

INCENTIVES

was easily &  
readily available,  
people will be  
encouraged to walk

INCENTIVE

WALKING

If walking  
was an attractive  
activity, people  
will be encouraged  
to walk.

FREE/CHEAP  
STUFF

INCENTIVE  
WALKING THROUGH  
A CASH BACK  
PROGRAM

Showing people  
there are tangible  
benefits to walking!

COMMUNICATE  
RESULTS

Thursday, 19 February 2015

# USING YOUR DATA: USER JOURNEYS AND MENTAL MODELS

Exploration

ENVIRONMENT  
EXPLORATION  
BY RETAIL

# Today's Plan and Objectives

**Part 1:** 9:00am – 10:00am

Mental Models

User Journeys

**Break:** 10:00am – 10:10am

**Part 2:** 11:10am – 12:30pm

Homework

Data Analysis Basics and Us

Activity

Take-Home Review Points

Homework



# Sam's UX ProTips

Constraints are awesome.

Critique is not opinion.

All UX is knowledge based.

For every rule, there is a reason to break it.

You are not, and never will be, your user.

Users are bad designers, but they know bad design.

Expect to be wrong, and embrace it.

It depends.

Be reflexive.

Ideas are easy, good UX is hard.

Constraints are awesome.

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# Mental Models

Note the two important elements of this definition:

1:

A mental model is based on **belief, not facts**: that is, it's a model of what users know (or think they know) about a system such as your website. Hopefully, users' thinking is closely related to reality because they **base their predictions** about the system on their mental models and thus plan their future **actions** based on how that model predicts the appropriate course. It's a prime goal for designers to make the user interface communicate the system's basic nature well enough that users form reasonably accurate (and thus useful) mental models.



# Mental Models

2:

Individual users each have their own mental model . A mental model is internal to each user's brain, and different users might construct different mental models of the same user interface. Further, one of usability's big dilemmas is the common **gap between designers' and users' mental models**. Because designers know too much, they form wonderful mental models of their own creations, leading them to believe that each feature is easy to understand. Users' mental models of the UI are likely to be somewhat more deficient, making them more likely to make mistakes and find the design much more difficult to use.





# Mental Models

Finally, mental models are **in flux** exactly because they're embedded in a brain rather than fixed in an external medium. **Additional experience** with the system can obviously change the model, but users might also update their mental models based on **stimuli from elsewhere**, such as talking to **other users** or even applying **lessons from other systems**.



# User Journeys

A user journey is a series of steps (typically 4-12) which represent a scenario in which a user might interact with the thing you are designing. They can be used for 2 main things:

1. Demonstrating the way users **currently** interact with the service / website / product
2. Demonstrating the way users **could** interact with the service / website / product



# User Journeys

There are many benefits to investing time into user journeys:

*Demonstrating the vision for the project* – user journeys are a great way to communicate what you are trying to achieve with stakeholders. They show an example of what the future state of whatever it is you are designing could be. Along with personas they can be one of the key outputs from the requirements gathering stage at the beginning of a project.

*They help us understand user behavior* – User journeys can help you work out how users are going to interact with your system and what they expect from it.



# User Journeys

*They help identify possible functionality at a high level – by understanding the key tasks they will want to do to you can start to understand what sort of functional requirements will help enable those tasks .*

*They help you define your taxonomy and interface – By understanding the ‘flow’ of the various tasks the user will want to undertake you can start to think about what sort of taxonomy can help support those tasks and what kind of interface the user will be needing to accomplish them.*



Now what to do with data ...



# Data Analysis: Quantitative

Single-Variable Descriptive Statistics

Then things get hard...

Multi-Variable Statistical Analysis (think correlations)

Pre-Requirements:

Clean Data

Coded Data

Math Skills and Software

Attention to Detail and Patience



# Data Analysis: Qualitative

Just as useful as quantitative and  
just as difficult and time consuming to do!

(Video)

Pre-Requirements:

Clean Data

Coded Data

Software for this helps

Attention to Detail and Patience



Now your data ...



# Quick Usefulness

## **Mental Models/User Journeys**

# Design Insights: Review

Is this a design insight?

Users have long hair.

Users have long hair, so designs should remember that hair may get caught in windows and rolling mechanisms.

# Design Insights: Review

Is this a design insight?

Users do not speak English well.

Users like blue, a LOT.

20 out of 30 users were splashed in the face.

Users always go to bed early, so designs should aim for daytime use.

# Take Homes, What are they?

Terms:

Mental Models

User Journeys

Qualitative Analysis

Quantitative Analysis

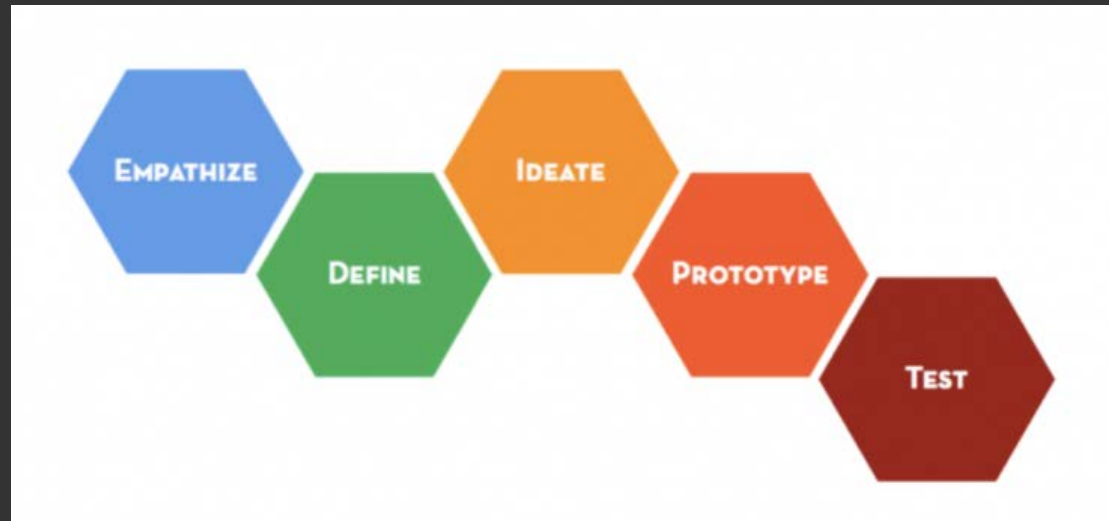
Coded Data

Thematic Analysis

Affinity Diagrams

# Design Thinking: Six Steps-ish

1. Empathize
2. Define
3. Research
4. Ideate
5. Prototype
6. Test
7. (Repeat)



# Homework

For your selected project, write/turn in the following:

Now you are very smart and probably have or know what you need to do this.

1. Describe an existing user journey.
2. Define your users, specifically and in detail.
3. Define your problem, context, and constraints.
4. List your research-based design insights.
5. Explain the users' most common mental model relevant for your project/question.
6. Sketch at least two wildly different ideas.

Ask me questions!