

TURNING ANECDOTES INTO INSIGHTS

MIXED METHODS RESEARCH IN SUPPORT OF DESIGN

DALIA EL-SHIMY

SENIOR UX RESEARCHER AT SHOPIFY



An ecommerce platform made for you

Whether you sell online, on social media, in store, or out of the trunk of your car, Shopify has you covered.

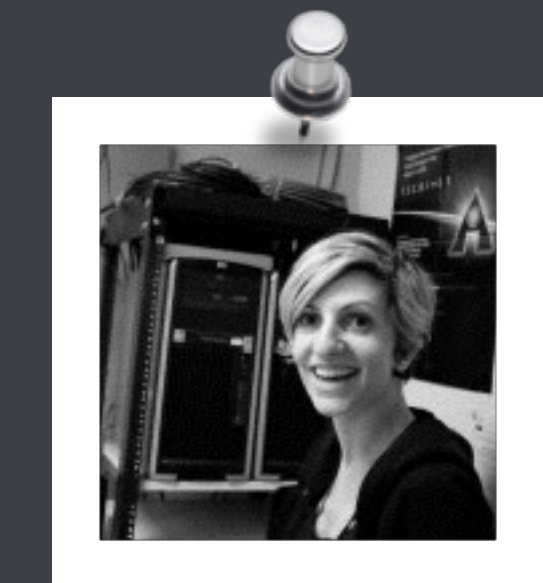
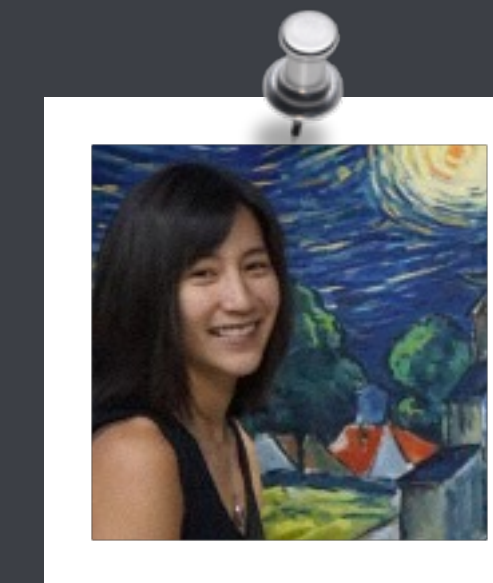
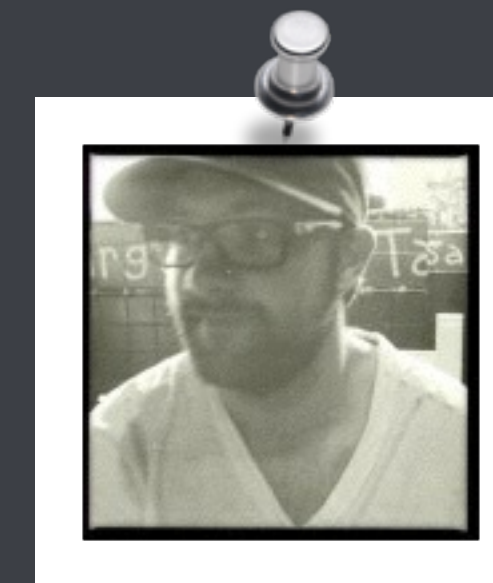
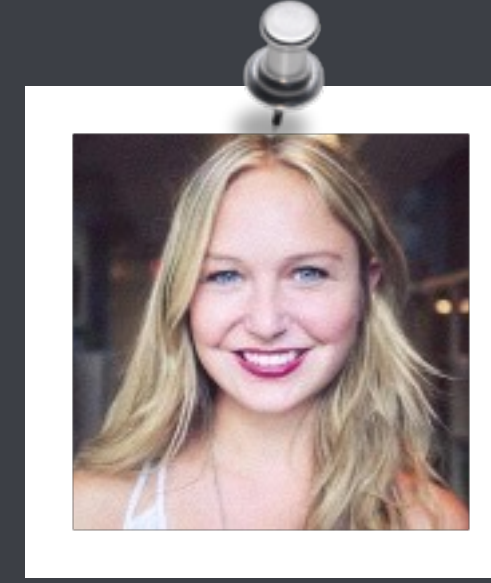
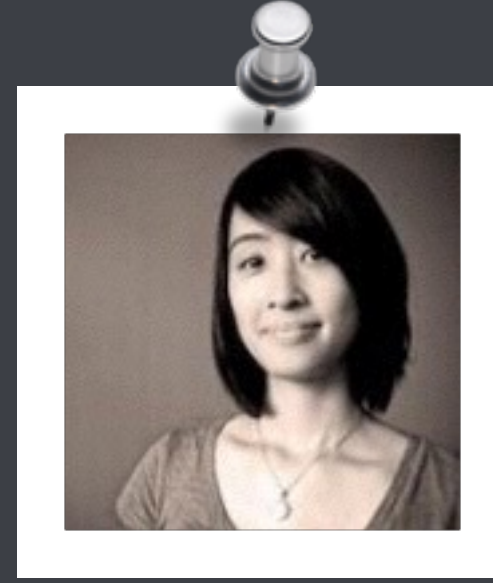
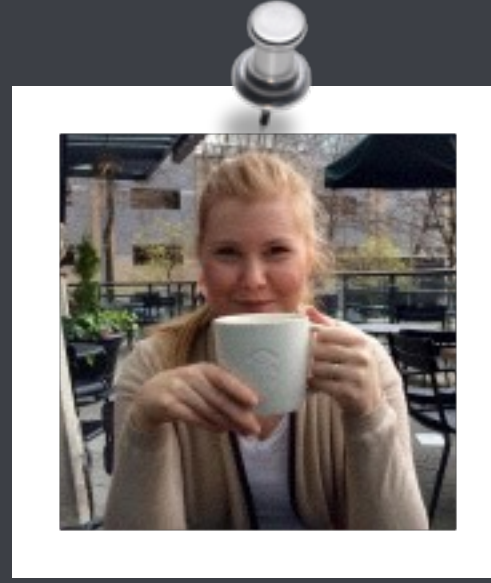
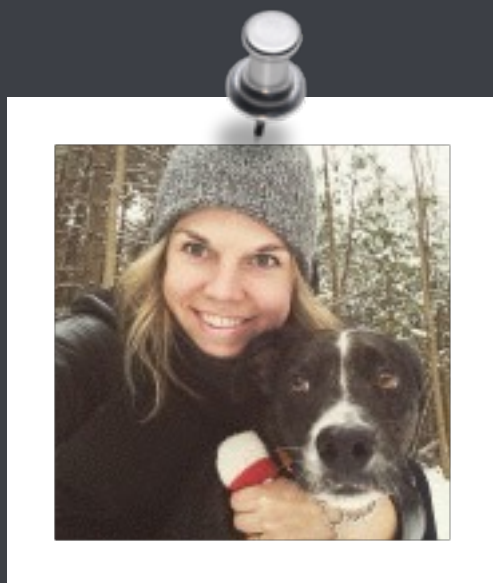
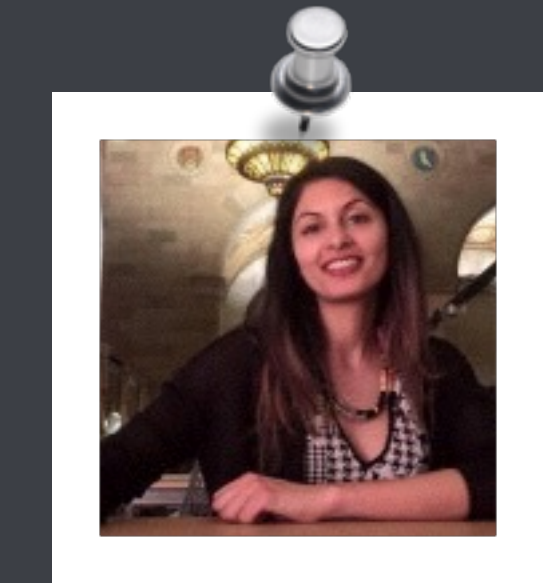
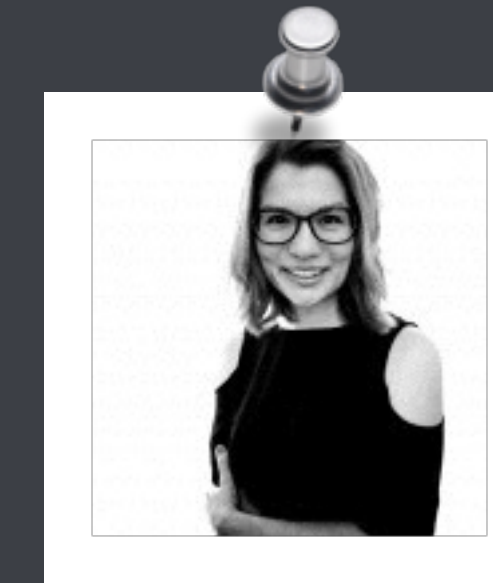
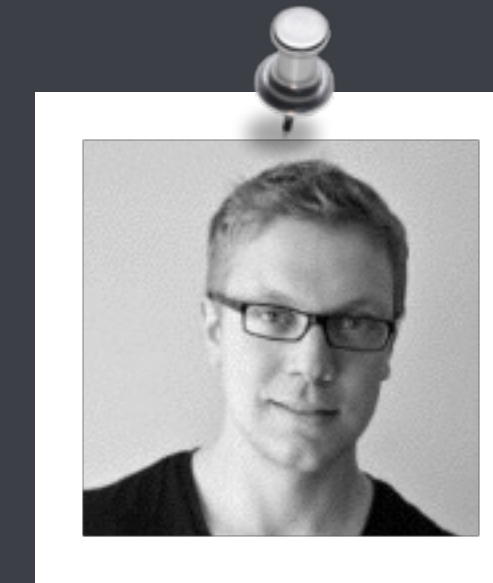
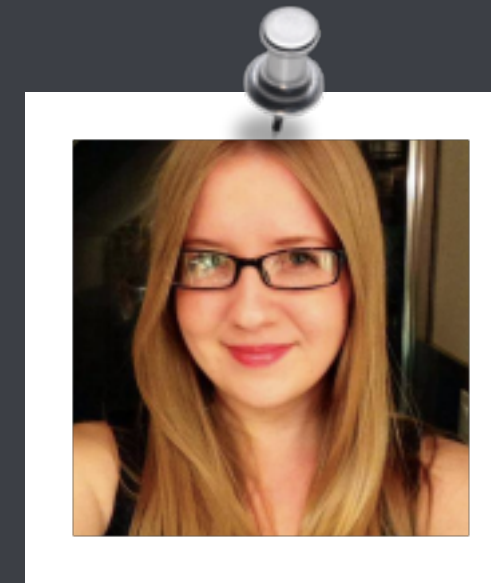
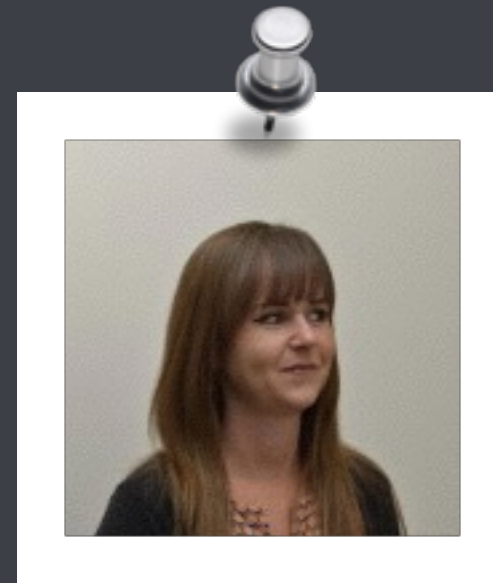
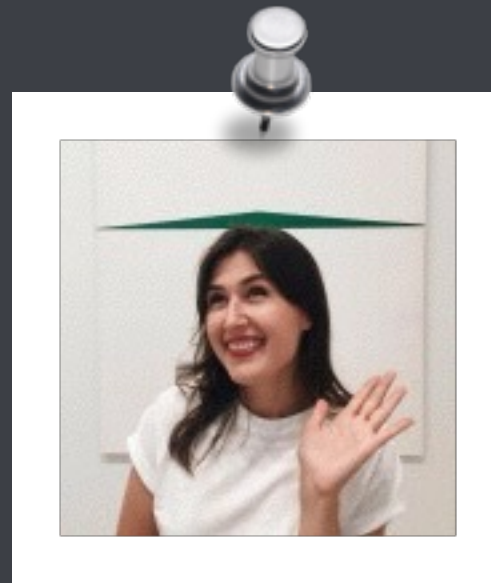
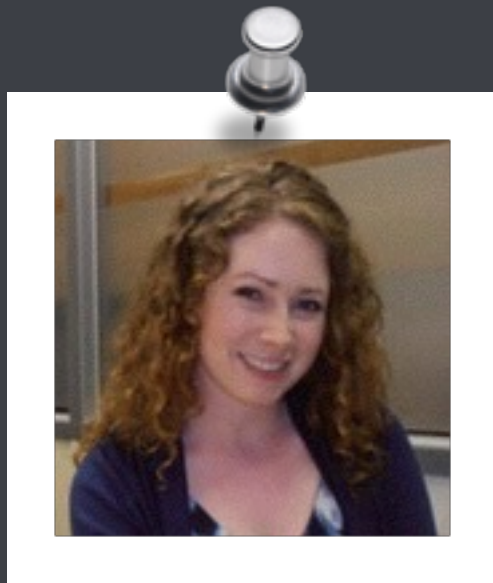
[Get started](#)

Try Shopify free for 14 days. No risk, and no credit card required.

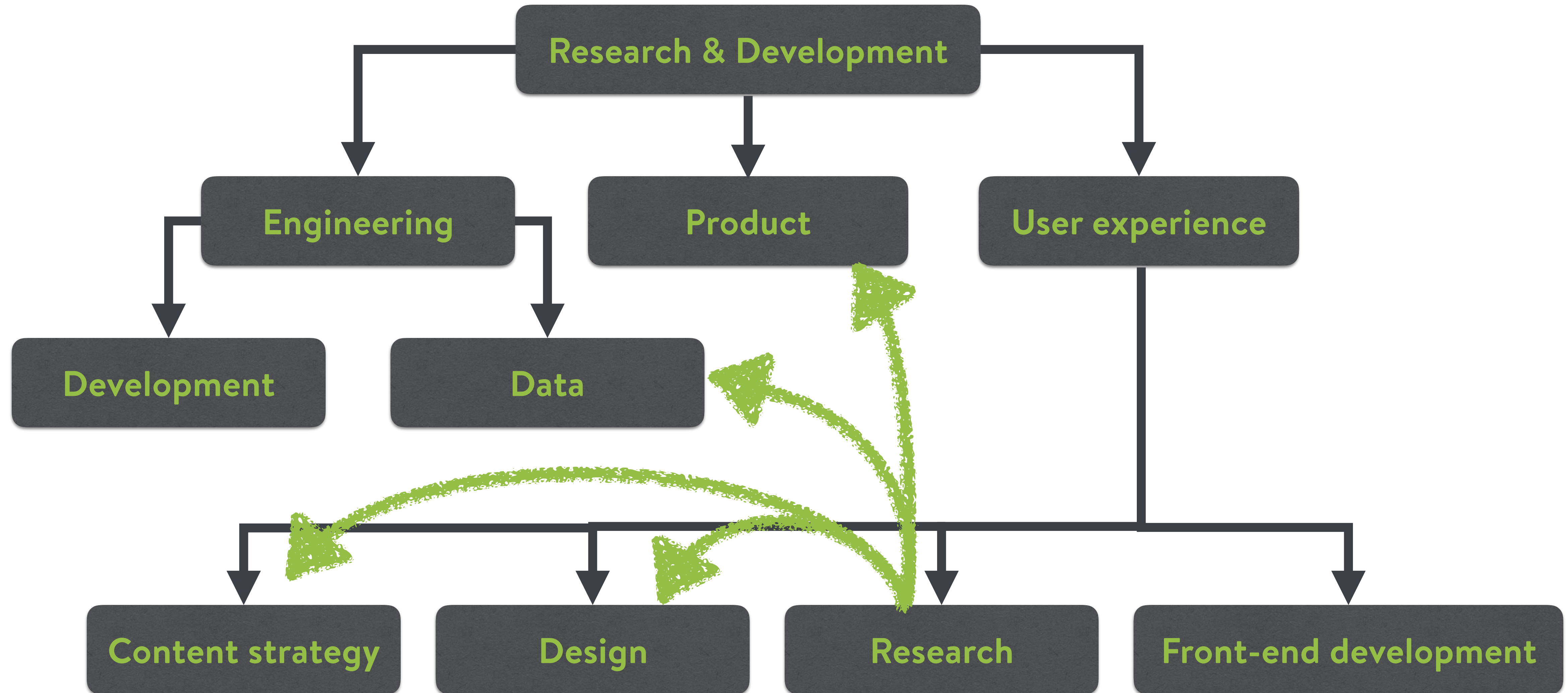




The UX research team



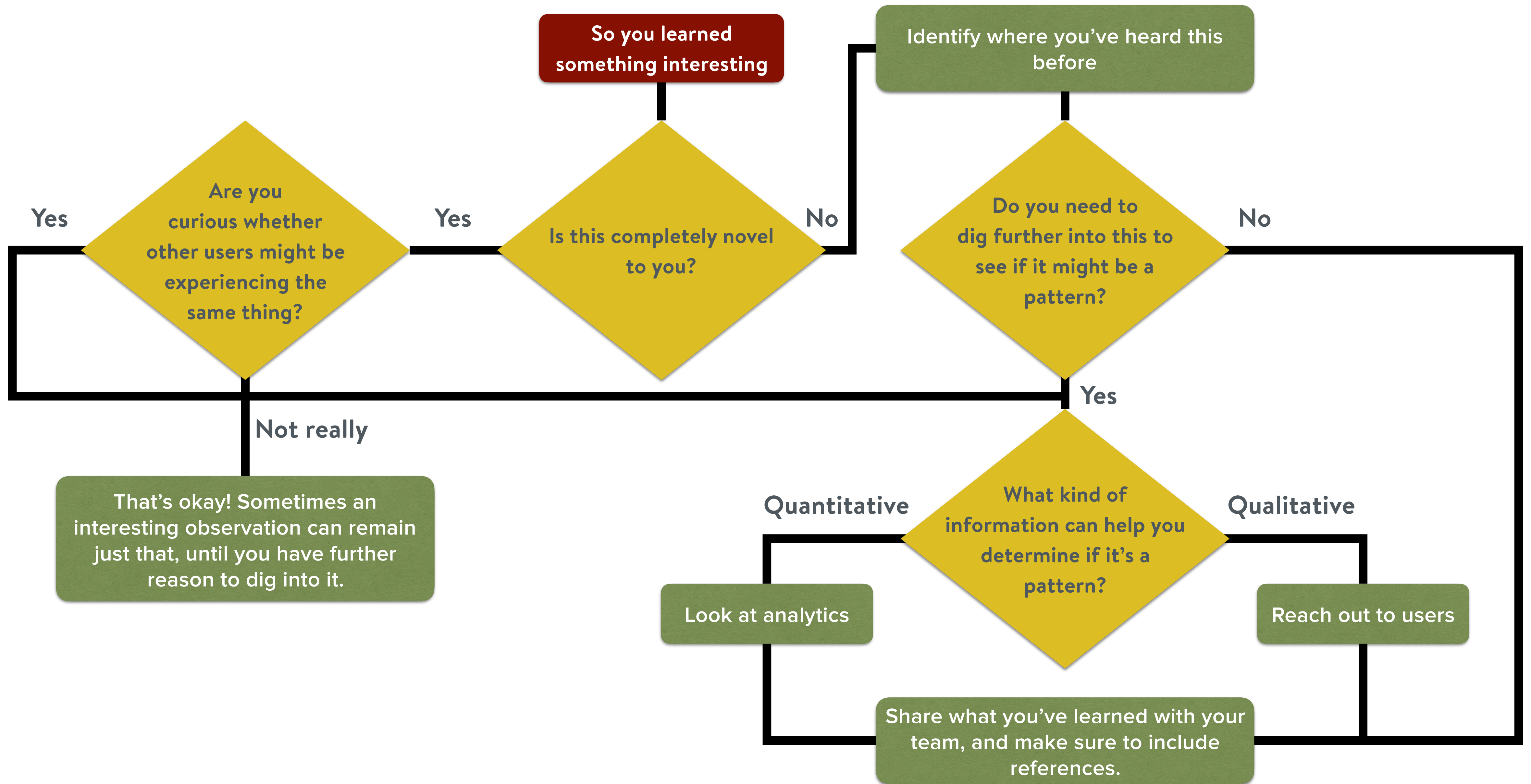
The role of UX research



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





TO FORM A COMPLETE PICTURE, BOTH BIG AND THICK DATA ARE CRITICAL BECAUSE THEY PRODUCE DIFFERENT TYPES OF INSIGHTS AT VARYING SCALES AND DEPTHS



@TRICIAWANG

When you combines statistical trends with stories and personal experiences, the collective strengths of both provides a better understanding of the research problem than either forms of data alone.



Mixed methods research

*“An approach to research in the social, behavioural, and health sciences in which the investigator gathers **both quantitative (close-ended) and qualitative (open-ended) data, integrates the two, and then draws interpretations based on the combined strengths of both sets of data to understand research problems.**”*

- Creswell, 2015

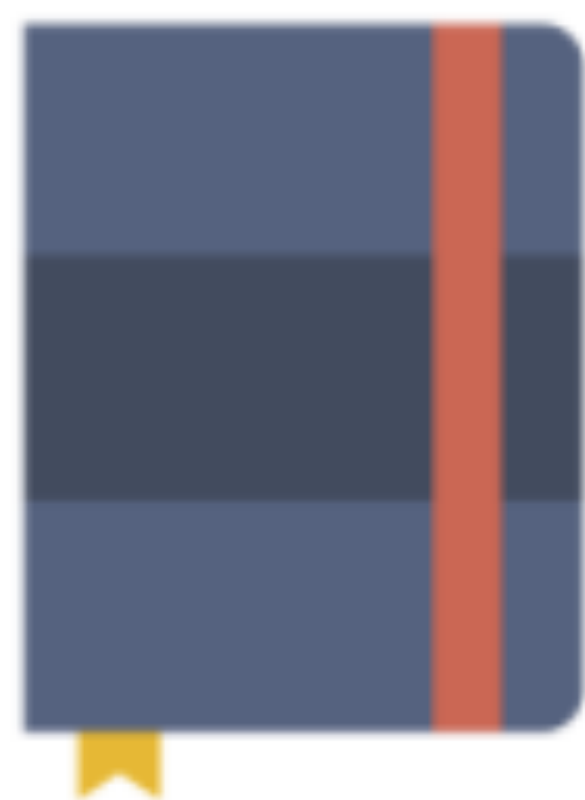


LET'S TALK ABOUT **QUALITATIVE** RESEARCH









shopify

Journal study

Elyse's Shopify Journal

Welcome back Elyse, and thanks for taking the time to fill out your journal today!

* 1. How's your theme coming along?

- ☐ I'm still working on it.
- ☐ It's ready to go live on my store.







Shoe
Chi

Shopfina Cart



Décor

Décor &
Cie.



Shopping Cart

Red Velvet
Cupcake



\$2.75

\$10 gift card

Don't you just love cupcakes? Especially when they're on sale? Well, it just so happens your favourite pastry shop, Sweet Deli, is celebrating its 4-year anniversary by having a "Buy 4, Get 1 Free" promotion on their all-time favourite flavour: a strawberry cupcake with chocolate icing. Hurry up and grab some of these delicious cupcakes for yourself!

shopping cart:
chocolate cupcakes

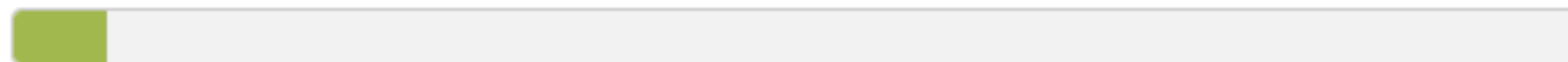
1A

Dapper
Gents



LET'S TALK ABOUT **QUANTITATIVE** RESEARCH





This is your chance to directly influence the upgrades we'll make to Shopify over the next year. The more we understand what's important to you, the better we can develop solutions to help you make sales and grow your business.

This survey will only take about 10 minutes. Complete the survey by Friday, March 11th for your chance to win an \$800 Apple voucher.

*** How would you describe yourself?** 

- ☐ Shopify store owner
- ☐ Working for a Shopify store owner
- ☐ Shopify partner or expert
- ☐ Previously owned a Shopify store
- ☐ Did the free trial but never launched my store

Shopify Redshift_7.sql - DataGrip 2016.1.1

DB ConsolesShopify RedshiftShopify Redshift_7.sql

DatabaseShopify Redshift_3.sqlShopify Redshift_4.sqlShopify Redshift_5.sqlShopify Redshift_6.sqlShopify Redshift_7.sqlnew_merchants_themes.sql

Shopify Redshift (warehouse)

adminchannelscheckoutdiscoveryerror_eventsexperimentsfacebookfinancefinance_opsfunnelinformation_schemainfrastructurainsightsinstafactsinternal_toolsloadingmarketing

WITH shops_using_debut AS (
SELECT DISTINCT _shop_key, "theme name"
FROM admin.theme_editor_customization_facts
WHERE "theme editor version" = '2'
AND "theme name" LIKE '%debut%' OR "theme name" LIKE '%Debut%'
AND "theme role" = 'main'
)
SELECT "shop created at (est)", "shop name", "shop permanent domain", "theme name"
FROM shops_using_debut
JOIN starscream.shop_dimension USING (_shop_key)
WHERE "shop created at (est)" >= '2016-10-26' -- (INSERT YOUR FAVE MIN DATE HERE)
AND "password enabled" = 'Password is Enabled'

warehouse.public

Database Console Shopify Redshift_7

OutputResult 3

1-500 of 501+

Tab S...(TSV)View Query

	"shop created at (est)" (yyyy-MM-dd HH:mm:ss.ffffff)	"shop name"	"shop permanent domain"	"theme name"
1	2016-12-05 11:22:46.000000	Sigma Beauty	sigmabeauty.myshopify.com	debut
2	2017-01-01 17:50:06.000000	Kay&Ky Collection	kay-ky-collection.myshopify.com	debut
3	2016-11-09 04:02:35.000000	krafty + kaeratana	krafty-kaeratana.myshopify.com	debut
4	2017-02-03 09:59:52.000000	868 Apperal	868-apperal.myshopify.com	debut
5	2017-01-21 10:25:11.000000	Drip Drop Water Testing	drip-drop-water-testing.myshopify.com	debut
6	2016-11-24 15:06:56.000000	organogoldstore	organogoldstore.myshopify.com	debut
7	2016-11-06 17:39:59.000000	Waters Supply Co.	waters-supply-co.myshopify.com	debut
8	2016-11-16 14:21:23.000000	DreamD's	dreamds.myshopify.com	debut
9	2016-11-17 06:30:53.000000	GEMELLILINE	gemelliline.myshopify.com	debut
10	2016-10-27 19:44:47.000000	Vanity Treasures	vanity-treasures.myshopify.com	debut
11	2017-01-01 14:31:41.000000	Health2020	health2020.myshopify.com	debut
12	2017-01-23 07:53:28.000000	Heavenly Creperie	octal-2.myshopify.com	debut
13	2016-11-07 22:43:03.000000	Rhett Tucker Handmade	rhett-tucker-handmade.myshopify.com	debut
14	2017-01-30 02:18:28.000000	Gardor Enterprises	gardor-enterprises.myshopify.com	debut
15	2016-11-15 19:04:50.000000	Jane's Fashions	janes-fashions.myshopify.com	debut
16	2017-02-06 15:46:02.000000	tshirtst	tshirtst.myshopify.com	debut
17	2017-01-22 15:44:15.000000	AksesuaraiJums	aksesuaraijums.myshopify.com	debut
18	2016-12-24 07:05:27.000000	Ev Yapımı	ev-yapimi.myshopify.com	debut
19	2017-01-10 22:55:53.000000	Grand Nerve	grand-nerve.myshopify.com	debut

10:26 LF UTF-8



Chen Karako

February 5, 2017 · Refreshed 2 minutes ago

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REPORT PARAMETERS

Refresh

Date Interval

Last 4 weeks



Ticket Topic

Online :: Domains



Support Tickets Analysis

Number of support tickets for a chosen topic and period, with comparisons to an equal previous period, normalization by total number of customers, and as percentage of total support tickets.

Number of Tickets
and rate of change from previous period

14,583

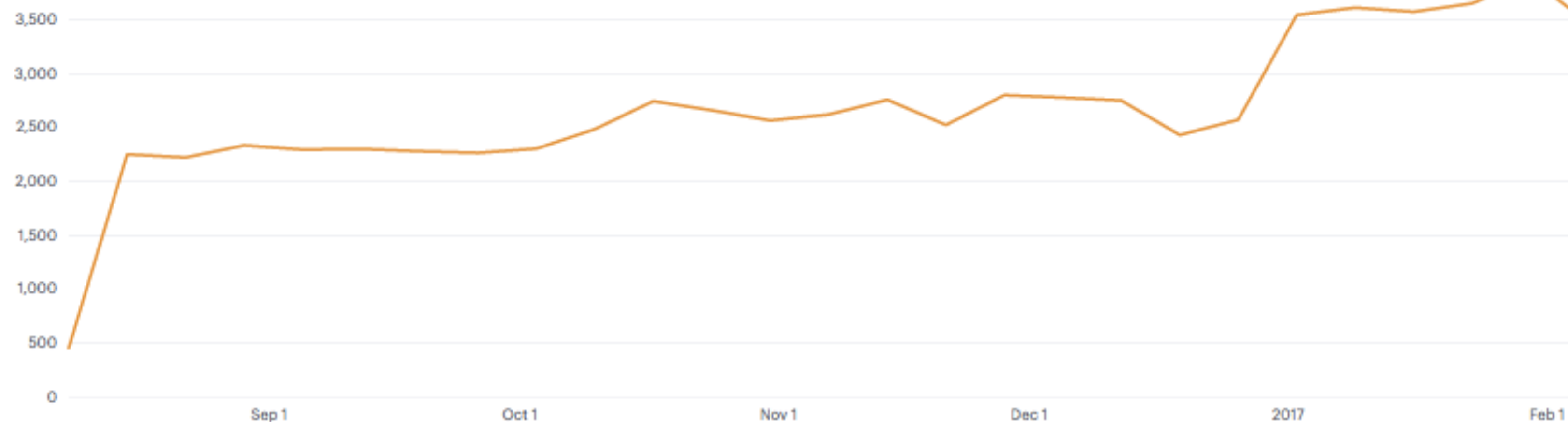
▲ 19.8%

Percent of All Support Tickets
and rate of change from previous period

7.04%

▼ 1.7%

Number of tickets for this topic per week (last 6 months)

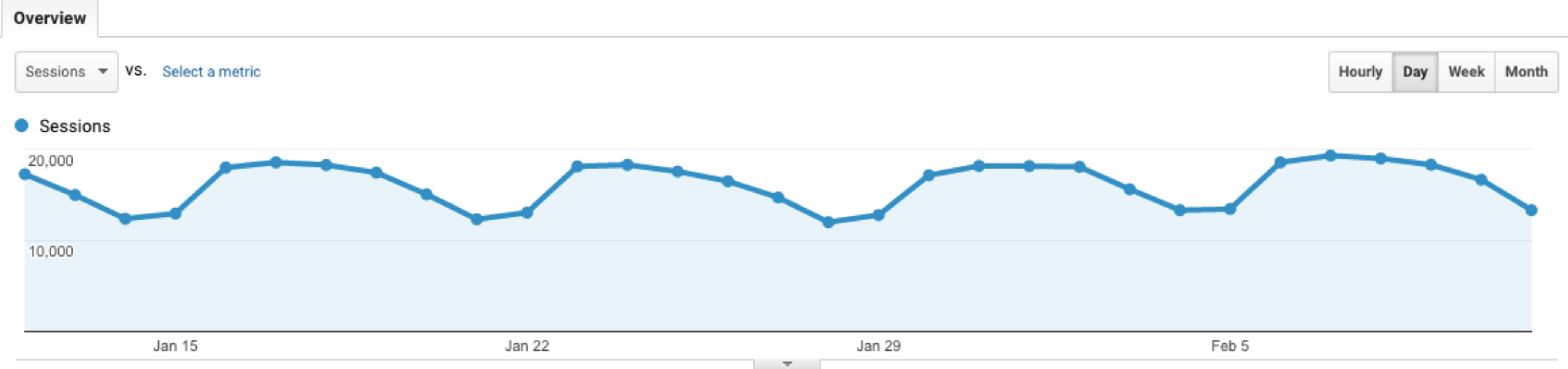


Search reports & help

- Dashboards
- Shortcuts
- Intelligence Events
- Real-Time
- Audience

All Users
100.00% Sessions

+ Add Segment



Sessions

498,621

Users

255,457

Pageviews

3,147,725

Pages / Session

6.31

Avg. Session Duration

00:04:40

Bounce Rate

30.86%

% New Sessions

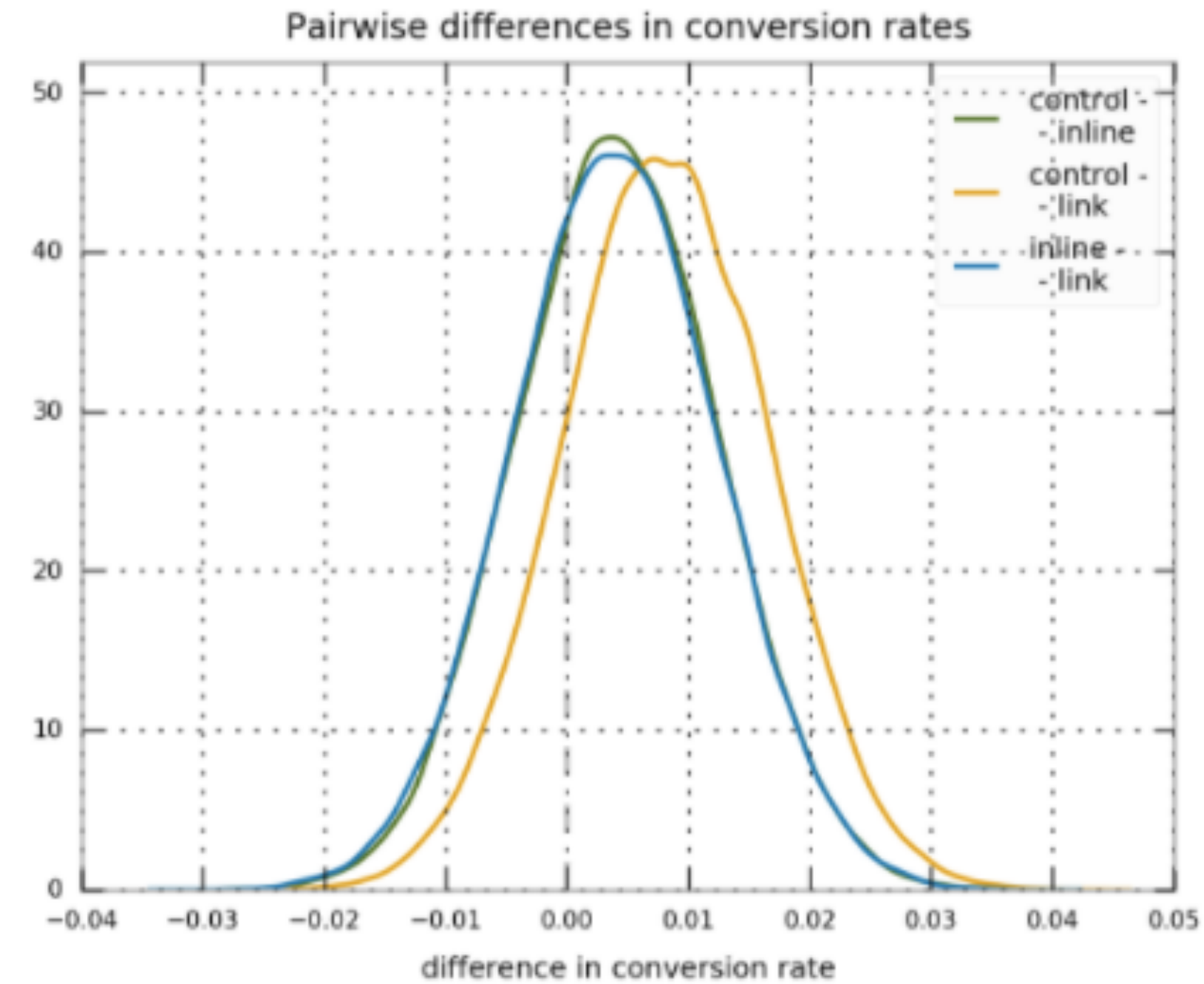
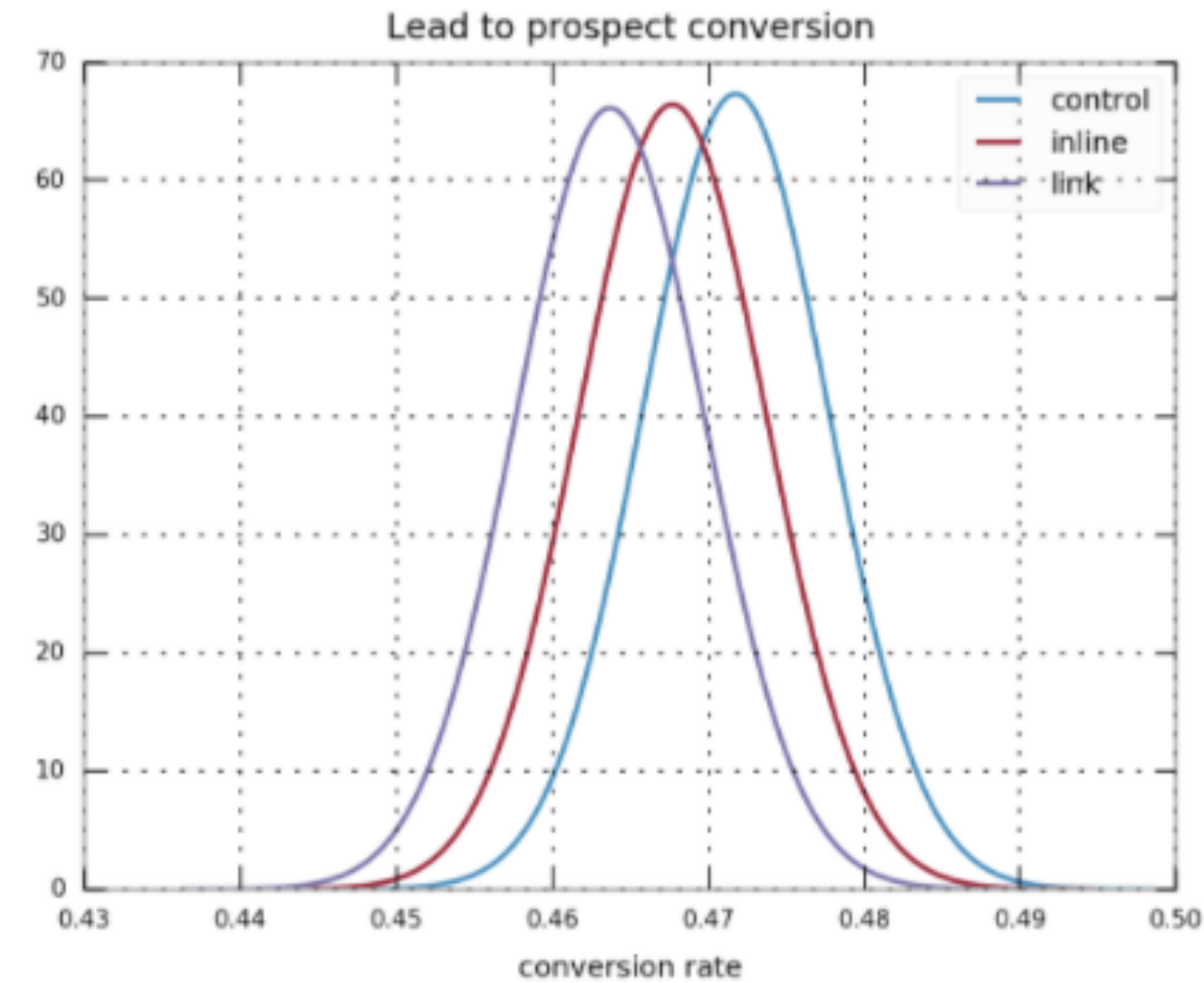
42.16%

Returning Visitor 57.7%

New Visitor 42.3%

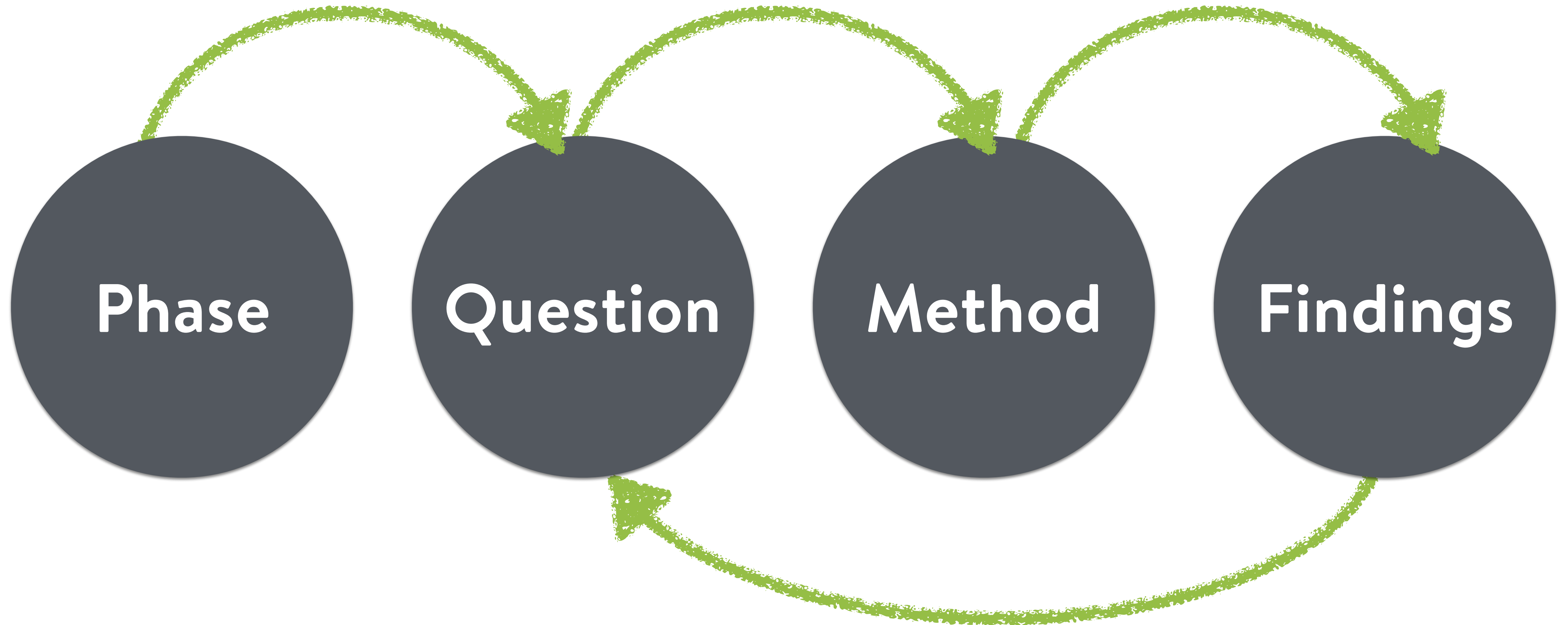
Comparison		Confidence	Rel. Increase
control	converts higher than inline	69%	--
control	converts higher than link	83%	--
inline	converts higher than link	68%	--

Group	Conversion	Total	Observed rate
control	3,347	7,095	47.17%
inline	3,227	6,900	46.77%
link	3,167	6,830	46.37%



SO HOW DO WE CHOOSE
THE RIGHT TECHNIQUE?





Getting shit done



Idea



Think



Explore



Build



Launch



Tweak

Getting shit done

Questions:

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



Idea



Think



Explore



Build



Launch



Tweak

Qualitative

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

Quantitative

- Existing data
- Establishing facts, confirming/disproving assumptions

Getting shit done

Questions:

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



Idea



Think



Explore



Build



Launch



Tweak

Qualitative:

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

Quantitative:

- Quantify how big are the segments that would benefit from this product

Getting shit done

Questions:

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



Idea



Think



Explore



Build



Launch



Tweak

Qualitative:

- Lo-fi prototype testing
- Clickable mockups

Quantitative:

- Define success metrics and baseline for those project success metrics

Getting shit done

Questions:

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



Idea



Think



Explore



Build



Launch



Tweak

Qualitative:

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

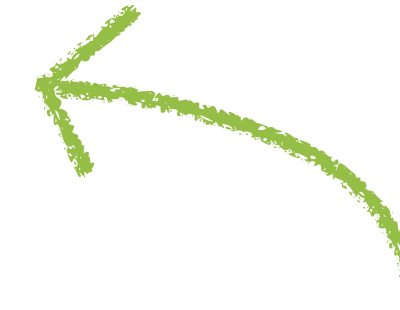
Quantitative:

- A/B tests, instrumentation, reporting

Getting shit done

Questions:

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



Idea



Think



Explore



Build



Launch



Tweak

Qualitative:

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



Quantitative:

- Monitor success metrics, more reporting

Getting shit done

Questions:

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



Idea



Think



Explore



Build



Launch



Tweak

Qualitative:

- Retrospectives
- Post-mortem
- Analysis of support tickets



Quantitative:

- More A/B tests
- More reporting

Phase	Question	Qualitative	Quantitative
Idea	What potential problems might we solve?	Existing research, observations, diaries	Establishing facts, confirming assumptions
Think	What are the root problems?	Interviews, co-design/participatory workshops	Quantify segments
Explore	How might we test assumptions	Lo-fi prototype/mockup testing	Define success metrics, measure baselines
Build	Can people use what we're building?	High-fidelity usability tests, diary studies, beta tests	A/B testing, instrumentation, reporting
Launch	Are people using it in the way we thought they would?	Forums/social media monitoring	Monitor success metrics, more reporting
Tweak	What improvements might be worthwhile?	Analysis of support tickets, retrospective	More A/B tests, more reporting

SO HOW DO YOU GO FROM
QUANTITATIVE AND QUALITATIVE
TO MIXED METHOD?



Mixed methods research

*“An approach to research in the social, behavioural, and health sciences in which the investigator gathers **both quantitative (close-ended) and qualitative (open-ended)** data, **integrates the two**, and then draws interpretations based on the **combined strengths of both sets of data** to understand research problems.”*

- Creswell, 2015

	Advantages	Disadvantages
Qualitative	<ul style="list-style-type: none"> • Provides detailed perspectives of a few people • Captures the voices of the participants • Captures complex phenomena • Is based on the views of the participants, not the researcher • Appeals to people's enjoyment of stories • Adapts to context 	<ul style="list-style-type: none"> • Has limited generalizability • Studies few people • Is subject to the researcher's biases • Is time-intensive when it comes to data collection and analysis
Quantitative	<ul style="list-style-type: none"> • Draws conclusions for large numbers of people • Is relatively efficient when it comes to data collection and analysis • Investigates relationships within data • Appeals to people's preference for numbers 	<ul style="list-style-type: none"> • Is impersonal • Does not record the words of the participants • Provides limited understanding of the context of participants • Is largely researcher driven

Three mixed methods designs

1

Convergent
design

2

Explanatory
sequential
design

3

Exploratory
sequential
design

Convergent design



Log patterns



Collect stories

Explanatory sequential design

Discover patterns

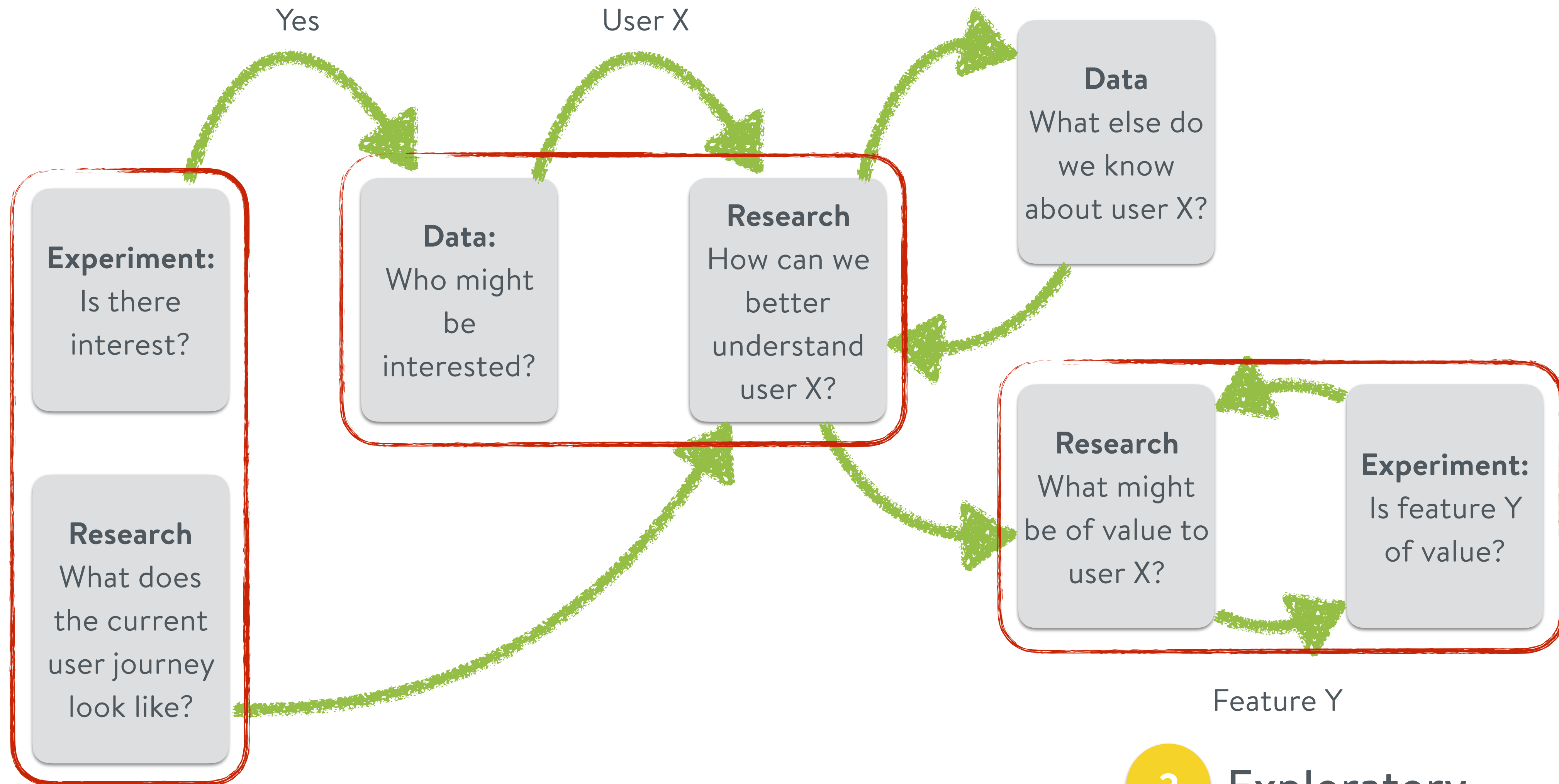
Explain behaviours



Exploratory sequential design



2 Explanatory sequential design



1 Convergent design

3 Exploratory sequential design

So leverage the strengths of each method...



Voices, stories,
complex phenomena,
details



Objectivity, efficiency
statistical trends,
relationships between data

... to go from anecdote to an insight



THANK YOU!



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dalia@shopify.com

