Planning impactful user research

UX in the City: Manchester Thursday 14 March 2019



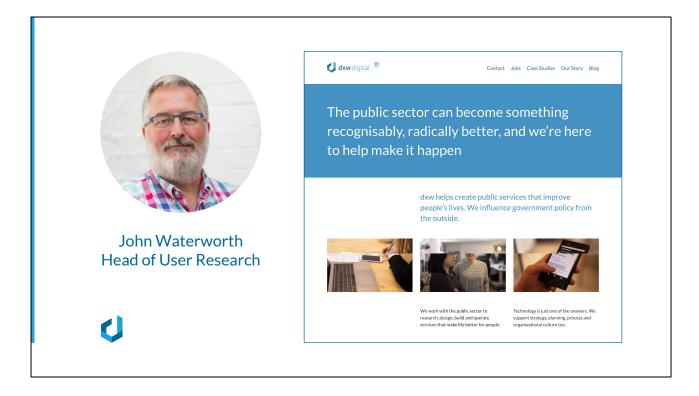
I've spent a lot of the last 10 years telling people that user research is great, and they should probably do some.

When I was speaking to Sophie Dennis about doing something at UX in the City, we thought we'd probably done enough of that. Because lots of organisations and teams *are* doing some good user research now.

Maybe it's time to talk about how that user research can have more impact.

And a good place to start with having more impact is with planning. Deciding what research to do and how to do it.

So that's what we'll be looking at in this session.



But first, a bit about me.

I'm John Waterworth. I'm head of user research at dxw digital.

Before that I was head of user research at the Government DIgital Service and head of the government user research community.

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We've not got long, so I'll give a quick introduction to what I mean by impactful user research.

And I'll also quickly introduce the scenario that we'll use for the four activities that will then take up most of the session.

Impactful user research



So let's quickly look at what I mean by user research and what I mean by impact.

Help organisations and teams
Build a deep understanding of
different kinds of people
So we can make better services
for them



User research is about helping our organisations and our teams (and they might be organisations we are part of, or who we work with as clients) build a deep understanding of people so we can make better services for them.

And that gives us a pretty good statement of what I mean by impact.

Is your user research really helping your colleagues or clients build that deep understanding? And is what you're learning together helping to make better services?

Findings that are reliable



So how do we make sure that our user research has the impact we want.

Of course it's important that we're creating findings that our organisations can rely. That we're not making things up, jumping to conclusions or missing things.

Findings that are reliable important useful clear



But we can get overly focussed on that. And forget other things that matter just as much.

We're always limited in how much research we can do, so are we focussing on the most important issues? Are we producing findings in a way our colleagues can use and act on? Are our findings clear, so out colleagues understand them and take the right action?

Research that is frugal in small batches a team sport adapt as we learn



And are we using our research time, effort and budgets wisely, so we get the most done? Are we doing research in small batches so our teams don't have to wait to long for useful findings, so they can get involved in the process, and so we can adapt our research as we learn?

Solid but flexible plan That aligns our research With our organisation's goals



So the key to this is creating a solid but flexible plan that aligns our research with what our organisation needs to learn.

What do we need to learn?
Who should we do research with?
Which methods should we use?
What should we do now, next, later?



And to create that plan we're going to look at four questions:

What do we need to learn? Who should we do research with? Which methods should we use? What should we do now, next, later?

The reset of this tutorial will be a set of exercises looking at each of these questions.

Thoughts and questions

Scenario: Digital passport photos



We'll use a common scenario through those exercises. And that will be digital passport photos.

This is something that has already happened, but we haven't got much time and hopefully this is a scenario you can all understand.



Printed photo from a booth or a high street photographer



Image by Max Spielmann

Until recently, the only way to provide a passport photo was to get one printed and include it with your application. And most people got them from an automated photo booth or from high street photographer.

Move from paper to digital passport photos



But the booths and photographers are using digital cameras. And the printed picture and stored image file in your passport come from a scan of your printed photo.

So can we cut out the printing.

Digital photo provided with online application





Image by HM Passport Office

So we'll image it's a few years ago, and you're in a team looking at how people can provide a digital photo along with their passport application.

Exercises

(You won't have enough time to do a perfect job)



Each of the exercises is about 10 minutes long with some extra time for to share what we did, and for questions and discussion.

That's not enough time to produce a perfect result. But there should be enough time for you to see how you can go through the same steps with your team.

Thoughts and questions

Exercise: Agree research questions

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The first exercise we'll do is about research questions.

What do we need to learn?



Our first step is to figure out what we need to learn.

We need to know ...

What problems do people currently have providing a passport photo?



We'll do this be creating a set of research questions.

The should all fit into a sentence like "We need to learn ..." Here's an example for our scenario.

So these aren't questions you would ask a person an an interview or survey. 'Cause we'll use different methods to answer the different questions, like analysing service performance data.

Write research questions for digital passport photos

Groups of 3 or 4

10 minutes to create, 5 minutes to share and discuss



1. Write research questions

On your own, 2 minutes

- 2. Sort and refine big questions and sub questions In your group, 5 minutes
- 3. Write 3 key question groups on an A3 sheet In your group, 3 minutes



This is a common collaborative working structure. It gives people individual time to think, but also time to work to work together and generate more ideas, and time to consolidate and critique and create a clear result. So people who work in different ways and are good at different things can contribute.

Note, of course, that with a real team, you'll need more time than this. Both time beforehand to get up to speed with the topic, and more like 45-60 minutes to create and agree your research questions.

If you're working with 3-4 colleagues, you can follow these steps.

If you have a larger group. Do step 2 in groups of 3-4, then come together as a whole group and consolidate your questions, before you do step 3.

1. Big question

- 2. Big question
- 3. Big question

- Sub question
- Sub question
- Sub question

- Sub question
- Sub question
- Sub question

- Sub question
- Sub question
- Subquestion



For this exercise, aim for something like this.

Now you may feel that you have answers to some of these questions. And your colleagues may think they can quickly get answers to some other.

Don't discard these questions. Keep them and use them to structure what you learn from previous research and from existing but poorly understood data.

Thoughts and questions

Exercise: Identify participant groups

The next exercise is about research participants.

Who should we do research with?



The next step in creating our research plan is to think about who we need to include in our research.

Type or role (patient, carer, doctor, pharmacist)

Different circumstances (new parent, changed name)

Different behaviour (pay taxes by direct debit)

People who have a disability (hearing, memory)

People who may need support (skill, confidence, access)

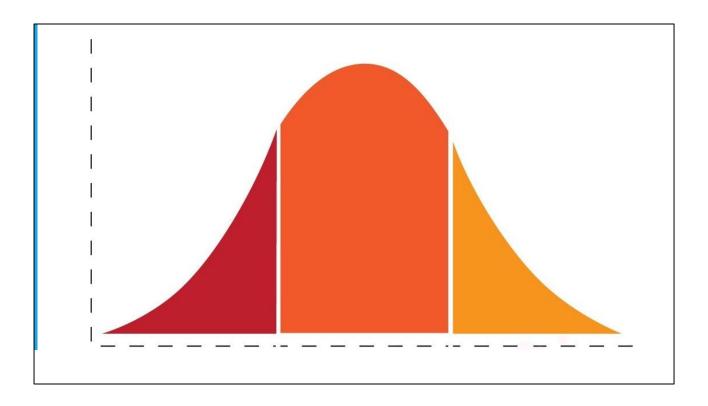


There are lots of different ways we can think about who we need to do include in our research.

Explore the variety of actual and likely users

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But whoever we're thinking about, it's important to explore the variety of potential users, not just the biggest groups.



If you arrange the people you might research with into different groups, or along some dimension, you'll get lumps - they're called modes in statistics.

It's easy to get suckered into focussing on these bigger groups, especially if you have colleagues who are very focussed on numbers.

But if you keep researching with more and more of the same kinds of people you're soon stop learning anything new.

So think more about whether you're covering the variety of people.

Identify participant groups for digital passport photos

Same groups

10 minutes to create, 5 minutes to share and discuss



1. Identify groups to research with

On your own, 2 minutes

2. Sort and refine big groups and subgroups

In your group, 5 minutes

3. Write 3 groups on an A3 sheet

In your group, 3 minutes



We'll follow a similar process to the one we used for the research questions. Some individual time, some group time and the recording the results on a sheet.

1. Big group

- Sub group

You should end up with something like this.

For more complex services, the groups won't fit so easily into a simple tree like this. They'll feel more like a venn diagram.

But that can be hard for colleagues to understand. So stick to a simple tree when sharing this with colleagues, even if it is a bit of an oversimplification.

Thoughts and questions

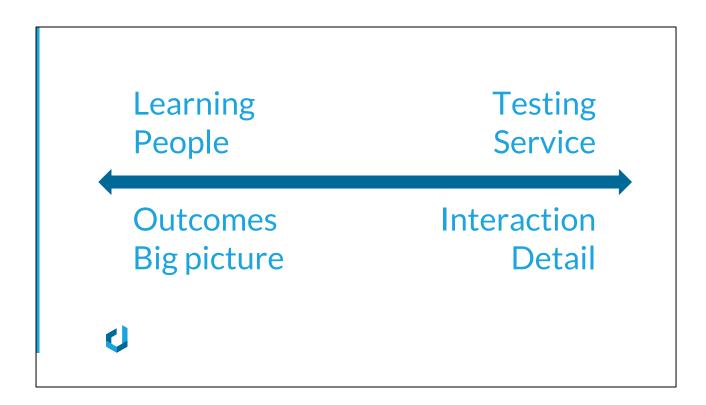
Exercise: Choose research methods

The next exercise is about research methods.

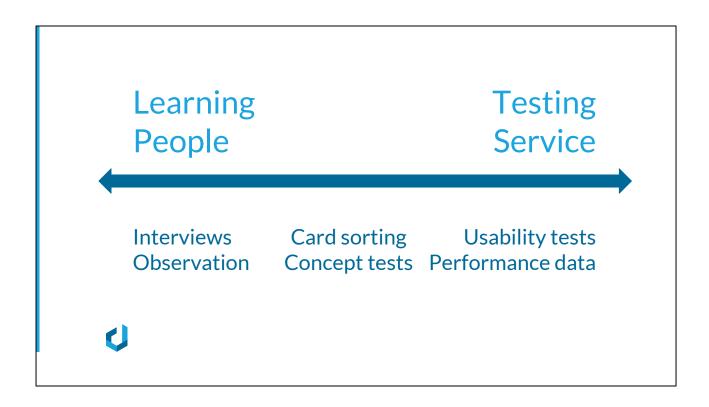
Which methods should we use?



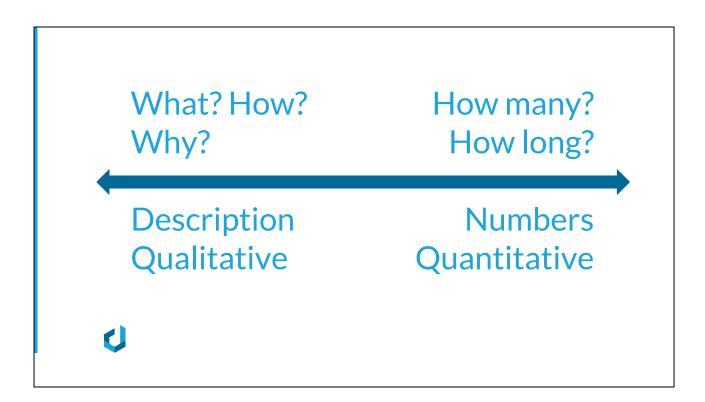
Going back to our questions, now we have an idea of what we need to learn and who we need to research with, we can think about what methods to use.



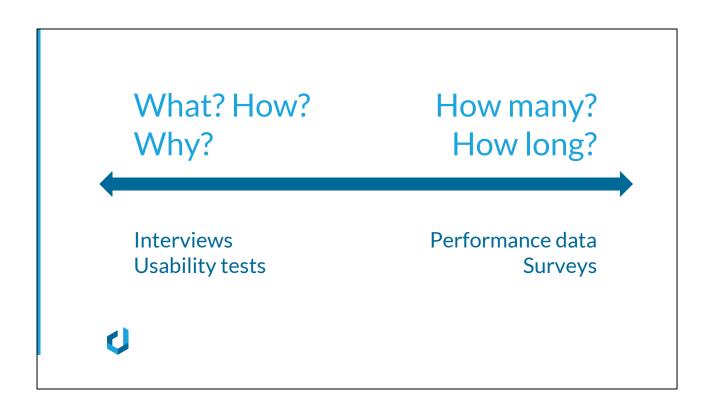
We can think about research in different ways, some is more learning about people and the big picture, and some is more testing our ideas and the things we're making, so it's more about the detail of how people interact with our service.



And our different methods are more appropriate for these different situations.



We can also think about the different kinds of research questions we're trying to answer. Are they more about getting counting things or getting more detailed descriptions of things.



And our different methods are more appropriate for these different questions.

What? How? Why? People Interviews Observation	What? How? Why? Service Usability tests Support logs
How many? How long? People Gov, industry stats Surveys	How many? How long? Service Performance measures Data analysis



So we can put these together into a 2 by 2 grid.

This gives you a way to think about which research methods to use.

Research activities

We're going to Do X with Y to learn Z



Too often I see people present research plans that just have a list of methods, and then more detail about how they'll do those methods. But not many of your colleagues know or care that much about research methods.

So your research plan needs to describe research activities - we're going to do (method) with (participant group) to learn (research question).

So in our scenario we might visit passport offices to sit with the staff who assess passport applications to learn more about how they assess passport photos, what works well for them and what problems they have.

Choose research methods for digital passport photos

Same groups

10 minutes to create, 5 minutes to share and discuss



1. Draw the research quadrant on an A3 sheet Now!

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Description	Description
People	Service
Numbers	Numbers
People	Service



- 2. Pick and pair research questions and user groups
- 3. Choose a research method
- 4. Write activity on sticky note and place in quadrant In your groups, 2 minutes
- 5. Repeat until you have 6-10 activities In your groups, 8 minutes



You should be aiming for quite granular research activities.

So if you think you might do some initial interviews with a certain group to learn some things, and then do visits to learn some other things. Then that's two activities.

Similarly if you want to do initial interviews with three different subgroups of one main participant group, that's three activities.

Thoughts and questions

Exercise: Prioritise research activities



The next activity is about setting priorities.

What should we do now, next, later?



Now we have a bunch of research activities, we'll need to priorite. We won't be able to do them all at once.

Prioritise research activities for digital passport photos

Same groups

5 minutes to create, 5 minutes to share and discuss



1. Draw Now, Next, Later columns on an A3 sheet Now!

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- 2. Put 2 activities in Now
- 3. Put 2 activities in Next
- 4. Put the rest in Later In your groups, 5 minutes



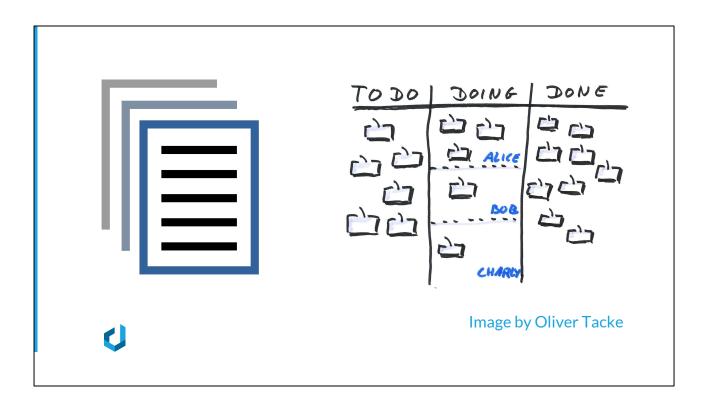
So pick which activities you'd do first, which you'd start preparing to do next, and which would go in a backlog to do after that.

Thoughts and questions

Sharing your research plan



So now you have the bones of a research plan you can share with your colleagues.



You can put the research questions, participant groups and research activities into a document, and create a Kanban board for the research activities.

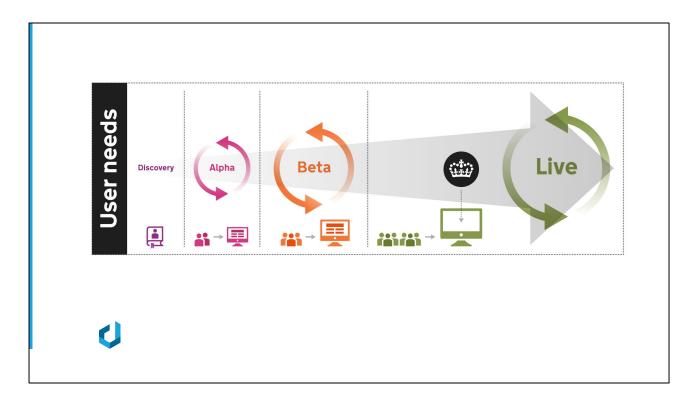
Your research Kanban board might have a To Do column, a Preparing column, a Doing column and a Done column. You can also think about work in progress limits.

This structure also makes it clear how you're adapting your plan as you go. Refining your research questions and participant groups. Adding new questions and groups. Adjusting the priority of your research activities.

Numbers of participants Recruitment approach Involve your team Share findings



There are some other things you'll likely include in your plan, that we didn't have time to look at today. Like the numbers of participants for each activity and the approach you'll take to recruiting them. And how you'll involve your team and share the findings.



In government, we tend to work to this structure, and create a new plan for each phase.

But if you're in a long beta for a really big and complex service, then I suggest that you revisit some of the planning activities periodically to make sure you're on track.

Thoughts and questions

Beware of the unknowns



A hard thing to get right about this way of planning is the balance between:

- having some idea where you're going so you make good use of your time and get good results
- sticking too closely to a very focussed plan missing the elephant that's just out of your field of vision

So beware of getting too narrow and focussed and missing those unknown unknowns.

Thoughts and questions

Thanks!

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