どうもありがとう!

Thank you for attending! Thanks to Satoshi and Webdirections for inviting me, and especially thank you to our translators.

20 Years Ago

Let’s start here in 1995.

* There was a senior researcher at Microsoft named Dr. Eric Horvitz. [START VIDEO]

* He led a team called the “Decision Theory & Adaptive Systems Group” Their job was to study and improve how people used microsoft software and make it a dramatically better experience. [Next slide]

* Dr Horvitz was a very smart dude. Still is. He knew a lot about this thing called “Bayesian methods” and something else called “Animated pedagogical agency.” If those terms don’t make any sense to you than

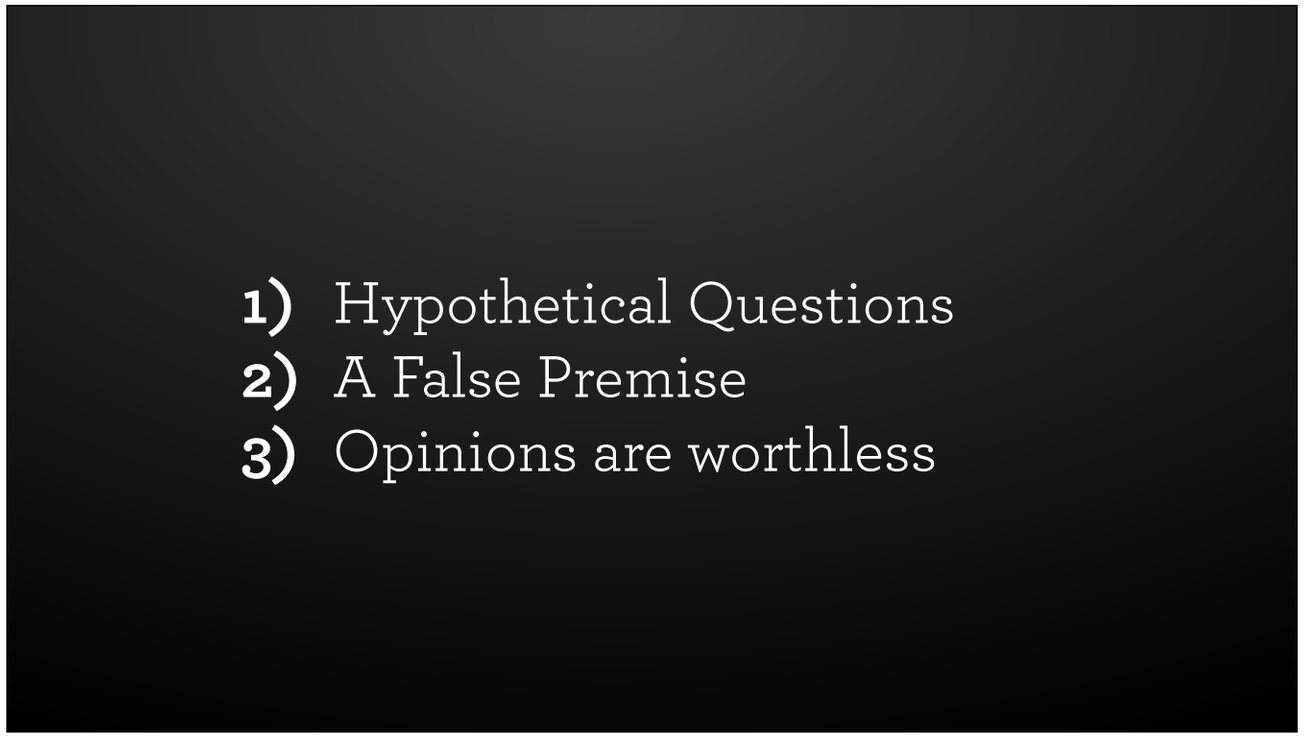
However, what Microsoft ended up building from this research is arguably one of the most hated features in the history of modern computing.

Bad Listening

You essentially have this original academic research that's built around this false premise of succesfully being able to predict user frustration. To this day, not even Watson can tell when you are getting frustrated with an interface. Hard problem.

Second, you have tons of Microsoft researchers asking users hypothetical questions about if they would enjoy a system that offered help when they needed it using a friendly "agent." People were like "sure, sounds great, I could totally use that kind of assistance."

Every study of these people put them in the context of hypothetical usage. And it's worth mentioning that Dr Horvitz explains the real reason Clippy was such a failure was because the engineers axed the fancy Bayesian logic due to all those infamous bloated features in Office 97 taking up all the disk space.



Microsoft, bless their hearts, made three critical mistakes here. Two of which we care about.

1) giving users hypothetical scenarios during one on one research - “would you use this? would this be helpful?” Those questions will generate nothing but inadvertent lies from participants.

This is the worst question you can ask your customers is this one. But it’s also impossible not to ask it. The great conundrum of design research.

So why conduct research?

Well let’s look at some good examples of research and listening inside some interesting startups and technology companies

1. AirBnB
2. Facebook
3. Flickr & Slack

By the way, a little more about me. My name is Nate Bolt, and I’ve been doing UX research for 15 years. I started a company called Bolt | Peters in 2002, and we were a design research consulting firm of 8 people that worked with over 200 large organizations. Everyone from Sony to The New York Times to Toyota to Oracle. I sold that company to Facebook in 2012, and then helped run design research at Facebook and Instagram for two years.

How do organizations listen to their customers?

As you probably know, this was the oldest continuously running company in the world until 2007. To be fair I have no idea how they listened to their customers, but Andy Budd told me about them this morning.

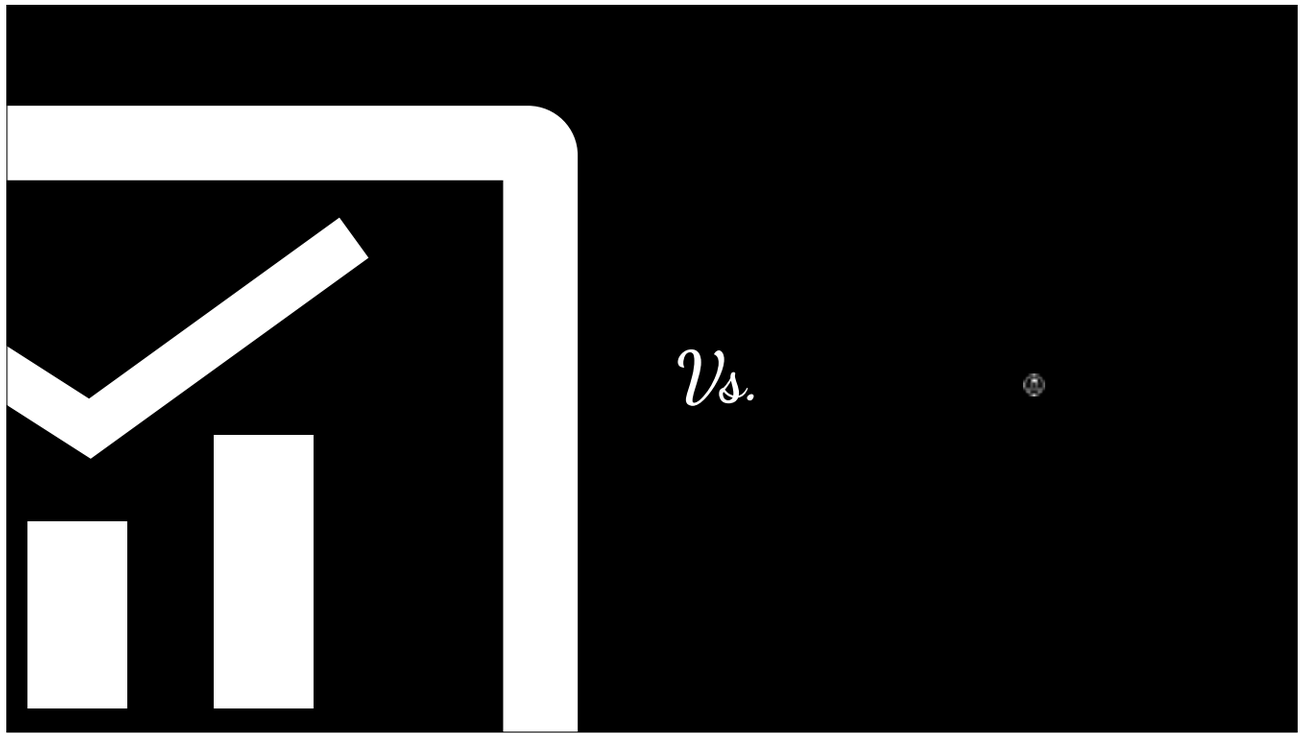
So 60 years ago, way back in the day, this was about standard for commercial research, and the word ethnography had not become a corporate buzzword.

30 YEARS AGO

there used to be a lot of technology associated with research
but it was all for documenting it, not really for doing it

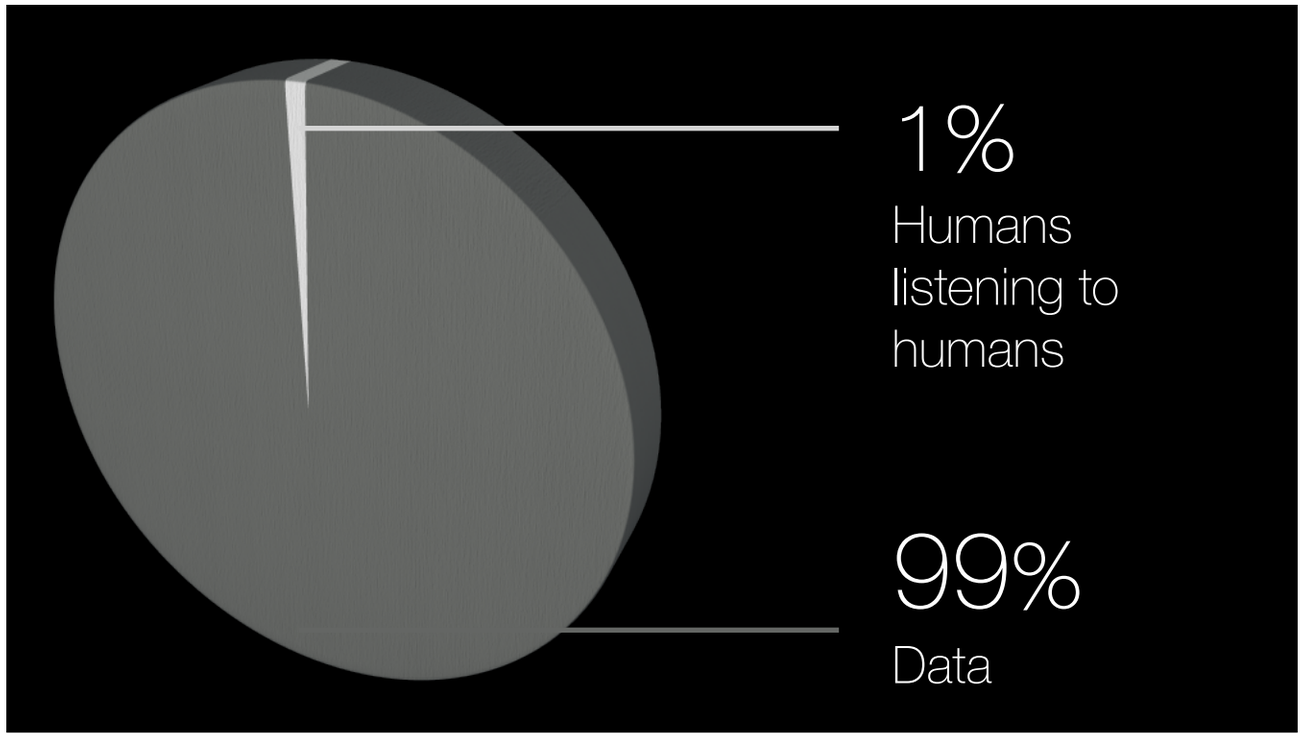
data science, analytics, computers watching people use computers.

the real answer to the question of “how do companies listen to their customers?” is of course data. That’s by far and away.



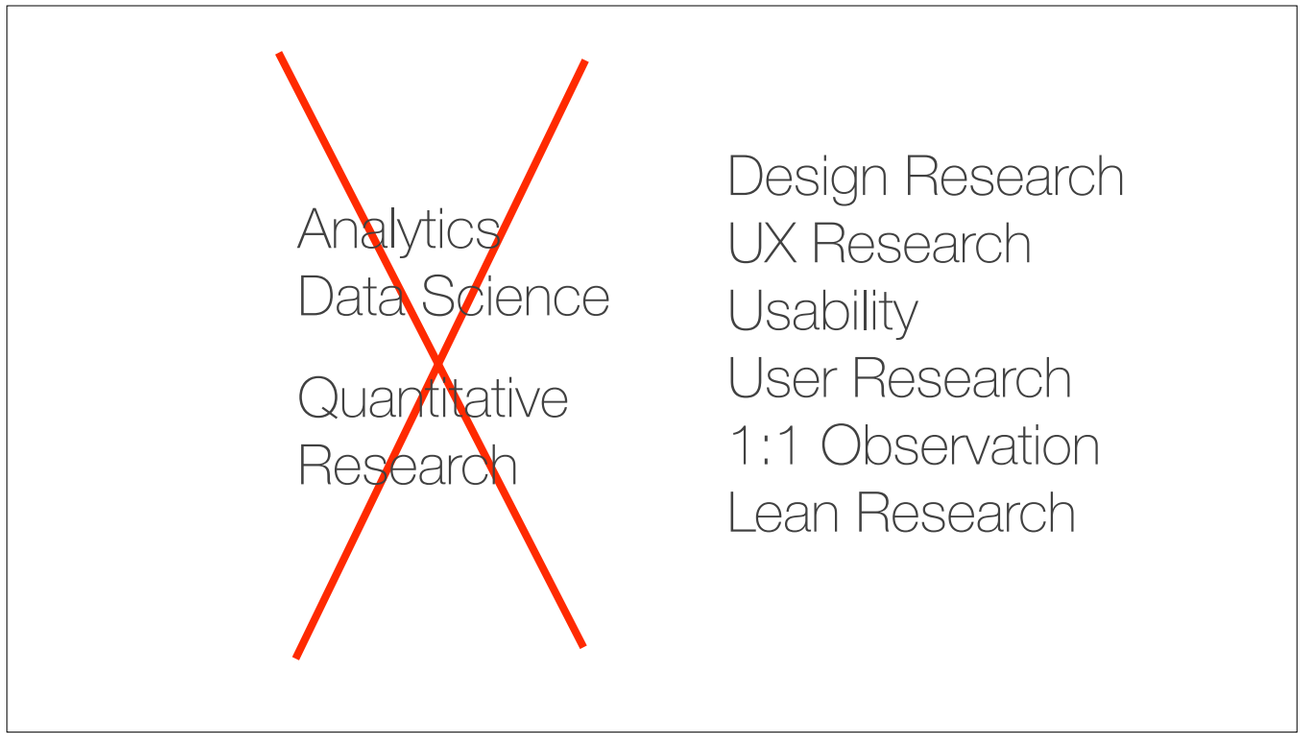
data science, analytics, computers watching people use computers.

the real answer to the question of “how do companies listen to their customers?” is of course data. By far. If you ask most executives why this is, I think they would say that quantitative data is more reliable, statistically significant, more sound. And listening to people 1:1



Another way to look at this

What I'll be talking more about today is design research or ux research. In other words the qualitative side of understanding behavior.



Also won’t be discussing these kinds of quantitative research

Organization	UX Researchers
Dropbox	9
AirBnB	7
Pinterest	14
Uber	9
Google	250
Facebook	90

Unofficial
Wild Guesses

Interesting to see the startups over the last few years aggressively hiring UX researchers. This is relatively new. There was a time not that long ago when startups thought UX research, or listening to users, was sort of old school silly usability. But something changed. I should say these numbers are something close to complete guess work. Not official. Just my personal guessing based on the clear blue sky.

Organization	Product Designers
Dropbox	100
AirBnB	60
Pinterest	50
Uber	90
Google	1,000
Facebook	300

Unofficial
Wild Guesses

Organization	Ratio of Designers to Researchers
Dropbox	11:1
AirBnB	9:1
Pinterest	4:1
Uber	10:1
Google	4:1
Facebook	3:1

Unofficial
Wild Guesses

This used to be about 40 to 0. No startups used to have dedicated researchers. Even large tech companies like Microsoft

Organization	Engineers
Dropbox	500
AirBnB	900
Pinterest	300
Uber	800
Google	12,000
Facebook	4,000

Unofficial
Wild Guesses

This used to be about 40 to 0. No startups used to have dedicated researchers. Even large tech companies like Microsoft

Organization	Other “UX” Job Titles
Dropbox	0
AirBnB	0
Pinterest	0
Uber	0
Google	0
Facebook	0

Unofficial
Wild Guesses

Just kind of interesting

1. AirBnB

So far three of us have mentioned AirBnB. I don’t think any of us think that it’s some kind of super hero company we should all imitate. In fact, the legality and future of AirBnB seems as in question as Uber. But they are doing pretty well so far. How well?

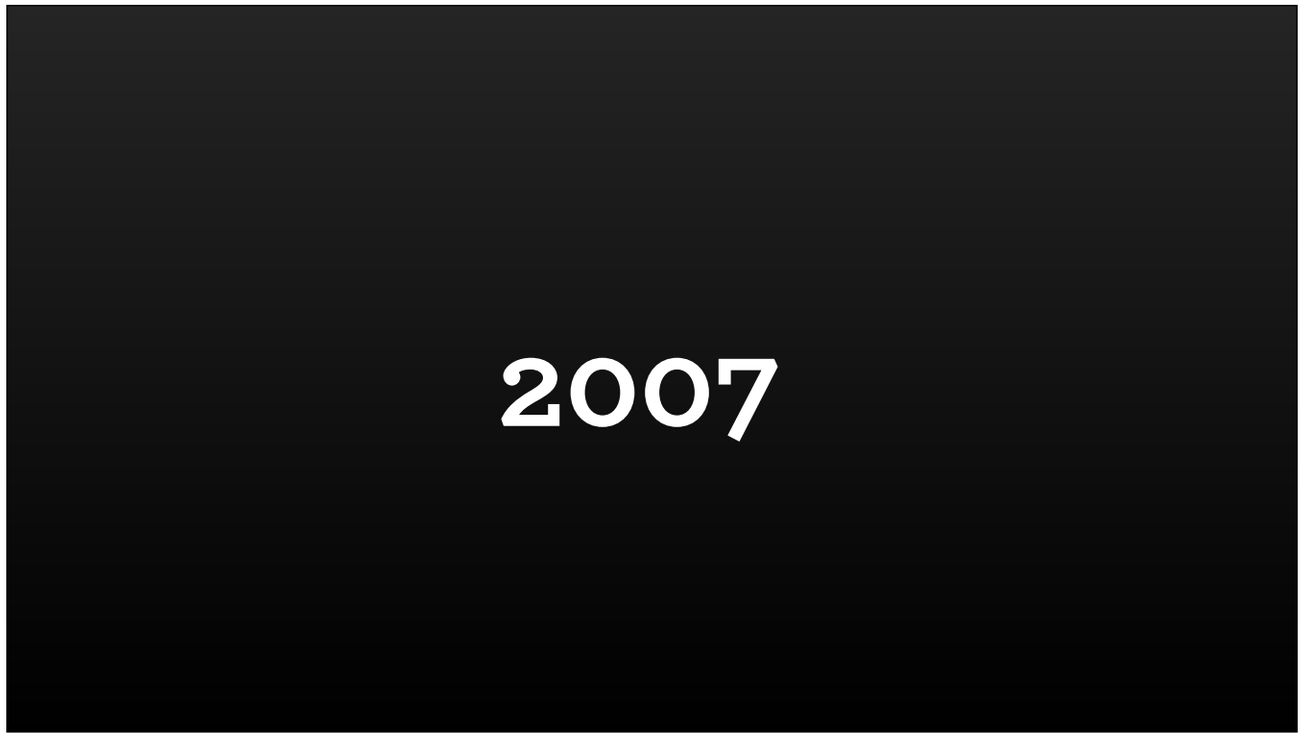
$20**B**

¥2.4**T**

Current valuation of AirBnB as of a month ago. That’s 20 billion dollars. That’s bigger then Hilton hotel group – which is 10 times less at 2.4 billion dollars. This feels insane to us. And fragile, but that’s where we’re at right now.

Not super succesful in Japan.

Founder Joe Gebbia 8 years ago was struggling with AirBnB. They decided they had to go to New York, which was their most succesful first target market, and sit down with hosts.



Failing

Good Listening

1. contextual - these people were using AirBnB.

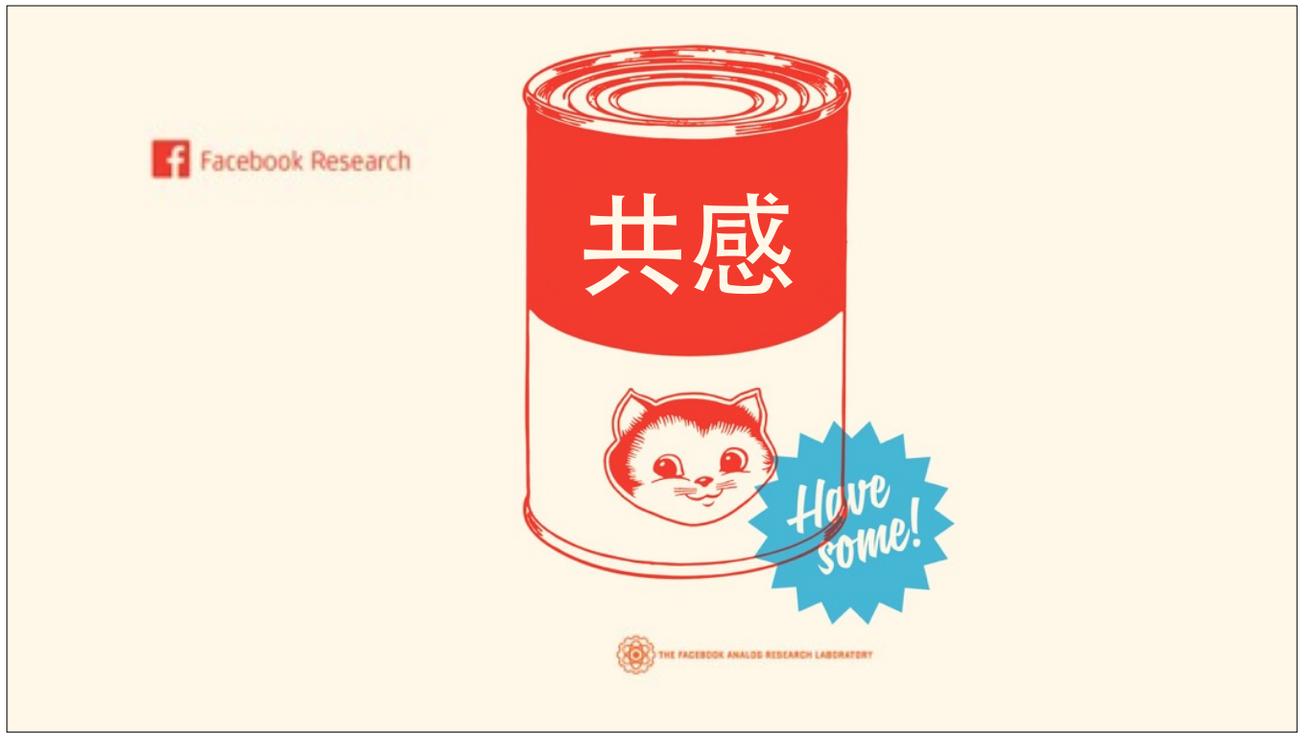
2. time-aware. they were in the middle of eating, answering questions. They weren't talking about a meal five days ago, or a hypothetical meal in the future - it was about what they were actually doing RIGHT IN THAT MOMENT. That's huge. Time eats away at the accuracy of customer feedback like you wouldn't believe.

3. Behavioral. They weren't just talking in a focus group. They were functionally involved in the core value of this product.

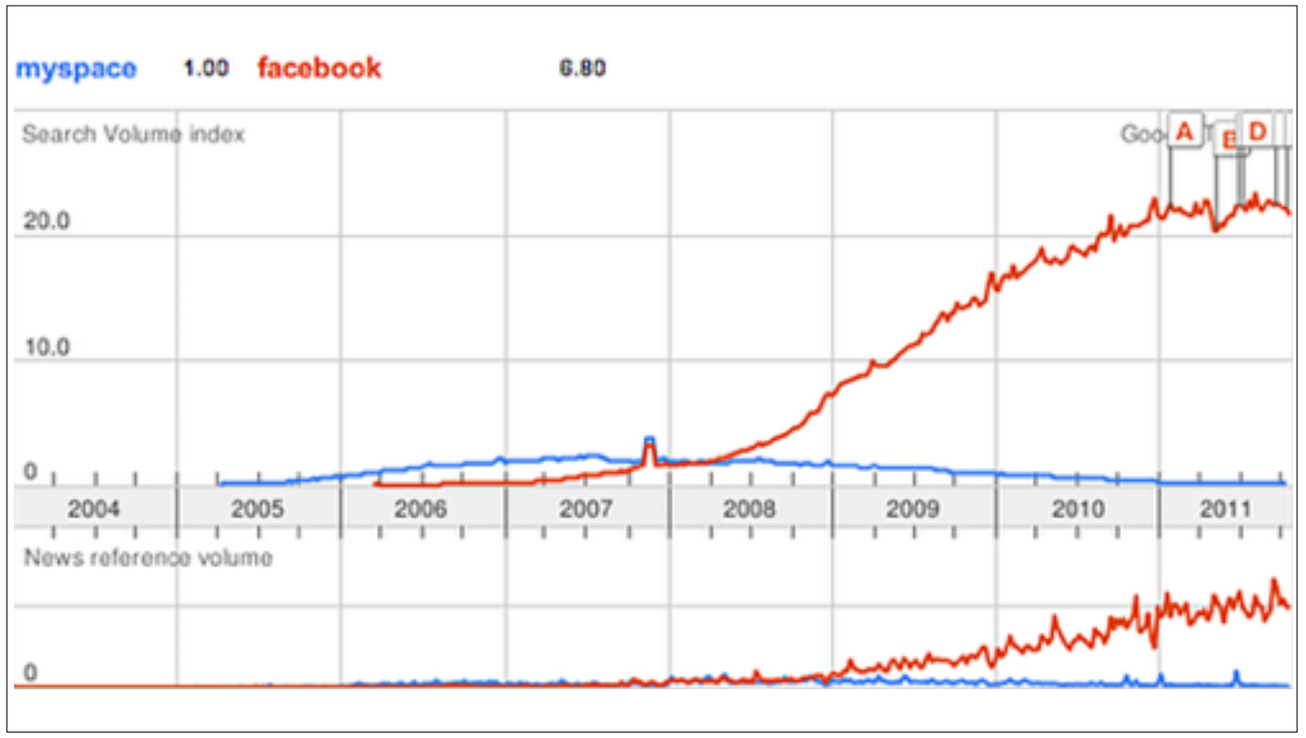
2. Facebook

“ We can never have too much understanding about our products.”

Quote from Mark Zuckerberg



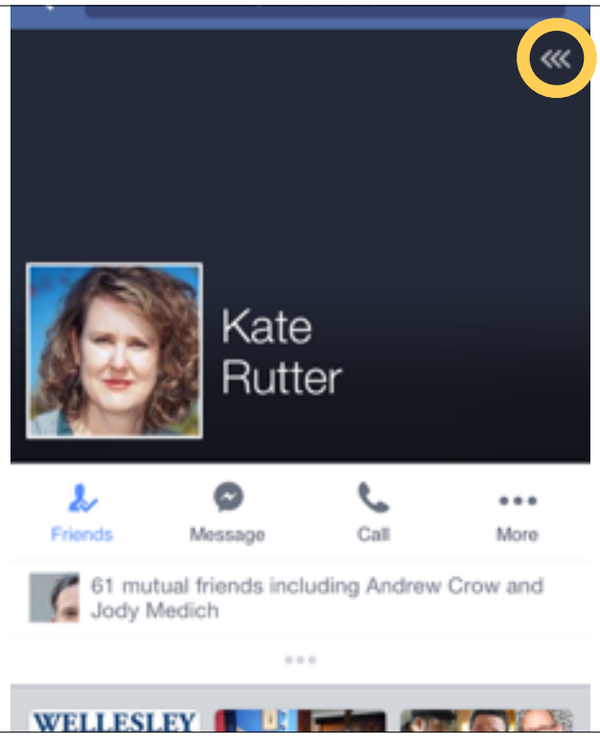
The team inside Facebook. This is a real poster for the team. And in a lot of ways this is the role of research – to give empathy to the engineers and designers and everyone who can forget sometimes what it’s really like to be outside of the united states, outside of california, outside of Menlo Park where 6,000 Facebook employees work.



We all know this story.

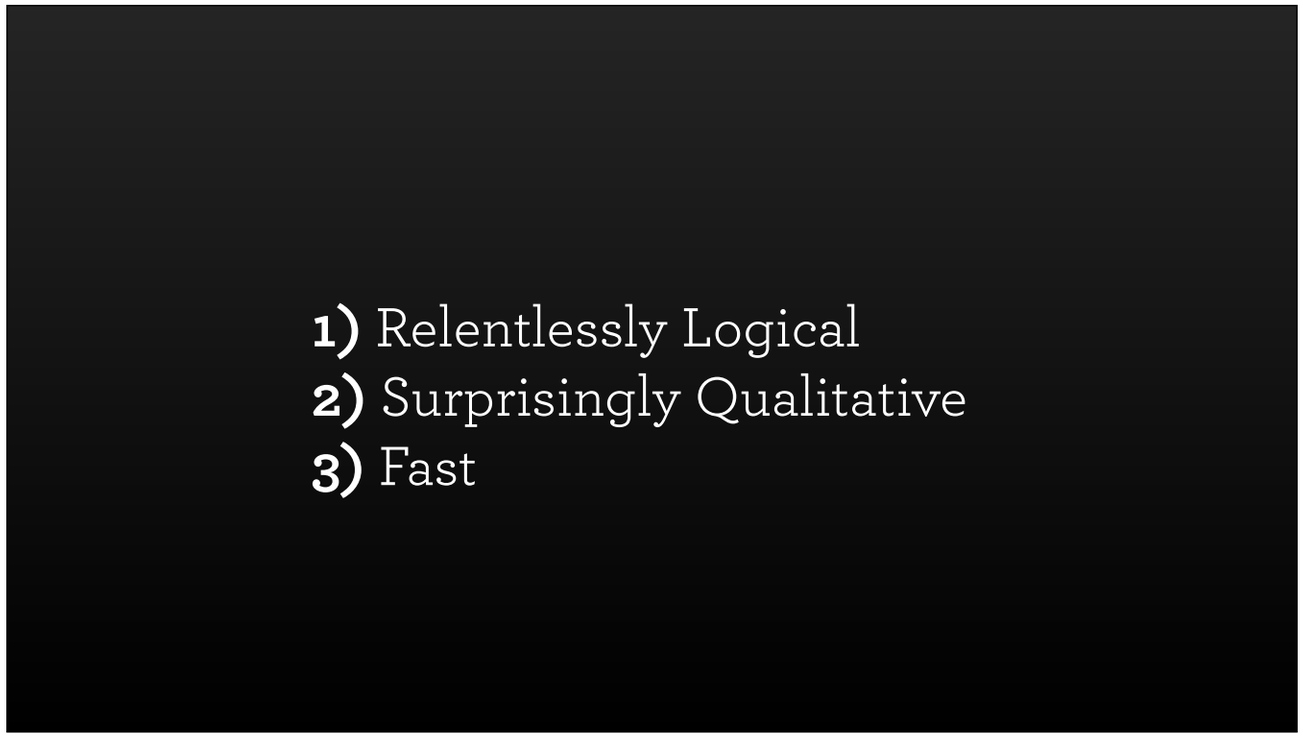
wants scrolling pictures
old photos
would check, but less interesting b/c not as recent
any mutual friends?
who's in photo w/her?
what other photos?
of note, but uninformative
P6 Allie
non-friend
2011

Photos for friends
Photos for non-friends


Kate
Rutter
Friends
Message
Call
More
61 mutual friends including Andrew Crow and Jody Medich
WELLESLEY

Facebook Research
185 projects seen by 480 Facebookers and 110 followers
MEET THE TEAM
Search researchers, teams, and tags...
Search
Get more specific?
Click below to add sub-tags to your search.
qual
ads
usability
[redacted] Prototype Round 2
january 30 by [redacted]
on Thursday
How do users respond to the second iteration of Hunch?
Hunch
Open Graph
prototype
hunch

Good Listening



1. the company is run on a belief in logic. if you can make logical arguments and show data, you can make good product decisions at Facebook. This is Big Data BUT (NEXT SLIDE) with a heart

2. Shivani Mohan who ran this research project only talked to 10-20 users in different parts of the world. they were in the middle of eating, answering questions. They weren't talking about a meal five days ago, or a hypothetical meal in the future - it was about what they were actually doing RIGHT IN THAT MOMENT. That's huge. Time eats away at the accuracy of customer feedback like you wouldn't believe.

3. Behavioral. They weren't just talking in a focus group. They were functionally involved in the core value of this product.

> *“Quantitative research lets us test our assumptions, and qualitative research lets us find out what we don't know.”*

Never told anyone about this conversation I had with Zuckerberg before. And the only reason he was even talking to me about it was because I flew a drone with a ghost on it at his house for a halloween party. True story.

research.facebook.com/userexperience

See more stories about how FB listens to users, believe it or not.

3. Flickr & Slack

2004

Two researchers

Company called Ludicorp made this game in 2001 but they noticed.

Of course you can say flickr is a graveyard now but it’s important to remember it represented the most fundamental shift in posting digital photos the world had ever seen.

Now you have the same thing almost happen again.

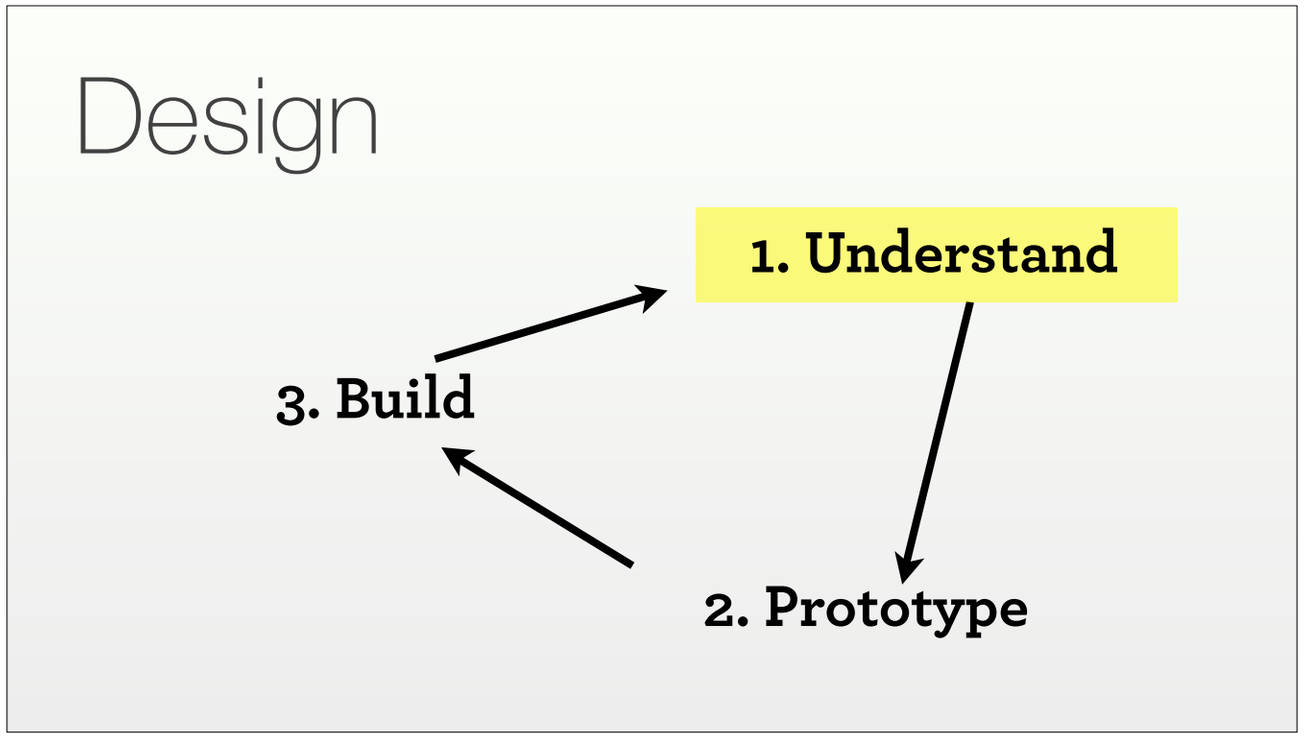
Stewart worked on that game Glitch for years and failed, then decided to create Slack for real-time work collaboration.

Current valuation of Slack. That is possibly insane.

Good Listening

1) Behavioral
2) Fast
3) Collaborative

They observed system behavior. The designers, engineers, and PMs were all one person, but in addition to that they watched and understood users.



So this is one of many ways to look at the stages of interface development. My main goal today is to show you how research can be useful at every phase of the design cycle, which (simplifying) I'm going to break down into 3 phases: Understand, Prototype, and Build.

Many people are familiar with the work research can do at the end of a project, after a product is built, such as usability testing.

But in fact the main thing I want you to take away is that research can be helpful throughout the process and especially at the beginning.

1. Understand

- review existing research
- focus groups
- interviews
- ethnography
- surveys
- card sorts
- data analysis
- diary studies

Research methods for the Understand phase are ways of learning about users' attitudes, pain points, unmet needs, goals, habits, daily lives, mental models, and expectations.

2. Prototype

- participatory design
- collaborative design
- brainstorming techniques
- heuristic evaluation
- paper prototype testing
- static mock testing

Research methods for the Prototype phase are lightweight ways of developing and testing out ideas that we’re not sure about yet, before any code is written.

3. Build

- usability testing
- heuristic evaluation
- diary study
- A/B test
- field testing

Research methods for the Build phase are best for tweaking a design direction we have some confidence about already.

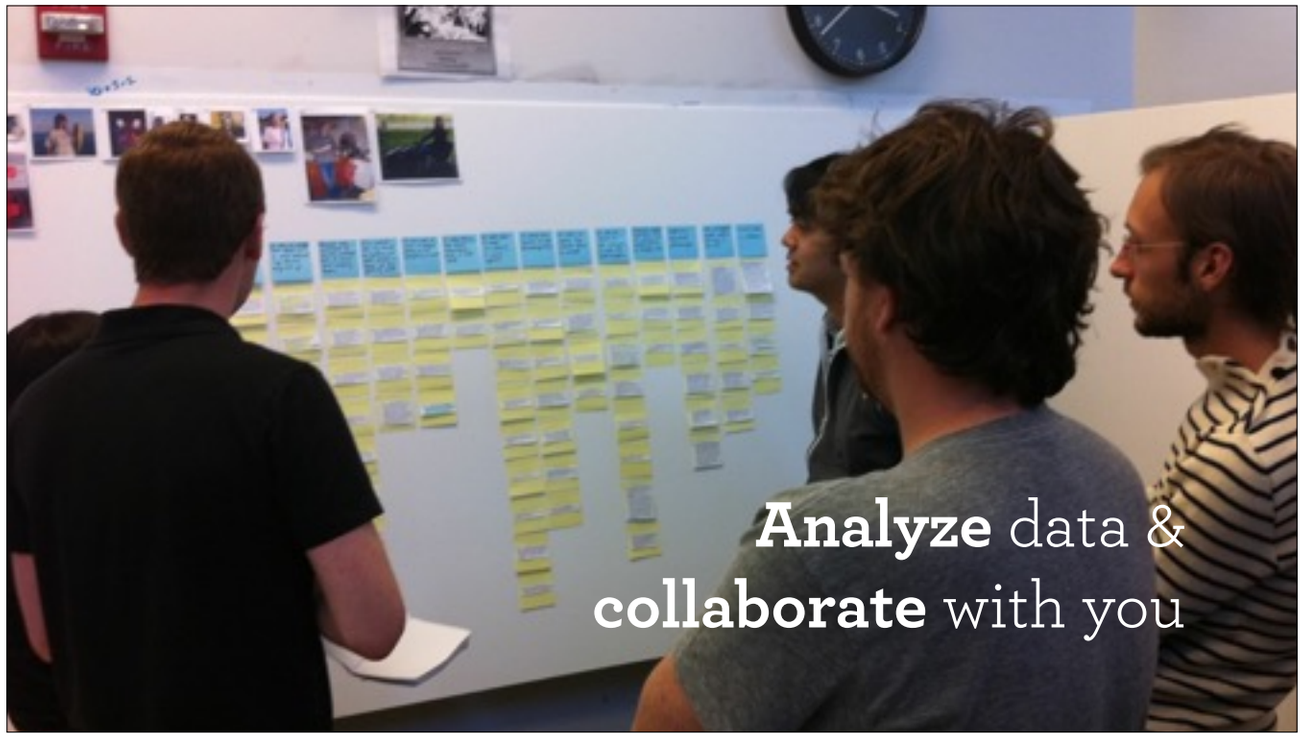
What a UX researcher does

Here’s an overview of the research process.

The question: We meet with a team’s stakeholders to learn what the goals of the project are. We also find out what questions are most on the team’s mind about the end users. This information feeds into our research questions.

Recruiting: It's important to pick the right people to study. We recruit participants who are most relevant to the question, whether that mean expert users, extreme users, target users, or even non-users. We reach out to them via ads, megaphones, emails, professional recruiters, or sometimes even intercept them in the field.

Data collection: Many qualitative methods call for patiently listening and observing. Quantitative methods require making sure you're doing the correct sampling to get a representative set of responses that's large enough to show statistically-significant trends.



Analysis: Once data is collected, we comb through it to find trends, patterns, and themes that are relevant to the research question, and discuss it with the team. For qualitative research this involves pushing around and recombining quotes, anecdotes, and behavior examples from users; for quantitative research, it involves querying the data you collected in many different ways to see if it backs up various hypotheses or not.

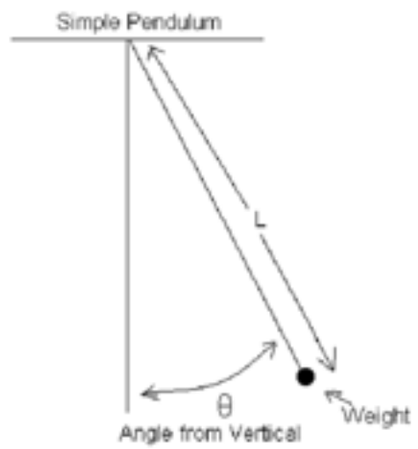
Combine Methods

We do it all together: We get the goals and questions from you, then we do the up-front work of fielding a survey or getting participants into the lab, but you are there during the interviews, usability tests, and debriefing sessions, so you can observe data with your own eyes.

Computers Watching People

Surveys
Behavioral Data
Experimental Data
Metric outcomes
Analytics
Statistical significance

We tend to excel at these methods here.



It’s a balance between the inputs you all have. Traditionally startups and technology companies do well with quantitative understanding of behavior. And we do that too. But I’d like to push the pendulum closer to giving you guys all insight into how real people use our products as part of their lives.

People Watching People Use Computers

Live remote observation of real users all around the world.

This is what the workshop is all about on Saturday

The Myth:
Geniuses have genius ideas that turn into genius products.

We tend to look at google and apple and Facebook as isolated geniuses that come up with something that changes the world through some combination of luck and genius. But companies have been looking for a recipe or formula for how to design great interfaces for quite some time

The Truth:

Great Ideas come from Other Great Ideas

People treat research as the answer. Really, research is one area of inspiration. Steven Johnson calls other ideas “the adjacent possible,” and knowing what is possible and how people functionally interact with your company’s producs or services is certainly a form of understanding ideas.

More Truth:

Imaginative research facilitates invention

Understanding does not always lead to innovation. Some of the most radical innovations in technology come from people with very little understanding of the behavior of their users. But understanding almost always leads to succesfully optimizing existing products. It's important to know the difference. If you have all these smart people working on optimization only, they will quit. Make sure the wacky research ideas have a place here.

that’s it. i’m done.

Nate Bolt
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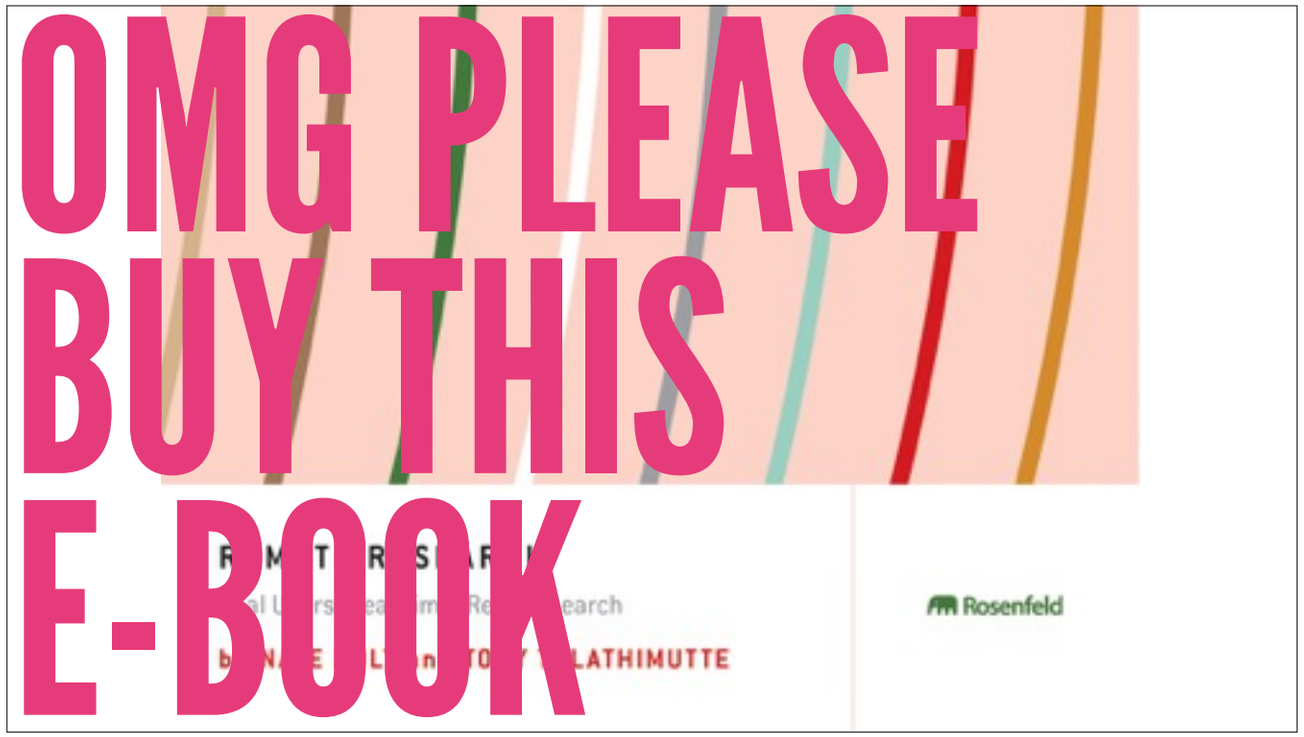
@boltron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BUY THIS
E-BOOK
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BUY THIS
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