



University of California
San Francisco

The Internal Studio Model

Project by project human centered innovation

Beth Berrean, MBA, MLIS
Deputy Director, Design & Discovery
UCSF School of Medicine Technology Services Unit

11/15/18



About SOM Tech



Broad technology expertise



Deep knowledge of the UCSF ecosystem



Human centered approach

SOM Tech provides leadership and advocacy across the School of Medicine's technology spectrum, from research to product development to data security.

Who is SOM Tech?



We are technology advocates. Designers, developers, project managers, analysts, testers and security experts centered on building digital projects further, faster.

Design and Discovery

Unpack

Understand work to date and problem areas

Explore

Develop insights and opportunities

Design

Define qualitative and quantitative metrics for success

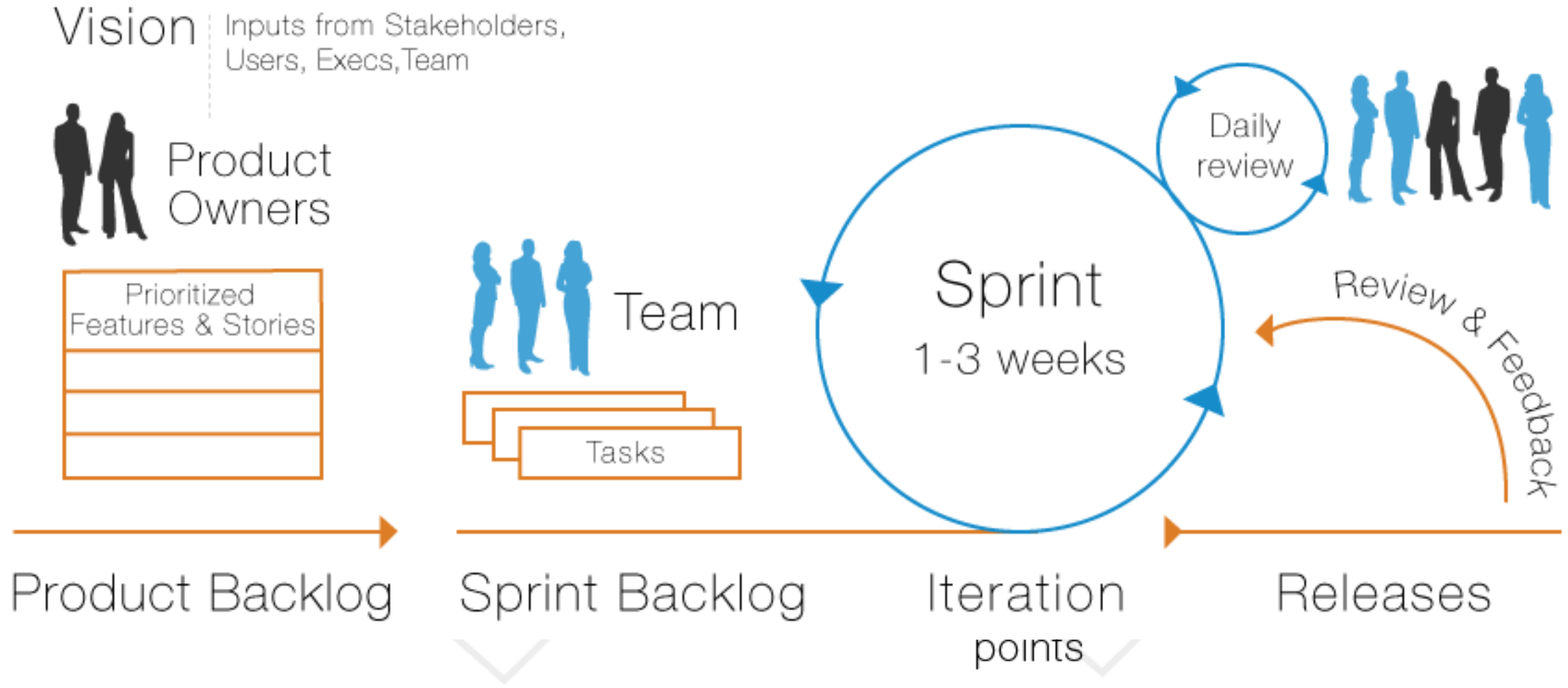
Prototype

Use an iterative development process to define touch points

Validate

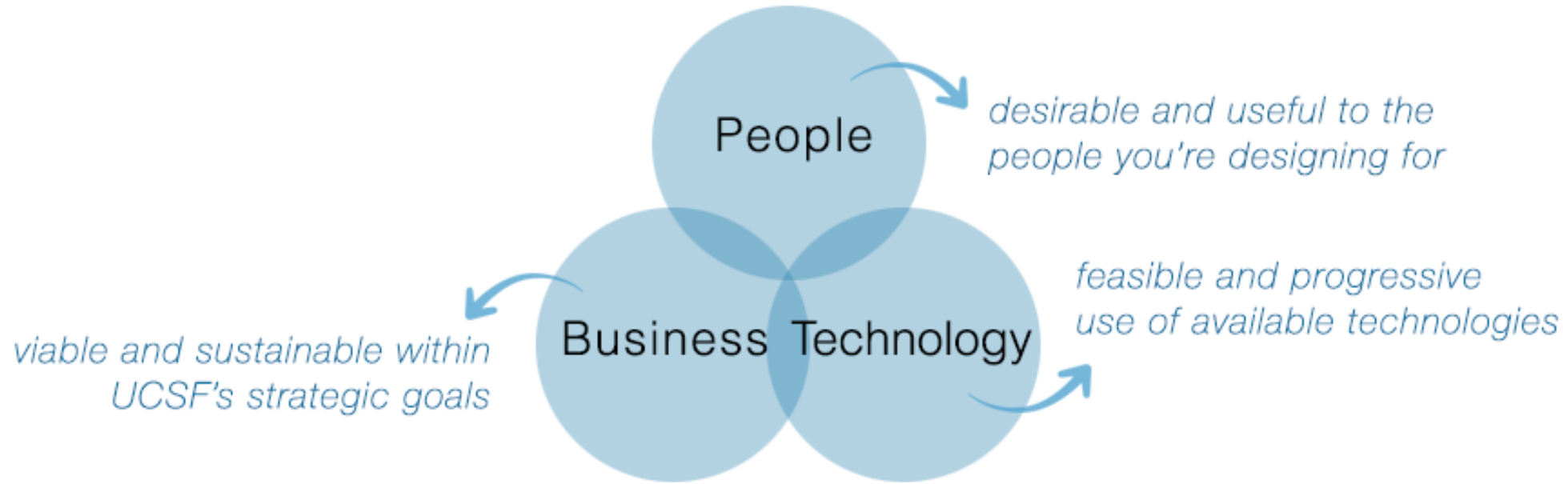
Pilot and redesign as appropriate

Agile Development

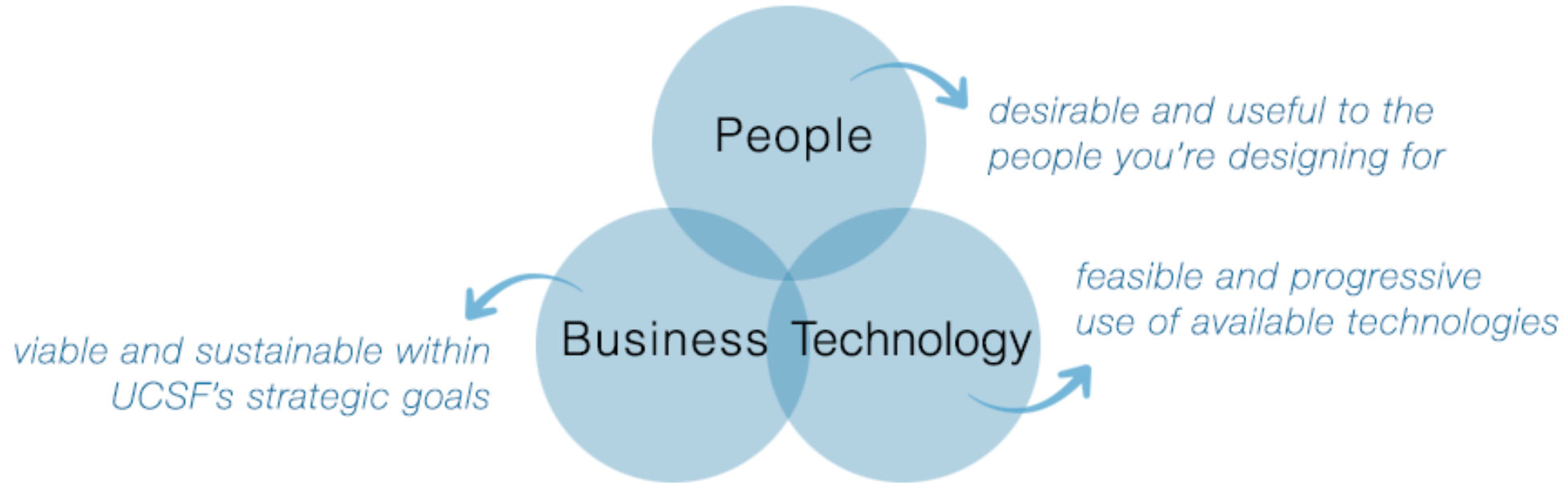


Digital Product Development is Innovation

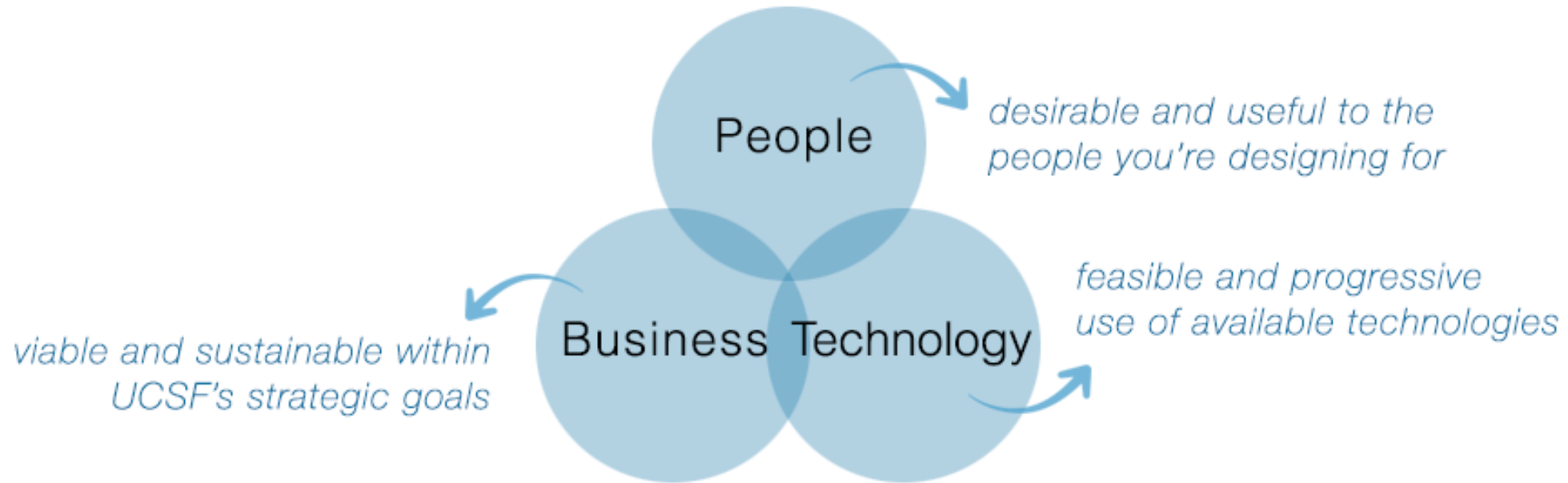
Digital Product Development



Digital Product Development

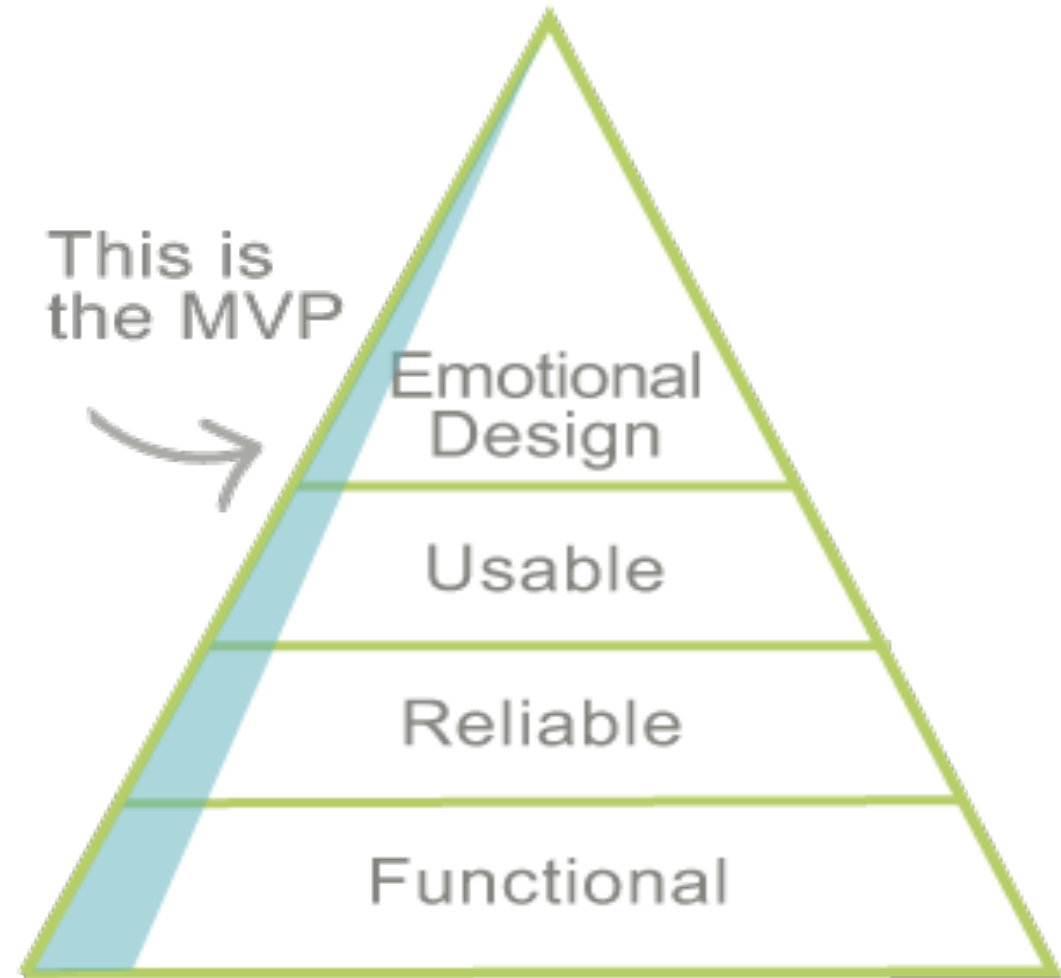


Digital Product Development



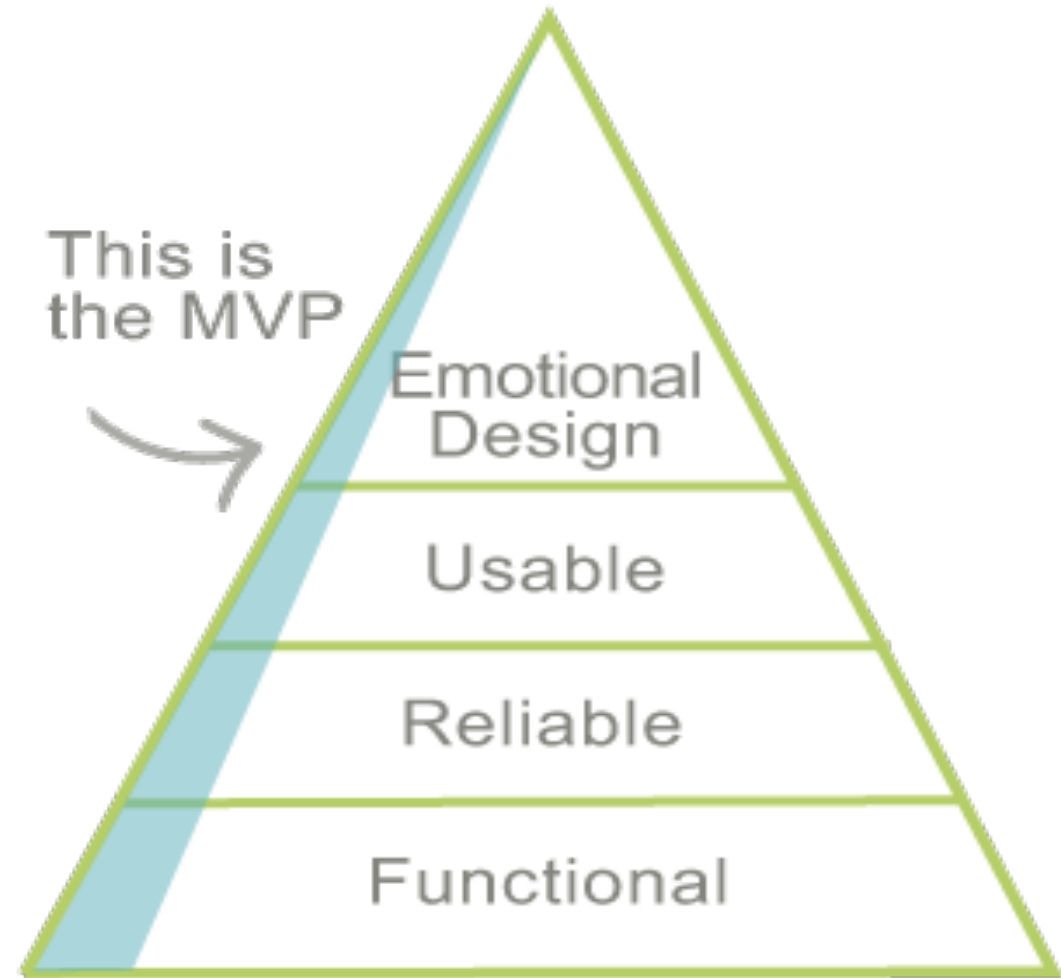
Developing successful digital products in an academic medical center has particular challenges focusing on human needs, value and business goals

Minimum Viable Product



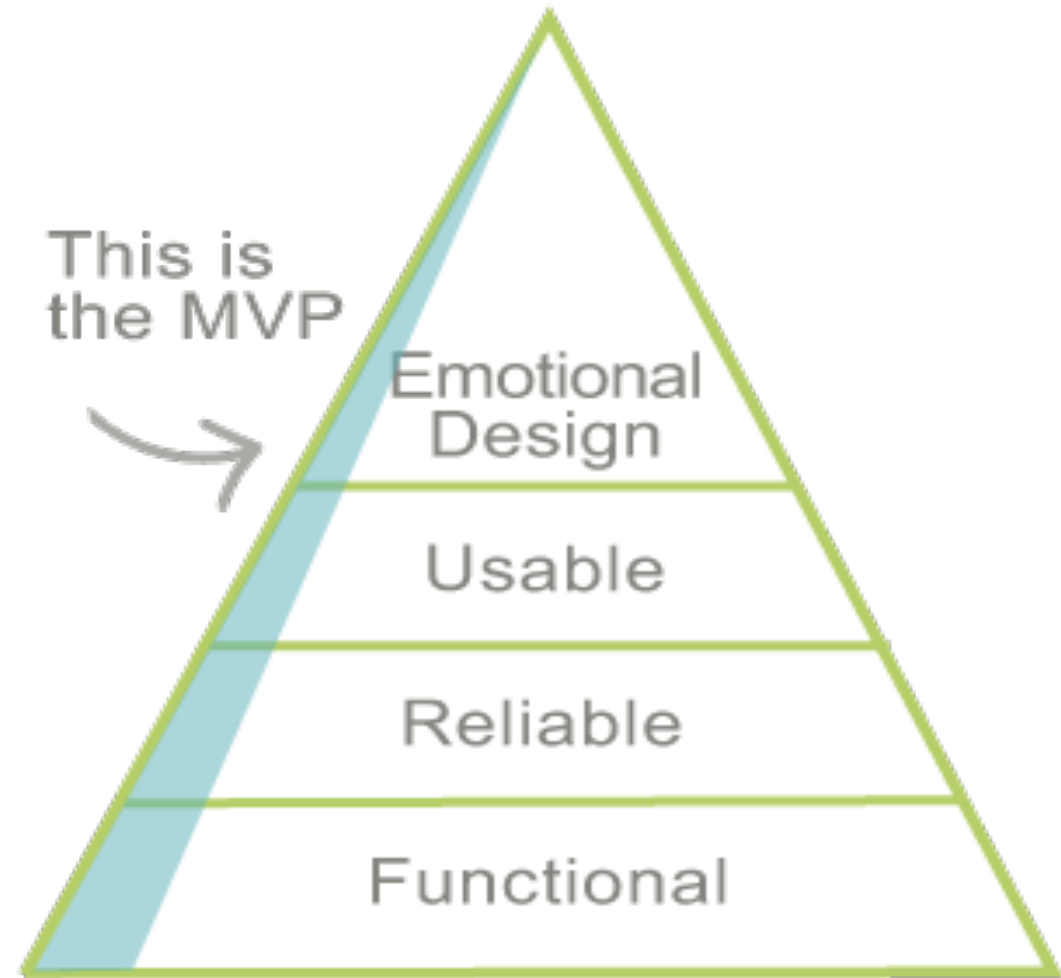
Minimum Viable Product

Human Centered Design
is Innovation



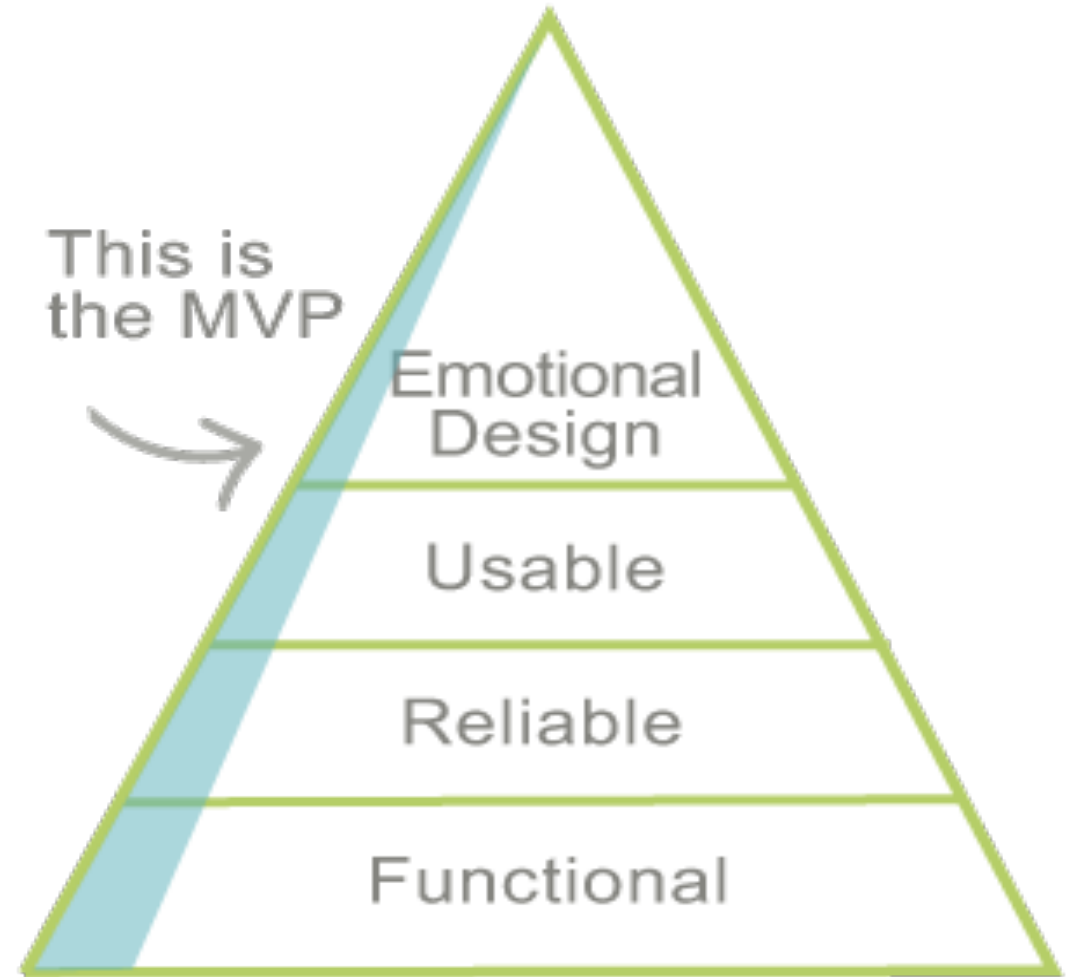
Design helps

1. Make things tangible



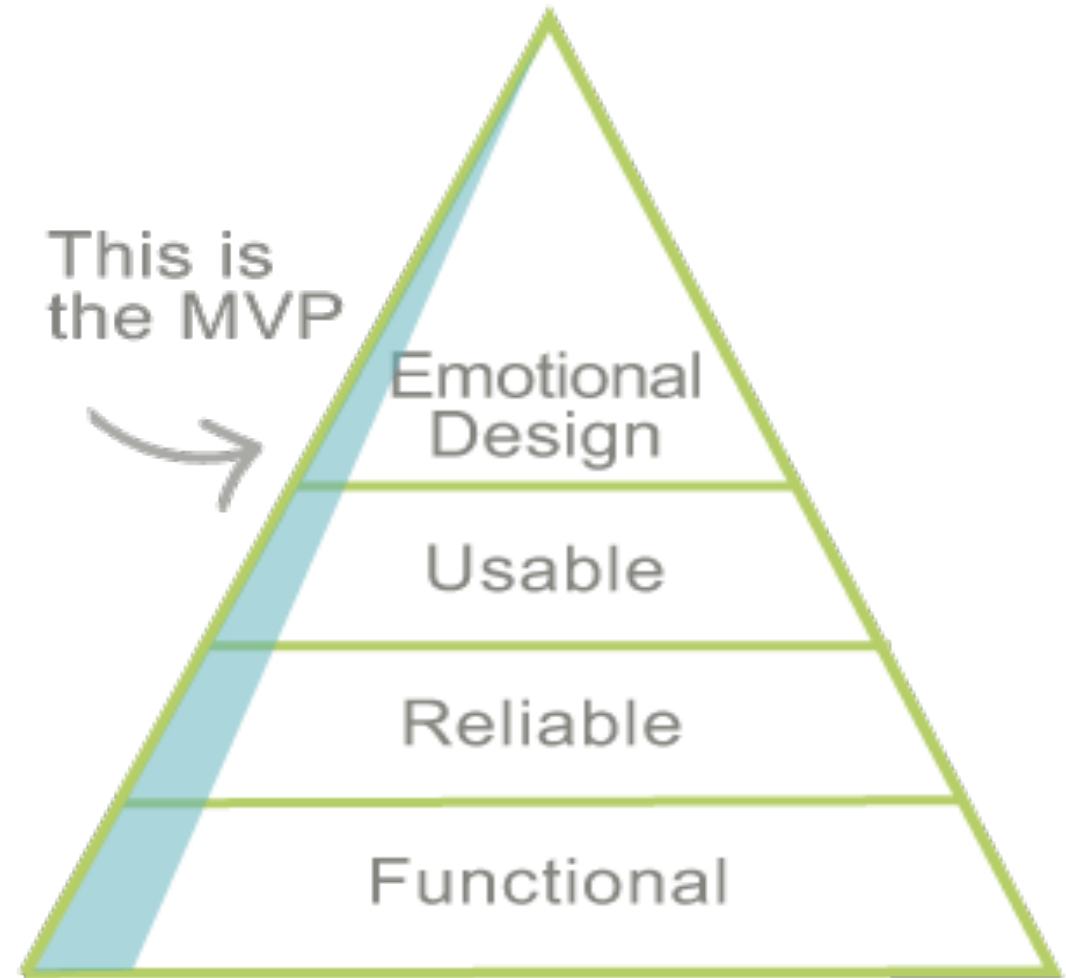
Design helps

1. Make things tangible
2. Work **for** and **with** all stakeholders



Design helps

1. Make things tangible
2. Work **for** and **with** all stakeholders
3. Celebrate constraints



The Product Toolkit captures discovery process

Vision Statement & Value Guide

What
A vision statement is a clear, concise statement about the overall goal(s) and direction of the project.

Why
The vision statement inspires your framework for your ongoing work for how you define value and success.

How
Ask yourself and your team the the worksheet on the following if your team is unable to answer, discovery work should be done.

Questions to answer as a team:
Who will benefit from this product?

Minimum Viable Product (MVP) Guide

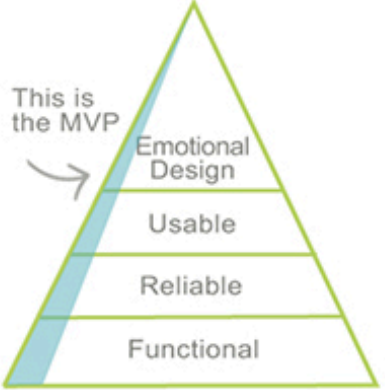
What
The MVP is an initial version of the product that includes the minimum amount of functions/features needed to gather feedback and determine if the product is viable. AKA "Will people use it?"

Why
An iterative process that responds to ongoing user feedback helps you deliver higher value, efficiently.

How
With your team, before you start development, complete a prioritization exercise and document your prioritized features and functions.

Steps to take with your team:

- Establish a complete list of product features and functions
- Prioritize them based on the value they provide and the effort it would take to build them
- Always refer back to your vision statement, value definition, personas, and scenarios



This is the MVP

Design and discovery to development

- Vision
- Value Statements
- Assumption Mapping
- Persona
- Storyboards
- Roadmap

Vision Statement & Value Guide

What
A vision statement is a clear, concise statement about the overall goal(s) and direction of the project.

Why
The vision statement inspires your framework for your ongoing work for how you define value and success.

How
Ask yourself and your team the questions on the following worksheet. If your team is unable to answer a question, discovery work should be done.

Questions to answer as a team:
Who will benefit from this product?

Minimum Viable Product (MVP) Guide

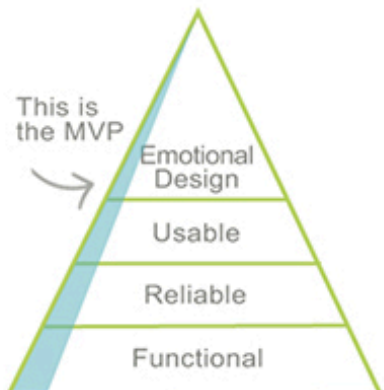
What
The MVP is an initial version of the product that includes the minimum amount of functions/features needed to gather feedback and determine if the product is viable. AKA "Will people use it?"

Why
An iterative process that responds to ongoing user feedback helps you deliver higher value, efficiently.

How
With your team, before you start development, complete a prioritization exercise and document your prioritized features and functions.

Steps to take with your team:

- Establish a complete list of product features and functions
- Prioritize them based on the value they provide and the effort it would take to build them
- Always refer back to your vision statement, value definition, personas, and scenarios

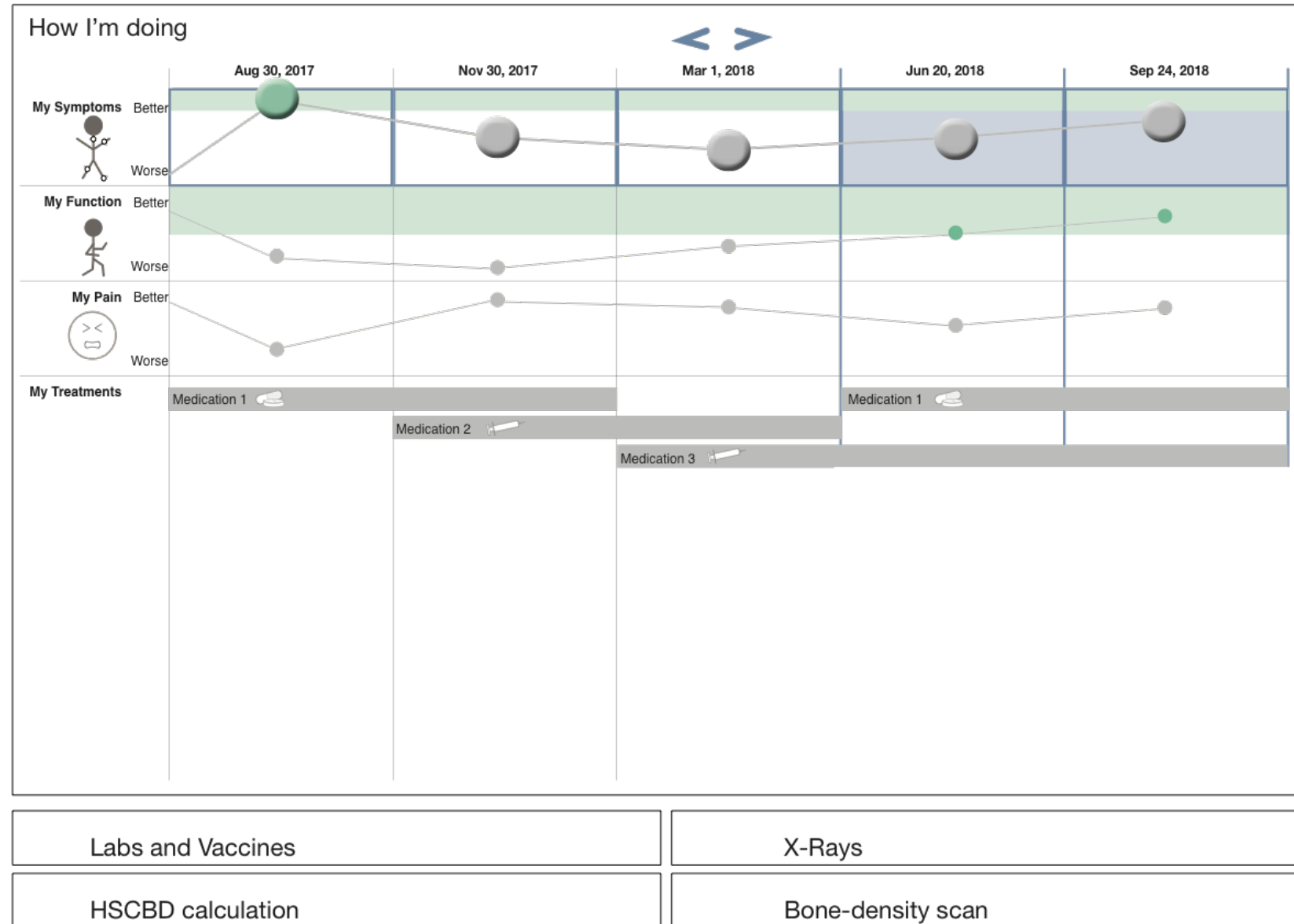


This is the MVP

Make things tangible

ADAPT/ PACT

- Funded research study to incorporate patient reported outcomes into regular clinical decision making
- Improve use of PROs
- Use Electronic Health Records to import and display data
- Current MVP wire



Initial insights from patient interviews

Allergic to anything but bupropion. - Glad, nurse who doesn't want no addiction.

Fall asleep on medicine - not as present. Can't take pain meds when I come to a dr. appointment

"Everything works fine until you run out of pain medication." Hard to get authorization. Clinics not always open

Now the bus driver lowers the ramp. - Needs courtesy & compassion

least amount of side effects

"Want to be able to walk around my building." Dog pulls me around. It's my joints.

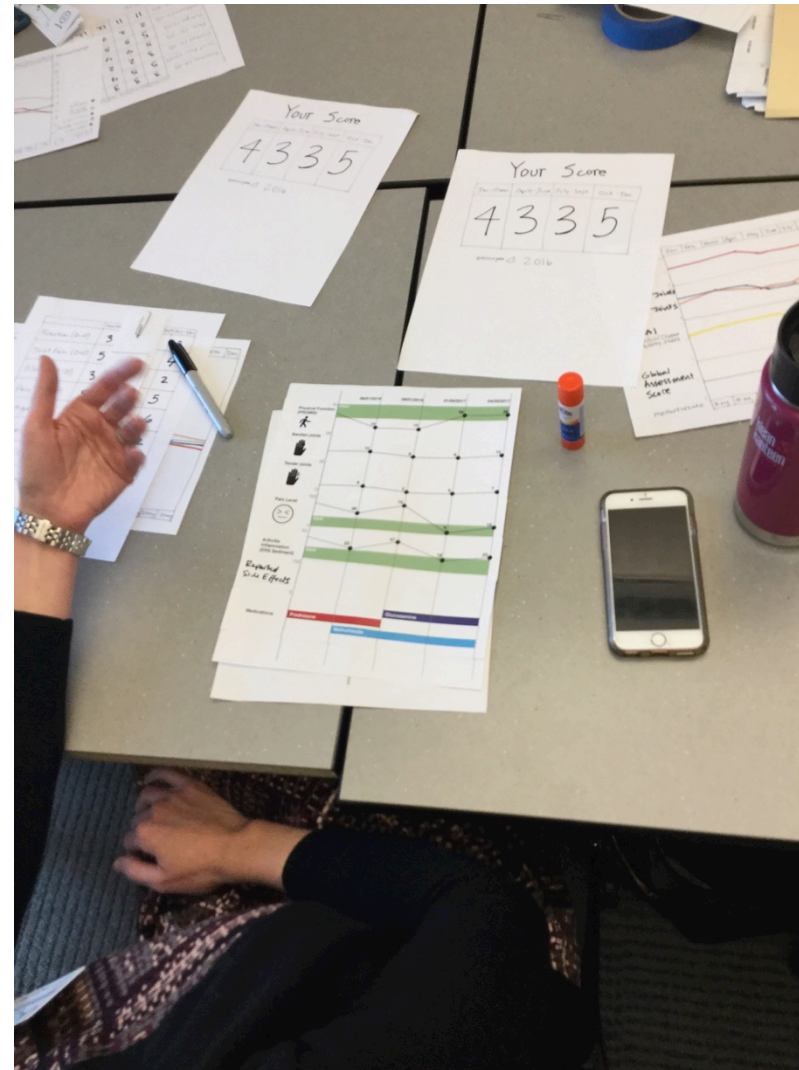
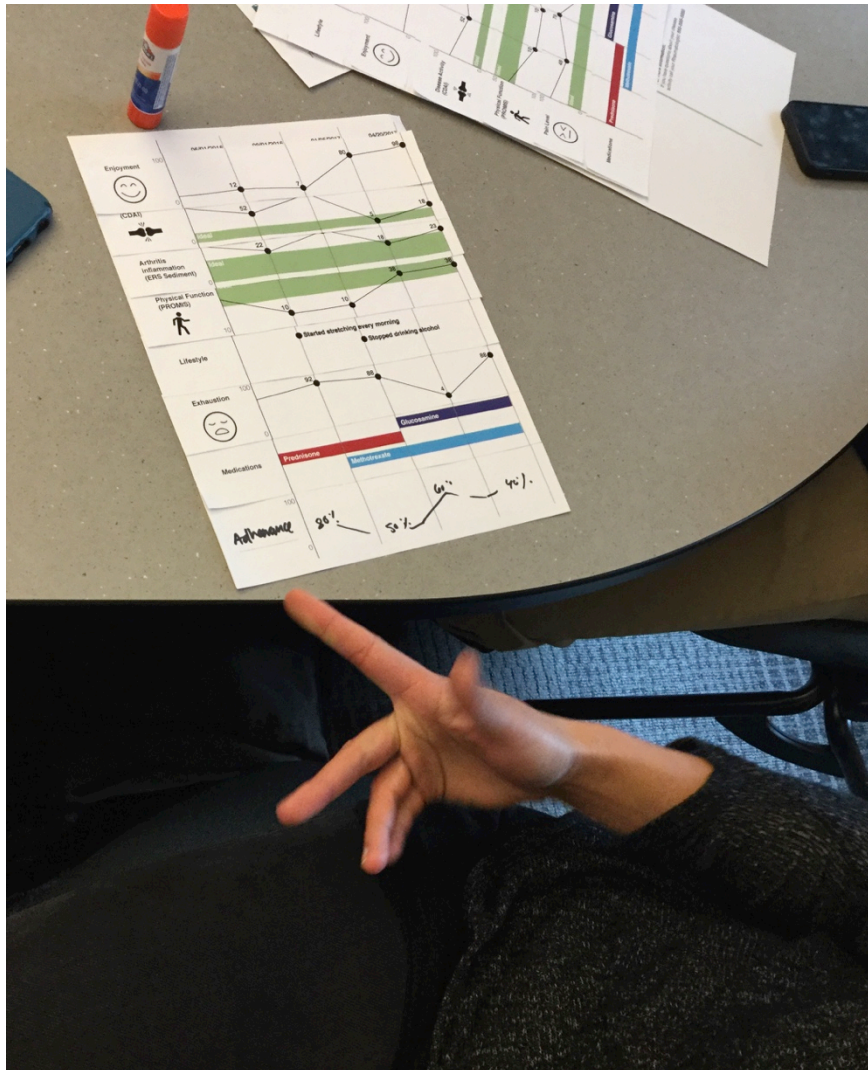
We all have our own goals and milestones that guide decision-making.

11/15/18

Patient focus group 2: diy prototypes



Provider focus group: diy prototypes



Vision Statement

This (name of product) **exists for** (people who will benefit from the product) **in order to** (product's positive impact).

Vision Statement

This PACT dashboard exists for Rheumatology patients and their clinical care team in order to enrich conversations around treatment decisions.

Vision Statement & Value

This (name of product) exists for (people who will benefit from the product) in order to (product's positive impact).

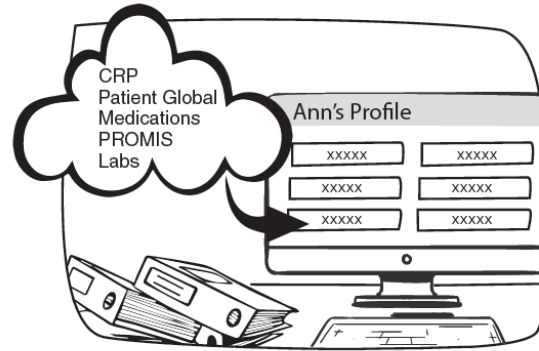
List (types of) people who will use and or benefit from this product	What value will this product bring to them?

Vision Statement & Value

This PACT dashboard exists for Rheumatology patients and their clinical care team in order to enrich conversations around treatment decisions

List (types of) people who will use and or benefit from this product	What value will this product bring to them?
Patients	Puts information in the palm of the patients hand. Ability to see their pain and functionality scores and initiate a conversation with
Clinicians	Track their patients scores over time in particular in relation to new medicines
Medical Assistants and other people on the clinical team	Helps interpret/translate results

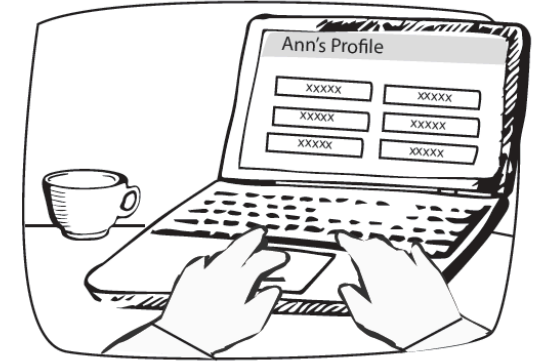
Storyboards



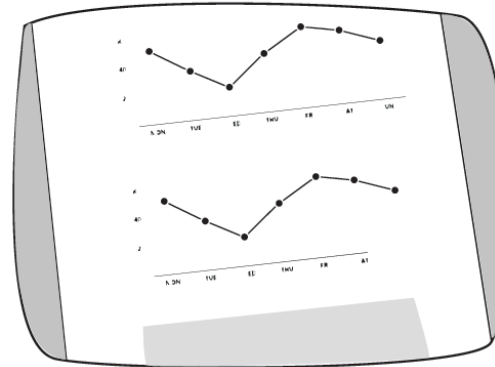
Pre-visit data is auto-loaded from EHR into Ann's RA profile.



During Ann's visit, Dr. Gomez updates EHR with data from her exam, such as swollen and tender joints. This data updates her profile.



Dr. Gomez pulls up Ann's profile.



Dr. Gomez and Ann look at all of her data together and discuss progress, medications, treatment, lifestyle and goals.



Ann takes a printout of these options with her, which she can also access later through MyChart.



Later she references the printout when discussing her medication options with her sister.

Work *for* and *with* all
stakeholders

We Are Family

*Using Technology to Help Marginalized Communities
Keep HIV Prevention Center Stage*

Aim

The California HIV/AIDS Research Program (CHRP) is developing and conducting a preliminary test of an intervention for African American Gay, Bisexual and Transgender (AAGBT) youth involved in the Bay Area's "houses" of ballroom culture — excellent potential mechanisms for promoting regular HIV testing and strengthening engagement with AAGBT youth.

Approach

SOM Tech partnered with the We Are Family team at CHRP to explore and develop digital tools designed to leverage LGBTQ "family" and "house" networks to:

- Increase information flow
- Reduce stigma
- Motivate community members to reduce risky behavior
- Seek regular HIV testing
- Engage in treatment if they are HIV-positive



Solutions

SOM Tech worked directly with the researchers and house ball community in participatory workshops to prioritize features and design a tool that makes it easy for youth to engage with content and find services.

Real Stories

Share stories and challenge HIV-related stigma through user-submitted videos and photos

Find Services

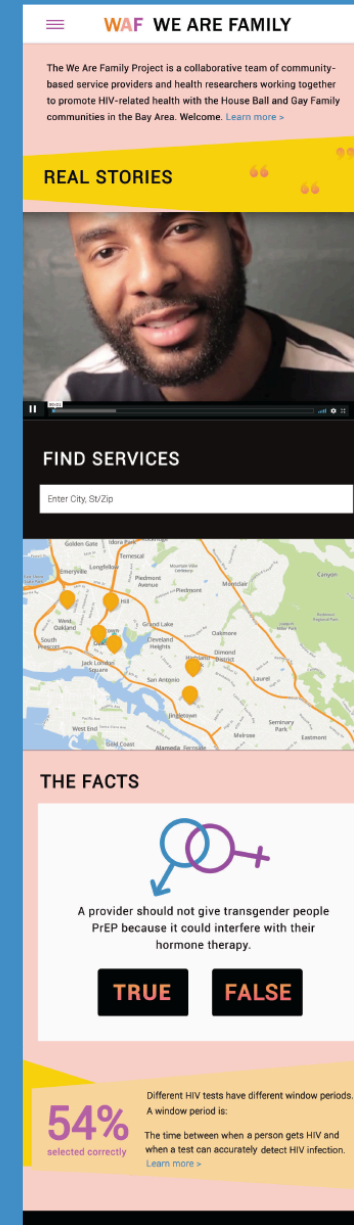
Connect youth to local resources with a service map locator and user-submitted reviews

The Facts

Provide accurate information in a fun, engaging quiz format that's updated weekly

We Are Family

Create a positive online community through the anonymous We Are Family site and WAF Facebook page



What we know & what we don't

What do we know?	How do we know that?	What questions do we still have?	How will we answer them?
Videos are a key part of how the community interacts and passes knowledge?	Interviews.	What video styles are applicable?	Participatory design sessions
There is a lot of mis information about <u>PrEP</u>	Interviews	How will we source videos?	Participatory design sessions
Most community members use social media	Observation	How can we engage in social media "like" activities safely?	Investigate games/polls <u>etc</u>
		What's the best way to re-enforce info?	Mock Ups, Reactions to samples

What we know & what we don't

What do we know?	How do we know that?	What questions do we still have?	How will we answer them?

Games & Quizzes: Sketches

HOUSING

Jobs

Clothing

HEALTH MEDS TESTING

THNS 4 GM

Training School

Goodwill

SF 60W SPH

Customize your buttons

Basically, you should have short quizzes like them short facebook quizzes or personality quizzes.

Meme here

Facebook messenger Games w/ group chat

Which matches you best?

x

y

z

Submit

Allow users to build a profile that customizes the content made viewable to them

Your Profile

location: _____

Needs: _____

etc: _____

etc: _____

Allow users to make an avatar etc to allow anonymity.

SF East Bay

Avatars customizable


Memes that Describe Different PRONOUNS

Background


game - Informative

Videos

"15 Ways You Can't Get HIV!" by Todrick Hall for #HIVBEATS



15 Ways You Can't Get HIV!
Todrick Hall




"Oh Hey! Prepare Yourself!" by Bob the Drag Queen for #HIVBEATS

WEAIDS NEWS | CAMPAIGNS | MATERIALS | HIV/AIDS INFO

FIND LOCAL HIV / AIDS SERVICES ENTER CITY, ST/ZIP
GET UPDATES ENTER EMAIL







Search About En Español Regions




15 Ways You Can't Get HIV!
Todrick Hall

YouTube Stars Bring It for #HIVBEATS!

Top social media influencers [Todrick Hall](#), [Bob the Drag Queen](#), [Davey Wavey](#), [Zackary Drucker](#), [Amber's Closet](#) and [Catrifi](#) are paired with some of the hottest talents in music and choreography today in this highly-watchable YouTube series to get out the word about HIV prevention and treatment. To read the [HIV BEATS press release](#), [click here](#). Watch. Educate Yourself. Share.

 <p>15 Ways You Can't Get HIV! Todrick Hall</p>	 <p>Oh Hey! Prepare Yourself! Bob the Drag Queen</p>	 <p>That's Enough to Get Your Blood Pumping! Davey Wavey</p>
 <p>HIV Shouldn't Stand in the Way of Love! Zackary Drucker</p>	 <p>We Don't Have Much Time...! Amber's Closet</p>	 <p>Guess What? I'm Not Pregnant! Catrifi</p>

It Got Better Featuring EJ Johnson



Persona

Name:

Key quotes and stories from this person:

Important elements of this person's life,
in the context of this product:

Images that represent
this person

Insert photo

Insert photo

Persona

Name: *Marcus*

Key quotes and stories from this person:

“My parents are always nagging on me for losing my stuff.”

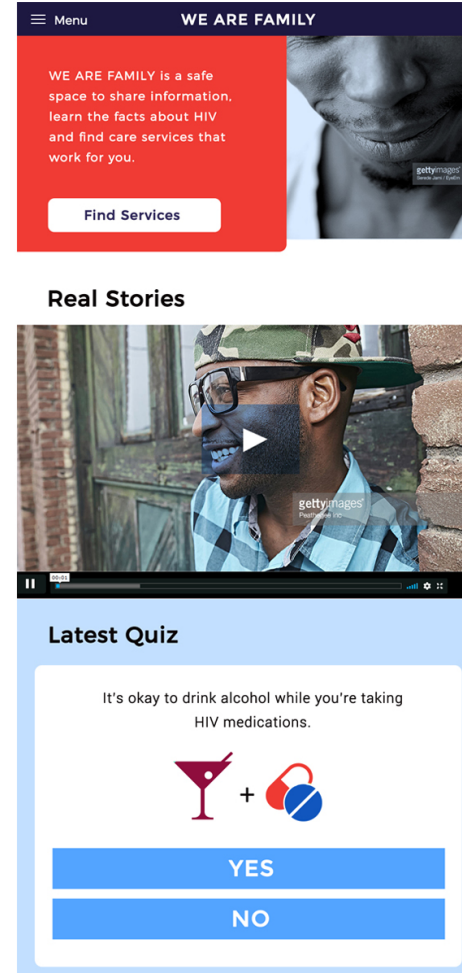
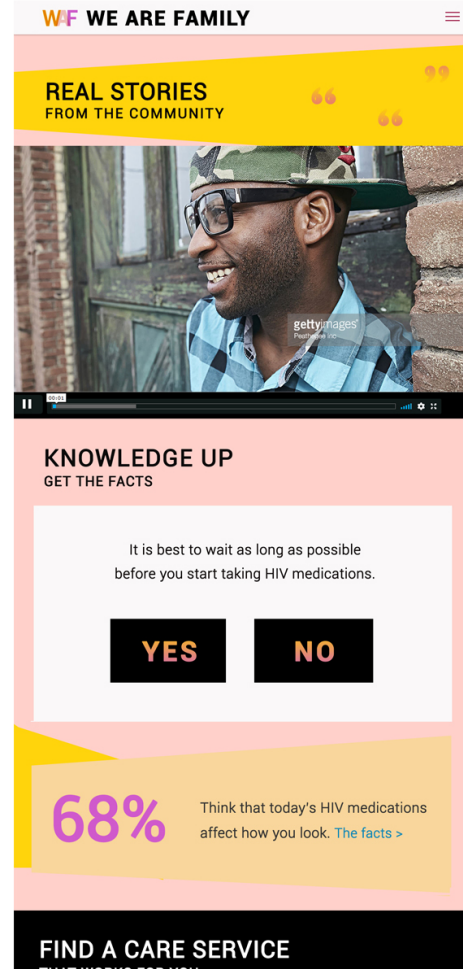
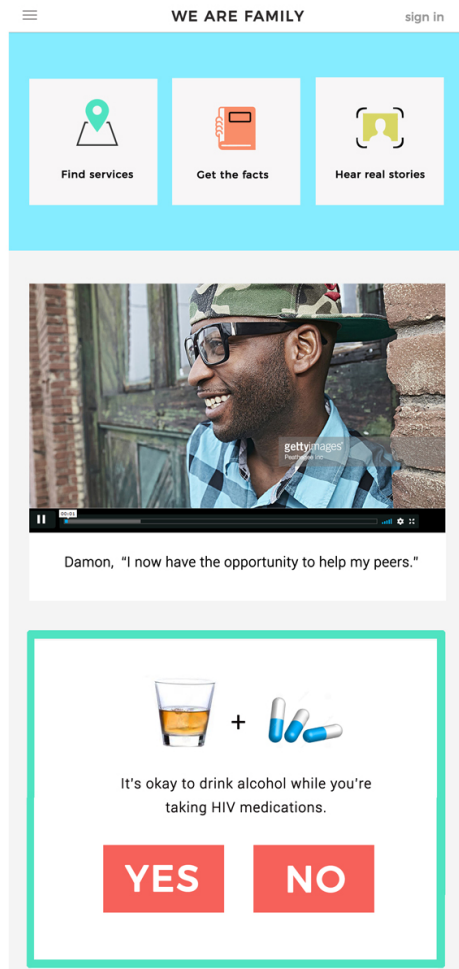
“For my 16th birthday, my dad gave me an expensive laptop and I lost it the first week of school. I was afraid to tell him about it. He made me get a new job to replace it and I had no time for friends that fall.”

Important elements of this person’s life,
in the context of this product:

- Marcus is a new college student
- He is involved in sports, student body, has a double major and a part-time job
- He has a busy schedule and is up late
- His parents think he is forgetful and it tends to drive them crazy, but he just has a lot going on
- He would like to have more independence at school and wishes his parents would place more trust in him



Wireframes, Mock Ups



Celebrate Constraints

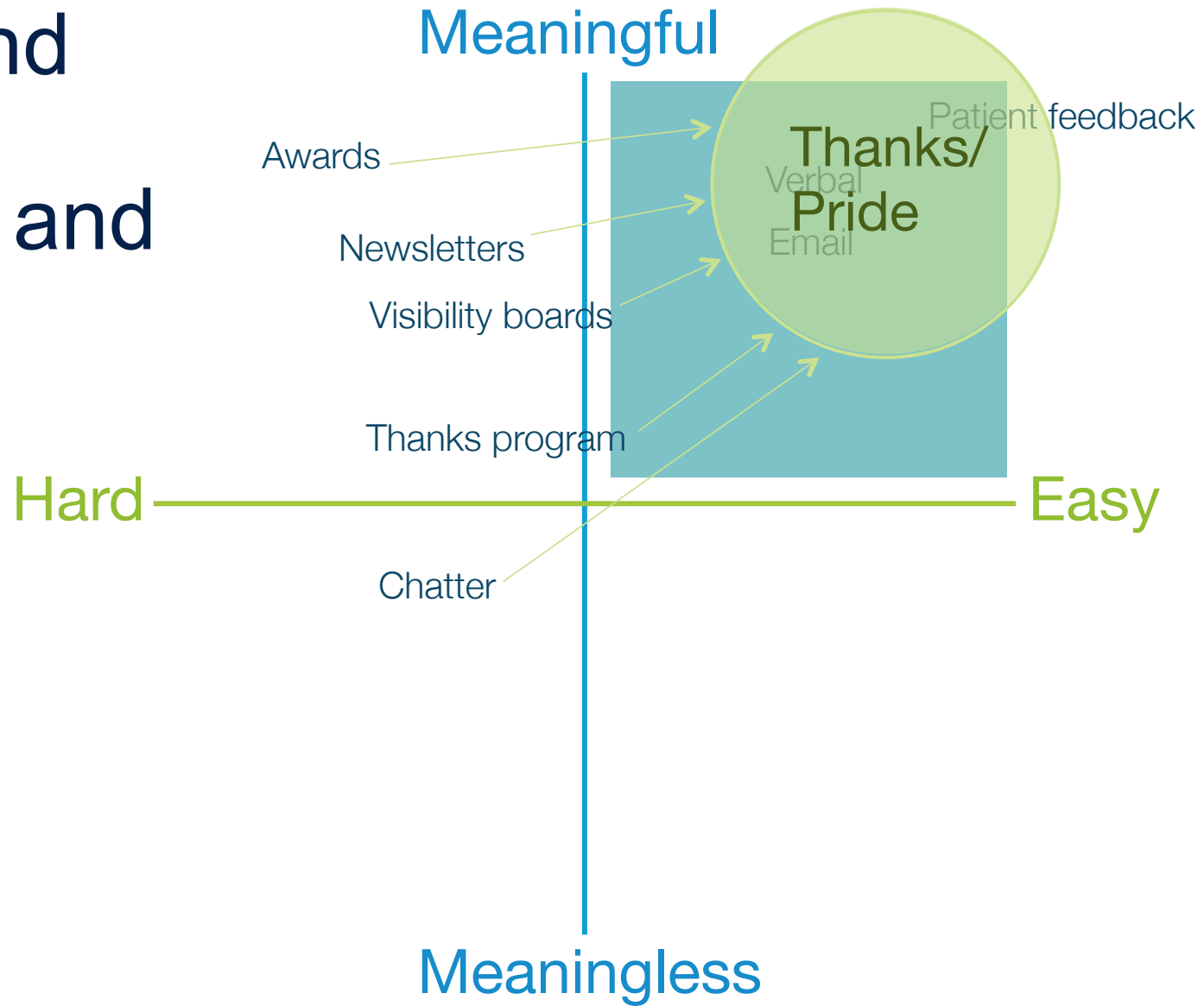
Recognize

Developing a culture of recognition with technology

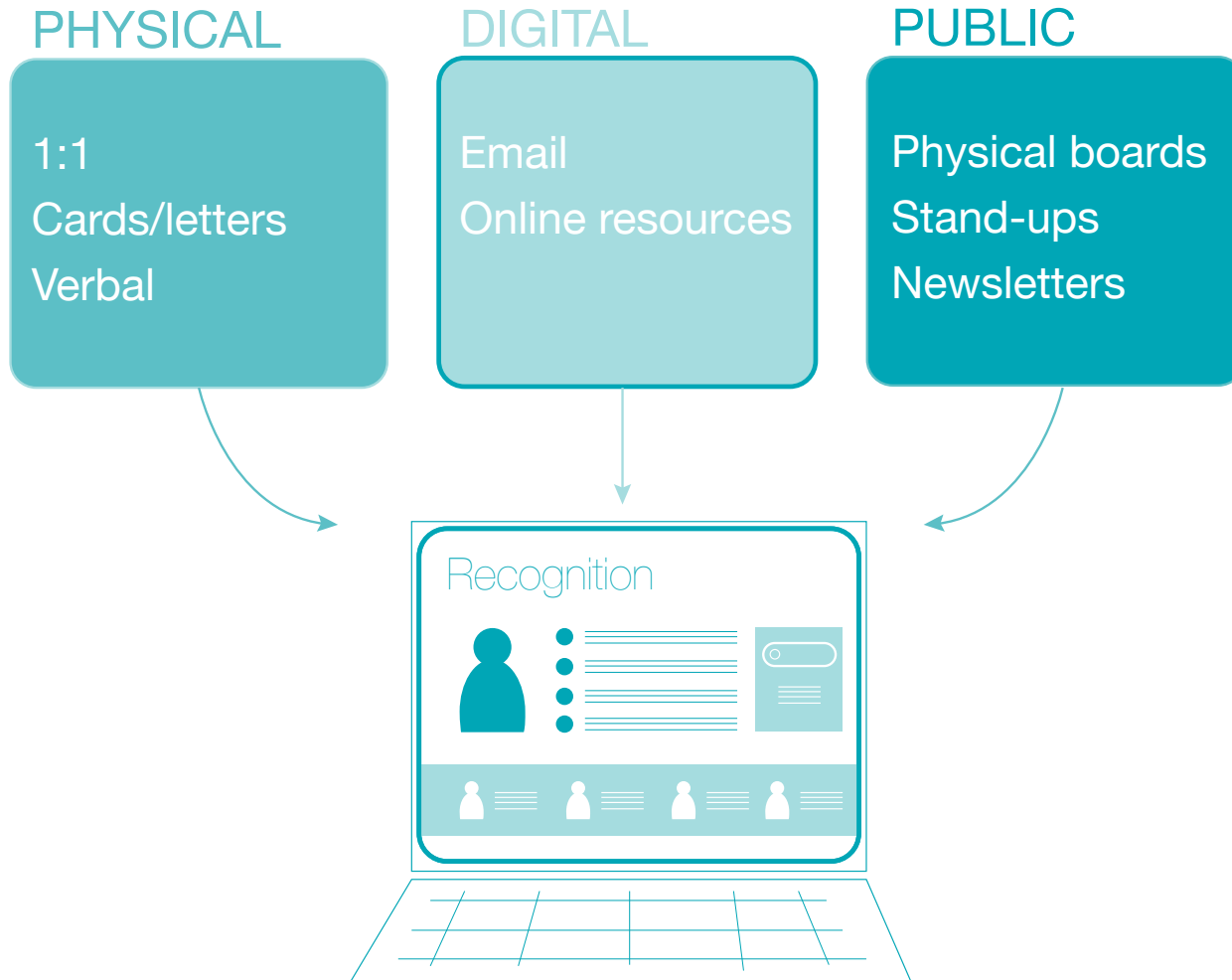
Aggregated collection of existing programs and tools



Understand existing programs and behaviors



Connect existing programs



Minimum Viable Product






List prioritized features and functions:

Feature or function	Estimate of value provided	Estimate of effort needed	Dependencies with other features/functions	Acceptance criteria
Ability to tag and <u>untag</u> items	High	Low		User tags/untags item using smart device; User sees item as tagged/untagged
Ability to know where item is when needed	High	Medium	Tag/untag feature needs to be done first	User views the item's location
Ability to track a list of items	Medium	Medium	Tag/untag feature needs to be done first	User views a list of items, location, and date stamp
Ability for multiple users to view items	Medium	High	Tag/untag feature needs to be done first	User/s can see the list with multiple permission settings

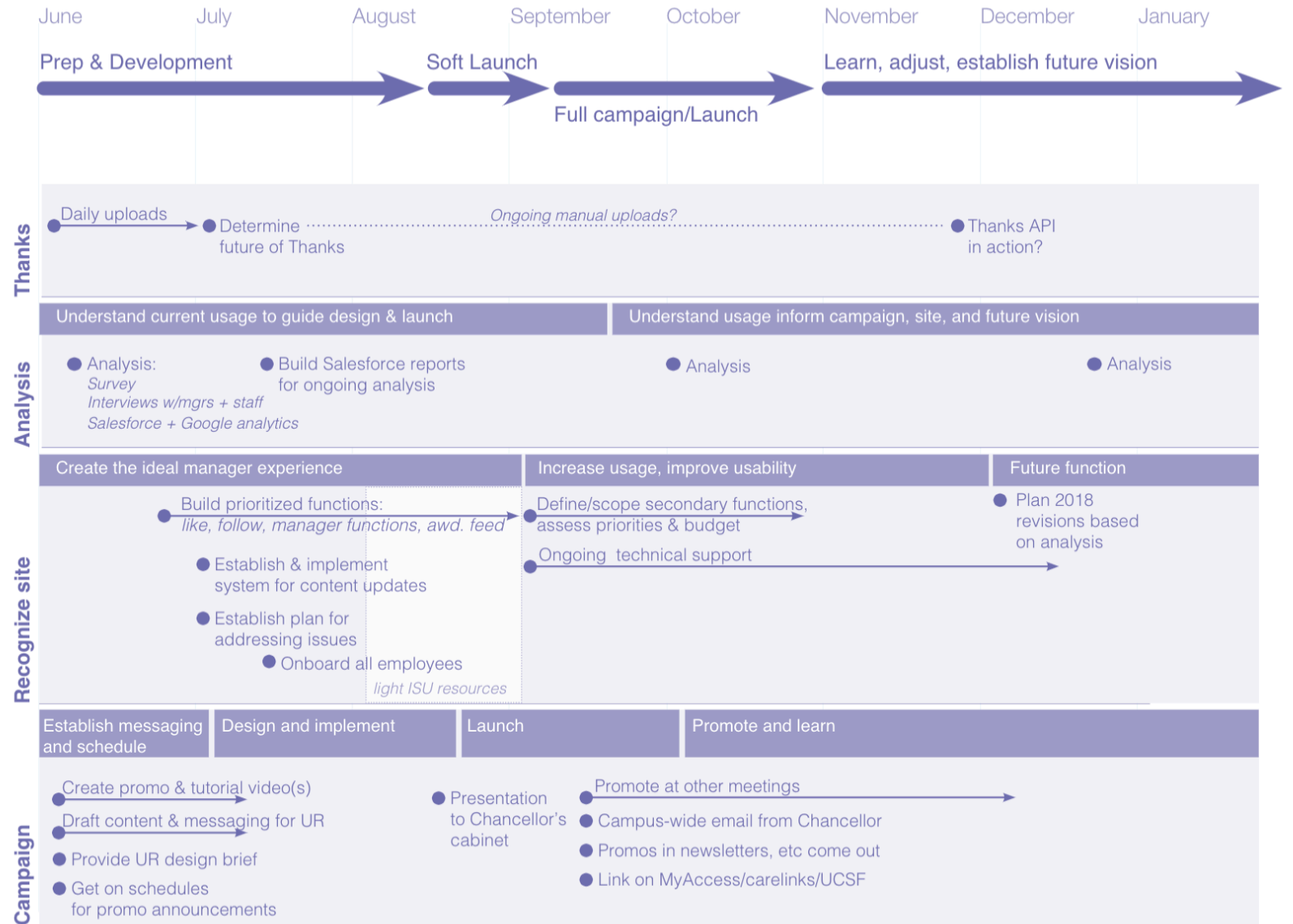
Success Metrics

What will success look like?	How will we measure that?	How often will we measure that?	What is the baseline measurement?	What is our success measurement?
<ul style="list-style-type: none">• Students don't lose their stuff	<ul style="list-style-type: none">• Lost and found data	<ul style="list-style-type: none">• Quarterly	<ul style="list-style-type: none">• 10 items reported lost	<ul style="list-style-type: none">• 2-5 items reported lost

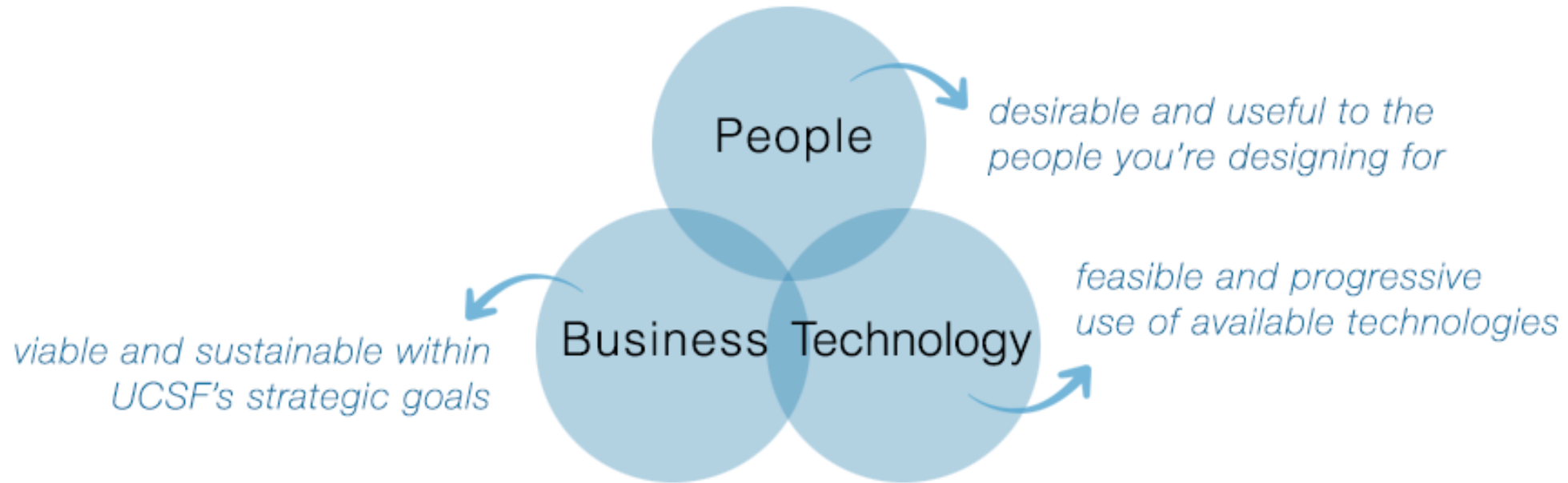
Product Roadmap (feature focused)

 Date Key dates, timeframes, deadlines					
 Name The name of the new product version or major release					
 Goal The reason for creating the new version or release					
 Features The three to five features necessary to meet the goal					
 Metrics The metrics/KPIs to determine if the goal has been met					

Detailed Roadmap



Digital Product Development



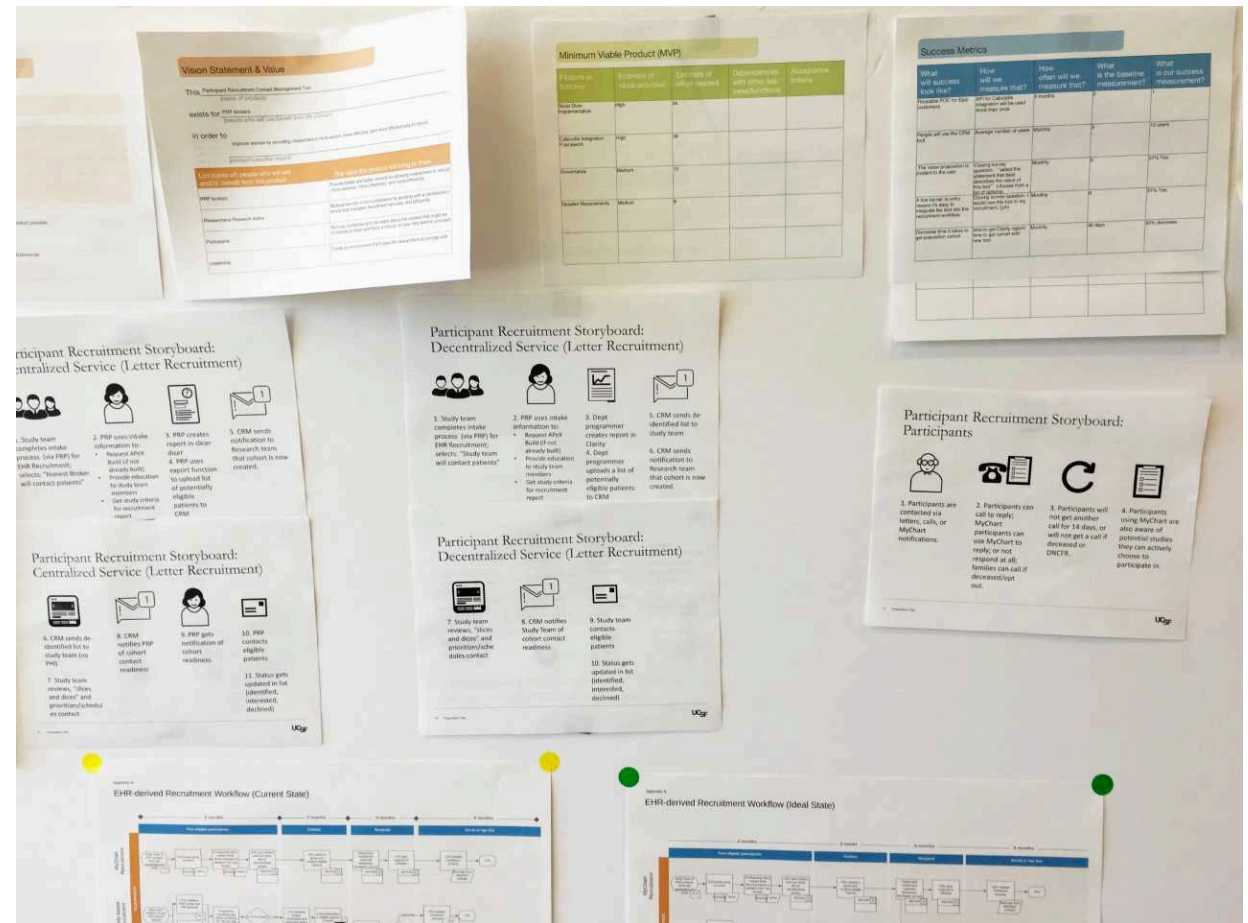
Developing successful digital products in an academic medical center has particular challenges focusing on human needs, value and business goals

Digital Product Development is Innovation

Innovation is learning by doing

Tangible

- A living document present during standard Agile meetings



Collaborative

- Promoting communal ownership of information



Product Owners, PMs, BAs, Designers, Developers

Embraces Constraints

- Referenced during trade off discussions

Questions

Resources

- SOM Tech: <https://tech.ucsf.edu/>
- Roman Pichler's Product Management Tools: <https://www.romanpichler.com/tools/>
- Lean UX Intro: <https://www.interaction-design.org/literature/article/a-simple-introduction-to-lean-ux>

Thank You!



UCSF