



World
Usability
Congress

connect
2020

SABRINA DUDA

21 OCTOBER, 2020

USER RESEARCH DRIVING DEVELOPMENT

**THREE CASE STUDIES
WITH LEARNING INSIGHTS**



USER RESEARCHER & PSYCHOLOGIST



MS Psychology

Engineering Psychology /

Cognitive Ergonomics & Computer Science

- 20+ years of experience in UX
- Head of UX at VERJ (LAB Group), London

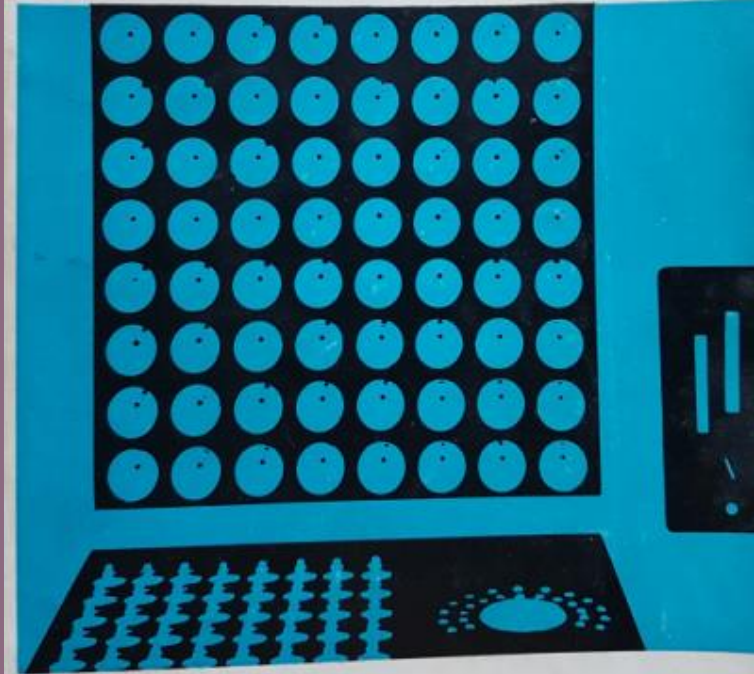


ENGINEERING PSYCHOLOGY



INGENIEURPSYCHOLOGIE UND VOLKSWIRTSCHAFT

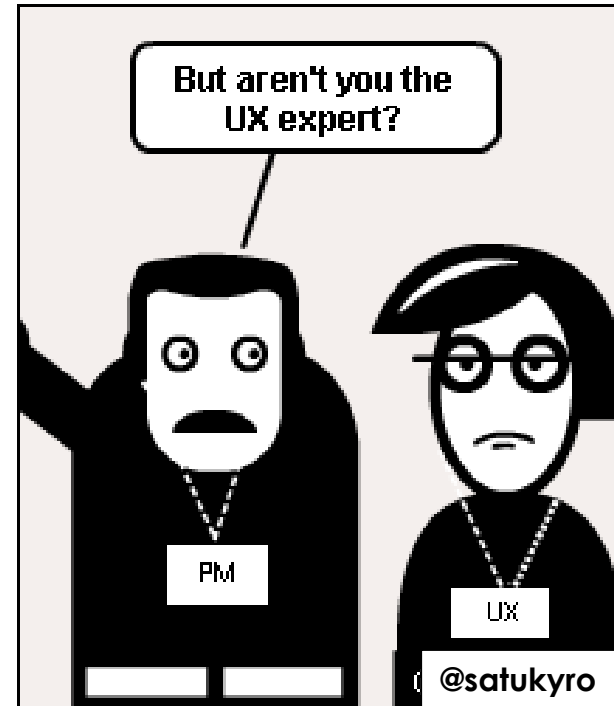
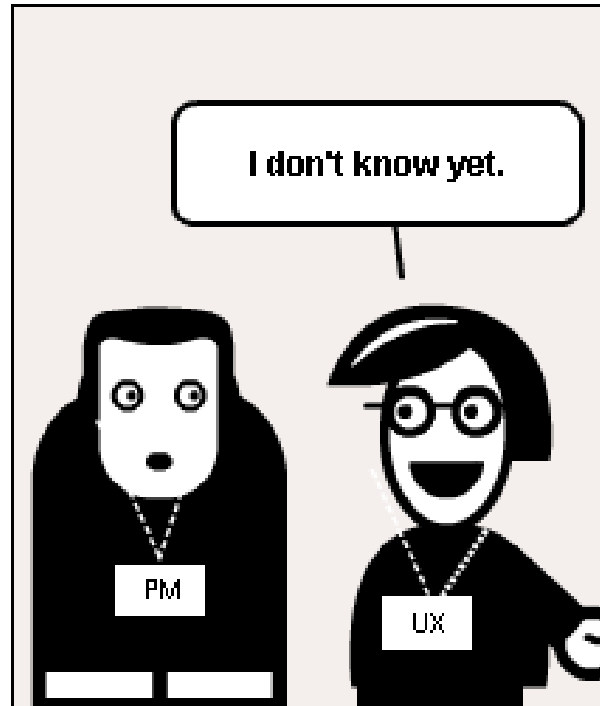
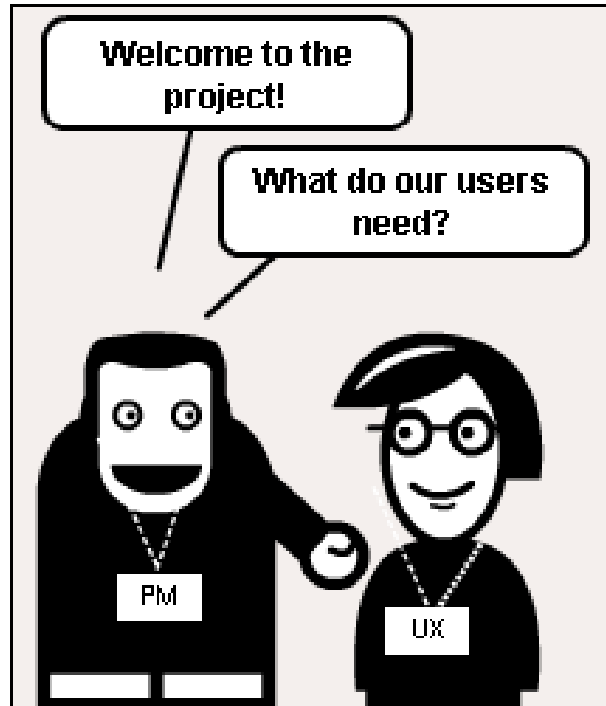
KLIX
SIEBENBRODT
TIMPE



VEB DEUTSCHER VERLAG DER WISSENSCHAFTEN

MYTH:

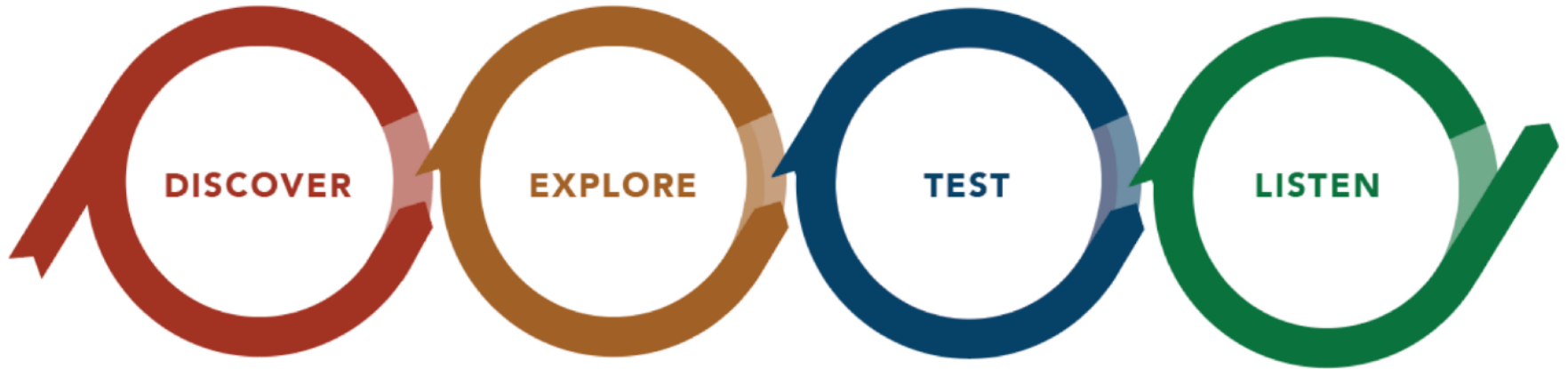
“A UX EXPERT KNOWS WHAT USERS NEED”



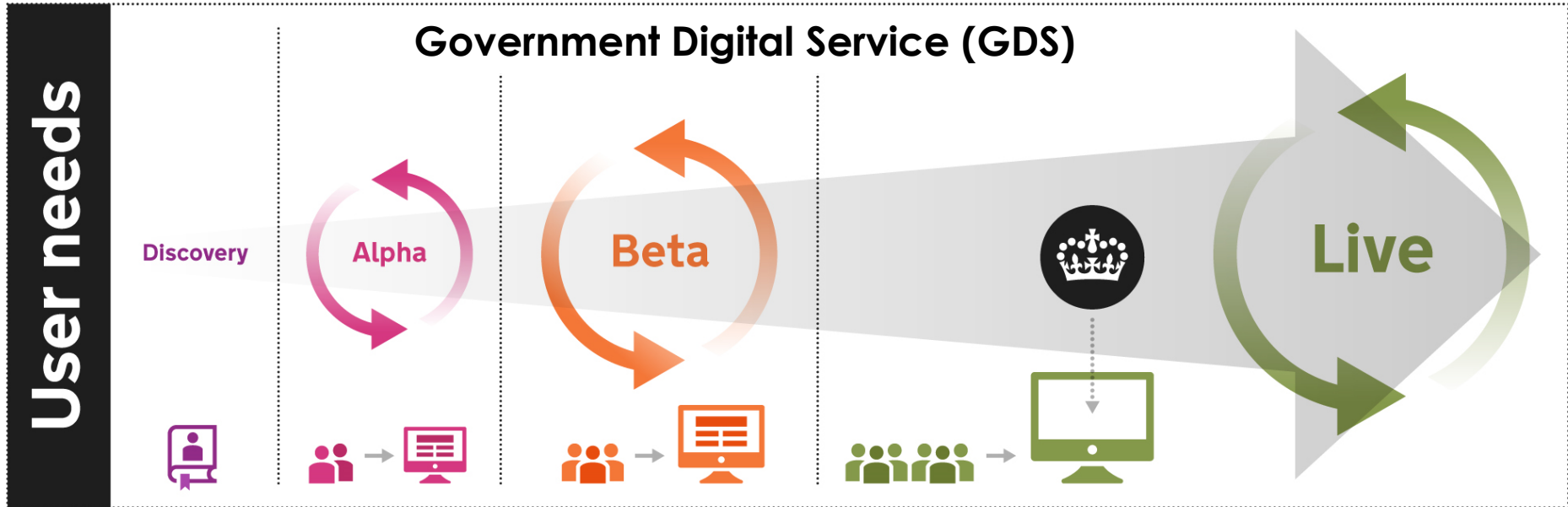
TRUTH: RESEARCH NEEDED IN EVERY STEP OF PRODUCT DEVELOPMENT



When to Use Which in the Product Cycle



USER NEEDS DRIVE PRODUCT DEVELOPMENT





Business Services Authority

NHS BSA WORKFORCE DISCOVERY

2019

CHALLENGES

Project goal

“How to make NHS the best place to work”

- Very vague and broad project goal.
- Tight timescale of 8 weeks.

Recruiting

- Many different user groups (NHS staff).
- No budget for recruiting and incentives.
- Doctors and GPs hard to reach for research.

INTERVIEWS WITH NHS STAFF

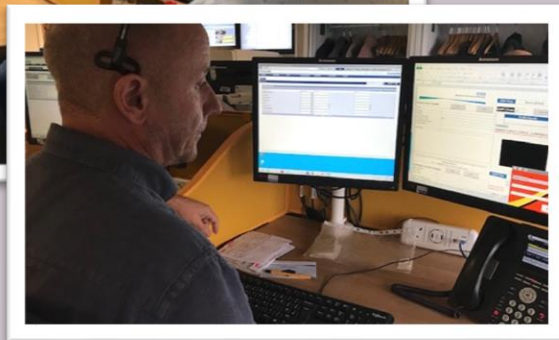
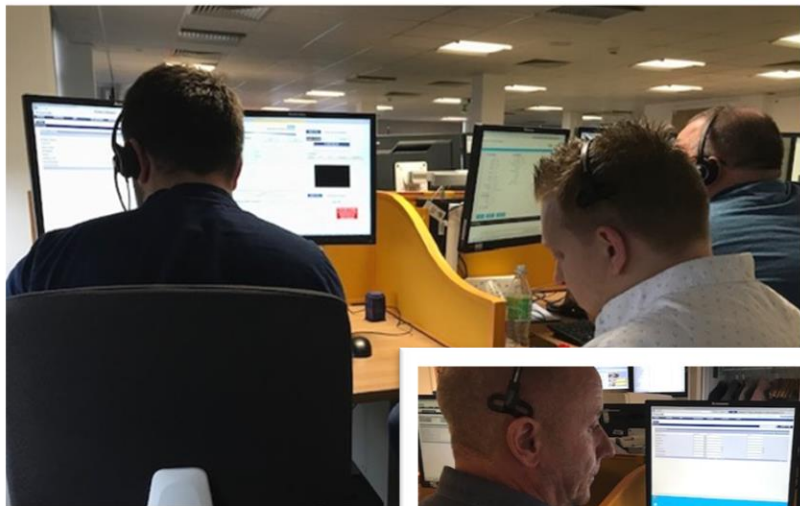
User research at the core of the project.

Identification of needs and pain points of NHS staff.

18 in-depth interviews with NHS employees:

Hospital doctors, GPs, nurses, practice managers, office workers,...

CALL CENTRE LISTENING: PENSION LINE NHS STAFF, NEWCASTLE



"I can claim a lump sum and still get my pension? That is really good news."

RESEARCH ON-SITE WITH PRACTICE MANAGERS: NHS PENSION EVENT, NEWCASTLE



- Interviews with practice managers (they manage NHS staff pensions)
- Taking part in discussions
- Listening to audience questions

"Sometimes I don't even know what question to ask, it is so complex, I don't know what to look for."

USER NEEDS IDENTIFIED



User need	Quantity	Keyword
I want one system/one access.	6	Systems
I need every day to be different/variety in my job.	5	Daily work
I need to have good annual leave.	4	Pension & benefits
I need to make a difference to people/make someone's life better/help people.	4	Daily work
I want to share knowledge with other NHS staff/practices.	3	Career pathways
I need to understand the purpose of the training.	3	Career pathways
I need a training budget/more training/extra training.	3	Career pathways
I need to understand my pension.	3	Pension & benefits
I need the discounts to be better advertised to be aware of the options.	3	Personal wellbeing & discounts
I need to feel valued, appreciated, and someone being grateful for the best.	3	Daily work
I need less admin / bureaucracy.	3	Daily work
I need to work in a good team.	3	Daily work

TOP USER NEEDS



Identify user needs



Extract opportunities



- I need to feel NHS cares about me.
- I need to feel NHS supports me with my particular life event.
- I want the option to learn and develop, I need training specific to my role.
- When I start a new job I need access to the tools necessary for my job and someone to answer my questions.
- I want one system.
- I want to be delighted and surprised.



Wellbeing & benefits
Life events
Career pathways
Onboarding
One System
Magic moments

FINDINGS VS. ASSUMPTIONS

"My job motivation was never money. Feeling you are doing what you can to make someone's life better."

Psychiatrist

"It's nothing I looked into. Not well advertised."

Senior Nurse

(False) stakeholder assumptions about shopping discounts

- NHS staff is motivated by discounts for shopping; they are important.
- NHS staff is aware of the discounts options.

"I used it a couple of times. A nice gesture. But not rated highly."

Young GP



LEARNING INSIGHT #1

Validated user needs

USER RESEARCH VALIDATES ASSUMPTIONS

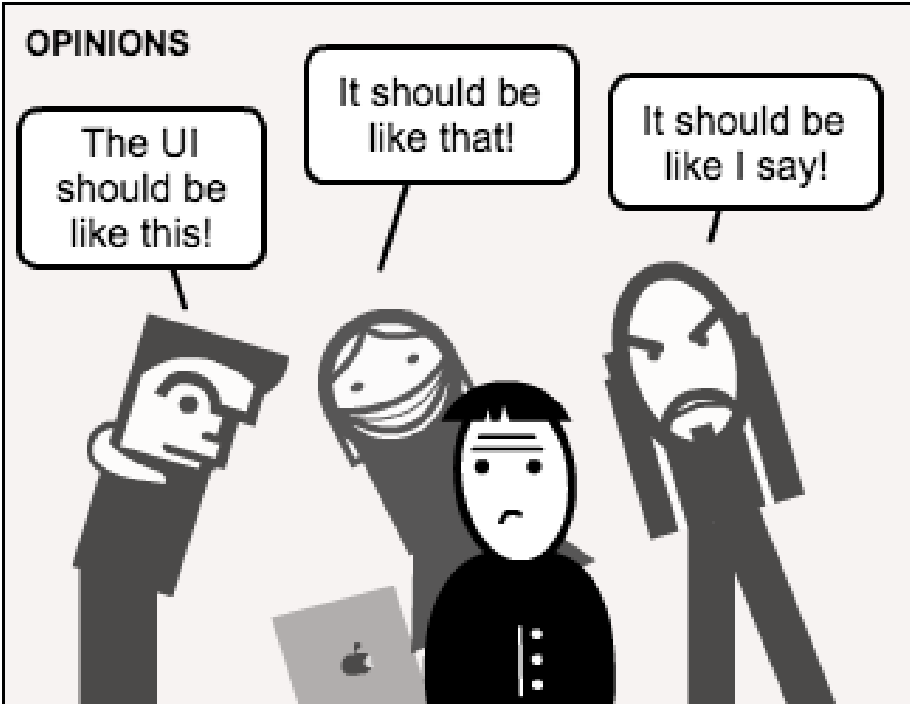


OPINIONS

The UI should be like this!

It should be like that!

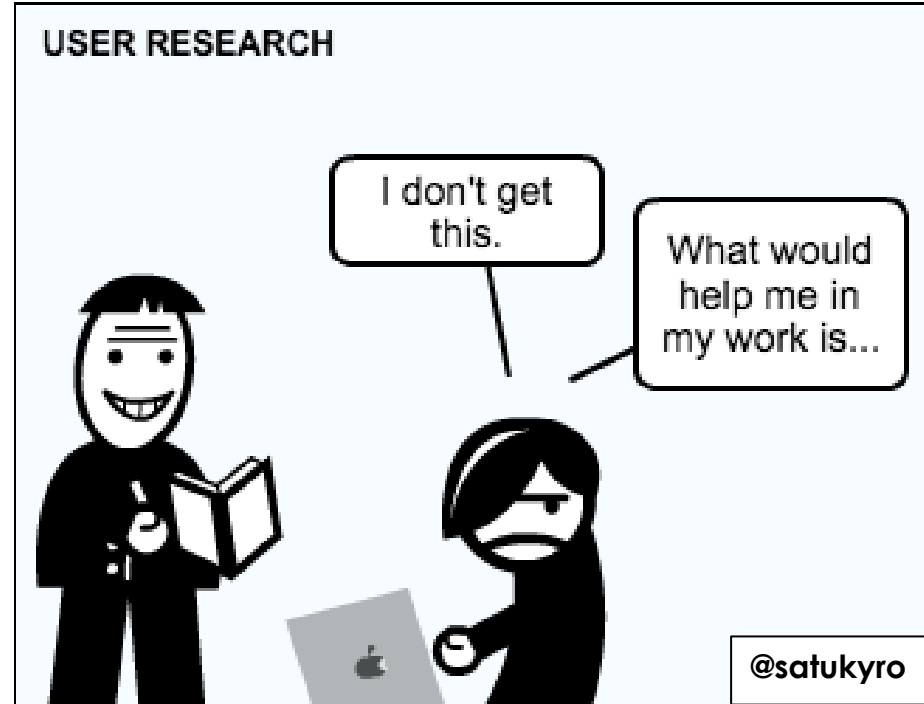
It should be like I say!



USER RESEARCH

I don't get this.

What would help me in my work is...



@satukyro

ASSUMED USER NEEDS ARE NOT REAL USER NEEDS





ZAVA

DIGITAL HEALTH, TELE MEDICINE

2018/2019



NEW PRODUCT: DISCOVERY & DESIGN SPRINTS



- Creating a brand new product for the German market
- Working in a cross-functional agile team with a doctor and a lawyer
- Weekly design sprints with user research
- Lean UX approach

14 DESIGN SPRINTS: EVERY WEEK A NEW PROTOTYPE & USER RESEARCH

6 month

- 14 Design Sprints
- Every week a new prototype
- 78 user interviews

Weekly testing of assumptions with a new prototype.

Learning a lot about users' needs and every aspect of their journey.

TEAM COLLABORATION & FAST SPRINTING

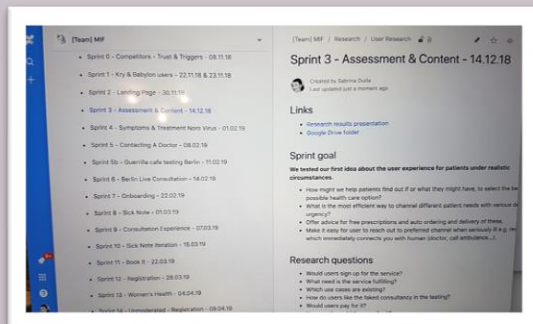
Team collaboration





User research

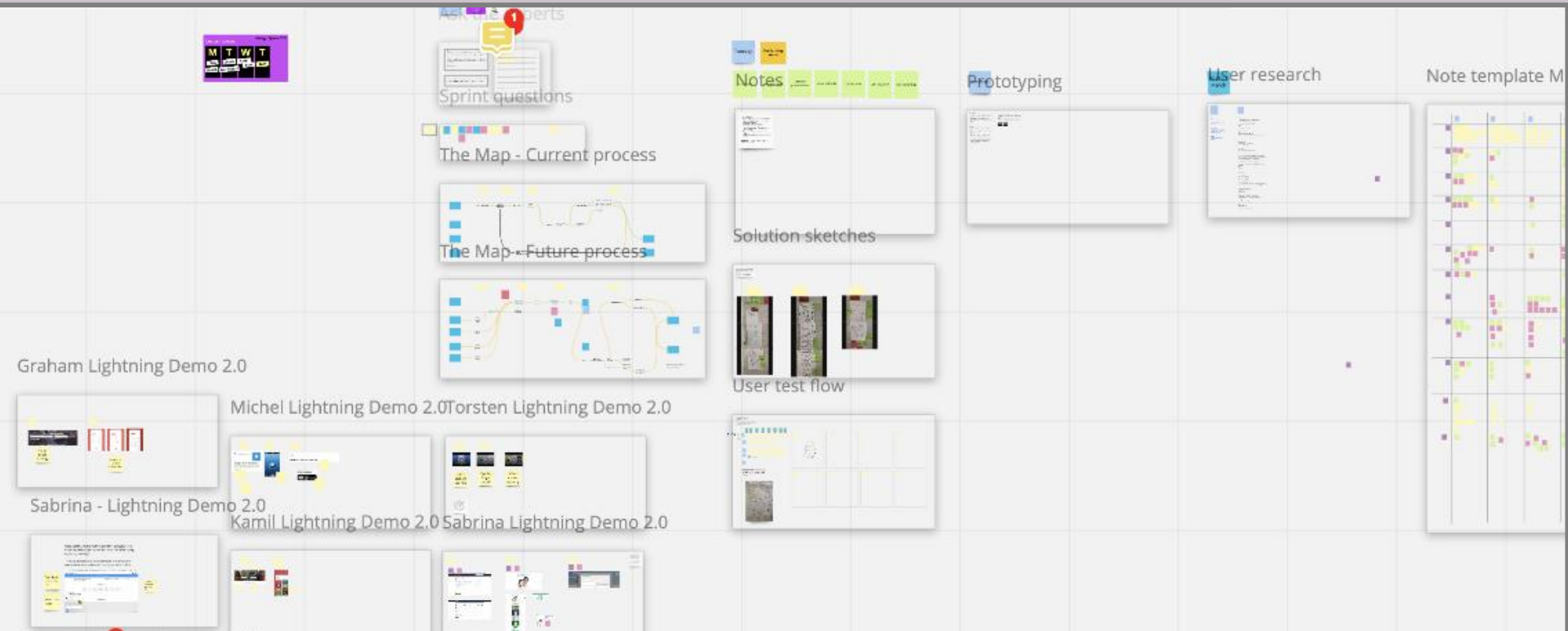




WHOLE SPRINT ON ONE MIRO BOARD



miro



1 DAY SPRINTS WITH USER RESEARCH: TEAM IMMERSION IN BERLIN



- Sprinting and prototyping every day
- Talking to users every day
- Absorbing culture and lifestyle in Germany



LEARNING INSIGHT #2

Fast iterations with testing



LEARNING INSIGHT #3

Team ownership of product



COMMON MISTAKE: IDEATE SOLUTIONS TO WRONG PROBLEMS

1) Define the problem

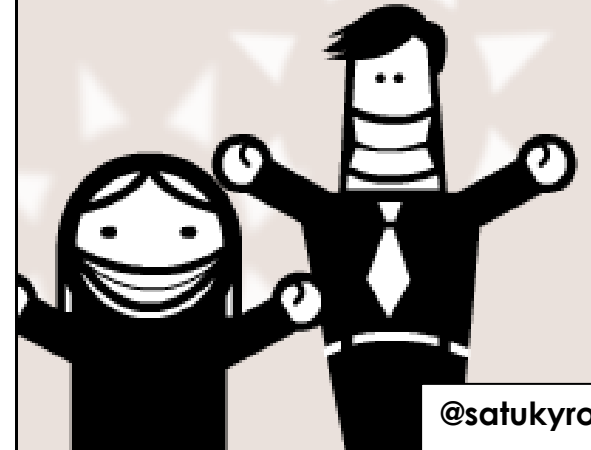
SKIP!

2) Collect data with user
research

SKIP!

3) Ideate solutions

(to wrong problems)



@satukyro



USABLE VS. USEFUL





NHS DATA SECURITY CENTRE

2020

REDESIGN OF NHS DSC WEBSITE

Redesign

- Landing page and key content pages.

User feedback

- Integrate continuous user feedback.
- Create new information architecture based on card sorting.

CHALLENGES

Challenges

- Short time frame of 7 weeks.
- Distributed remote team.
- Difficult recruiting due to Coronavirus.



User recruiting

- Data security specialists from NHS.
- Pre-selected list with users from the Cyber Associates Network (CAN).
- Scheduling via email and calendar tool; digital consent form.

REMOTE RESEARCH TOOLS

The screenshot shows a web browser with multiple tabs. The active tab displays the NHS Digital website, specifically the 'Secure boundary service' page. The page header includes the NHS Digital logo and navigation links: 'Data and information', 'Systems and services', 'News and events', and 'About NHS Digital'. The main heading is 'Secure boundary service', followed by a subheading: 'Our free secure boundary service is a perimeter security project supporting NHS organisations. Find out how we can help you secure your organisation.' Below this, there is a 'Page contents' section with links: 'Top of page', 'About our secure boundary service', 'Benefits', 'How the service is being developed', 'How it works', 'Components', 'Capabilities', and 'Register for the service'. The 'About our secure boundary service' section states: 'Our secure boundary service provides a perimeter security solution offering protection against security threats. It's free for NHS organisations. This solution uses next generation firewall (NGFW) and web application firewall (WAF) protection to protect internet traffic from digital and cloud-based threats.' The 'Benefits' section begins with 'Find out about the benefits of the secure boundary service.' In the bottom left corner, there is a text overlay: 'User-13-Rob-23.03.20'. On the right side of the screenshot, a video call interface is visible, showing a participant named 'Sabrina Duda' with a timer at '00:47:18' and buttons for 'End' and 'Pause'.

 lookback

 OPTIMAL WORKSHOP

 SurveyMonkey

 inVISION

UX RESEARCH EVERY WEEK

User interviews every week.
Feedback fed back into the
prototype immediately.

- Remote moderated interview (N=16)
- Questionnaire (N=5)

Sprint 1 2 March	Sprint 2 9 March	Sprint 3 16 March	Sprint 4 23 March	Sprint 5 30 March
Landing page	Landing page + services page	Landing page + services page + secure boundary page	Landing page + services page + secure boundary page + more service pages	Landing page + services page + secure boundary page + more service pages + contact form
Interview 4 users	Interview 4 users	Interview 3 users	Interview 4 users	Interview 1 user Survey 5 users

THE PAGES

NHS
Digital

Search

[Data and information](#) [Systems and services](#) [News and events](#) [About NHS Digital](#)

[NHS Digital](#) > [Cyber and data security](#)

Cyber and data security

We help NHS organisations to manage and improve their cyber security.

Alerts

See all alerts

Citrix RCE Vulnerability in Multiple Products
Severity: High Date: 21/01/2020

HPE Enterprise Storage Abnormal Failure Rate Issue
Severity: Medium Date: 15/12/2019

Google Releases Security Updates for Chrome
Severity: Low Date: 03/11/2019

Most used services

See all services

Secure boundary service

Specialist training for SIROs

GCHQ-certified board training

Useful information

See all information

NHS
Digital

Search

[Data and information](#) [Systems and services](#) [News and events](#) [About NHS Digital](#)

[NHS Digital](#) > [Systems and services](#) > [Cyber security support model](#)

Cyber security support model

Our free cyber security support model helps NHS organisations to meet their cyber security responsibilities. Find out about the services we offer.

Page contents

[Go to alert](#)
[Benefits of using our services](#)
[Discover support](#)
[Sign up for our support model](#)

The model consists of five cyber security services that can be tailored to your organisation to help you transform your digital services.

Find out more by watching this video

Cyber security support model

EMBED

Unified Cyber Risk Framework

View a transcript of this video

How our support model works

Cyber security support model

```
graph TD; NAC[NAC On-site Assessment] --> GCHQ((GCHQ certified board training)); GCHQ --> Tech[Technical Remediation]; Tech --> UCRF[Unified Cyber Risk Framework]; UCRF --> COS[Cyber Operational Readiness Support]; COS --> SB[Secure Boundary Service]; SB --> NAC;
```

Create assessment.
It's essential to start with an create assessment. This helps your organisation to identify issues and provides initial guidance on risks and vulnerabilities.

Technical remediation.
This service fixes the issues identified in your assessment, focusing on your existing technology and systems.

Create assessment

Technical remediation

Cyber operational readiness support

Unified cyber risk framework

Secure boundary service

NHS
Digital

Search

[Data and information](#) [Systems and services](#) [News and events](#) [About NHS Digital](#)

[NHS Digital](#) > [Systems and services](#) > [Cyber security support model](#)

Services and resources

We support health and care organisations to manage their cyber risk. This enables the safe and secure use of data and technology to deliver improved patient care.

Home

Filter by category

Filter by severity

Filter by date

Filter by type

Filter by status

Filter by location

Filter by language

Filter by format

Filter by topic

Filter by audience

Filter by region

Filter by country

Filter by organisation

Filter by project

Filter by phase

Filter by outcome

Filter by impact

Filter by value

Filter by cost

Filter by time

Filter by effort

Filter by complexity

Filter by risk

Filter by priority

Filter by urgency

Filter by importance

Filter by relevance

Filter by applicability

Filter by feasibility

Filter by desirability

Filter by viability

Filter by sustainability

Filter by scalability

Filter by replicability

Filter by transferability

Filter by adaptability

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GCHQ-certified board training

Create assessments

Cyber operational readiness support

Unified cyber risk framework

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GCHQ-certified board training

Create assessments

Cyber operational readiness support

Unified cyber risk framework

Secure boundary service

REMOTE WAYS OF WORKING

Face-to-face

- Kick-off workshop at the start of the project in Leeds
- One additional meeting in London

Remote

- Daily stand-ups via MS teams
- Dedicated Slack channel
- Trello board with tasks
- Documentation of work on Confluence
- Weekly show & tells with Google slides via MS Teams



LEARNING INSIGHT #4

Remote team collaboration with tools



LEARNING INSIGHT #5

Team involvement in research



LEARNING INSIGHT #6

Knowledge flow about research

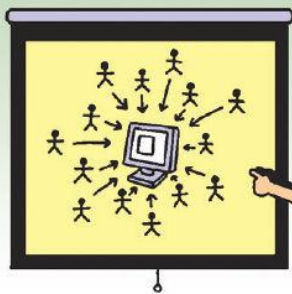


LEARNING INSIGHT #7

Talk to the right users

TALK TO THE RIGHT USERS

WE INTERVIEWED HUNDREDS OF USERS AND TURNED ALL OF THEIR SUGGESTIONS INTO FEATURES.



AS IT TURNS OUT, EVERY USER WE TALKED TO WAS AN IDIOT, AND THEIR DUMB SUGGESTIONS RUINED OUR PRODUCT.



IN HINDSIGHT, WE PROBABLY SHOULD HAVE TALKED TO PEOPLE WHO WORK OUTSIDE THIS BUILDING.



Dilbert.com DilbertCartoonist@gmail.com

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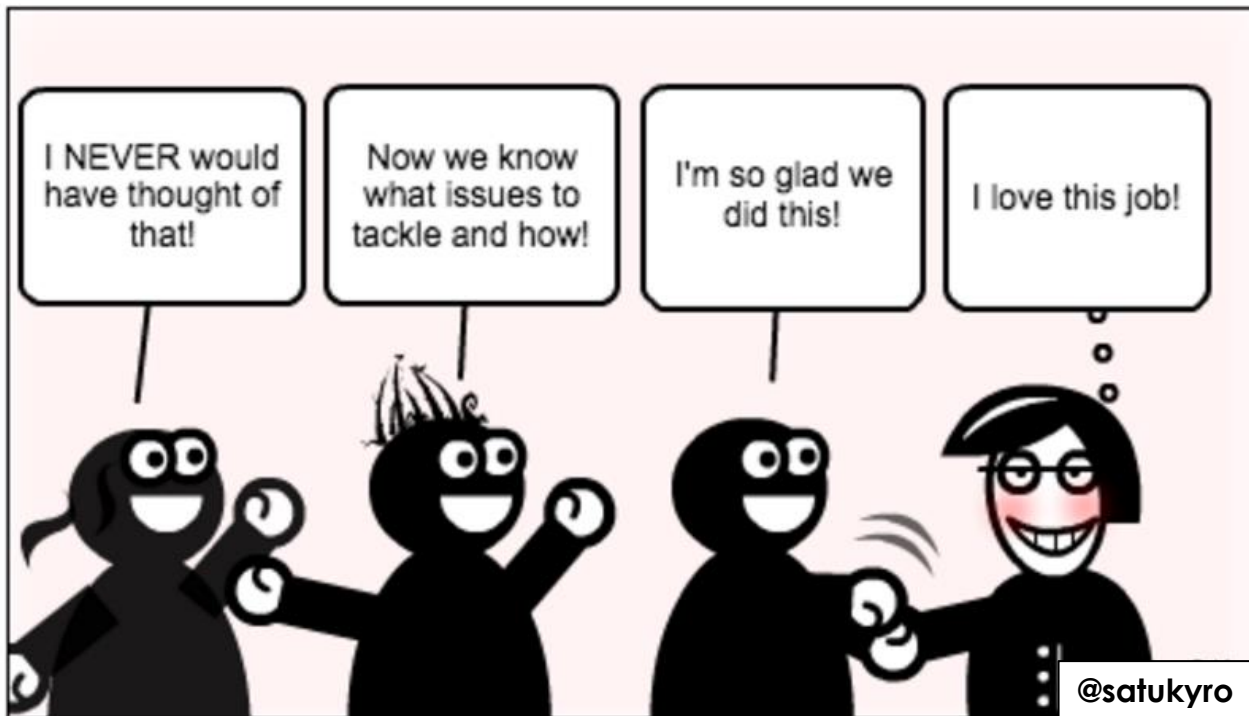


HOW CAN RESEARCH DRIVE DEVELOPMENT?

SUMMARY KEY LEARNINGS

1. Validated user needs
2. Fast iterations with testing
3. Team ownership of product
4. Remote team collaboration with tools
5. Team involvement in research
6. Knowledge flow about research
7. Talk to the right users

I HOPE YOU ARE A HAPPY USER RESEARCHER!





THANK YOU FOR YOUR ATTENTION!

www.smiling.club
sabrina@smiling.club

SMIL^{ING}

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