User-Centered Design: From the Playbook into Practice

ISG Town Hall

Catharine Robertson, PM3
10/25/2017

What We'll Cover

- The role of UCD in ISG

- What is UCD? Let's talk about terms

- Measuring the user experience

- Why move to UCD? Who benefits?

- What it means to "move to UCD"

- How will ISG know when it has moved to UCD?

ISG Mission

"We design, build, and continuously improve **_user-centered_** and innovative IT solutions to advance the CMS Quality Strategy"

UCD is the Engine of Culture Change

The core of what ISG does is deliver compelling, useful, easy-to-use products and services that satisfy these CMS strategic goals on behalf of **PEOPLE**:

- Empower **patients and doctors** to make decisions about their healthcare
- Support innovative approaches to improve quality, accessibility, and affordability **[for people]**
- Improve the CMS **customer** experience

UCD is the Engine of Culture Change

ISG Playbook strategies

- DevOps
- Cloud
- Agile Open Source
- Making Information More Timely, Accessible, and Secure

serve the **PEOPLE** who use the products and services you deliver.

UCD as Risk Identification & Mitigation

- Better to find out earlier rather than later that people have a hard time using your product or service.
- Even people who WANT to be compliant often can't figure out how.
  - This failure leads to more expensive service delivery because people don't stay in the cheaper service channels.
  - Multiple encounters across multiple channels = higher cost to serve.
- Services that people can use help agencies achieve organizational goals.

100+ Years of UCD
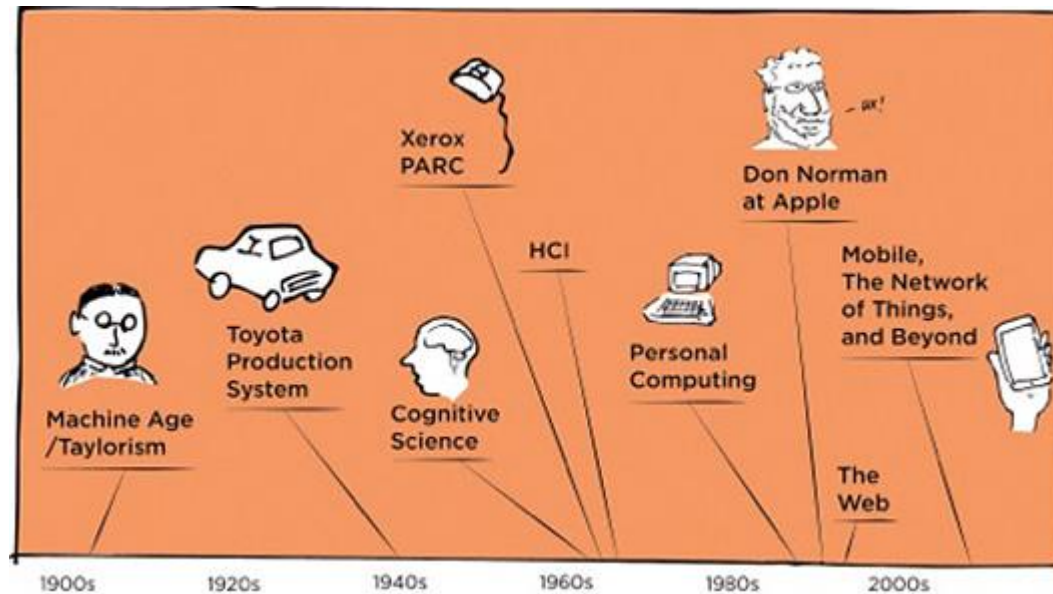
Leah Buley, A UX Team of One http://www.uxbooth.com/articles/where-ux-comes-from/
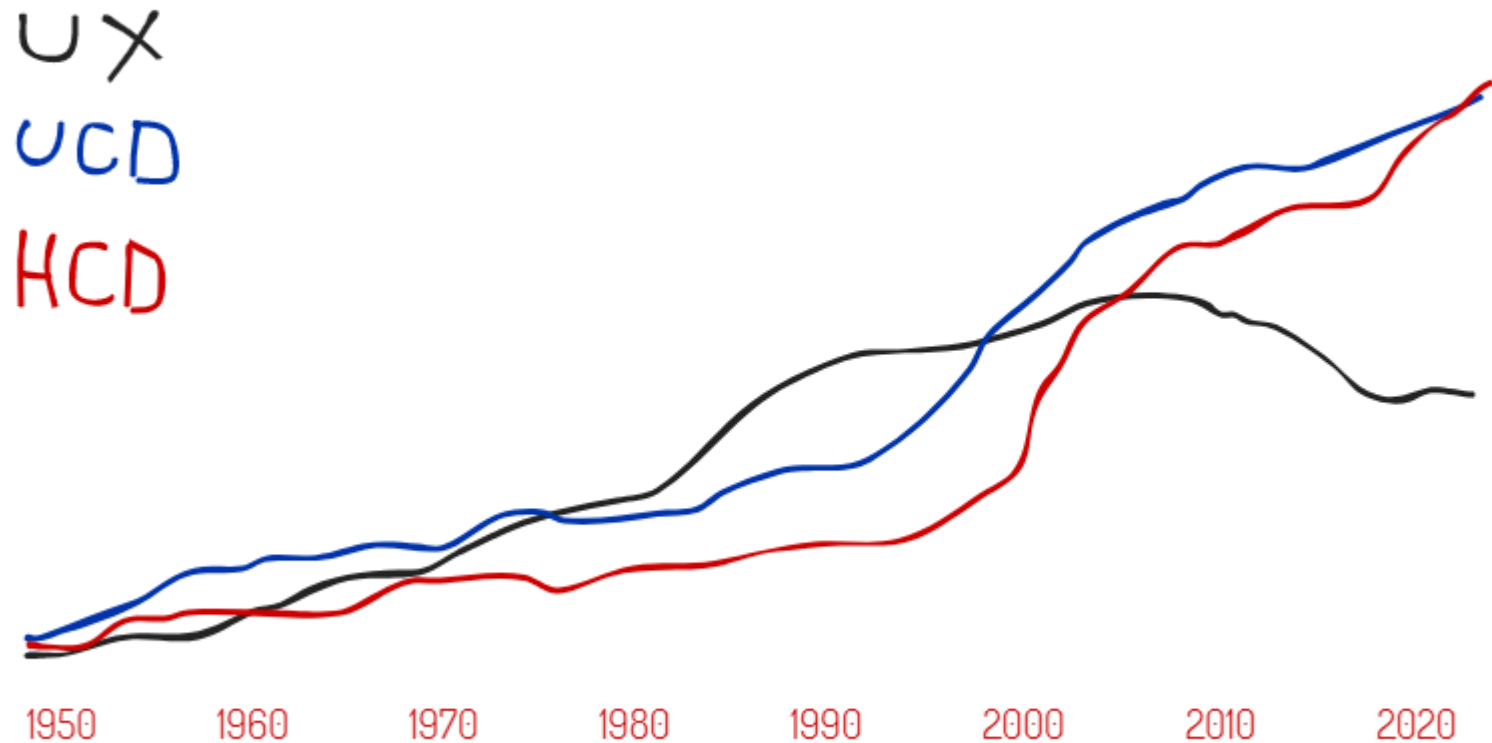
Humans, People, and Users

There are two industries that say "users" to mean consumers of their products & services:

1. Software design
2. Illegal drugs
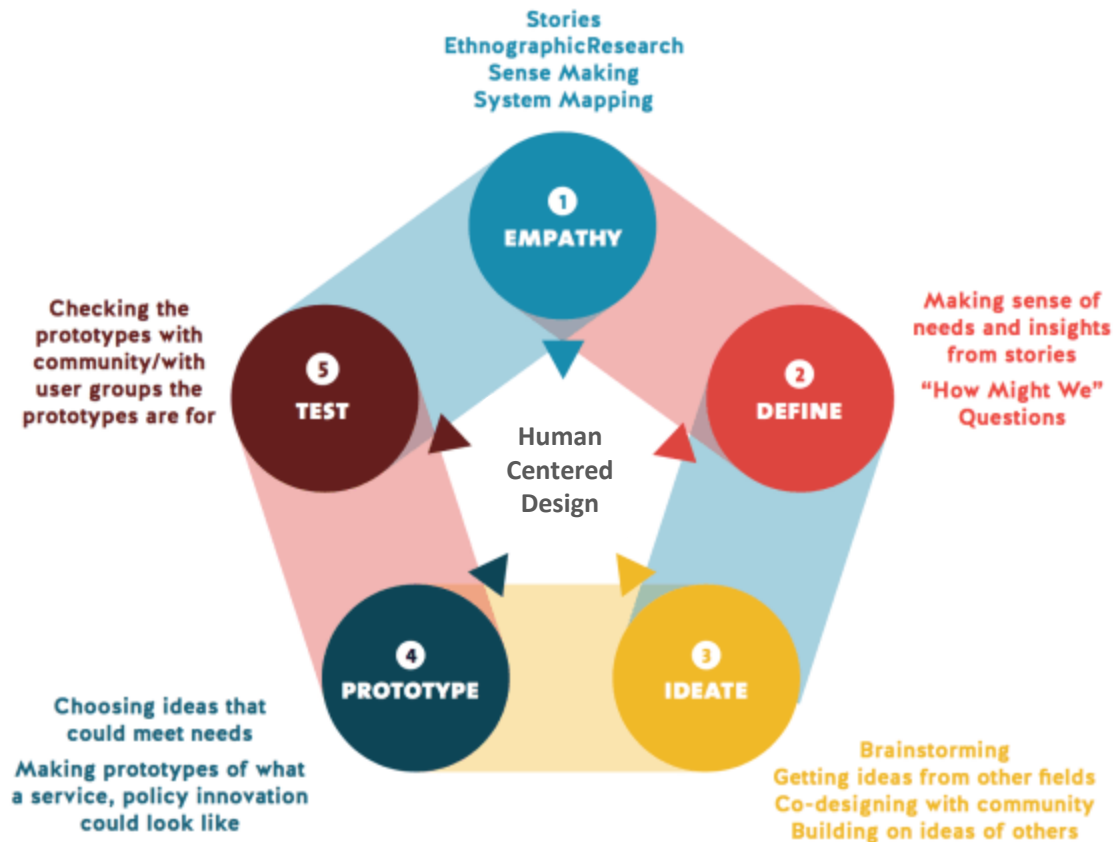
User-centered design is *human-centered* design.

The field is young. The terms aren't settled.

What is UCD (or HCD)?

- **An intentional process** in which the needs, motivations, and limitations of the people using a product or service are considered.

- **A philosophy** that all products and services should be designed with people's needs, motivations, and limitations in mind.

Human-Centered Design Process

Stories
EthnographicResearch
Sense Making
System Mapping

1 EMPATHY

2 DEFINE
Making sense of needs and insights from stories
"How Might We" Questions

Checking the prototypes with community/with user groups the prototypes are for

5 TEST

Human Centered Design

4 PROTOTYPE

3 IDEATE

Choosing ideas that could meet needs

Making prototypes of what a service, policy innovation could look like

Brainstorming
Getting ideas from other fields
Co-designing with community
Building on ideas of others

https://www.skillssociety.ca

"Make observations on the intended target population, generate ideas, produce prototypes, and test them. Repeat until satisfied." -- Don Norman

Measuring the User Experience


Effectiveness
Can users achieve their desired goals on your website?

Efficiency
How quickly can users achieve their goals on your website?

Learnability
Is site easy to learn the first time users encounter it?

Memorability
Can repeat users easily remember how to use your site?

Error handling
How does the website help users recover from errors?

User satisfaction
Do users like using your website & recommend it to others?

https://marketingland.com/conversion-optimization-measuring-usability-user-experience-ux-part-1-79557

First rule of measuring UX:
Don't listen to what people *say*.
Watch what they *do*.

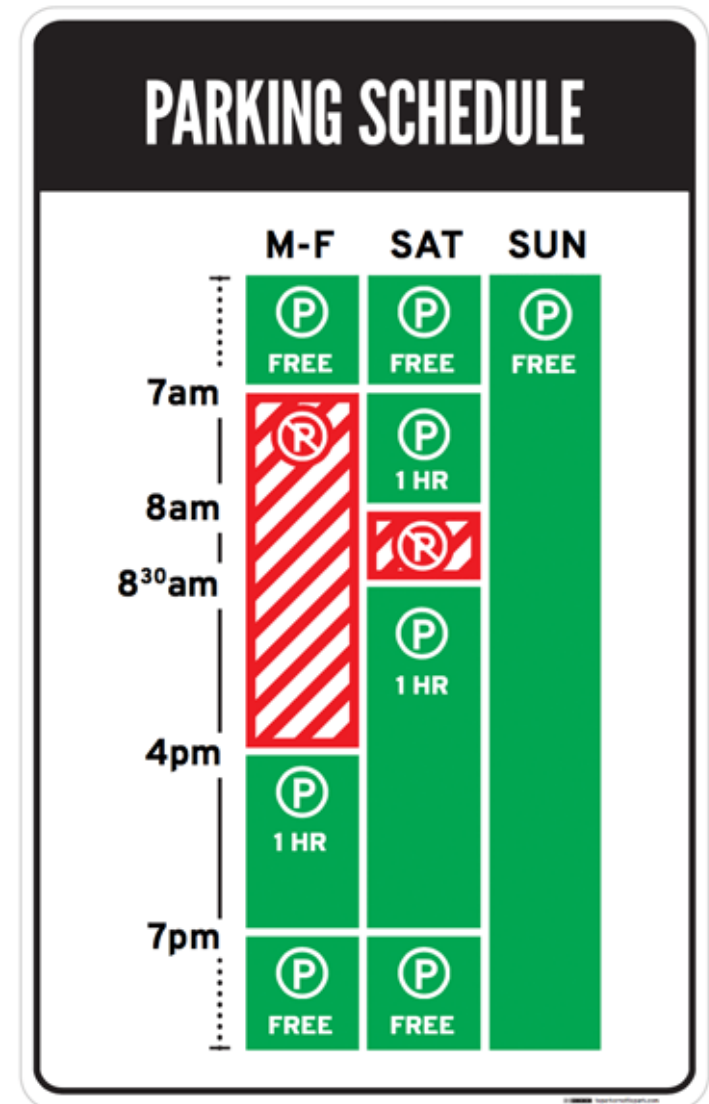Watch them try to perform
tasks. This is called usability
testing.
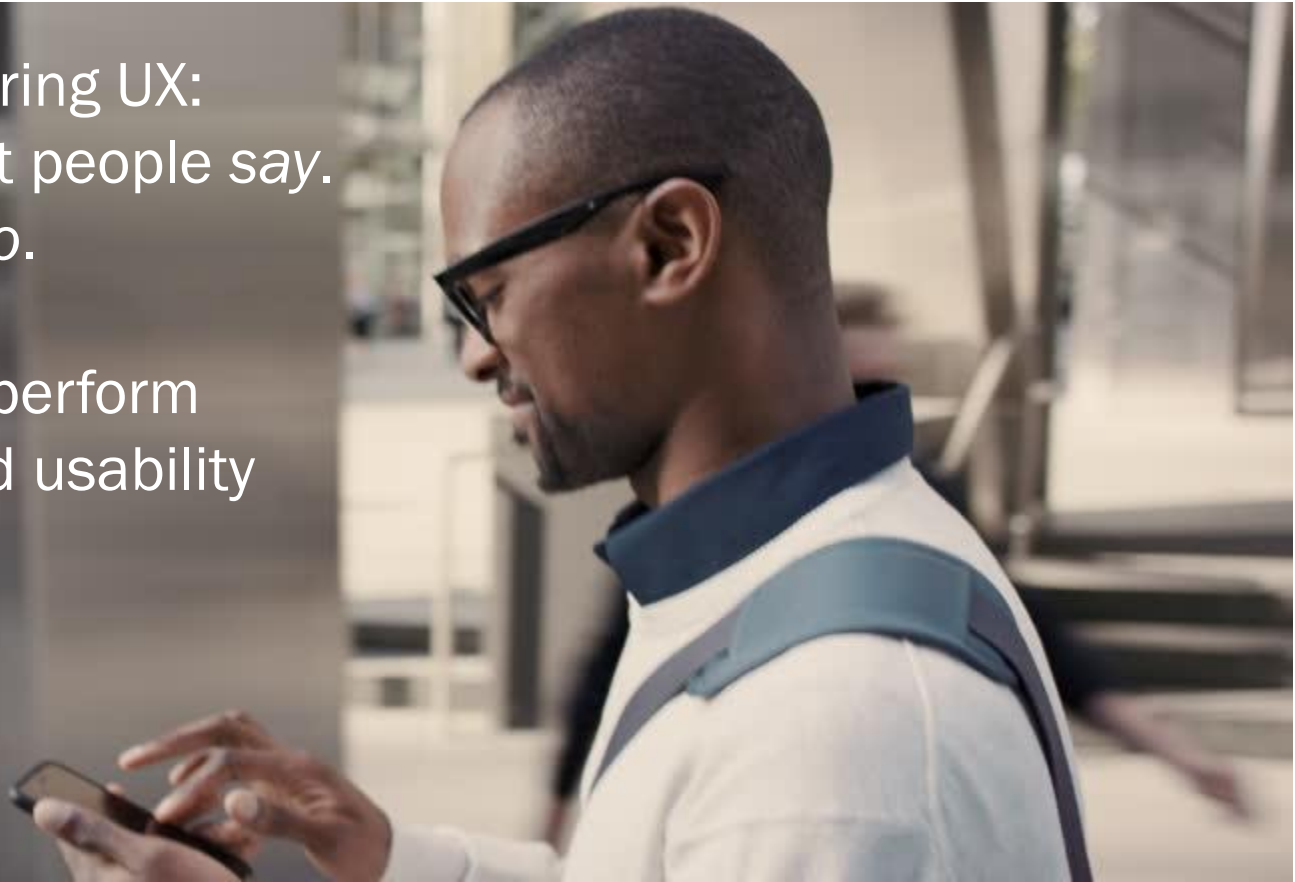
Usability Testing of a Mobile App
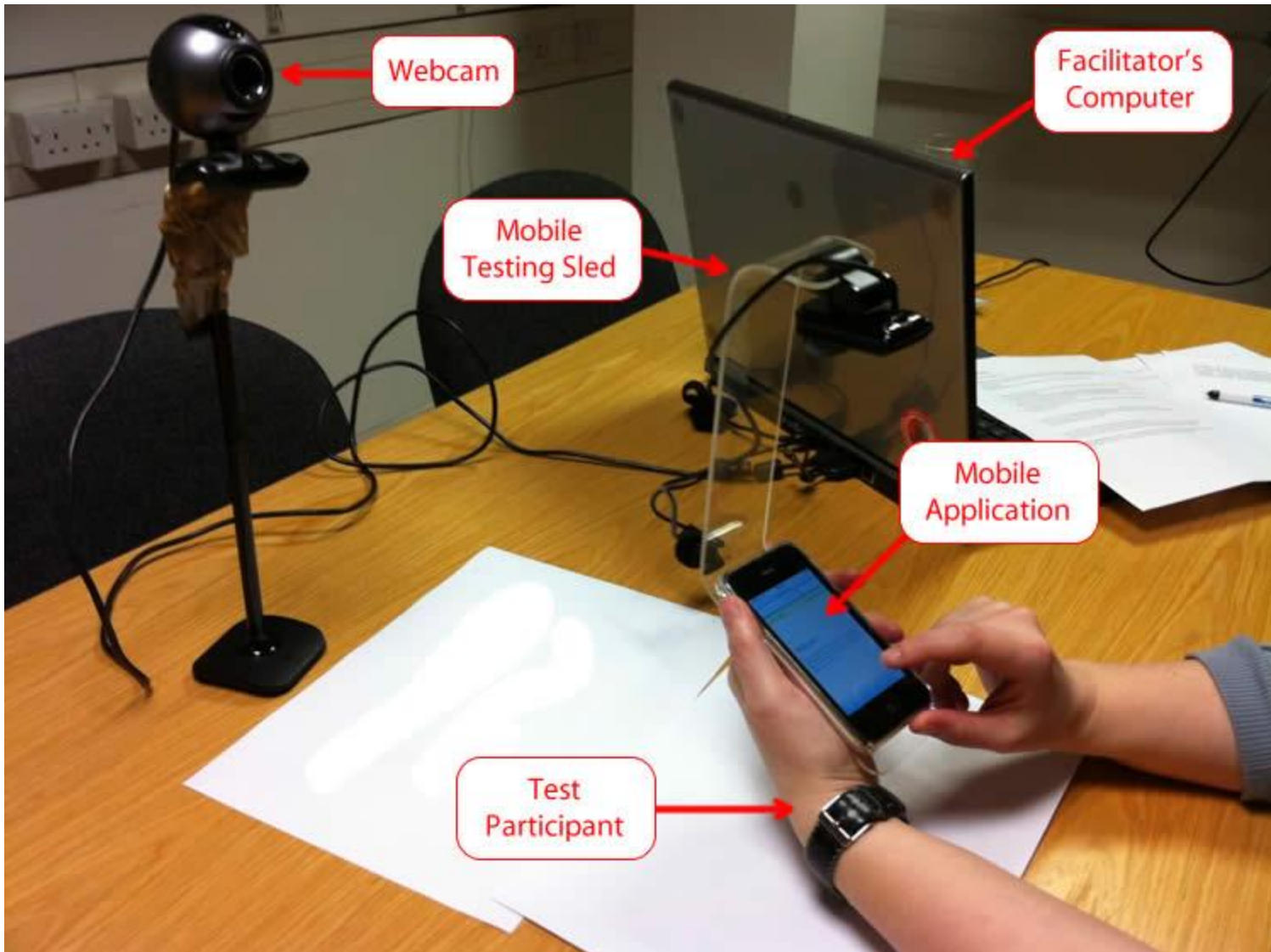
Usability Testing Lab
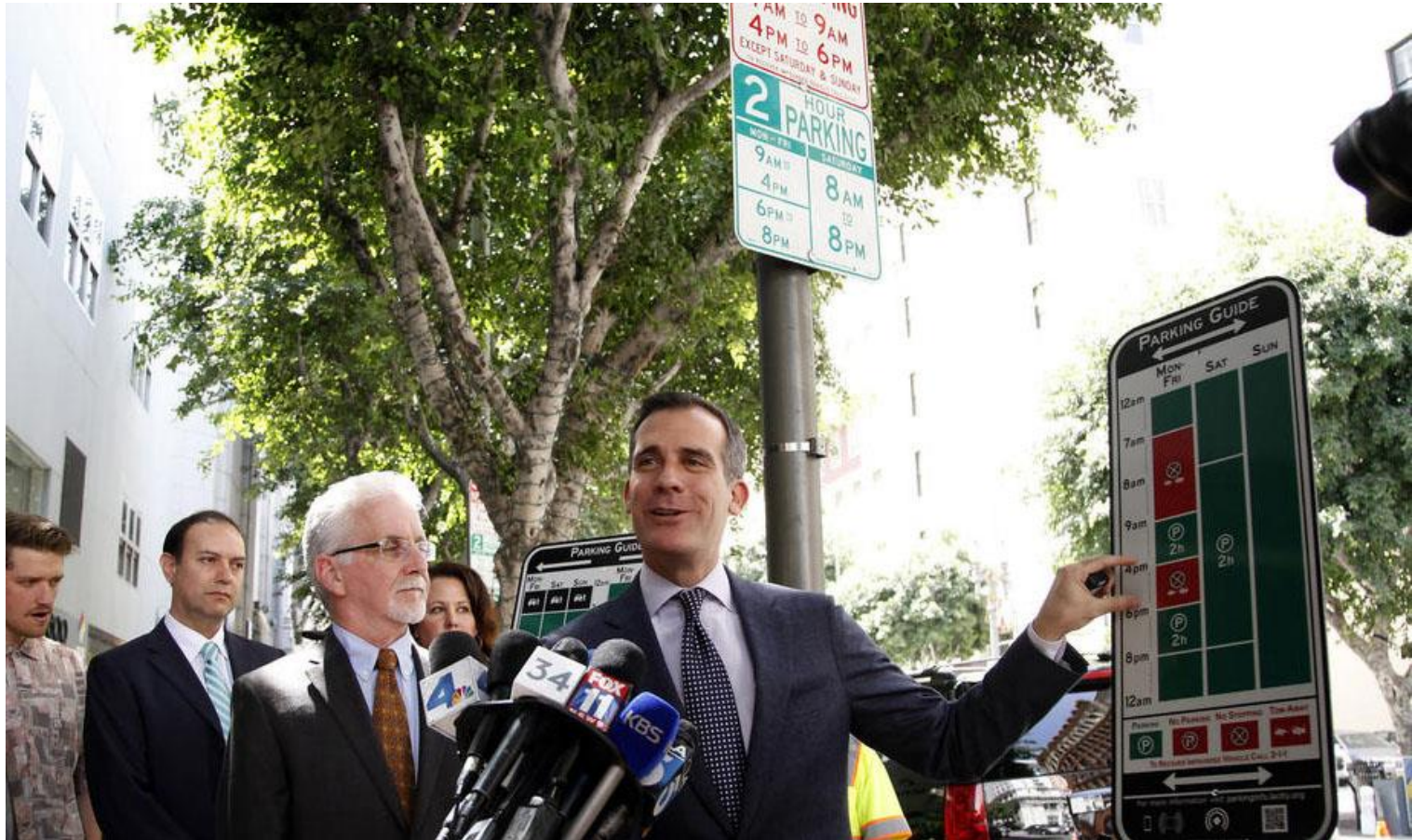
UCD Example: Parking Sign Redesign

UCD Example: Parking Sign Redesign

Nikki Silianteng http://nikkisylianteng.com/project/parking-sign-redesign/

Getting community feedback on the proposed redesign

UCD Example: Parking Sign Redesign

Nikki Silianteng http://nikkisylianteng.com/project/parking-sign-redesign/

Pilot programs in Los Angeles, Brisbane, New Haven having great success

Why Move to UCD?

"As a whole, federal agencies finished *tied for last* in average customer service scores alongside internet service providers." -- NextGov

Why Move to UCD?

When the design of healthcare systems fail, there are very real harms to people's lives, health, and rights.

How Bad UX Killed Jenny

UCD in Another Government: gov.uk

gov.uk

Poor usability affects the government's ability to achieve policy outcomes.

Lessons from gov.uk Redesign

- **"Your organization will benefit more from your moving to UCD than the users ever will."**
  - Compliance
  - Strategic goals
- **"Orient everything in your organization around real user journeys."**
  - Name services after people's needs, not the organization's
  - People should never be able to tell their single experience is managed by 8 different contractors
- **"Seek the truth, even if it's ugly."**
  - Leaders: Break through any inclination to hide the ugly stuff from you
  - Everyone, even leadership: 2 hours of user observation every 6 weeks makes better products & services

Benefits of UCD

More efficient design

Increases:
- Adoption
- Compliance
- Productivity
- Ease of use
- Ease of learning
- Satisfaction

Reduced cost

Saves:
- Dev costs
- Dev time
- Redesign costs

Reduces:
- Maintenance costs
- User errors
- Support costs
- Training costs

Improved ROI

Increases:
- Adoption
- Transactions
- Compliance
- Traffic
- Retention
- Conversion
- Satisfaction
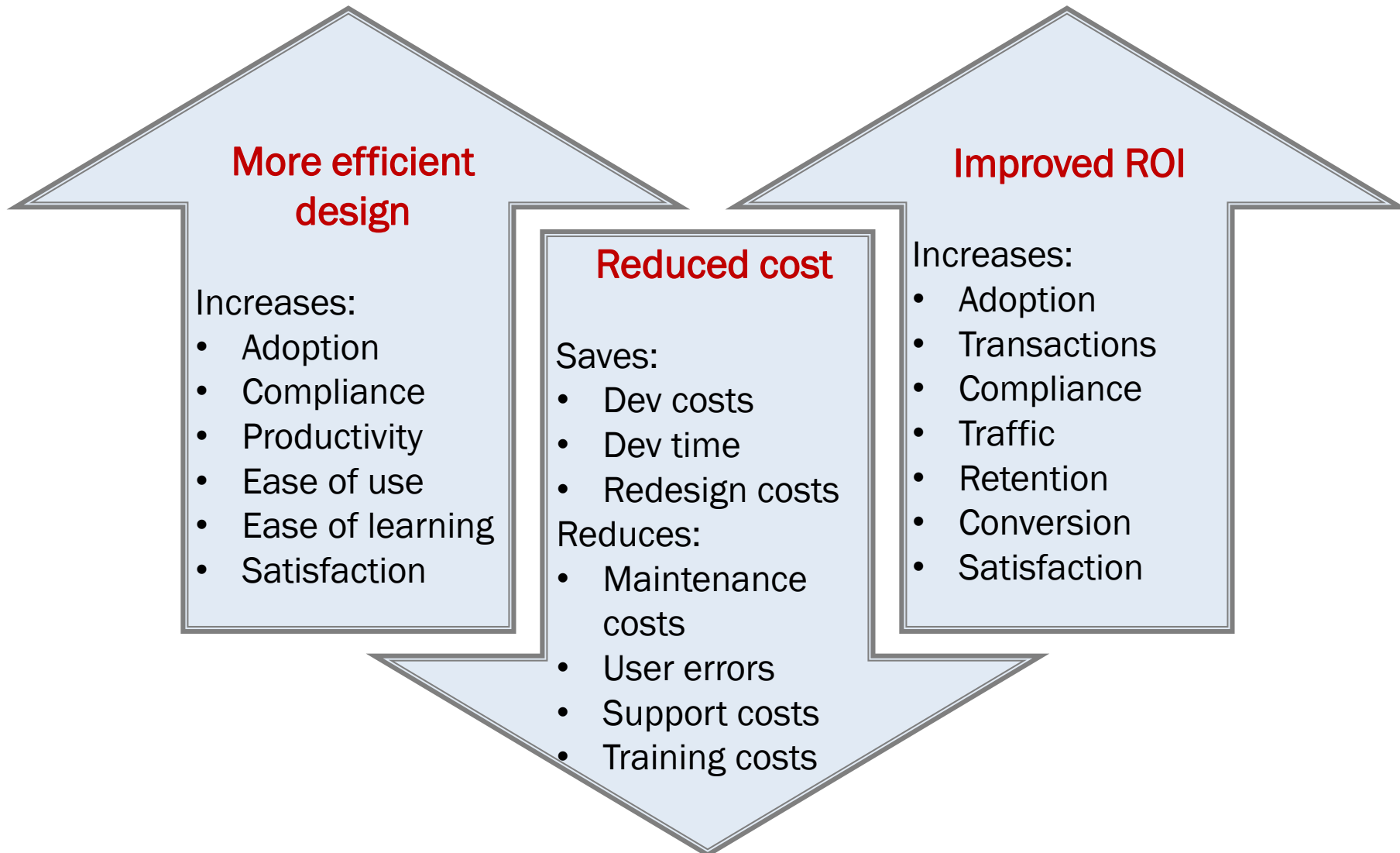
Considerations for "Moving to UCD"

- UCD is a part of agile, which requires *"user feedback"*
- UCD processes are all similar, but *details differ*
- Teams need flexibility to *tailor processes* to contracts & lines of business
- Teams need support in the form of *access to end users* (people who use the products and services)
- ISG embraces the chance to *learn from people who use its products and services*

ISG Criteria for "Moving to UCD" in 2017 / Program Increment 1

1. Someone must be doing user research and UX design work
2. UX teams are involved in requirements from the beginning
3. UX teams have access to users
4. UX teams are getting feedback from users at least once per release
5. User feedback results in changes to products when needed
6. IPTs are using a metric or standard by which user testing of a design is considered successful to move to development and production

Method of Measurement in 2017 / Program Increment 1

Surveys sent to IPT, including UX teams and product owners

- – UX teams should have already received the first survey
- – ISG using this survey as a baseline
- – If you're working in a UX team and didn't receive a survey, email me: catharine.robertson@tantus.hcqis.org

Other Efforts in 2017 / Program Increment 1

- Released a basic UCD toolkit on Confluence for optional use:
    - Content inventory template
    - User research plan template
    - User persona template
- Releasing more UCD templates—full toolkit—in December
- Creating enterprise user personas from existing LOB personas (example on next slide)
- Start collecting all HCQIS user research about people who use ISG products and systems
- Cross-HCQIS UX team collaboration, such as enterprise UX standups

→ Starting to institutionalize the practice of UCD in ISG

User Persona: Design Tool Summarizing User Research

Eleanor Enterprise
Quality Manager at Healthcare Facility

"I'm responsible for this whole business unit, so our data has to be submitted correctly and on time, and my facility has to get paid."

LOBs: HQR, EQRS, QPP

Goals
- Get her facility paid for meeting CMS quality measures
- Always know if the facility is on track to get paid
- Know about deadlines and policy changes way in advance

Pain points
- Reports take hours or days
- Systems can be so slow they seem broken
- Info she needs is in too many places, and sources conflict

Needs help desk

Often ———————————— Rarely

Comfort with technology

Not very ———————————— Very

A day in her life

1. **Run a report** to ensure her facility is on track to receive incentive payments this payment year. Contact the help desk if it's slow to arrive.
2. **Find info** on CMS policy updates affecting the facility.
3. **Sign a contract** for a new vendor to submit quality data to CMS on the facility's behalf.
4. **Change her QualityNet user profile** since she got married and changed her name.
5. **Hire & train data entry staff** to use applications to submit the facility's data.
6. **Report to the facility's executive team** on the P&L for her business unit.
7. **Request an ad hoc report** on her facility's previous payment year.
8. **Verify the deadline** for the next reporting period & meet with her staff to plan the next quarter's activities.

What we can do to help her

- Display a status of whether her facility is on track with measures or incentives
- Push info on policy changes and deadlines to her
- Make applications easy for her entry level staff to learn and to use all day, every day

37 years old
Indianapolis, IN

Uses enterprise services

QualityNet Secure Portal

QualityNet.org

QARM

Data Exchange / Axway

PRIS

PSVA

Considerations for 2018 and Beyond

"Aim high! Trivial corrections usually are as hard to make and as staunchly resisted as fundamental changes." – Peter Drucker

Considerations for 2018 and Beyond

"Moving to UCD" in 2018 encompasses showing business value:

- – Deploying shared knowledge about HCQIS end users to create HCQIS enterprise-wide product strategy
- – Measuring ROI of UCD
- – Ensuring new development efforts are required to leverage UCD
- – Adjusting ISG resources & structure to prioritize people's needs over tools and technology
- – Tailoring services to match people's needs
- – Working toward a model of UCD/UX/HCD maturity

The Evolution of UX: How UX takes hold within organizations ...

The User Experience Maturity Model, Adapted from Bruce Temkin's Five-Stages of Experience-Based Differentiation Maturity Model

6 EMBEDDED — UX is in the fabric of the organization, not discussed separately

5 ENGAGED — UX is one of the core tenets of the organization's strategy

4 COMMITTED — UX is critical and executives are actively involved

3 INVESTED — UX is very important and formalized programs emerge

2 INTERESTED — UX is important, but receives little funding

1 UNRECOGNIZED — UX is "not important"

UX used to enable strategic growth

UX used as a directional point

How Will ISG Know When it Has Moved to UCD?

- When there is no confusion about who your users are.
- When there is open access to users for research and testing.
- When UCD is embedded in the organization, and even drives product development for HCQIS.
- When ISG creates products and services that measurably improve people's lives and make them happier.

Questions?

ISG Contacts:

Ginny Valles-McCullough

Ginny.Valles-McCullough@cms.hhs.gov

Indre Goble

Indre.Goble@cms.hhs.gov