## ADOPTING A RESEARCH MINDSET TIPS AND LESSONS FROM UX RESEARCH AT SHOPIFY

DALIA EL-SHIMY SENIOR UX RESEARCHER, SHOPIFY



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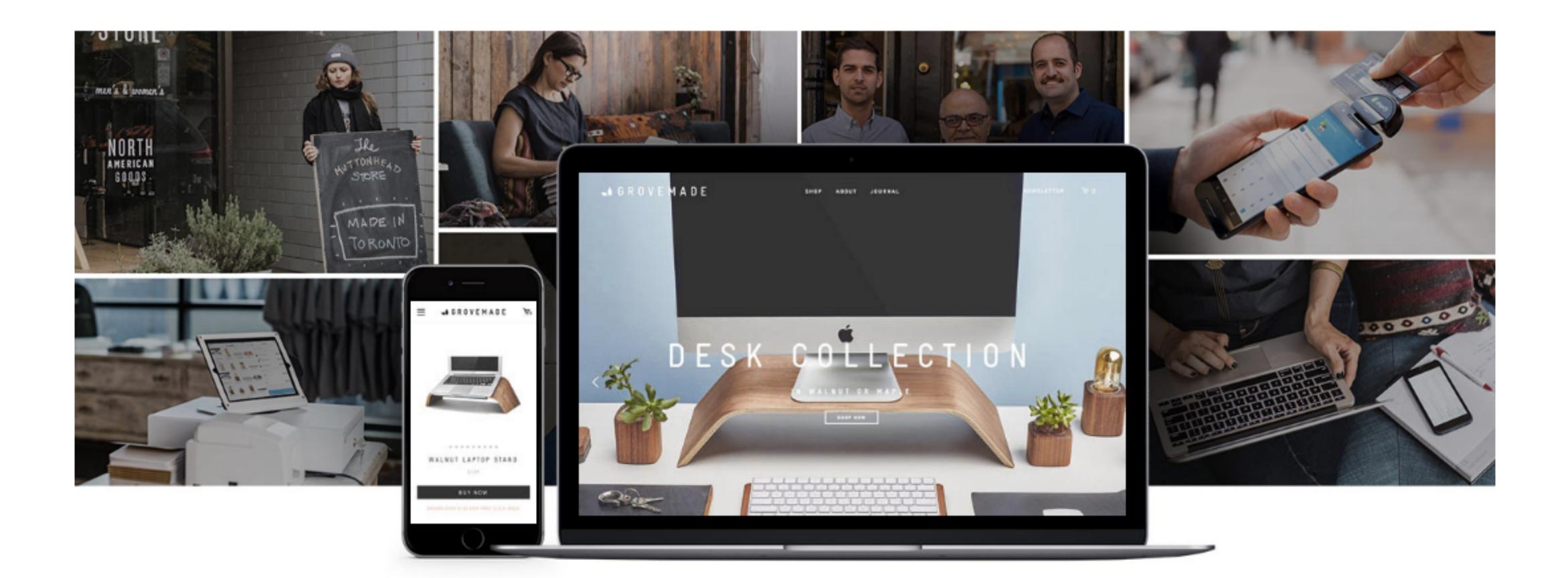
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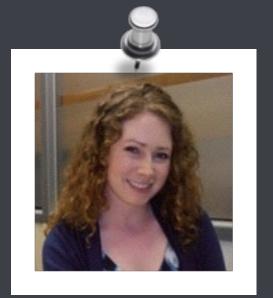


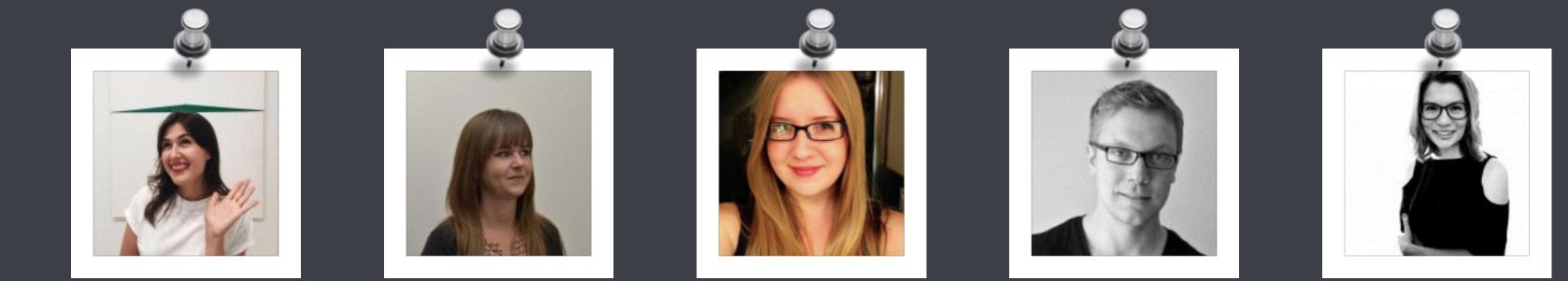




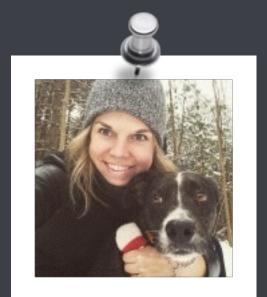


# The UX research team



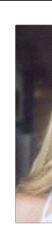


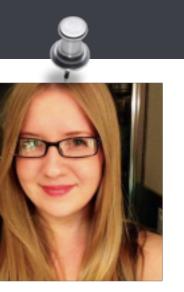


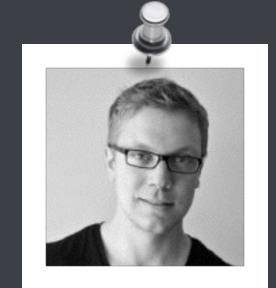


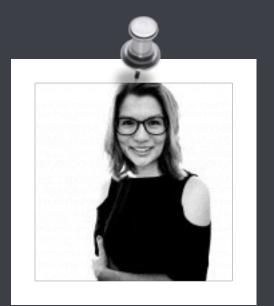


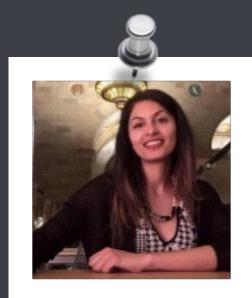






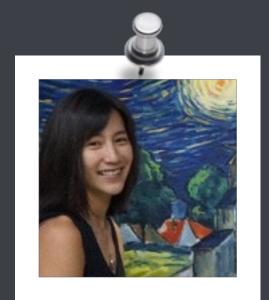


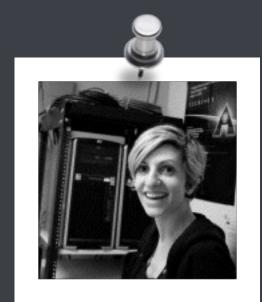








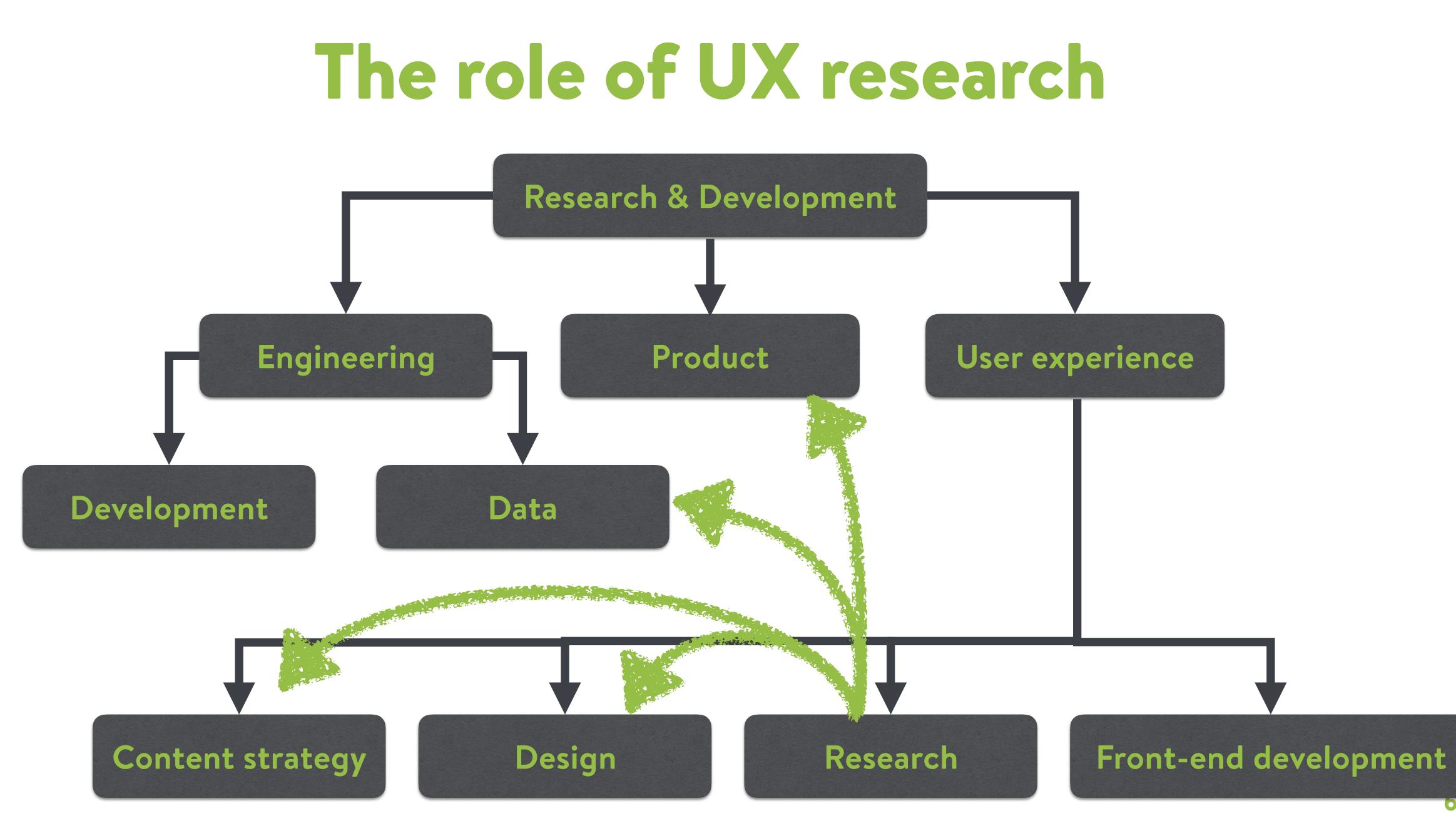




# The role of UX research

- Understand behaviours/needs/expectations around the product
- Make recommendations accordingly
- See those recommendations through
- Ask questions, find answers, share knowledge
- Encourage empathy across all practices



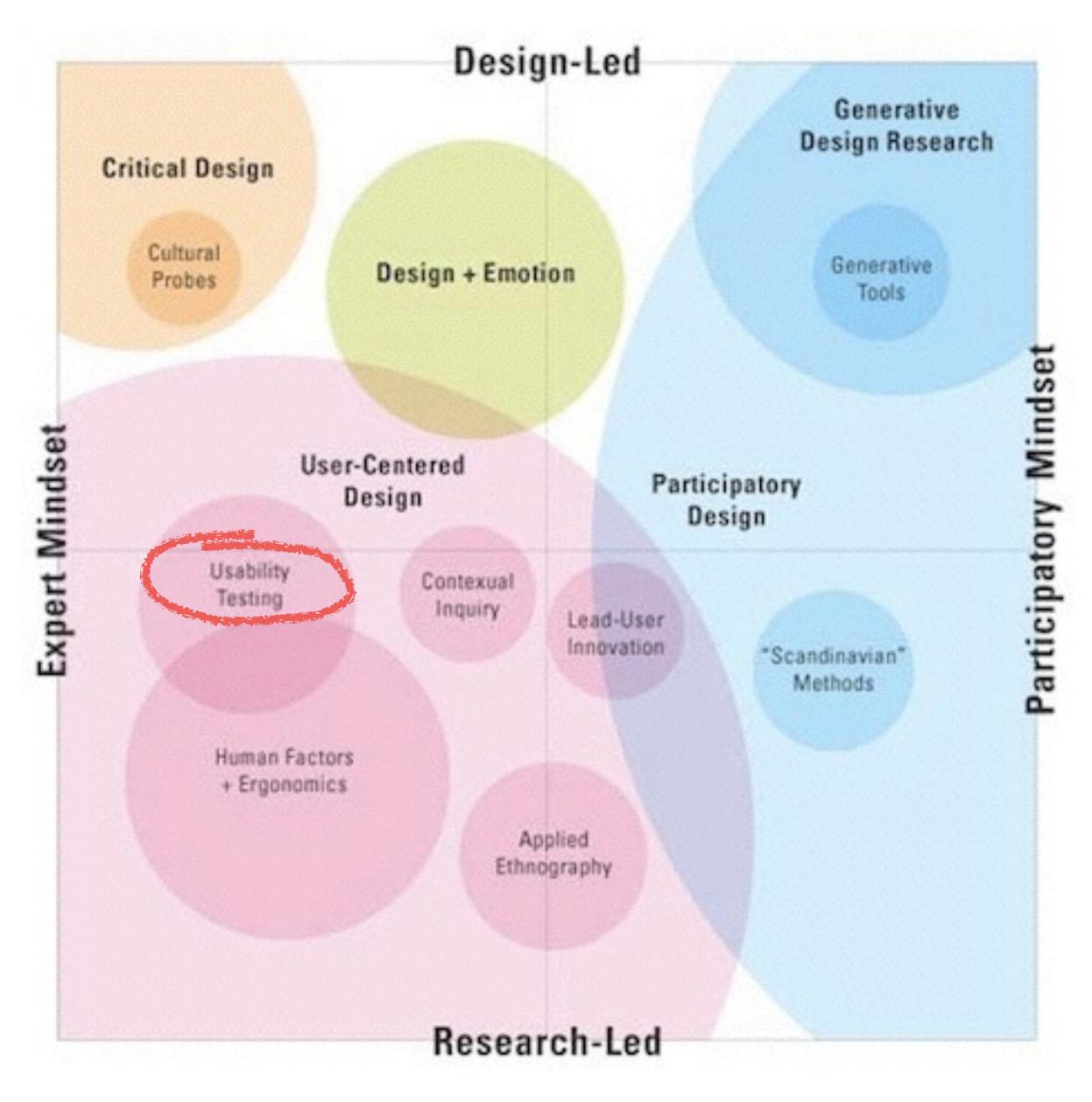






## USER RESEARCH ≠ USABILITY TESTING

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http://uxmag.com/sites/default/files/uploads/anderson-richard/sandersdiagram.jpg



## WE'RE ALWAYS LOOKING TO TRY OUT NEW THINGS











- Payment Gaterny M - Checkout Flow - Additional Checkent bottoms - Credentials Diversion Conversar - ORIN DISCUSSION - DIVERSE NEWFORD -SUNNALITE - DEVICE ADVOCATE - EKOSP IDERS AD THERT - UNPACE - AREIN AT 10







SO HOW DO WE CHOOSE THE RIGHT TECHNIQUE?

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Idea

Think

Explore



Build

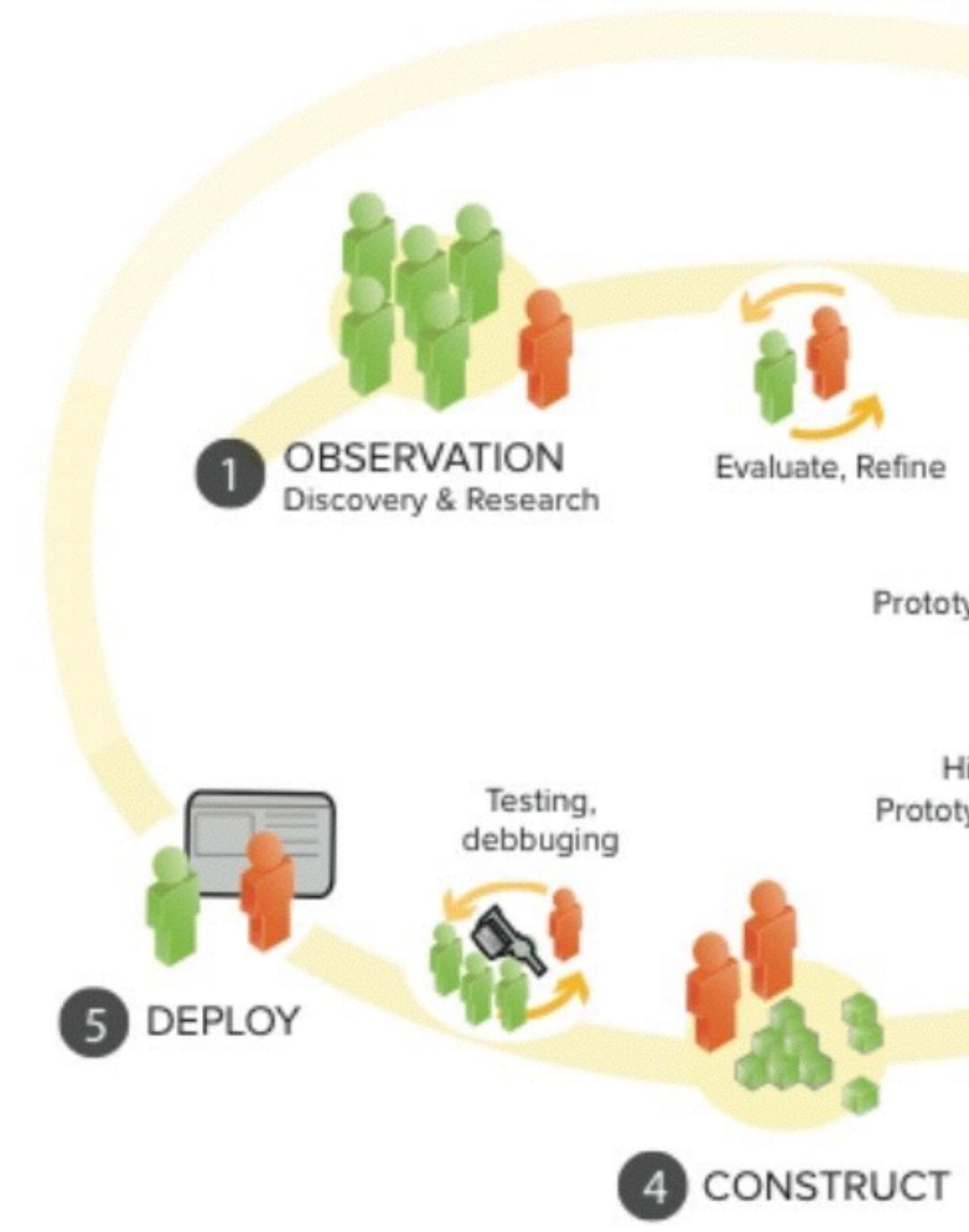






Tweak





DEFINITION Requirements & Features

Low-fidelity Design Prototype, Evaluate, Refine

Hi-fidelity Design Prototype, Evaluate, Refine DESIGN

3

Translate user research into design concepts



17



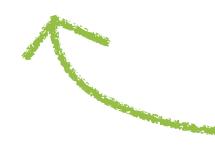
- What potential problems might we solve?
- How might we gather context on the problem?







Idea



## **Research methods:**

- Existing research and data
- Observations, interviews, diaries, internal workshops









- What are the root problems?
- What are the biggest challenges we might focus on?





Think



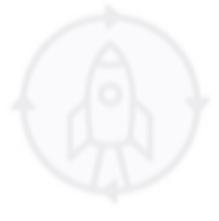
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**Research methods:** 

- Profiles/segments/personas
- Interviews, co-design/participatory workshops

# Getting shit done











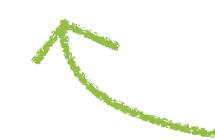








Explore



# Getting shit done

#### **Questions:**

How might we be scrappy and effective when testing assumptions and hypotheses?







## **Research methods:**

- Lo-fi prototype testing
- Clickable mockups



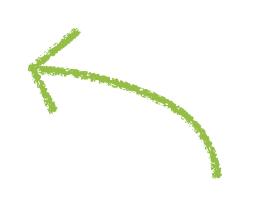


- Can people use what we're building?
- Is what we're building addressing the initial problems and goals?



#### **Research methods:**

- High-fidelity usability tests
- Diary studies
- Beta testing





Build







Launch

Tweak





- Are people using it in the way we thought they would? •
- Did we successfully solve the problem we identified? •

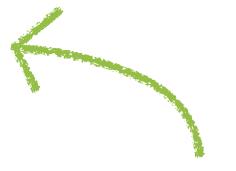




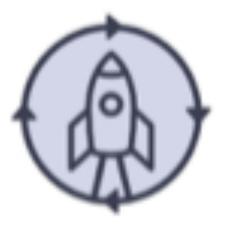


## **Research methods:**

- Forums/social media monitoring •
- Open-form feedback forms







Launch











- •
- •



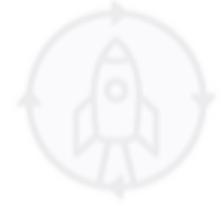




What incremental improvements might be worthwhile? What revisions should we make to our roadmap?











Tweak

#### **Research methods:**

- Retrospectives
- Post-mortem
- Analysis of support tickets





## SO WHAT DO YOU DO WHEN YOU DON'T HAVE **DEDICATED RESEARCHERS?**

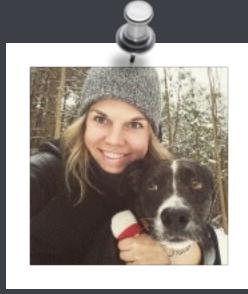


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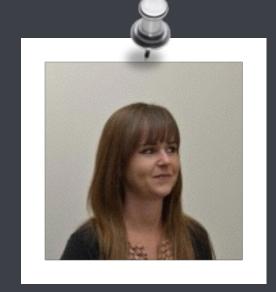
# The UX research team



Design/MBA



Graphic design



Psychology



Psychology



Art History



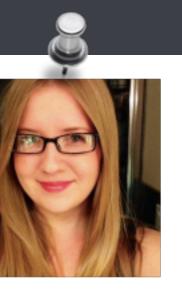
Public Relations

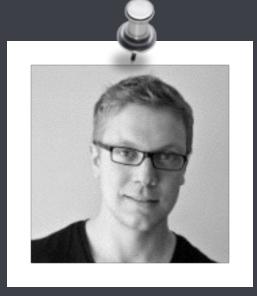




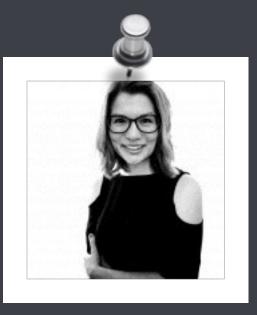


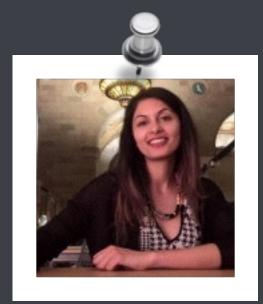
Commerce/ Commerce/ Marketing





Industrial Design

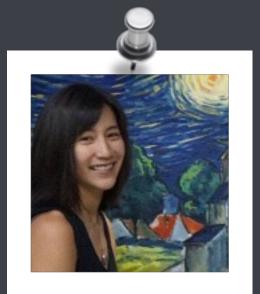




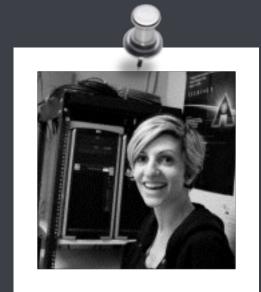
Industrial Anthropology Design



Marketing



Computer Science



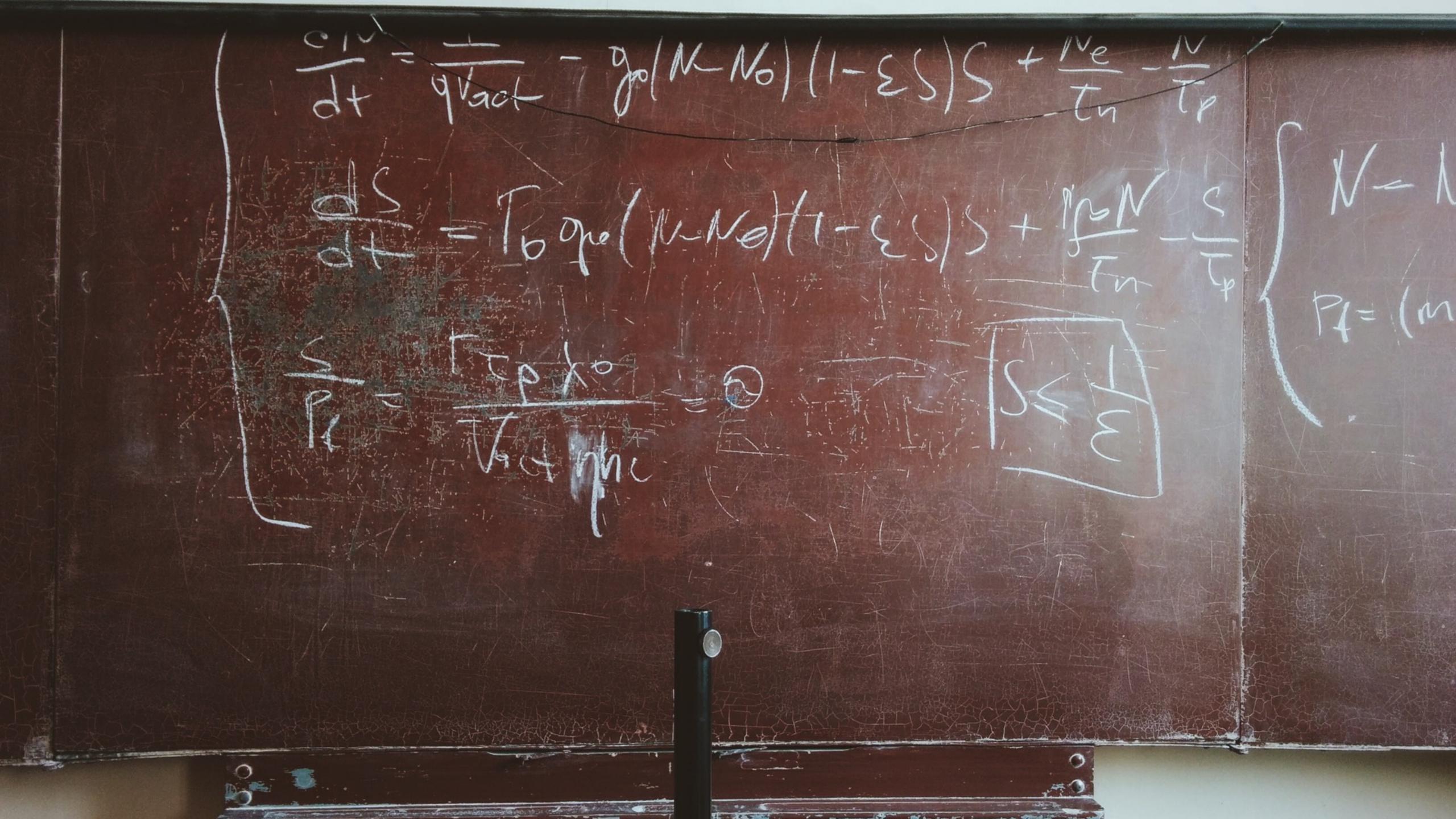
Electrical Engineering





WE'RE ALL DRAWN BY A SENSE OF CURIOSITY ... AND A COMPULSION TO ASK QUESTIONS.

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#### WHY GOOD ENGINEERS (SOMETIMES) CREATE BAD INTERFACES

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#### ABSTRACT

This paper presents a view of system design that shows how good engineering practice can lead to poor user interfaces. From the engineer's perspective, the ideal interface reflects the underlying mechanism and affords direct access to the control points of the mechanism. The designer of the user interface is often also the designer of the mechanism (or at least is very familiar with the mechanism), and thus has a strong bias toward basing the interface on the engineering model. The user, however, wants to complete a task, and an interface that is based on the task is often more appropriate than one based on the system mechanism. We discuss these issues, and also discuss where to position the user interface between the poles of the engineering model and the task model.

KEYWORDS: User interface, design, engineering, task model.

#### ENGINEERING MODELS AND TASK MODELS

For our discussion, we will use a very simple model of a system. A system consists of an underlying mechanism that produces the desired behavior. Of course, we don't always want exactly the same behavior, so the mechanism has several control points that alter its workings and change the behavior. The control points in a mechanical system might be valves or levers, while the control points in a computer software system might be variables or procedure arguments.

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The main thesis of this paper is that a good engineer's model of the system is based on knowledge of the underlying mechanism, and therefore the interface most natural to the engineer is one that provides direct access to the control points in the mechanism. The user, however, is primarily concerned with the task to be accomplished, and a problem arises if the user's model of the task does not map cleanly onto the system mechanism. The user may not need to access control points directly or may wish to access a set of control points in systematically constrained ways. In that case, the engineer's ideal interface will not be a good interface for the user. It may be advantageous to base the user interface on a task model instead. This paper explores some of the factors involved in making this decision.

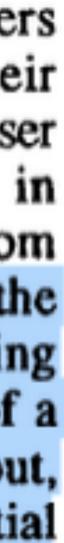
#### ADVANTAGES OF BASING THE INTERFACE ON A TASK MODEL

#### An example: The carburetor

We can illustrate these points by examining the carburetor on an automobile engine.1 As shown in cross-section in Figure 1, a carburetor has two main valves. The choke valve, in the upper portion of the carburetor, controls the amount of air entering the carburetor and hence the proportion of air in the gas-air mixture. The throttle valve below controls the total amount of gas-air mixture passing through to the engine. These two valves are major control points for the engine, and it is not surprising that the interfaces for early automobiles provided the driver with levers and knobs directly connected to the choke and throttle valves. But as automobile interfaces evolved over the next 100 years, only the fittest portions survived because most

The point of these examples is to show that engineers sometimes are so involved in the mechanism of their systems that they are blinded to the probability that the user is more interested in accomplishing a task than in manipulating the mechanism. At CHI+GI'87, Tom Landauer [9] noted that once designers understand the underlying system mechanism, they cannot help being influenced by their knowledge. He used the analogy of a hidden figure in a picture – once the figure is pointed out, you will always see it. You cannot return to your initial naive state.







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<sup>&</sup>lt;sup>1</sup>This discussion refers to the mechanical carburetors common before the 1980's. We have little idea how modern computerized carburetors operate.



Photo by Bob Mazzer





## ANYONE CAN ADOPT A RESEARCH MINDSET



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# IT'S A MATTER OF



ASKING QUESTIONS, FINDING ANSWERS, SHARING KNOWLEDGE, AND ENCOURAGING EMPATHY.

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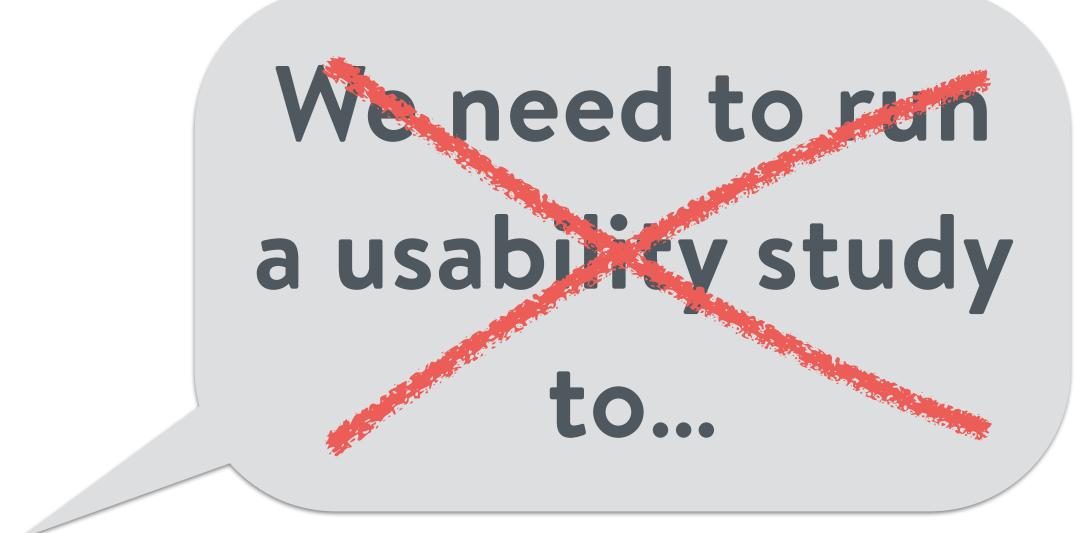
# **Tip #1:** METHOD



ACCEPT THAT THERE IS NO "ONE-SIZE-FITS-ALL"

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# We'd like to learn more about...



GSD phase	<b>Research question</b>	Research method	
ldea	What potential problems might we solve?	Existing research and data	
Think	What are the root problems?	Interviews, co-design/participatory workshops	
Explore	How might we test assumptions and hypotheses?	Lo-fi prototype/mockup testing	
Build	Can people use what we're building?	High-fidelity usability tests, diary studies, beta tests	
Launch	Are people using it in the way we thought they would?	Forums/social media monitoring	
Tweak	What improvements might be worthwhile?	Analysis of support tickets, retrospective	



## Phase

## Question

## Method

# Findings

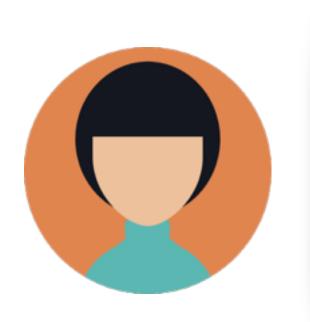




### **Tip #2:** ALLOW THE USER'S ROLE TO BE FLUID



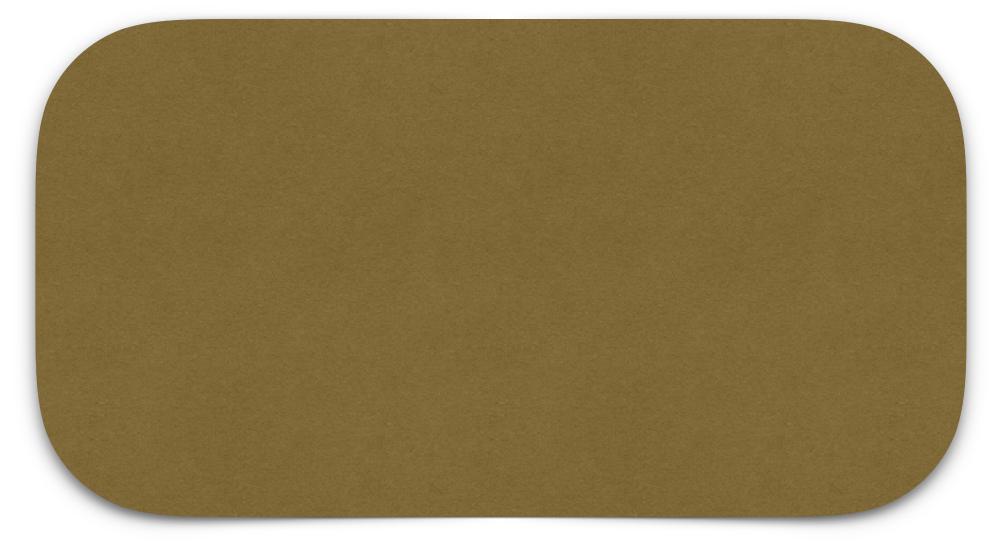
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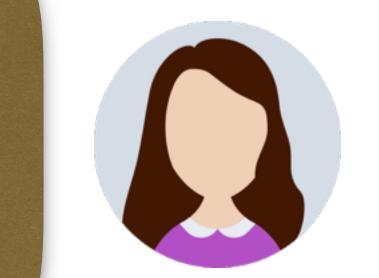






























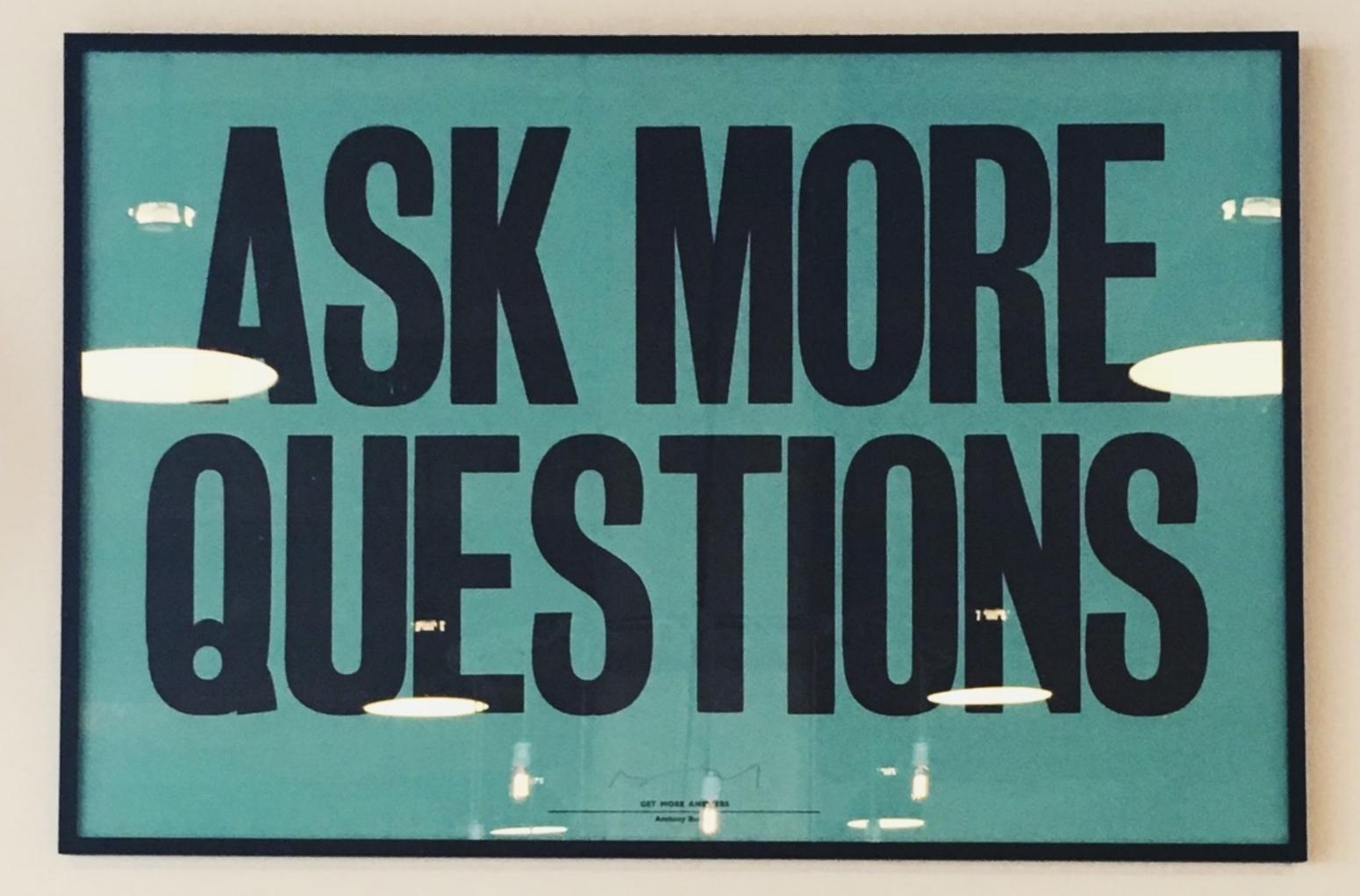
**Tip #3:** CHOOSE TO BE PROBLEM-ORIENTED



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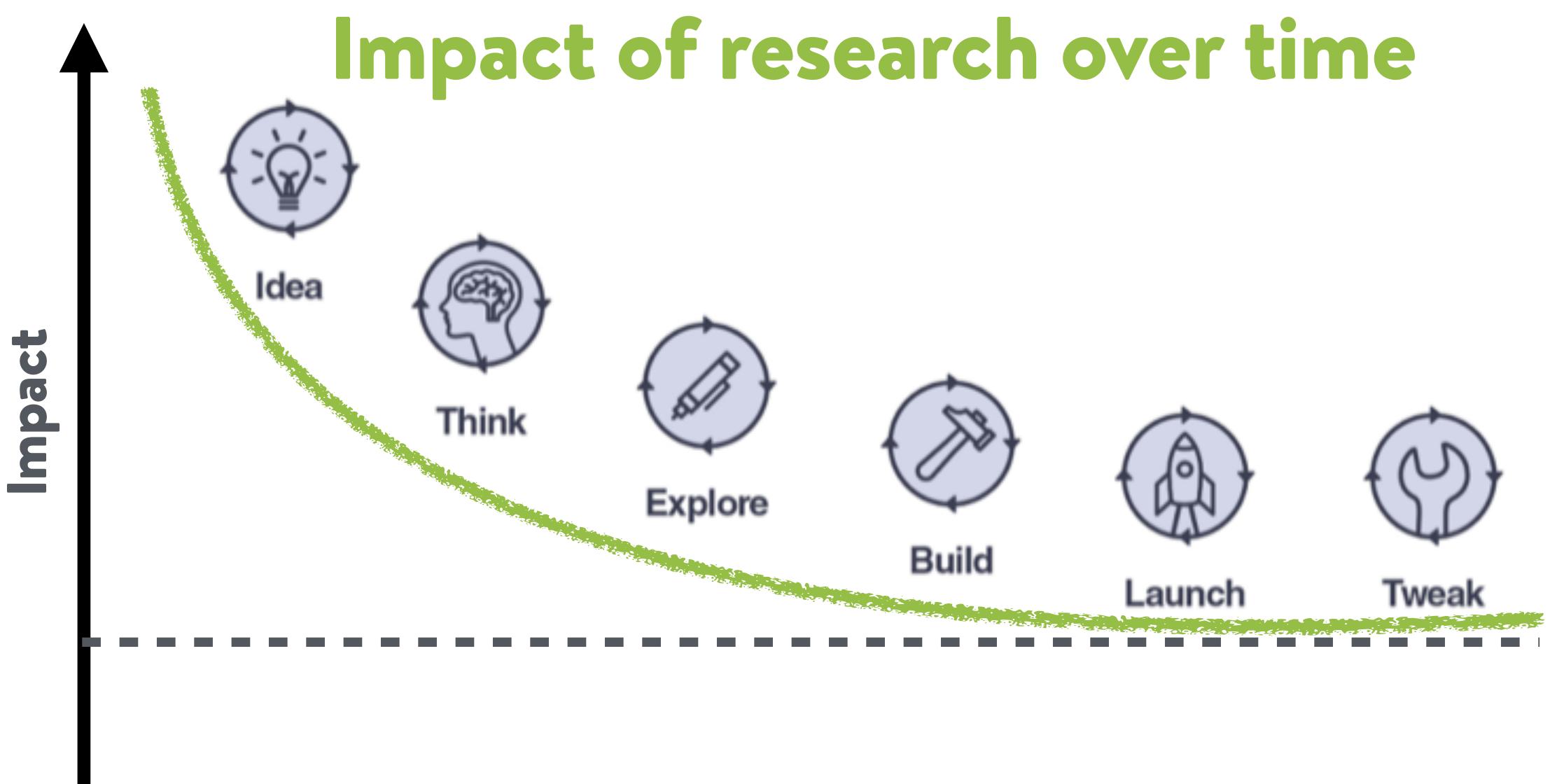


**Tip #4:** ASK EARLY, AND ASK OFTEN











## **Tip #5:** FIND INFORMATION ALL AROUND YOU

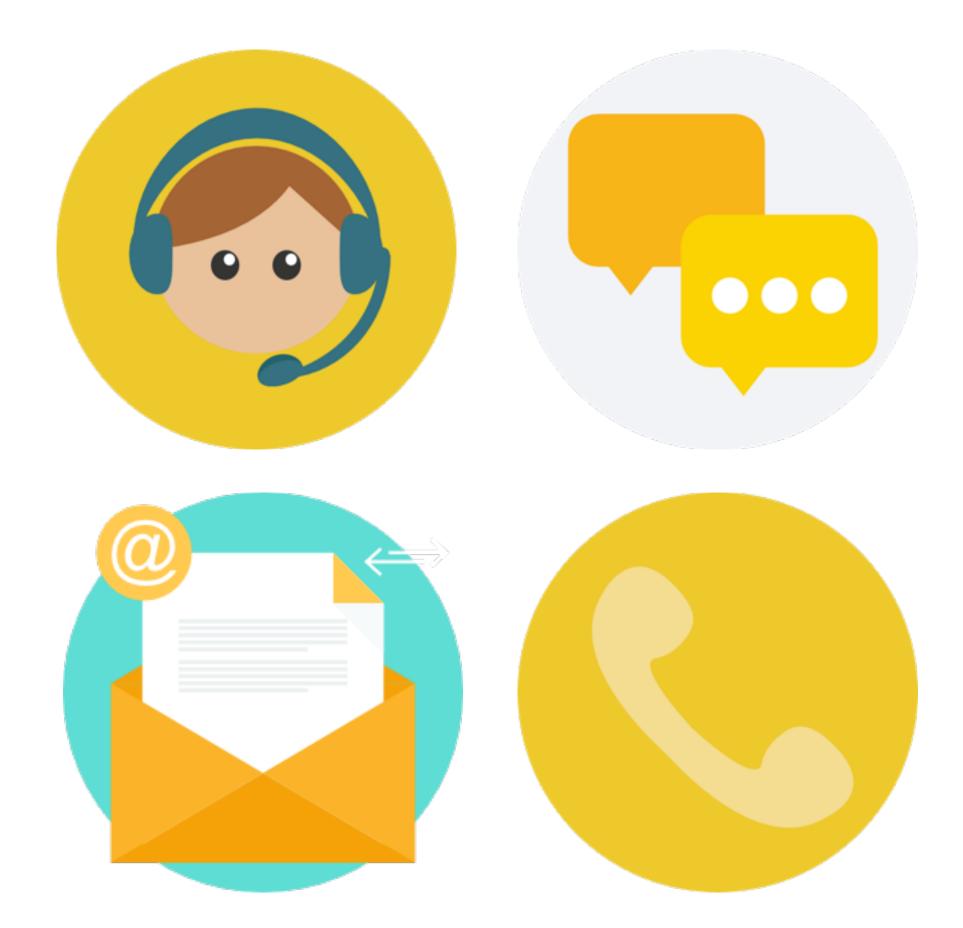


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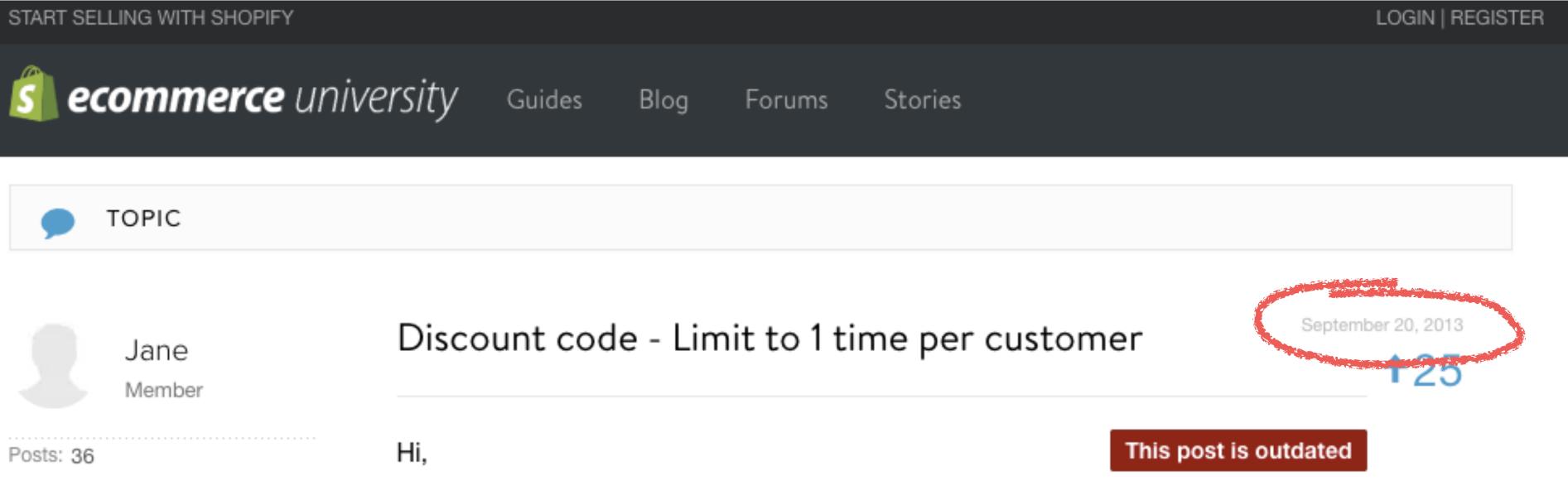
# Analytics













I want to limit this particular discount for 1 time use per customer. Can this be done?

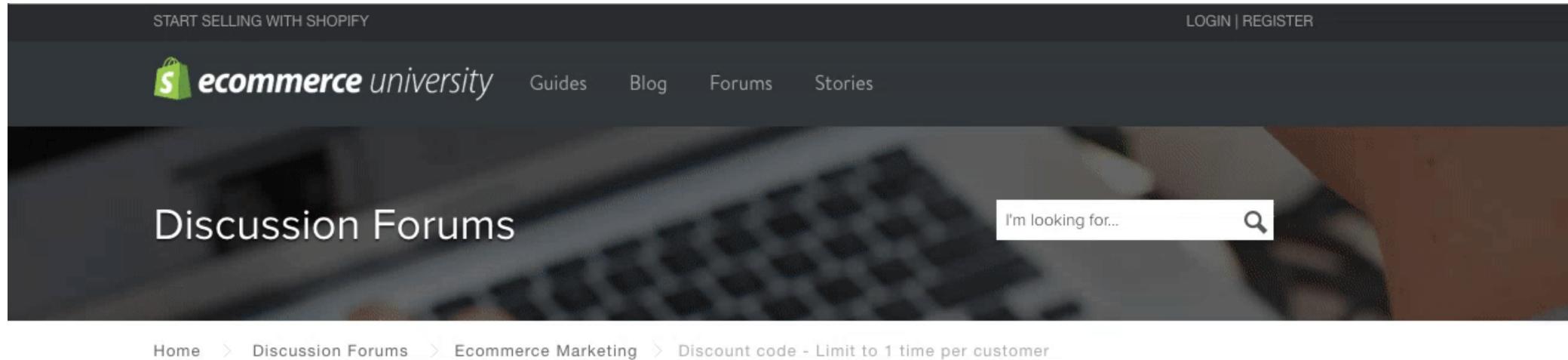
There's only an option How many times can this discount be used? Does this apply to 1

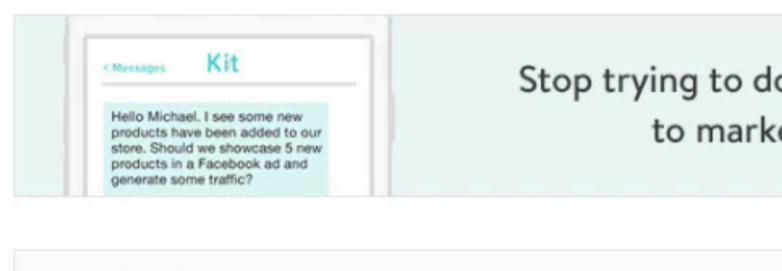
customer or overall?

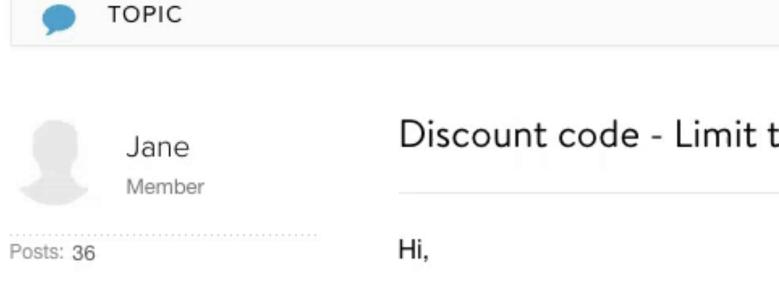
Thanks.











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I want to limit this particular discount for 1 time use per customer. Can this be done?

o it all alone. Add Kit et your store	Learn more	
to 1 time per customer	September 20, 2013	
This post is outdated		



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rickydazla Shopify Expert

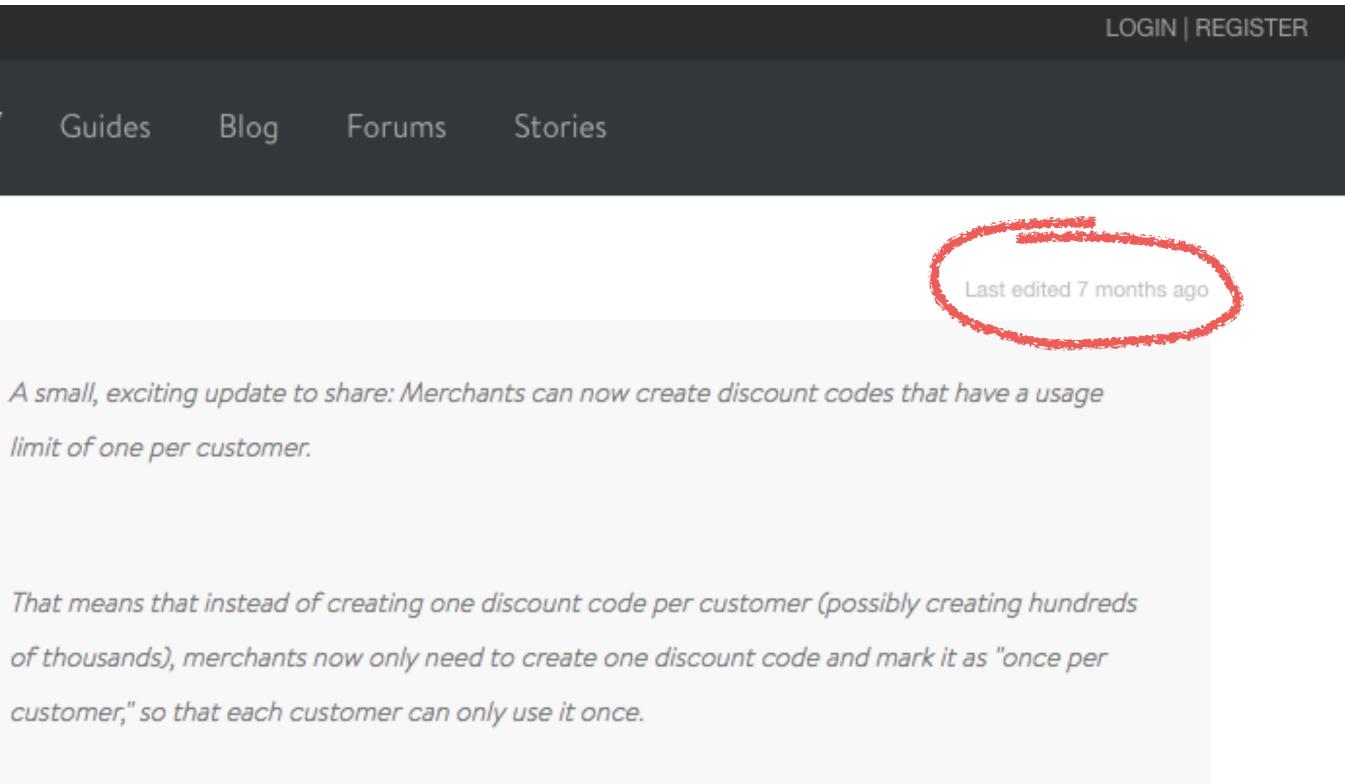
experts.shopify.com/tricky3 Posts: 648

limit of one per customer.

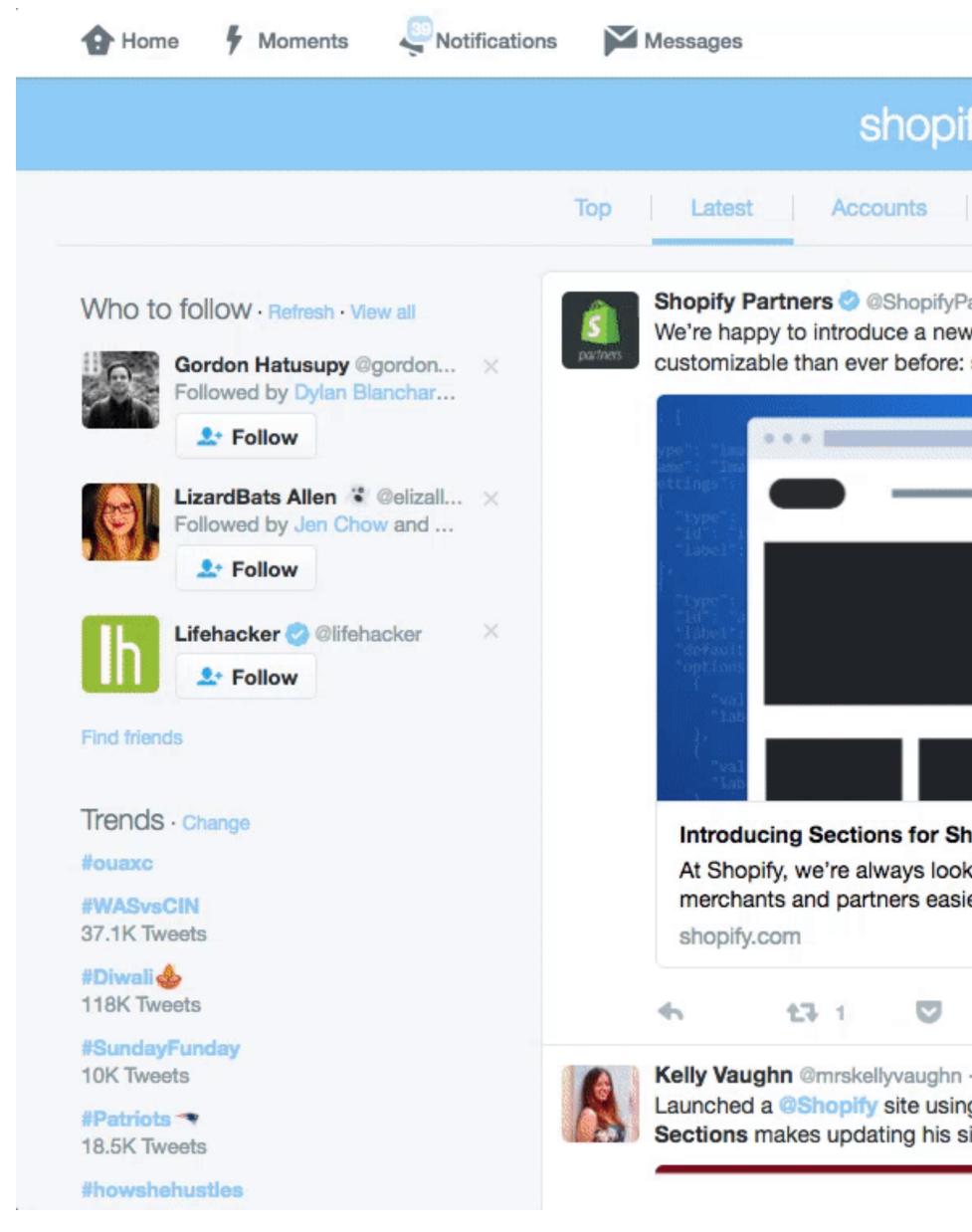
### Thread Closed!

I'm a million different people









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Jonathan Kennedy Month o' May 9 · Port Montreal in the whereabouts o' QC	Shopify Entrepreneurs is a group of Shopify store owners, store(tharr be more) Peer into the depths		
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free growth call - only requirement is a live Shopify store)(tharr be more) Continue further down this 'ere scroll	GATHER YE'SELF A NEW CREW		





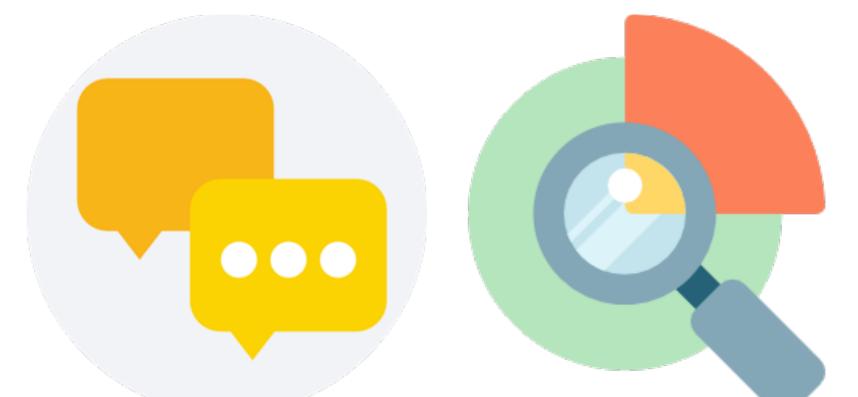
**Tip #6:** TIGHTEN YOUR FEEDBACK LOOP



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### Qualitative

e.g. Forums, Support, Social media, User research



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# Uncover hypotheses

## Uncover patterns

# Quantitative







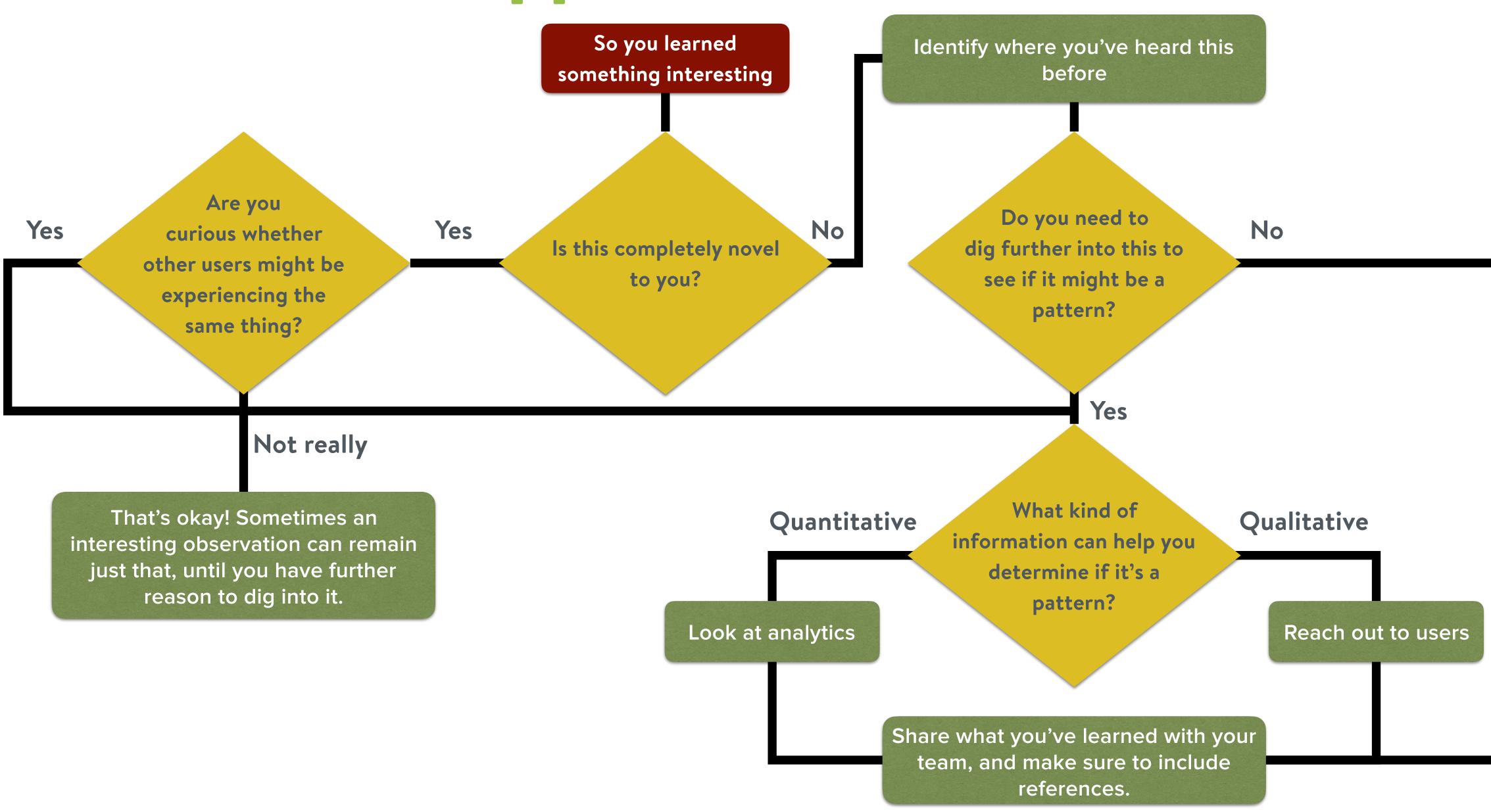
### **Tip #7:** SHARE THE INSIGHTS, NOT THE ANECDOTES



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# What happens after a store visit?





**Tip #8:** CONSIDER THE IMPACT OF SMALL CHANGES



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# Consider the impact of quick wins vs. full releases

"Now there is a constant tweaking of formats and systems. For the 'creatives' who work behind the scenes this might seem easy and inconsequential - little incremental changes in a constant quest for better efficiencies, or striving to make an interface seem cleaner or more intuitive blah blah - but for process workers at the other end of the system it is just **bloody annoying**. It's as though every week or two when you opened your desktop on your computer the icons had been changed, and subtly re-arranged, and some of them had been done away with and new ones added. Some things might work better, and some might not, and it might only take you a day or two to get used to the new system and you do get used to it. Then in a couple of weeks it all changes again and on and on."

## What's the tradeoff?





## **Tip #9:** DEVELOP EMPATHY FOR YOUR AUDIENCE TOO



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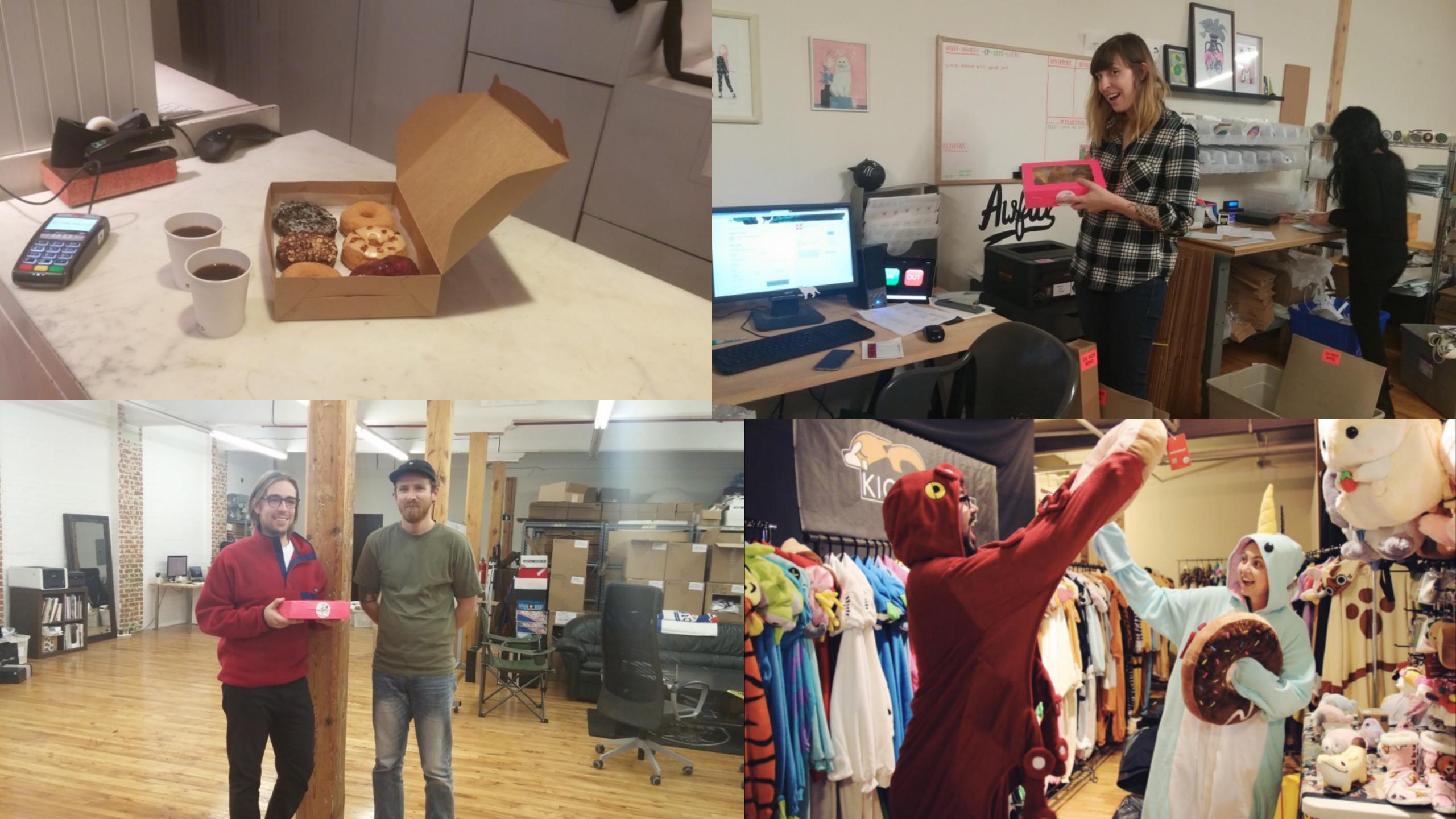






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**Tip #10:** BE CONTAGIOUS





# With one researcher for every 140 employees...



# 



# ... we need everyone to think like a researcher.



# -----



# 10 tips for adopting a research mindset

#2: Allow the user's role to be fluid **#3:** Choose to be problem-oriented **#4:** Ask early, and ask often **#5:** Find information all around you **#6:** Tighten your feedback loop **#7:** Share the insights, not the anecdotes **#8:** Consider the impact of small changes **#9:** Develop empathy for your audience too **#10:** Be contagious



- **#1:** Accept that there is no "one-size-fits-all" method

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## BEING A RESEARCHER ISN'T JUST ABOUT RUNNING STUDIES AND WRITING REPORTS.



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## IT'S ABOUT ADOPTING A MINDSET OF ASKING QUESTIONS, FINDING ANSWERS, SHARING KNOWLEDGE, AND ENCOURAGING EMPATHY.



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