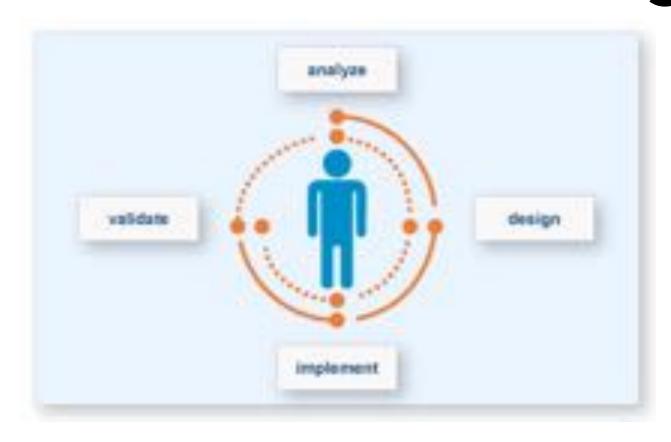
some quick thoughts on hci and privacy

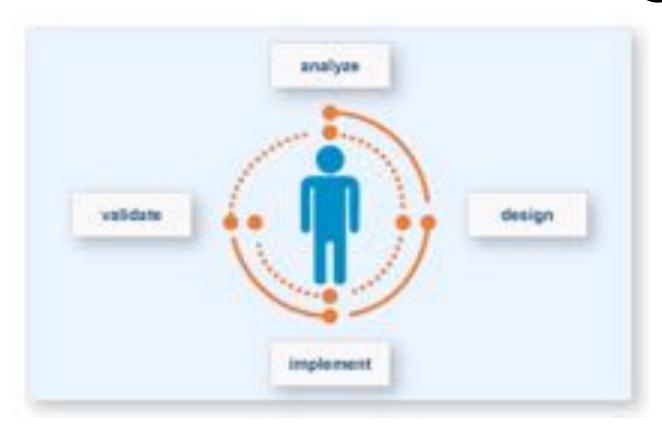
keith edwards georgia tech keith@gatech.edu



user centered design



user centered design



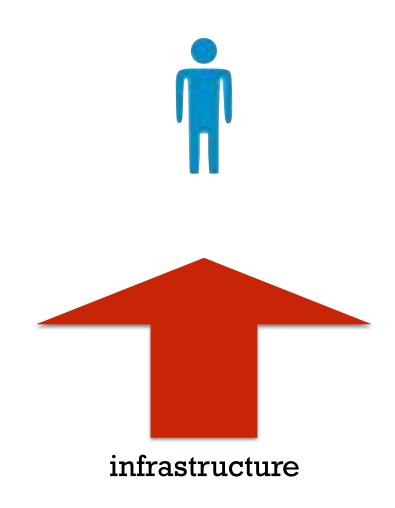
... when people don't know the risks?

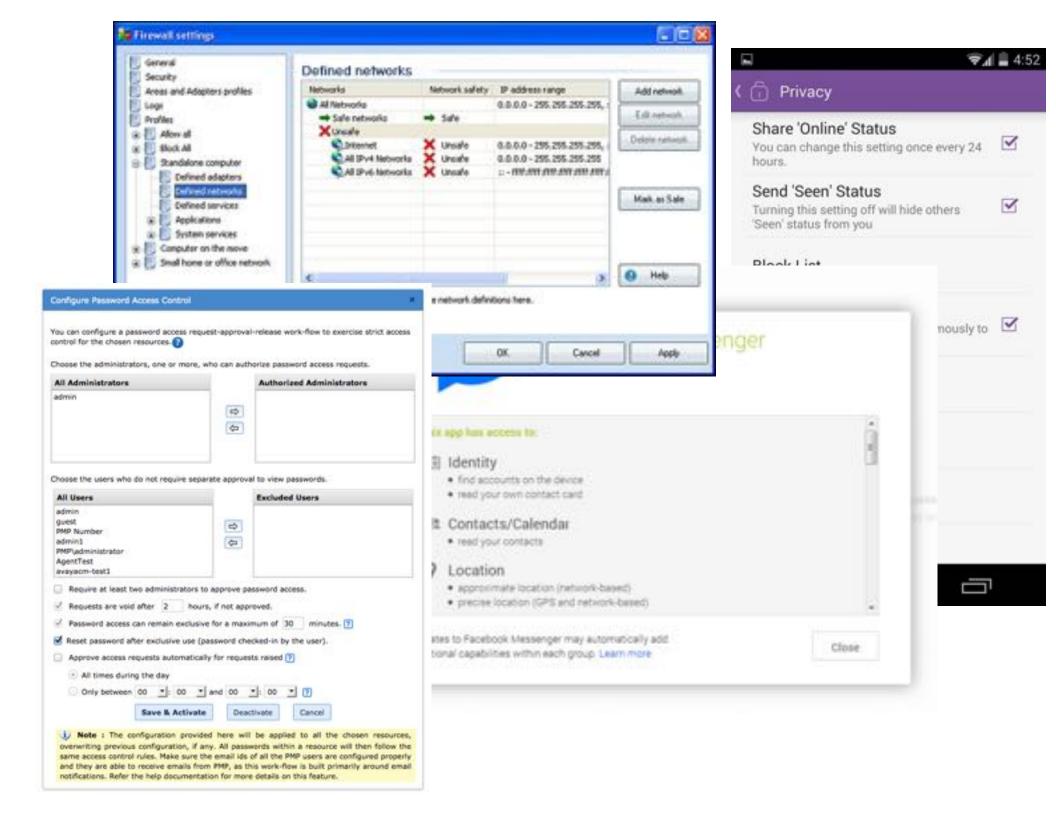
... when evaluation often lacks ecological validity?

... when privacy trades off against the very concerns this method is meant to call attention to (e.g., usability)

... when a variety of externalities push against people's abilities to control their privacy?

encroaching externalities







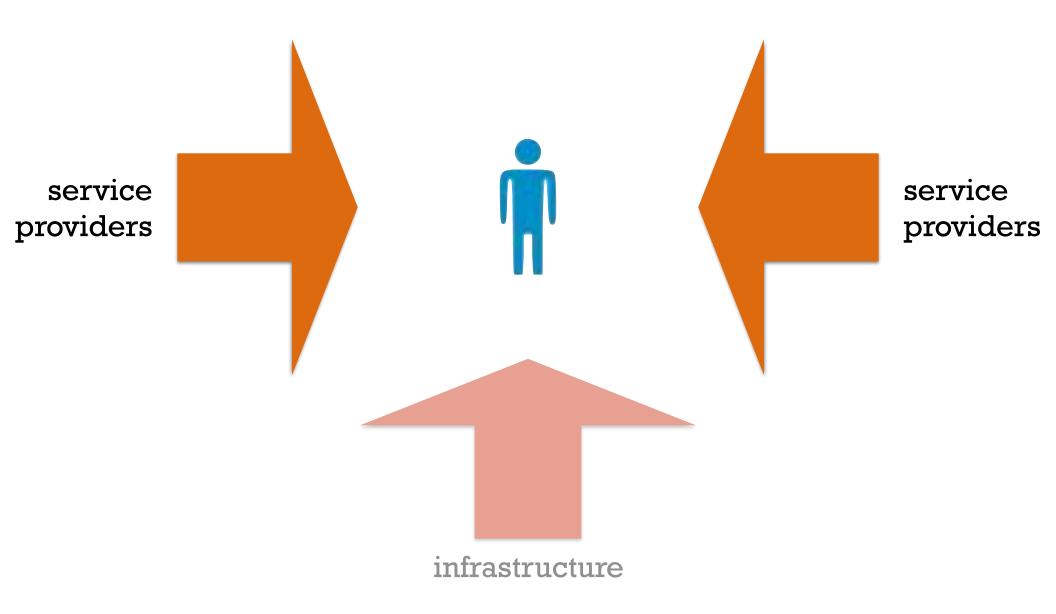
Two Theories of Home Heat Control Willett Kempton, Cog Sci J. 1986





Reflecting on the Invisible: Understanding End-User Perceptions of Ubiquitous Computing Erika Poole, et al. Ubicomp 2008

encroaching externalities



- automatic payment plan account deduction or credit/debt cardioayments.
- \$5.00 if you choose to pay your bill by telephone with the assistance of a live agent.
- \$15.00 per bill period for apples of billing records requested by you, except for your first request in a year.
- \$15.00 for each disconnection or terrmination notice we send to you.
- \$5.00 each time we call you to menind you that your payment is past-due.
- \$10.00 result livre we process a transaction to earsiter your service to the non-attracted was your Today.
- \$15.00 each time we process a transaction requesing that the TDSP discornect or reconnect service.
- Up to 2.5% of ourrent amount due if you shores to pay your bit ever the phone or online, using electronic funds bandler or certain wedlt conts.
- (c) <u>Corrections</u>. <u>Credits</u>. We reserve the right, to the extent allowed by PUCT rules, to have included on your monthly bills any charges or credits necessary to correct or true-up any previous estimated bills, meter read errors miscalculations of taxes, fees or other charges, billing errors and other errors or omissions. We will make reasonable efforts to return any undatmed credits, if a credit belance exists on your excount, after payment of your final bill from us. Unless we receive your specific request, these account balances that are less than one dollar (\$1.00) will not be returned.
- 12. Taxes and Other Charges. You are responsible for paying, and we may bill you for, all applicable federal, state and local larges, governmental charges, excessorments, and other sharges, presently or termedies imposed on you as a purchased of electricity, or Onese Mountain Energy Corrowry as a seller of electricity, or on electricity sales transactions, including but not limited to: gross receipts taxes, PUCT assessments, municipal administrative feet. ERCOT administrative, ERO or NOOAL feet or other ERCOT feet or sussessments, system reliability feet, charges and assessments, and any other generation, utility. TDSP, regulatory (including the PUCT and ERCOT), 8TU or electroty taxes, feet, charges and assessments. Such taxes and other charges will be identified as a separate line item or items on your bill. For applicable non-residential customers, you can provide us with information establishing your exemption from the payment of such taxes by providing us with a copy or your tax exemption certificate.
- 13. Assignment. You may not assign the Agreement without our prior writter consent. We may assign or transfer this Agreement without your consent, which includes the right to (a) transfer sell, piedge, encumber, collaterally spage or assign this Agreement or the accounts, revenues or proceeds hereof it connection with any financial attangement or power supply transaction. (It assign this Agreement is any antity succeeding to all or substantially all of the business or assets of Green Mountain Energy Company, and/or (c) transfer or assign this Agreement to a certified REP. In the case of (b) or (c), any such assignee shall agree in writing to be bound by the terms and conditions hereof, and upon any such assignment, Green Mountain shall have no further obligations hereader.
- 14. <u>Hispalaneous.</u> These forms and conditions set forth the final and entire Agreement between you and Green Mountain (subject to explicable leve), and supersede of previous provises, understandings and agreements. If any provision of this Agreement is decreed to be invalid, liegal or otherwise unenforceable, you and we agree that it shall be modified to the minimum extent necessary to needer it valid, legal and enforceable. If any such provision cannot be modified in a manner that would make it valid, legal and enforceable, such provision shall be served from this Agreement, and all other provisions hereof shall remain in full force and effect. Any faiture on surport at any time to enforce any term or condition of our service or to exercise any right under this Agreement shall not be considered a water of our right thereafter to entorce each and every such term and condition or to exercise such right or any other right under this Agreement.
- 19. Certain Detrotions. The terms "Custome" and "binnos Address" are as appointed during your envolvement process or denoted in your Envolvement Authorization, if applicable. The terms "we", "us" and "our" refer to Green Mountain. The terms "you" and "your" mean the Questimer. The term "industed" or "including" means including without limitation. "Envolvement Authorization" is the document that is executed by you or your acceptance of Green Mountain's Terms of Service by integhane or internet. "Delivery Charges" means all charges of any kind imposed or authorized to the collected by the TDSP or any other transmission or distribution provider under any Law or otherwise for, or related to electricity transmission and distribution and related services, including, "network transmission charges" and Nuntrypassable Charges. "Nuntrypassable Charges" means each TDSP's Delivery Charges, sellem benefit fund feets and any competition charges, transition charges and/or similar charges associated with or resulting from the opening of the steaths marked in Texas, including recovery of stransfed codes. "Charge in Law" means any revision in, lessable, charges, transition of, amendment to, or interpretation of any Law affecting approved or anticipated rates, make dessafications or profiles, taxiffs, taxes, charges, frees, credit requirements or assessments, the wholesake or retail energy market, towering, supply, generation, transmission or derivery of energy. "Law" means any law, rule, regulation, ordinance, statute, judicial decision, administrative order, the EPCOT Operating Outlees, the EPCOT



US world opinion sports soccer tech arts lifestyle fashion business travel environment science



home) tech

Facebook

Facebook admits it tracks non-users, but denies claims it breaches EU privacy law

Social network claims privacy report commissioned by the Belgian privacy watchdog 'gets it wrong multiple times' over what Facebook does with user data



Most popular in US



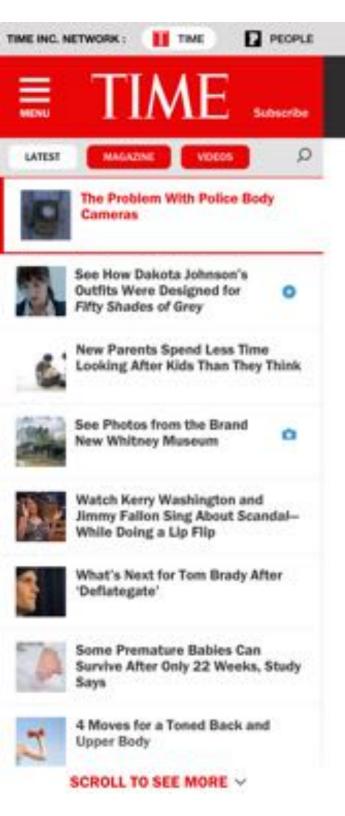
What Frida wore: the artist's wardrobe locked up 50 years - in pictures

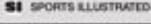


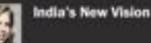
Tigers and wild animals escape from Oklahoma 200 after tomado hits



Election polling day live: IT glitch causes voting problems in east London and Dorset







FORTUNE

IDEAS SECURITY

The Problem With Police Body Cameras

TO ENTERTAINMENT WEEKLY

▶ MORE

Janet Vertesi May 4, 2015

Janet Vertesi is Assistant Professor of Sociology at Princeton University.

In court, video evidence never speaks for itself

Correction appended, May 4, 2015.

The recent events in Doltingons have ones



Brian Gurule, a Colorado Springs motor officer poses with a Digital Ally First Vu HD body worn camera worn on his chest in Colorado Springs on April 21, 2015.

encroaching externalities:

- from infrastructure
- from service providers

OPINIONS ON INTERNET PRIVACY

THE PHILOSOPHER:

"PRINACY" IS AN IMPRACTICAL UAY TO THINK ABOUT DATA IN A DIGITAL WORLD SO UNLIKE. THE ONE IN WHICH OUR SOCI-



THE CRYPTO NUT:

MY DATA IS SAFE BEHIND SIX LAYERS OF SYMMETRIC AND PUBLIC-KEY ALGORITHMS.

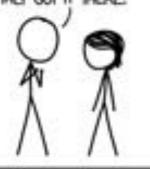
MOSTLY ME EMANLING
WITH PEOPLE ABOUT
CRYPTOGRAPHY.



THE CONSPIRACIST:

THESE LEAKS ARE JUST THE TIP OF THE ICEBERG. THERE'S A WAREHOUSE IN UTAH WHERE THE NSA HAS THE ENTIRE ICEBERG.

I DON'T KNOW HOW THEY GOT IT THERE.



THE NIHILIST:

JOKE'S ON THEM, GATHERING ALL THIS DATA ON ME AS IF ANYTHING I DO MEANS ANYTHING.



THE EXHIBITIONIST:

MYMMY I SURE HOPE THE NSA BAT LIATCHING ME BITE INTO THESE JUCY STRAUBERRES!!

COPS I DRIPPED SOME ON MY SHIRT! BETTER TWE IT OFF:

GOOGLE, ARE YOU THERE? GOOGLE, THIS LOTION



THE SAGE:

I DON'T KNOW OR CARE WHAT DATA ANNONE HAS ABOUT ME.

> DATA IS IMAGINARY. THIS BURRITO IS REAL.

