What's the deal with UX Research anyway?

Dalia El-Shimy

Senior UX Research Manager

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A bit about me...

Hi!

- Took this course in 2008, and TA'd it from 2009-2014
- Studied with Jeremy at the Shared Reality Lab and CIRMMT
- Earned my PhD in 2014
- Started as Shopify's first UX Researcher in Montreal in 2014
- Built the discipline in Montreal, and oversaw growth of the team from 5 people to 60+ across all offices
- Started at Miro in June 2021
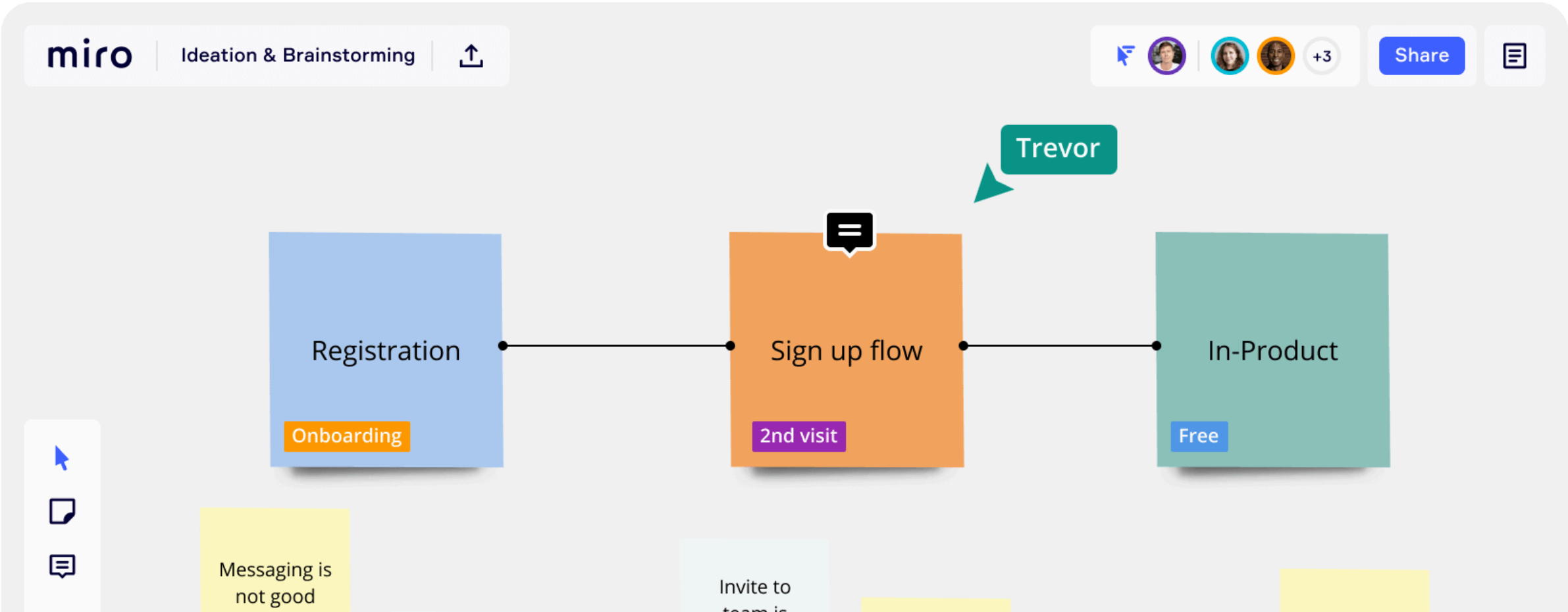
Mark

Where distributed teams get work done

The online collaborative whiteboard platform to bring teams together, anytime, anywhere.

Anna

Start a whiteboard →

Free forever — no credit card required

Elena

miro   Ideation & Brainstorming   +3   Share

Trevor

Registration

Onboarding

Sign up flow

2nd visit

In-Product

Free

Messaging is not good

Invite to team is

Meetings & Workshops

Ideation & Brainstorming

Build and develop ideas with distributed teams as if you were in the same room, anywhere, anytime.

Research & Design

Customer Journey Map

Paint a holistic picture of how people interact with your product or service end-to-end.

👤 Facilitation Tip

Plan 1-2 hours for a kickoff session.

01 Choose the **persona(s)** you're focusing — 10 min

02 Identify the major **phases** in the journey. — 15 min

03 Fill in customer **touchpoints**, positive and negative **thoughts** and **feelings** — 45 min

👤 Be mindful, follow with a break — 10 min

04 Assign the **responsible person** for each phase — 10 min

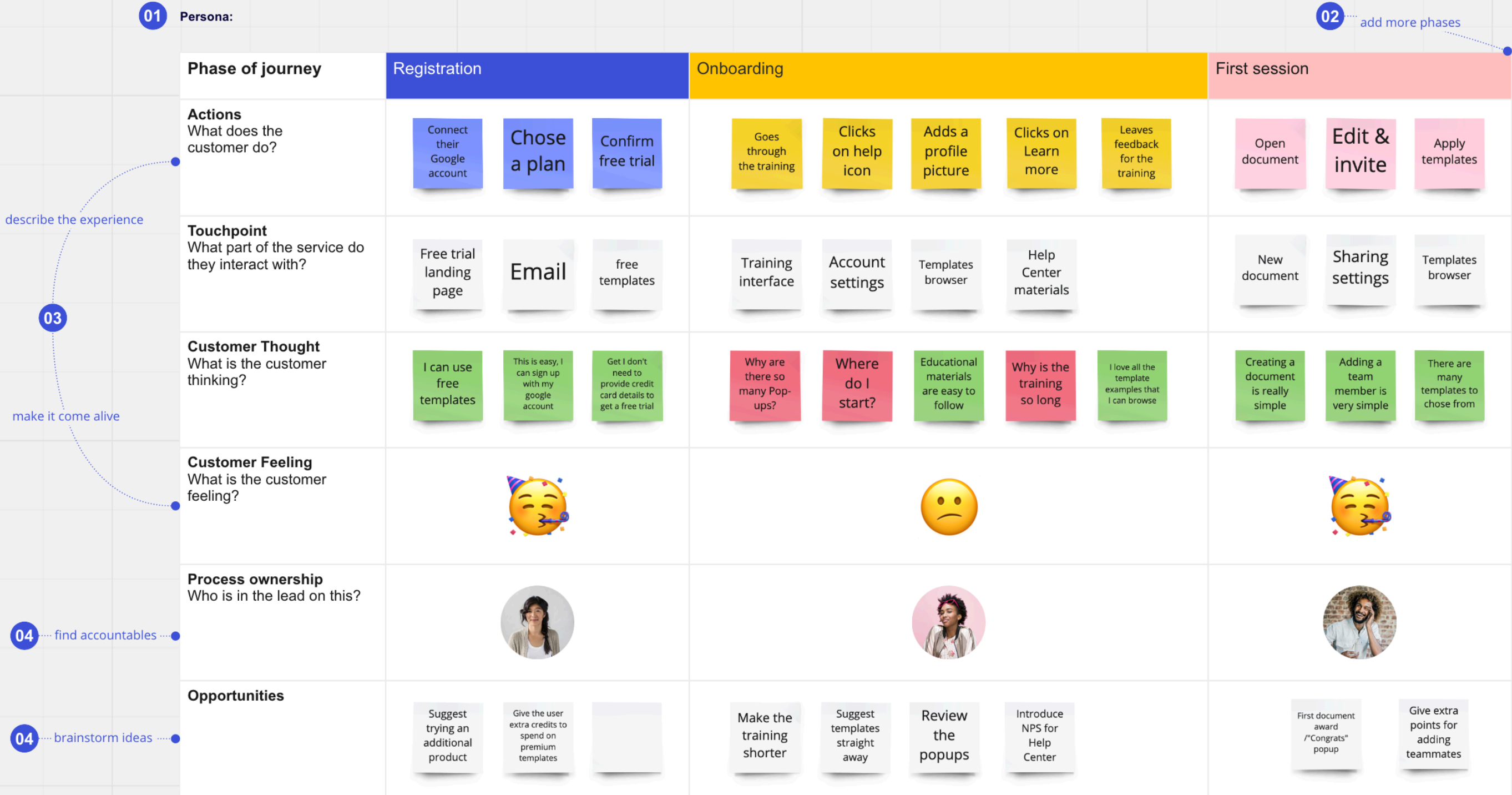05 Brainstorm first **ideas and opportunities** with your team — 20 min

Productivity Tip 💪
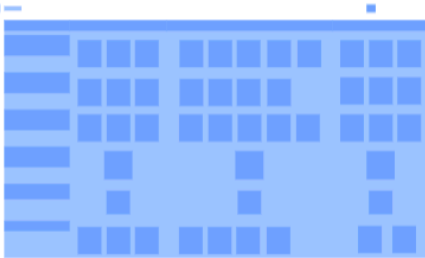
Add new lanes to the CJM to focus on specific aspects of the service. Tables make it easy as pie to add, remove or rearrange elements.

Learn more

Everything you need to know before customer journey mapping

Miro Academy Course | User Experience Design

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01 Persona:

02 add more phases

describe the experience

03

make it come alive

04 find accountables

04 brainstorm ideas

Phase of journey	Registration			Onboarding				First session		
Actions What does the customer do?	Connect their Google account	Chose a plan	Confirm free trial	Goes through the training	Clicks on help icon	Adds a profile picture	Clicks on Learn more	Leaves feedback for the training	Open document	Edit & invite	Apply templates
Touchpoint What part of the service do they interact with?	Free trial landing page	Email	free templates	Training interface	Account settings	Templates browser	Help Center materials		New document	Sharing settings	Templates browser
Customer Thought What is the customer thinking?	I can use free templates	This is easy, I can sign up with my google account	Get I don't need to provide credit card details to get a free trial	Why are there so many Pop-ups?	Where do I start?	Educational materials are easy to follow	Why is the training so long	I love all the template examples that I can browse	Creating a document is really simple	Adding a team member is very simple	There are many templates to chose from
Customer Feeling What is the customer feeling?		🥳			😕					🥳	
Process ownership Who is in the lead on this?		👤			👤					👤	
Opportunities	Suggest trying an additional product	Give the user extra credits to spend on premium templates		Make the training shorter	Suggest templates straight away	Review the popups	Introduce NPS for Help Center		First document award /"Congrats" popup	Give extra points for adding teammates	

52%

I'm gonna mention the word "product" a lot, but what I mean by that is essentially different types of software that are used by human beings (e.g. websites, mobile apps, game, VR experiences, etc.)

What is user experience research?

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User research "focuses on understanding user behaviours, needs, and motivations through observation techniques, task analysis, and other feedback methodologies."

usability.gov

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We're just trying to understand **human beings**, and **why** they do the things they do.

To do this we **collect information**.

And then we spend a bunch of time trying to **make sense** of this information.

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How is this different from other types of research?

- It typically exists within the context of a broader product or process
- Its goal isn't in and of itself simply to gather knowledge
- It's conducted with the purpose of bringing about direct improvement to a process or product
- It focuses on behaviours rather than opinions
- It tends to occur in an iterative manner, rather than a one-off
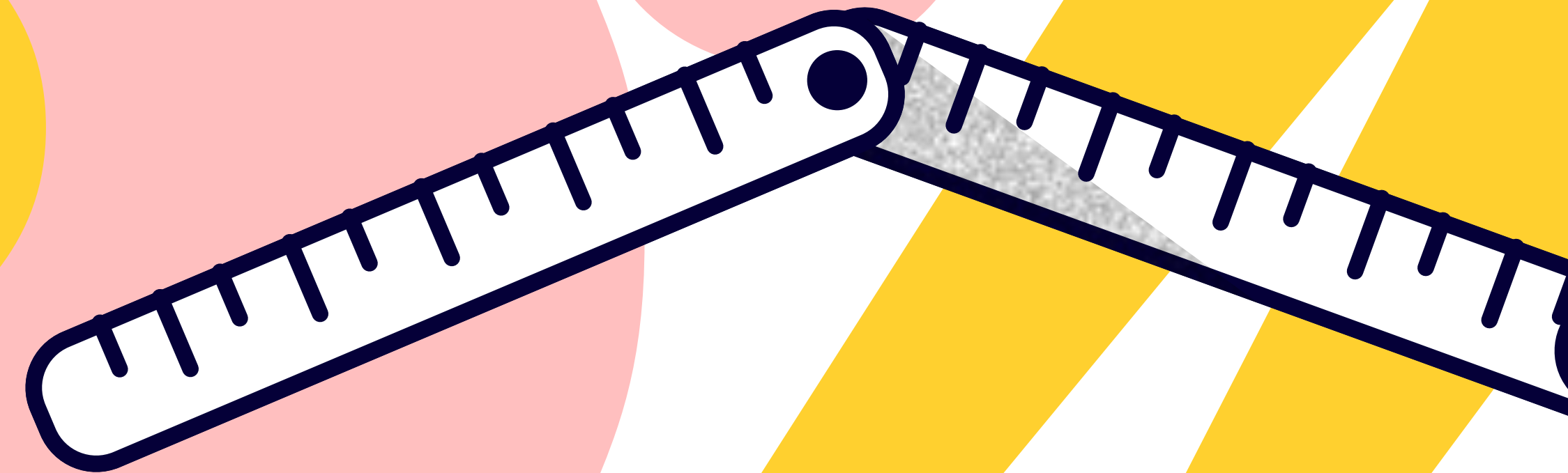
A few reasons…

- Because we have questions
- Because we want to test our assumptions
- Because we've noted things that require us to gather more context
- Because we want to make things better
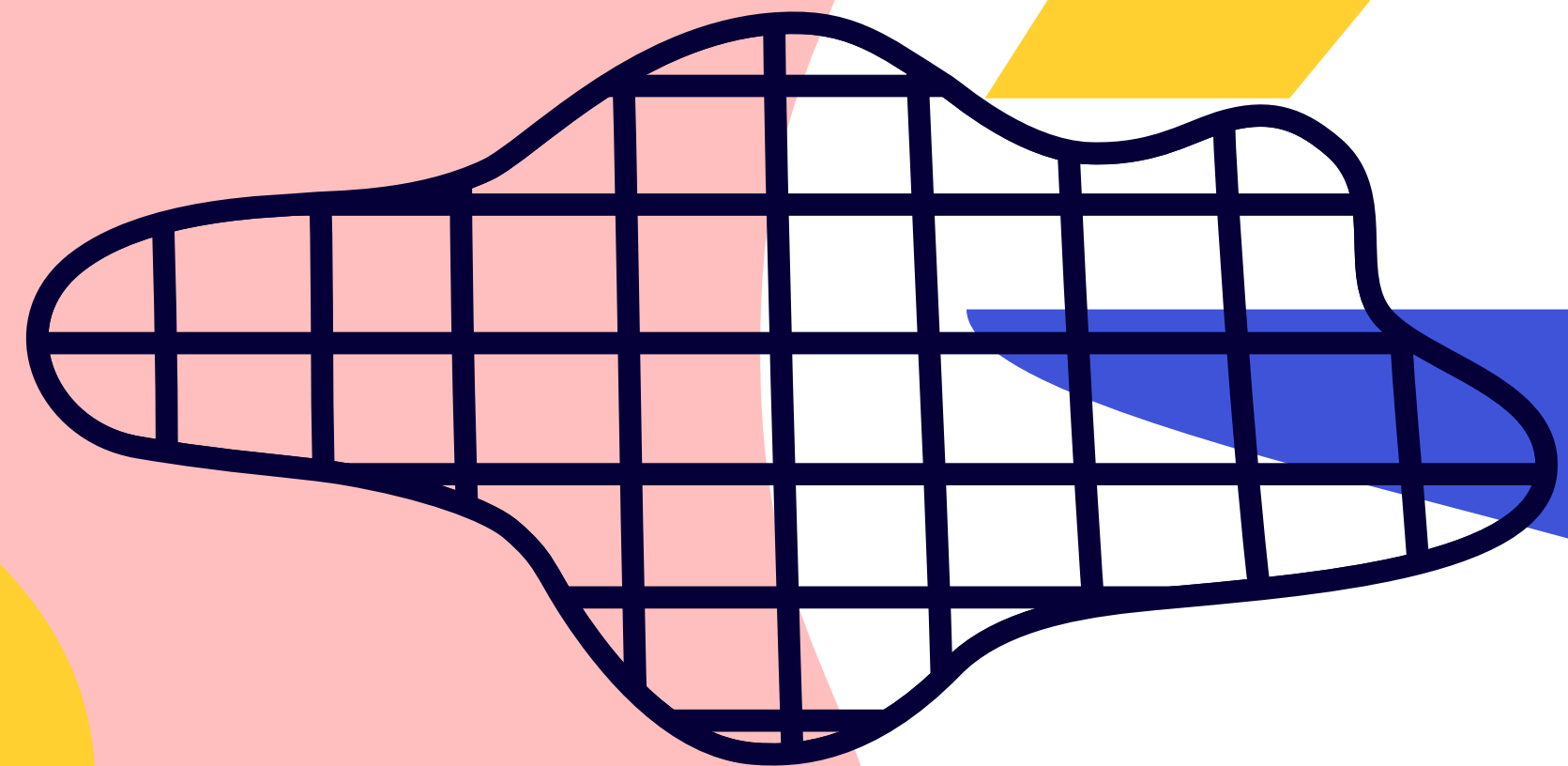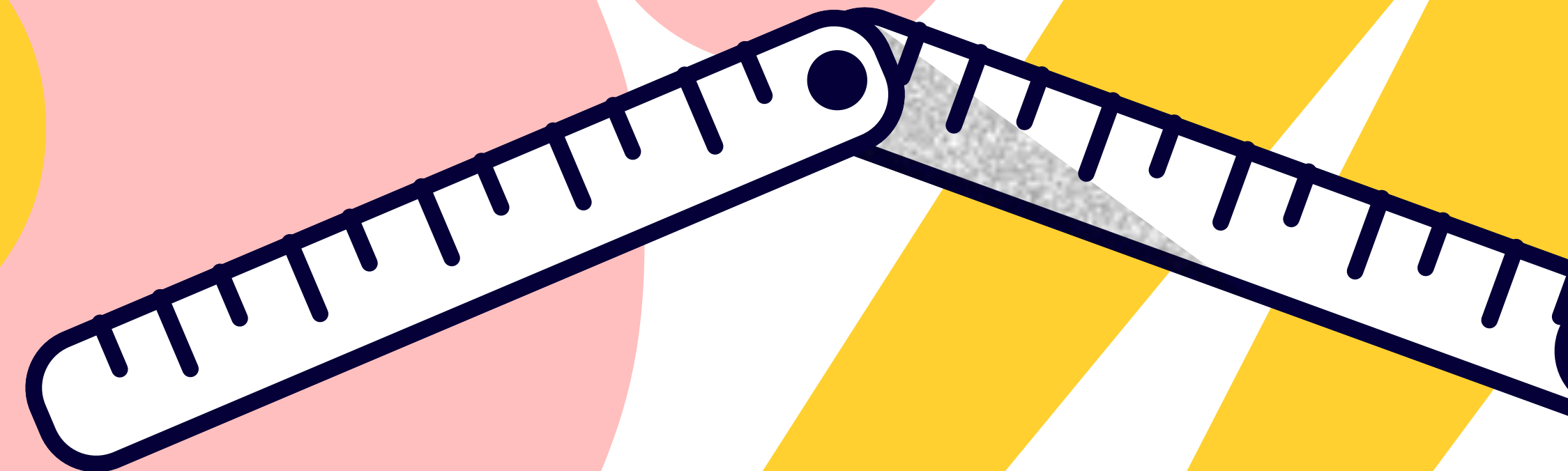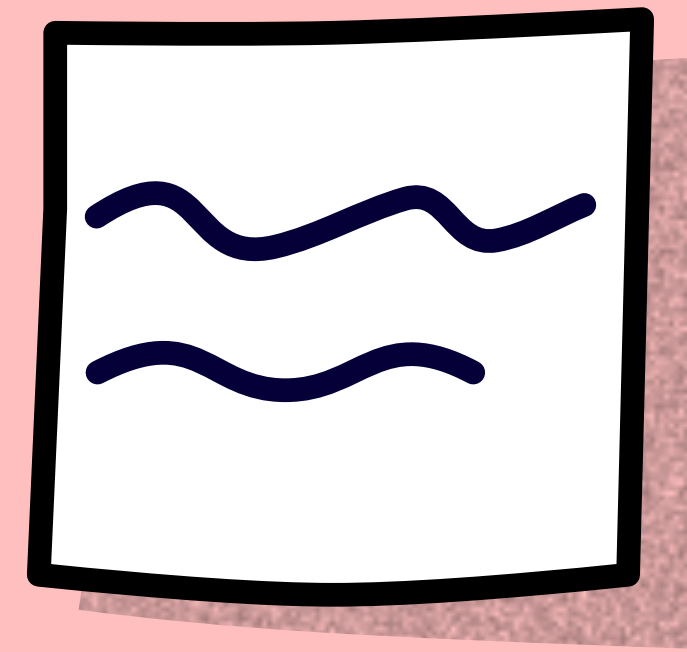
There's **no such thing** as "user research school".

If you're **curious** about people, and you want to **make sense** of things (and you're taking this class), you're already on **the right path**.

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Let's talk about where user research comes from

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A brief historical overview of user research...

Before 1950s	1950s-1960s	1960s-1970s	1980s-2000s

System reliability phase
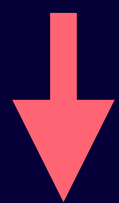
System performance phase

User performance phase

Usability phase

How long would it function without failure?
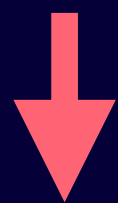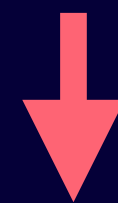
How fast can it perform?

How fast can the user perform?

How easy is it to use?

How do we evaluate usability?

Give your target users a series of repeatable tasks, then measure:

- Time to complete
- Task completion rate
- Accuracy
- Error rate
- Satisfaction
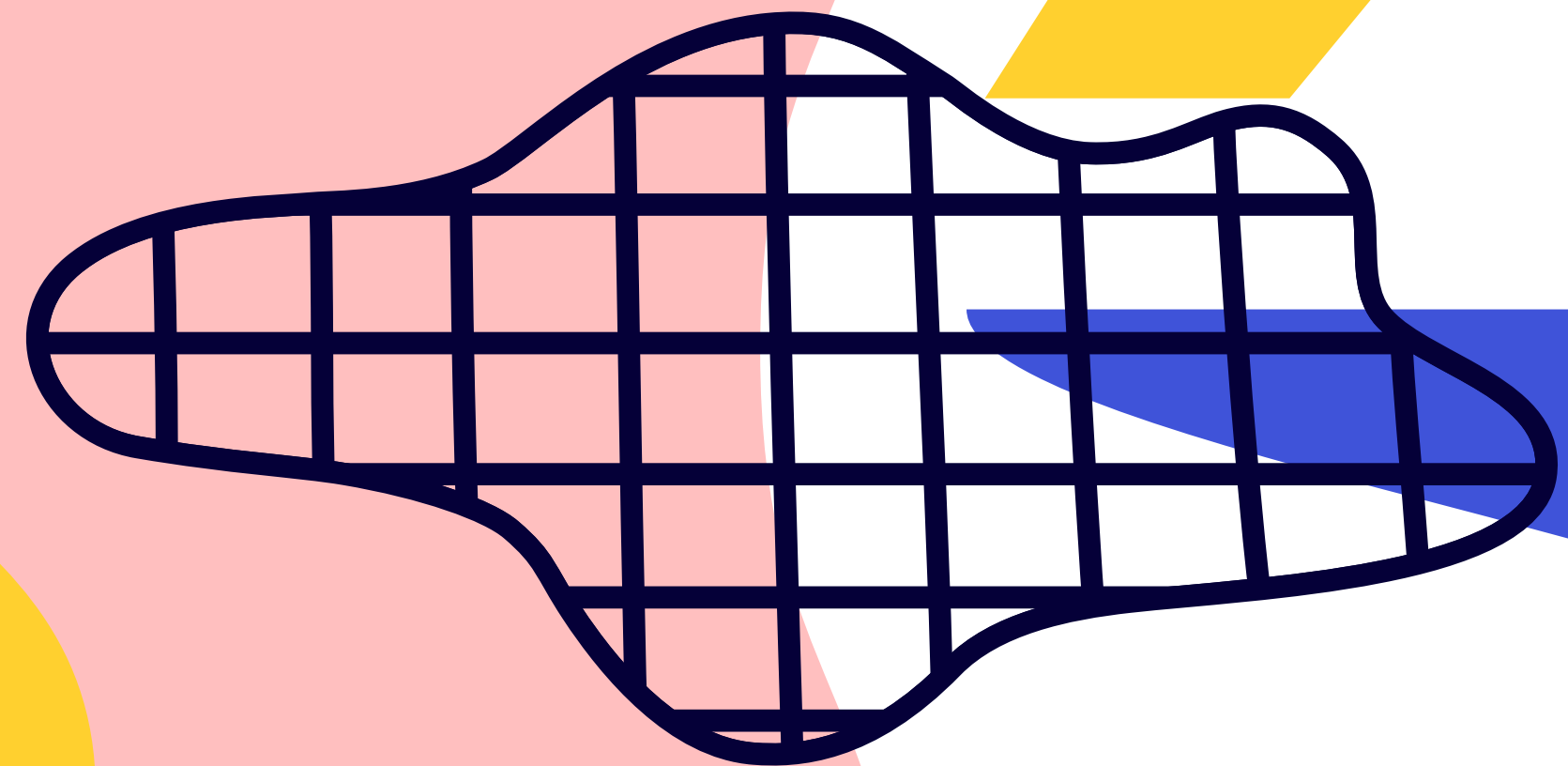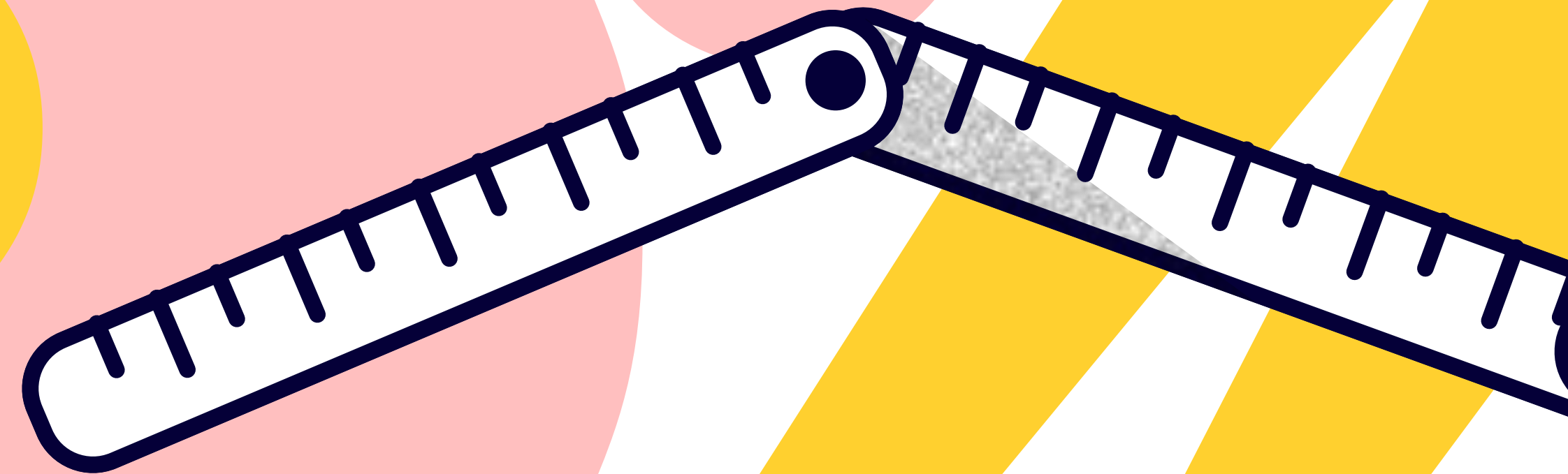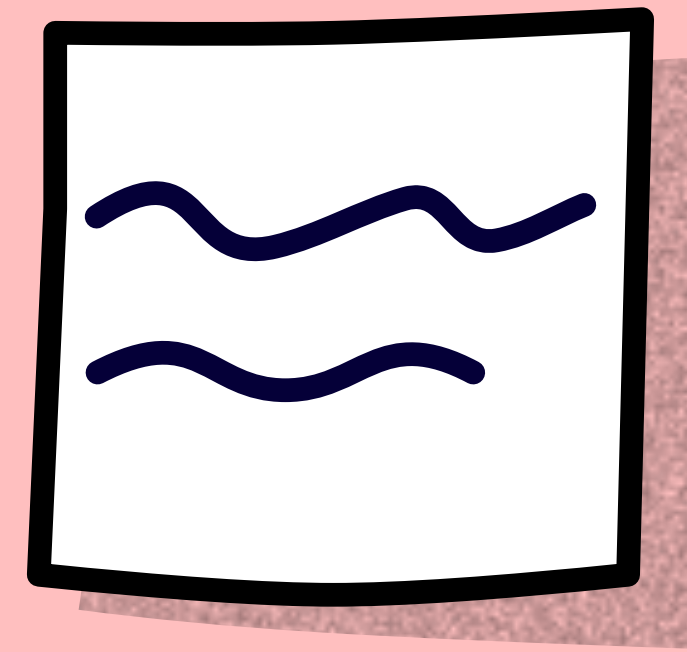
"What of technology not for accomplishing tasks but for having experiences, for expressing one's identity, for flirting and arguing and living?"

MacDonald and Atwood, 2013

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So we went from task-based design to experience-based, from user-centered to people-centered, and became known as **third-wave HCI**.

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A brief historical overview of user research...

Before 1950s	1950s-1960s	1960s-1970s	1980s-2000s	2000s-Present
System reliability phase	**System performance phase**	**User performance phase**	**Usability phase**	**User experience phase**
↓	↓	↓	↓	
How long would it function without failure?	How fast can it perform?	How fast can the user perform?	How easy is it to use?	
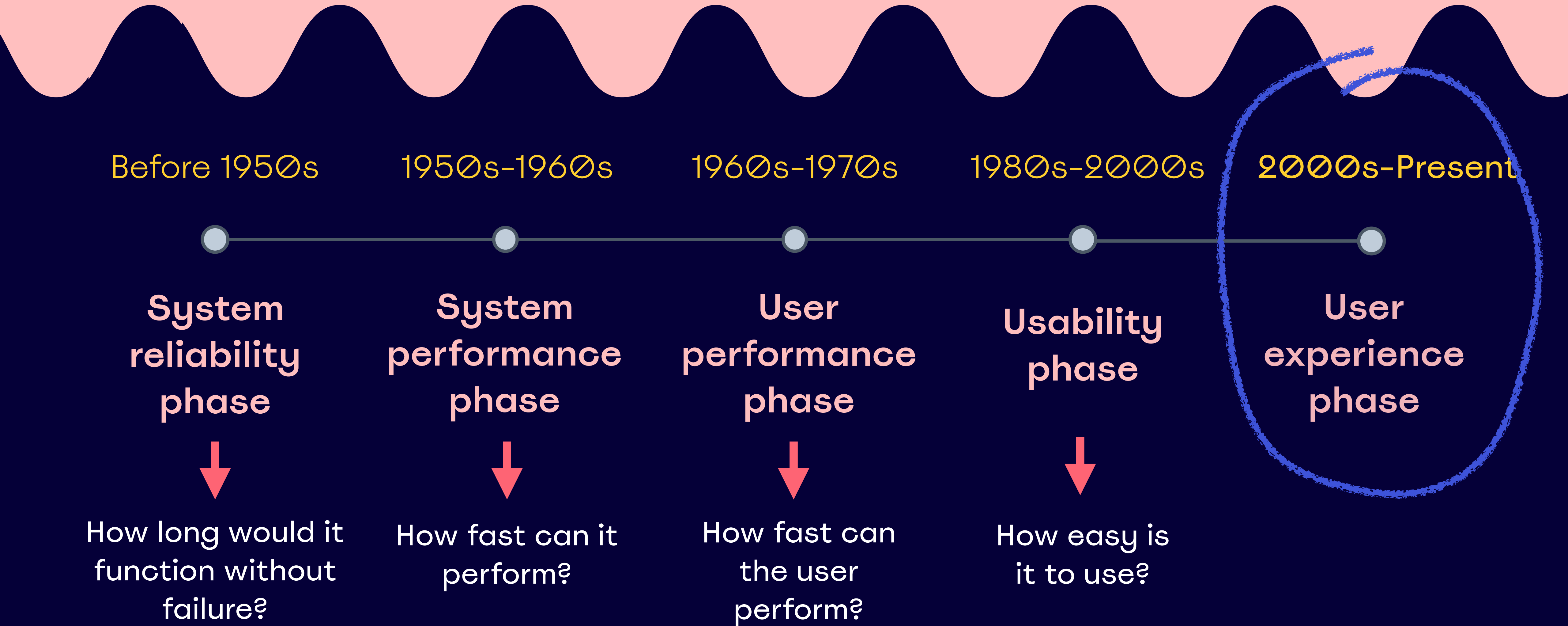
The 'user experience' era...

- Personal, social, cloud, mobile computing
- Contexts are broader
- Technology is more pervasive
- Shift from the utilitarian/pragmatic to the emotional/affective
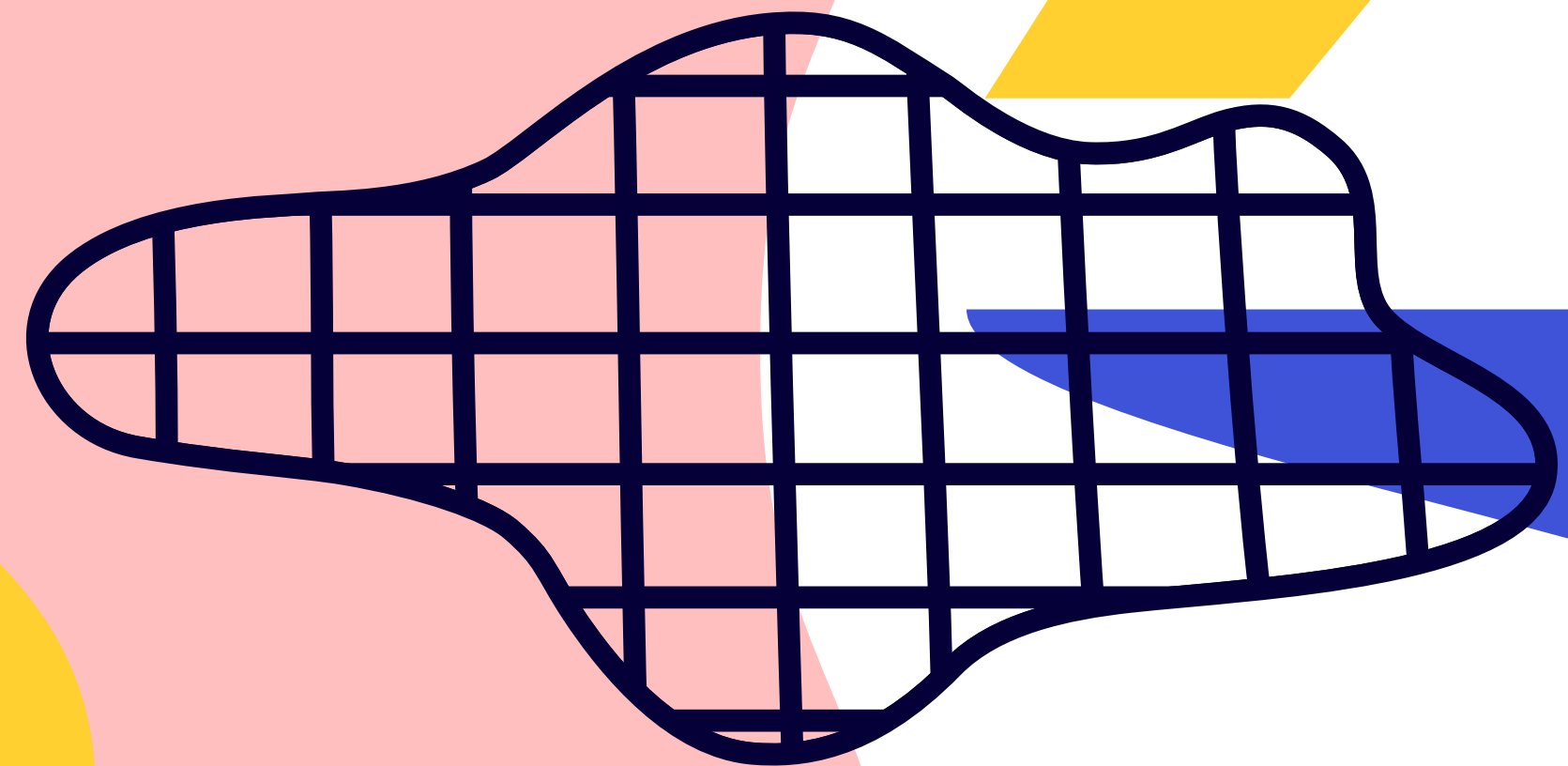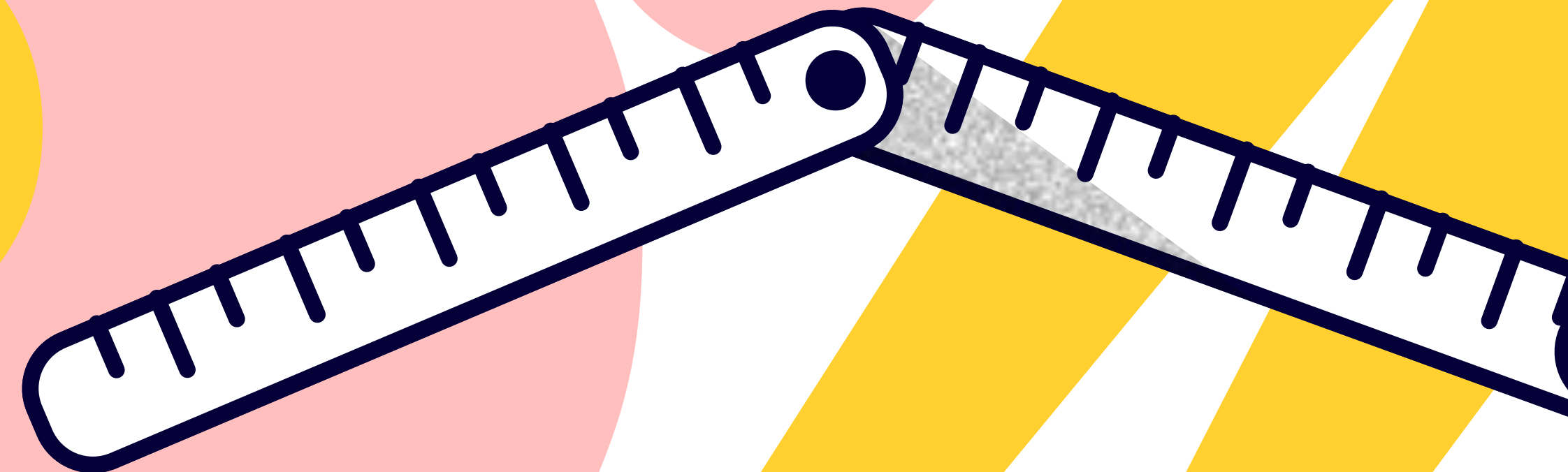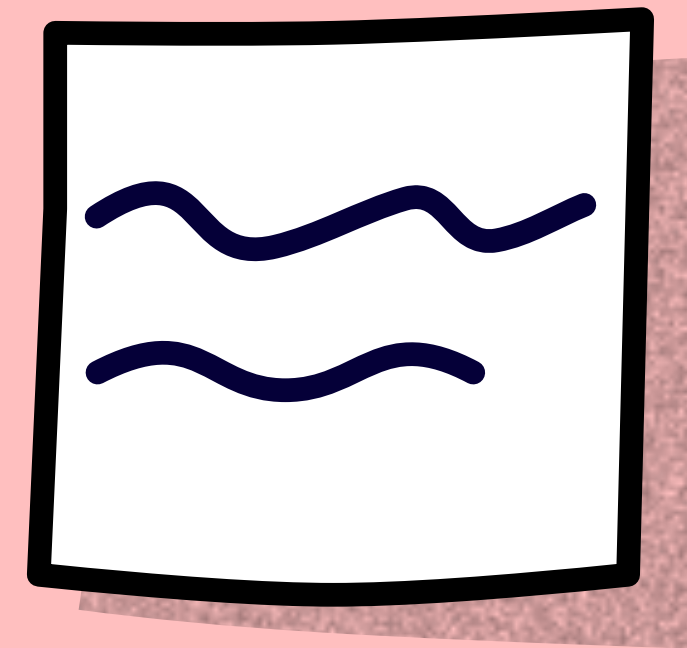
The focus has shifted from evaluating isolated **tasks**, to understanding where they fit within broader, more complex **experiences**.

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Question #1

What are some examples of interfaces where evaluating tasks might be more important? What about ones where evaluating experiences might be more important?

**But how do we measure
all this?**

**We're really good at
evaluating tasks, but less
so experiences.**

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"Evaluation has been a dominant theme in HCI for decades, but it is far from being a solved problem."

Kaye et al., 2007

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There is no "one-size fits all" method

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Let's talk about qualitative methods

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COME TRY A PROTOTYPE
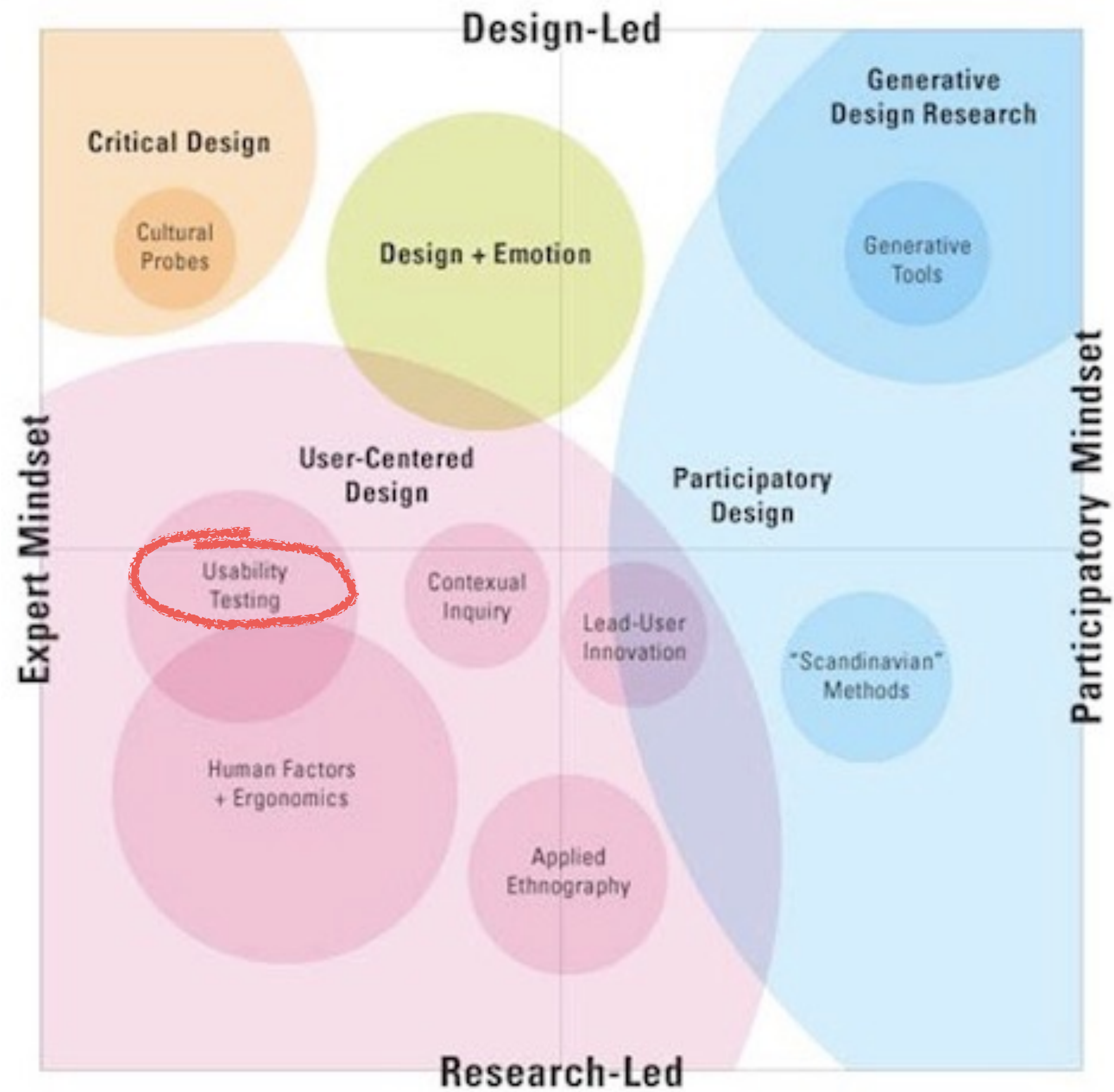
A pilot workbook and tools for preparation, including a disposable camera, pens and stickers (from case 2 in chapter#4).

Different visual styles were used to appeal to the grownup participants (more formal) and for the youngsters (more playful).
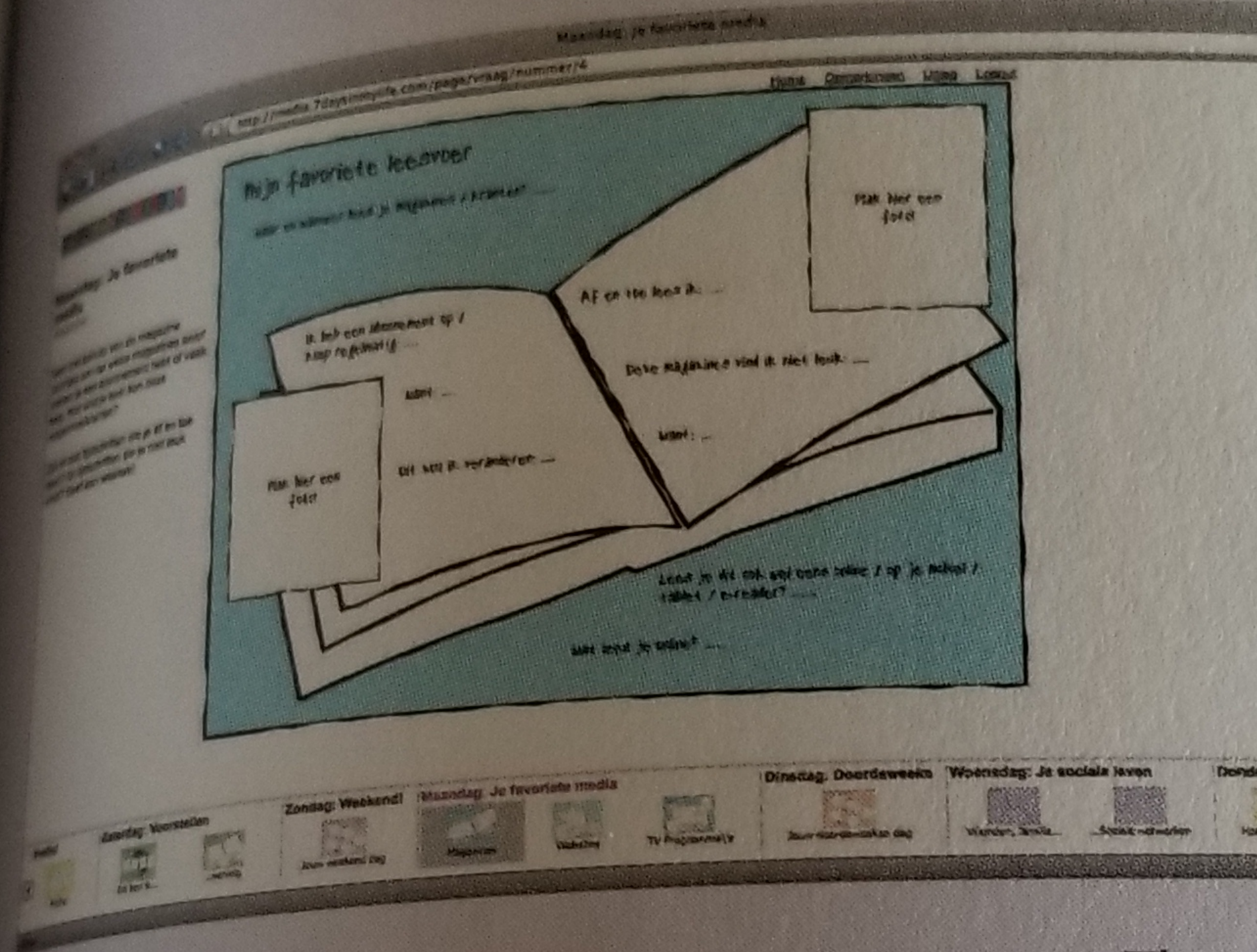
A screenshot of a typical 7days page: The participant has room to make a collage of photos and notes, and on the right he can pick icons to use. On the bottom is an overview of the questions.
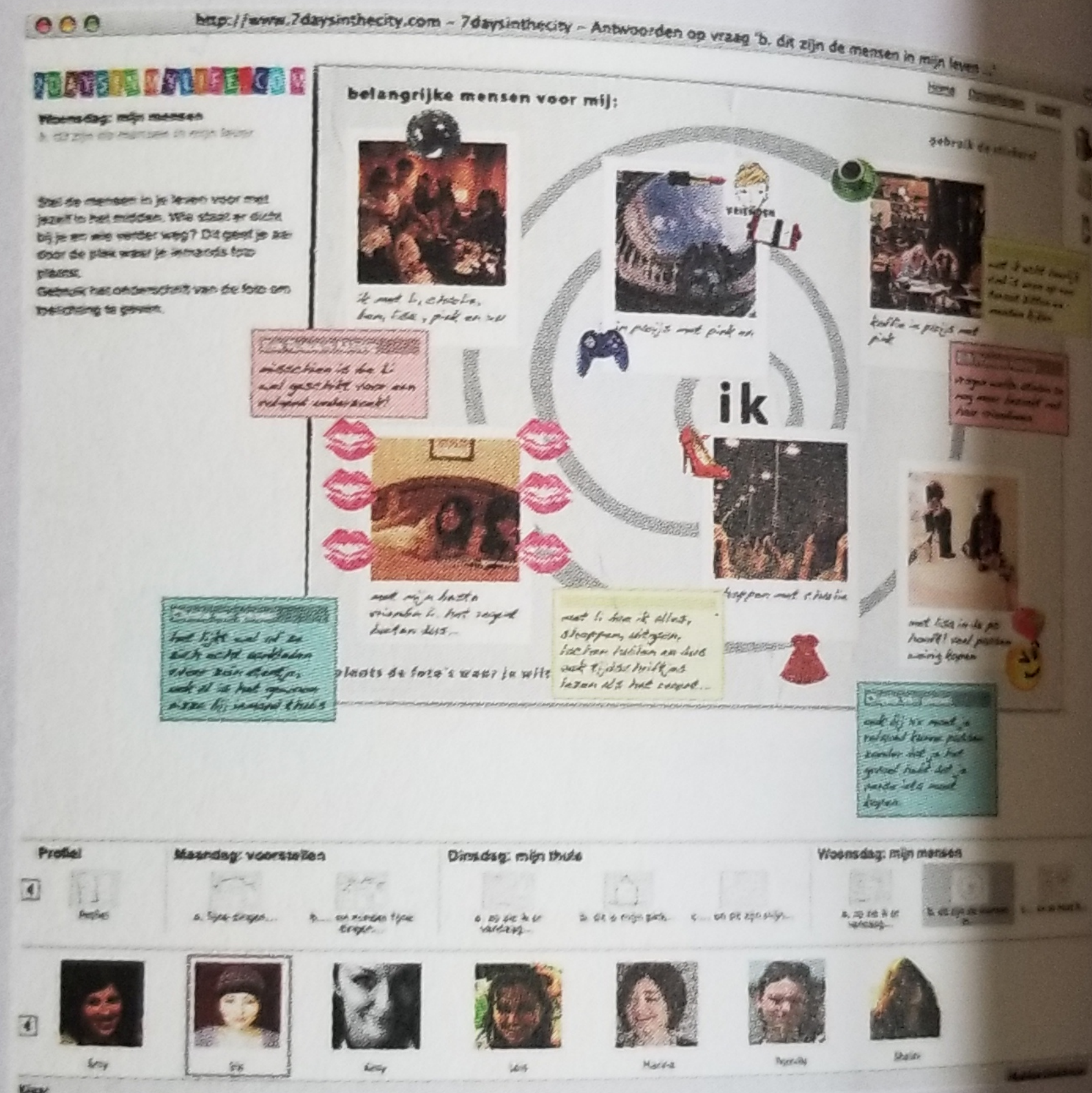
A screenshot of a 7days page as it is filled in by a participant. The colored post-its are comments made by different members of the research team.

The toolkit included Velcro modeling pieces for participants to express themselves.

Among the toolkit's many components were non-specific, colorful objects, and specific plastic pieces and game parts.

Photo from "Convivial Toolbox: Generative Research for the Front End of Design"

Let's talk about quantitative methods

1 → What type of meeting were you in when you launched the Miro app from your videoconferencing software? *

A It was a one-off planned collaboration session

B It was an ad-hoc/spur of the moment meeting

C It was part of a regular team ritual (e.g. retrospective, planning, team sync, standup, etc.)

D Other

OK ✓

Search reports & help

All Users
100.00% Sessions

+ Add Segment

Dashboards

Shortcuts

Intelligence Events

Real-Time

Audience

Overview

Active Users

Cohort Analysis BETA

User Explorer

▸ Demographics

▸ Interests

▸ Geo

▸ Behavior

Overview

Sessions ▼ VS. Select a metric

Hourly   Day   Week   Month

● Sessions

20,000

10,000

Jan 15   Jan 22   Jan 29   Feb 5

■ Returning Visitor   ■ New Visitor
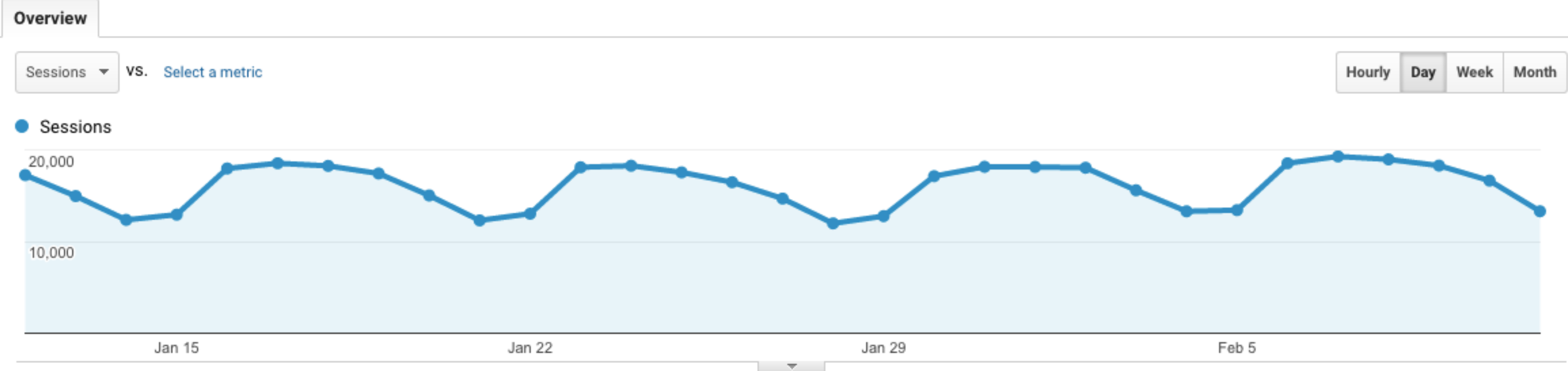
Sessions
498,621

Users
255,457

Pageviews
3,147,725

Pages / Session
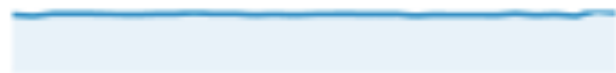6.31

Avg. Session Duration
00:04:40

Bounce Rate
30.86%

% New Sessions
42.16%

42.3%

57.7%

DB Consoles › Shopify Redshift › Shopify Redshift_7.sql

Database

Shopify Redshift_3.sql Shopify Redshift_4.sql Shopify Redshift_5.sql Shopify Redshift_6.sql Shopify Redshift_7.sql new_merchants_themes.sql

warehouse.public

▼ Shopify Redshift (warehouse)

```sql
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'
)
```

Database Console Shopify Redshift_7

Output   Result 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	11:22:46.000000			debut
2	17:50:06.000000			debut
3	04:02:35.000000			debut
4	09:59:52.000000			debut
5	10:25:11.000000			debut
6	15:06:56.000000			debut
7	17:39:59.000000			debut
8	14:21:23.000000			debut
9	06:30:53.000000			debut
10	19:44:47.000000			debut
11	14:31:41.000000			debut
12	07:53:28.000000			debut
13	22:43:03.000000			debut
14	02:18:28.000000			debut
15	19:04:50.000000			debut
16	15:46:02.000000			debut
17	15:44:15.000000			debut
18	07:05:27.000000			debut

10:26   LF‡   UTF-8‡

REPORT PARAMETERS

Refresh

Date Interval

Last 4 weeks

Ticket Topic

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.

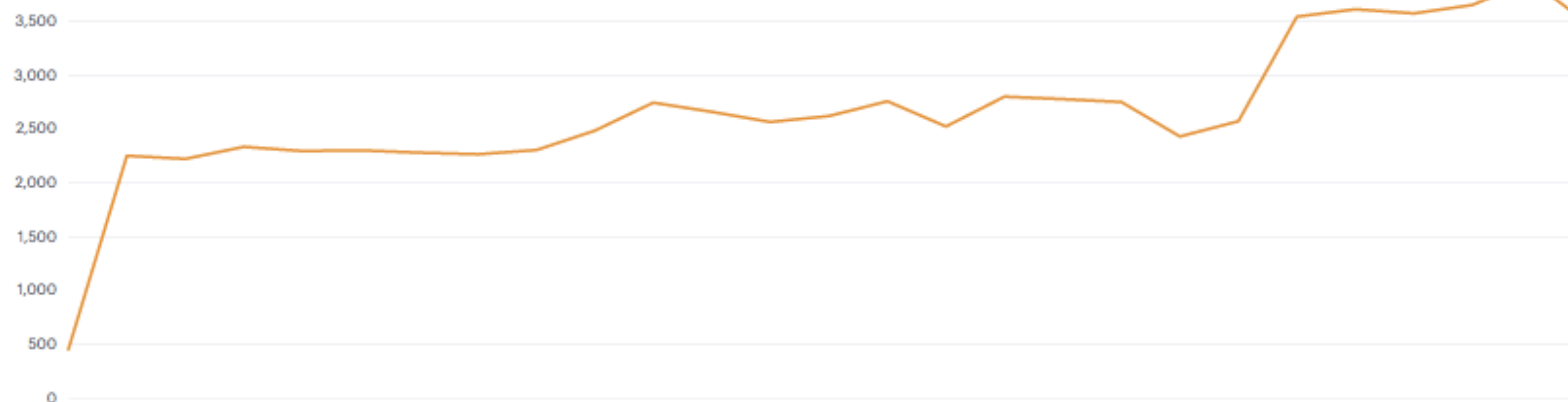### Number of Tickets
and rate of change from previous period

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)

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%

Lead to prospect conversion

Pairwise differences in conversion rates
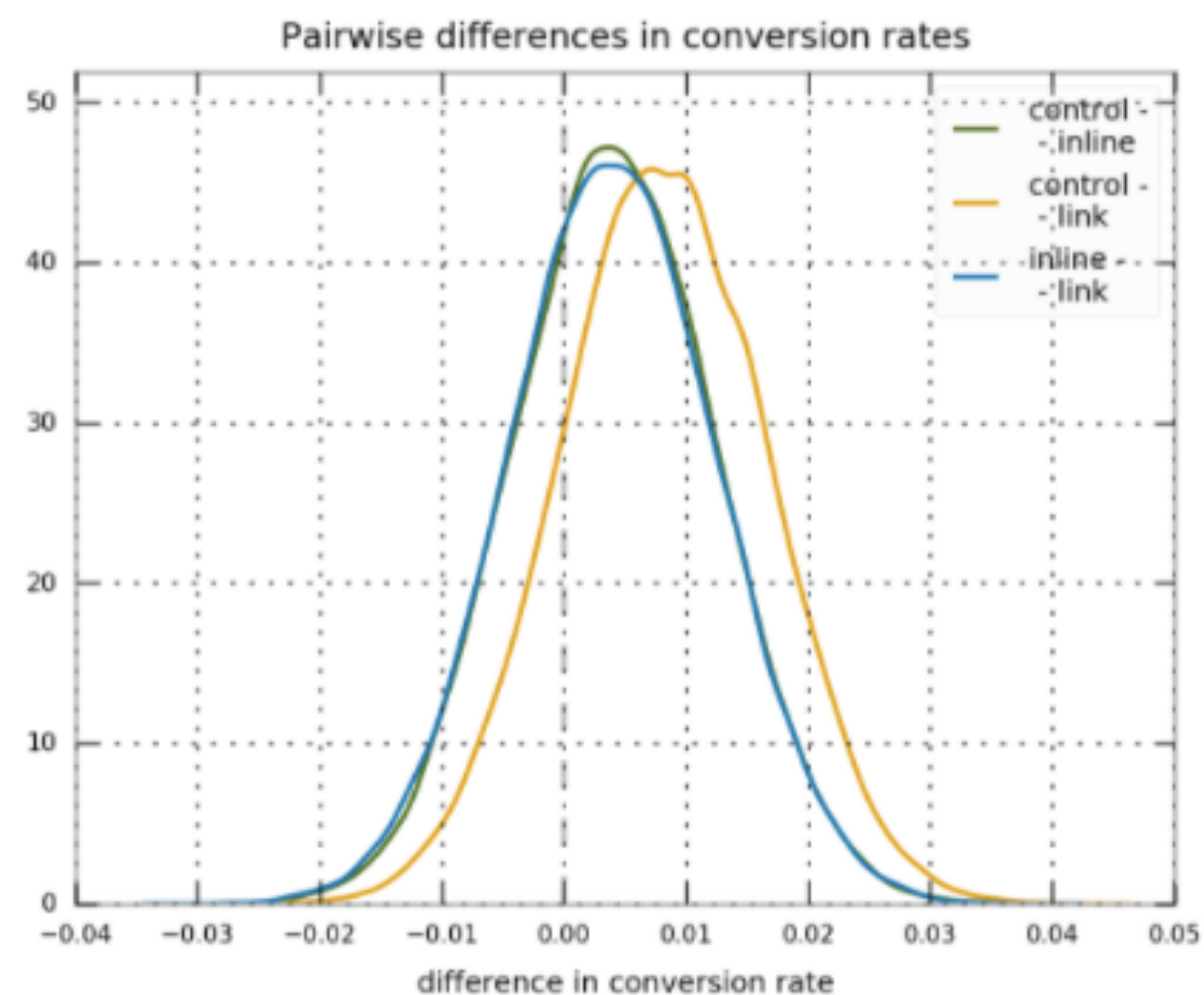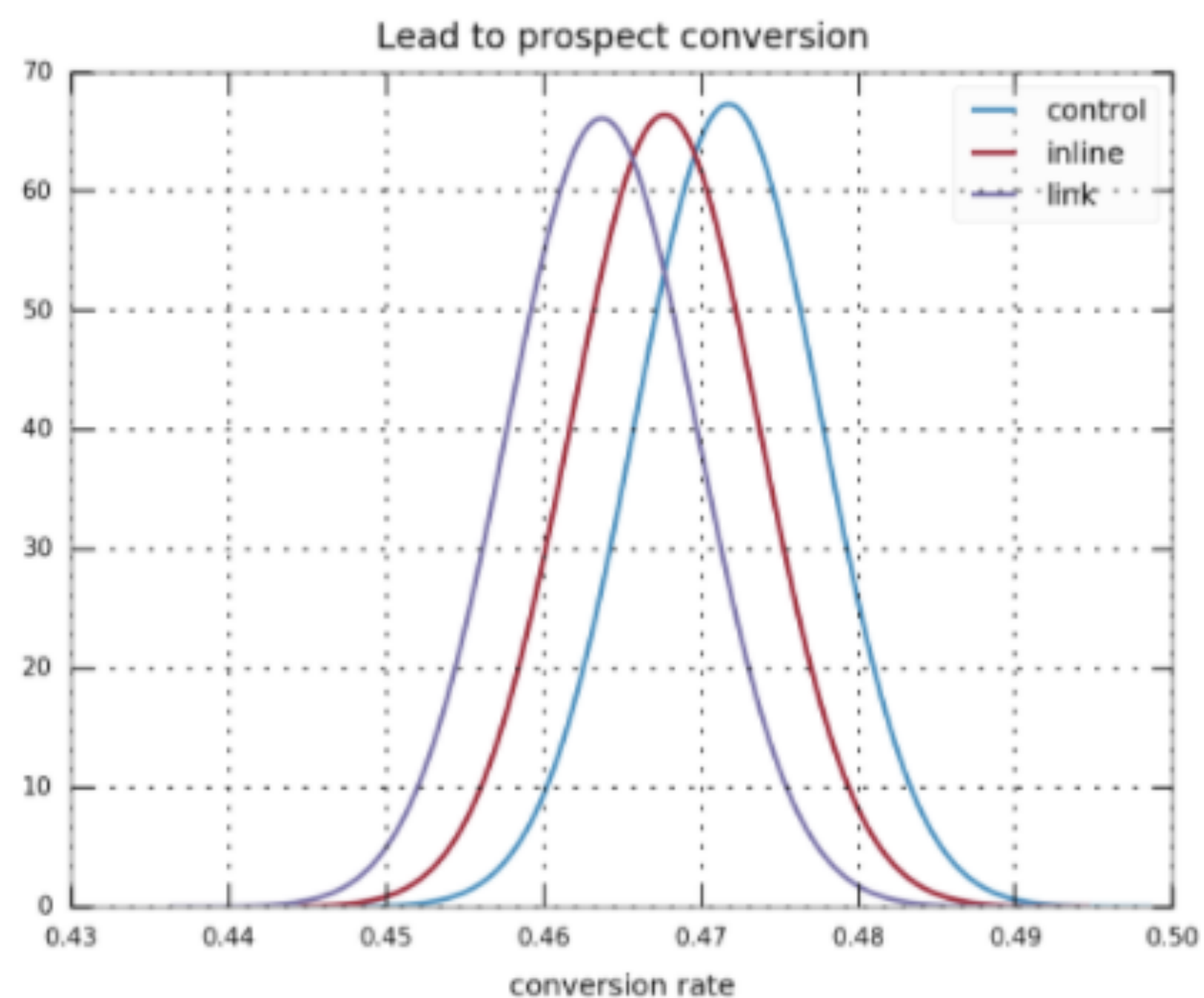
So how do we choose the right method?
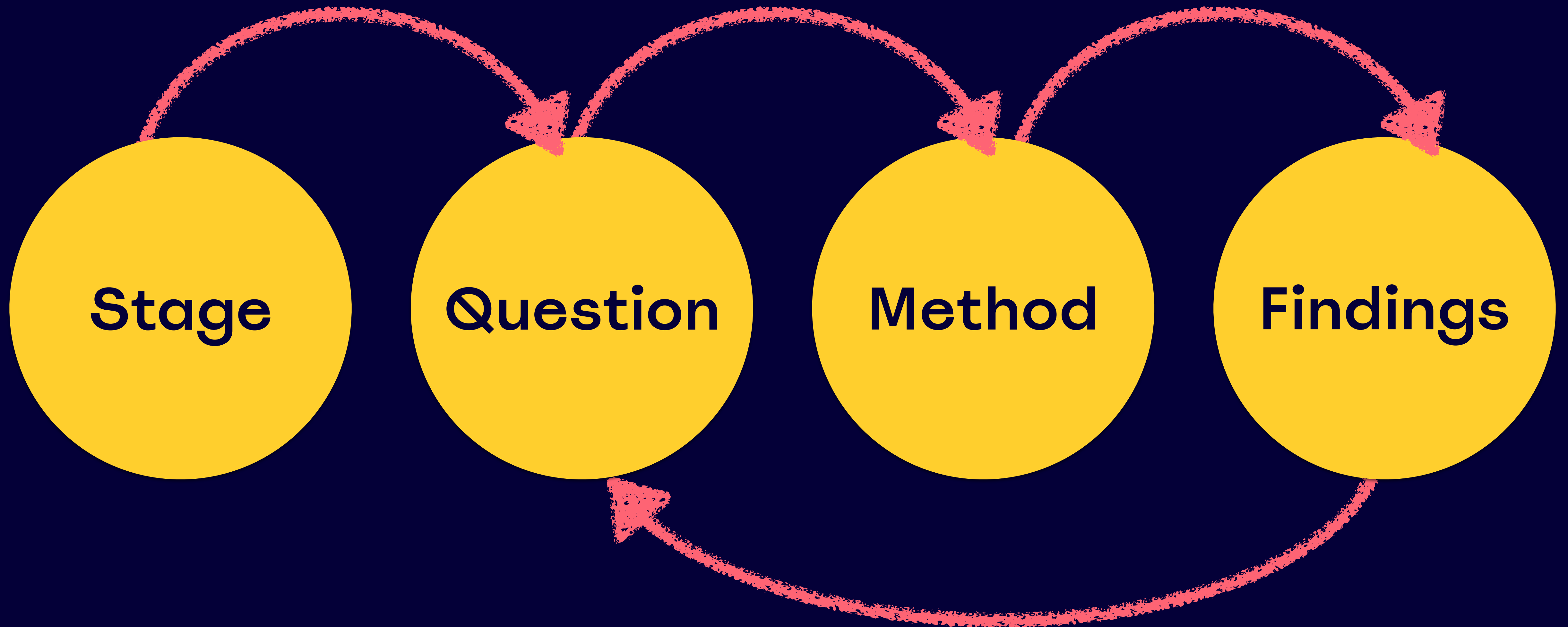
Question #2

When do quantitative data and qualitative UX research best complement each other?

A. During the early stages of a project

B. During the later stages of project

C. Both

Product Lifecycle

Product Lifecycle

Idea

Gather initial thoughts on problem and impact of solving it

Think

Become experts of the problem domain, both internally and externally

Explore

Plan how the problem will be solved, explore and evaluate various solutions

Build

Iteratively build and ship small, quality components of the solution

Launch

Publicly release the solution to users

Tweak

Iterate on the solution based on user feedback and usage

Idea

Questions:
- Who are our audiences and what behaviours, unmet needs and challenges do they exhibit?
- What is happening today/has historically happened in this space?

Idea

Qualitative:
- Look at existing research (internal and external), identify gaps/assumptions/hypotheses
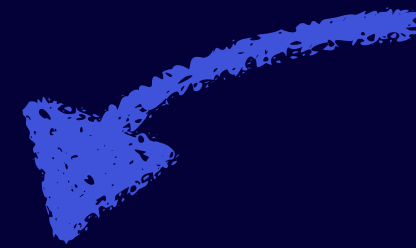- Conduct additional interviews, observations, diary studies

Quantitative:
- Look at existing research (internal and external), identify gaps/assumptions/hypotheses
- Conduct additional data and trend analysis

Think

Questions:
- What are the most impactful problems to focus on?
- What are the root causes and consequences of those problems?
- What will be meaningful to measure today and down the the line?

Think

Qualitative:
- Conduct more interviews, observations, and diary studies
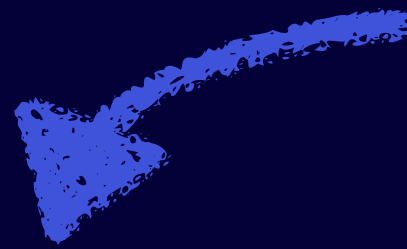
Quantitative:
- Conduct surveys to identify segments and measure total addressable markets
- Conduct data analysis to measure existing impact/reach of problems
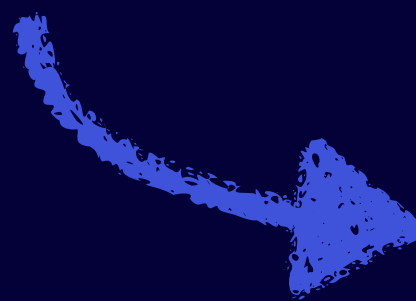- Define success metrics

Explore

Questions:

· How are users faring with the concepts we're developing?
· To what extent do they understand the designs, flows, and content we've put together?

Explore

Qualitative:

· Conduct concept/paper prototype/lo-fi prototype/clickable mockup testing

Quantitative:

· Measure baselines for success metrics
· Conduct experiments (incl. A/B tests)

Build

Questions:
- Can people use what we're building?
- To what extent is it addressing the issues posed by the problem we're trying to solve?
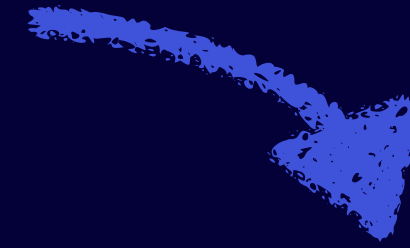
Build

Qualitative:
- Conduct high-fidelity usability tests
- Conduct diary studies and beta tests

Quantitative:
- Conduct experiments (incl. A/B tests)
- Build out instrumentation and dashboards
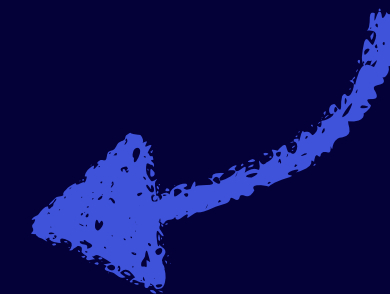
Launch

Questions:
- Are people using our solution the way we thought they would?
- To what extent did we succeed in solving the problem we initially defined?

Launch

Qualitative:
- Monitor support tickets/forums/social media
- Gather feedback from in-context forms

Quantitative:
- Populate dashboards
- Monitor success metrics

Tweak

Questions:
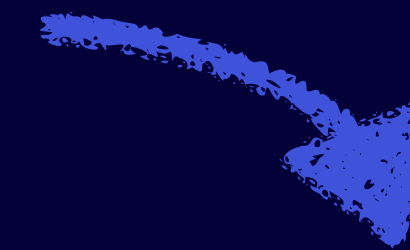- What incremental improvements or revisions to our roadmap might be most impactful to our users?

Tweak

Qualitative:
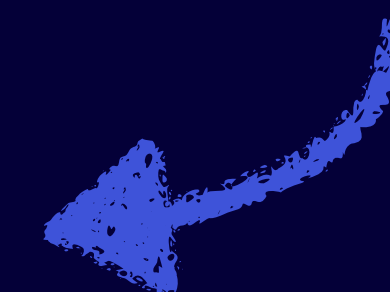- Participate in retrospectives/post-mortems
- Continue monitor support tickets/forums/social media

Quantitative:
- Conduct A/B tests
- Continue monitoring success metrics

How questions change over time

Are we building
the right thing?

Are we building
the thing right?
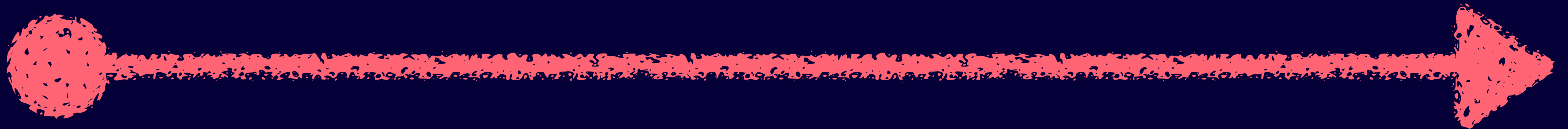
Inception

Completion

http://radar.oreilly.com/2014/02/building-the-right-thing-vs-building-the-thing-right.html

"**Triangulation** allows us to have greater confidence and **richer insights** than is possible to achieve through a single method alone. We aspire to form a **comprehensive** narrative of what we know about the current and future users of our products rather than methodologically siloed insights."

Sara Belt, Spotify

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"Value to the user is qualitative. Value to the business is quantitative. In order to make holistic decisions, you have to create a representation that makes that translation."

Erika Hall, Mule Design

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"Integrating big data and thick data provides organizations a more complete context of any given situation. For businesses to form a complete picture, they need both big and thick data because each of them produce different types of insights at varying scales and depths."

Tricia Wang, Sudden Compass

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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.

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We call this
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."

John Creswell, University of Michigan

	Strengths	**Weaknesses**
Qualitative	Provides detailed perspectives Captures the voices of the participants Captures complex phenomena Adapts to context Is largely participant-driven Appeals to people's enjoyment of stories	Is time-intensive when it comes to data collection and analysis Studies few people Has limited generalizability Loses scale Is subject to the researcher's biases
Quantitative	Is relatively efficient when it comes to data collection and analysis Draws conclusions for large numbers of people Investigates relationships within data Appeals to people's preference for numbers	Does not record the words of the participants Is impersonal Provides limited understanding of the context of participants Loses resolution Is largely researcher-driven

Three mixed methods designs

1 Convergent design

2 Explanatory sequential design

3 Exploratory sequential design

Convergent design

Study large numbers
of people

Captured detailed
perspectives
and complex phenomena

REPORT

Explanatory sequential design

Discover patterns for large numbers of people

Enrich them with details and context

REPORT

Exploratory sequential design

Capture the stories of few

Draw conclusions for large samples

REPORT

IMPORTANT DISCLAIMER:

Very few people are equally skilled at both qualitative and quantitative. The real power lays in understanding enough about both types of methods, and their respective strengths and weaknesses, to be able to have informed conversations and forge collaborations.

Now that we've covered the theory, let's focus on one foundational technique...

The user interview.

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On interviews...

Pros

- You get to really deep-dive into a topic with participants
- They can evolve as you learn
- A good interview can be very engaging for your participants
- You can learn and share stories
- Sharing audio or video snippets can be really powerful

Cons

- They are time-consuming to recruit for
- They are time-consuming to conduct
- They are time-consuming to analyze
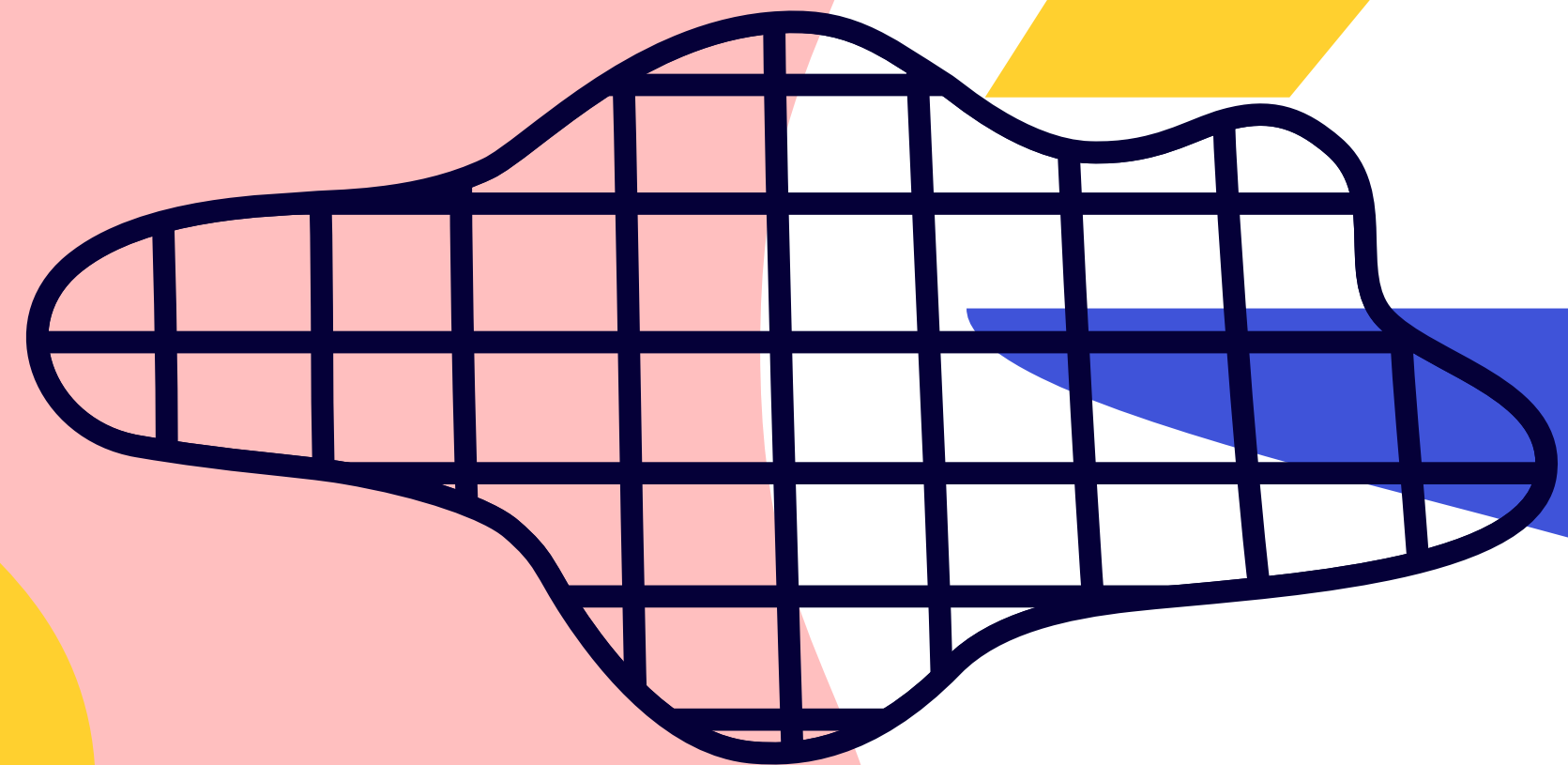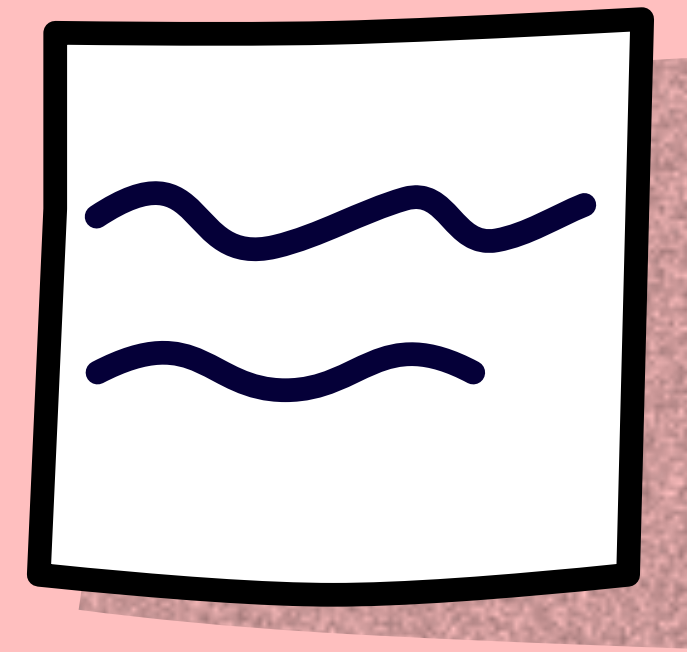- You can only speak to small sample set

Conduct interviews when you want to **deep-dive** into a topic with participants, and/or **aren't sure yet** what the full set of questions to ask might be.
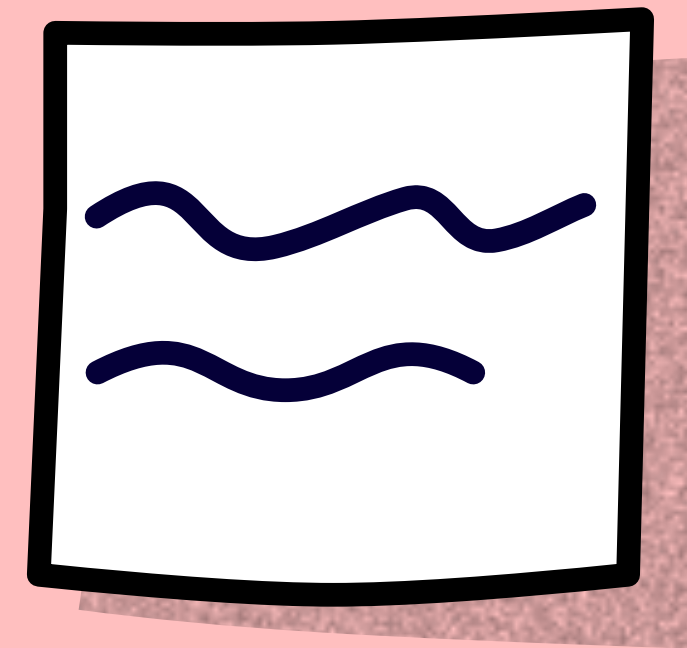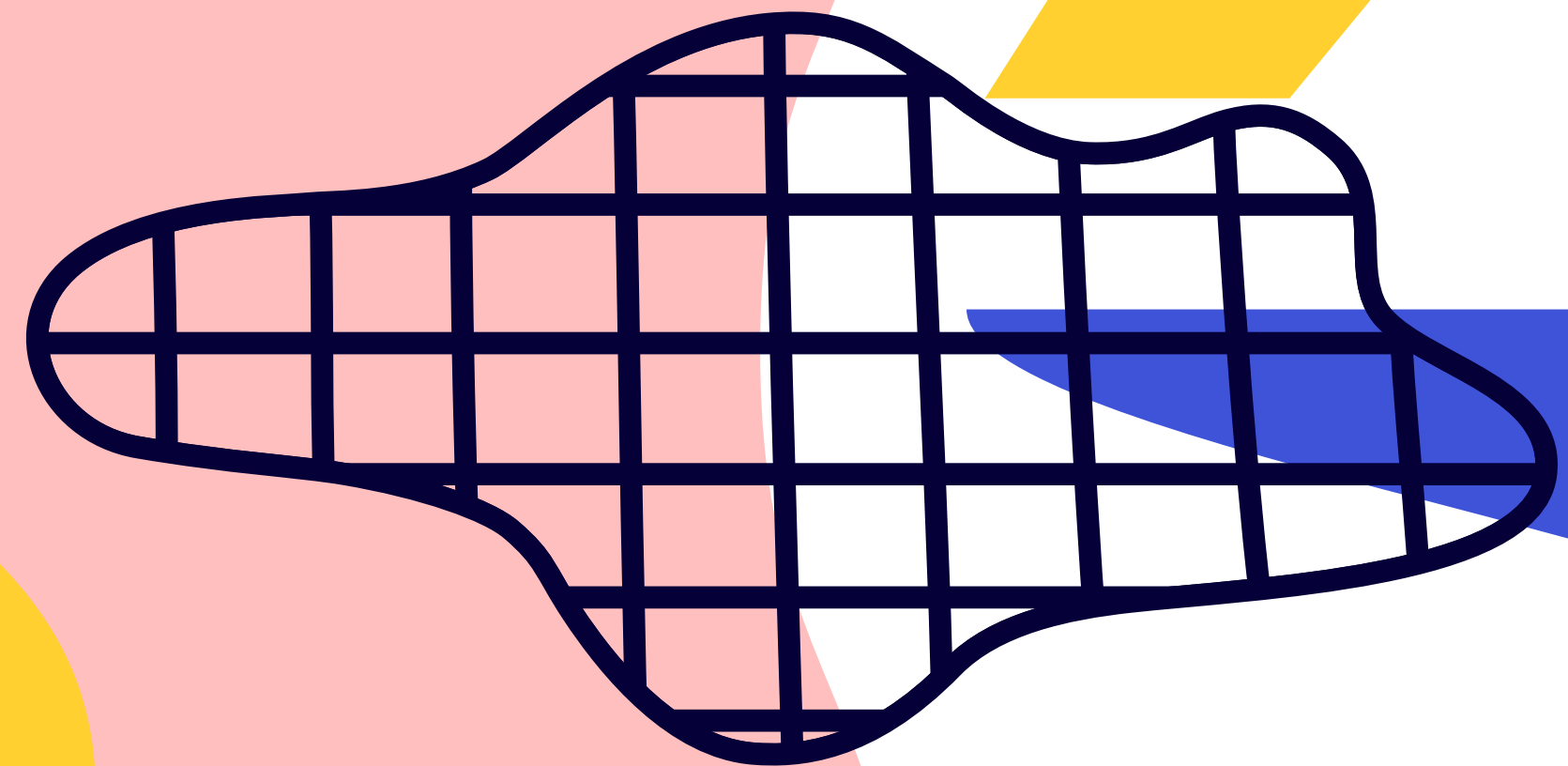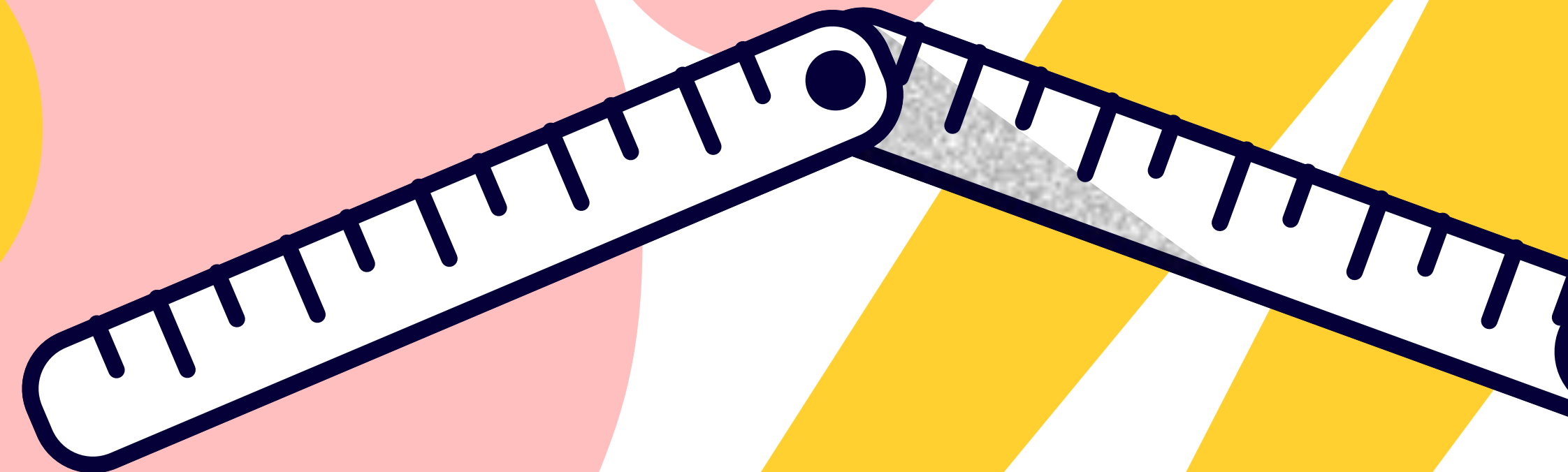
Interviewing task

Interviewing isn't natural

- It goes against how we've been trained to behave socially
- It requires us to set our personalities aside
- It means we actually have to listen to other people
- But there are certain skills that can help us do all this
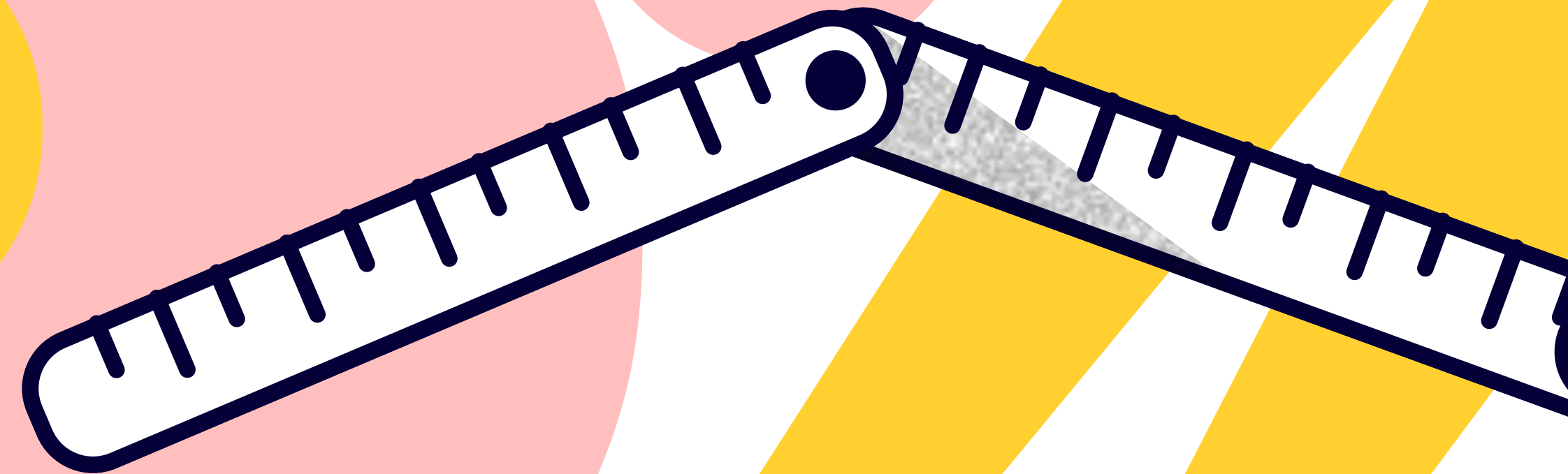
During an interview

- Ask open question
- Ask non-leading questions
- Remain neutral
- Embrace silence
- Probe appropriately

Open questions

Don't...

... ask questions that encourage one-word answers:
- 'Do you do this OR that?'
- 'Is this important to you?'

Do...

...encourage participants to tell 'stories'
- 'Tell me about the last time you...'
- 'What do you think about...'

Non-leading questions

Don't...

... put words in their mouths:

- 'How annoying do you find this thing?'
- 'As a 🔥 do you think it's easy to use?'

Do...

...allow them to reflect their experience in their own words:

- 'Tell me your thoughts on...'
- 'How have you found doing [this thing]?

Remaining neutral

Don't...

...agree too much:
- 'Yes that's great'
- 'Well done'

Do...

show with your eyes that you understand and keep conversation-encouragers simple:
- 'Mm hmm'
- 'Okay'
- 'Fair enough'

Embracing silence

Don't...

...worry about filling in gaps:
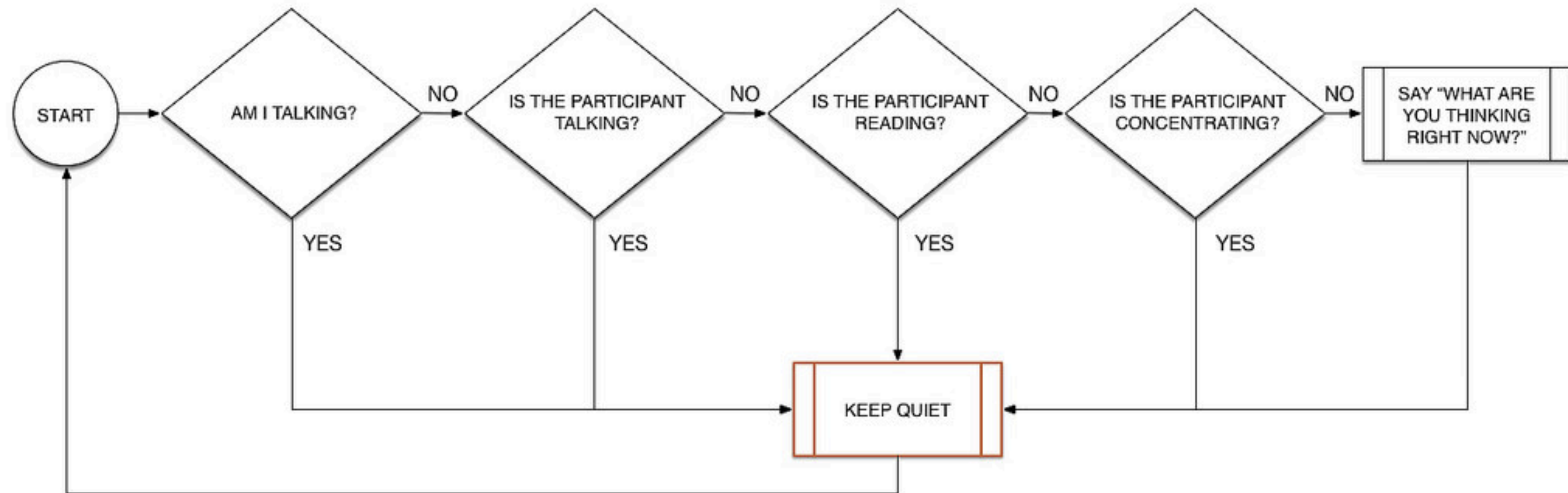- If you doubt yourself or your question
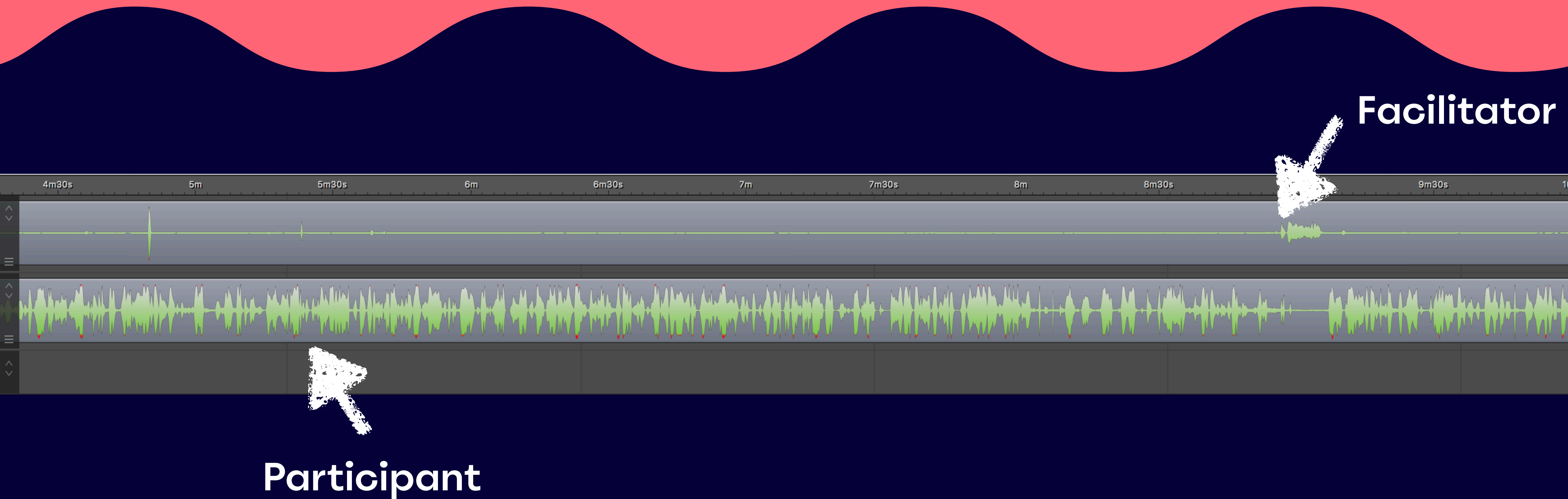- If your participant pauses

Do...

...generally shut up:
- After you're done asking a question
- After they're done responding

THE USABILITY TEST MODERATOR'S FLOWCHART

```
START → AM I TALKING? ──NO→ IS THE PARTICIPANT TALKING? ──NO→ IS THE PARTICIPANT READING? ──NO→ IS THE PARTICIPANT CONCENTRATING? ──NO→ SAY "WHAT ARE YOU THINKING RIGHT NOW?"
```

- AM I TALKING? — YES
- IS THE PARTICIPANT TALKING? — YES
- IS THE PARTICIPANT READING? — YES
- IS THE PARTICIPANT CONCENTRATING? — YES

KEEP QUIET

@userfocus

What a session should look like

Facilitator

Participant

Actions speak louder than words: what participants say and do aren't always the same. So try to shut up, listen, and observe.

Probing appropriately

Don't...

...interrogate people:

- 'Do you actually mean that?'
- 'Are you sure?'

Do...

...play dumb:

- 'Can you tell me a little more about that?'
- 'What do you mean by...?'
- 'Why's that?'

Playing dumb...

... really works to your advantage. It gives room for your participant to be the expert.

The privilege of asking questions

Dalia El-Shimy   Follow
Oct 4, 2016 · 4 min read

https://ux.shopify.com/the-privilege-of-asking-questions-9870c7ba9810
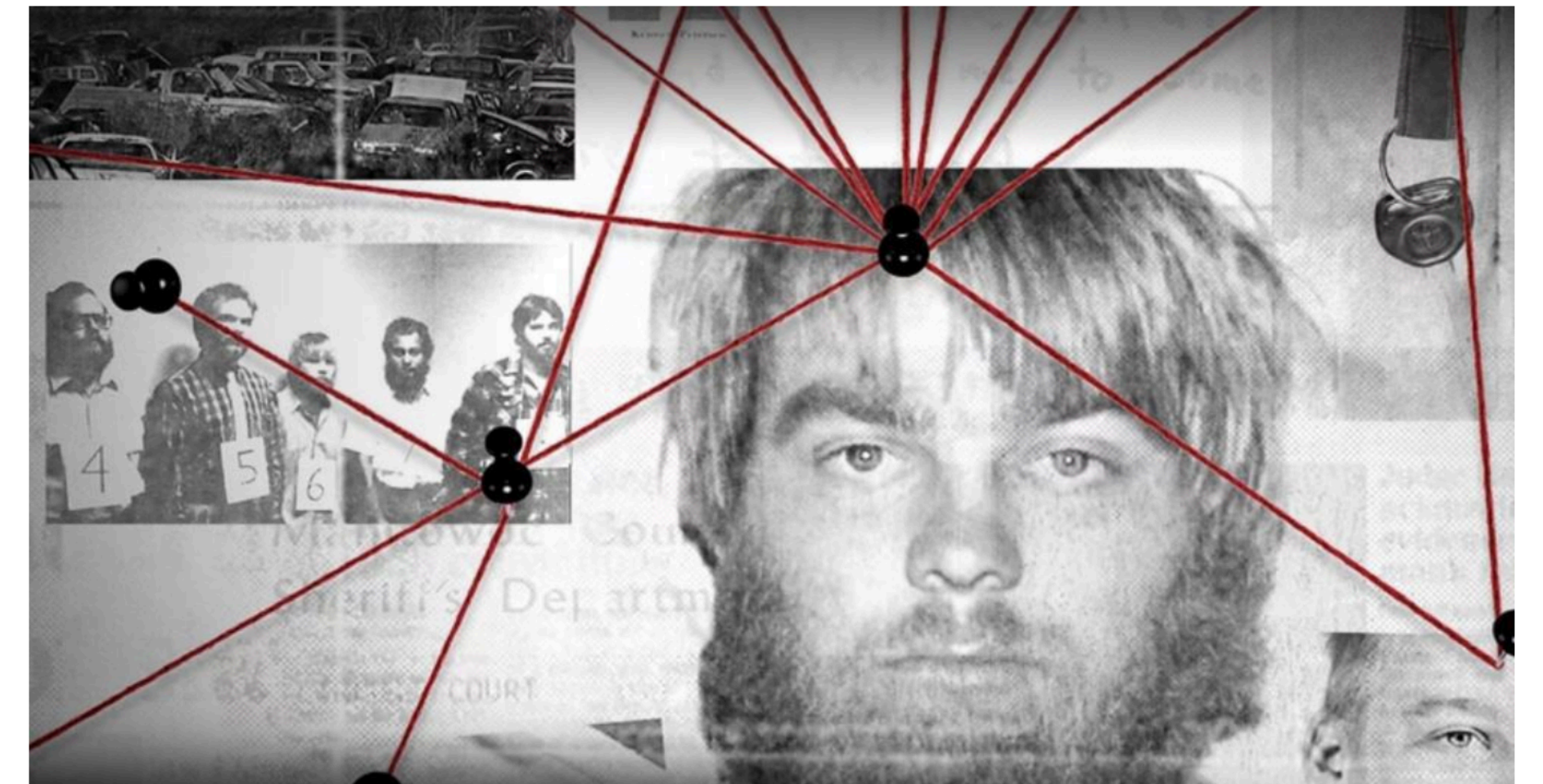
Fun fact

Why do bad interviewing techniques seem so familiar?

Making a Murderer: Lessons for UX Research

Alëna Iouguina Follow

Jan 13, 2016 · 5 min read

https://ux.shopify.com/making-a-murderer-lessons-for-ux-research-fb1ade501c26

So rare

"The questions suggest the answers."
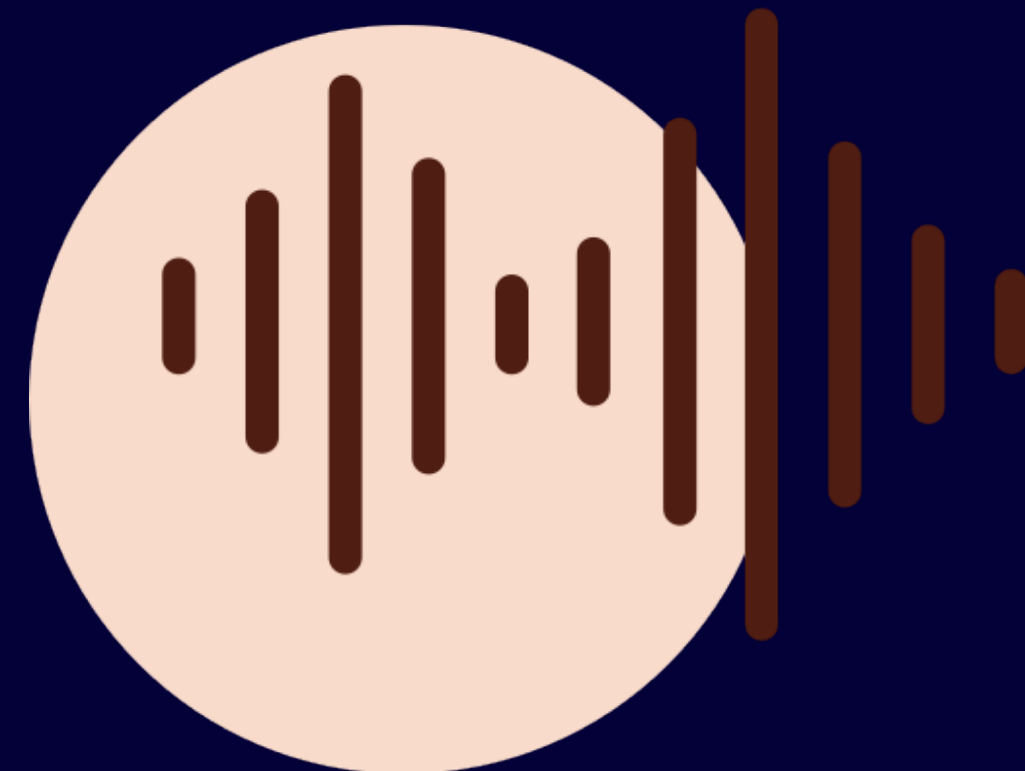

"The case worker tainted the interview."

Transcript task

A few insider techniques

Boomerang

Echo

Columbo

Boomerang

Think like a politician! Try to avoid helping participants, or giving them the answer. If they ask you a question, just turn it back on them in a non-threatening way.

- Participant: 'Do I have to register to use Miro?'
- Facilitator: 'What do you think?' or 'What would you do if I wasn't here?

This prevents you from leading the user by directly answering their question, without having to ignore it.
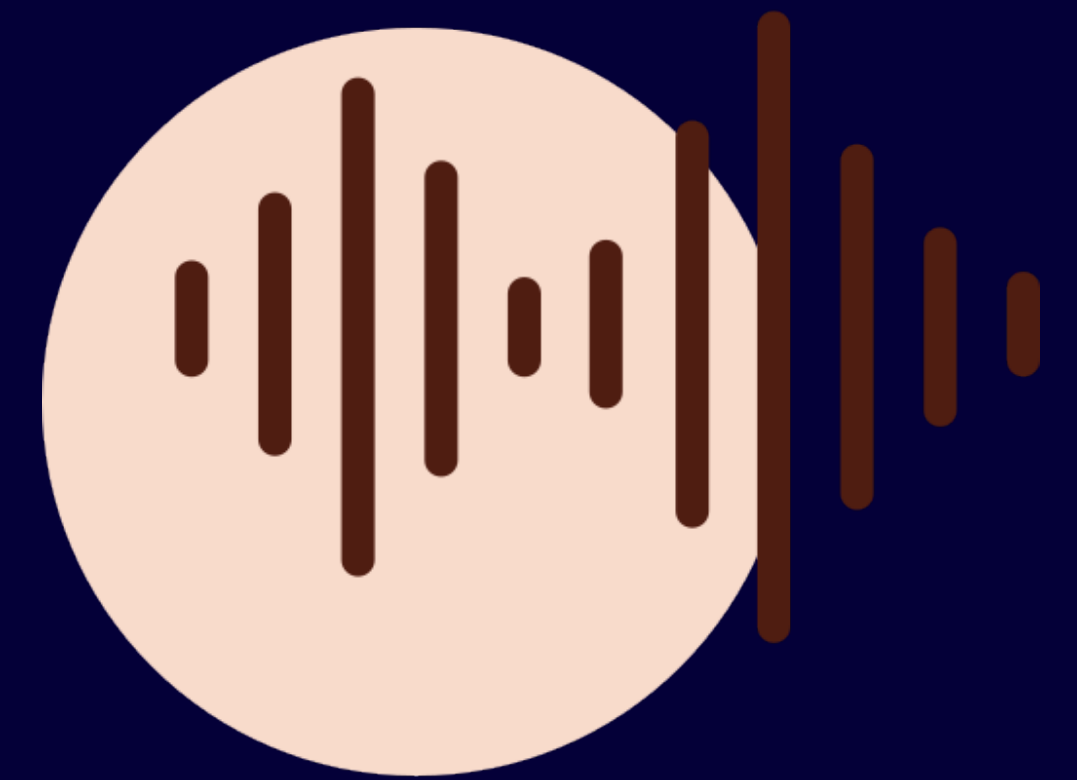
Echo

If the participant sounds unsure or confused, try repeating the last thing they said in a slightly interrogatory tone.

- Participant: 'This is not what I use Miro for.'
- Facilitator: 'Not what you use Miro for??'

This allows you to encourage the user to say more without judgement or suggestions.

Columbo

This is about playing dumb, just like Columbo used to do during his investigations, and hoping the user will help you out. You can do this by asking the participant partial questions.
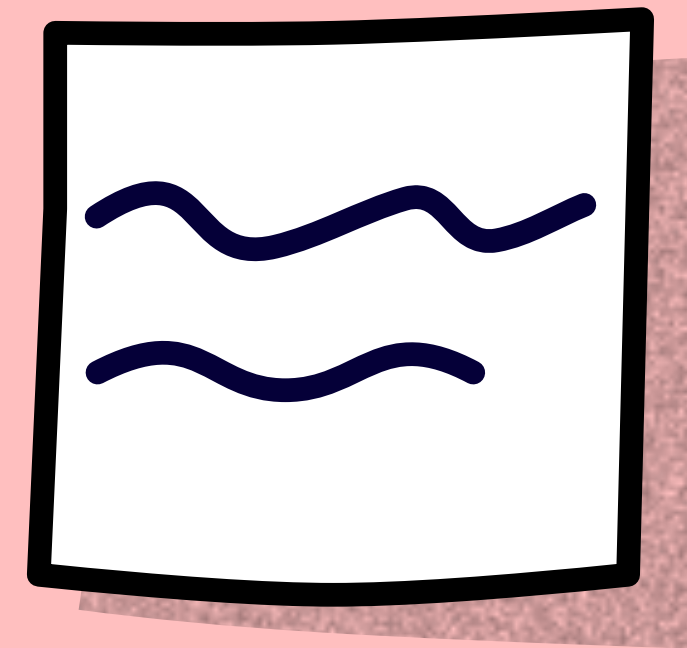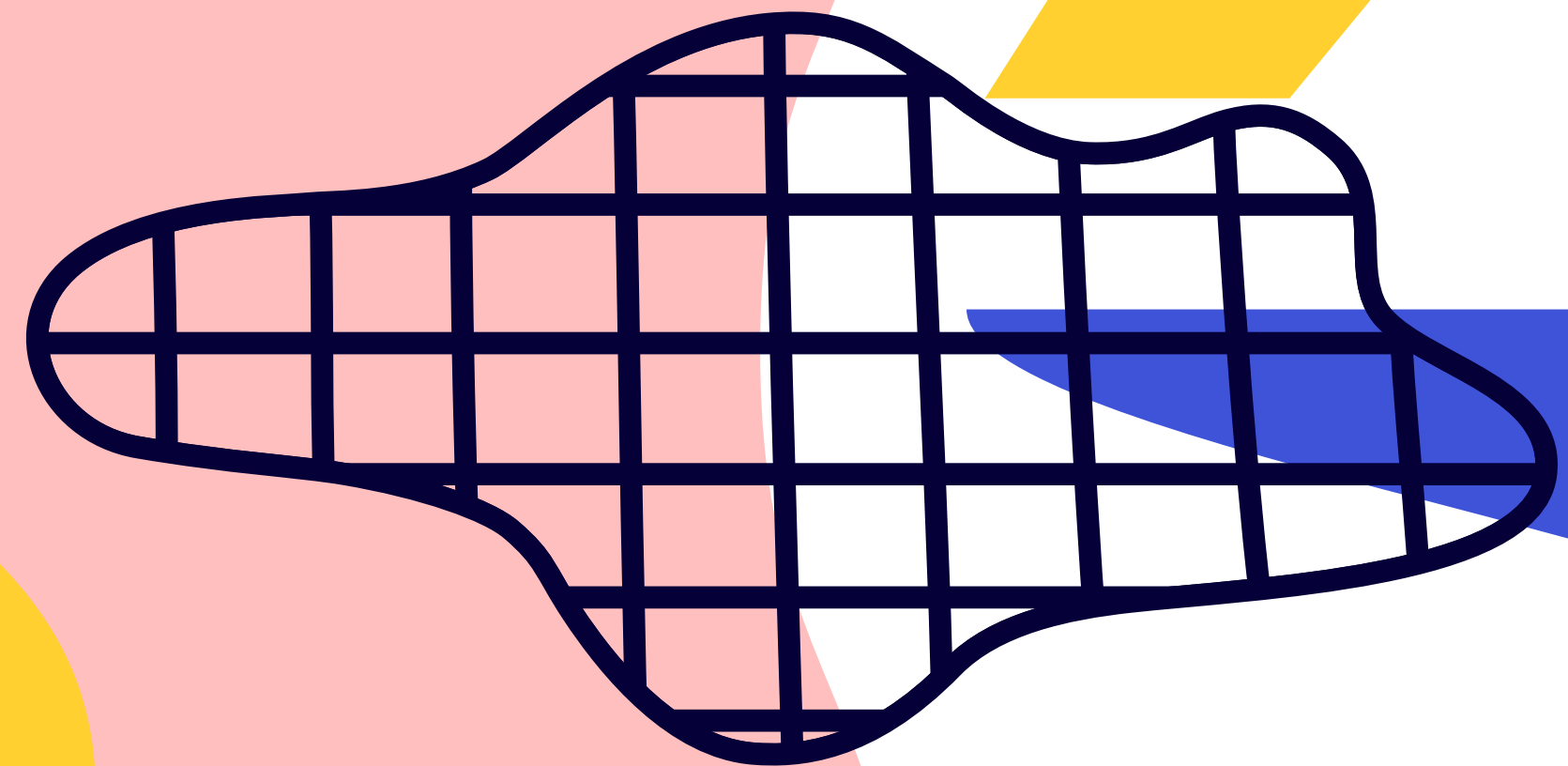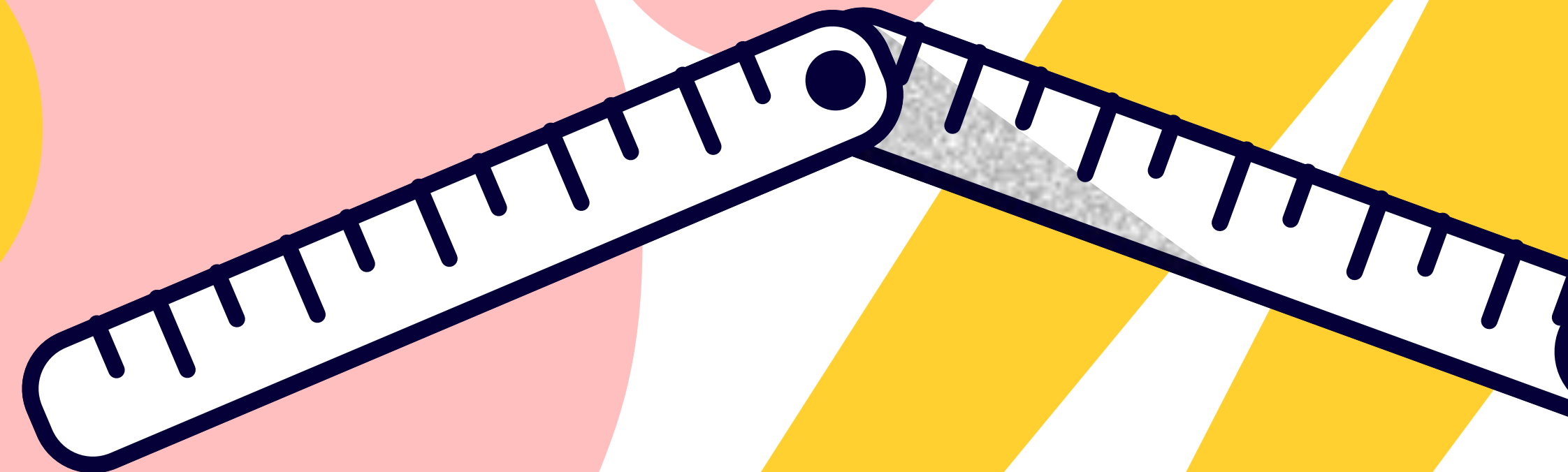
- Participant: 'Do I have to have a Miro account to collaborate with someone on a board?'
- Facilitator: 'So you're wondering if...'

This allows you to ask users questions on the fly when you can't think of a non-leading way of doing it.

Remember the tips!

- Ask open question
- Ask non-leading questions
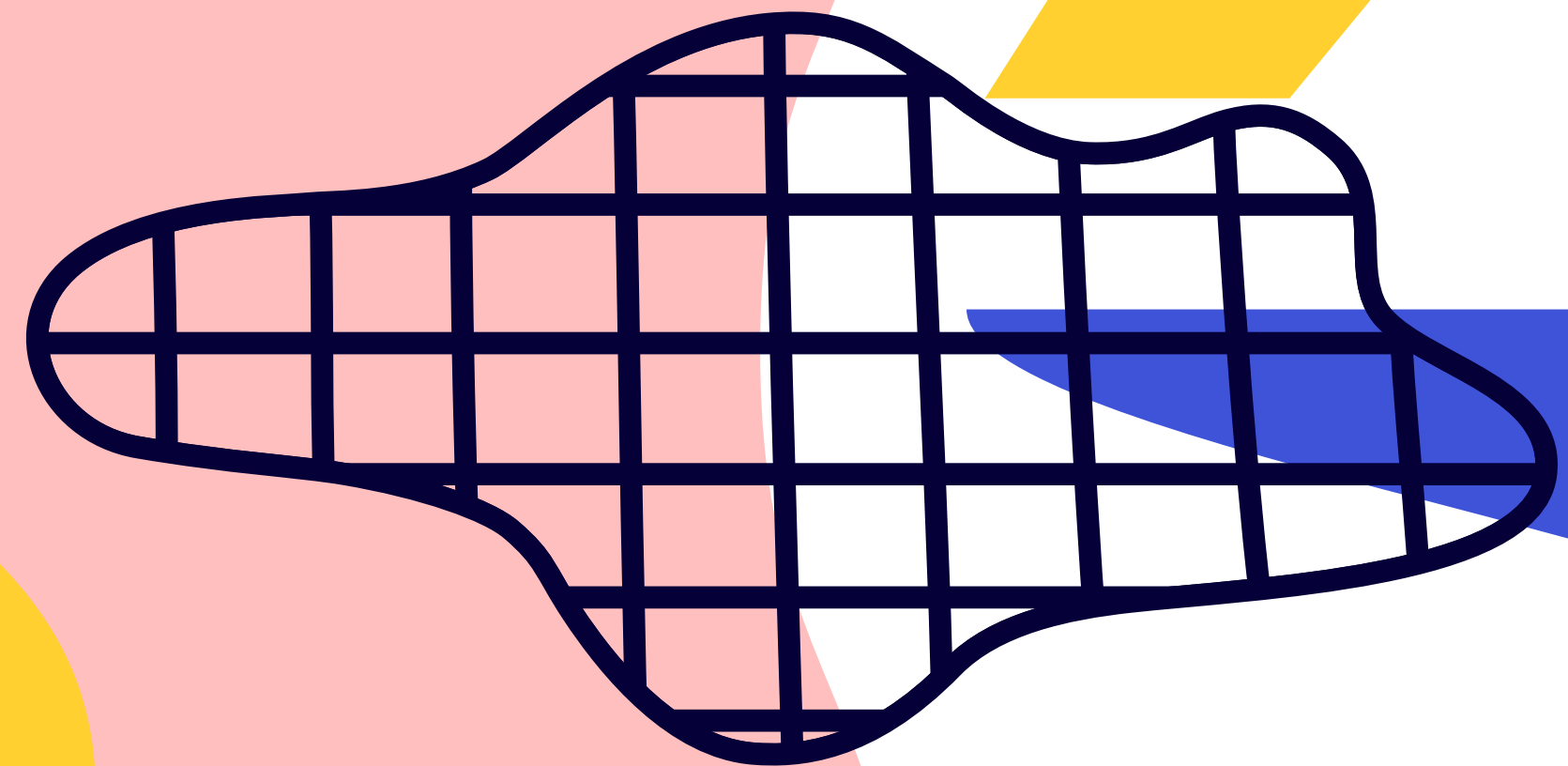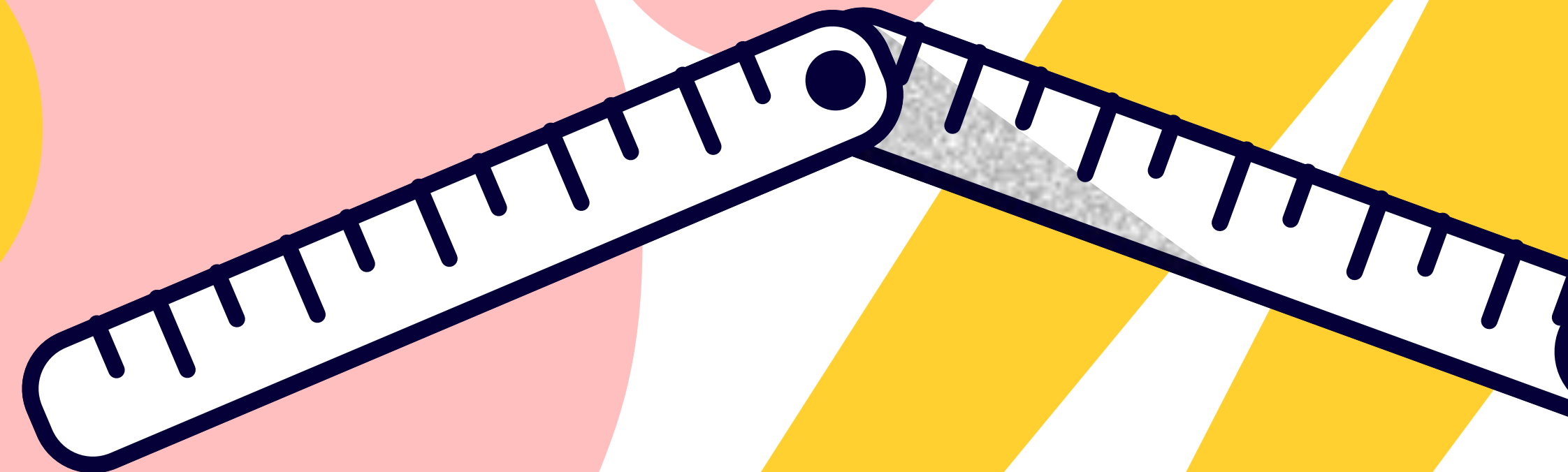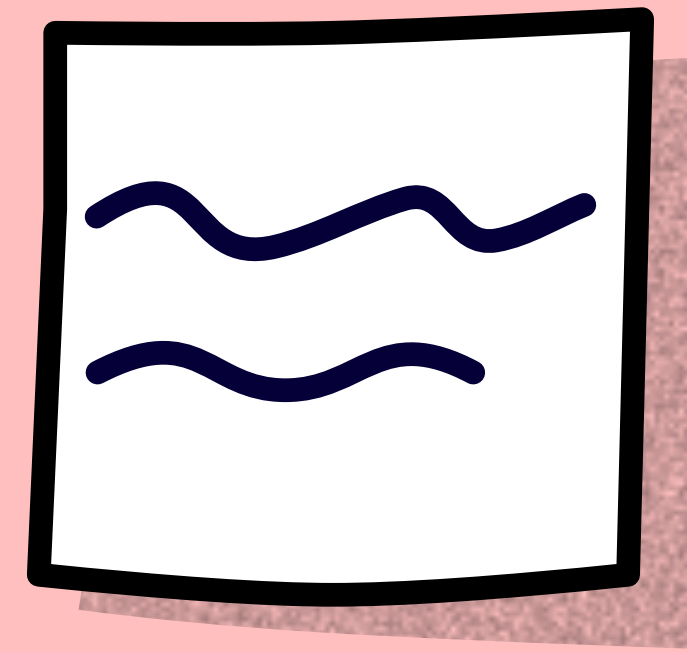- Remain neutral
- Embrace silence
- Probe appropriately

Never ask

- 'Would you use this?'
- 'How would you design it differently?'
- 'What features do you think are missing?'
- 'What would you want?'

Participants help us understand their behaviours and challenges. We then design solutions accordingly.

And don't forget to think about your tech setup

- How are you going to record the interview? (audio/video/ notetaker)
- Are you doing this in person or remote?
- Should other people from your team be able to sit in on the interview?

Thank you!
dalia@miro.com

miro