

STAKEHOLDERS AS RESEARCHERS

Empowering non-researchers to interact directly with consumers

Marta Ponte Fissgus

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**Empowering non-researchers to interact directly
with consumers**

**Master thesis by
Marta Ponte Fissgus**

Master thesis

Stakeholders as Researchers: empowering non-researchers to interact directly
with consumers

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“We wanted to position ourselves like strategic partners, so we decided that we were going to train others in the research that we didn’t want to do.”

Researcher talking about her experience with training

“As research becomes more mainstream, organizations will continue to develop new tools to democratize those practices and adapt to company needs.”

dscout People Nerds (2018)

ABSTRACT

An investigation into the trends of user experience research revealed that businesses and stakeholders will increasingly value human insights, and hence, as research becomes more mainstream, “organizations will continue to develop new tools to democratize those practices and adapt to company needs (dscout, 2018).” This trend was further supported by conversations with researchers across Uber, the company where this thesis has been conducted, who highlighted the need to have resources readily available to mentor others on how to do research. This thesis aims to tackle how the research practice can be democratized within Uber, which leads to the research question: how to empower stakeholders to do their own research. A combination of literature to understand both how people learn and what is good user experience research, interviews with researchers and non-researchers, and a review of both internal and external toolkits were used to set the vision and principles that the solution builds upon. The final solution is composed of UXR101, ‘the textbook for learners’, and a toolkit for researchers, ‘the teacher’s guide’. UXR101 is an internal website compiling the process of doing qualitative research and best practices and examples for each of the stages of a research project, and is intended to be self-serving in case a researcher cannot offer support. For those projects that the researcher can mentor, the toolkit for researchers distills the different activities the researcher should do to guide the experience of the learner.

ACKNOWLEDGEMENTS

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GLOSSARY

Action research. Research approach that seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of generating knowledge.

Human centered design. An approach to interactive systems development that aims to make systems usable and useful by focusing on the users, their needs and requirements, and by applying human factors/ergonomics, usability knowledge, and techniques. This approach enhances effectiveness and efficiency, improves human well-being, user satisfaction, accessibility and sustainability; and counteracts possible adverse effects of use on human health, safety and performance.

Innovation. An iterative process initiated by the perception of a new market and/or new service opportunity for a technology-based invention which leads to development, production, and marketing tasks striving for the commercial success of the invention.

Practice based research. An original investigation undertaken in order to gain new knowledge partly by means of practice and the outcomes of that practice.

Qualitative research. Research best equipped to answer why questions and dive deep into a problem. It is used to gain an understanding of underlying reasons, opinions, and motivations, and uncover trends. It provides deep insights into the problem and/or helps to develop ideas or hypotheses for potential quantitative research.

Quantitative research. Research most appropriate to quantify a problem, attitudes, opinions, behaviors, and other defined variables – and generalize results from a larger sample population.

User experience design. The process of enhancing user satisfaction with a product by improving the usability, accessibility, and desirability provided in the interaction with a product. User experience design encompasses traditional human–computer interaction (HCI) design, and extends it by addressing all aspects of a product or service as perceived by users.

User experience research. Research directed at generating insights about people and the world to innovate for the present and future. It is research that prevents us from designing for one user: ourselves.

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- 1 Internal survey to researchers
- 2 Interview guide for researchers
- 3 Interview guide for stakeholders
- 4 External toolkits reviewed

1 Introduction

The goal of this research is to help companies increase the number of product decisions based on user insights by looking at Uber as a case study in the high-growth technology sector. Let's start by exploring why bringing the user perspectives to product development decisions has reached the importance it has today.

It all dates back to the concept of human-centered design. Human-centered design is defined as “an approach to interactive systems development that aims to make systems usable and useful by focusing on the users, their needs and requirements, and by applying human factors/ergonomics, usability knowledge, and techniques. This approach enhances effectiveness and efficiency, improves human well-being, user satisfaction, accessibility and sustainability; and counteracts possible adverse effects of use on human health, safety and performance” (The International Organization for Standardization, 2010).

Human-centered design has increasingly gained in popularity over the last decades and it's widely recognized that companies who approach product development by continually listening, testing, and iterating with end-users, exhibit higher business performance than companies who don't (McKinsey, 2018).

Another discipline that has gained popularity over the last few years is user experience design, which goes beyond human centered design in the sense that it not only looks at the usability of products, but expands the definition to also look into all other aspects of a product or service as perceived by users:

“No product is an island. A product is more than the product. It is a cohesive, integrated set of experiences. Think through all of the stages of a product or service – from initial intentions through final reflections, from first usage to help, service, and maintenance. Make them all work together seamlessly.” - Don Norman

Moreover, IDEO's Tim Brown refers to desirability as one of the three pillars of innovation. "Innovation stems at the intersection of desirability, feasibility and viability." (IDEO, 2003). The desirability lense looks at the target users for the innovation and tries to answer the following questions: What are their unmet needs? What are their pain points? What are their hopes and fears? By starting with humans, what's most desirable is uncovered.

User experience research (UX research), user research or participatory research are subsets of user experience design and these are the disciplines specialized in interacting with the user to uncover unmet needs and evaluate existing products. Within the product development process, user experience research influences what products are built and how they are built, and it also evaluates existing products to understand how they can be improved.

Hence, given the importance of involving users in the product development process, ideally 100% of consumer-facing products that reach the market should undergo some degree of user research before launch. Doing so will enhance the chances of product-market fit.

Moreover, Figure 1-1 also highlights the importance of involving users early and often in product development, as the likelihood to make changes to a product decreases as time passess and the product gets closer to its launch (Knapp, Zeratsky & Kowitz, 2016). However, the reality is that, since we live in a world in which resources are limited, some products inevitably reach the market without any input from users.

Context: the company

Before the start of this thesis, I was an intern at Uber for a period of 6 months. During that time, I became acquainted with the UX research practices at Uber, while also experiencing some of the challenges of doing research in a professional setting. The time spent at Uber before the start of my thesis led to the discovery

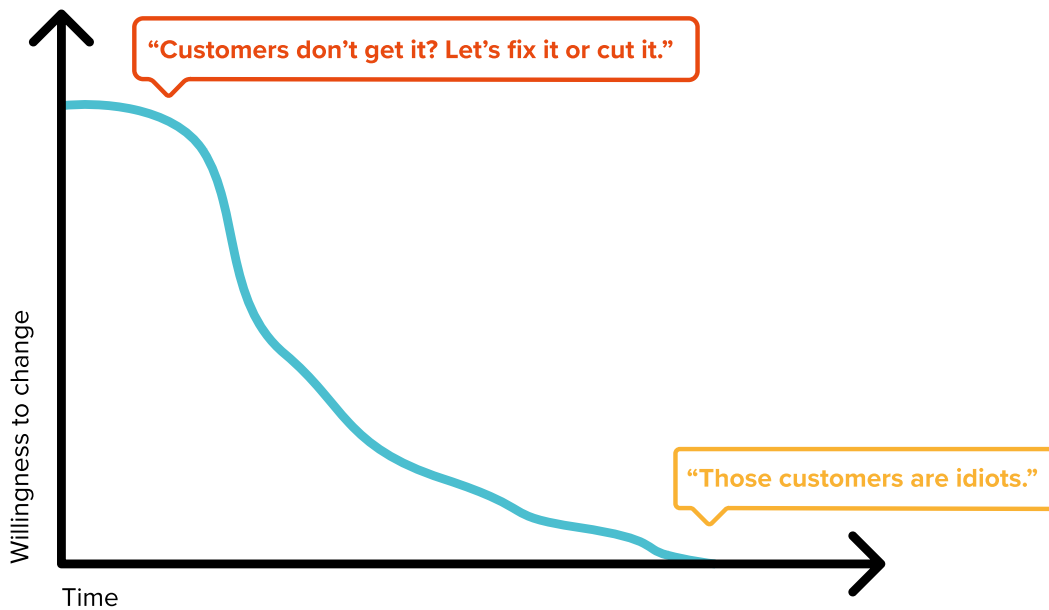


Figure 1-1 The willingness to make changes to a product is inversely proportional to the time to launch date (Knapp, Zeratsky & Kowitz, 2016).

of the problem that this thesis (at least partly) strives to solve.

About Uber

“Uber’s mission is to create opportunity through movement. We started in 2010 to solve a simple problem: how do you get access to a ride at the touch of a button? More than 10 billion trips later, we’re building products to get people closer to where they want to be. By changing how people, food, and things move through cities, Uber is a platform that opens up the world to new possibilities.”

Ensuring user insights in product development

Whose responsibility is it that user insights are embedded in product development? At Uber, user experience research is one of the disciplines that looks into the consumers’ needs and explores how they use their products to uncover both improvements in existing products and generate ideas to develop new ones. Essentially, it is research that prevents us from designing for one user: ourselves.

Research aim and objectives

Trying to answer the previous question, the goal of this research is to increase the number of product decisions based on user insights, rather than assumptions. A way to do so is by empowering other functions to do their own UX research when researchers are not available due to lack of bandwidth. This research looks at one possible solution to empower other functions to do research: a research-led training.

- **Target users.** Who is the target group for a research training? Which functions would benefit the most from learning how to do research?
- **Tools.** What is the best way to empower non-researchers to learn how to do research? How does the training / learning process look like in practice?
- **Project types.** What kind of research projects are most suitable for non-researchers to conduct?
- **Cadence.** How often does the training happen? Is it ad-hoc basis or on a recurrent basis?
- **Engagement model.** What is the role of the researcher in the training? What are the levers that dictate the level of engagement for each project?

Research approach

The research approach chosen for this research is a practice-based research approach. “Practice-based research is an original investigation undertaken in order to gain new knowledge partly by means of practice and the outcomes of that practice” (Candy, 2006).

Practice based research is a subset of the general area of action research. Action research goes beyond the notion that theory can inform practice, to a recognition that theory can and should be generated through practice (Brydon-Miller, Greenwood & Maguire, 2003). Essentially, action research seeks to “bring together action and reflection, theory and practice, in participation with others, in the pursuit of generating knowledge” (Reason & Bradbury, 2001).

This form of research then is an iterative, cyclical process of reflecting on practice, taking an action, reflecting, and taking further action. Therefore, the research takes shape while it is being performed. Greater understanding from each cycle points the way to improved practice (Riel & Rowell, 2016).

Thus, one of the pillars of action research is incorporating moments of reflection throughout the research process. Moments of reflection look back at the actions after collecting data, and tries to identify if the process was to be repeated, what should change? What was surprising? What worked well? A good reflection provides a deep understanding of why events occurred as they did, and how those outcomes helped address the overarching questions.

French and Bell (1973) apply the principles of action research to organizational development, and define organization development (OD) at one point as “organization improvement through action research”. If one idea can be said to summarize OD’s underlying philosophy, it would be action research as it was conceptualized by Kurt Lewin. Lewin (1958) believed that the motivation to change was strongly related to action: If people are active in decisions affecting them, they are more likely to adopt new ways. “Rational social management”, he said, “proceeds in a spiral of steps, each of which is composed of a circle of planning, action and fact-finding about the result of action”. Lewin’s description of the process of change involves three steps (Lewin, 1958):

- **Unfreezing:** Faced with a dilemma or disconfirmation, the individual or group becomes aware of a need to change.
- **Changing:** The situation is diagnosed and new models of behavior are explored and tested.
- **Refreezing:** Application of new behavior is evaluated, and if reinforcing, adopted.

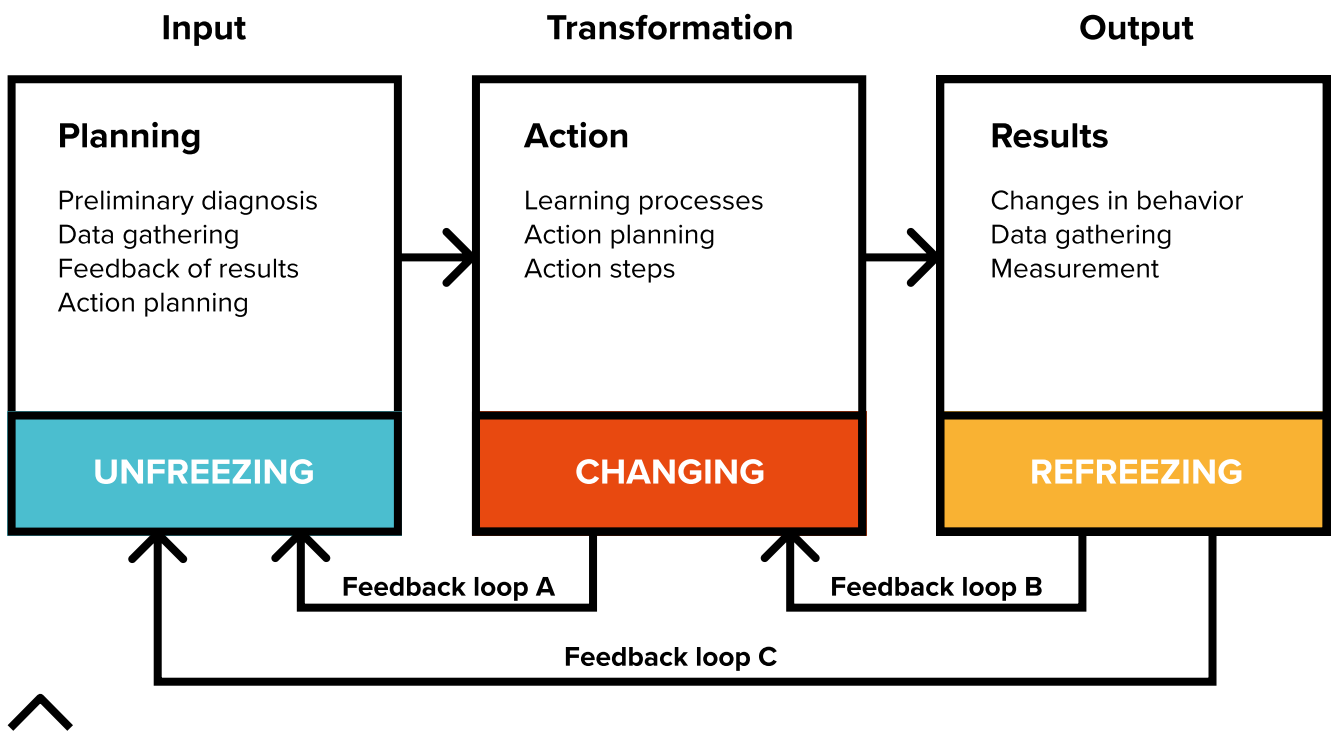


Figure 1-2 The steps and processes involved in planned change through action research: action research is depicted as a cyclical process of change.

The action-research model shown in Figure 1-2 closely follows Lewin’s repetitive cycle of planning, action, and measuring results. As indicated in the diagram, the planning stage is a period of unfreezing, or problem awareness. The action stage is a period of changing, that is, trying out new forms of behavior. The results stage is a period of refreezing, in which new behaviors are tried out on the job and, if successful and reinforcing, become a part of the organization’s behavior.

The practice-based research approach has been chosen because it enables the researcher to generate theory through practice, and it gives a process and structure to drive behavioral change in the context of an organization.

This thesis focuses primarily on the discipline of UX research at Uber. Various research methods have been used, including surveys, interviews, case studies

and observations. The action-reflection cycles consisted of switching back and forth between literature, empirical research, case studies and prototypes and its applications.

Structure of the report

This thesis is composed of 7 chapters. **Chapter 2** provides the theoretical underpinnings for this thesis: an introduction of UX research, the business rationale of doing research and the relevant trends in user research in which this thesis builds upon.

Chapter 3 further explores the problem that is here introduced, hence setting the context in which this work is positioned.

Chapter 4 presents different approaches to specifically explore the topic of UX research trainings, and a variety of methodologies are used to enable data triangulation. UX research trainings are explored from the perspective of other researchers, and as well as case studies in which the researcher takes on the role of training. This chapter distills the learnings into a framework which sets the foundations to build the solutions explored on chapter 5.

Chapter 5 introduces a theory for learning, which sets the backbone of the learning experience created in this thesis, and a review of both internal and external toolkits in which their strengths and weaknesses are evaluated. Additionally, it provides principles and a vision to guide the design of the final solution: UXR101, the textbook for learners to step into the world of UX research.

Chapter 6 describes the pilot conducted with the first version of the solution. It tackles some of the limitations identified and presents some open questions as prompts for next steps. The teacher's guide is presented here as well, as a result from the feedback from researchers that they needed more guidance to enable an effective learning experience. The teacher's guide also offers guidance depending

on the amount of time the researcher can or wishes to offer.

Finally, **chapter 7** presents a few prompts for discussion: to what extent the research question has been addressed, and it defines the contribution to new knowledge that this master thesis has developed. Moreover, the limitations and implications of the research are discussed and recommendations for future research are suggested.

Theoretical background

Problem analysis

Empirical research

Making the toolkit

Evaluating the toolkit

Discussion

2 Theoretical Background

The topic of UX research is detailed to give the reader the theoretical foundation in which the rest of this research is underpinned. UX research is defined, and several dimensions of UX research are detailed, such as the types of research, the range of methodologies available and ultimately explains the purpose of UX research within companies.

2.1 THE INNOVATION IMPERATIVE

A literature review on the definitions of innovation by Garcia and Calantone (2012) revealed that the 1991 OECD definition is the one that best captures the essence of innovations:

“Innovation is an iterative process initiated by the perception of a new market and/or new service opportunity for a technology-based invention which leads to development, production, and marketing tasks striving for the commercial success of the invention.”

This definition aligns with what are considered to be the three pillars of innovation, and idea that originated from IDEO in the ‘00s (Figure 2-1): “innovation stems at the intersection of desirability, feasibility and viability.”

The desirability lense looks at the target users for the innovation and tries to answer the following questions: What are their unmet needs? What are their pain points? What are their hopes and fears? By starting with humans, what’s most desirable is uncovered. But that’s only one lens through which solutions can be looked at. Once a range of solutions that could be relevant for those users is determined, what is technically feasible and how to make the solution financially viable can be evaluated.

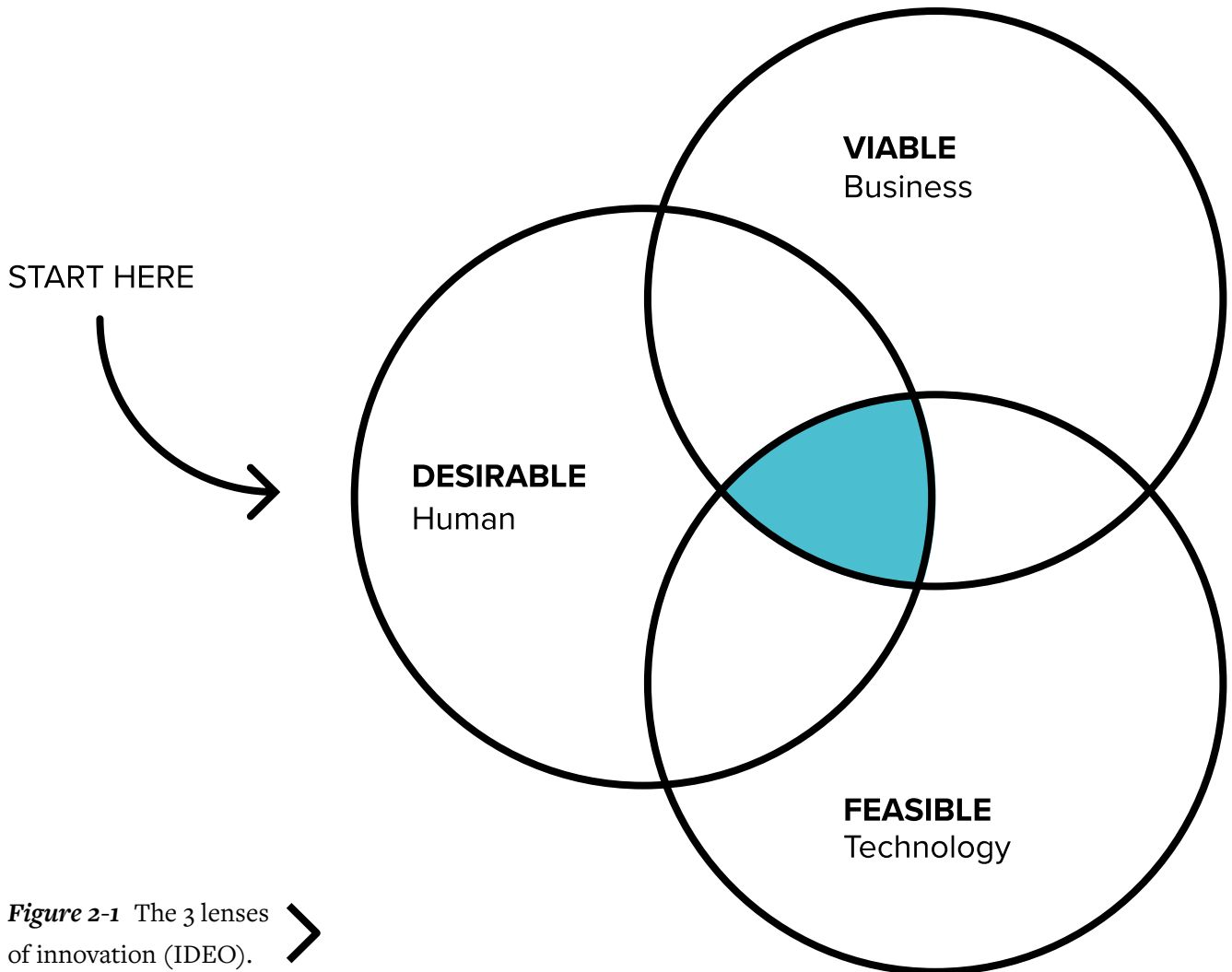


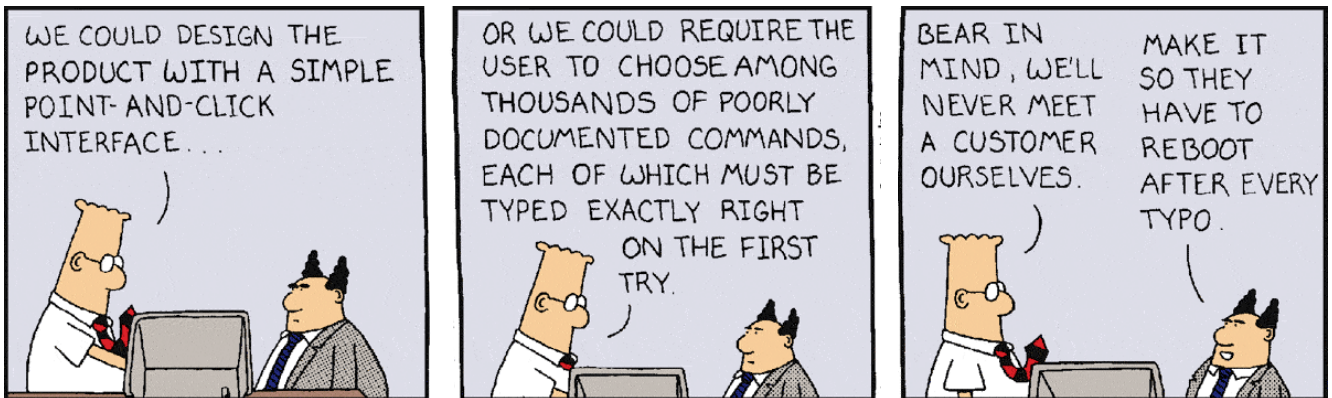
Figure 2-1 The 3 lenses of innovation (IDEO).

Innovation stems at the intersection of desirability, feasibility and viability.

2.2 DEFINING UX AND UX RESEARCH

The ‘user experience’ is the translation of the desirability lense into a product or service. And ‘user experience research’ is the discipline that is in charge of interacting with users to (1) uncover their needs and wants to create a compelling user experience and (2) evaluate a product before and/or after launch. Essentially, the main goal of user research is to inform the design process from the perspective of the end user. It is research that prevents us from designing for one user: ourselves.

2.2.1 User experience (UX)

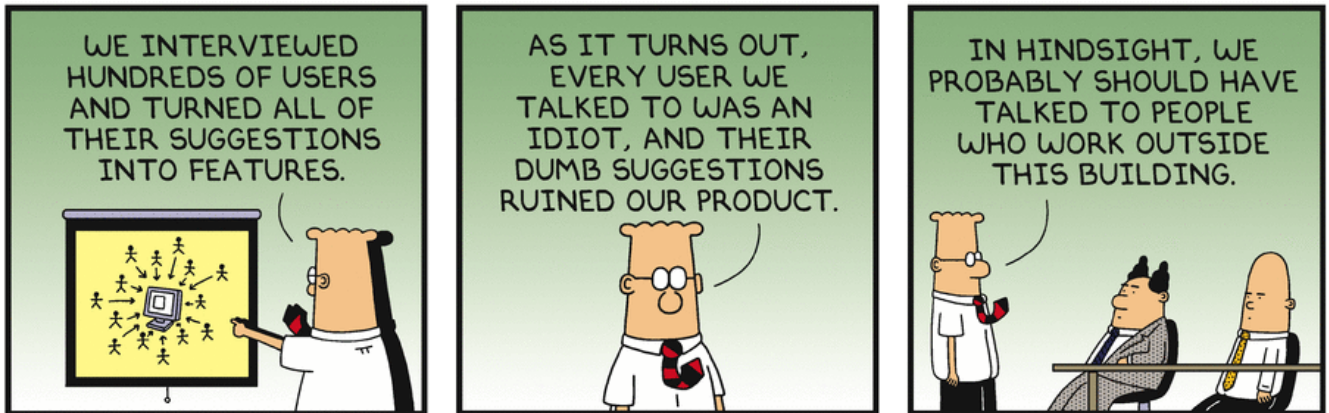


Comic character Dilbert sarcastically chats with his boss about a poor user experience (Adams, 1994).

The international standard on ergonomics of human system interaction, ISO 9241-210, defines user experience as “a person’s perceptions and responses that result from the use or anticipated use of a product, system or service”. According to the ISO definition, user experience includes all the users’ emotions, beliefs, preferences, perceptions, physical and psychological responses, behaviors and accomplishments that occur before, during and after use. The ISO also lists three

factors that influence user experience: system, user and the context of use. In short, user experience is about how the user interacts with and experiences the product.

2.2.2 User experience research (UX Research)



Comic strip which highlights the importance of doing research with the actual end users (Adams, 2012).

The focus of this thesis will be on the user experience research practice (also referred to as ‘UX Research’ or ‘research’ in this report) at Uber. The vision of the UX Research team at Uber is to “generate insights about people and the world to innovate for the present and future. We understand our global customer’s needs and behaviors. We inform short- and long-term planning decisions. Users are considered in a principled, earnest and robust manner - developing truly user centered products and services.” In short, UX research primary focus is to generate utility for the end user, while aligning with a business goal.

“If we only test bottle openers, we may never realize customers prefer screw-top bottles.”— Victor Lombardi (Why We Fail)

The following sections illustrate different aspects of UX research: types of research, review of tools and research process. The goal is to set the context and foundation for this research.

2.2.3 Types of research

The field of user experience has a wide range of research methods available. The key question is what to do when. To better understand when to use which method, it is helpful to view them along a 3-dimensional framework with the following axes, see Figure 2-2 (Rohrer, 2014):

- Qualitative vs quantitative
- Attitudinal vs behavioral
- Context of use

Qualitative vs quantitative

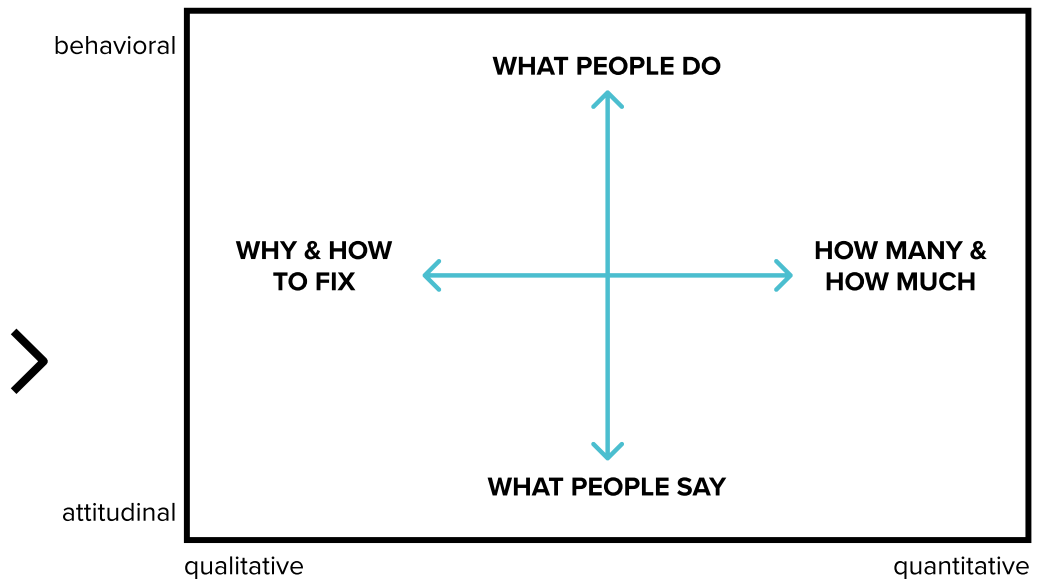
“The most basic definition of qualitative research is that it uses words as data, collected and analysed in all sorts of ways. Quantitative research, in contrast, uses numbers as data and analyses them using statistical techniques” (Braun & Clarke, 2013).

Qualitative research is best equipped to answer why questions, and dive deep into a problem. It is used to gain an understanding of underlying reasons, opinions, and motivations, and uncover trends. It provides deep insights into the problem and/or helps to develop ideas or hypotheses for potential quantitative research.

Quantitative research is most appropriate to quantify a problem, attitudes, opinions, behaviors, and other defined variables – and generalize results from a larger sample population.

The UX Research team at Uber is specialized in qualitative research. Nonetheless, there is a small UX research subteam which has the quantitative expertise and supports the other researchers on quantitative needs. However, most quantitative research is handled by data science or marketing research teams, with the UX research team being the subject matter expert on qualitative methodologies at Uber.

Figure 2-2 Questions answered by the different research methods across the landscape (Rohrer, 2014).

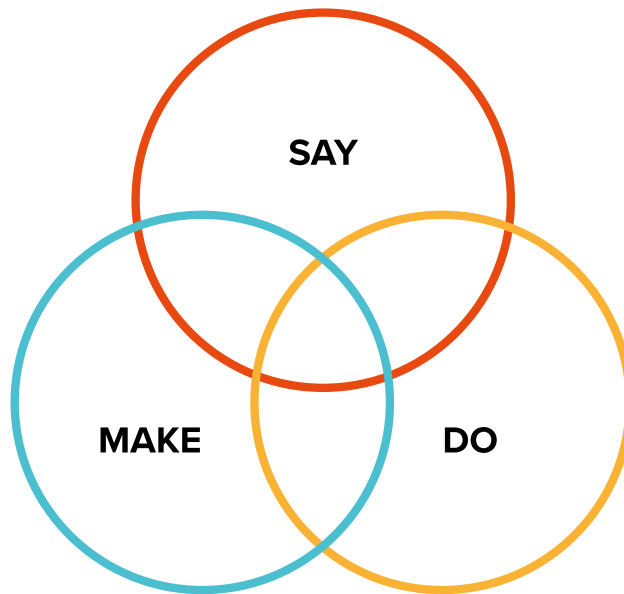


Attitudinal vs behavioral

The distinction between attitudinal and behavioral can be summed up by contrasting “what people say” versus “what people do” (Rohrer, 2014). Sleeswijk Visser, Stappers and Sanders (2005) add an additional dimension which is “what people make” as tools to facilitate the expression of what people know, feel and dream. These 3 dimensions encompass all the research techniques in use today for exploring people’s experiences (Figure 2-3): research techniques fall into one of three categories or into the areas of overlap between the categories (Sanders & Stappers, 2012).

Sanders and Stappers (2012) provide the following example to describe the difference between say, make and do techniques: “If you’re conducting a generative study on future kitchen experiences of people, you can visit their homes and observe what they do: how do they use the kitchen? You can ask them questions and listen to what they say: interview them about what they do in the kitchen, with how many people, for how long and when. You can get them to recall earlier kitchen experiences and reflect on those. And you can study what

Figure 2-3 Say, Do and Make tools and techniques complement and reinforce each other (Sanders & Stappers, 2012).



they make when given an ‘ideal kitchen experience construction kit’; what ideas do they have, and what reasons do they give for these.” Figure 2-4 from Sleeswijk Visser et al. (2005) illustrates how the different techniques help access different levels of knowledge.

What people do. With Do techniques, people, their activities, the objects they use and the places where they conduct these activities are observed. Three salient dimensions to consider with Do techniques are (1) the observer, (2) the level of intrusion and (3) the recording media used in the study (Sanders & Stappers, 2012).

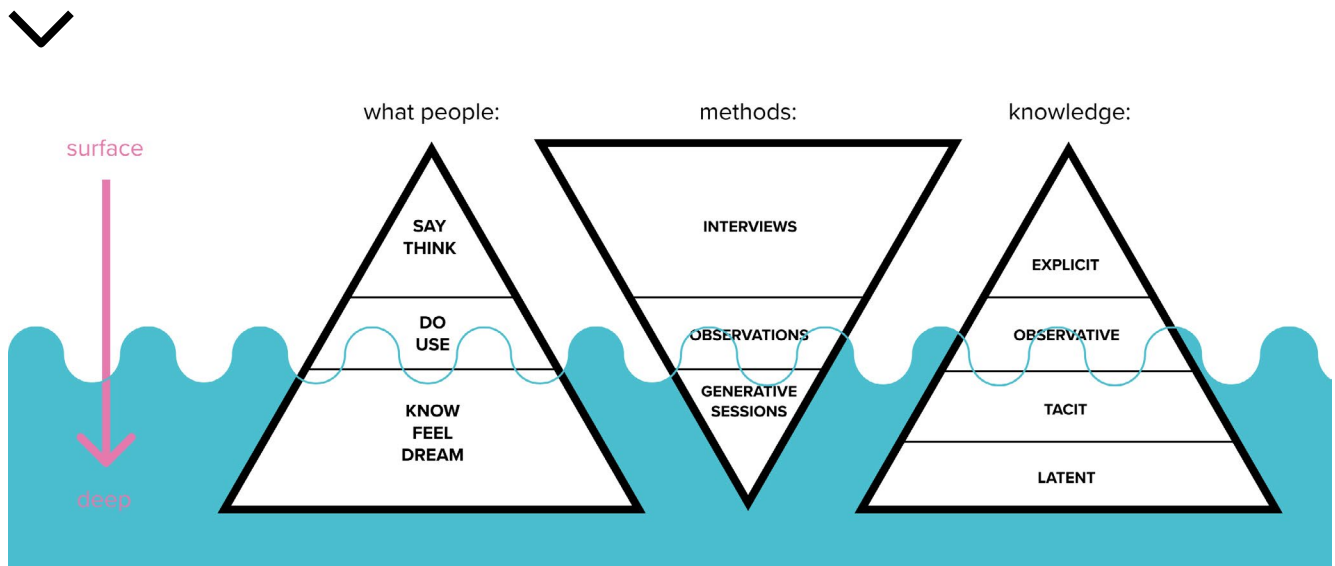
What people say. Surveys and interviews are different ways of getting answers from people. When considering Say techniques, the following three dimensions are important: (1) who and how many people talk?, (2) is there a predetermined structure? and (3) the media/form that are used for the ‘conversation’ (Sanders & Stappers, 2012).

What people make. Having people make things can help them to express their thoughts and feelings. The Make tools and techniques borrow from design and psychology, and involve participants by having them perform a creative act with respect to the subject under study (Sanders & Stappers, 2012). An important part of Make techniques are toolkits for expression. These toolkits are created by the researcher to help participants express themselves in a predetermined activity; making things enables them to express information that is difficult to access, or difficult to express, and enables the researcher to access their latent and tacit knowledge.

Figure 2-4 Methods that study what people say, do and make help access different levels of knowledge (Sleeswijk Visser, Stappers & Sanders, 2005).

Context of use

Context of use refers to whether participants in the study are using the product or service in question or not, and how (Rohrer, 2014). This can happen during product development, for example giving the participants a product to use, or as part of exploratory research in which the subjects of the study are already using a product, and the researcher wants to better understand how they use such product. According to Rohrer (2014), context can be described as:



- **Natural or near-natural** use of the product
- **Scripted** use of the product
- **Not using the product** during the study
- A **hybrid** of the above

The goal of studying the natural use of the product is to minimize interference from the study to get as close to reality as possible. This provides greater validity but less control. An example are ethnographic field studies, though these are generally subject to observation biases. Quantitative examples are interceptive surveys and data mining (Rohrer, 2014).

A scripted (often lab-based) study is usually done in order to uncover usability issues or explore how consumers are using a product. For example, evaluating the design of a new flow. The degree of scripting varies depending on the goals of the study (Rohrer, 2014).

Studies where the product is not used are usually more foundational in nature, designed to examine issues that are broader than usage and usability, such as a study about user needs or behaviors (Rohrer, 2014).

Hybrid methods use a creative form of product usage to meet their goals. For instance, “participatory-design methods allows users to interact with and rearrange design elements that could be part of a product experience, in order to discuss how their proposed solutions would better meet their needs and why they made certain choices” (Rohrer, 2014).

However, most of the methods (Figure 2-5) can move along one or more dimensions, and some do so in the same study, to satisfy multiple goals (Rohrer, 2014). Field studies can focus on what people say (interviews) and what they do (extended observations).

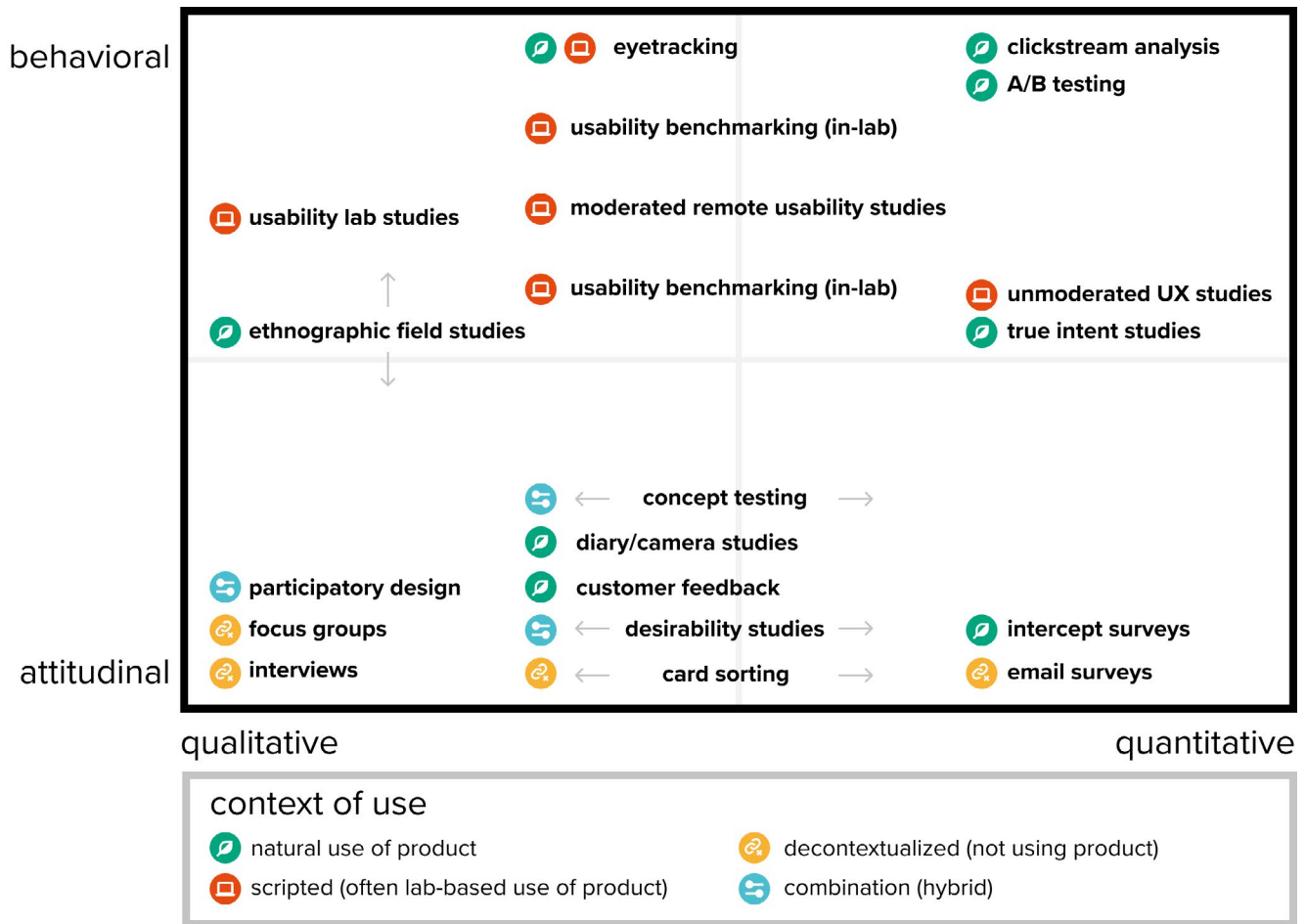


Figure 2-5 Landscape of commonly used user research methods (Rohrer, 2014).

2.2.4 Landscape of user research methods

Figure 2-5 places commonly used UX research methods along the 3 dimensions previously discussed. The horizontal axis categorizes the methods based on the qualitative/quantitative dimension. The vertical axis refers to whether the method is used to uncover ‘what people say’ (i.e. the attitudinal dimension), or what ‘people do’ (i.e. the behavioral dimension). The icons next to the methods illustrate the context of use: natural use of product, scripted (often lab-based), decontextualized (not using product) or a combination.

2.2.5 Research stages: Exploratory vs Generative vs Evaluative

Research methods can also be classified based on the stage of the product development process, as can be seen in Figure 2-6. Hence, the classification of research into explorative, generative or evaluative is based on the intention with which research is conducted.

Exploratory research is done to identify a problem to solve and explore ideas. As Hall (2013) explains “this is the research you do before you even know what you’re doing.” The goal is to uncover unmet customer needs and opportunities for product development. Exploratory research generally results in a problem statement or hypothesis to concentrate on. This kind of research is usually done at the beginning of a project.

Steve Jobs famously remarked, “Get closer than ever to your customers. So close that you tell them what they need well before they realize it themselves.”

Descriptive and generative research is about understanding the context of the problem and how to solve it. Generative research can also be used to uncover common needs within groups of stakeholders that speak different languages: essentially, generative tools provide a common ground for everyone to express what they want and achieve a common understanding about a problem. By this stage, the research goal shifts from “What’s a good problem to solve?” to “What’s the best way to solve the problem I’ve identified?”

Evaluative research purpose is to test that the solution is working as expected and is solving the identified problem. Usability testing is the most common form of evaluative research. Evaluative research can be conducted at any time throughout the project as long as there is something to evaluate. Early sketches, paper or digital prototypes, and implemented interfaces can all be subject to evaluative research.

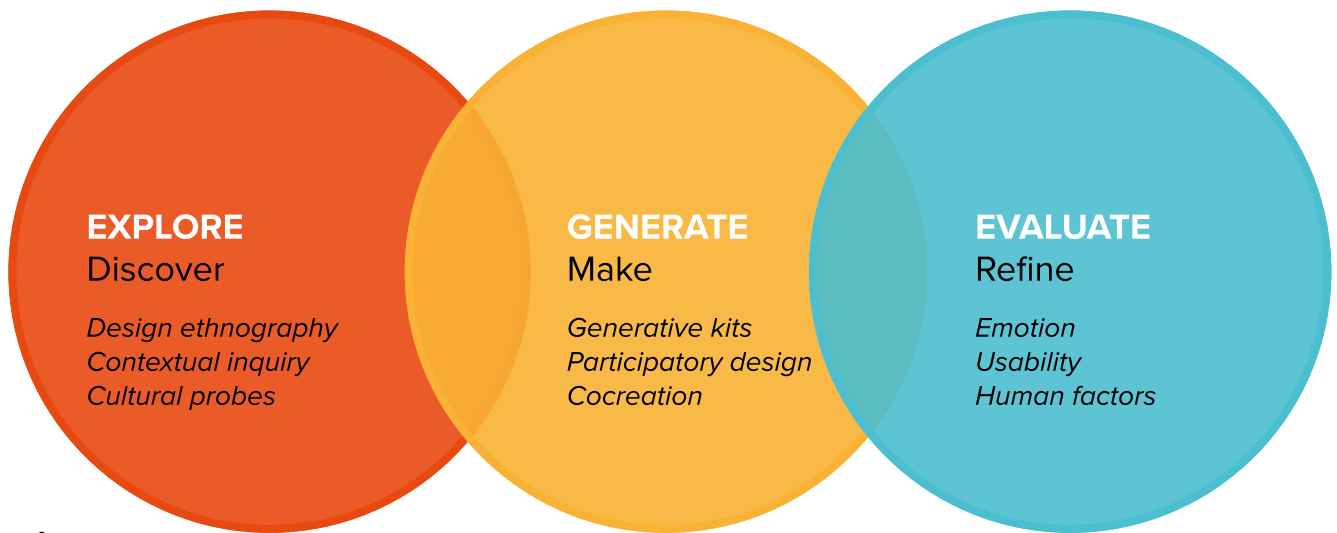


Figure 2-6 Model of design research process (Hanington, 2007). Explorative research is intended to discover unmet needs, generative research goals is to both identify common needs for groups of people that ‘speak the same language’ and come up with ideas to solve for a user problem with the intended target users, and evaluative research is used to refine a product before and after launch.

2.3 THE BUSINESS VALUE OF RESEARCH

The previous section gives the reader the theoretical foundation of UX research. This section further explains the business rationale of doing research, the why of UX research.

A McKinsey research (2018) on the business value of design, uncovered that companies who continuously iterate by continually listening, testing, and iterating with end-users among other practices (Figure 2-7), exhibit higher business performance than those companies who don't. Moreover, “making user-centric design everyone's responsibility, not a siloed function” also correlated strongly with higher business performance.

2.3.1 Relevant trends in user experience and research

Similarly, an article published on dscout's blog People Nerds (2018) about user research trends for 2019, predicts that businesses and stakeholders will increasingly value human insight, and as research becomes more mainstream, “organizations will continue to develop new tools to democratize those practices and adapt to company needs.”

Hence, the need for new tools and the democratization of research stems from an increased appetite for user research and the lack of bandwidth of researchers who are unable to accept all research requests, meaning that smaller research studies or projects in less strategic markets get deprioritized.

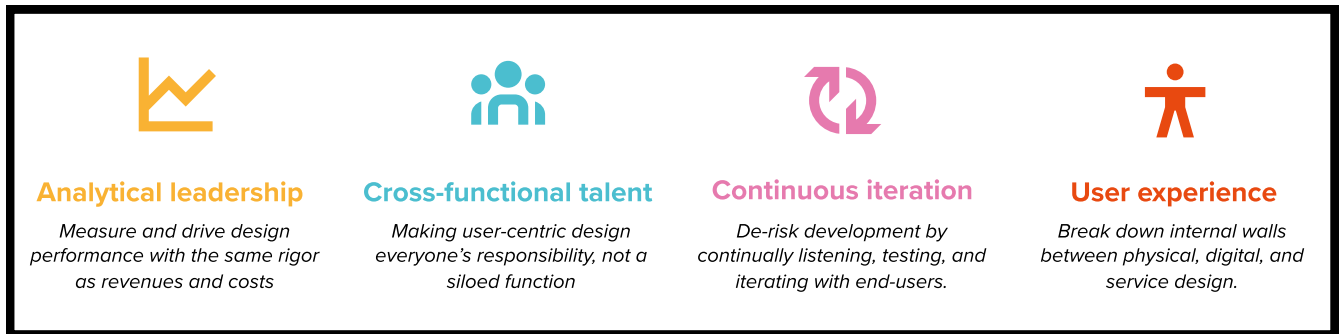


Figure 2-7 Clusters of design actions which strongly correlate with superior business performance (McKinsey, 2018). (1) Measuring and driving design performance with the same rigor as revenues and costs., (2) breaking down internal walls between physical, digital, and service design, (3) making user-centric design everyone's responsibility and (4) de-risking development by continually listening, testing, and iterating with end-users.

2.4 CONCLUSION

This chapter compiles the baseline knowledge needed to understand the different dimensions of UX research, and sets the necessary foundation to be able to teach others about UX research.

Defining UX research

The goal of UX research is to inform the design process from the perspective of the end user, and it generally strives to (1) uncover their needs and wants to create a compelling user experience and (2) evaluate a product before and/or after launch.

Illustrating different ways to categorize research methods and when to use what

Depending on the research question and given the multitude of methods to do research, is useful to categorize them to understand when and for what they are suitable. This chapter offers two approaches: (1) either in terms of the stage of product development in which they are used, or (2) based on whether they are qualitative vs quantitative, attitudinal vs behavioral and the context of use (Rohrer, 2014). Such categorizations are useful to comprehend the rationale of choosing a particular method, and relating this back to the training, it raises the following question:

- How can these categories be used when teaching others about UX research?

Understanding the array of methods available to do research

This chapter introduces 20 different UX research methodologies: usability-lab studies, ethnographic field studies, participatory design, focus groups, interviews, eyetracking, usability benchmarking, moderated remote usability studies,

unmoderated remote panel studies, concept testing, diary/camera studies, customer feedback, desirability studies, card sorting, clickstream analysis, A/B testing, unmoderated UX studies, true-intent studies, intercept surveys, and email surveys.

These do not attempt to represent all the research methodologies available, but rather, to illustrate the wide range of methods available to gather user insights. It raises the following questions for the next stages of this research:

- Which methodology represents a good introduction to UX research?
- Which methodologies are feasible to be taught and which are not?
- Which functions can benefit the most from each of these methodologies?

Illustrating the business value of UX research

Companies who continuously iterate by continually listening, testing, and iterating with end-users among other practices, exhibit higher business performance than those companies who don't (McKinsey, 2018). Moreover, "making user-centric design everyone's responsibility, not a siloed function" also correlated strongly with higher business performance.

Relevant trends in UX research

As research becomes more mainstream, "organizations will continue to develop new tools to democratize those practices and adapt to company needs." This thesis looks closely at how research tools can be made readily available to other functions, hence aligning with the trends in the sector.

“As research becomes more mainstream, organizations will continue to develop new tools to democratize those practices and adapt to company needs.”

dscout People Nerds (2018)

Theoretical background

Problem analysis

Empirical research

Making the toolkit

Evaluating the toolkit

Discussion

3 Problem Analysis

The problem is analyzed, and the research goals and questions are set as the basis for the empirical research and the development of the solution.

3.1 PROBLEM DEFINITION

As it was uncovered in the UX research trends in the preceding chapter, the UX research team at Uber must also operate within the realities of finite resources including time and bandwidth, which impacts the volume of requests the team can accept at any given time.

These limitations can also impact the relationship between product teams and researchers, particularly if resource constraints lead to the perception that they're not reliable partners. As a result, researchers often find themselves striving for a balance between long-term and more strategic/foundational research studies, and short-term and often evaluative research studies, with most researchers reporting a preference for strategic and foundational work. Another undesired effect for researchers not being able to accept a project is that they miss out on an opportunity to build their knowledge on a product area (Figure 3-1).

Figure 3-1 Some of the consequences of not being able to accept a research request are varied (in no particular order).



Additionally, even when the researcher is not available to fulfil a request, research and the user experience should not be just the researcher's responsibility; companies which make the user experience everyone's responsibility, rather than a siloed function, exhibit higher business performance (McKinsey, 2018). Brand



Missed opportunity to build expertise on a product area

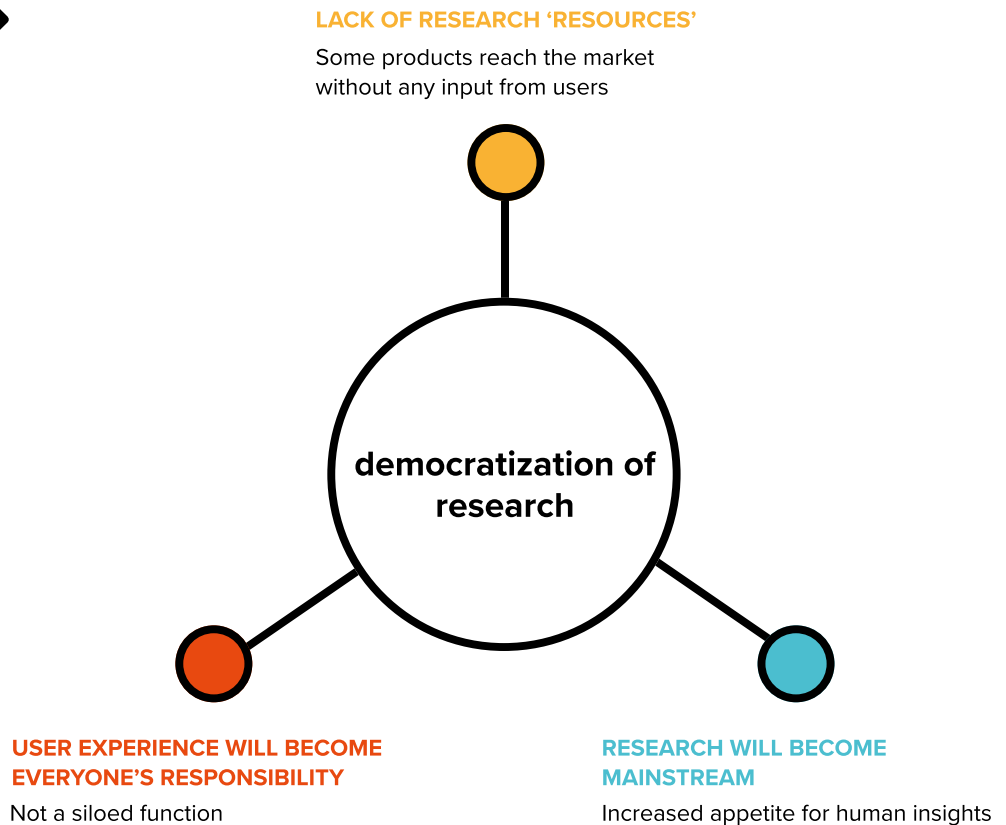


Might damage the relationship between the team asking for the research and the researcher



Researcher focuses on short-term, immediate needs rather than on long-term

Figure 3-2 The goal of this research stems at the intersection of an increased appetite for human insights, user experience becoming everyone's responsibility and researchers not being able to accept all research requests due to lack of time and lack of bandwidth.



consultancy Siegel+Gale goes as far as saying that “Empathy is the new currency of success”, highlighting again this need to put the user front and center.

Figure 3-2 summarizes the 3 pillars in which this research is underpinned. These three pillars lead to the concept of democratization of research: the user experience will eventually become everyone's responsibility, hence the need of developing ways to empower other functions to look after the user experience, and also to eventually build a more user-centric culture.

The UX research team at Uber has started to think about ways to democratize

user research practices, in order to increase availability of user insights for product decisions while minimizing the dependency and pressure on resources from the UX research team. One way to do this is training other functions on how to conduct their own research when needed.

A good example of a similar initiative is LinkedIn's research bento: a program that strives to empower designers to do their own research (Chaney, 2017). The motto of the program is that "Research Bentos are designer led, research-supported projects." However, besides this example, it is difficult to find best practices documented online on the topic of empowering non-researchers to generate insights. This thesis project aims to partially bridge that gap.

Borrowing from LinkedIn's framework of designer-led and research supported training, which explains the scope of the responsibility of the different stakeholders involved, Figure 3-3 plots in a two-dimensional axis the different areas in which a training framework could fall into. Since one of the primary goals of this research aims to help researchers when they don't have time to support a research request, this research aims to be positioned on the left quadrants (Figure 3-3): **where the researcher has a supporting role rather than a leading role in a research training and project.**

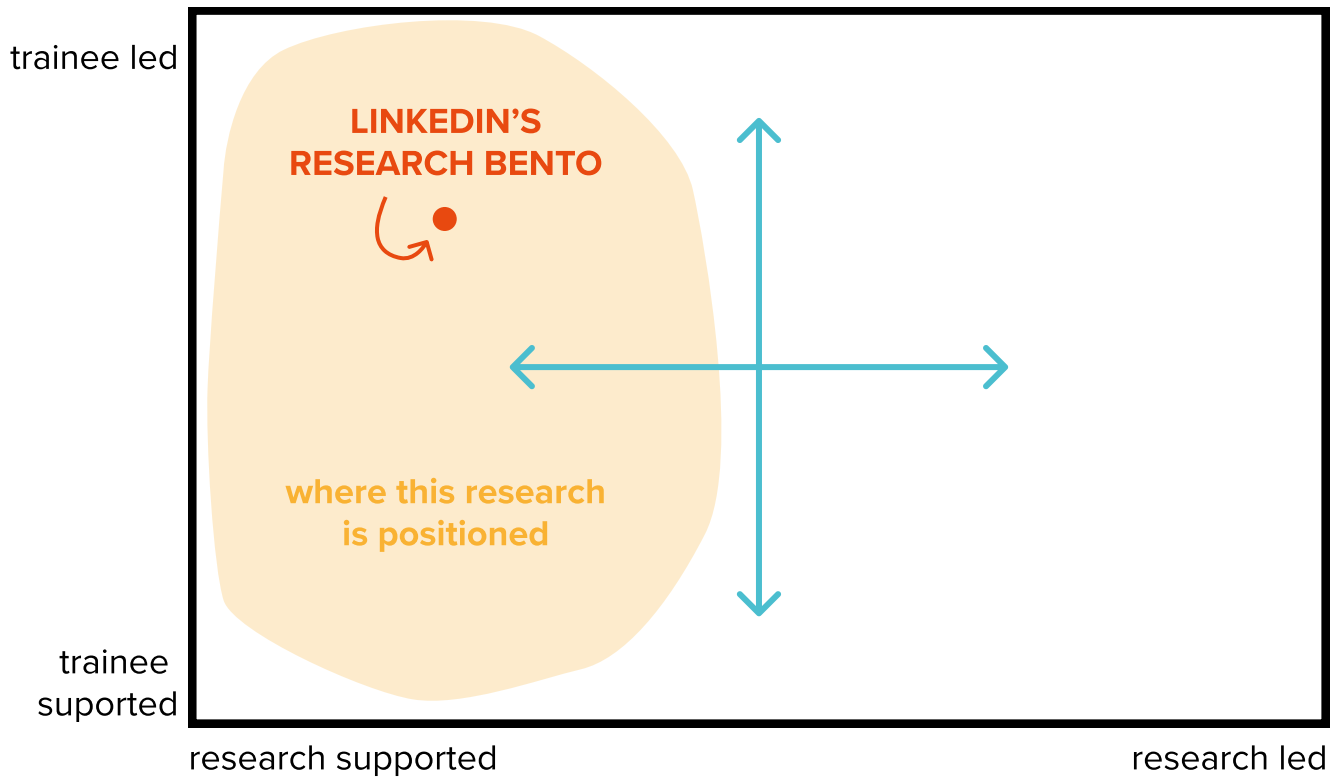


Figure 3-3 The left quadrant represents where the results of this research should aim to be positioned: research supported and trainee led or supported projects.

3.2 STAKEHOLDERS

As aforementioned, user experience research at Uber is one of the disciplines that looks into the needs and wants of users. The purpose is two-fold: identifying new opportunities for development and improving existing products.

Researchers are one of the actors that are in charge of directly interacting with users, but that doesn't mean that research should only be the responsibility of the researcher. Figure 3-4 (left) represents the proximity of different functions to the user, in which the researcher is positioned closest to the user. Proximity to the user in this context is defined as the frequency of interaction with actual users, and the extent to which users insights are used or not to perform one's activities.

It can be argued that the current situation (Figure 3-4) is far from ideal. Although the primary goal of this research stems from a need standpoint (i.e. ensuring research activities are performed even when a researcher is not available to conduct the research), a side effect which this research intends to trigger is to bring relevant functions closer to the user, who will eventually and in the long-term feel the responsibility and the importance to utilize user insights to make decisions.

The product development functions depicted in Figure 3-4 are chosen based on the potential benefits of incorporating user insights in their work. Their key responsibilities are as follows. **Researchers** interact directly with users, and work with teams to define research roadmaps and to ensure that research outputs inform product development activities. **Copywriters** use user insights to inform the tone of voice and wording of the copy they write for different products and user communications. **Designers** are in charge of creating compelling experiences

and easy to use interfaces. **Product Managers** work on prioritizing which products should be built. **Marketers** work on advertising products and ensuring that they reach the right audience. And **engineers** work on making the envisioned products a reality.

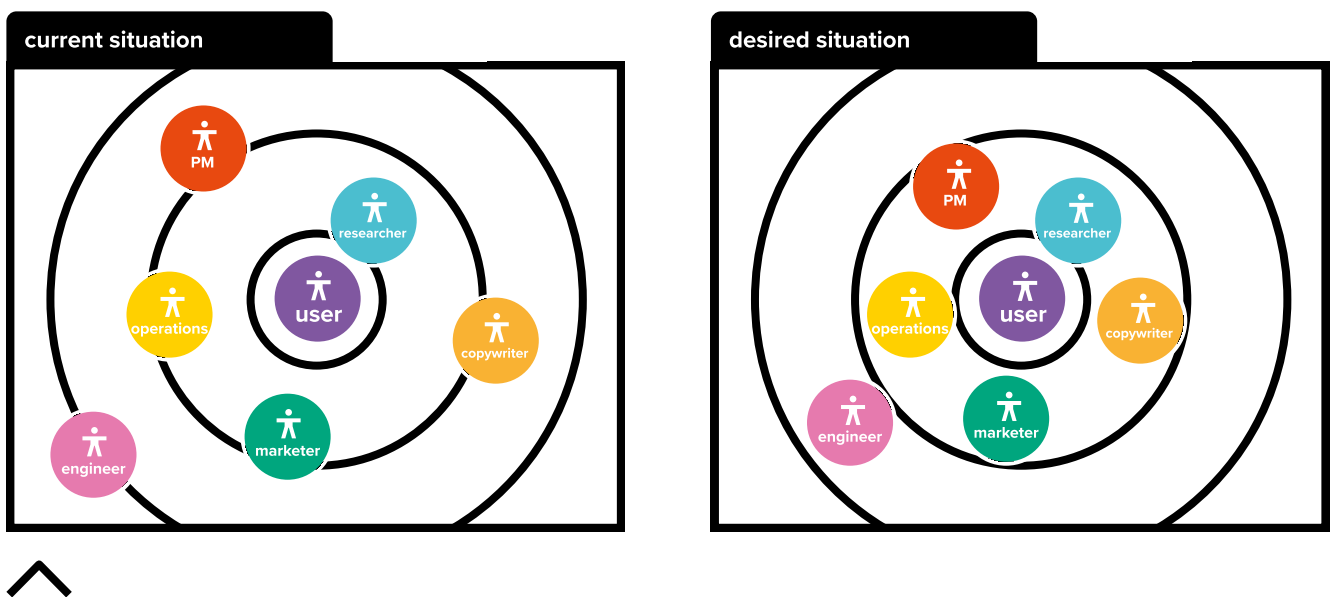


Figure 3-4 In an attempt to build a more customer-centric and insights driven culture, this thesis aims to bring different functions closer to the user.

3.3 RESEARCH PROCESS

This section illustrates what the work of a UX researcher looks like in a company like Uber. The purpose of explaining the step-by-step process is to provide insight into what the day-to-day work of the researcher might look like. The step-by-step process of research projects at Uber can be found in Figure 3-5, and it illustrates that researchers are not only in charge of conducting the research but also of planning, limiting the number of projects they can take at a given time. Understanding this research process is equally important when building a solution to address the research question.

The time spent on each of the steps varies depending on the scope and focus of the study, and the stage of the research. For example, a usability study is less complex and has a narrower scope than a foundational and more strategic study.

The steps are further explained here:

1. **Kick-off meeting and problem definition.** Meeting to achieve stakeholder alignment and define the problem that will be researched. The purpose of the research is also established: Is it to formulate a general strategy? To fill a knowledge gap? To evaluate concepts? To detect usability issues? Usually there is a “problem owner” and team members can join to provide additional insight and context to the problem.
2. **Project plan and research goals.** After the kick-off meeting, the researcher crafts a research plan in which the research goals are detailed and the timeline for the project is decided. The project plan is reviewed by key stakeholders and then once approved, the research can start.
3. **Secondary research.** Optional step, depending on the focus of the research.

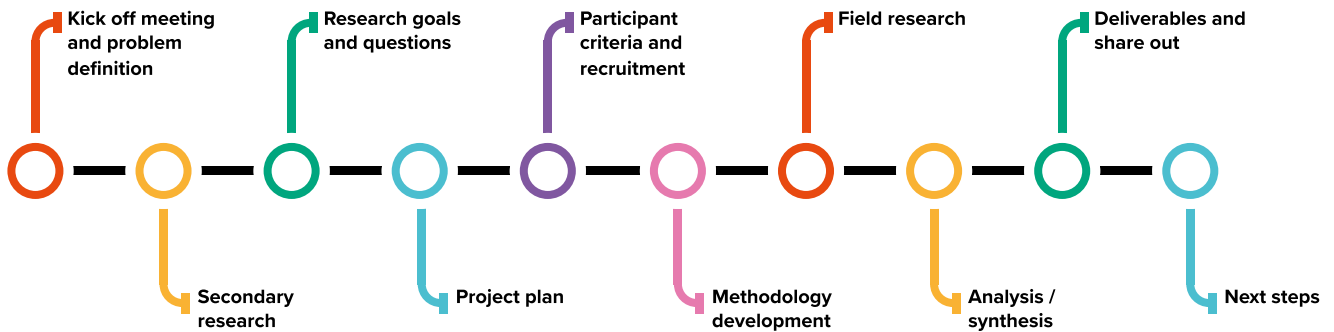
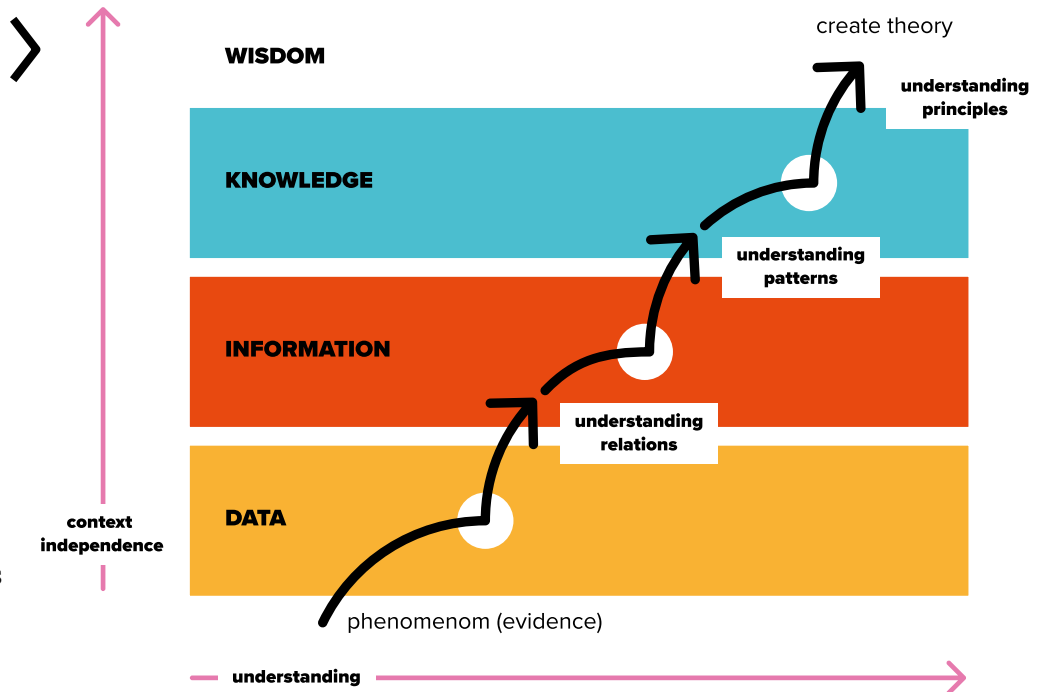


Figure 3-5 Step-by-step overview of the research process at Uber for single market studies.

- Here internal documentation is reviewed, the data science team can help look into existing data and external sources are also consulted.
4. **Methodology development.** This step deals with deciding which method will be used to answer the research questions, and how that will look like in practice.
 5. **Participant criteria & recruitment.** The researcher defines the criteria for the participants so the recruitment team can screen and recruit suitable research participants. Recruitment is done in-house, by the researcher or research operations, or with an agency.
 6. **Primary research / field research.** The part of the project when the researcher meets with the participants; essentially, where raw data is generated, such as user quotes, anecdotes, and/or observations.
 7. **Analysis / synthesis.** Sense making process of all the raw data generated during primary research to generate insights and knowledge. According to Sanders & Stappers (2012), analysis typically involves “interpreting the data, making comparisons to theory and to other data, searching for patterns and determining how well they fit, generalizing findings to a broader scope, and finding evidence to support the conclusions.” A simple model to guide analysis is the DIKW scheme (Sanders & Stappers, 2012; adapted from Ackoff, 1989), in which the letters D,I,K,W stand for Data, Information, Knowledge, and Wisdom (Figure 3-6).

Figure 3-6 Ackoff's DIKW scheme (1989) provides a simple framework to guide analysis (cited in Sanders & Stappers, 2012). Data are symbols that represent the properties of objects and events. Information consists of processed data, the processing directed at increasing its usefulness. Information is contained in descriptions, answers to questions that begin with such words as who, what, when, where, and how many. Knowledge is conveyed by instructions, answers to how-to questions. Understanding is conveyed by explanations, answers to why questions.



8. **Deliverables.** Ways to communicate the knowledge generated during the research. These could be personas, customer journeys, pain points and user needs uncovered, usually consolidated in a research report.
9. **Share out.** Smaller share outs are usually done throughout the project to keep stakeholders engaged and then, there is a final share-out where the key learnings and opportunities are communicated. The final share-out can be done with a presentation, or with a more participatory approach such as an interactive workshop.
10. **Next steps.** Researcher activities directed at identifying gaps based on the research, future research projects, and ensuring that the insights uncovered during the research are embedded in the product or the opportunities are captured in the product roadmap.

3.3.1 Embedding research in product development: organizational structures for research

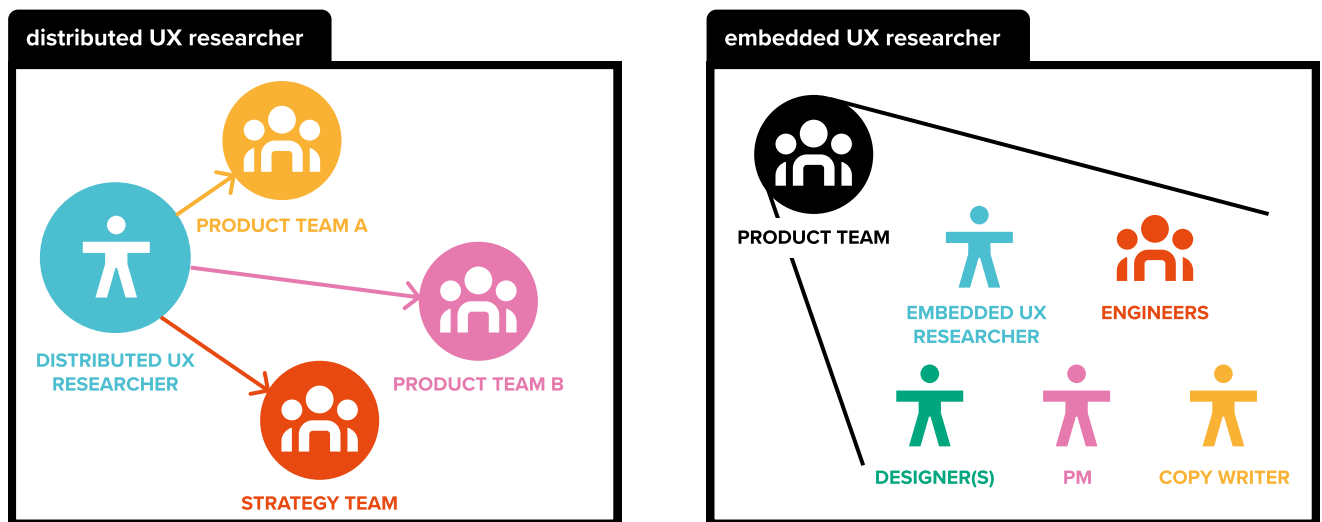
How does research look like in practice? At Uber currently, there are two different organisational structures for research: **distributed** (or studio model) versus **embedded** model. Figure 3-7 depicts the difference.

Figure 3-7 Difference between distributed (left) and embedded (right) researcher.

Distributed researchers work with a variety of teams, while embedded researchers belong to one product team.

Embedded researchers are part of a product team and hence have an easier ability to build a relationship and trust with their team. They are able to drive research activities more easily, build subject matter expertise and follow-up on the impact of the research.

Distributed researchers cover research asks for those teams who don't have an embedded researcher, or when the embedded researcher on a team doesn't have the time to cover a particular research project. The key advantage of distributed researchers is that they build knowledge across multiple different parts of the business, and hence have a better overview of the different initiatives going on in the company. They are better equipped to find connections and shared themes between seemingly disparate projects. However, they struggle with ensuring that research outputs are embedded in the product and roadmaps.



3.4 RESEARCH QUESTION

The goal of this research is to help companies increase availability and consideration of user insights in product decisions, rather than relying on assumptions, both during the exploration and testing stages of product development. A way to do so is by empowering other functions to do their own UX research when researchers are not available due to lack of time or lack of bandwidth.

Although it can be argued that there are several ways in which the problem identified can be tackled, this research looks at just one possible solution to empower other functions to do research: a research-led training. The reason for doing so is an initial internal exploration before this thesis started, in which this issue was explored from different angles and this was deemed the most suitable solution to explore as part of a student thesis.

Hence, the key question this thesis tries to answer is:

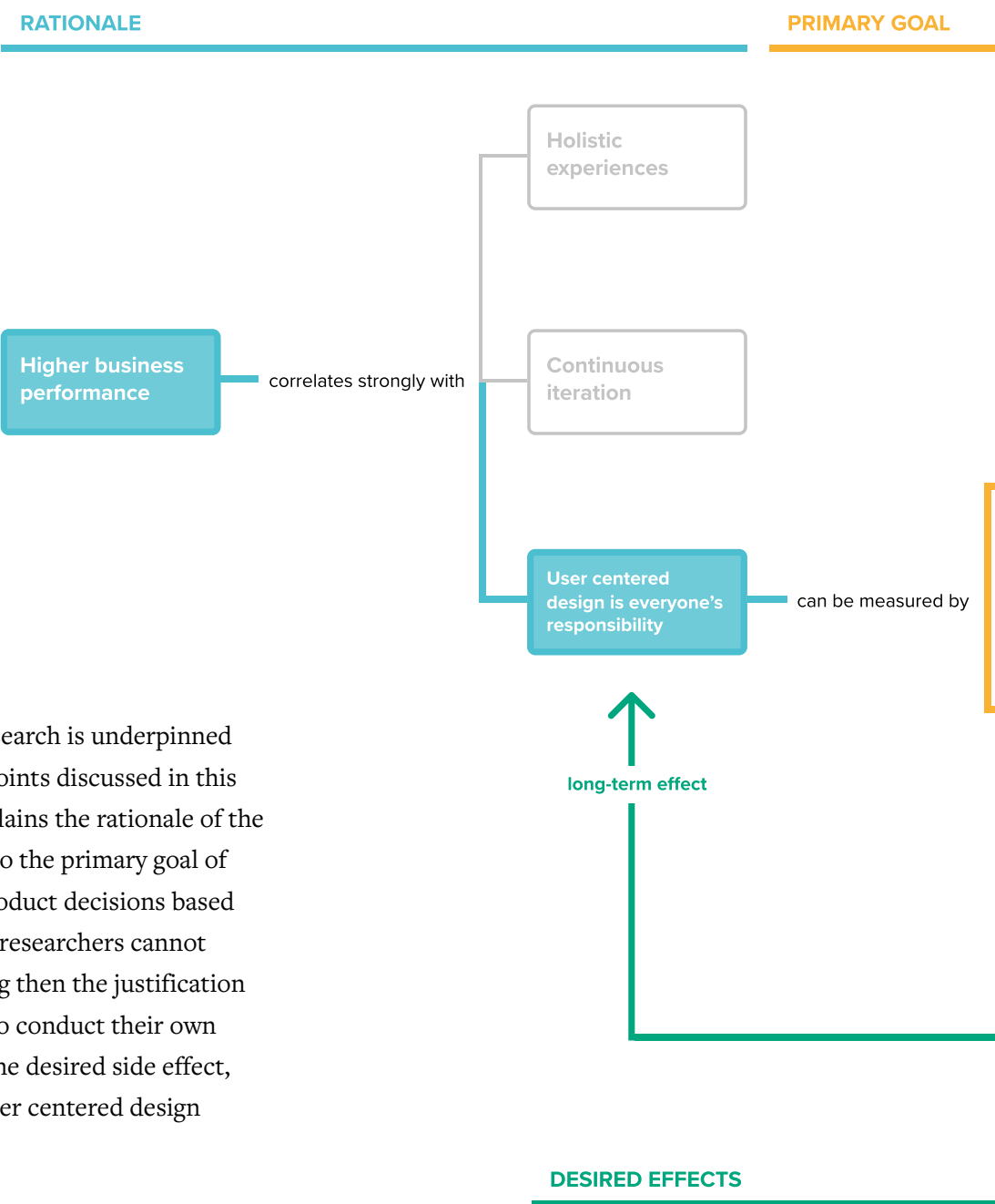
How to empower non-researchers to do their own research?

Within this research question, there are a series of sub-research questions that also need to be answered. These refer to the different dimensions that a training for UX research should encompass: its target users, how the training is delivered, the content of the training, the type of research that is suitable for training and the role of the researcher throughout the training. These aspects of the training are further discussed in the following list:

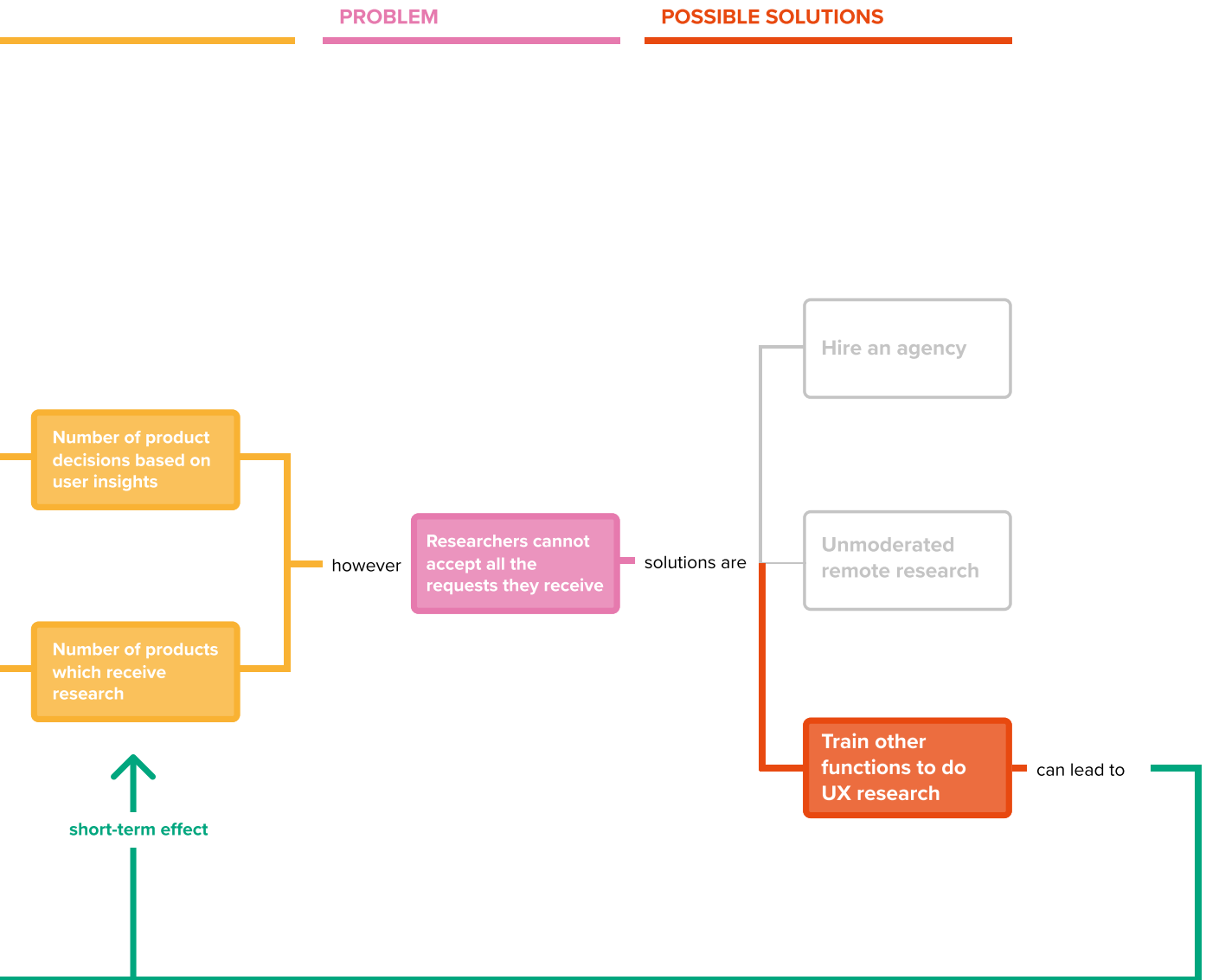
- **Target users.** Who is the target group for a research training? Which functions would benefit the most from learning how to do research?

- **Tools.** What is the best way to empower non-researchers to learn how to do research? How does the training / learning process look like in practice?
- **Project types.** What kind of research projects are most suitable for non-researchers to conduct?
- **Cadence.** How often does the training happen? Is it ad-hoc basis or on a recurrent basis?
- **Engagement model.** What is the role of the researcher in the training? What are the levers that dictate the level of engagement for each project?

3.5 FRAMEWORK



Framework in which this research is underpinned and visual overview of the points discussed in this chapter. The framework explains the rationale of the research, and how that ties to the primary goal of increasing the number of product decisions based on user insights, even when researchers cannot accept all requests, providing then the justification of training other functions to conduct their own research. It also highlights the desired side effect, in the long-term, to make user centered design everyone’s responsibility.



Research question:

How to empower non-researchers to do their own research?

Sub research questions:

Target users. Who is the target group for a research training? Which functions would benefit the most from learning how to do research?

Tools. What is the best way to empower non-researchers to learn how to do research? How does the training / learning process look like in practice?

Project types. What kind of research projects are most suitable for non-researchers to conduct?

Cadence. How often does the training happen? Is it ad-hoc or on a recurrent basis?

Engagement model. What is the role of the researcher in the training? What are the levers that dictate the level of engagement for each project?

Theoretical background

Problem analysis

Empirical research

Making the toolkit

Evaluating the toolkit

Discussion

4 Empirical Research

Several data sources have been used for this study: qualitative data from semi-structured interviews, archival data from the internet, and internal documents. During the research, the researcher was present on site allowing for opportunistic data collection and the ability to follow events in real time. Additionally, 1 case study experimenting with a training method has been documented.

4.1 INTERNAL TRAINING INITIATIVES

4.1.1 Goals

This study describes an investigation about internal UX Research training initiatives for non-researchers. The objectives of this study were threefold: (1) to map out internal training initiatives by other researchers, (2) to pinpoint best practices and determine opportunities to improve how researchers train others and (3) to identify potential subjects for in-depth interviews and gauge interest to pilot the program in the future.

4.1.2 Method

The scope of the investigation was limited to Uber's UX research department, since the objective is to understand internal practices that can be leveraged when building a solution, which is context-dependent. A survey (which can be found in appendix 1), was distributed via email to the whole UX research department at Uber. The survey yielded $n = 16$ responses (approximately 20% of the department at the time). Despite the low response rate, the findings are still represented here because patterns were found which give some high-level insight into the most suitable type of projects for the training, as well as the stakeholders who could benefit the most, and motivations and challenges when delivering a training.

4.1.3 Key findings

#1 11/16 (69%) of the researchers who responded to the survey have experimented with different ways to train others.

This finding is consistent with the trends in UX research uncovered during the literature review, specifically the notion that as research becomes more mainstream, organizations will continue to develop new tools to democratize research practices.

#2 Evaluative research (63% of the responses) was the most common type of project that researchers supported or trained others to do.

A reason is that evaluative research is generally narrower in scope and more concrete compared to exploratory or generative research. Examples of evaluative research are design concept testing or interaction and usability testing. Thus, evaluative research makes the most suitable kind of research for those who want to get started.

Evaluative research was followed by foundational research, and was deemed suitable for those stakeholders who had already observed research and used research materials crafted by a researcher.

#3 Designers, followed by product managers (PMs) and then engineers and marketers, were the most common recipients of the trainings.

Designers, engineers, marketers and PMs are the functions working at the core of product development; hence it makes sense they show the most interest in engaging with UX research to understand user insights. Operations was also deemed a suitable target for the training, and what makes them interesting is that we have operations teams in all countries where Uber operates. This means they are acquainted with the local cultural nuances and can speak the local language.

#4 Researchers supported or trained colleagues across all research stages, with the research design being the most common one.

All research activities, namely creating the research plan, recruitment, research design (i.e. interview guide), moderation and analysis require dedicated support and training from experienced researchers to enable successful completion of the project. For those new to research, every research stage requires some degree of handholding before “learners” are equipped to do it on their own. Analysis was perceived as the most difficult research stage to assimilate.

#5 Motivation to teach others how to do research stemmed from lack of bandwidth, a desire to provide tools for people to autonomously make product

decisions, preventing research or the researcher from being the bottleneck of user insights, scaling the research practice, providing stronger ownership of the research insights among stakeholders and making teams empathize more with researchers (Figure 4-1).

Scaling the research practice and building coalition with researchers (i.e. increased empathy with researchers stemming from a better understanding of our process) were the most common motivations to train others. Additionally researchers observed side effects such as improvements in how people talked and made decisions, such as “more evidence based conversations started rather than decisions made just based on assumptions.”

#6 However, training is sort of a double-edged sword. Researchers did not end up saving much time compared to having done the project by themselves.

Although enabling or empowering others to do their own research can be initially seen as a time-saving strategy, and has powerful side effects aforementioned, it requires dedication and time from the researcher to make it a success.

Designing and delivering the training are time consuming activities (Figure 4-2). Additionally, the researcher feels the need to coordinate or facilitate the process and ensure that milestones and deadlines are completed on time.

“I didn’t save time in the sense that it added time to gather resources and develop the training and then deliver it. Yes in the sense that research was conducted that I did not then have to allocate time for. But then No (again) in the sense that had I not enabled the other coworkers to conduct themselves in about 90% of the cases it just would not have been done at all due to competing priorities and bandwidth.”

“My time-saving ambition wasn’t a big success, since mentoring required more than a little attention. Training, support, and mentorship require time, energy, and focus.”

- 
- 1 Enabling teams to autonomously make product decisions
 - 2 Preventing research from being the bottleneck of user insights
 - 3 Stronger ownership of user insights across teams
 - 4 Increasing empathy with researchers and their process
 - 5 Scaling the research practice - 'research becomes everyone's responsibility'



Figure 4-1 Key motivations of UX research to train non-researchers.

#7 A challenge for those participating in the training was combining the research activities with their full-time work responsibilities. Hence, setting up the right expectations and incentives early on and gauging commitment are essential to the success of these trainings.

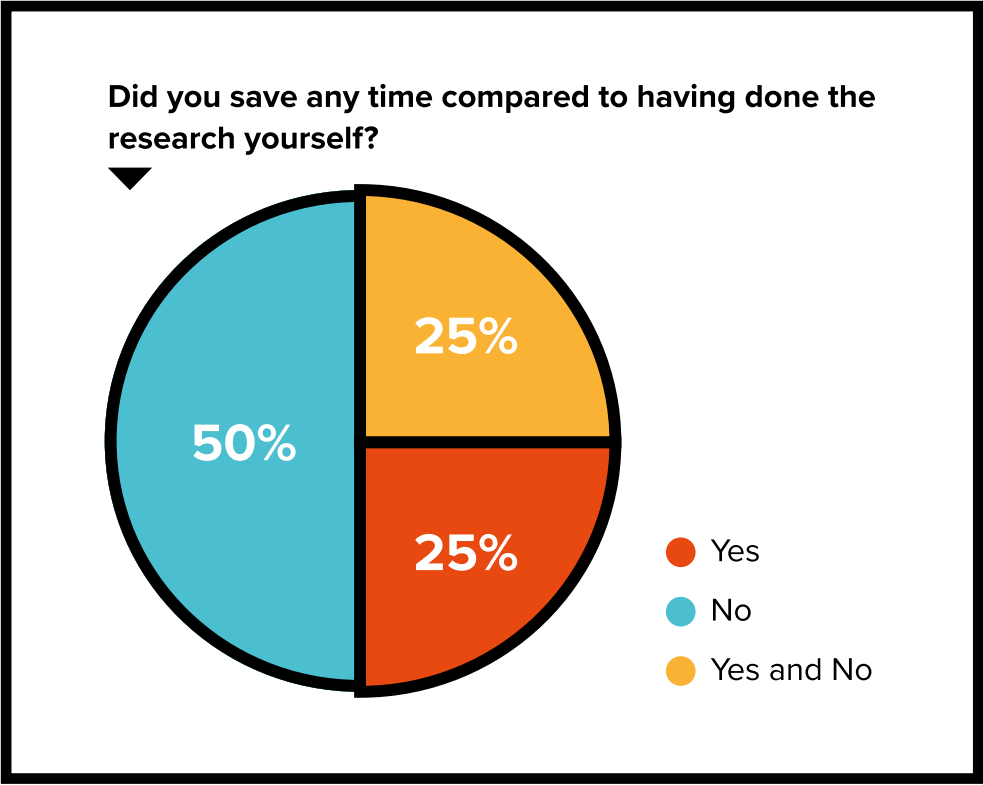
Despite seeing an appetite from other functions to learn research, their job responsibilities will always take priority over doing research. Identifying stakeholders with the right amount of bandwidth is a way to minimize this issue, besides setting up the right expectations and gauging commitment before starting the training. One respondent suggested that if they were going to do this again:

“Before going too far, I would begin by explaining that anyone who wants to participate in the training, they have to commit to doing another user research within the year.”

Moreover, it is important to help stakeholders understand the value they will get from learning how to do research.

“I have trained, but from my perspective you need buy-in from people, otherwise it’s a fool’s errand. Even with people interested in, you need to pitch what value they’ll get from learning those techniques and practices, which it’s not trivial as it tends to detour from the main discipline people do the majority of their work.”

Figure 4-2 Only one fourth of researchers managed to save time by training teams to do their own research.



#8 Multiple methodologies were used to deliver the training: shadowing a researcher, reading materials, decks for reference, and ‘classroom’ set-up. Classic classroom approach with lectures or readings as a starting point, but practical exercises and shadowing a researcher are essential to ensure that knowledge is internalized. Shadowing the trainee is also an important feedback mechanism to ensure that trainees are able to perfect their moderation technique.

#9 Researchers who have not attempted to train others cite not having an established procedure, or materials / toolkit to facilitate the training, as the biggest blocker to attempt the training themselves. This insight reinforces the need to have a process in place to ensure that if there is a willingness from the researcher to train or empower others to conduct their own research, they have the appropriate tools to do so to minimize time spent

doing crafting the training and avoid duplication of efforts.

#10 Last, there is some skepticism in the ability to train others to do UX research. It is a specialized profession for a reason.

“Honestly, I’ve always had mixed feelings about training non-UXRs to do UXR work. On one hand if bandwidth is limited and/or they are going to do it anyway you want to best enable them for success. On the other hand (perhaps elitist attitude, but), I do think it’s a specialized profession for a reason.”

4.1.4 Reflection

This initial survey demonstrates the interest among researchers on training others, since over two thirds of the sample has experimented with training other functions. Evaluative research emerged as the most suitable research to initially train others to do. Regarding the functions, designers were the most common recipients of these trainings. The design of the research guide was the most common support given to others; however, researchers supported stakeholders across all research stages.

The motivations to train others were varied: from having a lack of resources, to enable teams to collect insights more autonomously and to have greater ownership of research insights. Although saving time, or lack of time, was an initial motivation to train others, researchers did not end up as much time as desired. And a challenge for trainees was to combine their full time work with the research activities.

Different methodologies were used to deliver the training: shadowing a researcher, reading materials, decks and presentations. And researchers who have not attempted to train others before cite not having an established procedure in place as the biggest blocker.

Last, a side effect stemming from the distribution of this survey has been connecting with other researchers interested in the topic of training, and collecting other documents that researchers have used previously to conduct their trainings.

Further questions for interviews

The following questions stem from the results of the survey and also the reflection after analyzing the survey results. Some of these questions serve as the basis for the in-depth interviews described in the following chapter.

- How do you build a scalable research training model?
- How do you keep stakeholders engaged and motivated throughout the training?
- What skill set is desirable for trainees?
- How have other researchers delivered the training?
- What are the challenges and pitfalls to consider when training others?
- If time-saving ambitions are only accomplished in a quarter of the situations, does it still make sense to train others? If so, when? And then, how to minimize the time the researcher spends delivering the training?
- Why train others when there are vendors?

4.1.5 Limitations

There are some limitations from this chapter that need to be acknowledged.

The sample size is too small to draw generalizable conclusions, but it provides a starting point since some underlying themes have already been found.

Additionally, the sample might not be representative of the whole UX research department, since those who have done trainings are more likely to be engaged and reply.

4.2 INTERVIEWS WITH PRACTITIONERS

4.2.1 Goals

A series of in-depth interviews was conducted to explore how other researchers have attempted to train others in the subject of UX research, trying to answer the questions posed in the previous section. Table 4-1 depicts the high level goals of the interview, and the full interview guide can be found on appendix 2.

Additionally, a few interviews were conducted non-researchers to hear their perspectives on the topic of training and understand how to create something that would fit their research needs. The script can be found on appendix 3, as well as the goals of the interview.

Table 4-1 Structure of interview to practitioners.



Section	Goal
Intro	Warm-up, build rapport and introduce trainings that interviewee has done before
Trainee selection	Identifying soft and hard skills of trainees
Tools	Tools used to deliver the training
Methodology	Methods most suitable for training and level of support per research stage
Training set up	Tips and tricks per research stage
Role of the researcher	Level of engagement of researchers and the levers that dictate that level
Lessons learnt	What are their key learnings from having trained others before

4.2.2 Method

Research methodology introduction

Patton (2002) explains the rationale of qualitative interviewing as follows:

“We interview people to find out from them those things we cannot directly observe. The issue is not whether observational data are more desirable, valid or meaningful than self-report data. The fact is that we cannot observe everything. We cannot observe feelings, thoughts, and intentions. We cannot observe behaviors that took place at some previous point in time. We cannot observe situations that preclude the presence of an observer. We cannot observe how people have organized the world and the meanings they attach to what goes in the world. We have to ask people questions about those things. The purpose of interviewing, then, is to allow us to enter into the other person’s perspective. Qualitative interviewing begins with the assumption that the perspective of others is meaningful, knowable, and able to be made explicit. We interview to find out what is in and on someone else’s mind, to gather their stories.”

Therefore, qualitative interviewing was chosen to get insight into other researchers past experiences with training, with the purpose of distilling best practices and lessons learnt. The interviews were conducted face-to-face or remotely with the help of the video conferencing software Zoom, if the researcher was sitting in a different office.

Data collection

10 informants from multiple levels of the organization were formally interviewed. Informants were sampled from the UX Research department, design, engineering and community operations (Table 4-2). The interviewees were selected based on tenure, position and previous experience with training. All research participants

were interviewed using the general interview guide approach, as described by Patton (2002), because it enables flexibility, while making sure that “the basic lines of inquiry are pursued with each person interviewed”. The interview guide serves as a checklist during the interview to make sure all relevant topics are covered (Patton, 2002).

A total of 10 semi-structured were conducted, each consisting of 30-60 minutes yielding roughly 330 mins of material. Although there is no definitive rule for sample size, the sample was deliberately kept small to allow the material gained to be studied in greater depth and detail (Patton, 1990). As such, the variation in

<i>Interview code</i>	<i>Location</i>	<i>Department</i>	<i>Tenure</i>
UXR1	Australia	UX Research	> 2 years
UXR2	United States	UX Research	< 1 year
UXR3	India	UX Research	> 1 year but less than 2
UXR4	United States	UX Research	< 1 year
UXR5	Brazil	UX Research	> 1 year but less than 2
UXR6	United States	UX Research	> 2 years
UXR7	The Netherlands	UX Research	> 1 year but less than 2
DES1	The Netherlands	UX Design	< 1 year
ENG1	The Netherlands	Engineering	> 1 year but less than 2
COMMOPS1	The Netherlands	Community Ops	< 1 year



Table 4-2 Overview of interviewees: location, department, and tenure.

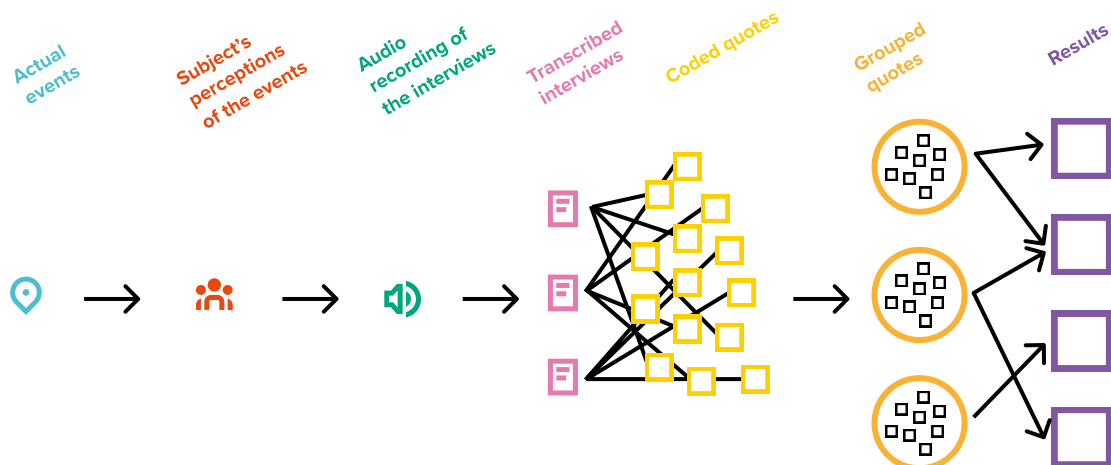
this sample was selected for in order to improve the opportunity for triangulation of data by comparing the results of each interview for contradictions, or confirmation of emerging themes. Glaser and Strauss (1967) recommend the concept of saturation for achieving an appropriate sample size in qualitative studies. After 10 interviews insights started to converge and overlap and hence the decision to stop with the interviews.

Several measures were put into use to avoid informant bias and strengthen theory. All interviews followed semi-structured interview guides in an open ended format about recent, important activities which limits recall bias, and enhances accuracy (Golden, 1992; Koriati, Goldsmith & Pansky, 2000). Last, interview data was collected using a digital audio recorder, which has the advantage that the interview report is more accurate compared to writing out notes and enables the researcher to be more immersed in the interview (Patton, 1990).

Figure 4-3 Information takes different forms during research.

Data analysis (grounded theory)

Data analysis is of the inductive type, meaning that patterns and themes emerge from the data, in contrast of being defined prior to the data collection if the data was analyzed in a deductive manner. Figure 4-3 visually depicts the different forms that information takes during research.



4.2.3 Key findings: From other researchers

Interviewees had varying degrees of experience with training others. Some had done it as a one-off, because they did not have time to onboard a vendor and were working on a very tight deadline to deliver results. For others, the motivation was more about creating a culture of testing, and increasing appreciation for the UX research craft. Last, I had the opportunity to interview a researcher which engaged teams in 7 different cities to evaluate the launch of a new product. Involving teams in the 7 cities was necessary as there were only 3 researchers, and the research had to be done simultaneously.

Another researcher who had worked in several companies before joining Uber, could share how she experienced training differently in each of them. One was a bank and credit card company in which they followed a top-down approach to training: they had a whole department dedicated to teaching people how to do research. Another, a multinational telecommunications company, followed a more bottom-up approach: as the company was going a transformation to agile, they started to question how does research fit with agile. In her own words:

“People just needed to get the ideas in front of users... researchers were like that doesn’t sound very grounded... and there were a million of those requests. We were trying to position ourselves as a strategic partner, rather than just fixing and working in loops... So we wanted to position ourselves like that, and we decided that we wanted to train others in the research that we didn’t want to do.” - UXR4

Her case illustrates a long-term intention to train, so researchers can focus on more strategic rather than tactical studies.

The following paragraphs detail the learnings from the interviews.

#1 The decision of choosing a ‘vendor vs training’ was mostly focused on whether the researcher already had connections interested in learning about research, or whether a vendor had already been onboarded.

The key reason to choose to train others versus hiring an agency was primarily time and cost savings, and possibly enhanced quality if done correctly since local stakeholders have the local knowledge which is sometimes needed to contextualize the research.

“Speed, cost and quality. Don’t have time to hire a vendor and go through the approval process. Internal stakeholders already have a good understanding of the business so it is good to leverage this expertise.” - UXR1

One of the interviewees had an interesting situation in which she had a tight deadline and she was unavailable to travel due to the rapid turnover in which insights were needed. She needed support to conduct research in two different countries. For India, she chose to train a member of the operations team.

The rationale was that there was no vendor already onboarded and she had connections there which had already expressed interest in the past to do research. However, in Mexico, she did not have any connections with the local teams, and it would take too long to get buy-in from management. She opted to work with a vendor instead which was already onboarded so they could start straight away.

“For India, there was a highly motivated team member, that was already pumped to collaborate, so I didn’t even have to encourage him. And he found someone in Chandigarh that was also interested. That ripple effect made it so easy... For Mexico, I don’t speak Spanish so I didn’t think that I could influence operations in Mexico. I thought it would take too long to get the buy-in from management, and I didn’t have any connections in those cities, while the vendor we could just ask them to travel, and they have their localized knowledge, and that was important.” - UXR2

#2 The motivation of the researcher stemmed from lack of bandwidth to support a project, stay focused on more strategic studies, or leveraging local connections interested in learning. Sometimes the motivation was from a need standpoint, like working on tight deadlines or budgets.

The researchers interviewed expressed several different motivations to train others. The most obvious one is enabling others to conduct their own research when the researcher is not available. It can also help researchers stay focused, while ensuring that the less strategic or lower priority projects still receive attention. For others, rather than a motivation, it was a necessity, like working on a tight deadline or budget. Other times, the motivation stemmed from having local connections that had expressed interest in learning in the past, and when the right opportunity came, they took it. And last, most researchers expressed that they are already getting their stakeholders acquainted with research best practices, so they could participate during research projects more effectively (i.e. better note taking).

“I usually worked with PMs, engineers and designers. The idea was to teach fundamentals of research, to either conduct their own research or participate in research more effectively.” - UXR5

“We were trying to position ourselves as strategic partners... so we decided that we wanted to train others in the research that we didn’t want to do.” - UXR4

#3 Building awareness that training is a possibility is as important as creating materials to train.

Some researchers mentioned the importance of building awareness within the UX research team that training others is a possibility. Some have taken initiative on their own, but others did not think about training until they were encouraged by another colleague to do so.

Besides building the awareness, having resources readily available for researchers to conduct the training was also deemed important.

“For me, one of the biggest things was the awareness that this [training] was even a possibility, I didn’t even know that I could train other functions. A colleague gave me the idea... Then I was thinking it would take too long to create a deck from scratch, and it felt like a godsend when one of my colleagues sent me a training doc she had used.” - UXR2

#4 Although researchers experimented with different approaches to train, they all agreed on the importance of practical experience.

Researchers experimented with a variety of tools to deliver the training: ‘classroom’ approach with lecture, observation / shadowing a researcher, role-playing, hands-on experience with interviewing with the researcher observing. Everyone highlighted the importance of practical and hands-on experience, and the idea is to “do as little research as possible as the person who runs the training.”

“While doing the training, I realized that you need a lot of practical things, rather than giving theory, the ways of doing research, methods, analysis... At some point I asked them to roleplay, shadow, and ask them to do moderation themselves. And that was invaluable. However, we did this on a one by one basis because we were on the field with them, so not all of them got feedback. And getting feedback is super important. After they shadowed us, and we shadowed them, the project continued by each team member returning to each of the cities and doing focus groups, putting the findings on a deck per city and we all got together again for the analysis.” - UXR7

#5 In terms of the content of the training, it’s important to adjust it to a particular project, and to not train just for the sake of training.

Interviewees also talked about the content of the training. The most relevant insight is to approach the training once there is a project and a need to solve a problem, rather than just for the sake of doing research.

“The root problem of a lot of people is that they are excited to do research, but they approach it from a methodology point of view. Like ‘I want to do a diary study’, rather than ‘what is the question that you want to answer...’ The idea of the right method for the right research questions, we should teach them how to frame their problem. But that goes back to: Are we trying to make researchers? No, we are trying to make executors... So I can focus on strategic. It is a constant balance, of us being structured and methodical, and people wanting to get it in front of a human being...” - UXR4

The ‘Testing Fridays’ initiative that the company where one of the interviewees had previously worked perfectly illustrates this point:

“Let’s recruit people to the lab, every Friday, over lunch. So we had a vendor who was always recruiting at this lunch hour. Wouldn’t it be great if we always had people at a constant basis? ... sounds like a great idea. The challenge was that it is just gen pop (people that had a phone and use it daily, super general recruits), and sometimes we didn’t have anything to show. What ended up happening is that it devalued the research, participants would be there, we got these participants, and we asked engineering, do you have a questions. It wasn’t structured properly, and it wasn’t designed well in how they were asking things. We would never use this forum to ask if they like something. That was not the intention, but it is what ended up happening...” - UXR7

They talked about helping stakeholders frame the research, and advising on the best methodology for that problem. Once the methodology has been defined, then the training should be adapted to only that particular case, hence keeping it simple and focused. One of the interviewees used the following analogy to explain how to approach the training:

“I think after having failed twice, what I learnt, that the best way to teach someone is to give them a project, and giving them training for that specific project. You give them the dough of the pizza, and the ingredients, and you give them the instructions on how to make the pizza. Teaching like we do in schools is not helpful. We want them to execute in very short time.” - UXR7

For the lecture type lesson, they advised to explain interview best practices and the biases of research. The focus should be on how to ask good questions, for example, show what a leading question looks like, or explain why one shouldn't ask yes/no questions. Another important point is teaching them how to be simple and objective in the questions, and don't ask many questions at once and focus more on the why. UXR4 had a very creative way of explaining what a good and a bad question look like:

“I crafted this do's and don'ts videos, moderation technique topics, I took the researchers on our team and we made videos... Someone recorded us, and we would do like do's and don'ts for qualitative interviewing. It was so much fun, so funny, we had to re-record... We exaggerated of course, but this made the training fun and engaging, and I could easily share this afterwards.” - UXR4

#6 Besides teaching interview skills, making trainees aware of the biases that research can have was considered to be important.

Another relevant aspect was to teach stakeholders about the biases that research can have, in order to increase their rigor. The biases of research, that UXR5 taught during this training, are categorized into respondent or researcher biases.

Respondent biases:

- **Acquiescence bias.** Also known as “yea-saying” or the friendliness bias, acquiescence bias occurs when a respondent demonstrates a tendency to

agree with and be positive about whatever the moderator presents. In other words, they think every idea is a good one and can see themselves liking, buying and acting upon every situation that is proposed. Some people have acquiescent personalities, while others acquiesce because they perceive the interviewer to be an expert. Acquiescence is the easy way out, as it takes less effort than carefully weighing each option.

- **Sponsor bias.** When respondents know – or suspect – the sponsor of the research, their feelings and opinions about that sponsor may bias their answers.
- **Social desirability bias.** When the respondents answer the questions in a way that they think will lead to being accepted and liked. Some people will report inaccurately on sensitive or personal topics to present themselves in the best possible light, such as money related topics.
- **Sampling bias.** When a sample is collected in such a way that some members of the intended population are less likely to be included than others.

Researcher biases:

- **Method bias.** Refers to how the study has been designed. A way to minimize this bias is to use multiple methods for the same research, like in-depth interviews and a survey.
- **Interviewer bias.** Elaborating on a respondent's answer puts words in their mouth and, while leading questions and wording aren't types of bias themselves, they lead to bias or are a result of bias. Researchers do this because they are trying to confirm a hypothesis, build rapport or overestimate their understanding of the respondent
- **Confirmation bias.** Confirmation bias occurs when a researcher forms a hypothesis or belief and uses respondents' information to confirm that belief.

#7 Being very prescriptive should be one of the principles of the training. And the stage of synthesis is the most difficult for trainees to do independently.

They also advised to be very prescriptive at the beginning, leaving little room for

doubt, as a way to build confidence.

“At the beginning be very prescriptive, little room for iteration. Make instructions as clear as possible and force them to follow the guidelines. Our interview guide was extremely detailed. We wrote everything they had to say, and how they should say it. We had screenshots of the prototypes, timestamped and with the questions they should ask per screen and what to observe. We also noted which questions were a must and which were nice to have” - UXR1

For note taking, they advised to bring a second person to the session, and researchers also created a template for note taking. However, they followed different approaches in terms of how structured it should be. Bringing a second person to the sessions is also a way to minimize confirmation bias.

A less structured approach is asking them to highlight the quotes related to the research goals:

“My notetaker wasn’t too detailed, what I noticed is that it doesn’t necessarily follow strictly the structure of the interview, sometimes it’s better for people to write down everything, and whenever you see things in your notes related to these 5 research goals, pull them out, pull out top insights within these themes.” - UXR2

Synthesis was done with everyone together, and the most common method they used was affinity mapping. They also used templates to structure the analysis, to ensure that the learnings were set in an actionable format, so they could take action straight after the research. The synthesis was structured and facilitated by the researcher.

“We usually did the synthesis together. The easier method to do synthesis was with post its and clustering them (affinity mapping). If it was in depth research, we did value prop, gains, pains. It is important to provide frameworks for analysis. It can help them set their learnings into something that is actionable during the synthesis. And I was facilitating.” - UXR5

Some researchers even went as far to say that the analysis was the most difficult part for others to do, needing the full support of a researcher.

“The analysis part did not work well. I expected them to be autonomous, but I had to help a lot. We did the analysis together. 20 people in a room for an entire week. We had everything structured, what order to go through, and there were a lot of learnings we had not documented anywhere, on how to do the analysis. They were good with quotes, but going deeper was very hard. I asked them to go in the notes, take the post its and put things that they learnt, cluster post its, and if they have to synthesize that to an insight statement how would that be. And then from there to the real insight statement. They learnt to craft insights by seeing us do it. And seeing us facilitate. Analysis was divided in 4 days. First day was very slow. The other 3 days were a lot better.” - UXR7

#8 There was not a clear consensus on who should own the recruitment.

In terms of recruitment, there was not a clear consensus on whose responsibility that should be. Depending on the timeline and the scope of the project, some researchers took care of the recruitment to enable the trainee to focus on the rest of the research, while others made it a separate activity for those training. Eventually, if the desire is to train someone who will eventually be able to do the research autonomously, they should learn to do the recruitment too.

“I scheduled the participants on Calendly. I wanted to take some weight off, so I wasn’t putting too much on their plate. I used Calendly because its in English. I set them up, sent a confirmation, and I asked an Ops team member to double confirm their times.” - UXR2

The coordination effort by the researcher is extreme for multi-market /multi-city studies. Researchers expressed the necessity to be always available for their stakeholders. Also when planning the time commitment of the trainees to the project, estimate more. It is their first time doing it so they will likely need more time.

“Coordinating while executing is challenging. We had weekly meetings, and we had online chat channels with all of them per city, they could ask any question or request and we would be there for them while at the same time we were doing research ourselves.” - UXR7

#9 Trainings were conducted on an ad-hoc basis, when there was a need, rather than on a regular cadence.

Rather than having a regular cadence for the trainings, researchers conducted the trainings mostly on an ad-hoc basis, when there was a need or a request from a team member. One of the interviewees worked previously at a company which had a whole team dedicated to training, but that seems to be an exceptional situation.

“At company A it was on a regular cadence, because we had a team 100% focused on it. At company B, our research team was really small and there was interest on research... we heard this interest many times so it made sense... We did it more ad-hoc, when we got a request. Interest in research needs to be a requirement for people doing interviews... there has to be a requirement, or management, so people make the best of it.” - UXR4

It's also important to have a backup date planned for the training in case there are last minute cancellations. Or a one-pager which people who can't attend can look at to get some minimal knowledge, especially relevant for projects with very tight deadlines.

#10 The most important "skill" when choosing trainees was intrinsic motivation.

Before the interviews there was the hypothesis that researchers were looking for a specific set of skills on trainees. However, all of them agreed that intrinsic motivation is the most important aspect when selecting trainees. In short, the 3 requirements are: motivation, time commitment and approval from manager. And that as a researcher you're able to trust that they will get the job done.

"It's less about skills, Ops skills are very diverse, but more about intrinsic motivation: is this them who want to learn how to do qualitative research as a way to grow their career? Or is it their managers who are asking them to do it?" - UXR1

Another factor is that they are able to minimize their biases. Stakeholders are usually not as neutral as researchers. A strategy to minimize confirmation bias is to have two people together doing the research, preferably from different functions, so they can keep each other in check. "You don't want them walking away with fake insights, I am very sensitive to this." - UXR4.

"And sometimes, they are also afraid of listening to their insights, depending on the profile. I was always telling them to never do it by themselves, to minimize the research confirmation bias. There is a lot of teams doing bad research... There is no harm in teaching, the important thing is to put someone else, potentially from a different function. This creates coalition and collaboration. So the designer and the PM... The designers didn't want to accept that users couldn't use the product." - UXR5

Additionally, getting the person in the right mindset and the why of the research is essential for the research to succeed. “This group was more focused on ticking boxes, like yes I have done this, but they don’t understand the process and the intent. You need to show examples, how to get to a point...” - UXR7

#11 Design, operations and marketing were the 3 functions chosen as the most suitable to receive training.

Design, operations and marketing were deemed as the 3 functions that could benefit the most, or that are most suitable to conduct research on their own. PMs and engineers were thought benefit more from attending the research, with less value to be taught. When engineers are building a new feature it should have already been tested, so there are few instances for them to actually have to do research. However, engineers are valuable to participate because they are the only ones who know what is technically feasible, so they can keep the team grounded when going into idea-generation mode.

Researchers advised to look into what are the motivations of the person to participate in the training and research, and to “sell it as an opportunity rather than additional workload.” Understand first what are the interests of the person, and how you can present the research and training as an opportunity to reach those goals.

“Sell it as an opportunity rather than workload. I connect with a lot of people within Uber. I wanted to extend my project to France, but I did not speak French or had the time to do it myself. So I approached her, the marketing person in France, and asked her what are your goals for the year. And then I told her I am doing this project that could align with your interests. It was a priority, so that also enabled us to get approval and buy-in for her to do the research.” - UXR7

For designers, it can be presented as an opportunity to be more autonomous on their process, without having to solely rely on researchers to make product decisions based on user insights.

“For design, the company was really design centric. We sold this as you should be independent. If you have doubts, don’t make assumptions. This means autonomy for designers. Design is not only about pixels, it’s about solving problems. Autonomy is how you sell it.”

- UXR4

PMs were identified as not prone to do research, but nonetheless, could still benefit from having a good understanding of research best practices, so they understand what UX research is good for and what is not, and how they can use it to make product decisions.

Ultimately, to get engagement from stakeholders, coming up with the right value proposition is essential.

“The UX research process can be sold as something sexy, attractive, new and exciting, and that is a good hook. But it doesn’t hold itself, you need that in combination with something else. How do you deliver the message? It is a training, but what are you really selling? What is your value proposition? Nailing that is critical.” - UXR7

#12 If the key motivation is to save time, then the researcher should look for someone they can work with over a longer period of time. The first one or two times that another person is supported, researchers did not report to save much time.

Interviewees reported that the first one or two times they did the training they were not able to realize their time saving ambition, similar to the learnings from the survey.

“The first 2 times are very hands on, if you’re gonna go through the effort of the training, then it should be for a longer engagement. Foresee that you will be doing multiple research over a 6-12 month period for the effort from the researcher to be worth it. How to keep them engaged over time? It again goes back to motivation. And make sure to show appreciation over the long term, like a bottle of wine here and there.” - UXR1

One time saving strategy is to find trainees that have the motivation and the bandwidth to collaborate with UXR over a long term, rather than one-off, so the time investment will make sense over the long term, when the trainee is able to work autonomously.

Since training others is about offloading, researchers need to be careful about how much ‘white glove service’ they offer. Another strategy is to delegate as many research activities as possible to the trainee, minimizing the workload of the researcher. However, finding a balance might be difficult since the trainee also has their other work to take care of.

Making sure that there are readily available resources for people who want to train others is another way to ensure their time commitment to the training is reduced:

“I was thinking it would take too long to create a deck from scratch, and it felt like a godsend when one of my colleagues sent me a training doc she had used previously.” - UXR2

A side effect of training for some researchers was an increased number of interruptions during their work, since trainees recognized them as the subject matter experts and went to them every time they had a question.

“When things got complicated they were still relying on me. The issue of training others, is that a couple of things will increase the workload. You plan a lot of work that you want to do but you’re constantly getting interrupted by them. And you should help them because you’re the one who started this. It certainly increased the number of interruptions for me.” - UXR5

Researchers also talked about the importance of thinking about how to make the training scalable, and to be able to minimize the commitment of researchers over time. The content and the format of the training also determines whether it will be scalable.

“They need to practice with actual users, and that is not scalable. Find a way for people to practice and get feedback without getting a lot of time from the expert. But you can’t train someone overnight. Someone who is willing to put time, and you need to be patient.” - UXR7

#13 Usability testing was deemed to be the most suitable research to do.

“Some research is not appropriate for others to do, we need to be careful about the research that we offload.” - UXR4

Everyone agreed that usability testing and concept testing was appropriate for a person doing research for the first time, as well as in-depth interviewing for topics that are not too sensitive or complex. Foundational and long-term studies were not regarded to be suitable, since the complexity in the design and execution of the study is much higher and it requires a long term commitment. This is identical to the findings from the survey.

#14 Three different roles that the researcher could take throughout the training were uncovered: lecturer, mentor and partner, with varying levels of

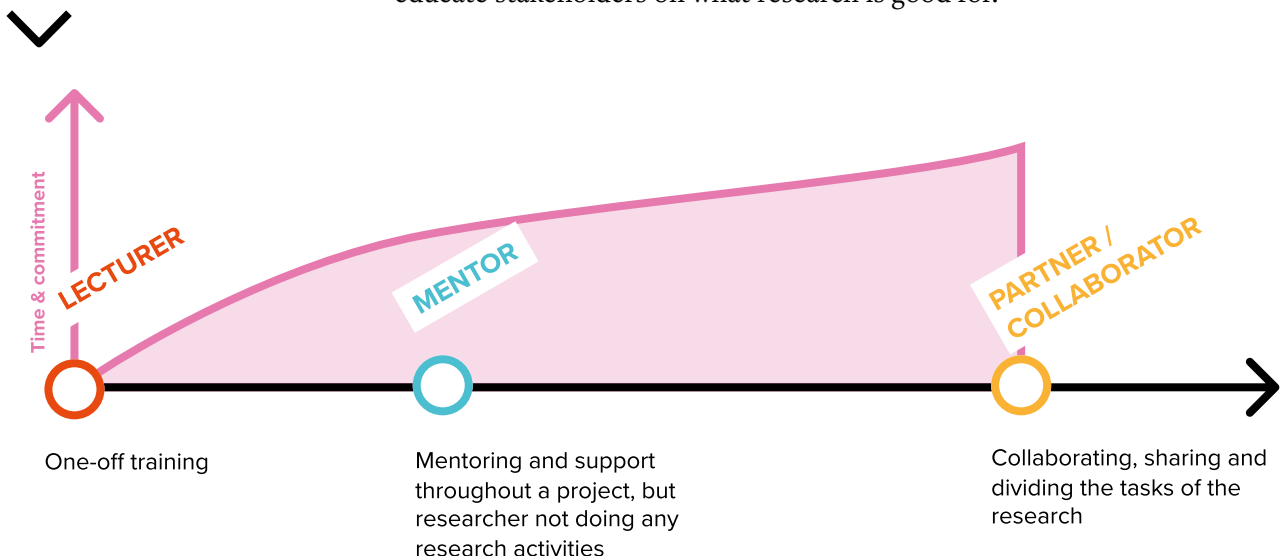
commitment.

The different researchers had varying levels of commitment. Some mentored their stakeholders throughout, while others also took the weight of the responsibility of some of the research activities such as recruitment. However, they all agreed that they had a desire to minimize the overall commitment, and that defining the support from the researcher and setting the right expectations from early on in terms of their commitment to the research was extremely important.

There are three distinct engaging models that emerged from this research, which are as follows and appear listed in terms of their time commitment to the project: lecturer, mentor and partner / collaborator, which are depicted in Figure 4-4.

Figure 4-4 There are three distinct engagement models that researchers doing trainings can fall into: lecturer, mentor or partner/collaborator.

- **Lecturers** do a one time engagement in which the researcher gives an initial lecture to the trainees and that covers the extent of the engagement. An example is one of the researchers who presented research techniques at a company wide meeting to promote the activities of the research team and educate stakeholders on what research is good for.



- **Mentors** work with trainees throughout a whole project, offering guidance across all research stages, but they are not doing any of the research activities themselves. This model worked best after the trainee already has had some previous exposure to research.
- **Partners or collaborators** work together with their stakeholder and besides giving them the proper training to conduct the research, researchers are also responsible themselves for some of the activities. Examples are researchers doing the recruitment for their trainees, or preparing the interview guide to lift some weight of the shoulders of the trainee. This role is taken when the trainee has little time to support the research or when it is the first time the trainee does research, hence they need additional hand-holding to complete the project effectively.

#15 Embedded researchers were considered to be more suitable to provide the training.

Researchers also commented that it would be favorable to be an embedded, versus a distributed researcher, to deliver the training. The rationale is that they know the team, the team knows them, and the researcher will be able to work on their research skills over a longer period of time. As a distributed researcher it is more difficult to maintain the long term relationship needed to be able to keep helping the trainee.

“Training works better with embedded researchers. Because they know the team, and the team knows them, and you’re able to work with them for a longer period of time.” - UXR6

“It works better if you’re embedded with the team. I won’t be able to constantly talk with the person as a consultant. They will forget, they will potentially lose confidence on themselves if you can’t help them.” - UXR5

#16 *An iterative process.*

After talking with a few researchers it became apparent that it can take a few tries to find the right ingredients and recipe to make the training effective and efficient for all parties involved.

“I didn’t get it right the first time. But I am applying the learnings from the first attempt now that I am replicating the research in other markets.” - UXR7

#17 *Important to incorporate moments of reflection and feedback.*

Incorporate moments of feedback and reflection during the process, so the training can be evaluated and feedback can be incorporated for the next round of training.

“Also create a post survey of whether they like it or not, to evaluate whether operations team members enjoyed the training, and understand what could be improved. For ops is extra on top of their work.” - UXR2

4.2.4 Key findings: From potential trainees***The perspective of engineers***

When discussing the value and role of UX research with the engineer, he mentioned that although it’s valuable to meet with users first hand to build empathy with them, practically he doesn’t see himself directly interacting with users on the course of a project. When design hands-off a design to build, the research has already been done.

“I don’t see the research in the day to day work. The interaction that we have is with designer and PM. It depends on the project, but with the projects that I have, I would say no, I don’t see myself doing the research. It is more at the beginning, before I receive the design and the end, once I finish the design.”

In terms of building empathy with the user, this was regarded as important because engineers have sometimes to make some decisions that could be eased by having had some degree of exposure to users and hence a better understanding of what their needs might be.

One interesting example is when the engineer needed to understand how Brazilians were paying, to adapt one of the flows to this market.

“For the Brazil project, I needed to understand how Brazilians were paying. They use a barcode like in the 80s... We are lucky to have many internationals and Brazilians in this office, and I had questions that I needed to answer. Like open questions, not do you think this is a great solution? But more like, how do you pay?”

He approached this research autonomously and when asked on how he planned for study, the answer was common sense, curiosity and knowledge on the topic.

“I guess is the way I talk to people. If I want people to confirm my idea, I will ask leading questions. If I want their neutral point of view, I will ask in the most neutral way. It’s common sense. I agree that is the base, the common sense. Maybe I am level 0, and there might be 100 levels. But although I know I have to be neutral, I know I will make mistakes. So yeah, for the skills, you need two sets of skills. First is common sense. Second you need to know what you’re talking about. If you want to ask good questions, it has to be your subject. I have been working for a long time in that project, so whatever they were talking about I understood.”

When approached on whether he would like to receive a training if there was an opportunity, he would do it out of curiosity, but he doesn’t feel there is a need in his work to be able to do research.

“The more we know the better. But we have limited time. Research is not a priority. Important to know the users, to get to know the real users. We build that feature for a year. We were a team of 10 people. Only me went on the research trip. Only me when to see how people were using this. It is way different when you see it in real life. Now I understand better real users. Maybe I can take decisions thinking about the users, how they feel. So that might be good for me, for the business. But I don’t think it’s a priority to know research. It is a plus.”

“I think it could interest people. We had the customer support training. We were pushed to go, so I didn’t want to go. But it was good. I think people could be interested. It is always good to learn new things, do something different.”

The perspective of designers

The designer had varying experiences with research: from working in companies which valued research to those that didn’t, and from doing research on his own at a previous start-up.

Although he thinks of research as a necessary part of the design process, he mentions that designers are busy with other things and that research is not really a priority for them. They are also not used to incorporating research in their workflow, so adding research to their skill set would fundamentally change the way they work.

“Research should be the priority. But many times it is not. Many times I think I should do this. But we cannot do it. Research I would love to spend time on, but in reality, if we skip the research, we get 5 hours back...”

When asked about the possibility to be trained to conduct his own research, he mentions that he enjoys more being an observer rather than leading the research, but values the ability to talk first hand with users.

“I wouldn’t mind to do research here. I appreciate to do foundational. As anyone, to see it all first hand, develop empathy, then you can solve the problem better. Just understanding how they think, they behave. Loved to be involved. Don’t love the idea of leading. There are lots of ways to contribute. But I am less excited to plan the research.”

“Especially around usability testing, let’s say I can take 10 things I worked on, and then tomorrow I could talk to users for 3 hours and get feedback on the designs. Just get some opinions and thoughts. I would be willing to do so.”

Particularly valuable would be to be able to try out unmoderated testing for rapid decision making when considering several design directions.

“I jump to my past experience with usertesting.com. Regardless of the tool, it cannot be too disruptive of your work. It is a cost from a time perspective, vs reward. It has to be high reward, low cost. If it is higher effort, then I will do it less frequently. At the other company I was doing these tests three times a week. I worked for 6 hours, right before I ended my day, I dropped the designs on user testing. And then these tests sometimes are worthless, other times it was useful.”

Unmoderated research was perceived to be more realistic for designers to do rather than moderated. It is a matter of time and effort vs return.

“Moderated is also valuable. But it takes more time and effort. I could do it sometimes but not always. There is 25000 other things happening. It is a question of I could do this, I could do these 5 other things.”

They key motivation and value for designers to do their own research is that it gives them leverage, especially when discussing with PMs on which design direction to pursue.

“I love that it gives designers leverage. Right now, I align with PM, engineer, we agree, we disagree. But it’s not until this time that we align, or if we don’t align, that we can involve research. So this I would launch it on my way home tonight, and Monday I can show the real test results to the PM. And I have some ammunition to go on a certain direction.”

Thinking about the structure of the training, he wants to have dedicated support from research at the beginning, until he develops the confidence to do it on his own.

“I would love to work with someone from research, in some capacity, especially at the beginning, to figure out some stuff that is critical, like are we asking the question the right way. Once you do a 2 weeks working together, and as the researcher feels that the designers are prepared, then we can let them go. Sometimes I can do it own, but other times I would need support is more complex.”

In short, in a perfect world he would always have support from research whenever he needs to test some concepts or have a better understanding of his users. However, he is also aware that research is resource constrained and he can’t always have the support of a dedicated researcher. For important decisions that don’t have research support, he thinks it is a plus to be equipped to do his own research. But nonetheless, he would still like to have the support of a researcher

to double check his plan and discussion guide.

“Maybe in a perfect world I would have some support in doing so, if needed. It is cool, I can run this on my own. But I would love to have like 10 minutes with a researcher to double check my plans: here is what I am intending to get out, do you have an idea on how to get these answers? Being able to get feedback is important. And then probably I am more likely to do it frequently.”

The perspective of community operations

The community operations team is made up of customer care agents and the agents working at the customer support centres, among other roles. The green light hub agents are currently running roundtables in their own countries to hear the perspectives of drivers. When talking with them, it was clear that they don't have a clear structure and method to run their roundtables, and were interested in having a bit more guidance from the UX research team.

This is a different use case in which the team is already doing their own 'research', but could benefit from having additional support from research. The problems identified ranged from not really knowing how to structure a roundtable, not knowing how to properly word questions and struggling with the analysis and actionability of the insights connected.

Increasing the quality of the research these teams do could also result in the research team eventually being able to leverage these resources when unable to travel to multiple countries for a research study, or as partner for smaller studies, like testing a new design or program in a different market.

4.2.5 Reflection

After speaking with other researchers, it became apparent that there is not a clear recipe for success, that the effectiveness of the training is context-dependent. The interviews give insights into different aspects of the training. Figure #fixme depicts the key takeaways, which set the foundations for the tool that will be built to deliver the training.

From the perspective of other functions, research was not a priority, but they all agreed that is a plus to create greater empathy with real users.

12 PRINCIPLES FOR TRAINING

1

Choice of vendor vs training based on budget or time constraints, and local connections

2

Key motivation for training is to save time, but this is only achieved through long-term commitment

5

Train for a project, don't just teach a methodology

6

Trainings should be conducted on an ad-hoc basis, when there is a need

9

An iterative process, necessary to incorporate moments of reflection throughout

10

Usability testing was deemed to be the most suitable research to do



Figure 4-5 Key principles for training distilled from interviews.

3

Build awareness that training is a possibility

4

Focus on practical experience over theory

7

Intrinsic motivation is the most important when selecting trainees

8

Design, operations and marketing are the most suitable functions to be trained

11

Three different roles for the researcher: lecturer, mentor and partner, with varying levels of commitment

12

Embedded researchers were considered to be more suitable to provide the training

4.3 CASE: TRAINING A DESIGNER

4.3.1 Goals

An explorative study was conducted with the intention to empower a designer to conduct his own usability tests and concept testing, while trying to answer the following questions:

- What kind of support do designers actually need to do their own usability testing independently?
- How much time do the designer and researcher need to dedicate to the project? Is it possible to combine the training with the other demands from the day-to-day work?
- How can the process be optimized to reduce the support from a researcher?
- What blockers were experienced during the project?
- What can be improved if this was to be done again?

4.3.2 Method

Participant

A staff product designer (i.e. very senior) from the Amsterdam Design Studio, who was working on a new app feature and needed user input into different versions of the design to decide which to move forward with.

Procedure

The study consisted of supporting a designer to conduct his own usability tests. The researcher assumed the role of trainer and partner (as described in section 4.2.3), supporting the designer in some of the research stages (e.g. recruitment and research design), while teaching the designer to conduct other activities (e.g. moderation and analysis). The testing was to be done remotely with 6 users located in Brazil, and the language of the testing was Portuguese.

Disclaimer

The following section details an experiment with the intention of trying out different ways to train others. Findings from the research conducted are intentionally not discussed here. This is a methodological thesis and hence the discussion of the study findings could be more distracting than informative. Some background on the study is presented, but the main focus is on the training activities and the learnings from the experiment.

4.3.3 Key findings / learnings

Motivations

For the designer. The motivation to do the testing originated from a conflict between the designer and the PM. The designer wanted to pursue version A of the design, whereas the PM thought version B would be easier to understand for the users, and also easier to implement. The designer wanted to resolve the discussion based on data rather than just on assumptions.

For the researcher. The motivation to train the designer stemmed from the desire to facilitate evidence-based product and design decisions and from the desire within the research department to scale their practice and empower teams to do their own research for smaller projects. The project met the criteria of evaluative testing and concrete, one-time, research (rather than an ongoing, foundational work).

Expectation versus reality

Both the designer and researcher expected to spend less time with this project than what was actually spent. A lot of time was spent in coordination and logistic activities, that although might seem straightforward to the reader, they were the biggest hurdles during the process. This reinforces the importance of having appropriate process in place when supporting others to conduct their own research.

For the designer. The designer expected a workload of 6 days, from preparation to testing to analysis. Without the analysis stage, the designer already spent 7 days, and only managed to conduct one session. A lot of time was wasted waiting for the participants to show up (at least, 20 minutes per participant was spent until they were deemed a “no-show”). Table 4-3 details the difference between the expected time and actual time spent on each of the activities.

Table 4-3 Expected vs actual time spent on each of the research activities by the designer.



<i>Task</i>	<i>Expected time</i>	<i>Actual time</i>
Preparing the testing	1 or 2 days	4 days
Doing the interviews	3 days (6 interviews)	3 days (1.5 interviews)
Compiling the findings	1 day	1.5 days

For the researcher. Assuming the role of coordinator of the research was extremely time consuming and overall the researcher still felt responsible for the success of the project. This meant that she was keeping track of all the different activities and ensuring that deliverables were provided on the agreed timelines. To do so, a lot of back and forward with emails and internal chats was done with colleagues based in other offices at different time zones, which added to the complexity of the project. Table 4-4 depicts the difference between the expected and actual time per activity.

The researcher and the designer experimented with a new tool to schedule research participants, Calendly, to minimize the workload of our recruitment team due to the tight deadline in which results needed to be delivered. They hypothesize that using this tool, instead of calling participants, is one of the reasons that they had such a high no-show rate, higher than the no-show rates that the team normally experiences.

Table 4-4 Expected vs actual time spent on each of the research activities by the researcher.

Task	Expected time	Actual time
Intake meeting with designer	1 hour	1 hour
Recruitment	1 hour	1 day
Interview guide	Half a day	Half a day
Deciding on testing software	1-2 hours	Half a day
Interview training	1 hour	3 hours
Doing the interviews	0 days	0 days
Compiling the findings	1 day	1 day

Obstacles: From the designer perspective

For the designer, two main things need to be addressed if this was done again:

- 1. Defining the testing environment as early as possible so the prototype can be built accordingly (i.e. who will control the prototype? What level of detail is needed?)
- 2. Speeding up the input from the PM

These two points are further discussed in the following paragraphs.

Testing environment

KEY LEARNING. The testing environment should be defined at the beginning. That can help build a prototype suitable to that test environment because creating a prototype that will be on a user phone, is very different from creating a prototype running in a phone that we control (i.e. high end test phone) or a prototype that will be shown in a computer.

“The tech you’re gonna use the prototype on determines how the prototype will

be built”. The way it was initially built would only work on high-end phones, meaning that the sample would be biased if the team only recruited users with high-end phones. The designer tested the prototype on an iPhone and a low-end device he had at the office, and the prototype did not work correctly in the low-end device.

“I managed to get the prototype in the phone and working, but that was not appropriate for the way we are gonna test. Very important to know beforehand how we are gonna test so time is not wasted choosing an incorrect test environment.” This learning raises the following key questions that need to be answered before the prototype is prepared for the research: Is the user gonna be at a place where we have control? Does the team have control over the hardware? Having control or not creates constraints on how the prototype should be created.

PM Input is very slow

KEY LEARNING. Get the PM to agree on the designs that are going to be tested before the interview script and the prototype are built, and ensure that the PM understands the tight timelines so he/she can provide feedback on time.

“Once we finished the prototype and script we were kind of blocked waiting for the inputs of other people.” Having to wait for the inputs of the PM slowed down the process, and he decided he wanted to make last minute changes to the prototype after the research had started. Getting alignment from the beginning is essential, and working on getting the commitment from PMs for this kind of quick rounds of research by designers is essential. It is a new way of working, so PMs are not used to having to give feedback to researchers on tight timelines. Although PMs are always busy, and don’t see these projects as a priority, the researcher and designer need to work with them in order to get their commitment for this kind of light-weight research.

Obstacles: From the researcher perspective

From the researcher point of view, 3 key things need to be addressed for this kind of research to work:

1. Commitment from data science to have recruitment queries run more quickly
2. Reducing dependencies to contact users once we receive the query results
3. Figure out the right software to do remote testing so internal expertise in one tool can be built

Working with data science

KEY LEARNING. Data science (DS) was the greatest bottleneck throughout the process. Their support is essential, so having their commitment to run lightweight queries for the design and research team when doing light-weight and quick research is essential. The data science team is the first step in getting users. They have the internal expertise to run queries which retrieve user details needed to do the recruitment. However, for the data science team, getting the queries for the recruitment team is not necessarily their highest priority. Hence, the designer and researcher had to escalate their request to the data science manager. In an ideal world, they wouldn't have to escalate and would get the queries on time to send the recruitment email.

Reducing dependencies to contact users

KEY LEARNING. With the current process, at least one week has to be accounted for to do the recruitment. Ideally, it should be a possibility to do this without any external support, or to have an appropriate process in place to be able to do this kind of lightweight research more quickly.

Figuring out the right tool and getting started with remote testing

KEY LEARNING. Being the first time testing remotely didn't help to understand the constraints of the different tools available. The designer and researcher spent roughly 3-4 hours trying to figure out which tool would work best and eventually

decided to go with Google Hangouts since it looked like the most user-friendly and easier to set-up for the test participant. Google Hangouts was tested before the interviews started and the designer and researcher did a practice interview.

Reflection

What worked well

Commitment from both parties. Both researcher and designer were committed to make this project a success and put in the necessary time to successfully complete the project.

Designer builds empathy with UX Research. Sometimes UXR is perceived as a discipline that anyone can do. However, the designer, after going through the process feels more empathetic with the research practice and understands that getting a research project up and running is not as straightforward as it would seem; it requires a lot of planning. The designer also feels that talking to users is not the same as having a normal conversation, which requires some degree of technique.

“Your job (research) is harder than I expected.” - Designer as he reflects on the process

Designer feels more confident. The designer slowly felt more confident with doing a research project more independently as he went through the process. This aligns with the findings from the interviews with researchers: learning by doing should be an essential part of the training.

“I would never do this without the support from UX research.” - Designer at the beginning of the process

“I feel more confident now moderating; I just need to keep on practicing” - Designer after completing a few interviews

What can be improved

Minimizing dependencies to increase efficiency of the process. Many of the delays were because of waiting for another team to deliver inputs that were needed to complete the project, such as waiting for data science to deliver the query, or waiting for the recruitment team to send the email to users. Working on having a process where the different stakeholders commit to delivering on time, or where some parts of this process can be eliminated, is also important.

“As per initial conversation we wanted to start testing on Tuesday 5th, to do half of the tests on Tuesday, have Wednesday to do changes in the prototype based on user input if needed, do the other half of the tests on Thursday and have Friday for the analysis. To do so, we needed to get the query from data science by Thursday to send the recruitment email before the weekend and collect sufficient responses by Friday/Monday. In reality, we didn’t get the query from data science until Monday and the recruitment email wasn’t sent until Tuesday 5th.” - Designer and researcher reflecting on the process

Not a hands-off project for the researcher; delegating more activities to the designer. The ambition of the UXR team is to minimize the amount of time spent working in the smaller research studies. However, besides moderation which is an activity that was done by the designer, the researcher spent lots of time with the different coordination activities. Hence, the time saving ambition of the researcher was not accomplished, and it increased the number of interruptions of the researchers’ work. The recruitment phase can easily be done with the designer together with the recruitment team, hence minimizing the workload of the researcher. Next time, enabling the designer to learn how the recruitment process works so they could do it independently the next time they attempt to do research will be a priority.

Trying unmoderated testing. As a result of the discussions with the designer, it was concluded that unmoderated testing for simpler prototypes like the one that was tested was as suitable as moderated testing. This would allow the designer to minimize wasted time by no shows, and to reduce the coordination efforts with the recruitment team. The way unmoderated testing works is that users are invited to go through a series of tasks with a prototype, and the software collects responses until the desired number of participants is reached.

Doing recruitment the traditional way. Rather than using a different tool which was meant to save time to the recruitment team, recruitment should be done the traditional way to minimize no shows. It was a waste of time waiting for the participants to show up in the video conference. The time spent coordinating with the recruitment team was also a waste since the users did not show up.

“I am never doing it again like this. I wasted so much time this week. I have only been able to think about the testing.” - Designer talks about all the time wasted waiting for participants to show up and rescheduling the sessions.

Getting more familiar with remote testing. It was the designer and researcher first time doing remote testing. Getting familiar with the different tools available and the pros and cons of each of the tools was also time consuming. Having clarity over the tools available before starting the project is essential to achieve greater time-saving.

Defining the right tool for the testing before the prototype is built. Feedback from the designer was that the testing environment defines how the prototype will be built. He built a prototype that the user could install in their phone. However, given the software constraints, he would not be able to see what the user was seeing on his screen. Hence, it was decided that the designer would control the prototype and ask the participant to think aloud and tell them where

to click. This meant that the effort to create a prototype that the user could install was a “waste”; despite the “waste” of time, it was also a key learning from this process.

4.4 CONCLUSION

This chapter discusses the different dimensions that need to be considered when thinking about a UX research training in the context of Uber.

Vendor vs training

The decision of training was primarily based on time and budget constraints, and local stakeholders have the local knowledge and business knowledge sometimes needed to contextualize the research.

Motivation of the researcher

Several motivations to train others were expressed by researchers: (1) ensuring that research is done when the researcher does not have the time to conduct the research, (2) being able to focus their attention on the strategic projects, rather than tactical, (3) working on a tight deadline or budget and unable to travel, (4) enabling local connections to learn how to do research if the interest had been expressed in the past, (5) getting product teams acquainted with research so they can participate as observers more effectively, (6) increased ownership by product teams of user insights and (7) building empathy across product teams both with the user and the researchers.

Building awareness that training others is a possibility

Some researchers did not realize they could train others until another colleague made them aware that training was a possibility.

Type of tool to deliver the training

Researchers experimented with a variety of tools to deliver the training: 'classroom' approach with lecture, observation / shadowing a researcher, role-

playing, hands-on experience with interviewing with the researcher observing. Everyone highlighted the importance of practical and hands-on experience.

Content of the training

The training should be approached once there is a project and the need to solve a problem, rather than just for the sake of doing research, from a methodology point of view. Hence, the content of the training should be adapted to each particular project. For example, for usability testing, the test set up determines how the prototype should be built.

Additionally, the training should cover how to ask good questions and be a good moderator, and the biases that research can have. It was also advised to be prescriptive at the beginning, and give clear guidelines. Another recommendation was to bring a second person to the research sessions to avoid confirmation bias. And last, the content and the format of the training determines whether it will be scalable; thinking about scalability is important if the time commitment from the researcher is to eventually be reduced or minimized.

Cadence

Usually training is done on an ad-hoc basis, when there is a need, besides one researcher whose company had a whole team dedicated to training.

The skills of the recipient

Intrinsic motivation is the most important aspect when selecting trainees.

The target recipient

Design, operations and marketing were deemed as the 3 functions that are most suitable to conduct research on their own.

Time saving strategies

It was reported that the first one or two times they did the training they were not

able to realize their time saving ambition. If time-saving is the key motivation or goal to train others, then it's important to see if there is potential to collaborate over the long-term. Another strategy is to delegate as many research activities as possible to the trainee, minimizing the workload of the researcher. However, finding a balance might be difficult since the trainee also has their other work to take care of. Another strategy is to have resources available when wanting to train, so the researcher doesn't need to spend much time crafting the materials. Last, a negative side effect of training is an increased number of interruptions in the researcher work.

Types of research

Everyone agreed that usability testing and concept testing was appropriate for a person doing research for the first time, as well as in-depth interviewing for topics that are not too sensitive or complex. Foundational and long-term studies were not regarded to be suitable, since the complexity in the design and execution of the study is much higher and it requires a long term commitment.

Role of the researcher

There were 3 distinct roles based on the level of commitment from the researcher: lecturer, mentor and partner or collaborator. Lecturers do a one time engagement in which the researcher gives an initial lecture to the trainees and that covers the extent of the engagement. Mentors work with trainees throughout a whole project, offering guidance across all research stages, but they are not doing any of the research activities themselves. Partners or collaborators work together with their stakeholder and besides giving them the proper training to conduct the research, researchers are also responsible themselves for some of the activities.

Embedded vs distributed researchers

To deliver the training, it is preferable to be an embedded vs a distributed researcher. The rationale is that they know the team, the team knows them, and

the researcher will be able to work on their research skills over a longer period of time.

An iterative process

It is difficult to get the training right on the first try, and it can take a few times to find the right ingredients and recipe to make the training effective and efficient for all parties involved.

Reflection and feedback

Related to approaching the training as an iterative process, incorporate moments of feedback and reflection, so the training can be evaluated and feedback can be incorporated for the next round of training.

“We wanted to position ourselves like strategic partners, so we decided that we were going to train others in the research that we didn’t want to do.”

Researcher talking about her experience with training

Theoretical background

Problem analysis

Empirical research

Making the toolkit

Evaluating the toolkit

Discussion

5

Making the toolkit

The design process followed to create the first version of the toolkit is presented. First, it starts with some background on learning theories, followed by a review of both internal and external toolkits for design. Then, some recommendations for guided learning experiences are presented, together with the vision and principles that guide the construction of the toolkit. Last, the toolkit content and design is presented.

5.1 BACKGROUND ON LEARNING

5.1.1 Kolb's experiential model of learning

Before getting started with building the toolkit, it is necessary to compliment the insights from the empirical research with the relevant theories in learning. The experiential learning theory by Kolb is discussed here as it is the one that best aligns with the training practices described by the researchers.

There is a long history of research on learning, and specifically on the role of experience in learning. Some authors argued that experience is all that is needed for learning to occur; others, such as Dewey (1986), proposed that humans learn through a “hands-on” approach and that learning is an ongoing “reconstruction of experience”, that reconciles new experiences with old ones in a continuous learning process.

In 1984, Kolb pulled from these many theories of learning to build what he called “experiential learning theory” in which he defined learning as “the process whereby knowledge is created through the transformation of experience,” and he defined the learning process as applying the four steps of experiencing, reflecting, thinking, and acting in a highly iterative fashion.

The experiential learning theory model connects two approaches to grasping experience (concrete experience and abstract conceptualization) and two approaches to transforming experience (reflective observation and active experimentation). Kolb's experiential learning theory is typically represented by a four-stage learning cycle in which the learner ‘touches all the bases’ (Figure 5-1).

According to Kolb (1984), effective learning occurs when a person progresses

we learn best when we shift and move through the cycle

as individuals we tend to enter the cycle at preferred points

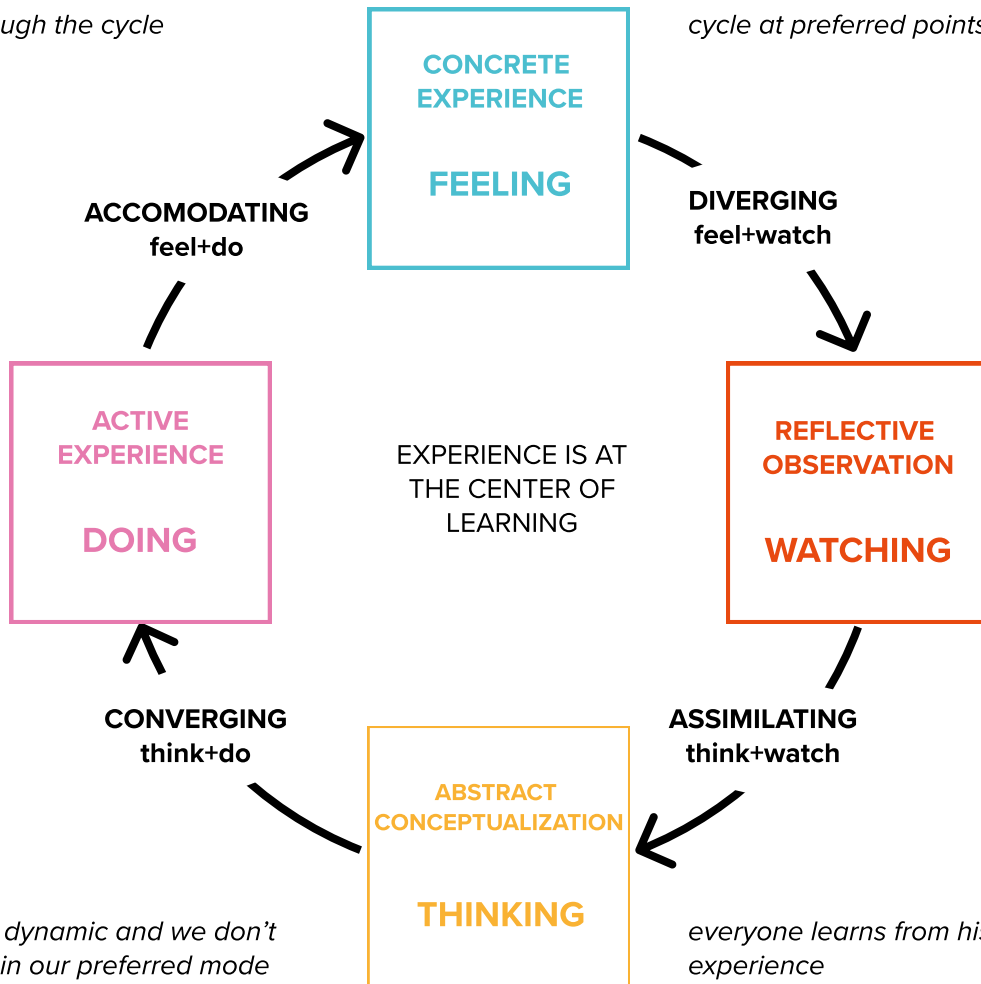


Figure 5-1 According to Kolb, for effective learning to occur, a learner needs to go through all four stages of the model: concrete experience, reflective observation of the new experience, abstract conceptualization and active experimentation.

through a cycle of four stages: of (1) having a concrete experience followed by (2) observation of and reflection on that experience which leads to (3) the formation of abstract concepts (analysis) and generalizations (conclusions) which are then (4) used to test hypotheses in future situations, where the learner applies their idea(s) to the world around them to see what happens, resulting in new experiences.

Kolb (1984) views learning as an integrated process with each stage being mutually supportive of and feeding into the next. It is possible to enter the cycle at any stage and follow it through its logical sequence. However, effective learning only occurs when a learner can execute all four stages of the model. Therefore, no stage of the cycle is effective as a learning procedure on its own.

Placed on a two-by-two matrix (Figure 5-2), the two approaches to grasping experience (concrete experience and abstract conceptualization) and the two approaches to transforming experience (reflective observation and active experimentation), define four learning styles: diverging, assimilating, converging, and accommodating.

Hence, learning style is a product of these two choice decisions:

1. how to approach a task (horizontal axis) - i.e., 'grasping experience' - preferring to (a) watch or (b) do , and
2. our emotional response to the experience (vertical axis) - ie., 'transforming experience' - preferring to (a) think or (b) feel.

In other words people choose their approach to the task or experience ('grasping the experience') by opting for 1(a) or 1(b):

- 1(a) - through watching others involved in the experience and reflecting on what happens ('reflective observation' - 'watching') or
- 1(b) - through 'jumping straight in' and just doing it ('active experimentation' - 'doing')

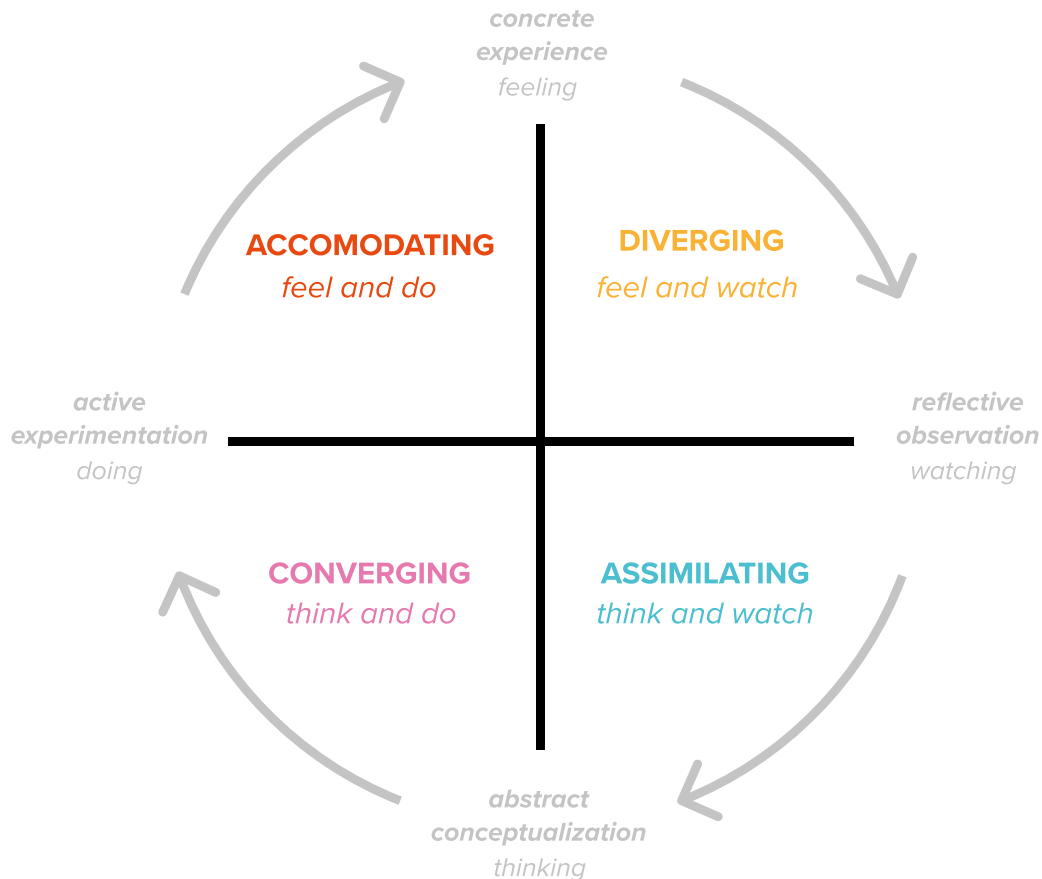


Figure 5-2 The four learning styles based on Kolb's experiential learning theory: diverging, assimilating, converging, and accommodating.

And at the same time they choose to emotionally transform the experience into something meaningful and useful by opting for 2(a) or 2(b):

- 2(a) - through gaining new information by thinking, analyzing, or planning ('abstract conceptualization' - 'thinking') or
- 2(b) - through experiencing the 'concrete, tangible, felt qualities of the world' ('concrete experience' - 'feeling')

Individuals tend to enter the cycle at preferred points. Individuals with a preference for a diverging style are good in idea generation activities, while individuals with a preference for a converging style prefer technical tasks over tasks dealing with social or interpersonal issues. Individuals with the assimilating

style are good at taking in a lot of information and logically ordering it, while individuals with the accommodating style prefer hands-on experience and action-oriented learning (Kolb, 2005).

Individual preferences for learning styles are thought to be derived from their personality type, educational specialization, professional career, current jobs, and the specific task or problem the person is working on at present (Kolb, 2005). Importantly, learning style is not a fixed trait in an individual, but “arises from consistent patterns of transaction between the individual and his or her environment....people create themselves through the choice of actual occasions they live through” (Kolb, 1984).

5.1.2 Using the analogy of cooking a new meal to explain the different approaches to learning

As aforementioned, everyone has a different approach to learning. Let’s say that someone was about to cook a new meal. There are multiple ways in which they could approach this task (Microsoft, 2016), see Figure 5-3:

- **Dive right in (trial and error):** Check fridge for ingredients, grab a cutting board and start putting together a dish.
- **Find a recipe (semi-structured):** Find a few recipes online based on the ingredients in your kitchen.
- **Attend a cooking class (guided):** Work with an instructor to learn each cooking technique before trying it out.

The training should reflect people’s diverse approaches to learning, which will ensure that everyone can get help when and how they need it.

Microsoft’s playbook “Designing for guidance” (2016) also provides three variables that influence a person’s desire for guidance (Figure 5-4):

- **Confidence level:** Some people might feel intimidated if they don’t have previous experiences with a task or a problem. This means that trainees



Figure 5-3 Using the analogy of cooking to explain the different approaches to learning, highlighting (bottom) the stage in which the learner enters Kolb's experiential learning cycle.

might have varying levels of confidence and comfort when doing interviews for the first few times.

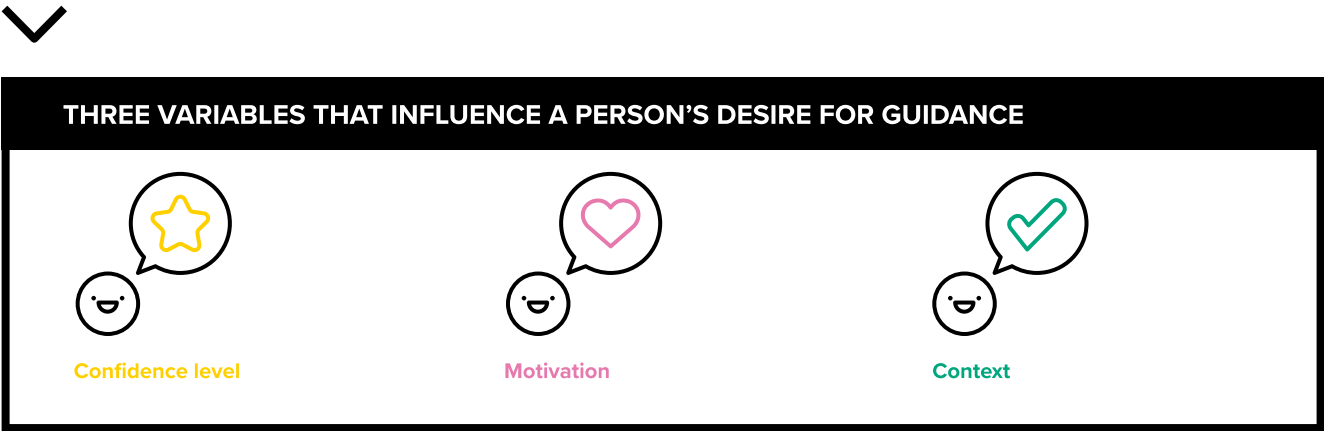
- **Motivation:** Why is the person learning this particular skill? Some people just learn to get it done and complete a task, while others do so to be able to eventually teach someone else or master the skill. The motivation will influence how they approach the learning task.
- **Context:** Guidance should be available in a variety of contexts, like a personal device or in a setting with no Wi-Fi, meaning that trainees should be able to access help across different settings to ensure they can get the help they need, when they need it, regardless of the set-up they have available.

5.1.3 Reflection

This model sets the foundations to build the training. It gives input into the kinds of activities that should be covered in the training to enable effective learning to occur. These are namely having an experience, reflecting on that experience to give rise to new ideas, and enable trainees to actively apply their ideas to the world around them. Ideally, activities and material should be developed in ways that draw on abilities from each stage of the experiential learning cycle and take the trainees through the whole process in sequence.

Figure 5-4 Confidence level, motivation and context are the three variables that influence a person’s desire for guidance and where they enter Kolb’s learning cycle (Microsoft, 2016).

The model also gives insight into how individuals might relate to the different learning activities, since each person has a preferred learning mode. This reinforces the importance to cover all learning modes in order to create an engaging learning experience for different kinds of learners.



5.2 OTHER TOOLKITS

This section introduces a review of playbooks and toolkits that have been reviewed in order to set the foundations for the final solution. Both internally and externally facing toolkits have been reviewed in order to benefit from a variety of perspectives.

5.2.1 External toolkits and playbooks reviewed

After understanding what the literature says about learning, different toolkits about design thinking and UX design have been reviewed in order to gather inspiration for the final solution, specifically around the format used to deliver the information. Appendix 4 compiles the toolkits that have been reviewed.

The toolkits reviewed go beyond just UX research, and cover methodologies in the different stages of the UX design process. Hence, instructions for UX research methods are covered during the ‘discover’ and ‘evaluate’ stages of the design thinking process. The reason of going beyond the scope of UX research methods is that no single toolkit found covered just the UX research process.

What the toolkits have in common

#1 Mapping the methods to each stage in the design thinking process.

Most of the toolkits reviewed provided an overview of the design thinking process, with the different methodologies mapped to the stages for which they are relevant. This helps those using the toolkit understand when to use each of the methods for best results, and guides the application of the different methods to the stages which are suitable.

#2 Explaining the what, why and how of each of the methods.

The way the methods were presented was by showing step by step instructions which make the different methods more digestible. However, the toolkits not only explained step by step instructions of how to proceed with each of the methodologies, but also the rationale of using the methods.

#3 Crisp and concise information, but with links to explore additional resources in case the reader wants to learn more.

The information on the website is presented concise, as not to overwhelm the reader. However, most toolkits provided links to additional resources in case someone wants to deepen their knowledge on the topic.

#4 Visually appealing and consistent style.

Some of the toolkits used the power of visual design to make them more engaging and easier to browse. They also had images or illustrations to aid comprehension.

#5 Digital and printable components.

Aligning with the principle that guidance should be available in a variety of contexts, many of the toolkits had a digital part and also printables to take the experience of learning offline. Printable components ranged from detailed instructions to templates to support putting the methodology in practice.

#6 Giving applied examples of the methodologies.

To illustrate when different methodologies can and should be used, some of the toolkits provided accounts of the tools being used to investigate or solve a real problem.

#7 Clear language, no jargon.

Some of the toolkits did not refer to the methods by their “real” or commonly used name, but rather, used plain and intuitive language so those who have zero experience with UX design and UX research can easily understand what the method is about. One example is IDEO’s “Downloading your learnings” which

refers to the analysis stage of research. The term “downloading your learnings” is a lot more intuitive and does not sound as intimidating as doing analysis of qualitative research.

#8 Adding channels of support when help is needed.

Different channels of support included forums, chat and email, that users could leverage in case they are struggling with the instructions on the toolkit.

#9 Detailing the outputs and next steps of using each of the methods.

The toolkits also explained what the outcomes of using the methods should look like and also suggested next steps to guide the user.

5.2.2 Internal decks and playbooks reviewed

A total of 39 internal decks and playbooks were reviewed. The playbooks were collected since the start of this thesis, either during the survey to researchers, during the interviews with other researchers, or during informal conversations with other team members. Here an overview of the gaps identified is presented.

Gaps identified

#1 Most materials are trainer facing, rather than trainee.

Despite the variety of documents collected, these were mostly “trainer” facing, rather than “trainee” facing. Most decks were intended for trainers to give a presentation to others who want to learn more about research.

#2 No in-depth materials on just interviewing skills.

There was no in-depth material on interviewing skills. One of the findings from empirical research was that giving training on the different methodologies is not useful, but rather, it was best to give the trainees foundational knowledge they can apply when doing any kind of research. Interviewing skills are the backbone of any qualitative research methodology. A few guidelines were presented on how to ask questions, but very few practical examples were given on how to approach

interviews and write interview scripts.

#3 No consolidation and repetition.

Despite having all the different resources together, it seems like every researcher approaches training on their own, and creates new materials to deliver their own training. There is a need to offer a single source of truth, or one document, that researchers can access and share with their trainees.

Strengths identified

#1 Good trainer facing materials.

Multiple researchers have created valuable trainer materials in the form of decks to give learners an introduction to UX research. However, these decks are very highlevel and focused on the theory of UX research as a discipline rather than on the practical implementation of the UX research skillset.

#2 Engaging materials.

The materials created use visualizations as a way to engage the audience and make the content more digestible.

5.2.3 Reflection

Looking at what's out there (external toolkits) is inspirational and gives some ideas on how the training can be approached, and which foundations to build upon to create something that is engaging. Internal toolkits provide an overview of what other team members have made and helps identify the gaps in the internal processes in order to create something novel, meaningful and avoid duplication of efforts.

The key gaps identified serve as a foundation for the solution. The final solution should include materials that are trainee facing while enabling them to focus on the basics of qualitative research (i.e. interviewing), and aim for consolidation of efforts among researchers by creating a single source of truth for training.

5.3 GUIDED LEARNING EXPERIENCES

Microsoft (2016) provides the following guidelines for creating products or features that support different learning styles, which are also depicted in Figure 5-5. The recommendations are illustrated continuing with the analogy of cooking to ease comprehension, and examples are provided on how these recommendations could be applied to the research learning experience this thesis aims to create.

5.3.1 Discovery

Multiple entry points: Individuals can find recipes, cooking techniques, or ingredient substitutes through sources like cooking shows on television, Pinterest inspiration boards, recipe websites or books.

- Implications: Learners should be able to access the information through multiple entry points, such as a Google doc, a website, printed materials or a conversation with a researcher.

Guidance across contexts: Guidance should be available using the internet, on a personal device, and offline.

- Implications: Learners should have both online and offline resources, digital and printable.

5.3.2 Control

Provide context: Most recipes include preparation and cooking time, expertise level, and an ingredient list. Then, an individual decides if they want to cook a specific meal or choose something else.

- Implications: Learners should have all relevant information required to make a decision.

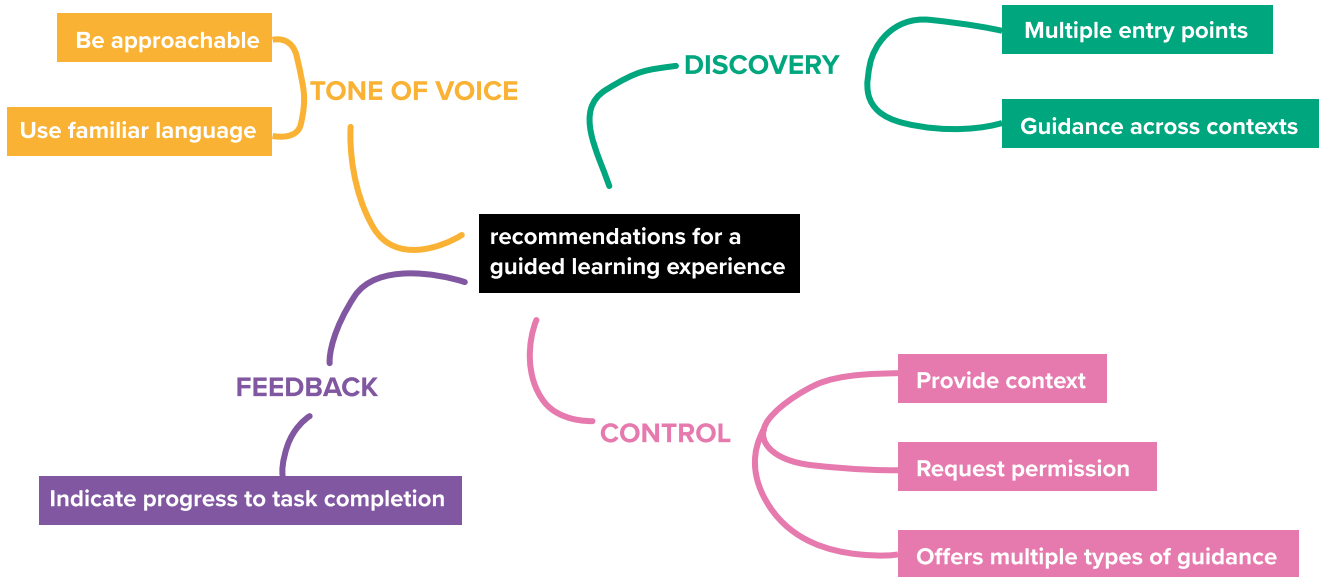


Figure 5-5

Recommendations for a guided learning experience, which will be used to guide the development of the final solution.

Request permission: Individuals can choose a preferred form of guidance, or opt out, based on their specific needs, context, or comfort level with a task.

- Implications: Learners should be able to choose their preferred form of guidance.

Offers multiple types of guidance: There should be multiple forms of guidance available such as a video tutorial for different techniques, a step-by-step recipe with pictures, or a cooking class with an experienced chef.

- Implications: Learners should be able to choose their preferred form of guidance, for example, aligning with Kolb's learning model they should be able to shadow a researcher, read about research techniques, or practice by doing mock-interviews and eventually doing research.

5.3.3 Feedback

Indicate progress to task completion: There should be ongoing feedback that indicates progress toward cooking a complete meal. For example, the oven light turns when it reaches the required pre-heated temperature, which is an indication to move on to the next step.

- Implications: Show the different stages needed to make research happen and what the outputs of each of the stages should look like, so learners have a benchmark to compare against.

5.3.4 Tone of voice

Be approachable: Most people seek cooking help from friends or family that they trust or see as an expert. Working with them can alleviate some of the fear or intimidation of learning a new task.

- Implications: Make a group of researchers approachable for those who wish to have guidance.

Use familiar language: People should be able to express their questions or needs in their own words.

- Implications: Use familiar language when creating the materials for the training and in the interactions with learners.

5.4 PRINCIPLES AND VISION

Based on the primary and secondary research conducted, this section introduces the principles, by type of user, in which the toolkit will be built upon. These principles also reflect the tacit knowledge that the researcher has after a year spent at the company. A vision to guide all the design activities is also presented here.

5.4.1 Vision

Encouraging everyone to think like a researcher, by providing a community-maintained learning experience, which supports different learning styles, for those seeking to learn how to do qualitative research (Figure 5-6).

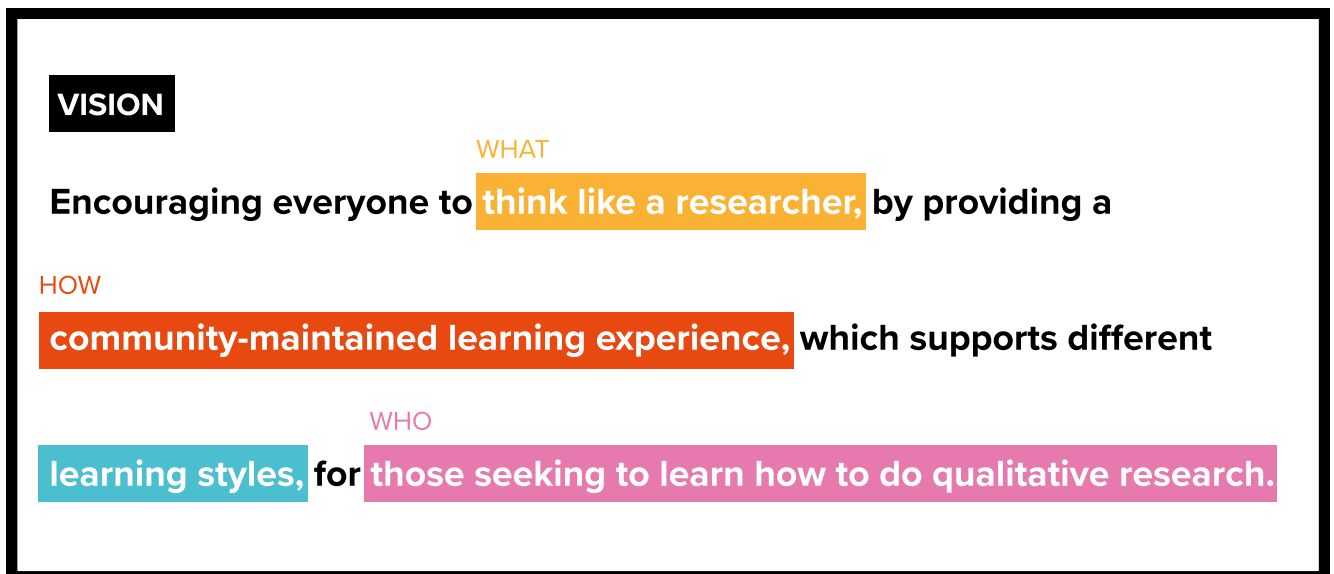


Figure 5-6 Vision for the solution.

5.4.2 Principles: for the researcher

Five key principles for researchers are described here: easily editable, collaborative, adaptable, accessible, and hands-off if needed.

Easily editable

Easy to edit and iterate. As the time passes, and the research team learns how the toolkit is used, the toolkit should enable for quick and easy iterations so it can be evolved and easily kept up to date.

Leverages internal tools. Instead of using a new tool, such as InDesign which is usually utilized for print / toolkit design, or building a website, the toolkit should aim to leverage internal tools and align with the way of working at Uber.

Thinking about the way teams work at Uber, the one tool that everyone has access to internally and is used day-to-day is Google Suite. The toolkit should leverage this way of working. A tool recently developed by the engineering and design teams is a script that turns Google docs into a website. This tool enables to adapt to the way of working, as the content is produced on a Google doc, while also having an engaging and visually appealing front end.

Collaborative

Crowdsourced, all researchers can contribute. The culture within the research team is highly collaborative, and hence the toolkit should build on this lever. Again, Google docs aligns with the collaborative nature: everyone knows how to use it, it's easy to edit and people can offer suggestions through the commenting feature or suggestion mode.

Increased ownership. A side effect of building a collaborative tool is that researchers will feel increased ownership over the toolkit, and reinforce the collaborative aspect of it.

Adaptable

Easy for a researcher to adapt to their own project. Researchers talked about adapting others' materials for their own projects. This new toolkit should be enough so researchers don't have to add additional effort to their training, but at the same time it should enable for adaptability if needed.

Accessible

Easy to find and access. Based on the experience of trying to compile the different training materials available, the toolkit created should be easy to find, rather than having to contact all the members of the research team to gather existing materials.

Hands-off if needed

Enables the researcher to be hands-off if they want to. It is essential that the toolkit enables the researcher to be hands-off a project if they don't have the time to actively support the learner.

5.4.3 Principles: for the trainee

Five key principles for trainees are described here: user friendly, supports the different learning styles, concise but comprehensive, practice makes perfect, and long-term orientation.

User friendly

Easy to find and access. Right now if someone wishes to learn more about research, or interviewing techniques, there is no resource internally filling in this gap. Some who wishes to learn would contact the research team and get support from them, or do a Google search, or even approach interviewing or focus groups without any guidance and just intuition and common-sense.

Use familiar language. The toolkit should aim to stay away from the UX research terminology and instead use language that is familiar and doesn't sound cryptic.

Supports the different learning styles

Supporting personal learning preferences. Different people approach learning differently, hence the toolkit should support individual learning preferences, while enabling learners to go through the full cycle of experiential learning, which according to Kolb (1984) is necessary for effective learning to occur.

Concise but comprehensive

Enable autonomy. Just enough information to be able to do research autonomously if research does not have the bandwidth to support. The toolkit should have enough theory to be self-explanatory, with clear instructions on how to approach qualitative research, while also facilitating moments of reflection and practice that does not necessarily need the support from an expert. Last, another key activity of the process should be the possibility to shadow a researcher.

Practice makes perfect

Reinforce the importance of practice. Although theory is a core component, the learning experience should also reinforce the importance of practice. Practice should be possible with and without the support of a researcher.

Long-term orientation

Buildable learning. Include different modules that support novice learners and those who already have some degree of experience and want to expand their toolkit. Those that reach higher expertise could eventually become the trainer of new learners, achieving the desire of the research team to build a scalable training.

5.4.4 Reflection

These principles should serve as a guide to make design decisions throughout the creation and iteration for the training. To build a truly user-centric experience, both kinds of users need to be considered. Both the principles and vision are summarized in Figure 5-7.

VISION

Encouraging everyone to think like a researcher, by providing a community-maintained learning experience, which supports different learning styles, for those seeking to learn how to do qualitative research.

PRINCIPLES: FOR TRAINER

**Easily editable
Collaborative
Adaptable
Accessible
Hands-off if needed**

PRINCIPLES: FOR TRAINEE

**User friendly
Supports the different learning styles
Concise but comprehensive
Practice makes perfect
Long-term orientation**



Figure 5-7 Vision and two-sided principles to guide decision-making while creating the solution.

5.5 UXR101

The principles, together with the review of internal and external documents, Kolb's experiential learning theory and Microsoft's recommendations for a guided learning experience are the foundations for the first version of the solution which is presented here.

This section is structured as follows: first, the components of the training are presented by describing the modules, tied to their specific learning goals, and the activities that the learning experience is composed of. Figure 5-8 provides an overview of these building blocks. Second, the specific content of each of the modules is described.

5.5.1 Components of the training

Figure 5-8 visualizes the components of the learning experience, which reinforce and complement each other. The components are as follows: two modules, UXR101 and UXR201, linked to their specific learning goals. The second component are the learning activities, that is, how the learner will reach the learning goals.

Two modules

As aforementioned, the learning experience will be made up of two modules: UXR 101 and UXR 201. UXR 101 gives the foundations of qualitative interviewing without going into detail into the different techniques available. The rationale is that currently there is no material available internally to train other functions on just applied interviewing skills. Most trainings internally focus on the methodologies available to do research. As it was learnt on the empirical research stage, the focus should be away from the methodology, and rather on setting

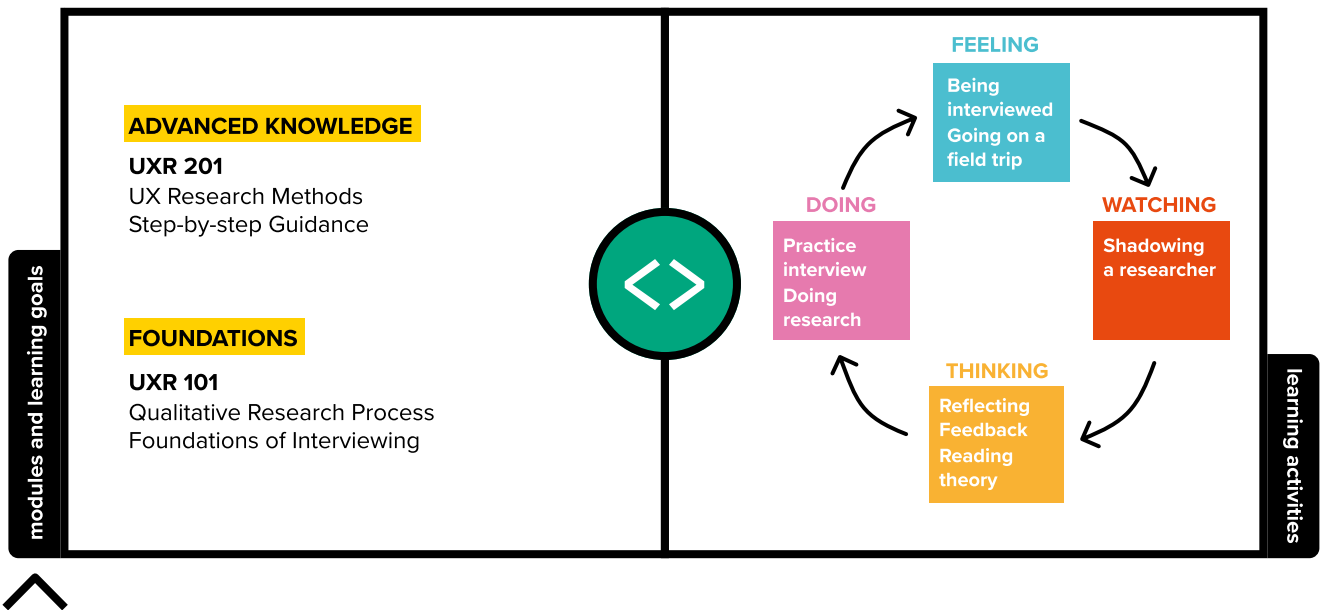


Figure 5-8 Components of the training. On the left, the modules and their respective learning goals are presented. On the right, the overview of the learning activities to achieve those learning goals are introduced, based on Kolb's experiential model of learning.

the foundations for qualitative interviewing. That is the aim of separating UXR 101, which focuses on building the foundations, from UXR 201, which will get interested learners the ability to do more advanced studies by providing an overview of the different methodologies to do UX research, such as usability testing, ethnography or concept testing.

UXR 101 - Foundations of interviewing and overview of the UX research process step by step

- **Learning goals:** (1) Knowledge of the different steps of the UX research process; (2) Knowledge of interviewing techniques, such as question flow and wording, and practical moderation skills.
- **Results:** The learner can conduct basic UX research studies, such as in-depth interviews and focus groups or roundtables, independently and autonomously. This means that the learner is able to frame the research questions and goals, select participants for the research, build a moderation guide composed of moderately adequate questions, be able to confidently moderate a session, and be able to analyze results and extract what's relevant

from what's not from the research results, while also being able to correctly phrase insights.

UXR 201 - Deep dive on the different UX research methods and their application

- Learning goals: (1) Awareness of the different methodologies available to do UX research; (2) Ability to select research method suitable for research questions with some support from a researcher; (3) Ability to conduct selected method fairly independently.
- Results: The learner has awareness that there are multiple methodologies and techniques to answer his/her research questions, and is able to select, sometimes with the support of a researcher, the suitable methodology for the research. The learner is able to put into practice the selected methodology.

Four activities

The following activities represent how the learner will achieve the intended learning goals, based on Kolb's learning model.

- **Concrete Experience - feeling.** Being interviewed or going on a field research trip.
- **Reflective Observation - watching.** Shadowing an expert conduct research.
- **Abstract Conceptualization - thinking.** Reflecting on experiences, getting feedback from an expert and reading research theory.
- **Active Experimentation - doing.** Doing mock interviews or conducting research.

According to Kolb, learners enter the cycle at a preferred point, which varies from individual to individual, but at the same time a learner must complete all the stages of the cycle in order to achieve effective learning. Hence, learners should be given some flexibility to enter the cycle at their desired stage, but be encouraged to complete the cycle by participating on the different learning activities.

CONTENT OF UXR 101

- | | |
|--|-----------------------------|
| 1. Intro | |
| 2. Doing research: step by step | Process overview |
| 3. What do you want to learn? | Research goals |
| 4. Who do you want to learn from? | Recruitment |
| 5. How do you prepare for a session? | Discussion guide |
| 6. How do you ensure an effective session? | Moderation |
| 7. How do you make sense of what you learn? | Analysis |
| 8. Teaching exercise #1: Mock interviews | Practice |
| 9. Teaching exercise #2: Interview the trainer | Practice |
| 10. Teaching exercise #3: Beyond basics | Practice |
| 11. What are the beginner mistakes? | Extra: biases |
| 12. References | Extra: additional materials |



Figure 5-9 Contents
for the UXR 101 learning
experience.

5.5.2 UXR 101

Content

Figure 5-9 illustrates the learner side content of the toolkit for UXR101, which is further detailed here.

1. **Intro**
 - 1a. What you will find in this guide
2. **Doing research: step by step**
 - 2a. Getting started with UX research
3. **What do you want to learn?**
 - 3a. What can you learn from qualitative research?
 - 3b. How do you know your most important questions?
4. **Who do you want to learn from?**
 - 4a. How to select the right users
 - 4b. Advice for roundtables / focus groups
 - 4c. How many users
 - 4d. Recruitment tips & tricks
5. **How do you prepare for a session?**

- 5a. The interview script
- 5b. How to structure a session
- 5c. Wording questions
- 5d. Additional advice for roundtables
- 5e. Getting feedback on a prototype
- 5f. Do a dry run
- 6. How do you ensure an effective session?**
 - 6a. A guide, not a script
 - 6b. Add a note taker
 - 6c. Note taking guidelines
 - 6d. Start with a warm up
 - 6e. Process feedback during an interview
 - 6f. The final or closing question
 - 6g. Listen, don't talk
 - 6h. Follow your nose
 - 6i. Parrot back
 - 6j. Disarm your own biases
 - 6k. Roundtables: be aware of social dynamics
- 7. How do you make sense of what you learn?**
 - 7a. Step 0: Everything starts with good notes
 - 7b. Step 1: Download your learnings
 - 7c. Step 2: Find themes
 - 7d. Step 3: Create insight statements
 - 7e. Step 4: How might we
- 8. Teaching exercise #1: Mock interviews**
- 9. Teaching exercise #2: Interview the trainer**
- 10. Teaching exercise #3: Beyond basics**
- 11. What are the biases that research can have?**

Additional materials

Additionally, besides the theory presented in the toolkit, the toolkit includes

templates per stage to guide learning, and enable learners to work autonomously.

Design

The following screenshots represent the visual style of the toolkit when the Google doc is rendered into a website. The table of contents is turned into a side menu, which learners can browse with ease without getting overwhelmed by all the content that the toolkit offers (Figure 5-10). The toolkit is also linked to a unique domain to make it easier to find: `companydomain/UXR101`. More screenshots on the next page.

UXR 101

Edit

How do you prepare for a session?

Go into every interview or roundtable with a prepared list of questions. This list, which we refer to as an interview guide, will keep you organized. You will appear more professional, and it will ensure that you get to your most important questions.

What you will learn on this section



The interview guide



How to structure a session



Wording questions



Rapport and neutrality



Practice: do a dry run

Talking to Humans

Doing research: step by step

What do you want to learn?

Who do you want to learn from?

How do you prepare for a session?

How do you ensure an effective session?

How do you make sense of what you learn?

Teaching exercise #1: Mock Interviews

Teaching exercise #2: Interview the trainer

Teaching exercise #3: Beyond basics

What are the biases that research can



Figure 5-10 Screenshot of UXR101.

Doing research: step by step

Qualitative research, i.e. talking to humans, is fun and inspiring, but it can definitely feel intimidating at first. The good news is that if you go about it in a thoughtful way and prepared, you will find lots of people who are willing to help and give you some of their valuable time.

Getting started

You need to begin with a core set of questions:

- What do you want to learn?
- Who do you want to learn from?
- How do you prepare for a session?
- How do you ensure an effective session?
- How do you make sense of what you learn?

[Back](#)[Next →](#)

What do you want to learn?

Understanding what qualitative user research is good for and then properly framing what you want to learn is critical to your success.

How can we make sense of what we learn?

You have gathered data, analyzed it, and put it to use.

Steps of synthesis

Synthesis means MAKING SENSE OF WHAT YOU LEARN.

Teaching Mock

There is nothing like a teaching mock to help you prepare for a session.

Before you go out into the field, try an exercise like the following.

Tools

All participants should have a copy of the following tools.

Preface: Choosing a topic

do you make of what you

tons of information. Here's how you share it with your
use.

nesis

NG SENSE out of what we see and hear to uncover opportunities.

ing exercise #1: Interviews

real-world practice to make learning stick.

he real world to conduct interviews, you might try a compact
g.

ave pen and paper.

se a Topic

Talking to Humans

Doing research: step
by step

What do you want to
learn?

Who do you want to
learn from?

How do you prepare
for a session?

How do you ensure
an effective session?

How do you make
sense of what you
learn?

Teaching exercise
#1: Mock Interviews

Teaching exercise
#2: Interview the
trainer

Teaching exercise
#3: Beyond basics

What are the biases
that research can
have?

Acknowledgements
& References



5.6 CONCLUSION

Kolb's experiential model of learning

Kolb's experiential model of learning is presented as the backbone that guides the creation of the toolkit. According to Kolb (1984), effective learning occurs when a person progresses through a cycle of four stages: of (1) having a concrete experience followed by (2) observation of and reflection on that experience which leads to (3) the formation of abstract concepts (analysis) and generalizations (conclusions) which are then (4) used to test hypotheses in future situations, where the learner applies their idea(s) to the world around them to see what happens, resulting in new experiences. Hence, the toolkit should ensure that learners are able to experience the four stages of Kolb's learning model.

Review of internal and external toolkits

Besides looking into the relevant theories of learning, a review of both internal and external toolkits was also conducted. External toolkits provide guidance into how to approach the construction of the UX research guide, whereas the review of internal toolkits allowed to identify gaps in order to create something novel, and serve as a foundation for the solution.

The gaps identified are threefold. Most internal materials are for the trainer rather than the trainee, and hence the final solution should cover the trainee-side of the learning experience. There were no in-depth materials on just interviewing skills, so the final solution should aim to cover this gap. And last, there was little consolidation in the materials meaning that multiple people were working on the same problems, so the final solution should look into increasing efficiencies and having a centralized source of truth for research trainings.

Recommendations for a guided learning experience

Microsoft (2016) provides a series of recommendations for creating products or features that support different learning styles:

- **Discovery:** providing multiple entry points and guidance across contexts.
- **Control:** provide context, request permission and offer multiple kinds of guidance.
- **Feedback:** indicate progress to task completion.
- **Tone of voice:** be approachable and use familiar language.

These principles offer additional guidance on how to approach the construction of the toolkit.

Principles and vision for the toolkit

First, the vision that guides the design decisions for the toolkit is presented: “encouraging everyone to think like a researcher, by providing a community-maintained learning experience, which supports different learning styles, for those seeking to learn how to do qualitative research.”

Besides the vision, there is a series of principles that the toolkit should reflect. The principles are two-sided, considering the needs of the researcher and the needs of the learner. For the researcher, the principles are as follows: easily editable, collaborative, adaptable, accessible, and hands-off if needed. These principles reflect a need to create a tool that is easily editable, easy to find, supports the collaboration of the research team and of building a tool that is hands-off if the researcher cannot support a project extensively.

For the learner, the principles are user friendly, supports the different learning styles, concise but comprehensive, practice makes perfect, and long-term orientation. These principles reflect the need of building a tool that follows the experiential model of learning of Kolb, and allowing for both learning through theory and practice.

Components of the training

The components are as follows: two modules, UXR101 and UXR201, linked to their specific learning goals. The second component are the learning activities, that is, how the learner will reach the learning goals. The learning activities reflect Kolb's experiential model of learning.

UXR101 compiles the foundations of interviewing and makes the learner well versed with the UX research process. Once the learner masters the content of UXR101, there will be a follow up module, UXR201, which will go in-depth into the different methods available to do UX research. The rationale for this decision is that before a learner can conduct more complex UX methods, they must first master the fundamentals of the discipline.

UXR101

UXR101 is the result of the primary and secondary research, and serves as the stepping stone into the next chapter, in which UXR101 will be tested both with researchers and relevant stakeholders. UXR101 is an internal guide which can be rendered as an easy to browse website, and the target is learners who have minimal support from a researcher but want to do their own research.

Encouraging everyone to think like a researcher, by providing a community-maintained learning experience, which supports different learning styles, for those seeking to learn how to do qualitative research.

Vision for the toolkit

Theoretical background

Problem analysis

Empirical research

Making the toolkit

Evaluating the toolkit

Discussion

6 Evaluating the toolkit

The toolkit was launched internally at the beginning of May, 2019. After launch, feedback from researchers was collected which led to the creation of a researcher toolkit, to guide their teaching process. Moreover, 2 pilot studies with a designer and a product manager were conducted, to understand how the tool performed in an applied setting.

6.1 INTERNAL LAUNCH

It was finally time to put the toolkit in front of the UX research team at Uber. The initial launch happened via email on May 9th, 2019 to the whole UX research department at Uber. The initial reactions via email were positive, with a total of 14 researchers answering to this email, and some researchers offered to provide their feedback individually. Additionally 2 researchers offered to pilot the toolkit with a stakeholder that had a research ask they were not able to support.

The purpose of the email was first, to make researchers aware of the existence of UXR101; second, to find researchers interested to pilot the training; and third, to get feedback from other team members.

6.2 EVALUATION WITH RESEARCHERS

As a result of the ‘launch’ email, some researchers offered to provide their feedback. The feedback was collected via email, comments on the Google doc (see Figure 6-1), individual conversations with researchers and a focus group discussion with 5 researchers based on the San Francisco office. This section presents the key takeaways from those conversations, as well as the iteration of the toolkit based on the feedback.

6.2.1 Initial feedback

#1 The toolkit also needs a researcher facing component.

Although the content of UXR101 can enable the learner to somewhat autonomously follow the UX research process, the researcher supporting the learner also needs a resource to guide the learner.

Within this resource, researchers want to have guidance on how to manage the process. This means they want to see a timeline of the different actions required by the researcher to make this happen, as well as the time commitment.

It should also provide scenarios and use cases on when to train / guide other stakeholders to do their own research and when not to.

#2 The toolkit needs to provide guidance for the researcher to understand the level of support they should provide.

Based on different levers, the toolkit should provide advice on what level of support and engagement the researcher should provide. Some of the levers suggested are:

How do you prepare for a session?

Go into every interview or roundtable with a prepared list of questions. This list, which we refer to as an interview guide, will keep you organized. You will appear more professional, and it will ensure that you get to your most important questions.

What you will learn on this section



The interview guide



How to structure a session



Wording questions



Rapport and neutrality



Practice: do a dry run

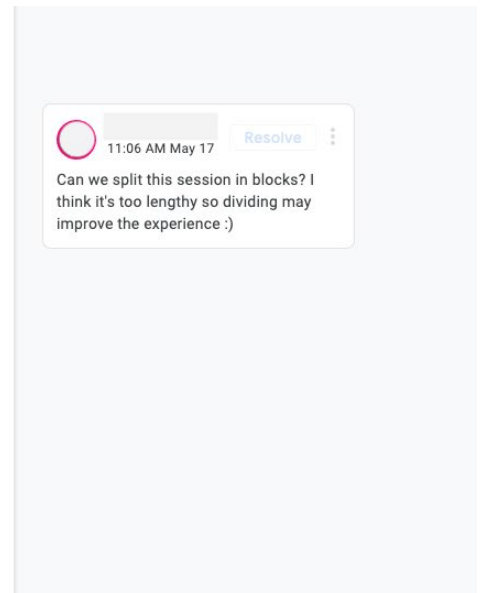


Figure 6-1 Researcher providing feedback on the Google doc version of UXR101.

- Researcher's bandwidth
- Complexity of the work
- Importance of the work
- Stakeholder's experience with research
- Scope of stakeholder's role in research (ex. running the entire study vs. team members running different parts vs. assisting the UXR)
- Stakeholder's level of enthusiasm/engagement

#3 Recruitment and script writing are seen as one of the greatest hurdles when empowering non-researchers to do research.

Recruiting was perceived by the researchers to be the biggest blocker and difficult for stakeholders to do if they don't have any previous experience.

#4 Besides the ad-hoc use case, this resource could be introduced during the planning cycles.

Even if a project cannot be supported by the research team, this is to make stakeholders aware that the possibility of them doing studies exists. And that

even if project gets deprioritized by research, that doesn't mean that the project cannot be done.

#5 Although the web version of UXR101 allows for autonomous learning, researchers would like to have a deck version in case they want to personally walk learners through it.

"I would like a deck version of UXR 101 because the best way to teach is to talk through it."

#6 Provide recommendations of suitable methods per function.

In line with what was described in chapter 5, specifically the idea of UXR201, researchers would like to have additional guidance for specific methodologies per function. So for example, provide guidelines for designers to do usability testing, or for marketing to do name testing.

#7 Break down the content of UXR101 in steps so it's more digestible.

The size of UXR101 can be a bit intimidating at first, and each chapter only needs to be read when the learner is actually conducting that activity. Hence, provide guidelines on when to read what.

6.2.2 Iteration based on feedback

Based on the feedback provided by the research team, a researcher facing component has been added to give researchers more guidance on how to approach the training of their stakeholders. More on the content of this guide in section 6.3.

6.3 TOOLKIT FOR RESEARCHERS

Based on the feedback from researchers, this section describes an additional component, the toolkit for researchers. The difference between UXR101 and the toolkit can be explained with the analogy of UXR101 being the textbook, and the toolkit being the teacher’s guide (Figure 6-2). This ensures that both parties participating in the training have enough guidance to effectively do so. The toolkit for researchers has been created with the collaboration and support of other researchers, to ensure ownership and alignment on the content of this tool.

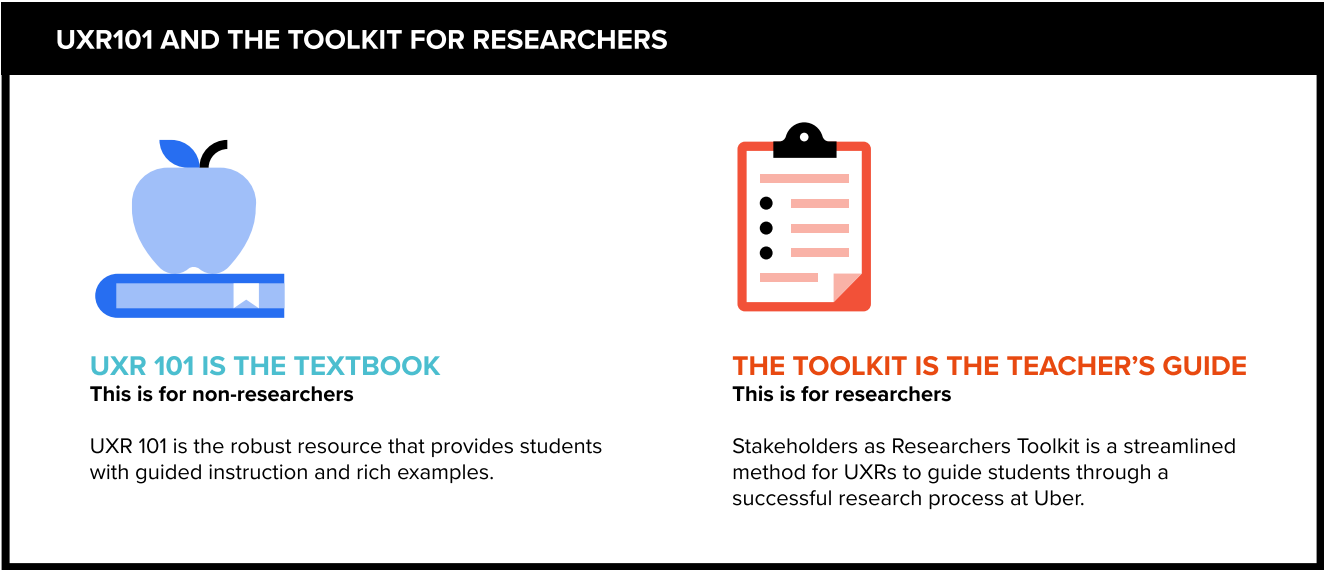


Figure 6-2 UXR101 and the teachers’ guide complement each other.

6.3.1 Content

The following list details the content of the researcher toolkit (also in Figure 6-3).

1. Introduction

- 1a. This toolkit is / This toolkit is not
- 1b. Approach: UXR101 is the textbook VS the toolkit is the teacher's guide
- 1c. What is the toolkit
- 1d. What problems are we trying to solve?
- 1e. When should we use this?
- 1f. Researcher decision tree
- 1g. Who are the stakeholders?

2. UXR101

3. Intro and link to website

4. Toolkit

- 4a. Tracks: no time, can contribute 3-4 hours per week, can contribute 5+ hours per week
- 4b. Use cases
- 4c. Timeline
- 4d. Meeting overviews: goals, key questions, stakeholder homework, UX researcher actions
- 4e. Meeting 0: Intro conversation
- 4f. Meeting 1: Kick-off
- 4g. Meeting 2: Training
- 4h. Meeting 3: Analysis

5. Reflection

6. Repository

CONTENT OF RESEARCHER TOOLKIT			
1. Intro	Approach, types of projects, decision tree	Meeting 0: Intro conversation	Discuss timeline and commitment
2. UXR101	UXR101 overview plus instructions on how to use	Meeting 1: Kick-off	Align on objectives, audience and methods
3. Researcher toolkit	Step by step instructions to guide learning	Meeting 2: Training	Answer questions and do practice session
3.1. Tracks depending on availability	Levels of comittment	Meeting 3: Analysis	Support stakeholder with analysis process
3.2. Timeline	Overview of the different training activities	4. Reflection	Feedback form for stakeholders and researchers
3.3. Overview of meetings	Instructions for each meeting	5. Repository	Extra: additional materials by other researchers



Figure 6-3 Table of contents for the toolkit for researchers.

Researcher decision tree

One of the key contributions of the researcher toolkit is guidelines to enable researchers to assess whether a particular project is suitable for a stakeholder to conduct. The researcher decision tree (Figure 6-4) supplements the project guidelines described on the next section. It’s intended as a checkpoint to ensure that the project meets the requirements for the training, and makes motivation and commitment of the stakeholder one of the key factors to decide whether to pursue the project or not.

Guidelines for appropriate projects

The guidelines do not intend to be prescriptive but rather support researchers in their decision making (see Figure 6-5). The three kinds of projects that were deemed as most appropriate for the toolkit were:

- Straightforward task evaluations and usability testing
- Simple questions to answer
- When the analysis is not expected to be complicated

On the other hand, projects that were considered to be less appropriate for a training were:

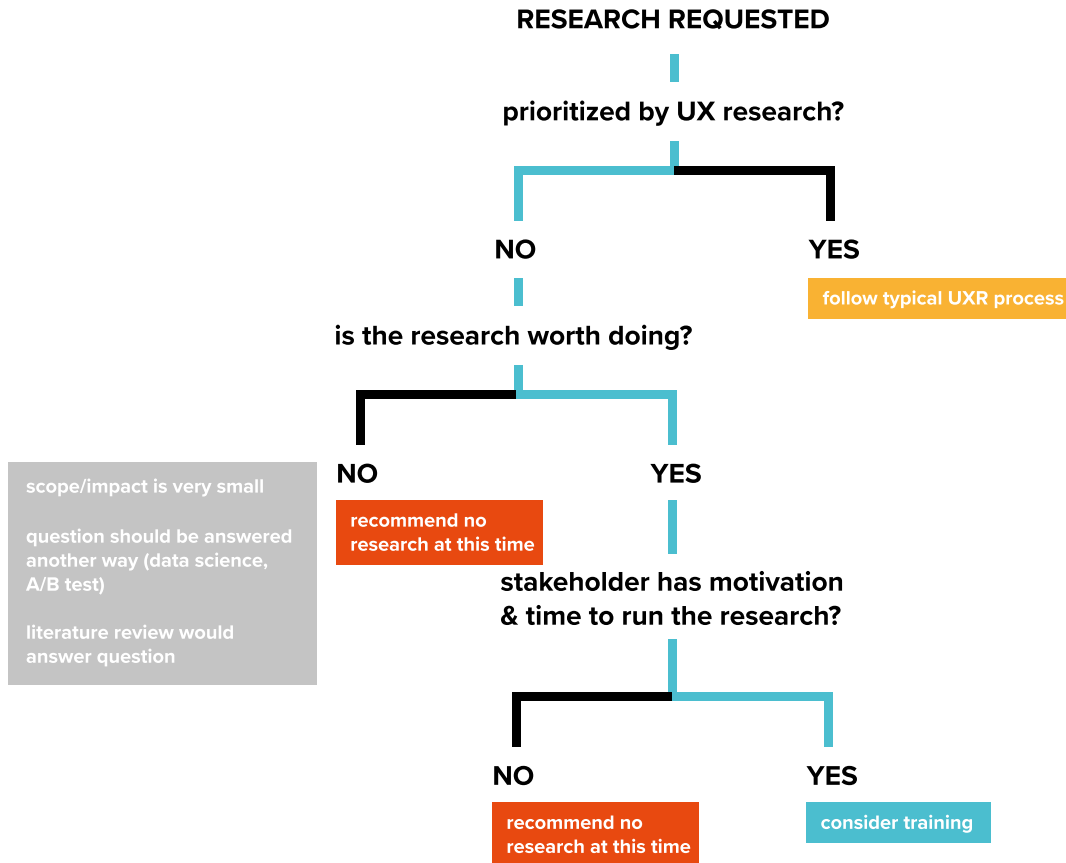


Figure 6-4 Decision tree for researcher to determine whether training the stakeholder is a good idea or not.

- Advanced research methods
- Prioritized projects that will rely heavily on data validity
- Large scale foundational projects or ethnographic study
- Stakeholder can't commit the time needed or is not motivated

Although this list is not comprehensive, it is a good starting point to enable researchers to make the decision of whether a project is suitable or not for a stakeholder to conduct. As the toolkit continues to be used, researchers will identify other use cases and fine tune the guidelines.

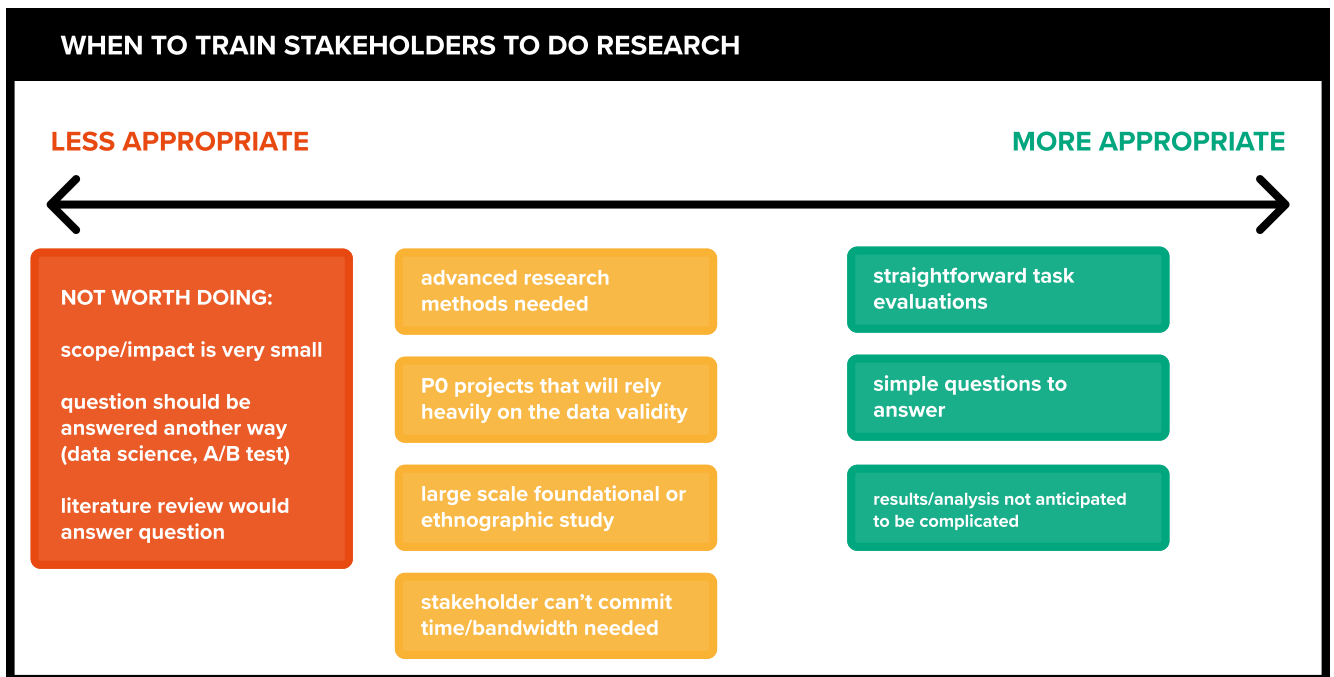


Figure 6-5 Appropriate and less appropriate kinds of projects to be tackled with this toolkit.

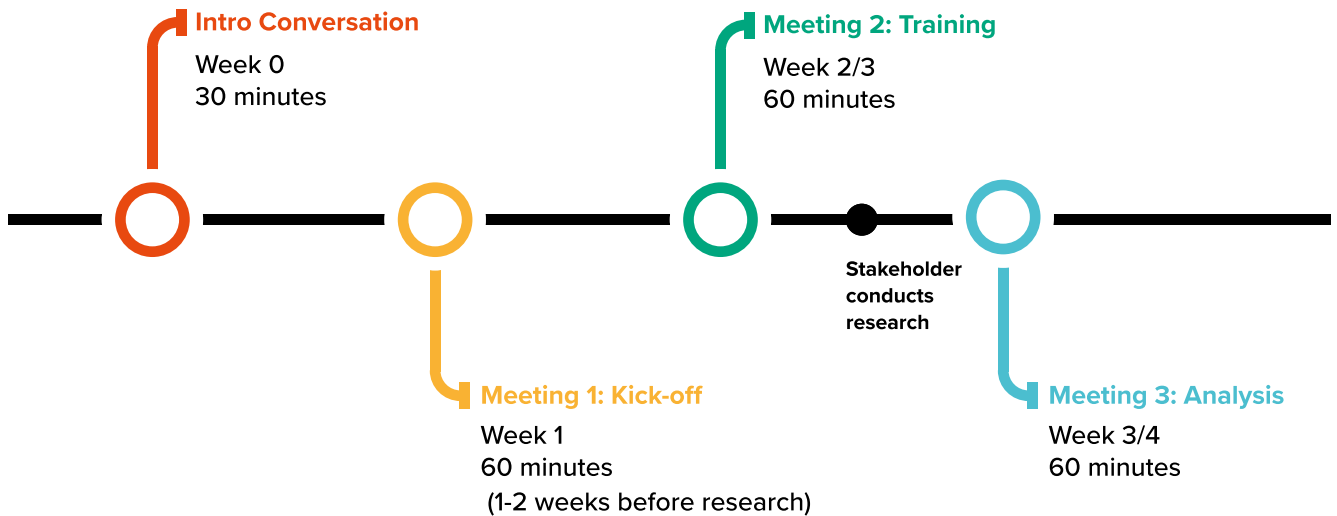


Figure 6-6 Timeline of recommended interactions between researcher and stakeholder.

Timeline and goals

Last, the timeline represents the recommended interactions between the researcher and the stakeholder to enable the stakeholder to complete the project successfully. The purpose of each of the meetings is as follows:

- **Meeting 0: Intro conversation.** (1) Discuss timeline and commitment expectations. (2) Determine if Stakeholders as Researchers Toolkit is a good solution.
- **Meeting 1: Kick-off.** (1) Align on research objectives. (2) Align on audience and method.
- **Meeting 2: Training.** (1) Answer questions, ensure stakeholder is comfortable and confident about the plan. (2) Decide on training approach depending on the bandwidth of researcher.
- **Meeting 3: Analysis.** (1) Answer questions, and help stakeholder plan analysis.

Additionally, besides the goals for each meeting, the researcher will assign homework to the learner at the end of each meeting, such as reading sections of UXR101 and preparing the research plan or moderation guide.

Sample meeting instructions

Figure 6-7 provides an example of what the instructions for each meeting look like in the researcher toolkit. Besides setting the goals, the toolkit provides the key questions to answer and conversation pointers, and determines the homework that the stakeholder needs to do before the next meeting.

Tracks based on researcher availability

The guidelines provided on the toolkit are based on the researcher being able to provide 3-4 hours over a period of 3-4 weeks (Track 2). The other tracks are as follows:

- **Track 1:** I have no time (just UXR 101)
- **Track 2:** I can contribute 3-4 hours over the next 3-4 weeks (3 meeting guidance + UXR 101)
- **Track 3:** I can contribute 5+ hours over the next 3-4 weeks (teaching sessions + 3 meeting guidance + UXR 101)

For future iterations of the toolkit, different activities per track should be documented.

Next steps: specific advice per function

Another outcome of the discussion with researchers was that specific advice per function would be beneficial. This aligns with the need of creating the tool of UXR201, with guidelines for particular research methodologies. The rationale is that the needs of a designer or a PM in terms of doing user research can be very different, and hence, once they have mastered how to do qualitative interviewing, they can be taught a particular methodology that aligns with the work they do.

6.3.2 Design

The medium chosen to create the toolkit for researchers was Google slides. This was the preferred medium when speaking with researchers since this format allows them to easily present to their stakeholders.

Meeting title

Goals for the meeting

Define desired outcome of meeting

Key questions that need to be answered during the meeting

Intro Conversation

Goals

Discuss timeline and commitment expectations

Determine if Stakeholders as Researchers Toolkit is a good solution

Key Questions

Why is this important?

When do you need this data?

What will you do with it?

Can you commit a full week (spread out) to this?



Figure 6-7 Explanation of the content of each of the meeting slides.

What to talk about:**Timeline**

3-4 weeks start to finish (depending on stakeholder's bandwidth)

Stakeholder commitment

2 days of planning +
 2-3 days of research +
 2 days of analysis =
~7 days total (spread out over 3-4 weeks)

Researcher commitment

1 30 minute meeting +
 3 60 minute meetings +
 0-5 hours of feedback/training/coaching as needed =
Minimum 3.5 hours total (maximum depends on preference)

Stakeholder homework for next meeting

- Review UXR 101, chapters 1-3
- Start research plan
- Take notes on reading, add to planning doc, share with UXR

UXR ACTIONS:

1. Create project calendar block, share with stakeholder
2. Schedule meeting 1, 2, 3

Conversation pointers for meeting

Agree on timeline

Highlighting the stakeholder commitment needed to make the project happen

*Might vary depending on the scope of the project

Highlighting the researcherr commitment needed to make the project happen

*Might vary depending on the scope of the project

Homework assignment for stakeholder

Readings from UXR101

Completing appropriate form per stage (i.e. research plan, discussion guide)

Actions required by researcher

6.4 GUIDE FOR LEARNERS

An additional resource that was created was a document to provide more guidance for the learner on how to use UXR101. The homework and guidelines align with what is needed for each of the meetings with the researcher.

Figure 6-8 shows an example of the to-do's for the stakeholder before meeting with the researcher. Here they get both the homework, for example, creating the research plan with the template provided, and they are also asked to read the relevant chapters of UXR101 in order to make the meeting with the researcher more productive.

TO-DOS**Before Meeting 1 (Kickoff)**

- Create [research plan](#) (make a copy of the template)
- Review UXR 101:
 - [Chapter 1](#) - What do you want to learn?
 - [Chapter 2](#) - Who do you want to learn from?
 - Draft participant criteria based on this section, add to research plan
 - [Chapter 3](#) - How do you prepare for a session?
- Document your questions/comments on the reading in a notes section at the end of your research plan, share with your UXR partner before next meeting

Before Meeting 2 (Training)

- Recruit your participants - method should have been determined during Kickoff
 - Complete UXR logistics checklist
 - Book rooms for each session
 - Practice recording and remote control on Zoom
 - Print or get digital copies of NDA (ask UXR partner for this)
 - Assign note-taker
- Review UXR 101:
 - [Chapter 3](#) - How do you prepare for a session?
 - Draft a discussion guide outline based on this section, add outline to research plan
 - [Chapter 4](#) - How do you ensure an effective session?
 - [Chapter 5](#) - How do you make sense of what you learn?
- Training resources
 - [Teaching exercises 1,2,3](#)
 - Complete with your UXR partner or with another non-researcher to practice
 - Example research session recording
 - Ask your UXR partner if they can share a recording of one of their past sessions, to give you a sense of session flow, building rapport, etc
- Document your questions/comments on the reading in a notes section at the end of your research plan, share with your UXR partner before next meeting



Figure 6-8 One page of the document to guide the learning experience of UXR101.

6.5 PILOT STUDY

In addition to gathering feedback from researchers, a pilot study was also conducted to evaluate the performance of the toolkit. Two pilot studies were performed. One with a designer in San Francisco and another one with two product managers in Amsterdam. Both testers were given evaluation forms to document their feedback throughout the process. However, at the time of writing their feedback has not yet been collected, and hence not reflected in this document.

6.5.1 Pilot study with designer

One embedded researcher in San Francisco offered to test the toolkit with a designer in her product team. She cannot support all usability testing or concept evaluation requests from the designer and hence this was the ideal opportunity for her to leverage this toolkit.

Feedback

No feedback from the researcher and designer has yet been documented at the time of writing.

6.5.2 Pilot study with product managers (PMs)

Besides sending a launch email within the research department, another email was sent to the product teams in Amsterdam, including designers and product managers. Two product managers replied to the email volunteering to pilot the toolkit for some lightweight research they wanted to do but were not able to find the support from the research team to do so. The author of this thesis was the researcher in charge of supporting the PM through this process. Additional goals for performing the pilot study were to increase empathy for PMs both with

researchers and end users, and also to envision how research can possibly evolve within the business.

Initial feedback

#1 Reason to sign up based on interest to be able to self-serve their research needs and get their assumptions on check when planning or deciding on what features to build.

#2 For them, the need to self-serve is based on researchers not always being able to support their research requests.

#3 Have other functions which are even further from the user, such as engineering, not necessarily to moderate sessions but just to shadow in order to build empathy with the users.

Although they agreed that the functions that could benefit the most from the ability to interact with users are PMs, designers and copywriters, they suggested to include other functions, such as engineering and data science for this kind of lightweight research. The purpose is for them to build empathy with the users.

“Our goal as a PM is that not only UX researchers, PMs or designers should care about the customer. PMs and designers already know that. For your program, it would be a great success if you get an engineer or a person who is far from the customer to also participate. You also want them to build that empathy with the users. Maybe their engagement will be lower, and they will only shadow, but that is already a win for those who normally don’t have any contact with the end users. I am willing to pair up with someone and let them shadow me.” - PM reflecting on the toolkit

#4 Look at more channels to see how to expand this project.

One of the PMs mentioned that in his previous company the researchers had

organized a weekly forum with a random sample of their users to quickly test their assumptions and product ideas. The program might evolve in this direction with PMs and designers, however, the toolkit is still a good way to introduce stakeholders to how to do research independently.

Disclaimer: At the time of writing the full process of the research has not been completed. The researcher and PM met twice and completed the research plan and discussion guide together. The PM provided valuable inputs on how to make the research plan easier to use.

6.5.3 Additional stakeholders

Additionally, a designer from the Amsterdam office and a copywriter in the San Francisco office also offered to pilot the program. The first meetings will be in a week from the time of writing.

6.5.4 Some metrics

Google allows to track the number of views that documents have had. At the time of writing, the google doc for UXR101 has had 35 unique views (Figure 6-9 - top), and the web version has had 99 views (Figure 6-9 - bottom)

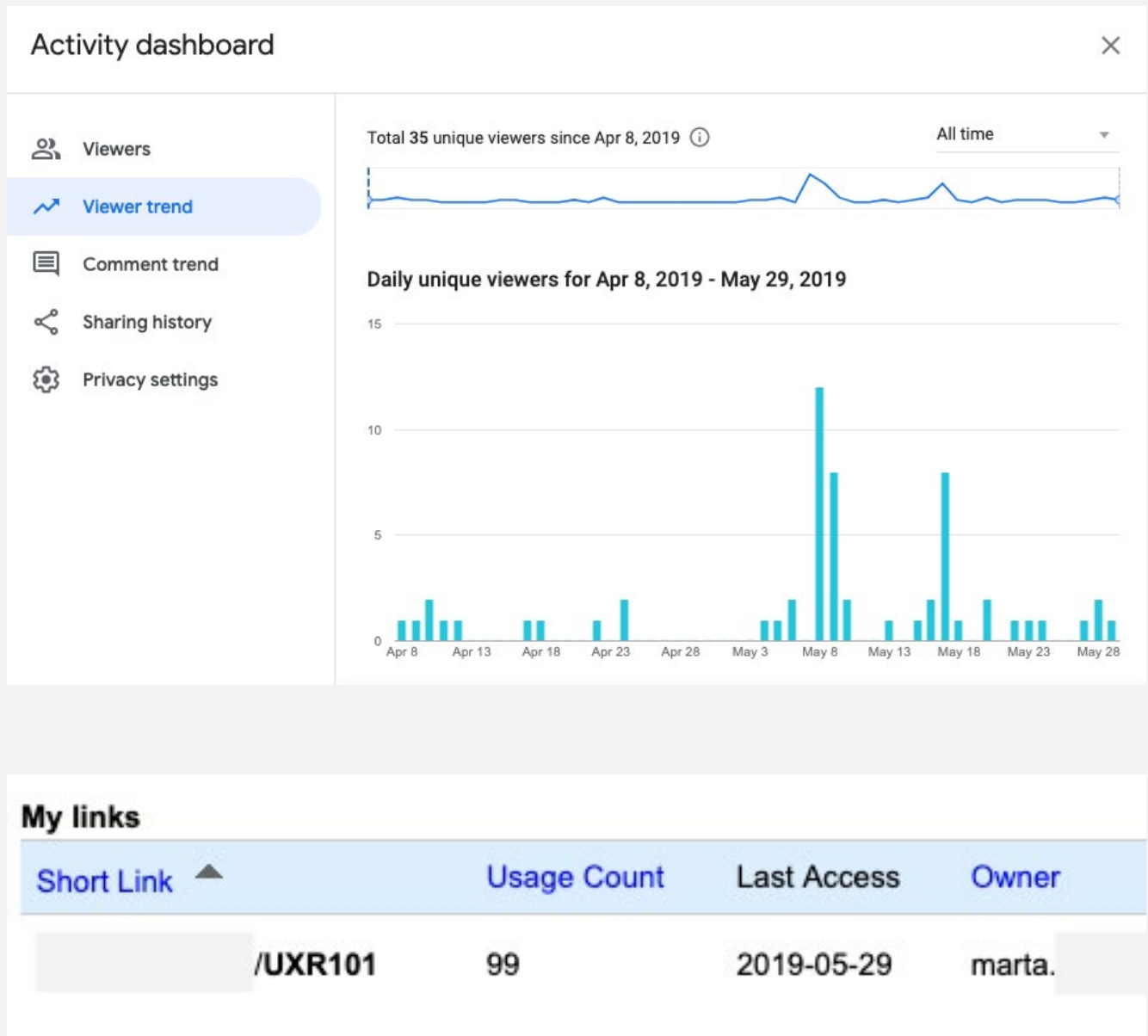


Figure 6-9 Number of views of the Google doc (top) and web version (bottom) of UXR101.

6.6 CONCLUSION

Although the solution received positive remarks from both researchers and stakeholders, and the initial feedback provided by researchers motivated the creation of an additional resource for them, at the time writing the complete results of the pilot are not yet documented. Hence, it cannot be concluded yet to what degree the toolkit performs well for the purpose it has been designed, although initial feedback shows promise. Feel free to contact the author if you wish to hear from the results of the pilot.

“Our goal as a PM is that not only UX researchers, PMs or designers should care about the customer. For your program, it would be a great success if you get an engineer or a person who is far from the customer to also participate. You also want them to build that empathy with the users.”

Product manager reflecting on the toolkit

Theoretical background

Problem analysis

Empirical research

Making the toolkit

Evaluating the toolkit

Discussion

7 Discussion

The purpose of this research has been to discover how researchers can empower stakeholders to do their own research. This can happen for a variety of reasons: limited research resources, researcher needs more hands for a particular project, to build empathy with our users across the organization or to enable stakeholders to conduct high urgency but deprioritized projects by the research department. The framework, principles and vision outlined in chapter 4 set the foundation for the final solution: UXR101, the textbook, and the toolkit for researchers, the teacher's guide. UXR101 and the toolkit present a solution for stakeholders to learn research skills, and for researchers to support them in their journey with varying levels of commitment depending on their availability.

7.1 ADDRESSING THE RESEARCH QUESTION

7.1.1 Overview of the report

Chapter 1 provides an introduction to this research. **Chapter 2** provides the theoretical underpinnings for this thesis: an introduction of UX research, the business rationale of doing research and the relevant trends in user research in which this thesis builds upon.

Chapter 3 further explores the problem that is here introduced, hence setting the context in which this work is positioned.

Chapter 4 presents different approaches to expand the knowledge that the researcher has on the topic of UX research trainings, and uses a variety of methodologies to do so to enable data triangulation. UX research trainings are explored from the perspective of other researchers, and as well as case studies in which the researcher takes on the role of training.

This chapter distills the learnings into a framework which sets the foundations to build the solutions explored on chapter 5.

Chapter 5 introduces a theory for learning, which sets the backbone of the learning experience created in this thesis, and a review of both internal and external toolkits in which the strengths and weaknesses are evaluated. Additionally, it provides principles and a vision to guide the design of the final solution: UXR101, the textbook for learners to step into the world of UX research.

Chapter 6 describes the pilot conducted with the first version of the solution, it tackles some of the limitations identified and presents some open questions as prompts for next steps. The teacher's guide is presented here as well, as a result

from the feedback from researchers that they needed more guidance to enable the learning experience. The teacher's guide also offers guidance depending on the amount of time the researcher can or wishes to offer.

This **final chapter** presents a few prompts for discussion: to what extent the research question has been addressed, and it defines the contribution to new knowledge that this master thesis has developed. Moreover, the limitations and implications of the research are discussed and recommendations for future research are suggested.

7.1.2 How to empower stakeholders to do their own research?

To understand how to empower stakeholders to learn how to do research, this question was explored from multiple points of view: by talking with researchers who have conducted their own training, by looking into the relevant literature in learning, and by going through the process of training a stakeholder in research. Combining these different data sources enabled for data triangulation and this set the foundations and rationale for the training.

The goal of this research was to find ways to increase the number of product decisions based on user insights, specifically by empowering stakeholders to conduct their own research when a researcher does not have the bandwidth to support. This research looks at one possible solution to empower other functions to do research: a researcher-led training composed of UXR101, the textbook for learners, and a toolkit to guide researchers who provide support to learners.

7.1.3 Which scenarios are suitable for a training?

This thesis has also explored the following scenarios in which a researcher might choose to train stakeholders:

- **Limited resources.** Sometimes researchers must “say no” to stakeholders (which can be tough, especially when a researcher is new and trying to build trust with the team).

- **High urgency, low impact requests.** Sometimes a stakeholder is very insistent that a research project is urgent, but it doesn't meet the UXR team's prioritization guidelines. This solves for the need of just because researchers aren't leading the research doesn't mean it can't be done, and ties back to the overarching goal of increasing the number of product decisions based on insights.
- **Need for more research hands.** Sometimes researchers need help running concurrent research, for example, for multi-market or multi-city studies.
- **Build empathy.** Research truly becomes part of the product development process when stakeholders have a deep understanding of user needs, motivations, pain points, etc. The most direct way to accomplish this is for stakeholders to not only observe and witness research, but to actively participate and contribute.
- **Elevate quality of data collection.** This toolkit brings an opportunity to partner with other teams and elevate the quality of data collection across functions.

7.1.4 Who are the target functions for a research training?

The functions most suitable to participate in a research training were operations, customer support, design, copywriter and PMs. However, the research use case varied per function:

- **Design** was most interested in usability testing and concept testing
- **PMs** on more strategic studies to help them define what to build
- **Copywriters** to get quick feedback on wording
- **Customer support** to elevate the quality of the insights collected with their roundtables with customers
- **Local operations** to be better equipped when researchers need a helping hand in local markets

Some of these stakeholders will initiate the research requests themselves, while for others, it will be initiated by the researcher. For example, when leveraging

local operations teams to partner with research, this kind of research and the training will be driven by the researcher. But if a designer wants to get feedback on screens, the research will likely be pushed, or should be pushed, by the designer himself or herself. The final solution caters for both of these needs by having a researcher and a stakeholder component, in case the researcher is not available to support a particular project.

Based on the interviews with other researchers and stakeholders, the most important factor when selecting a stakeholder to participate in a training was intrinsic motivation.

7.1.5 How does the training / learning process look like in practice? What tools do stakeholders need to learn how to conduct research?

The final solution has two components: UXR101, the textbook for learners, and a toolkit to guide researchers who provide support to learners. The rationale for this choice is further explained here, based on the theory of learning and on the principles and vision that guided the design process. The principles and the vision were distilled from the conversations with researchers, stakeholders, and from the review of internal and external toolkits.

Components of the training

For the learner, the components are as follows: two modules, UXR101 and UXR201, linked to their specific learning goals. The second component are the learning activities, that is, how the learner will reach the learning goals. The learning activities reflect Kolb's experiential model of learning.

UXR101 compiles the foundations of interviewing and makes the learner well versed with the UX research process. Once the learner masters the content of UXR101, there will be a follow up module, UXR201, which will go in-depth into the different methods available to do UX research. The rationale for this decision

is that before a learner can conduct more complex UX methods, they must first master the fundamentals of the discipline. UXR201 has been deprioritized as part of this thesis, but will be an ongoing internal effort, as some teams, such as copywriting, have expressed interest on having dedicated resources for methodologies specific to their discipline (i.e. highlighter test for copywriter, usability testing for designer).

For the researcher, there is a toolkit that guides their teaching experience. This was a result of the initial feedback of UXR101. The researcher's toolkit is a step by step guide which covers when to train stakeholders, what the toolkit is and what's not, and it gives advice on how to approach the interactions with the learner and how many, depending on the availability and interest of the researcher to support the learner.

Kolb's experiential model of learning

Kolb's experiential model of learning serves as the theoretical backbone of the solution. According to Kolb (1984), effective learning occurs when a person progresses through a cycle of four stages. which are represented on the final toolkit as follows:

- **Concrete Experience** - feeling. Being interviewed or going on a field research trip.
- **Reflective Observation** - watching. Shadowing an expert conduct research.
- **Abstract Conceptualization** - thinking. Reading UXR101, reflecting on experiences, or getting feedback from an expert.
- **Active Experimentation** - doing. Doing mock interviews (for example, with the training exercises available on the UXR101 toolkit) or conducting research.

Vision

The solution is guided by the overarching vision of encouraging everyone to think like a researcher, by providing a community-maintained learning experience,

which supports different learning styles, for those seeking to learn how to do qualitative research. This vision combines the learnings from speaking with researchers, stakeholders, from the review of the theory and the internal and external toolkits. It served as a benchmark with which the final solution was evaluated against at all stages of the design process.

Principles

Besides the vision, there is a series of principles that the toolkit reflects. The principles are two-sided, considering the needs of the researcher and the needs of the learner. For the researcher, the principles are as follows: easily editable, collaborative, adaptable, accessible, and hands-off if needed. These principles reflect a need to create a tool that is easily editable, easy to find, supports the collaboration of the research team and of building a tool that is hands-off if the researcher cannot support a project extensively.

For the learner, the principles are user friendly, supports the different learning styles, concise but comprehensive, practice makes perfect, and long-term orientation. These principles reflect the need of building a tool that follows the experiential model of learning of Kolb, and allowing for both learning through theory and practice.

These principles have been incorporated by using a format for the toolkit that is easily editable and accessible by everyone. The existence of both a researcher and a stakeholder component allows for the toolkit to be hands-off whenever that's needed. And by incorporating the different learning styles, it ensures that people will get the both the theory and the practical experience that they need to effectively learn how to do UX research.

7.1.6 What kind of research projects are most suitable for non-researchers to conduct?

Understanding which kinds of projects were suitable for other stakeholders to

conduct was one of the fundamental questions that needed to be answered to make the training appropriate and applicable in the context of Uber. As a result of the conversations with researchers, the following scenarios are presented.

Appropriate scenarios

- **Straightforward evaluations**, like a highlighter test for a copywriter or a simple concept evaluation for a designer.
- **Simple questions to answer**, projects evaluated by the researcher to be low complexity.
- **Urgent to stakeholder but not prioritized by research.**

Less appropriate scenarios

Experienced researchers identified these as “higher risk” due to level of importance, complexity, and engagement.

- **Advanced methods**, that require more than basic interviewing skills.
- **Large scale foundational/ethnographic study**, which requires a more complex research design and execution.
- Prioritized projects that will rely heavily on the **data validity**.
- **Stakeholder can’t commit time/bandwidth needed.**
- **Stakeholder is not intrinsically motivated to learn research**, for example, the participation in the research might be mandated by someone else.

Although this compilation of scenarios is not comprehensive, they reflect the most common situations in which a researcher might need to decide whether to pursue the training or not.

7.1.7 What is the role of the researcher in the training? What are the levers that drive the desired level of engagement for each project?

Based on the conversations with researchers, three levels of engagement were uncovered.

- **Lecturers** do a one time engagement in which the researcher gives an initial

lecture to the trainees and that covers the extent of the engagement.

- **Mentors** work with trainees throughout a whole project, offering guidance across all research stages, but they are not doing any of the research activities themselves. This model worked best after the trainee already has had some previous exposure to research.
- **Partners or collaborators** work together with their stakeholder and besides giving them the proper training to conduct the research, researchers are also responsible themselves for some of the activities. Examples are researchers doing the recruitment for their trainees, or preparing the interview guide to lift some weight of the shoulders of the trainee. This role is taken when the trainee has little time to support the research or when it is the first time the trainee does research, hence they need additional hand-holding to complete the project effectively.

Based on these three levels of engagement, there are three distinct tracks presented in the toolkit for researchers to cater for this need of varying levels of engagement:

- **Track 1:** I have no time (just UXR 101)
- **Track 2:** I can contribute 3-4 hours over the next 3-4 weeks (3 meeting guidance + UXR 101)
- **Track 3:** I can contribute 5+ hours over the next 3-4 weeks (teaching sessions + 3 meeting guidance + UXR 101)

Based on the feedback on the toolkit, additional levers that dictate the type of support the researcher should provide:

- Researcher's bandwidth
- Complexity of the work
- Importance of the work
- Stakeholder's experience with research
- Scope of stakeholder's role in research (ex. running the entire study vs. team members running different parts vs. assisting the UXR)

- Stakeholder's level of enthusiasm/engagement

7.1.8 Hypothesized adoption

Wrapping up this project, it's difficult to state the impact that this thesis has had in the organization. The assumption now is that although this initiative will be driven by researchers in the short term, the desire is that eventually stakeholders drive their own research projects with researchers in a supporting role. In the short-term, efforts will be dedicated to continue piloting with a select group of users, gathering their feedback, implementing it back in the product (UXR 101 and the toolkit for researchers), until is ready to be used by the wider team.

7.2 CONTRIBUTIONS

7.2.1 Contributions to new knowledge and the research practice

The key contribution to new knowledge is that best practices for training other functions in a corporate setting have been distilled and presented on this body of work. While doing the literature review, the desire of democratizing the research practice within organizations stood out. However, although many practitioners envision the democratization of research as the future to move towards, little advice was presented on how to reach that desired future. This body of work partly strives to address that gap.

7.2.2 Contributions to Uber

The contributions to Uber are two fold. For the research team, it solves for the need for developing tools to train stakeholders. This was one of the blockers identified to train others. It also solves for the need of a scalable training resource, since it can be used with little to no support from a research. In short, this research contributes to structured and standardized training in UX research within Uber.

At the organization level, the contribution of this thesis lies in giving the ability to stakeholders to conduct their own research when researchers are not available to fully support a project. Moreover, the long-term effect is expected to be an increased empathy across the organization with the users, eventually leading to more product decisions based on user insights.

7.3 LIMITATIONS AND RECOMMENDATIONS

7.3.1 Limitations and implications of this research

This research has resulted in a toolkit for stakeholders and researchers to enable other functions to do their own research. However, there are some areas that this research has not fully addressed.

The scope of the investigation has been limited to specific teams at Uber, meaning that the perspectives from other contexts have not been implemented in the final solution. However, it could be argued that this is a strength and a weakness at the same time, since limiting the scope to Uber has allowed for a bespoke solution catering for the needs of this organization.

Within the timeframe of this research it has not been possible to thoroughly evaluate the tools and address the impact and suitability within the organization. The focus has been on creating the tools and not as much as evaluating the tools over a period of time, essentially due to the lack of time to do so. Although the impact and results of the pilots are not fully documented on this report, they will continue as an ongoing effort within the department.

As a result of this research, two tools are needed for stakeholders to learn research: UXR101 and UXR201. UXR101 sets the foundations of the research process and interviewing skills, while UXR201 will provide guidance for specific methodologies. UXR201 was deprioritized from this thesis due to lack of time, and due to the desire to test first whether UXR101 is the right format to deliver part of the training to stakeholders.

Last, the results of this research support the need for tools to empower and

enable stakeholders to conduct their own research. However, only one solution to do so is presented here, and hence this body of work represents just a first attempt on the development of such tools.

7.3.2 Recommendations for future research

To fully validate the toolkit, it should be evaluated with different roles (designer, PM, copywriter) and with different types of projects with varying levels of complexity and different use cases, to understand where the tool best fits. Furthermore, the motivation for stakeholders to participate should be further investigated, and overall it would be beneficial to explore the effect of using the tools on the research outcomes, research process, stakeholder collaboration. Other metrics could be to assess the quality of insights stemming from using this tool and the effect on product decisions based on insights. In the long term it could be interesting to explore whether there is a cultural shift in terms of customer centricity.

The extent of the pilot for this study has been with ad-hoc requests; researchers or stakeholders that showed interest based on email communications of the toolkit. One researcher suggested to introduce this tool during planning cycles, so it could be interesting to test as well the impact of having this tool presented when the research roadmaps for the year are being planned.

It could also be interesting to test this toolkit in other companies and make it available to the public, and design a way to collect feedback from external sources, which can bring different perspectives to the problem that this thesis has tried to tackle.

It might be valuable to test the toolkit both with professors of UX research, to understand how this tool fits or not with their preferred ways to teach UX research in academia. Besides professors within UX research, the toolkit could be assessed with pedagogical experts, to help determine the educational value of the

toolkit.

It is however hoped that the results of this work will help the research practice at Uber extend their craft to other functions and further enable the mission of the research team to help everyone think like a researcher, achieving empathy with the users across all relevant functions.

7.4 FINAL REFLECTION

The months of the thesis have been nothing but challenging. Combining an almost full time job with a master thesis degree has taught me how to switch contexts and be more organized. Overall I am happy with what I have been able to accomplish, and extremely proud to have been able to finish within the, what I had believed to be, unrealistic deadline I had set for myself. I have learnt to be kinder to myself. To shift my mindset of striving for excellence and instead, to learn to be satisfied with what is within my control and don't suffer with what's not. And I have also learnt to better listen to my inner voice that tells me "you need to rest", although this is still an ongoing effort.

At the beginning of this project I set some goals for myself, trying to answer the question of what do I want to get out of this? My list was as follows: to improve my organization skills and communication skills, and to dive deep in the discipline of UX research, which also happens to be the profession I have chosen to pursue.

The reason of choosing UX research as the overarching theme of this thesis is that I wanted to explore my profession from the perspective of academia. Getting stuck in the busyness of work sometimes has the unintended consequence of overlooking what is happening in the outer world, in regards to our profession, and especially what is happening in academia. This thesis has enabled me to dedicate the time to read UX research journals, articles and to find inspiring voices and resources in this discipline.

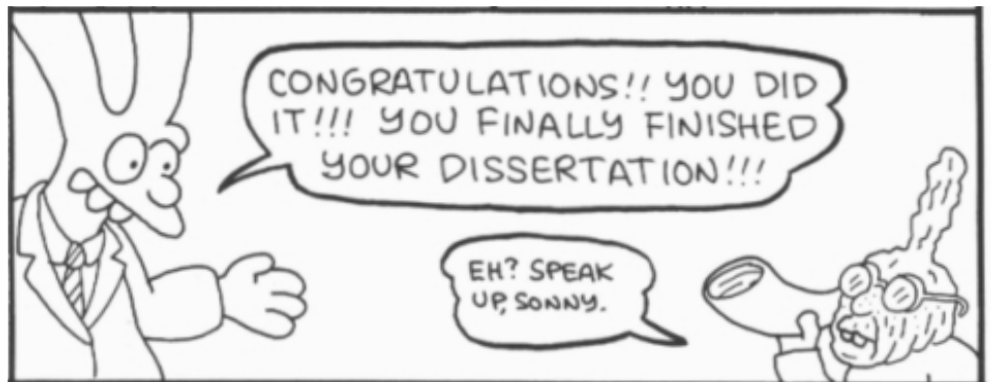
It is also common to hear that 'you only fully understand something once you're able to explain it to others'. Finding ways to support others in their journey to

learn UX research has enabled me to better understand the fundamentals of this profession and to be able to defend our value with more confidence.

Organization skills have always been one of my greatest weaknesses. At the beginning of this project, I told myself that if I wanted to complete my thesis on time, I had to prioritize improving my ability to organize and manage my time. I believe I have found a system that works for me to track and organize my work, and this is one of the key learnings that will accompany me in the future.

If I ask myself what I could have done differently, the answer is certainly to take more care of myself and my wellbeing. There were weeks that I was working 60-70 hours and that took a toll on how I felt. I now have a better understanding of my limits and what I need to do to feel at my best.

The following picture (Matt Groening, 1987) represents a bit how I feel now, as I am wrapping up the report. This thesis is the longest and most comprehensive work I have done up to now. Perhaps the ‘hardest’ thing I have done so far. However, I have continuously surprised myself with my dedication to this project and commitment to finishing on time. A few months ago I had a soft skills assessment at work, and ‘completer’ was one of the skills that came up. I didn’t really believe that. But as I see the results of this work, perhaps I believe a bit more where that is coming from.



Closing this project now is a bit of a bittersweet moment, as endings always are. However, I have to admit that is more sweet than bitter. Bitter because there are some things that I wish I had more time to work on, but I believe I will continue to work on this initiative internally to educate stakeholders on the value that research can have, and to continue to build resources that other teams can use. Sweet because there are many things I wanted to do the past few months that I couldn't do because of the thesis. And now, it's finally the time to get some well deserved rest and take on those things that have been waiting for me on my to-do

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