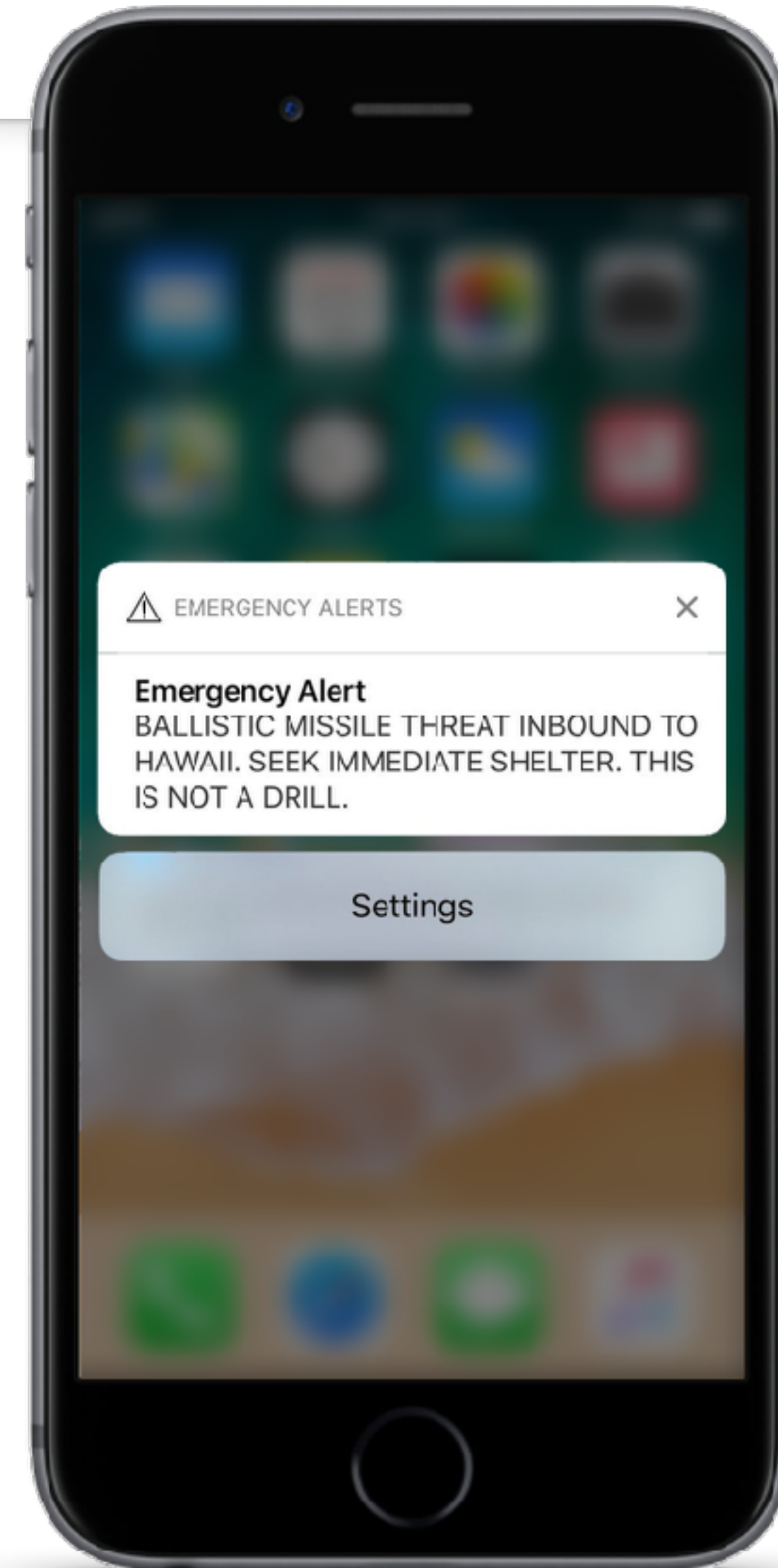
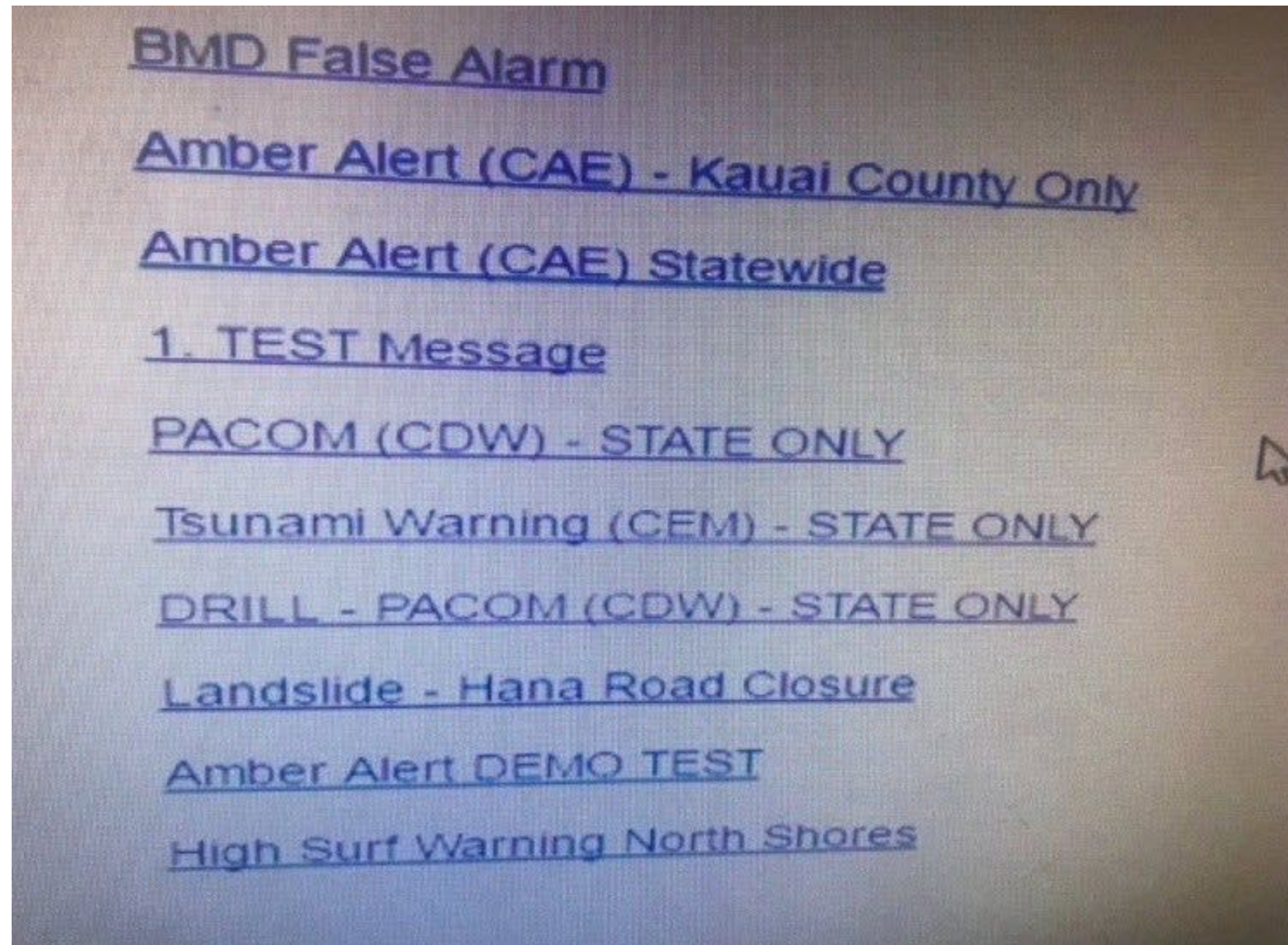
How often is the product used?

- Frequent users remember more details
- Infrequent users may need more help (even for simple operations)
- Which function is performed most frequently, and by which users?
- Optimising a product for these tasks will improve perception of good performance or usability

Are there usage time constraints?

- What functions will users be in a hurry for?
- Positioning of functions
- Which can wait?
- Is there a timing relationship between tasks?
- Time out

Hawaii's Emergency Management Agency alerts system



Data gathering for better understanding

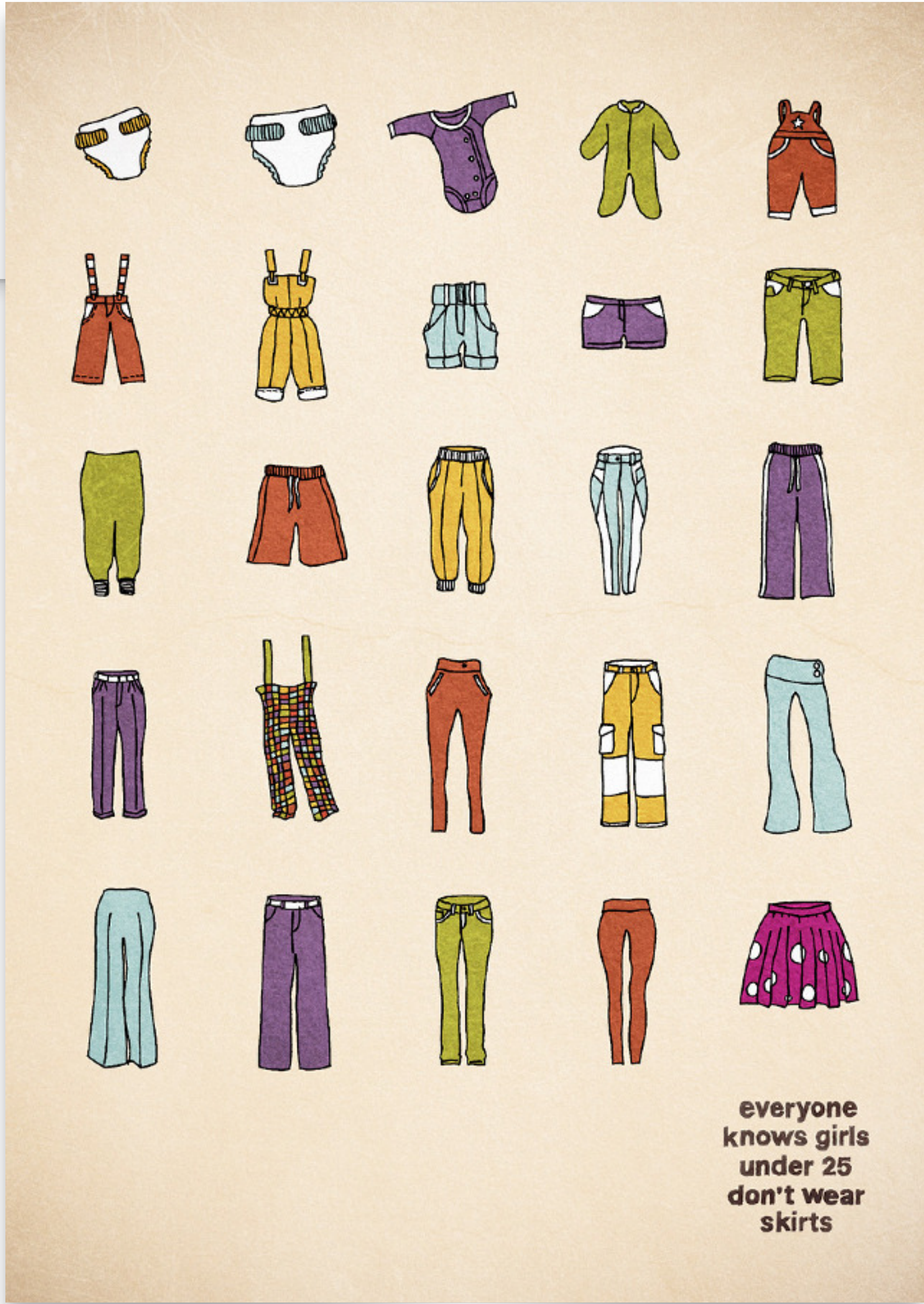
1. Questionnaires
2. Interviews
3. Focus groups
4. Natural observation
5. Analysing documentation

User behavioural cues: what are the...

- Pain points
 - Key concerns that generate aversion responses
- Motivators
 - Key concerns that generate positive responses
- Validators
 - Sources of decision-making info and support

You'll gather a lot of information following the above advice...

- Remember to translate that to insight!
- Try telling stories about a user to develop a deeper understanding
- Beware assumptions, especially general ones



everyone
knows girls
under 25
don't wear
skirts

User Persona Research

In 2013 MailChimp researched their users using the following processes:

- “ Interview MailChimp stakeholders to see who we assume our customers are*
- “ Rank our pool of active users by industry*
- “ Identify subjects from popular industries and interview, interview, interview*
- “ Analyze what we saw and heard*
- “ Share our findings with the team*

MailChimp User Personas



MailChimp User Personas

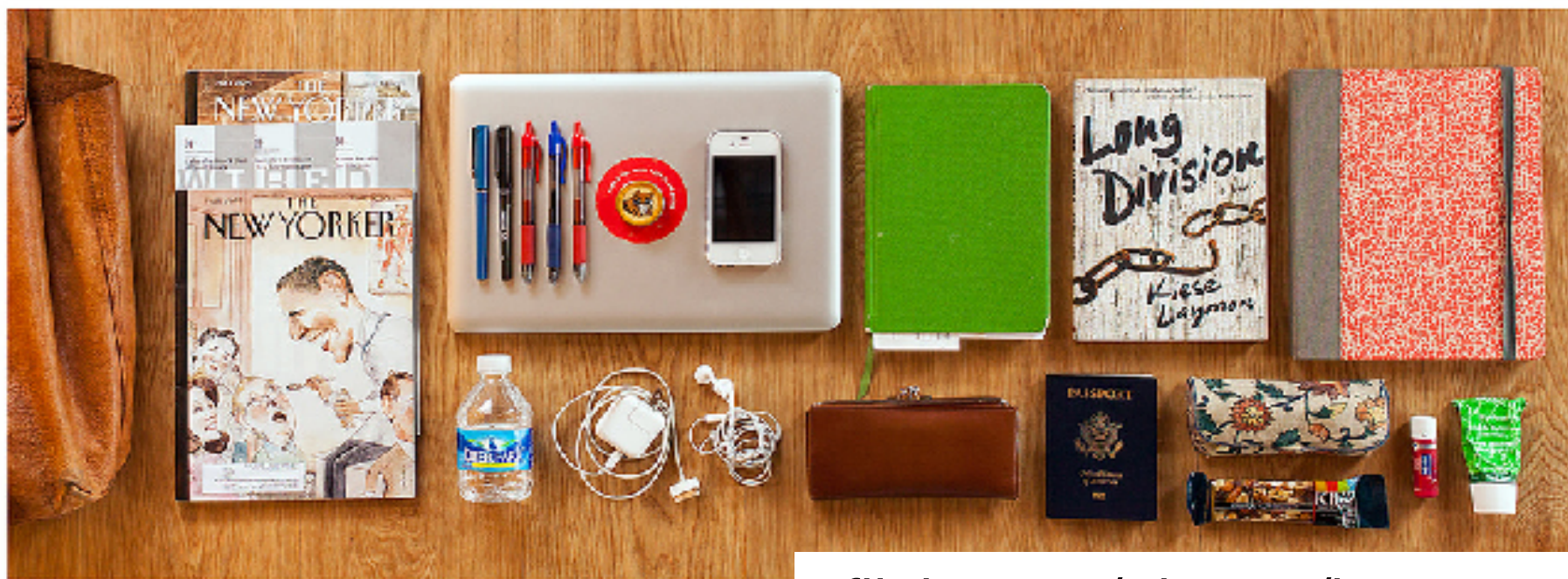


MailChimp User Personas





Jason Travis's 'Persona Portraits'
(The inspiration for Mailchimp's user persona posters)



Finally, beware of assumptions...



Finally (again), beware of assumptions...



Reading

- User Persona Examples, Templates and Tips: venngage.com/blog/user-persona-examples/
- Design principle: the power of desire lines: uxplanet.org/design-principles-the-power-of-desire-lines-3e7502da97eb
- Personas: a simple introduction: interaction-design.org/literature/article/personas-why-and-how-you-should-use-them
- The origin of user personas! https://www.cooper.com/journal/2008/05/the_origin_of_personas/
- The Encyclopedia of Human-Computer Interaction, 2nd Ed: interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/personas
- How to Create a User Persona: Tips and Examples: <https://mailchimp.com/resources/how-to-create-a-user-persona-ux/>