## How To Make (Almost) Anything Usable

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## Usability

The art & science of designing stuff that works great for people

- More useful & convincing final project
- For your future startup
- Fab Fame™



## Today

#### I. Golden rules

#### 2. Process tips



#### I. Simplicity User • Task • Context

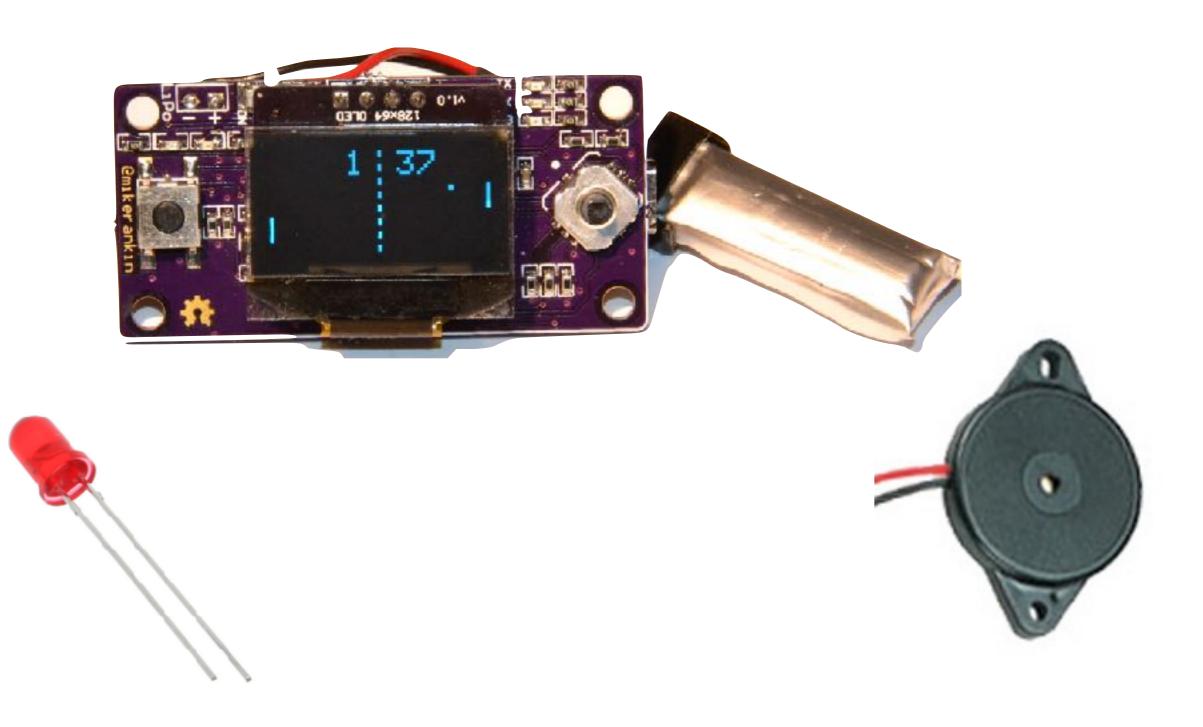








Current state?
Available features?
How to access?





#### Read: Bret Victor's rant on future of interaction design

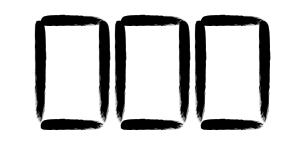






### 3. Gestalt Laws

# $\begin{array}{c} \Delta \bigcirc \Box \\ \Delta \bigcirc \Box \\ \Delta \bigcirc \Box \end{array}$



Beyond















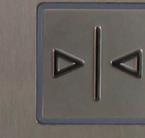


















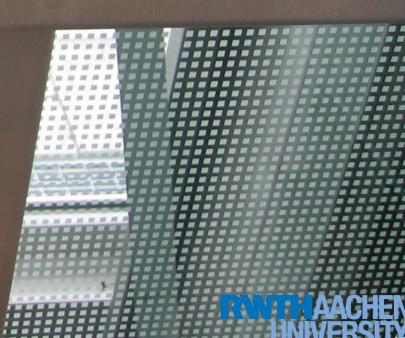












## 5. User's Language



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D7.1 input

Mode Into A/CH Device

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## 6. Avoid Modes







### 6. Avoid Modes

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Mode



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## 7. Principle of Least Surprise



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Your battery is now fully charged!

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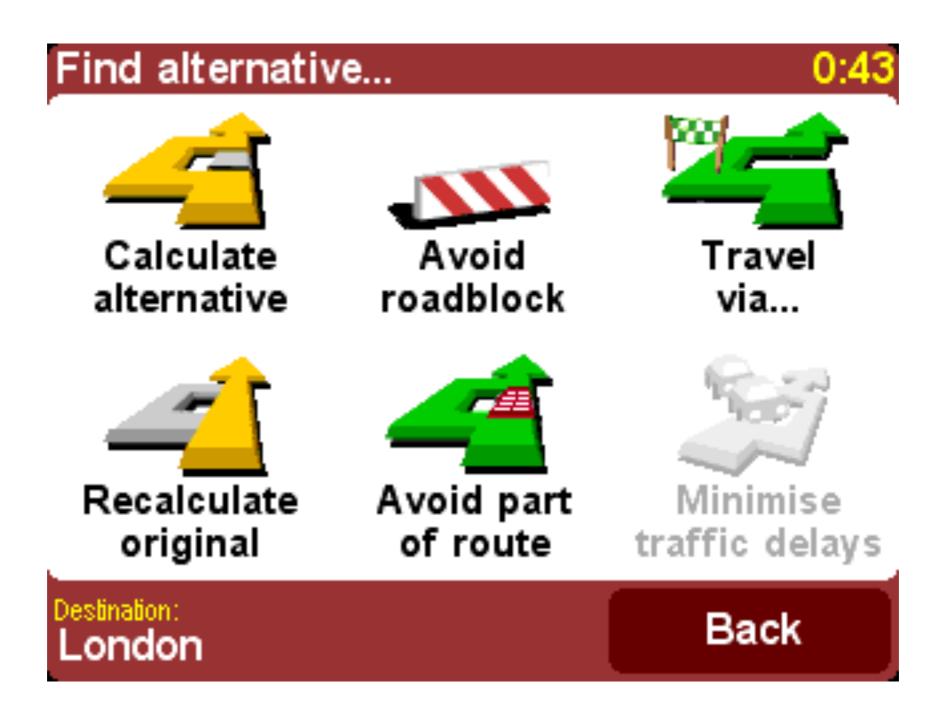
## 7. Principle of Least Surprise



Timeouts are evil!



# 8. Dialog, not Monolog





### 9. Tolerate Errors



#### Operation Could not be completed.

client-error-not-possible



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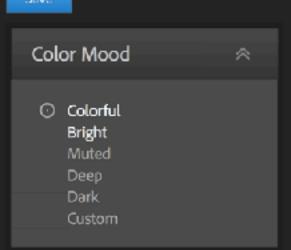
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Create





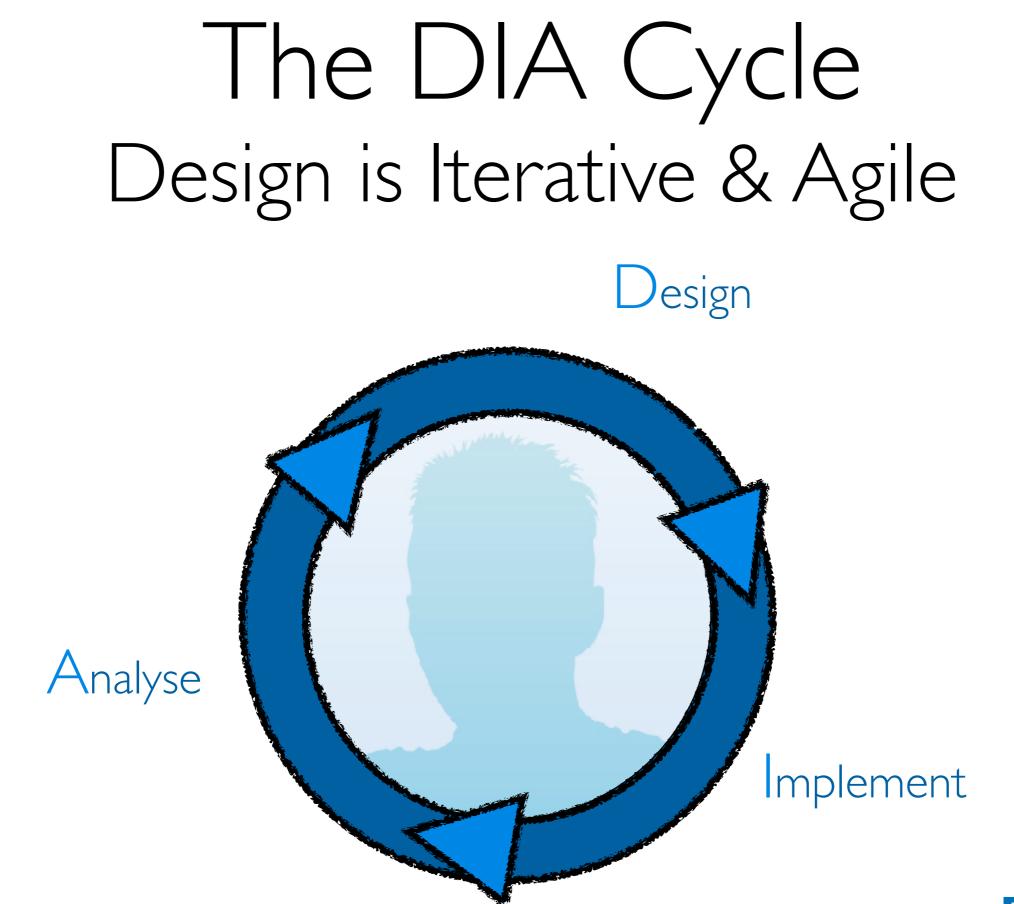


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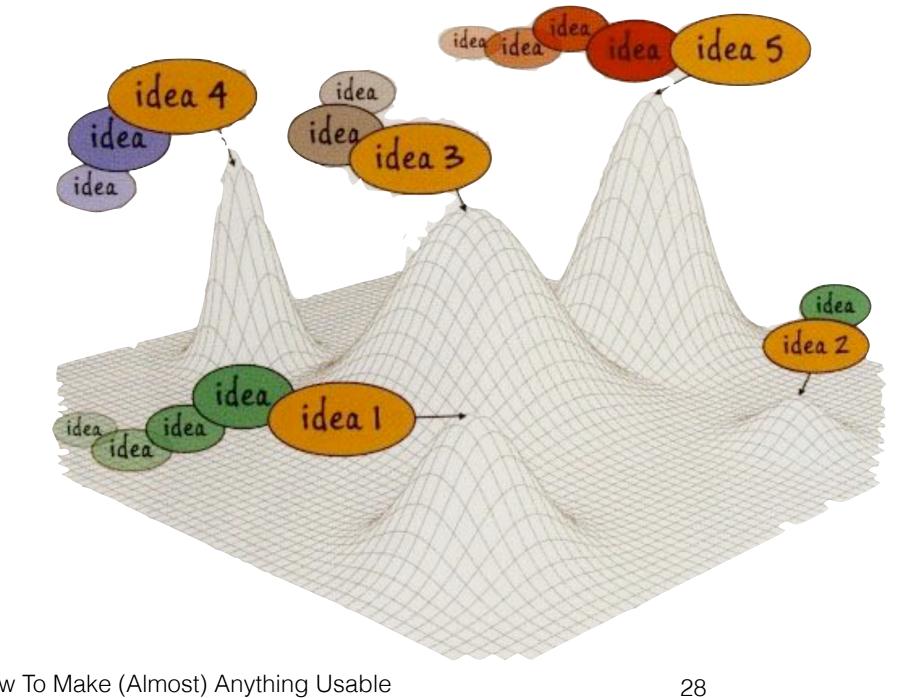
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# Observe and Ask First, Then Start Solving

- Are you looking for a problem for your solution?
- What problem to solve, not how to solve it
- Users: Who is it for? Other stakeholders?
- Task: What is their *actual* problem?
- **Context:** When & where does it occur?



## Design: Search the Solution Space



# Implement: Prototype

- Create quick prototypes to get feedback on from others, to improve and fill in your idea(s!). For each idea:
- Write one-paragraph success story, test it
- Then draw 3-panel success comic, test it
- Fake features with Wizard of Oz

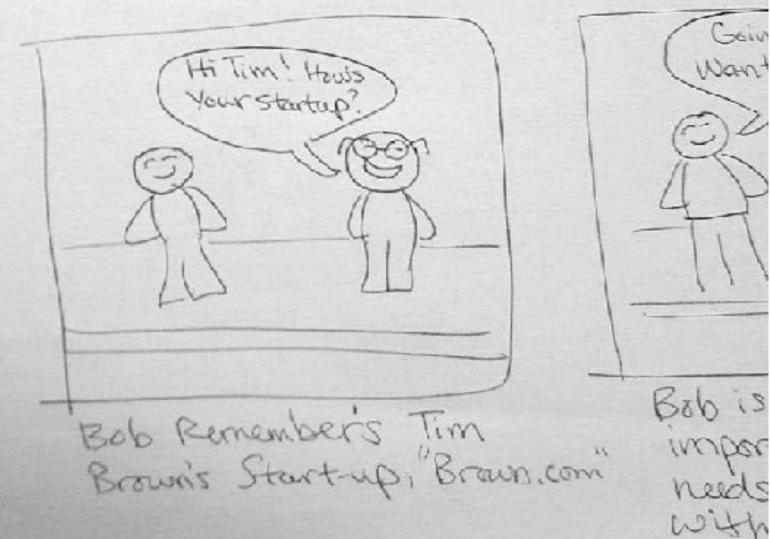








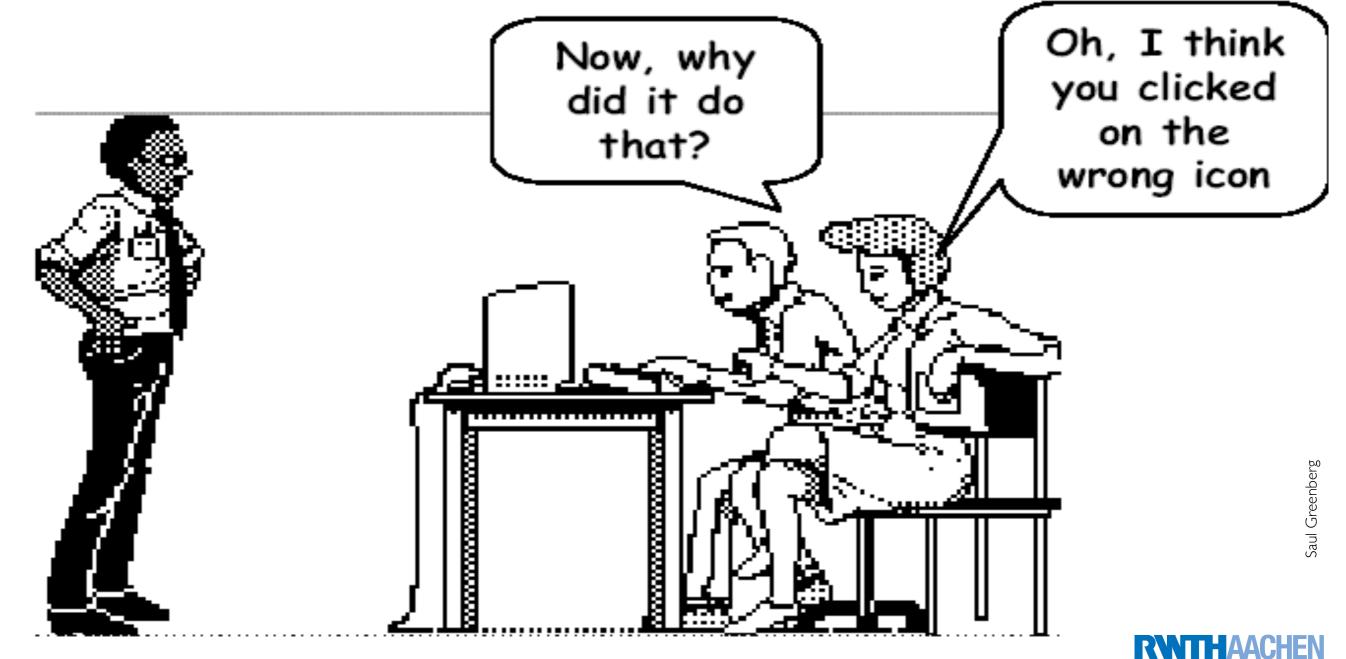
glasses register Tim's Name

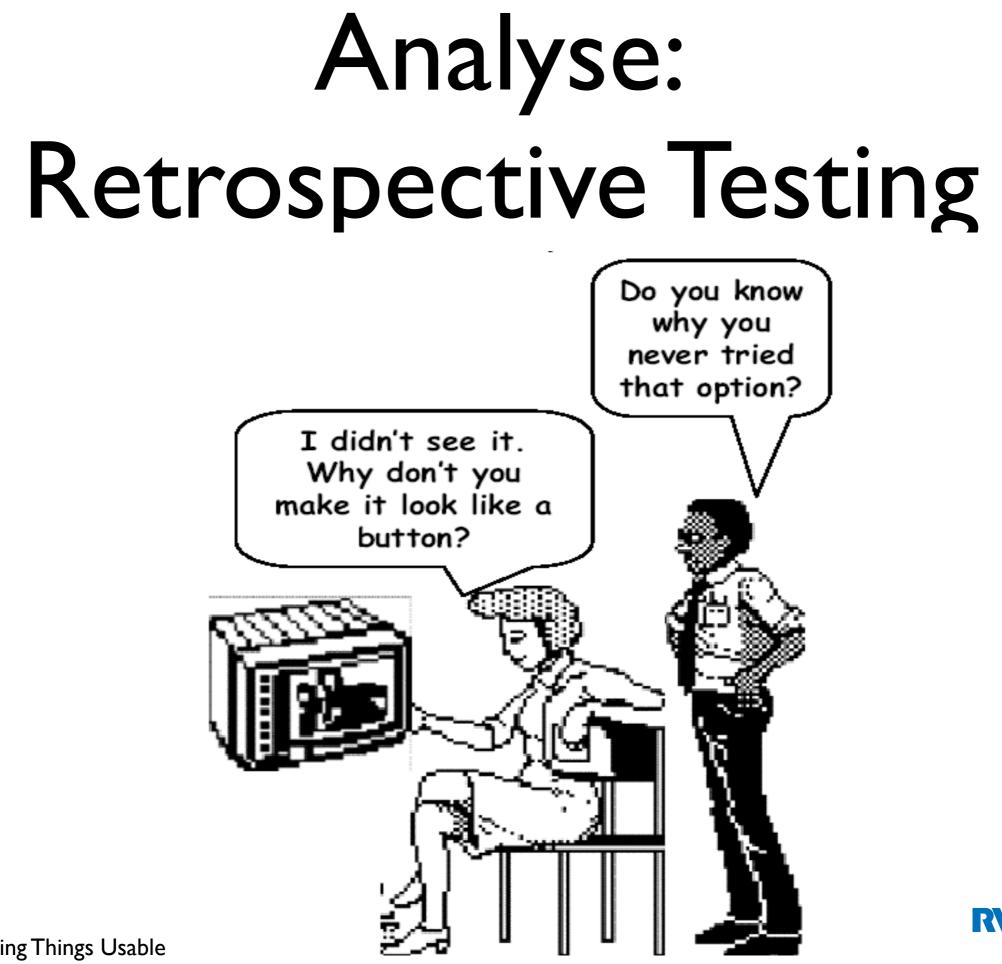


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Want

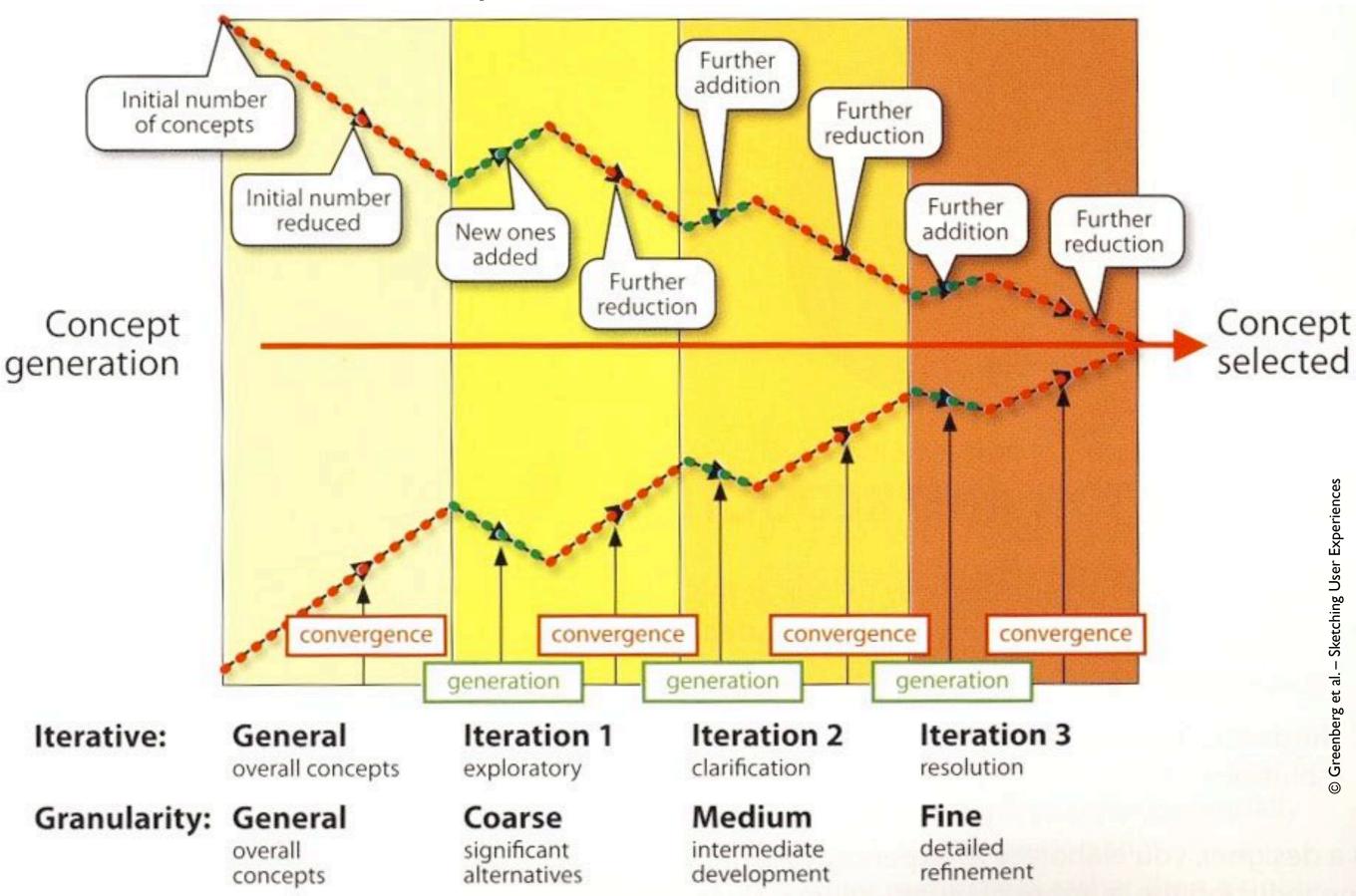
## Evaluate: Observe & Ask Constructive Interaction

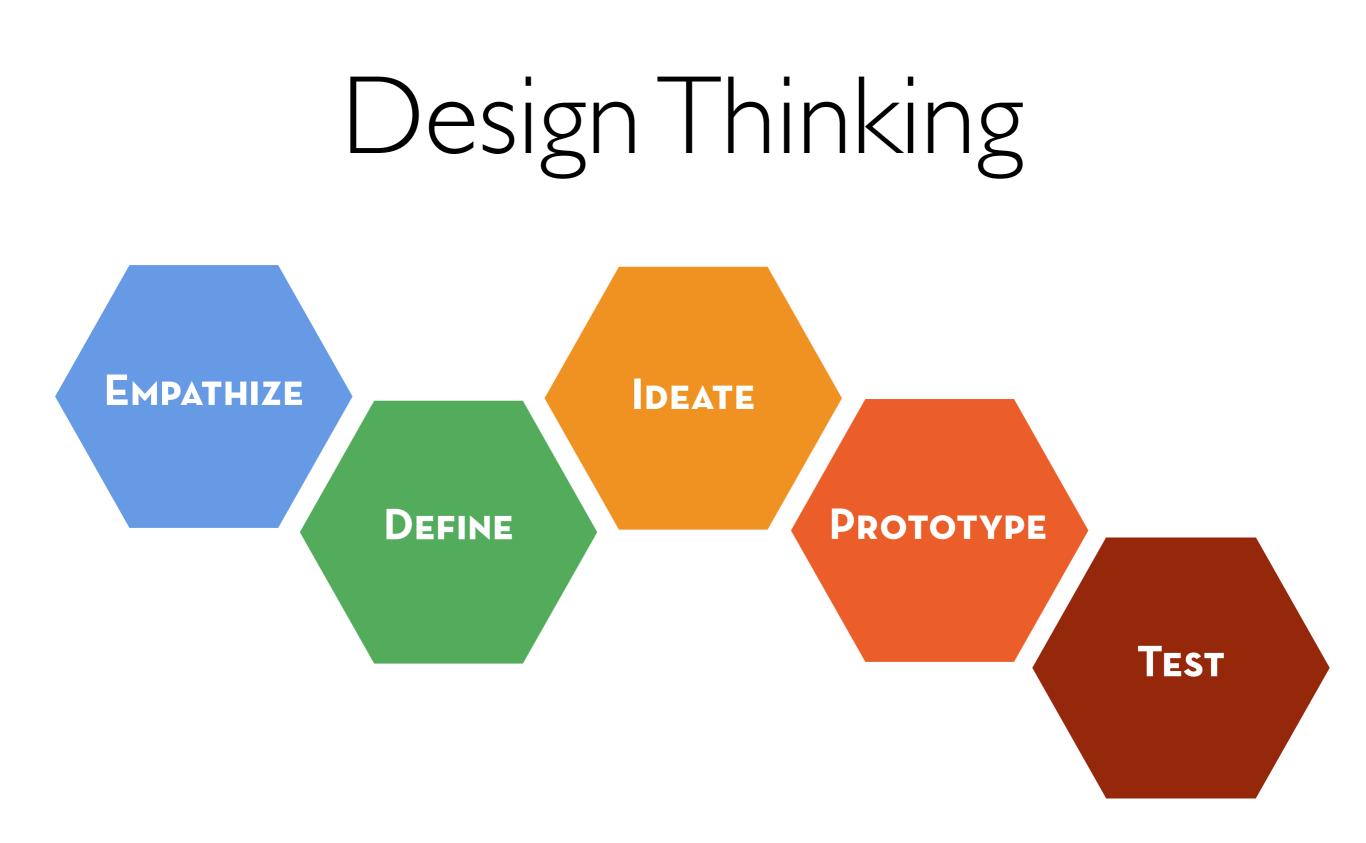




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#### Iterate to Expand and Focus Solution







#### Literature



Why High-Tech Products Drive Us Crazy and How to Restore the Sanity

With a new Foreword from Alam Cooper

Convighed Material REVISED & EXPANDED EDITION

The DESIGN of EVERYDAY THINGS

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DON NORMAN Cupyrighted Material "Bill Buston brings design leadership and creativity to Microsoft. Through his thought-provoking personal examples he is inspiring others to better understand the role of design in their own companies." Bill Gates—Chairman, Microsoft Corp.

#### Sketching User Experiences

getting the design right and the right design



MK



#### For Persistent Storage

Paying attention to your user experience pays off

Universal Golden Rules

Simplicity Visibility & Feedback Gestalt Laws Natural Mappings User's Language Avoiding Modes Princ. of Least Surprise Dialogs Error Tolerance Visual Design

Process Tips: Iterative DIA Cycle (Design Thinking) Design: Explore problem space first Implement: Storyboard before Building Analyse: Observe and ask others

