

Designing Interactive Systems I: Lab 6

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<http://hci.rwth-aachen.de/dis>



Lab Structure Changes

- Themed talks
 - Persuasive Technology
 - Game design
 - Emotional design
- Project coaching



Project Coaching Schedule

Date	Time	Group ID	Group ID
5 Dec 2011	13:45–14:00	9	10
	14:00–14:15	6	5
	14:15–14:30	2	8
	14:30–14:45	16	19
	14:45–15:00	7	15
12 Dec 2011	13:45–14:00	18	17
	14:00–14:15	3	13
	14:15–14:30	12	1
	14:30–14:45	11	14
	14:45–15:00	4	



Persuasive Technology

Using Computers to Change What We Think and Do

B.J. FOGG

Characteristics of Persuasive Technology

- **Persuasion:** an attempt to change attitudes or behaviors or both
 - Without using coercion or deception
- **HCI not CMC:** Change resulted from the interaction between human and computer
 - Not the result from human–human communication via computer
- **Intended effect** of technology, not side effect
 - Not a persuasive technology, e.g., Email ⇒ People go to post office less often
- **Endogenous effect:** The technology itself persuades
 - Not when people use technology to persuade, e.g., giving an iPhone as a reward for quitting smoking

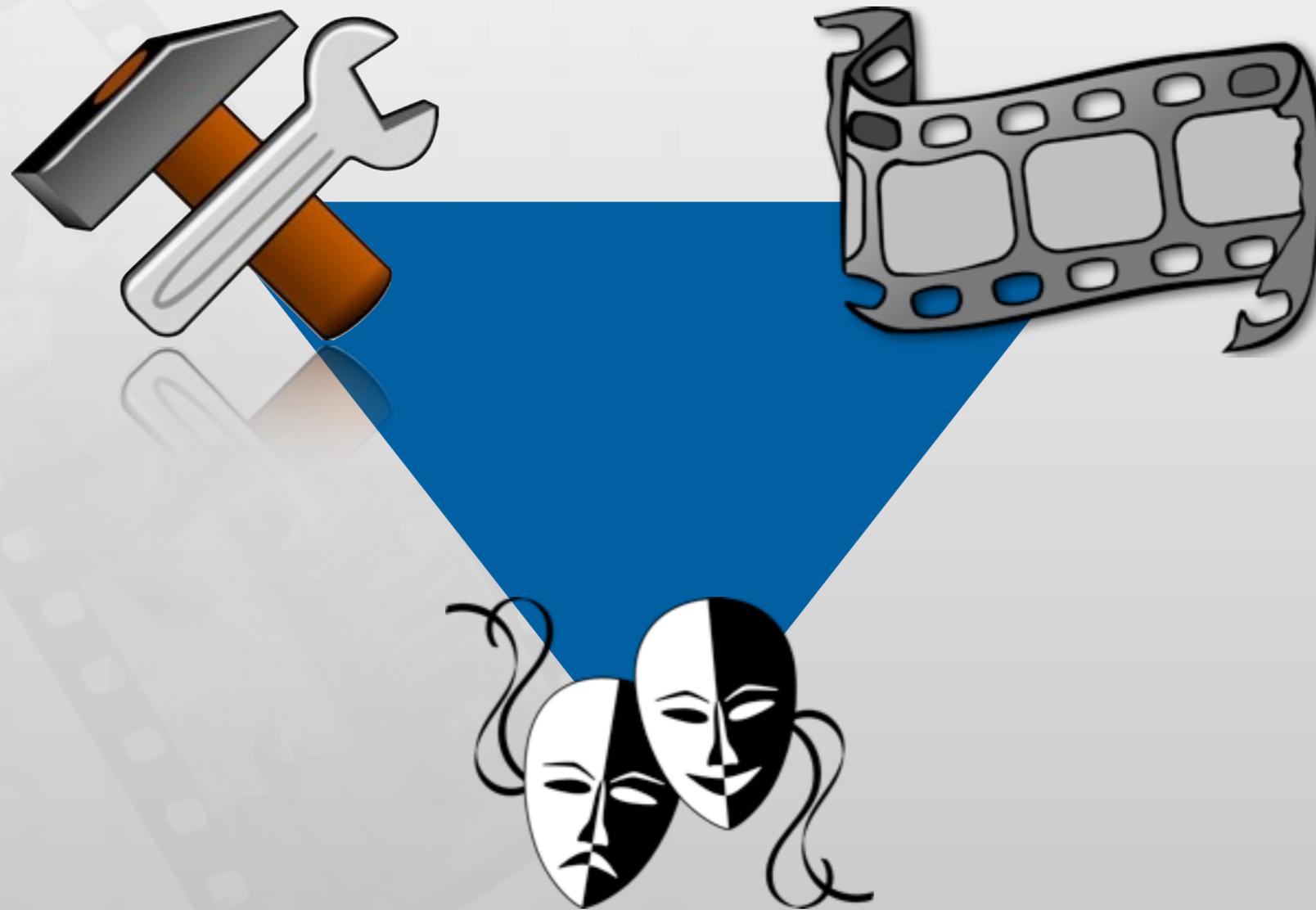


Strengths of Computer

- Computers are better than other media
 - Interactivity
- Computers are better than human
 - More persistent
 - Greater anonymity
 - Manage huge amount of data
 - Multiple modalities to influence
 - Scale easily
 - Ubiquitous



Human–Computer Relationship Triad



Computer as a Persuasive Tool

- **Reduction:** make complex tasks simpler
- **Tunneling:** persuading in a focused experience
- **Tailoring:** personalized information can persuade better
- **Suggestion:** intervene at the right time
- **Self-monitoring:** allow people to track themselves
- **Surveillance:** make people aware that they are being tracked
- **Conditioning:** positive reinforcement for desired behavior



Elected Officials

Find elected officials, including the president, members of Congress, governors, state legislators, local officials, and more.

Search By ZIP Code:

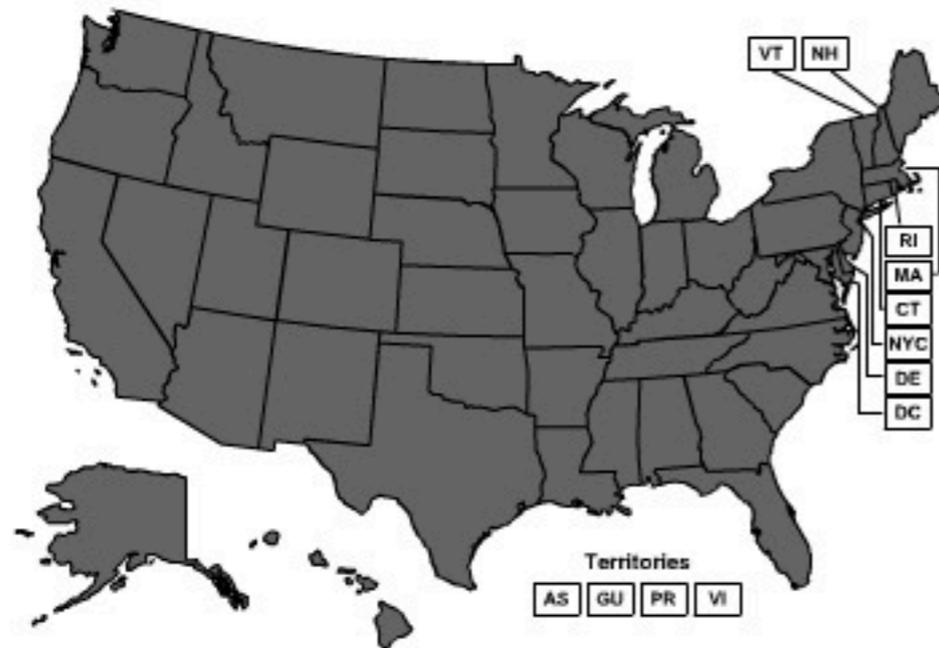
95448

[Local Official Search Options](#)

Search By Last Name:

Congress: State: Local: Any State

Select State



[Tell A Friend](#)

powered by [CQ Roll Call](#) ©2011

Compose Your Own Letter

1 COMPOSE MESSAGE

Select recipients and desired delivery method for each:

	Email	Printed Letter
<input checked="" type="checkbox"/> Governor Jerry Brown (D-CA)	<input checked="" type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> Senator Noreen Evans (D-CA 2nd)	<input checked="" type="radio"/>	<input type="radio"/>
<input checked="" type="checkbox"/> Assemblymember Wesley Chesbro (D-CA 1st) **	<input checked="" type="radio"/>	<input type="radio"/>

[Check All](#) [Uncheck All](#)

**** This Member accepts e-mail only from people who live in their district or state. If you are not a constituent, your message will be forwarded to your representative.**

Subject:

Please support good school

Issue Area:

Certain webform targets require an Issue Area so your message can be directed to the correct staff-person.

Education

Editable text:

(edit or add your own text - 9966 characters left)

Send this message to the Congress.

Tip: Cutting-and-pasting? Save as [plain text](#) first.

Reduction: CapWiz

Simplifying the process of writing to elected officials

Stop KFC from Destroying Our Forests

SIGN THIS PETITION

First Name Last Name Email Address City

Country

Select

[Outside U.S.](#)Post Code Why are you signing? [Add a reason \(optional\)](#)**SIGN**[About this Petition](#)[Petition Letter](#)[Petition Updates](#)

Why This Is Important

KFC's paper packaging is directly contributing to the destruction of our Southern forests. While other fast food chains are working hard to use less, use more recycled paper, and ensure that their paper packaging is not coming from the world's endangered forests, KFC continues to make its famous buckets from the few remaining special places in our region.

Signatures

4,301 out of 5,000

Petitioning

President (+ 1 other)



Created By

[Dogwood Alliance](#)

Reduction: Online Petition
Only take single step to sign

Windows 95 Setup



Welcome

Welcome to Microsoft Windows 95!
Windows 95 lets you unlock the potential of your PC.

- What you do now will be easier and faster.
- What you want to do, and more, is now possible.
- Whatever you do will be more fun.

Copying files...

0%

Exit (F3)

Tunneling: Software Installation

Windows 95 persuades with system features during the installation



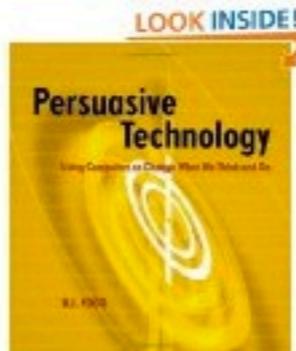
Tunneling: Apple Ecosystem

Change software distribution practice by starting form music

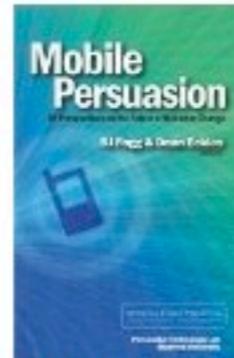
More Items to Consider

You viewed

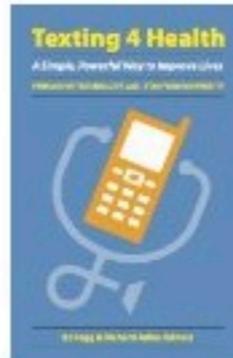
Customers who viewed this also viewed



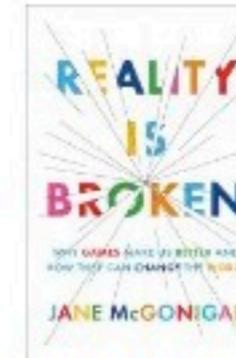
Persuasive Technology: Using...
› B. J. Fogg
Paperback
~~\$52.95~~ **\$35.26**



Mobile Persuasion: 20 Perspectives of...
BJ Fogg, Dean Eckles, Ian Bogost, ...
Paperback



Texting 4 Health: A Simple, Powerful...
Editor-BJ Fogg, Editor-Richard Adler
Paperback



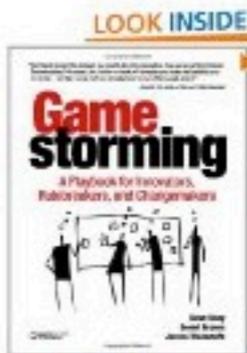
Reality Is Broken: Why Games Make Us...
› Jane McGonigal
Hardcover
~~\$26.95~~ **\$15.48**

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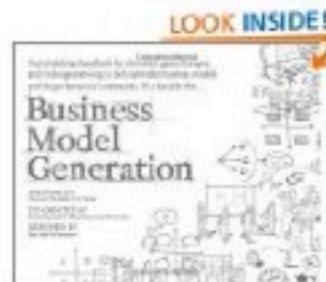
Related to Items You've Viewed

You viewed

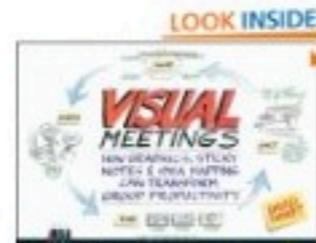
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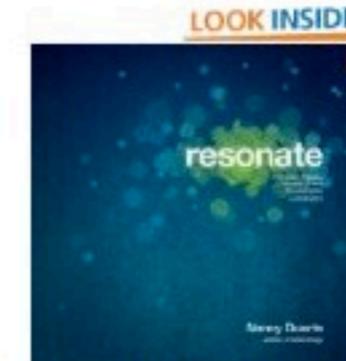
Gamestorming: A Playbook for...
› Sunni Brown, Dave Gray, James Macanufo
Paperback
~~\$29.99~~ **\$18.80**



Business Model Generation: A Handbook...
› Alexander Osterwalder, Yves Pigneur
Paperback
~~\$32.99~~ **\$18.70**



Visual Meetings: How Graphics, Sticky...
› David Sibbet
Paperback
~~\$29.95~~ **\$18.78**



Resonate: Present Visual Stories that...
› Nancy Duarte
Paperback
~~\$29.95~~ **\$15.27**

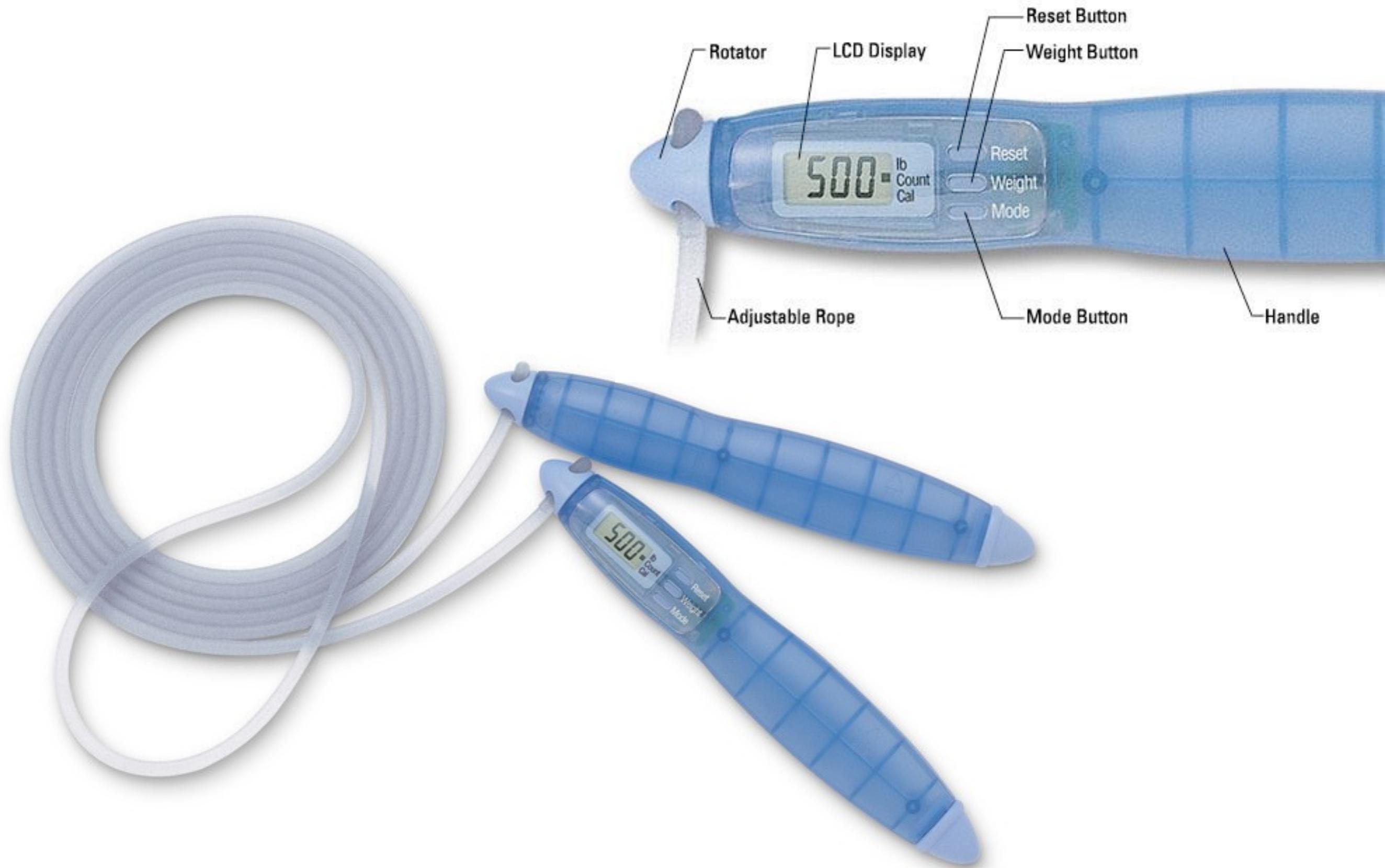
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Tailoring: Recommendation on Amazon.com

Personalized info ⇒ more attention + easier to be persuaded



Suggestion: Kustom Signal's SMART
Opportune suggestion \Rightarrow greater persuasive power



Self-monitoring: Tanita Jump Rope

Tracking self performance helps achieving predetermined goals



Surveillance: Hygiene Guard Hand Washing Surveillance

When people aware that they are monitored, they change the behavior



Conditioning: Sound and visual effects in games
Give positive reinforcements to turn existing behavior into habits

Computer as Persuasive Media

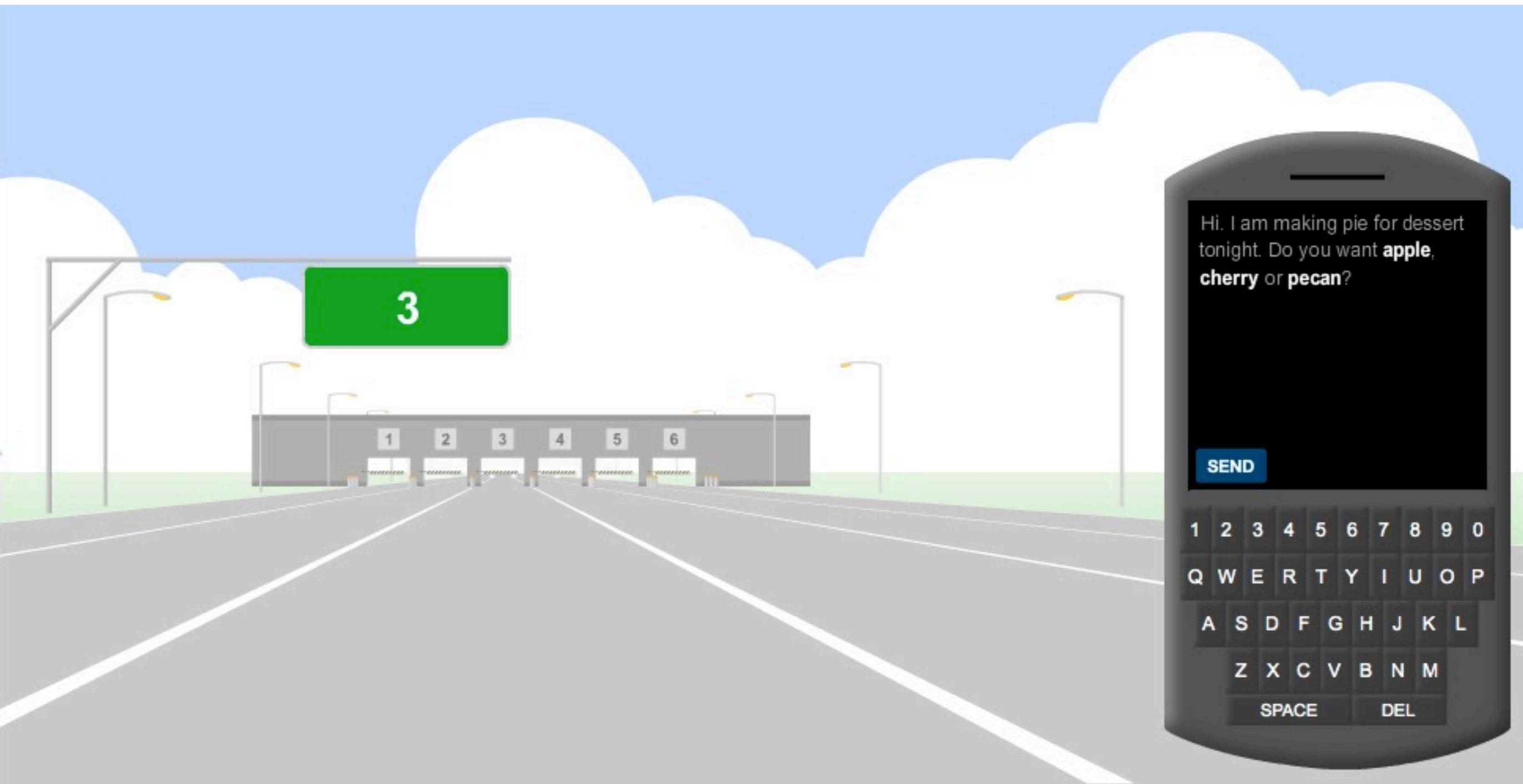
- **Bridge cause/effect gap:** Experience it right here, right now
- **Virtual rehearsal:** A safe place to try dangerous stuff
- **Augmenting the real life:** Simulating clear impact in the real life





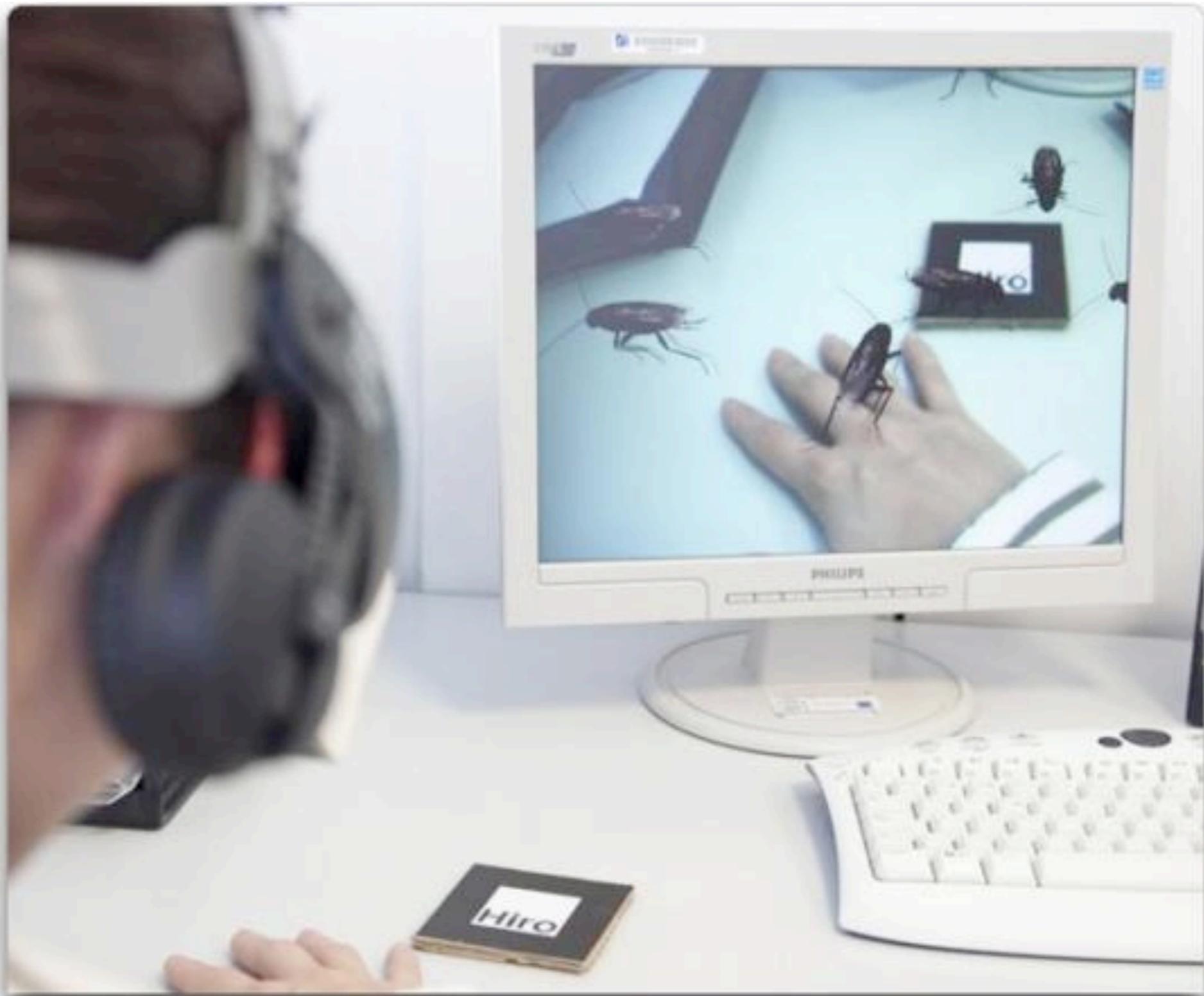
Bridge the Gap Between Cause and Effect: HIV Roulette

Frees users from real-world consequence. Close the space/time gaps between cause and effect.

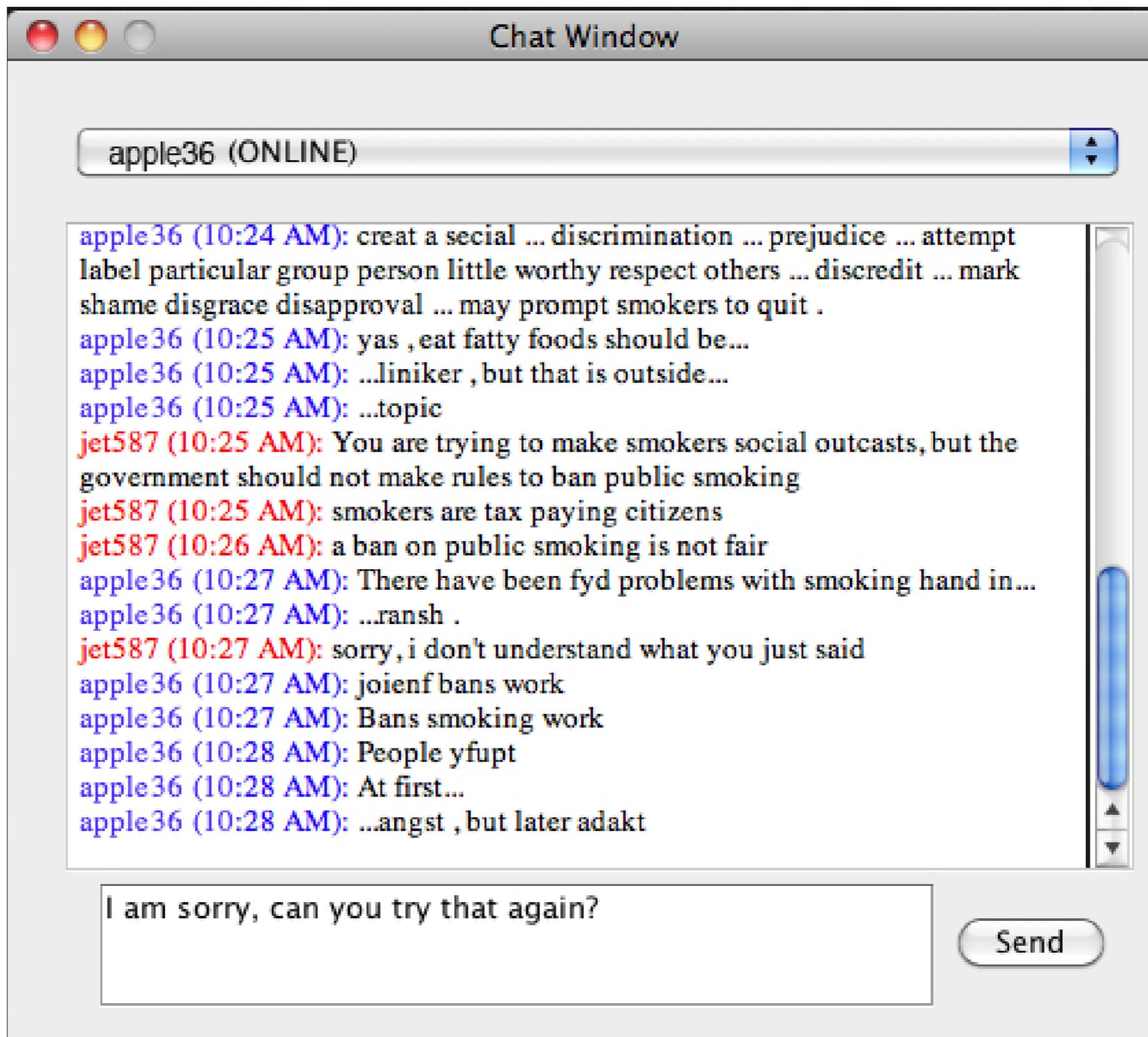


Virtual Rehearsal: Gauging Your Distraction

A simulation from NYTimes showing how your reaction time is affected by external distractions



Virtual Rehearsal: Spider and Cockroach Phobia Simulator



Virtual Rehearsal: Aphasia Characteristics Emulation Software
Use software to distort the language during chatting. [Hailpern et al., CHI '11; ASSETS '11]



Augmenting the Real Life: RealCare Pregnancy Suits and Baby

Computer as a Persuasive Social Actor

- **Physical cues:** Attractive on-screen characters are more persuasive
- **Psychological cues:** humor, personality, feeling
- **Language cues:** convey social presence, praise
- **Social dynamics:** turn taking, peer pressure, praise, reciprocity
- **Social roles:** authority, teammate





Aw, Snap!

Something went wrong while displaying this webpage. To continue, reload or go to another page.

If you're seeing this frequently, try [these suggestions](#).

Psychological Cue: Google Chrome Crash Page

Give a message that convey empathy

Feedback

Whoops. Let's fix that.

Where are you having problems? (required)

(choose an issue below)

Tell us what is happening. (required)

Language cue: Chrome Bug Report
Convey social presence through the language

ces via.

City:

State / Region:

Zip / Postal:

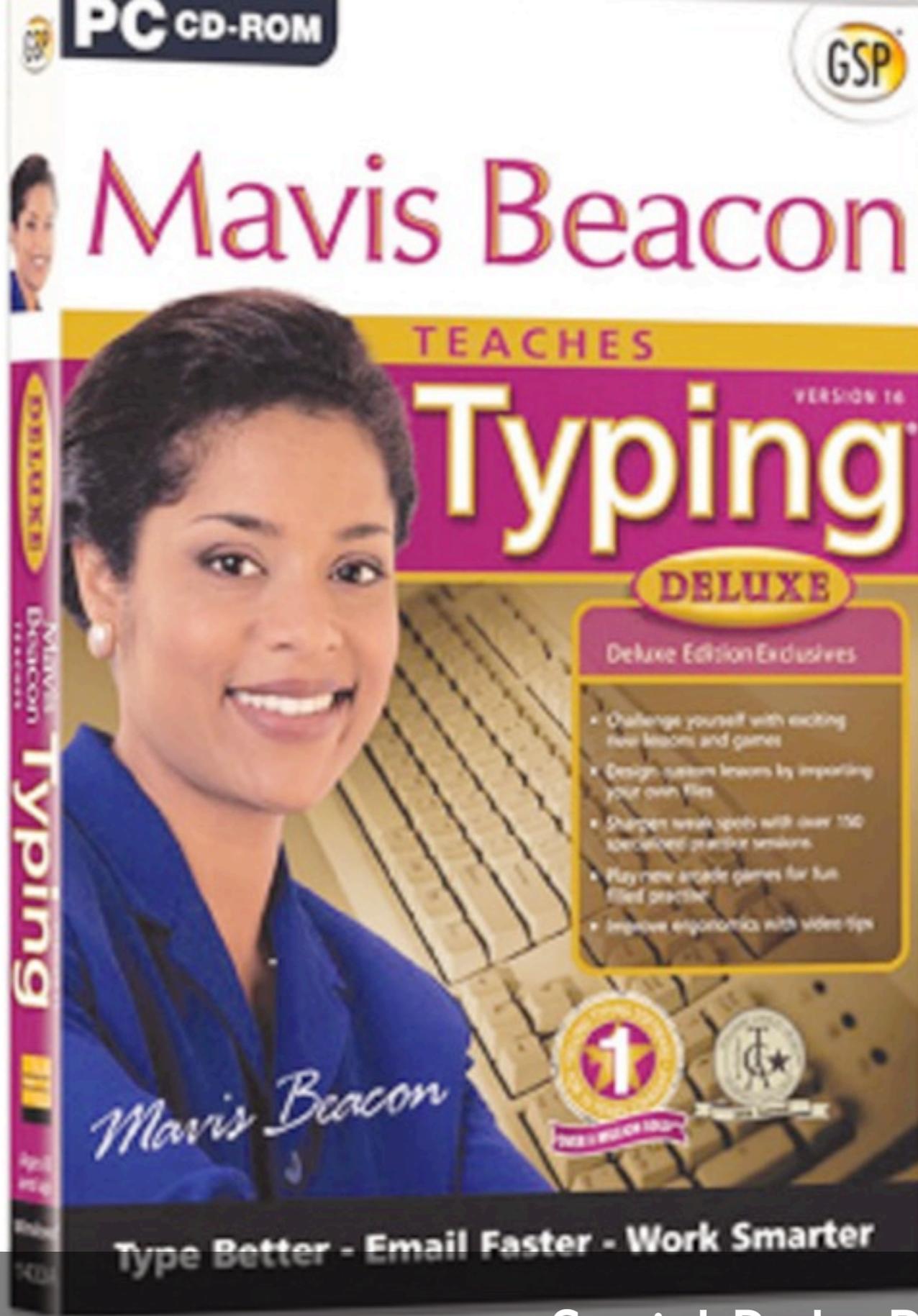
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Register Later

Register Now

Social Dynamics: “Register Later”

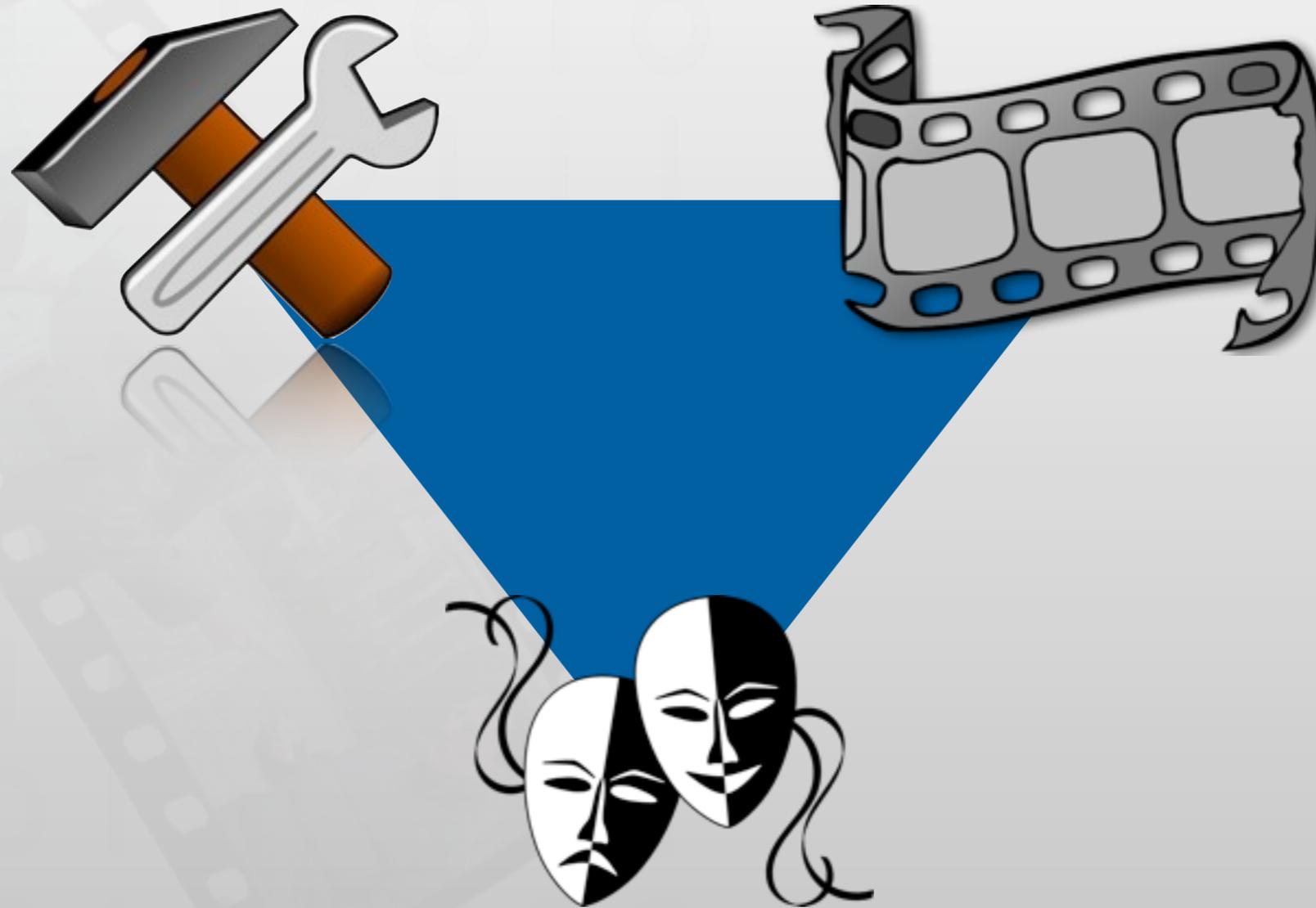
Instead of “no”, the user made commitment to reconsider registration



Type Better - Email Faster - Work Smarter

Social Role: Being an authority
People trust the computer that has tutor or doctor

Summary



Resource

- Book: Fogg *Persuasive Technology: Using Computers to Change What We Think and Do* (2003)
- Papers
 - Fogg et al. *Motivating, Influencing, and Persuading Users*. (2007) <http://bjfogg.com/hci.pdf>
Abridged version of the book
 - Oinas-Kukkonen and Harjumaa. *A Systematic Framework for Designing and Evaluating Persuasive Systems* (2008) <http://www.springerlink.com/content/h7n7k22740h6003p/>
Table of principles and corresponding examples
 - Fogg. *Creating Persuasive Technologies: An Eight-Step Design Process* (2009)
<http://dx.doi.org/10.1145/1541948.1542005>
Design process



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