Fostering a Culture of Research within Agile Processes

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WE FOLLOW THE AGILE PHILOSOPHY

"In the fast-moving environment that we are in, it is crucial to work agile. We need to be able to adapt to changed circumstances fast and deliver customer value in quick iterations."

—Kris Boon, Chief Strategy Officer at Werkspot

GLOSSARY

- **SP:** Service Professional

- **CS:** Customer

- **SR:** Service Request

- **Track:** Part of the organizational structure in which the platform is divided into teams to provide a single-focus work structure.

- **CSA:** Consumer Acquisition (track at Werkspot)

- **CMS:** Consumer Matching (track at Werkspot)

- **PO:** Product Owner

- **PM:** Product Manager

- **Agile:** Software development approach based on iterations and incremental delivery.

- **Retrospective:** Session that takes place at the end of the sprint, it's a moment of reflection and learning for team members.

- **Scrum:** Agile framework to be completed through time-boxed iterations.

- **Stand-up meeting:** Daily meeting that is held throughout sprint days in order to discuss progress on ongoing tasks.

- **Stories:** Tasks to complete throughout the Sprint process, they are prioritized in order of importance to be completed.

- **Tasks:** Sub-division of stories in which developers work on.

- **Acceptance criteria:** Criteria that a component must accomplish in order to be accepted.

- **Backlog:** Digital or physical list where stories are prioritized and placed.

- **Bug:** An error in the software that produces unexpected results.

- **Critical:** An error or issue that has the highest priority to be solved.

- **Sprint:** Iteration cycle that can last between 1 to 4 weeks, most commonly 2 weeks.

- **Kanban board:** Tool to manage work at a personal or organizational level. Depicts work at various stages.

- **Dual-track:** At Werkspot, the Consumer Acquisition track is divided into two teams: Discovery and Development, thus operating under a dual-track structure.

- **MVP:** Known as Minimum Viable Product, is the most basic form of a product with basic functionality to be used and tested. It seeks to receive feedback and be iterated.

- **HCI:** Refers to the Human-Computer-Interaction.

- **UX Design:** Refers to the process of enhancing user satisfaction by improving usability, accessibility and desirability. Operates within the context of HCI.

- **Marketplace Manager:** In charge of understanding the market dynamics of supply and demand within the context of a country and which services demanded to which Werkspot responds with professionals.

- **Scrum Master/ Agile Coach:** Works in close collaboration with developer teams and is focused on assisting them work more efficiently.

- **Research:** Study of people through diverse sources of information. Can be categorized into qualitative or quantitative.

- **Qualitative Research:** Uses words (written, spoken language and images) as data.

- **Quantitative Research:** Uses numbers as data.

- **Flow:** In the digital product context, it is the way through which we get from point A to point B (e.g. Navigating from Google into a website and its subsequent steps)

- **Product:** In digital innovation, we refer to product as the platform. In this case, the product is Werkspot's platform or website.

- **Developer:** The most crucial role of digital products, is in charge of creating the necessary infrastructure to make a digital product work properly.

- **OKR (Objective Key Result):** A framework for defining and tracking objectives and their outcomes.

- **Guild:** Sub-category through the work organization. (e.g. every track has UX designers, but all UX designers also from part of the UX guild, independent from track boundaries)

- **Conversion rate:** Percentage of users who accomplish a task.

READING GUIDE

To optimize your reading experience while reading this Master Thesis Report, a few of the design choices are explained below.

Report structure

The six main sections that compose this thesis report detail the phases of the graduation project. These have been color-coded to provide section breaks. Each section is related to one of the phases of the Designer Process, which is explained in the introductory pages per section. If you wish to know more about the content before reading, a content and introduction page can be found per section. You will find colored pages inside of each section, these contain important information.

Visualizations

As a designer, I am a visual thinker. This means you will find a lot of images along the Thesis report. These have been envisioned as textual support. The most important sections are Section 5: Developing a Research Process, and Section 6: Research Process Implementation. The visualizations you find in these two sections are the main deliverables from the Master thesis.

SECTION 1	SECTION 2	SECTION 3
Executive summary and Designer Process	*Immersion to Werkspot*	*Defining Research Methods*
01.	02.	03.

SECTION 4	SECTION 5	SECTION 6
Research in practice	*Developing a Research Process*	*Research Process Implementation*
04.	05.	06.

FOSTERING A CULTURE OF RESEARCH WITHIN AGILE PROCESSES

Master Thesis by Daniela Romero

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TIMELESS RESEARCH

"Timeless research is really about building long-term organizational knowledge and curating what you've already learned".

Joe Munko, User Research Director at Microsoft

— Braga and Teixeira (2019)

SECTION 1

Executive summary and Designer Process

CONTENT

01.

SECTION 1

Executive summary and Designer Process

INTRODUCTION

The first section of the thesis report summarizes the project through the Executive Summary. This gives an overview of what the reader can expect to find through the content of this graduation project.

The Designer Process section briefly explains the Double Diamond (Council, D. 2007). This is the process that was followed by the designer throughout the graduation project. It can be described in four main phases: Immerse, Define, Develop, and Implement. These phases are correlated with the content of the report, when a new section starts, the reader can expect to find which phase of the Designer Process it corresponds to.

01. EXECUTIVE SUMMARY

This project focuses on the integration of User Research in a Qualitative approach into an Agile work environment by conducting an in-house Case Study with Werkspot (Home improvement platform in the Netherlands). Customer expectations have hit an all-time high globally (Salesforce Research 2018) and as such, companies are expected to provide experiences beyond products (physical or digital). This has impacted the way companies must operate going forward, by recognizing and addressing customer involvement throughout the development process. The challenge relies in integrating two seemingly contradicting processes Agile development (fast-paced) and Qualitative Research practices (slow-paced) into a seamless operation. The objective is to include the end-users early in the development process. In this way, Werkspot is able to increase the chances of success of product features by implementing a validation phase prior to development process. This project makes a research distinction into Validative Research (concept or idea testing in an attitudinal level) and Explorative Research (learning from users on a behavioural level). Through the Research Case Studies *(Section 04: 'Research in practice')*, Validative and Explorative research methods are tested and accelerated to operate under the Agile work setting from Werkspot. The result is a Qualitative Research Process for Werkspot, through this process, the company can continuously involve users in the development of the platform.

1.2 Designer Process

The Double Diamond

The Double Diamond Design Process was implemented throughout the graduation project. This process has four phases that are used to guide the graduation project and helped to structure the Thesis report.

The four original phases described by the Double Diamond Design Process are 1) Discover, 2) Define, 3) Develop, and 4) Deliver (Council, D. 2007). For clarity purposes of internal use at Werkspot, due to the similarity with internal terminology, two phases were renamed. The Discover phase was renamed *Immerse*, and the Deliver phase was renamed *Implement*.

These four phases cover the end-to-end Designer Process and are correlated to the sections from the Thesis report to create a link between the designer's work approach and the end result. Every section of the report has an introductory page that explains which phase of the Designer Process is being explained.

Immersion

Understanding Werkspot & detecting areas of opportunity

Defining Research methods

Desk research and conducting Research Case Studies

Developing Research Process

By applying learnings from research in practice

Implementation

Making actionable recommendations for implementation at Werkspot

START   01. IMMERSE   02. DEFINE   03. DEVELOP   04. IMPLEMENT   END

SECTION 2   **SECTION 3 & SECTION 4**   **SECTION 5**   **SECTION 6**

Fig. 1. The Double Diamond designer process used for the graduation project (Council, D. 2007)

QUANTITATIVE DATA

"The hunger for quantitative data —trying to turn everything into a measurement before considering what it means— is at the heart of a lot of ethical issues we're facing in design and technology."
Erika Hall founder of Mule Design

— Braga and Teixeira (2019)

SECTION 2

Immersion to Werkspot

02.

SECTION 2

Immersion to Werkspot

INTRODUCTION

This Section introduces Werkspot, the company that was selected to develop the graduation project with.
We learn about the company's users and their modus operandi through fast-paced Agile development. We are also introduces to the internal teams in charge of developing the platform, and the roles that coexist within those teams.

We learn about the existing Quantitative Research Process at Werkspot, and we recognize the areas of opportunity that this process presents. The confusion is other types of research like Qualitative can strengthen the company's operation.

SECTION 2

ABOUT THE DESIGNER PROCESS — *Phase 01. Immerse*

"*The first quarter of the Double Diamond model covers the start of the project. Designers try to look at the world in a fresh way, notice new things and gather insights.*"

— Council, D. (2015)

Section 2 of the Thesis report, titled *Immersion to Werkspot* corresponds to Phase 1 of the Designer Process *(01. Immerse).*

01. IMMERSE
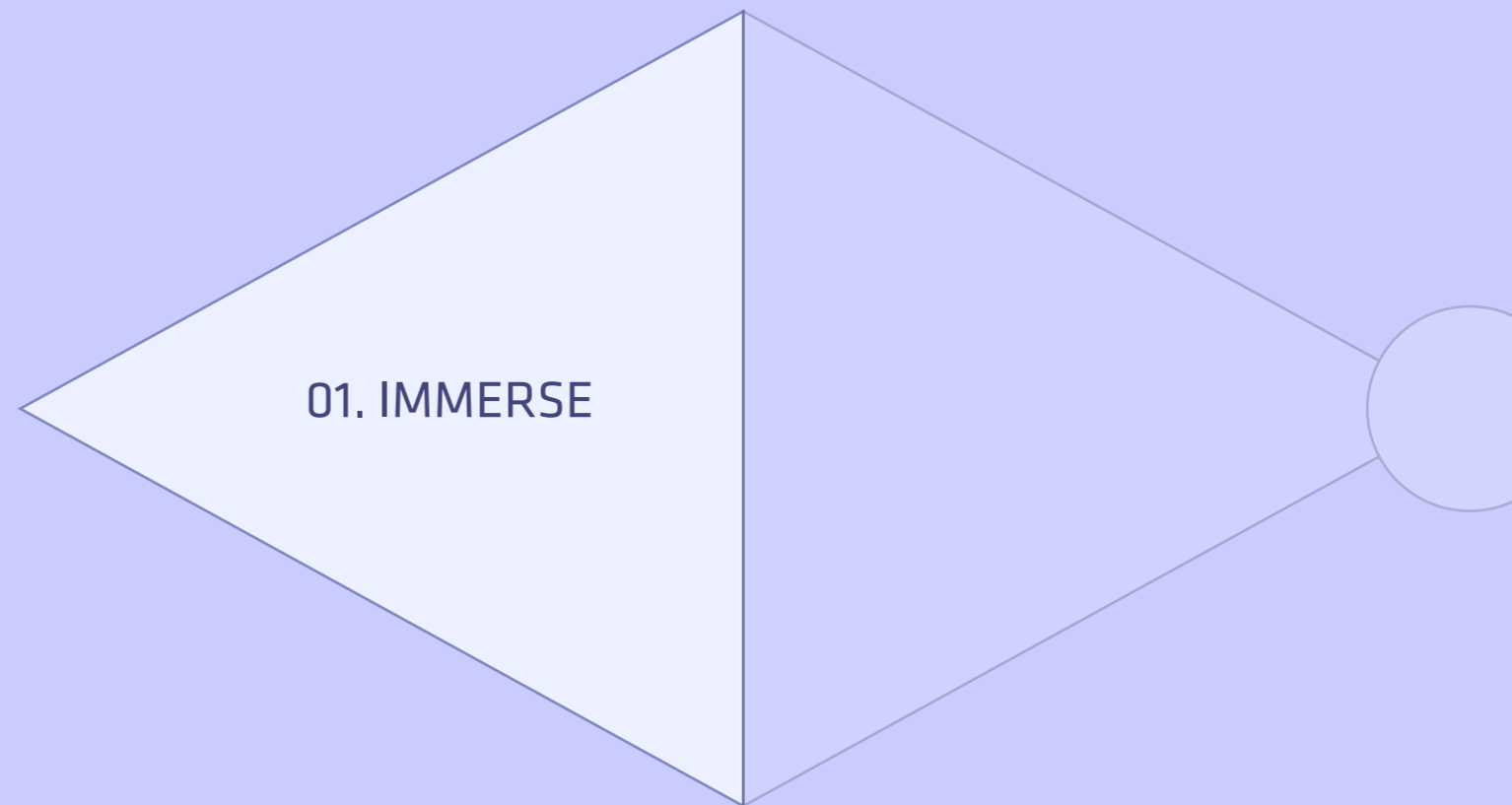
2.1 Background
Context of the project

The past couple of decades have fundamentally changed the dynamics between companies and their customers. Customers now have quick access to online information, and brand loyalty has been impacted by customers ability to find substitute alternatives. Empowered customers are exercising their decision power by weighing in alternatives before they make a compromise with any brand or product (Salesforce Reseach, 2018).

As market dynamics evolved, companies were also forced to change the way they operate, especially in the digital product domain. In the 1990s with the boom of PCs, companies faced a transformation. Regardless of this transformation, companies still operated with extremely prolonged development times. It could take up until three years before a digital product could be released to the public. This phenomenon is referred to as "the application delivery crisis", it was mainly caused by the approach companies used to take regarding the development of digital products. By relying on "waterfall" processes, vast amounts of time-consuming documentation were used. As well, the "waterfall" process has fixed stages that did not allow for changes or iterations. This way of operation had severe impacts on the speed companies could deliver, and it reflected an inefficacy to respond to market needs. A change was on the horizon, as companies were losing valuable time in the development process. By the time digital products were released, the needs they initially responded to could have changed, or even become irrelevant.

Agile software development became a counter-reaction to top-down processes such as "Waterfall", where every step had to be completed before moving to the next one and did not allow for changes throughout the process (Varhol, 2019). The beginning of Agile development has been credited to the creation of the Agile Manifesto in Utah, the USA in 2001. It was there where like-minded individuals gathered and set the premises for how development should work. Development should allow to make changes throughout the process, and keep away from heavy documentation that only slowed down the process. Nonetheless, these ideas were around for longer, "the application delivery crisis" was a call to action for developers to change the way of operating.

Agile became a faster way to ensure continuous delivery, nonetheless, an important human component was often disregarded while prioritizing speed. Contrary to Agile, User-Centered Design (UCD) had been around for more than a decade prior, which meant it had reached a higher state of maturation by the time Agile emerged. Agile is an approach to software development with diverse applications, on the other hand, UCD is an iterative design process that is focused around the end-user (The Interaction Design Foundation, 2019). UCD was born in the era of waterfall processes, and as such, it relied in longer periods of product development, in contradiction to the rapid nature of Agile.

Fig. 2. Agile development process — cycles of iterations, (left) and Waterfall process — top-down process (right)

User-Centered Design prioritizes the user and requires his involvement throughout the design process. This approach relies on the deep understanding of user needs and makes use of diverse User Research methods to do so. UCD recommends involving people from diverse areas of expertise, it accounts for multidisciplinary teams that include: engineers, designers, marketers, researchers and other stakeholders. Companies can benefit and view improvements from implementing UCD practices. These benefits include continuous user feedback, which results in products that are more likely to meet user needs and fulfill their expectations. By putting companies in close contact with end-users, companies can develop a better sense of empathy which translates into products that deliver benefits and improve the quality of life of its users. Some of the User Research methods that UCD implements to better understand users are: Surveys, Interviews, Brainstorming techniques, Usability Testing, among other methods (The Interaction Design Foundation, 2019).

An area that requires deeper exploration lies in the intersection of Agile development and User-Centered Design. The Agile approach allows companies to ensure continuous delivery, and User-Centered Design keeps the user as the main focus. This can prove to be a mutually beneficial relationship since companies can profit from having a better understanding of their customers. As for the customers, they appreciate being considered throughout the design process because their needs can be accurately recognized and acted upon.

2.2 Introduction to Werkspot

Werkspot is the leading home improvement platform in the Netherlands. They connect homeowners to service professionals from diverse areas of expertise (e.g. painters, plasterers, among others). Currently, Werkspot operates with different companies in three different countries in Europe; the Netherlands (Werkspot), France (Travaux.com), and Italy (Instapro). Werkspot has the vision to align the way all three platforms operate by 2020. Due to their growing popularity in the Netherlands, the company was acquired by HomeAdvisor in 2013. HomeAdvisor is a company with a similar service offering that operates in the United States and owns several other companies within the same domain (Travaux.com in France, My Builder in the UK, Instapro in Italy, among others). As a digital platform that connects Service Professionals with consumers (homeowners), there are two customer segments in Werkspot's business model. The first being the Service Professionals (Service Pros) that enroll in Werkspot's service to come in contact with consumers. The second segment of Werkspot's customers are the homeowners. Homeowners have more control over the service because they post a request to which Service Pros reply in the form of a proposal, and ultimately, the homeowners make the final choice to give the job to one of the presented proposals.

The company's expertise

Werkspot has successfully positioned itself as the market leader for home improvement in the Netherlands for its ability to take ownership of the marketplace. This was accomplished by continuously balancing the supply and demand between homeowners and Service Professionals.

One of their core practices has been adaptability, Werkspot has been able to increase the offering of services that homeowners are looking for. As such, they have become recognizable for their offering in the Netherlands. Currently, Werkspot has over 200 services listed on its platform that range from general contractors, painters, carpenters, among others.

The company's beliefs

Company Vision:

"*Everyone prefers to arrange home services online.*"

Company Mission:

"*Be the easiest and most reliable way to arrange home services.*"

Werkspot aims to be an easy and reliable solution for homeowners who require jobs in or around the home. Werkspot intends is to continue satisfying the needs of the market in the Netherlands and other locations in Europe. To do so, they must remain attentive to their audience's needs and demands.

Brands owned by HomeAdvisor (US)
- Werkspot (Netherlands)
- Instapro (Italy)
- Travaux (France)
- MyHammer (Germany)
- HomeStarts (Canada)

14 years of experience

Werkspot is funded by Joost Gielen and Sjoerd Eikenaar.

50% of the company was acquired by the Dutch yellow pages (DTG) the company launched their first TV campaign

HomeAdvisor (US) acquired Werkspot.nl, the leading Dutch home improvement platform.

The company moved to Amsterdam under the new management team with CEO Ronald Egas.

International expansion in Italy using the Instapro brand.

With a growing economy the subscription model for professionals was removed.

Werkspot (NL), Instapro (IT) and Travaux (FR) are working together towards a unified platform.

2005 2012 2013 2013 2015 2018 2019

Fig. 3. Werkspot's timeline

2.3 Werkspot users

As previously stated, Werkspot has two customer segments, the service professionals and the homeowners. The service professionals enroll in the platform as they aim to get jobs by coming in contact with homeowners, they pay to get access to customer leads that can result in jobs. Homeowners, on the other hand, use a free-of-payment platform in which they can get informed about a specific job and ultimately post a service request to come in contact with service professionals. Homeowners receive an average of 3 proposals from service professionals and can decide to give the job to one of the service professionals. This graduation project has been developed with the Consumer Acquisition track at Werkspot, which means it is only focused on the customer segment of homeowners.

From a functional point of view, Werkspot is responsible for connecting homeowners to professionals. Behind the functional benefits of the service offered by Werkspot, emotional benefits are present as well. A renovation process was categorized as a stressful process by consumers themselves throughout the interviews conducted for this project (Refer to Section 04: 'Research in practice' for more information). Consumers rely on external resources to facilitate the process for them, thus, they are not in control of the renovation itself. Werkspot's role becomes more important, as it mediates an interaction between homeowners and professionals. It can also facilitate the search for a professional, by giving access to useful information such as consumer reviews, professional's area of expertise, and the professional's job gallery. These elements are evidence of the service professional's skills and such elements are not part of traditional searching channels like word of mouth. With word of mouth, there is an immediate trust component because of the familiarity with the person is making the recommendation. However, it is harder to assess the professional's quality.

According to the company vision, in the near future "everyone prefers to arrange home services online". As of now, Werkspot is the market leader in home improvement in the Netherlands, but currently, the online market amounts to around 10% of the overall population for jobs to be done in and around the house. Several factors influence this, among them, word of mouth continues to be the predominant means to come in contact with service professionals.

2.4 How does Werkspot operate?

Werkspot implements an Agile development process to build its platform. Agile development is an approach that has its origins in software development, it relies on iterations and prioritizes speed throughout the process. Werkspot divides their organizational structure into tracks, which operate as single-focus teams. One of these teams is the Consumer Acquisition track (CSA). This graduation project is centered around the Consumer Acquisition track, which has the task of acquiring new customers for the platform. As such, it seeks to understand why and how customers are using Werkspot. On the other hand, it is important to detect areas of opportunity that might be hindering customers from using the platform.

Product Discovery

The Consumer Acquisition track operates under a dual-track structure, this means that two teams are coexisting within the same track. The two teams are Product Discovery and Product Delivery. Product Discovery is the newest addition to the track structure, the objective of this team is to implement a learning phase, before the development of features within the platform. The newly established Product Discovery team is integrated by members of diverse expertise:

- **Product Manager** who represents the business objectives by making sure the team members pursue initiatives relevant to the OKRs (Objective Key Results).

- **UX Designer** who has a user-centric point of view for the design of the platform. This is reflected in the user focus towards creating a platform navigation that enables users to reach their goals.

- **User Researcher** who is also user-centric and represents the voice of consumers within the track.

- **Online Marketers** who seek to understand what strategies to implement to improve consumer adoption.

- **Marketplace Manager** who ensures the supply and demand is satisfied on both ends. This is enabled by creating a balance between the amount of Service Professionals available per service, corresponding to the consumer demand.

- **The Content Team** who makes sure the created content is efficient and drives value for consumers. This team is important for conversion, by making sure the customer touch points (e.g. Price Guides) respond to customer questions and incentivize the use of the platform.

Existing Quantitative Research

The Product Discovery team currently benefits from being in direct contact with end-users. However, this was not always the case, Werkspot had an existing quantitative research process in place by conducting experiments. These experiments can be done in diverse ways: through Google Optimize, directly modifying the platform, among others. The purpose of these experiments is to increase conversion. Conversion is referred to as the percentage of people who convert to customers when entering in contact with the diverse touchpoints of the platform (e.g. landing page, price guide, homepage, etc). When conducting experiments, Werkspot compares quantitative (numeric) data. They can measure the current number versus the numbers from the proposed experiment over a certain period. If the experiment surpasses the current way, then it can be concluded as successful and fit for actual implementation at the platform. This is currently done in a fast an intuitive way.

The need to expand the reach of Product Discovery

Product Discovery became a physical team where current and new research efforts can coexist. The Discovery team, much like its name indicates, has the task to discover. Discovery centers around diverse objectives, one of them is validating ideas and concepts that can materialize into actual platform features. Discovery was mainly done at Werkspot by the previously described Quantitative Research Process. However, there was a need to expand the way Product Discovery could be conducted. Quantitative data tells a lot about *"what"* users do online, giving the company visibility over the platform touchpoint where users drop off (discontinue their process) with Werkspot. Nonetheless, there is a need to gain a deeper understanding of *"why"* the exhibited online behavior is the way it is.

How can Werkspot strengthen Product Discovery?

Product Discovery benefits from the direct interaction with customers because it favours receiving direct input and not working based on assumptions. Consulting customers can enable Werkspot to learn first and then proceed to development, saving development time which diminishes operational costs. Involving customers can be done by adopting a User-Centered Design (UCD) approach where the user is integrated early in the development process. UCD uses User Research to facilitate the integration and understanding of the users.

As research gained importance at Werkspot, there was a need for specialized roles. In the past, research has been conducted sporadically by diverse people. However, there was not dedicated User Researchers until recently. User Researchers were recently integrated in the organizational structure of the company (2 so far). This speaks of the company's vision to strengthen the way Werkspot can learn from its end users. However, there is no procedure on how this should be conducted. This allows flexibility to propose a process for Qualitative Research to be adopted and continuously implemented at the company.

Product Delivery

The second team that operates in the Consumer Acquisition track is the Product Delivery team. This team deals with the technical aspects of creating the platform by enabling the functional elements that end-users interact with. This team is vital for the platform, as they are the ones who ensure its daily operation. The Delivery team is integrated by diverse expertise:

- **UX Designer** takes on the design task (visual and functional). They propose how platform content and features should look and be navigated through.

- **Back-end Developers** who take on the technical aspects of the platform. They deliver functionality by creating the code structure that is the backbone of the platform and enables its use.

- **Front-end developers** who create the visual components customers interact with. They are the bridge between design and functionality and actively collaborate with UX Designers to bring designs to life within the platform.

Overarching roles

The overarching roles that have the full overview of the Discovery and Delivery teams are the Product Manager and the Scrum Master/ Agile Coach.

- **Product Manager** takes a leadership role between both Discovery and Delivery teams. Supervises and takes part in daily operations to make sure the 'ship sails smoothly'.

- **Scrum Master/ Agile Coach** works with both teams in the Consumer Acquisition track to ensure the team members work effectively and efficiently.

2.5 The Product Funnel

Product Discovery and Product Delivery

Product Delivery was the focus of the Consumer Acquisition track, where developers concentrate their efforts on the platform's daily functionality. As previously mentioned, Werkspot conducts experiments that produce quantitate data. This enabled the company's decision-making process by making use of data that highlighted areas of opportunity (e.g. promising new features/changes with a better conversion rate).

The way the platform is currently created follows a funnel structure, which can be described as The Product Funnel. This funnel is a set of subsequent stages from idea conception, development, market launch and evaluation. The teams that interact with these stages are Product Discovery and Product Delivery. The Product Funnel is composed of three stages:

- **Discovery Stage:**
  Discovering and validating new ideas or concepts. This is done to identify those concepts that have the potential for development. Only promising ideas move into a development stage. If not they are reworked or discarded.

- **Development Stage:**
  Promising concepts are built by the Delivery Team integrated by developers. The goal is to build efficiently to release to the market within a short period.

- **Evaluation Stage:**
  Once a change is implemented or a new feature is launched, its performance can be monitored to determine if optimization is needed. This is done to avoid errors or 'bugs' and ensure an optimal platform performance.

Werkspot is currently following the stages of this funnel (Fig. 3. Product Funnel). However, there are areas of opportunity in the operation.
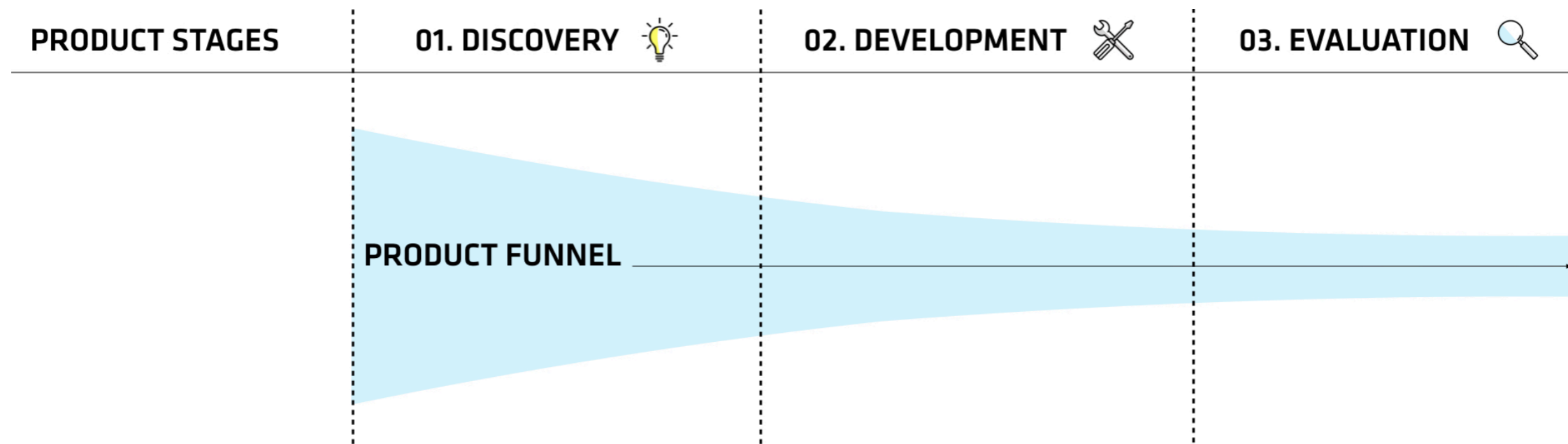

PRODUCT STAGES | 01. DISCOVERY | 02. DEVELOPMENT | 03. EVALUATION

PRODUCT FUNNEL

Fig. 4. The Product Funnel at Werkspot

PRODUCT DISCOVERY

*Discovering what
should be built next.*

&

PRODUCT DELIVERY

*Building promising
concepts.*

2.6 Findings and Areas of Opportunity

Findings

Werkspot is trying to achieve the mission to "Be the easiest and most reliable way to arrange home services". However, a factor that can hinder the company from achieving such a mission is a lack of representation of the voice of consumers within the development process. This refers to exploring the overall context of use which accounts to; before, during and after consumers have come in contact with the product (Werkspot platform). These interactions allow us to gain a better picture of who our consumers are, and how we can best help them to achieve their goals. This lack of representation of the voice of consumers is currently missing in the department that is actively developing the platform (Discovery and Delivery teams), some examples of this are:

- **Numeric data:** Werkspot relies heavily on quantitative data (e.g. A/B tests) which answers *"what"* but because the voice of consumers is lacking, it fails to provide us with the *"why"* behind consumer choices.

- **Delayed learnings:** Favoring speed of release of features over learning from the users first does not help the company. It means that speed is prioritized and adaptations can be made later, but it fails to take into account for user feedback from the start. Werkspot can benefit by making improvements at a concept stage and moving to development with validated concepts.

- **Build on assumptions:** Werkspot can fall into a very common trap that many other companies have faced before and think that they know their users without active involvement from users themselves. As previously mentioned, traditional Agile development methods do not account for the user experience, which favors building upon what the company knows, instead of talking to end-users first.

These challenges are not uncommon, and certainly not exclusive to Werkspot. As James Kalbach, author of Mapping Experiences states:

> *"(…) organizations get wrapped up in their own processes and forget to look at the markets they serve. Operational efficiency is prioritized over customer satisfaction. Many simply don't know what their customers go through."*
> — Kalbach, 2016

Areas of opportunity

The company wants consumers to have the best end-to-end experience when they come in contact with a product, in this case, a digital product which is Werkspot's platform. To achieve a better experience and increase consumer satisfaction, there's a need to take a closer look at what users go through. This is increasingly important as better consumer experiences can translate to business results for the company. Werskpot can achieve a better user representation within the company by applying core practices of User-Centered Design (UCD). When users are placed at the center of the development efforts, the focus lies on facilitating tasks and minimizing effort. Werkspot can achieve this is by learning directly from their end-users, which is done through User Research in UCD. In extreme cases, the downfall of not fulfilling User Centricity can be harmful to companies, as products could be perceived as broken experiences that ultimately result in dissatisfied consumers. As one interview participant stated:

> *"When you have a bad experience you want to alert others from this.*
> *I would tell other people never to use Werkspot if this (referencing negative experience) happened to me."*
> — Leonel, Interview participant

By communicating with end users early in the process and learning from and with them, the company can increase the chances of success of product features. In this way, Werkspot can move forward into a development stage with concepts that have been previously validated and strengthened through User Research so that a higher rate of success can be achieved. From a company point of view, developing validated concepts can be beneficial in economic terms, and from a user point of view, it reflects on a functional, yet enjoyable product experience.

2.7 How can Werkspot tackle these issues?

Summarized situation:

There is an existing gap between the teams in charge of the development of the platform (Discovery and Delivery teams) with the end-users. This is caused by the lack of connection between both parties. Currently, they don't interact directly with each other, but have interactions throughout the platform. One one side, the platform is created and modified, on the other spectrum it is being used.

Werkspot relies on quantitative data (numeric) regarding the end-users online behavior. This type of information is useful and the company should continue conducting quantitative research in the form of experiment and other practices. However, in order to close the gap, there is a need for closer end-user involvement in the development process.

Qualitative Research

Werkspot is trying to bridge the gap between the teams that develop the platform (Product Discovery and Product Delivery) with the end-users of Werkspot. The company is currently trying to address this gap by consulting quantitative data that gives insight into *"what"* consumers do online. However, when trying to understand end-users better, and understand the *"why"* behind their decisions, Qualitative Research is needed.

Home improvement's online market amounts to around 10% of the overall existence of jobs in or around the house. This means a vast amount of untapped customer potential for Werkspot. If the company invests time in getting more acquainted with its existing customers, it can be an opportunity to dive deeper into how customers think and operate. Getting to know the barriers that inhibit customers from going forward, can be a great way to access the untapped market potential of the online home improvement market.

Fig. 5. Missing connection between Discovery and Delivery teams with the end-users of the platform

DEFINING A SUCCESSFUL OUTCOME FOR WERKSPOT

LOWER COSTS

The cost to develop product features is high for Werkspot. Through the validation of concepts before development, these costs can be lowered. This is due to the fact that validated concepts can perform better with consumers. The end result is for Werkspot to save time and resources by not having to spend time reworking features that are not performing as they should.

HIGHER REVENUE

By getting to know consumer needs and priorities better, Werkspot can achieve higher revenue. This is because consumers are most likely to use the service if their needs are being fulfilled. Research can also drive higher revenue by uncovering areas of opportunity or untapped market potential through new customer segments.

HIGHER CUSTOMER SATISFACTION

Werkspot can reach higher levels of customer satisfaction by including customers in the development process. The two main reasons behind this is because consumers like being listened to and taken into account. By including customers, the final product is more user friendly and can detonate more satisfaction.

Criteria to conduct Qualitative Research

To facilitate the adoption of Qualitative Research at Werkspot, some considerations need to be taken for this type of research to be a fit with the Agile development approach implemented by the company.

- **Rapid results**— Speed is a given in Agile development, this criteria must also be considered as part of qualitative research. Not to be mistaken with losing quality to prioritize speed, nonetheless, there are phases of qualitative research that can be accelerated in favour of a more agile process.

- **Synchronicity of results**— To ensure synchronicity between user research and product development, the research initiatives conducted by the Discovery Team have to be done as a prior stage to development. Qualitative research results should be scheduled to be in line with upcoming development cycles so that these new initiatives can be picked up when developers are available.

- **Valid results**— Speed is not the only component that should be prioritized. The validity of research needs to be addressed because the company will rely on Qualitative Research outcomes to make business decisions. As such, there must be steps taken to ensure valid research outcomes *(Criteria for validity is discusses and implemented in Section 4: 'Research in practice).*

- **Continuous research**— Werkspot previously conducted Qualitative Research methods such as 'jobs to be done' in the past. However, this was never conducted continuously. A reason for this could be the fact that there were no specialized roles so research was taken on by diverse people whose primary role was not to conduct research. A consideration to take for Qualitative Research at Werkspot is that it can no longer be a sporadic effort. The company must remain in touch with its end users throughout the development process. When research is only conducted sporadically, long-term benefits cannot be observed.

- **Fit with the company**— Qualitative Research offers a vast amount of methods that can be conducted. However, not all methods are fit to be applied at Werkspot. To be a good fit, the research should be easily implemented and scalable. Scalability is important since initiatives sometimes run parallel between the three countries of operation (NL, FR and IT). By scaling efforts, the company can replicate successful processes within their sister companies (Instapro - IT and Travaux.com - FR).

2.8 Goal and research questions

Setting the basis for the graduation project

The goal of the graduation project is to design a qualitative research process that can help Werkspot achieve its objective of becoming more user-centered, by fostering a culture of research within Agile processes. Werkspot aims to develop a digital product that can have a higher chance of success and User Research can help to achieve this. Werkspot has done a good job in identifying the *"what"*, by being able to identify areas of opportunity through the research practice of experiments, this flexibility has favored their growth as a company. Nonetheless, the company is currently lacking processes that favor consumer involvement. A Qualitative Research process is proposed to assist the company to better understand their users. In doing so, promote user empathy in the development process. This process will also help the company in understanding the fundamental *"why"* behind consumer behavior and decisions.

Summarizing the challenge
How can Werkspot, operating under Agile processes (fast-paced) have a better understanding of their customers without having to undergo lengthy (slow-paced) qualitative research?
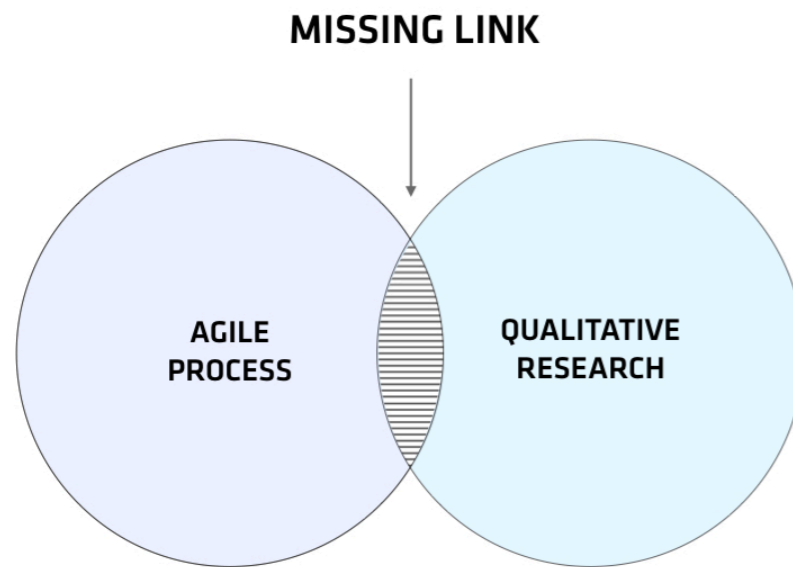
Fig. 6. Missing link between Agile process and Qualitative Research

To successfully implement a qualitative research process into Werkspot's current operation, there needs to be a company fit. This means that the proposed process has to be able to operate within the Agile development process (fast-paced) in contrast to traditional Qualitative Research (slow-paced). The challenge is to integrate two processes that are contradictory from a theoretical point of view, thus Qualitative Research has to be accelerated to adapt to an Agile development environment.

A crucial consideration is to simplify Qualitative Research without disregarding its depth and richness to ensure valid research outcomes. Therefore, the following research questions have been proposed to guide the project:

1. How can we successfully integrate consumers throughout the development process?

2. In which stages would it be more beneficial to receive consumer input?

3. Who should be the persons involved in the research process?

4. How to simplify qualitative research without disregarding the key components that provide rich data?

5. How can we ensure valid research outcomes? (e.g. criteria for validity)

6. What is the best format to communicate research outcomes?

7. How can we make research part of the Werkspot culture?

CHANGE STATEMENT FOR WERKSPOT

"*How might Werkspot close* the gap between development teams and end-users,

PRESENT STATE

In order to better understand end-users & increase the success rate of platform features."

DESIRED OUTCOME

THE IMPORTANCE OF USER RESEARCH

"In 2019, we should be thinking about:
    How to fix technology that is not working: from user research that can
    help us understand genuine needs to usability improvements that will streamline the
    adoption process."

— Braga and Teixeira (2019)

SECTION 3

Defining Research Methods

03.

SECTION 3

Defining Research Methods

INTRODUCTION

This section explores Research theory, but before, the reader learns more about the external conditions that make research relevant for companies in the first place. We will learn about the power of customers and why it is an increasing necessity for companies to know more about their users.

Afterwards, we dive into Research for Werkspot. We explore the Landscape of User Research Methods which concludes in addressing the company's needs through a categorization of Research at Werkspot (Explorative and Validative).

Lastly, a selection of methods for the company is made. These methods will be put in practice to address the company-fit.

ABOUT THE DESIGNER PROCESS — Phase 02. Define

"*The second quarter represents the definition stage, in which designers try to make sense of all the possibilities identified in the Discover phase. Which matters most? Which should we act on first? (...)*"

— Council, D. (2015)

Section 3 of the Thesis report, titled '*Defining Research Methods'* corresponds to Phase 2 of the Designer Process *(02. Define)*.

02. DEFINE
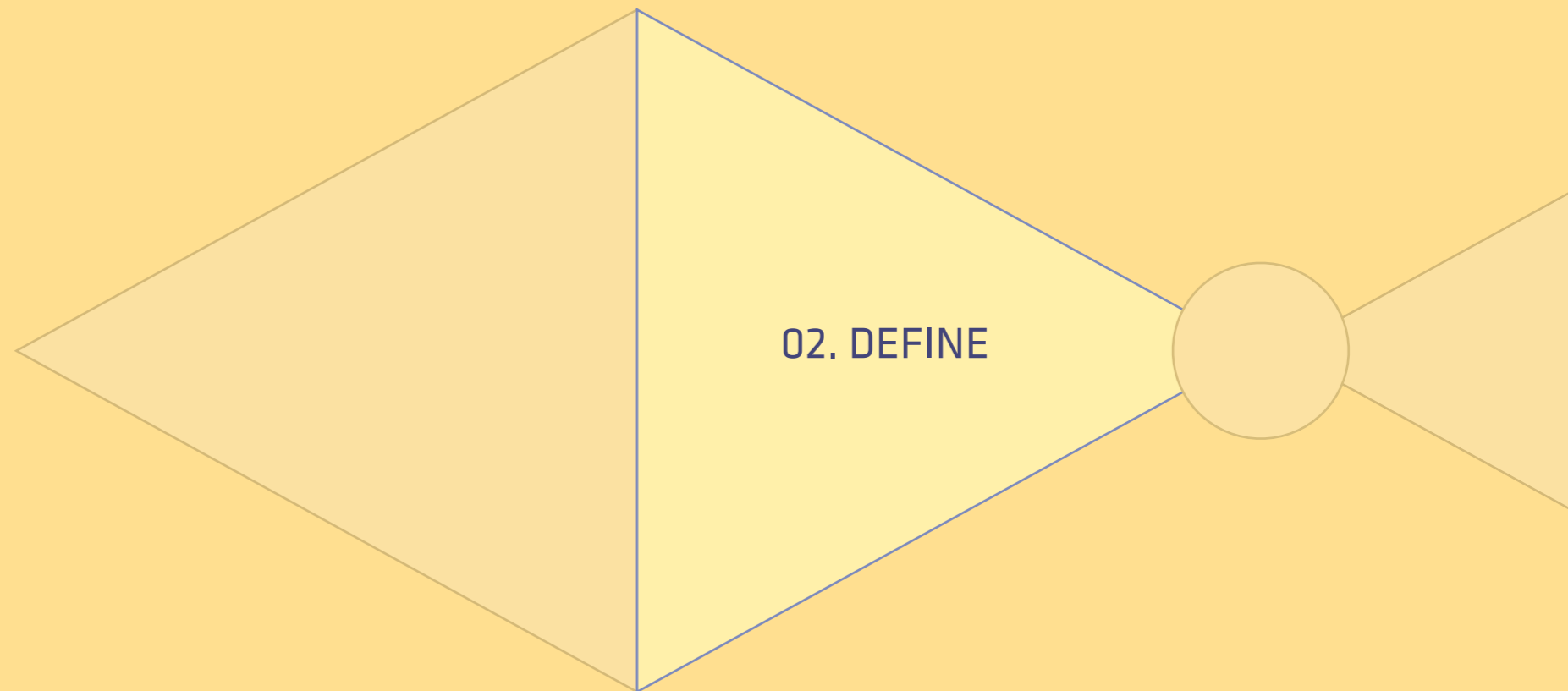
3.1 Why is Qualitative Research needed?

Section 2 introduced readers to the internal conditions at Werkspot, from the modus operandi to findings and areas of opportunity. These can be addressed by the integration of a user-centered approach facilitated by Qualitative Research. Section 3 starts with a broad perspective by looking at the external conditions in the consumer landscape that have increased the need for user research within companies. After exploring the external conditions, a zoomed-in perspective is taken at the application of research at Werkspot.

The Age Of The Customer

"We can't think of people like we think products; we cannot fix human behavior in a two-week sprint." — Braga and Teixeira, 2019

Working Agile presents many advantages, however, it lacks a user-centric approach. For companies operating under Agile development, understanding and recognizing user needs is not feasible in the time frame of a two-week sprint. Nonetheless, user-centricity can be achieved as a parallel effort to product development by feeding a human component into digital products. Humans are complex, which is acknowledged by Social Science studies devoted to understanding human behavior, such as Psychology, Sociology, Anthropology, and others (Backhouse & Fontaine 2014). Assessing human behavior and their needs is a task that must be integrated within companies and not taken lightly. Sporadic research efforts are not going to allow companies to have a long term vision regarding user behavior and what their needs might shift into. To stay relevant in today's economy, user-centric approaches become increasingly relevant. As Forrester Research states, we are living in The Age Of The Customer (Bernoff et al. 2011).

The Age Of The Customer explains the phases that we have gone through as societies progress. There is a correlation between the sources of dominance (e.g. Age of manufacturing) with the successful companies that dominated within the specific period (e.g. Ford, RCA, GE, etc). Successful companies have managed to dominate by excelling at sought after capabilities such as mass manufacturing or having the connections to distribute globally.

Nowadays, in The Age Of The Customer, the customers are empowered. This has forced companies to compete in ways that were not present in the past. Gaining customer knowledge is a competitive advantage that many companies are increasingly embracing to stay ahead of competitors. As companies compete to stay ahead, customers have gained more power through access to information, making it harder to believe everything companies state.

"Buyers have more power than ever. With online reviews and mobile web access, your customers know more about your products, your service, your competitors, and pricing than you do. Porter said it: "Where the buyer has full information about demand, actual market prices, and even supplier costs, this usually yields the buyer greater bargaining leverage." — Bernoff et al. 2011

Empowered customers know the influence they hold and brand loyalty has been damaged as customers make more educated comparisons facilitated by information. Customers are not afraid to migrate from one product or service to a new one to benefit their interests. According to the "State of the Connected Customer" Report by Salesforce Research, conducted through a global customer study that included The Netherlands: *"76% of customers expect companies to understand their needs and expectations."* This reiterates the notion that we are living in the Age Of The Customer. As such, companies can no longer consider user understanding and involvement as a commodity, it has become a real need in an empowered customer world.

Fig. 7. Age Of The Customer (Bernoff et al. 2011)
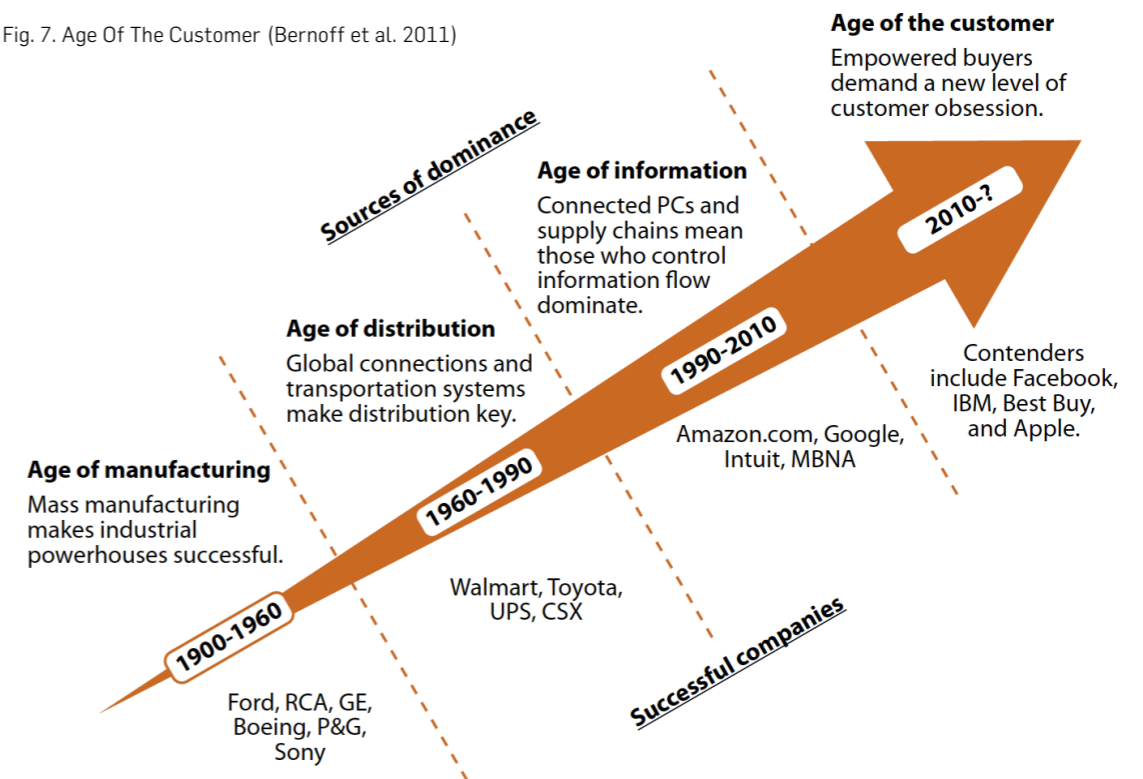
CUSTOMERS PUSH COMPANIES TO DO BETTER

Fig. 8. Global customer study by Salesforce Research (2018)

Customers Push Companies to Do Better

■ Consumers   ■ Business Buyers

80%
of customers
say the experience
a company provides is as
important as its products
and services

79%
81%

95%
of customers
say they are more
likely to be loyal to a
company they trust

94%
96%

67%
of customers
say their standard for
good experiences are
higher than ever

64%
73%
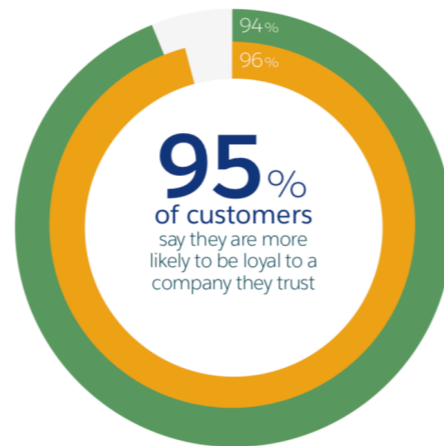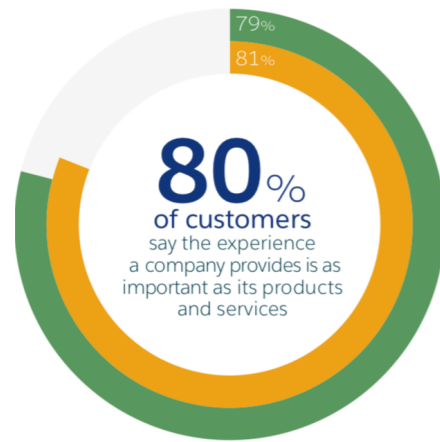
Customer expectation for experiences

Nowadays, customer expectation goes beyond products, as customers have increased their demand for experiences. In addition to this, trust is playing a bigger role in how customers give brand loyalty. Customers seek to be valued and understood by companies. This can be done through different approaches, the best one being in-house research. By conducting in-house user research, companies can talk to and involve customers in the creation of products and services. This facilitates having a first-hand account of the customer's current and desired experiences. Taking an in-house approach is relevant because it creates empathy for the people in charge of product development. By relying on insights and customer information from external research parties empathy is harder to transmit.

Experiences are intangible, yet they have become increasingly important for customers. Experience is what customers go through when coming in contact with a product (physical or digital). It is an end-to-end account of their interaction with any given product or service. Experiences are part of the decisive factors that make a customer predilection for one brand over the other.

"Fifty-seven percent of customers have stopped buying from a company because a competitor provided a better experience." —Salesforce Research (2018)

As customers place more value on experiences, it becomes relevant for companies to pay close attention to the experiences they are currently delivering. Sixty-two percent of global customers stated they share bad experiences with others, and seventy-two percent indicated they share good experiences (Salesforce Research 2018). This cycle of sharing positive and negative experiences is evidenced by the number of people who post reviews online. This is a transformation from a passive consumer into an active one, by recommending and warning others through his own experience.

Experiences at Werkspot

In the context of Werkspot, we can describe an experience in two components: the functional side of the experience (e.g. I want to renovate my house because it has certain issues that need to be fixed). On the other hand, there is the emotional side of the experience in which Werkspot can play the role of "stress reliever" by taking away some stress and anxiety in the process of a renovation for a consumer, thus, providing peace of mind in a complex process.

"This is something I don't know anything about and I don't want to deal with it, so I put my job on Werkspot." —Interview participant

Experiences become increasingly important as they are shifting from being a "nice to have" to a "must-have" in consumers expectations. Experiences are classified as external to the buyer, thus, something that they interact with but it's beyond their control. On the other hand, experiences are inherently personal, they have the quality to exist only in the mind of the individual who experiences them and can have emotional, physical and intellectual components. As such, two people are not capable of having the same experience because it derives from the personal interaction (Gilmore and Pine II, 1998). These changes make an impact on how everyday events are perceived. As such, companies have a deeper task as they not only provide commodities, goods or services, but they also have to account for the type of experience consumers want to have. This can be the main decisive factor between choosing one product over another. This need for experiences has sparked the need for companies to gain a deeper understanding of their consumers. In a sea of competitors and alternatives, customers seek an offering that stands out. Companies need to differentiate themselves and this can be done by understanding their customers wants and needs *(Customer experiences are revisited in Section 4: Research in Practice by implementing the use of Customer Journeys to map customer experiences at Werkspot.).*

User-centricity in Product Development

Diverse companies have adopted a user-centric design process, and have found success in doing so. User centricity is a crucial factor that makes an impact on both sides of the spectrum; the company, and its end-users. The graduation project described in this thesis report pushed me to go beyond my comfort zone and approach field experts that have dealt with integrating a user point of view into product development. As Joost van Hoof, Project Manager at Google explained:

"Google likes to say, focus on the customer and everything else will follow and I truly believe that. You cannot start building things that you can touch without experiencing what users really need. (...) I can't stress this enough, go to your customers soon and as often as possible." —Joost van Hoof, P.M. at Google

One of Google's core values is to always focus on the customer. This is echoed in their development process, by implementing user-research to get familiar with the unmet user needs, and later on gain feedback on concepts. This notion has gained importance since consumers have more alternatives than ever, which has diminished brand loyalty.

Another field expert that offered interesting insight into the moments when User Research is convenient to conduct is Nikolay Yaremko, Product Lead at eBay. He responded to the following question: *How do you make sure user research is quickly integrated to product development?*

"In my case, there are two moments when we do customer research, in the beginning (fuzzy front end) you do a lot of this, you need to get a concept out of it (co-create with customers). And then, as soon as you pass the change phase and get into your growth curve you need to have a really fast UX cycle , talk to users and see what are their concerns." —Nikolay Yaremko, Product Lead for Global First Party Advertising Products and Capabilities at eBay.

Understanding the moments from which companies benefit the most from conducting User Research proves valuable for the thesis objective of creating a Qualitative Research Process for Werkspot. It is recognized that consumers seek products that can fulfill their needs (functional and emotional), which makes it harder for companies to stay ahead of their competition. The key to unlocking consumer trust lies in how well companies can understand their underlying needs, for which user research proves to be crucial.

Quantitative and Qualitative Research

As companies face the need to go beyond and better understand their audiences, the need for research arises. Quantitative research has been widely adopted by companies worldwide. For some, it is the only source of information from their consumers. Some important considerations about quantitative research include the fact that it uses numbers as data, it seeks to understand relationships which can explain or predict outcomes to be able to generalize the findings and apply them to a larger population. It is usually described as theory-testing and it has a fixed method, which makes it inflexible once the study has begun. The known advantage of quantitative research is that it can be completed in a quick manner, which proves a favorable in a fast-paced world, especially when time is of the essence in the development process (Braun et al, 2013). Quantitative research proves advantageous to understand the *"what"* behind customers behaviors. If we seek to understand *"why"* behind user choices, quantitative does not prove to be a strong research method.

Qualitative research, on the other hand, uses words as data. It seeks to understand and interpret and it can produce knowledge that contributes to a more general understanding. The data that derives from qualitative research is qualified as "rich" or "thick descriptions" because it details complex accounts from participants. The objective is to seek patterns to better understand the context. It generates theory instead of testing theory and it values personal involvement. The methods are less fixed which provides research flexibility. The downside of qualitative research is that it takes longer to complete and as such, it can also be more expensive to conduct than quantitative research (Braun et al, 2013). As mentioned, this graduation project is focused on the integration of qualitative research practices into Werkspot.

3.2 Qualitative Research for Werkspot

As it has been explained, Werkspot could benefit from integrating qualitative research into their product development process. This would help the company to bridge the existing gap between the teams in charge of the development of the platform (Discovery and Delivery teams) with the end-users. Through qualitative research, a connection can be established with the end-users. Nonetheless, qualitative research has broad method applications which are not all suitable for implementation at Werkspot. Circling back to the criteria to conduct qualitative research *(Section 2: Immersion to Werkspot, p.26)*, certain criteria were introduced:

- **Rapid results** — There are phases of qualitative research that can be accelerated in favor of a more agile process that can properly fit the company.

- **Synchronicity of results** — To ensure synchronicity between user research and product development, the research conducted by the Discovery Team can be done as a prior stage to development.

- **Valid results** — There must be steps taken to ensure valid research outcomes taking into account research is conducted in different areas of the company, and even different countries.

- **Continuous research** — For Werkspot to experience long-term benefits, research must be a continuous practice and not a sporadic effort.

- **Fit with the company** — To be considered a good fit, the research should be easily implemented and scalable.

The company's Qualitative Research needs

The landscape of User Research methods is broad and it keeps expanding, there are emerging methods that lie in the intersection of Research and Design. This has only increased the number of options that are available nowadays. One of the most relevant decisions that companies have to make when implementing User Research is deciding which methods would be suitable.

Werkspot wants to bridge the gap between development teams with end-users. The company has areas that they wish to strengthen, these can be described as the following:

- **NEED 1:** Werkspot wants to increase the chances of success of the features they develop.

  - **How can we tackle this?** To increase the chances of success, Werkspot can validate before production of platform features. This way the company can move forward with concepts that have received user feedback. This can be tackled with a type of research that addresses product validation.

- **NEED 2:** Werkspot wants to discover new areas of opportunity that haven't been previously explored.

  - **How can we tackle this?** This can be addressed through an exploration phase of research. Through customer interaction in an exploratory phase, the *context of use* can be addressed. This refers to all interactions prior, during use and after the user comes in contact with Werkspot's offering. This gives the company more understanding over the customer journey context and opens new areas of opportunity.

The needs of Werkspot can be summarised in two words: one is to Validate and the second is to Explore. These serve as guidelines and will be taken into account for the selection of user research methods.

3.3 Explorative and Validative Research

Why is this distinction needed?

Werkspot has two different research needs, this means that one single approach is not going to solve both efficiently. These two needs can be defined as:

- **Validate** concepts with consumers before development. Thus increasing the chances of success when being released to the market.

- **Explore** with consumers to detect new areas of opportunity by diving deeper into the context of use of the platform (before, during, and after a person has interacted with Werkspot).

These needs will be addressed through the application of customer research methods that aim to validate concepts and understand how non-validated concepts can be improved. On the other hands, take an explorative approach to learn more about consumers, which benefits the company by detecting new areas of opportunity. To best address these two needs, research at Werkspot will be divided into Explorative and Validative Research.

- **Validative Research—**
  Goal: Concept validation.
  How: Receive consumer feedback to validate and improve concepts before development.
  Approach: Qualitative and Quantitative research is applicable and can be done parallel.

- **Explorative Research—**
  Goal: Consumer exploration.
  How: Learn more about consumers to achieve a better segmentation through tools like personas or archetypes. Gain a better understanding of the customer journey by addressing the *context of use* of the platform (before, during, and after a person has interacted with Werkspot). Be able to detect new areas of opportunity for Werkspot.
  Approach: Qualitative research.

By making a segmentation in the research needs of the company, more focused results can be obtained. This is because research methods can be selected with a specific aim to explore or to validate. Werkspot has dealt with the need for concept validation in a Quantitative research approach by conducting experiments, mostly A/B testing the current scenario versus a new proposition. However, they have not done Validation in a Qualitative research approach, much less, integrated this as a requirement before production.

On the other hand, Explorative research is much newer to the company. In the past, there have been sporadic efforts in this direction by conducting 'jobs to be done interviews' with consumers. Nonetheless, this was never a continuous effort. As well, there was no dedicated researcher who could keep track of the findings over time and draw comparisons.

As Werkspot undergoes a transition, by collaborating closer to their sister companies Travaux.com in France and Instapro.it in Italy, it provides a climate where new forms of collaboration are constantly being tested. As such, it is a good opportunity to set processes and parameters for how User Research can be conducted in the Netherlands with Werkspot, and if proven successful, it can be replicable for its sister companies.

VALIDATIVE RESEARCH

*Aims to validate concepts
and ideas prior to the
development process.*

Approach: *Deductive —
Confirms/disconfirms theory.*

Validative Research Methods:
- *Concept testing*
- *Online concept testing*
- *Usability Test*
- *Experiments*
- *Online communities*
- *Customer interviews*
- *Competitive analysis*

Observation:
*It can have a pre or post Quantitative
Research phase.*

&

EXPLORATIVE RESEARCH

*Exploratory approach
towards generating more
understanding about consumers.*

Approach: *Inductive —
Generates theory.*

Explorative Research Methods:
- *Context-mapping*
- *Co-creation*
- *Jobs to be done*
- *Online communities*
- *Diary Studies*
- *Customer interviews*
- *Contextual inquiry*

3.4 Landscape of User Research Methods

The Landscape of User Research Methods (please refer to Fig.9) has diverse methods mapped out in two axis. On the vertical axis, there is a distinction between Behavioral and Attitudinal research methods. The horizontal axis is divided into Qualitative and Quantitative. These can be described as follows:

- **Behavioral research methods:**
  Aim to understand "what people do", these methods can go deeper than attitudinal. This is due to people saying they do something, but contradicting themselves with their actions.

- **Attitudinal research methods:**
  Aim to understand and/or measure a person's beliefs, it has been widely used in marketing departments, it focuses on "what people say".

- **Qualitative Research:**
  It involves direct user interaction and implements words as data to seek patterns.

- **Quantitative Research:**
  It involves indirect user interaction and implements numbers as data.

It was previously defined that Werkspot aims to *Validate* concepts or *Explore* alongside consumers which can lead to discovering new areas of opportunity. In order to make a selection of methods that are a good fit for the company, Quantitative research will be excluded. This is because the graduation project is focused on implementing a Qualitative research process at Werkspot. Taking into account the needs of the company, a selection of user research methods was made which accounted for the fit with the company. This selection favored methods that can be easy to implement without dedicated equipment (e.g. to conduct eye-tracking). The objective was to select methods that can be continuously implemented at Werkspot, which facilitates the adoption of more Qualitative approaches.

A LANDSCAPE OF USER RESEARCH METHODS

BEHAVIORAL

- ● / ■ Eyetracking
- ● Clickstream Analysis
- ● A/B Testing
- ■ Usability Benchmarking (in lab)
- ■ *Usability Lab Studies*
- ■ Moderated Remote Usability Studies
- ■ Unmoderated Remote Panel Studies
- ■ Unmoderated UX Studies
- ● Ethnographic Field Studies
- ● True Intent Studies

- ◆ ← *Concept Testing* →
- ● *Diary/Camera Studies*
- ◆ Participatory Design
- ● Customer Feedback
- ▲ Focus Groups
- ◆ ← Desirability Studies →
- ● Intercept Surveys
- ▲ *Interviews*
- ▲ ← Card Sorting →
- ▲ Email Surveys

ATTITUDINAL

QUALITATIVE (DIRECT)   **QUANTITATIVE (INDIRECT)**

CONTEXT OF PRODUCT USE DURING DATA COLLECTION

- ● Natural use of product
- ▲ De-contextualized / not using the product
- ■ Scripted (often lab-based) use of product
- ◆ Combination / hybrid

Fig. 9. A Landscape of User Research Methods (Roher, 2014) *(The four selected methods are highlighted in bold)*

Research methods access diverse layers of knowledge

According to Sanders & Stappers (2012), different research techniques (methods) access diverse layers of knowledge. A correlation can be observed with the techniques and types of knowledge accessed. This influences the reasoning for the categorization between Explorative and Validative Research for Werkspot. By implementing methods such as Interviews, we listen to what people say and think, which corresponds to explicit knowledge. In terms of Werkspot, Interviewing falls mostly into Validative research, although interviews can also be conducted with an Explorative approach. Other methods, such as Observations, account for what people do, which is categorized as behavioral research. Methods such as observation access other layers of knowledge that are deeper and are categorized as observable, tacit and latent. In terms of Werkspot, these fall into Explorative Research.

It is important to create diversity in the research methods selected for Werkspot. This ensures the company can reach deeper layers of knowledge through research.

"Many studies (particularly in market research applications) include only Say techniques, but it is becoming increasingly common to find combinations of Say and Do techniques being used."—Sanders & Stappers 2012

If a company is stuck conducting the same type of research repeatedly, they can miss out on the opportunity of diving into deeper layers of customer knowledge. New knowledge paves the way for unidentified areas of opportunity where companies can expand. By adopting a diversified research approach, Werkspot can obtain a wide variety of customer knowledge. This diversified approach is accounted in the Explorative and Validative Research categorizations for Werkspot. These mostly include what Sanders and Stappers categorize as Say and Do techniques (What people say—Attitudinal, and What people do—Behavioral).

RESEARCH APPLICATIONS AT WERKSPOT

Validative Research
"What people say"

Goals:
Validate concepts and ideas through user feedback.

Explorative Research
"What people do"

Goals:
- Gain understanding on the context of use (before, during, and after and after users come in contact with the product.
- Obtain a deeper understanding regarding the customer journey.
- Discover new areas of opportunity to tackle.
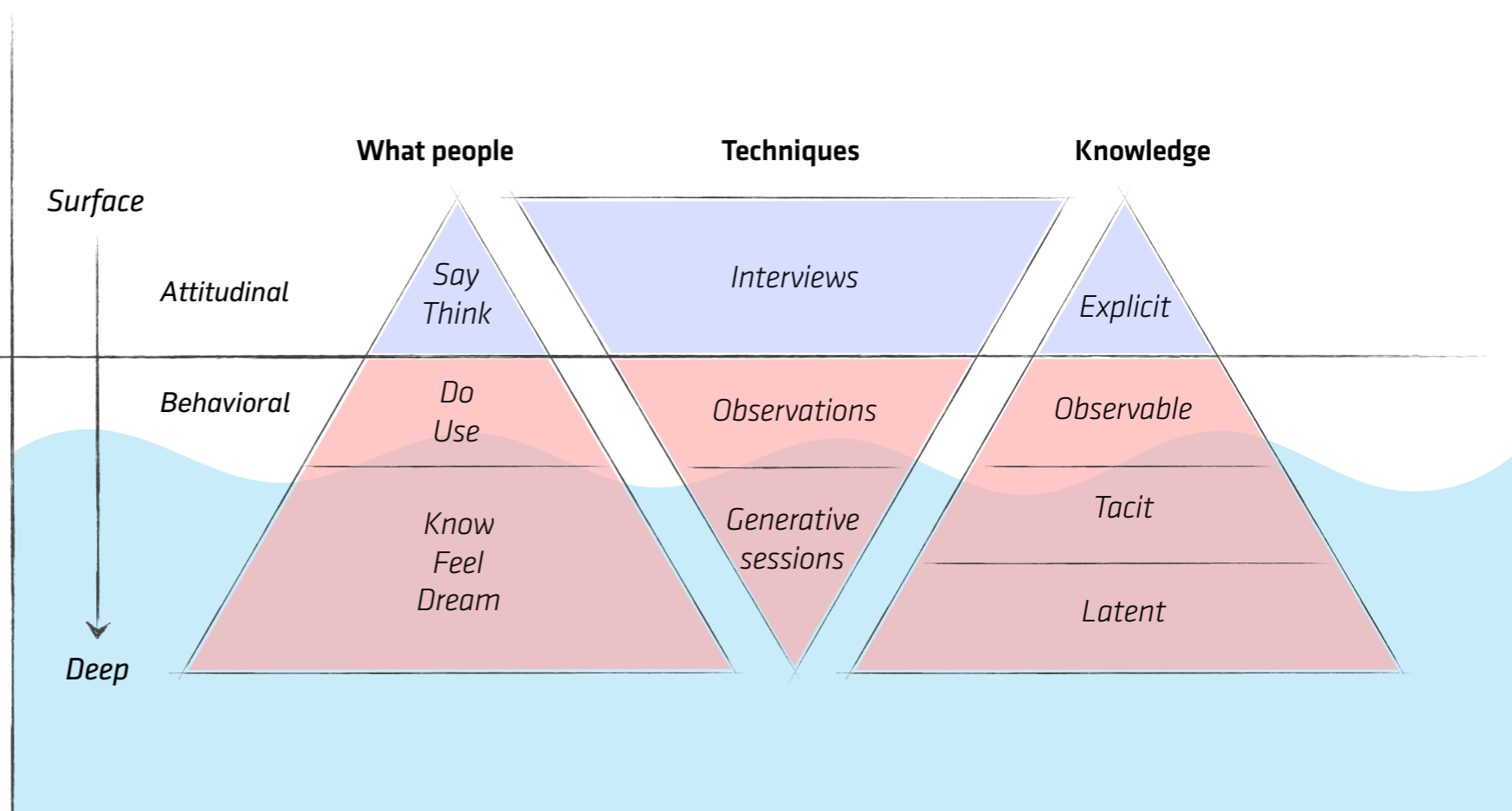
Fig. 10. Convivial Toolbox. E. Sanders, P.J. Stappers (2012)

Surface

Attitudinal

Behavioral

Deep

What people — Say / Think / Do / Use / Know / Feel / Dream

Techniques — Interviews / Observations / Generative sessions

Knowledge — Explicit / Observable / Tacit / Latent

Methods selected to implement at Werkspot:

The four selected research methods aim to expand Werkspot's horizons in terms of Explorative and Validative research. Two methods have been selected for each research category.

Validative Research—

1. **Usability Lab Studies** (further referred to as Usability Test), belongs to the scripted (often lab-based) context of product use. Aims to understand the usability of a product to assess clarity for end-users.

2. **Concept testing** (further referred to as Online Concept Testing), belongs to a combination or hybrid use of context of product use. In the context of Werkspot it was used to validate or invalidate concepts by receiving user feedback and modifying designs to have a better chance of success after development.

Explorative Research—

3. **Diary/Camera Studies** (further referred to as Diary Studies) is part of the natural use of product category. This was conducted as a generative study away from concepts or ideas, with the focus to deep-dive into the consumer experience when hiring a service professional and how the experience is lived by the participant. Gives information about the context of use (before, during, and after interacting with the platform).

4. **Interviews** is part of the de-contextualized / not using the product category. It has a specific topic that needs to be discussed and this is done through a one-on-one, face-to-face conversation. Interviews can also be done remotely.

The most common of the selected research methods is Interviews, this method has been conducted at Werkspot, but not with regularity. Part of the criteria that was established is for research to become a continuous practice at the company. Taking this into account, the interviewing process is examined to be simplified and implemented frequently.

Usability Testing is an initiative that is less within the company's comfort zone. While it was tested in the past, it was done with an open approach and no criteria for continuous Usability Testing had been set. This is a method that can be considered 'extensive' in some cases, nonetheless, through this graduation process, it is proven to be successfully implemented at Werkspot with frequency.

As for Concept Testing, Werkspot was approaching this was by conducting A/B testing in a quantitative approach. As mentioned, the graduation project centres around the adoption of qualitative research. Thus, concept testing is conducted in a qualitative format, taking into account rapidness among other criteria to address the fit with the company.

The one method that had not been explored by Werkspot is Diary Studies. Werkspot does not have a lot of practice with generative approaches. Nonetheless, through the implementation of the proposed Exploratory Research categorization, the main goal is to open the company to generative and co-creative approaches where new areas of opportunity can be discovered.

These selected methods were tested at Werkspot *(For more information please refer Section 4 - Research Case Studies 1-4)*. The objective was to test the methods first hand and conduct adaptations to address the fit with the company. Through the testing of these methods, the process per method was examined to understand how it could be accelerated to work more Agile. This is all done with the aim to create a seamless adoption of research methods into Werkspot's current way of operating.

DESIGNER & DEVELOPER COLLABROATION

"(...) the more a designer can speak the language of their developer peers, the better they can collaborate to get to a stronger final product."

— Braga and Teixeira (2019)

SECTION 4

Research in Practice

CONTENT

04.

SECTION 4

Research in Practice

INTRODUCTION

Section 4 starts with the results from a survey sent out to Werkspot employees. The results echoed the need for more contact with end users and a willingness to participate in research efforts. This is further corroborated when people from diverse areas participated in research initiatives.

This section dives deep into the four research methods that were pilot-tested at Werkspot. Through the Case Studies (1-4), the reader will get familiarized with how these methods were conducted, what were the learnings and areas of improvement. Each method had steps that were modified with the objective to work more Agile and have a good fit with the current work at Werkspot.

## ABOUT THE DESIGNER PROCESS — *Phase 02.* Define

"The second quarter represents the definition stage, in which designers try to make sense of all the possibilities identified in the Discover phase.

Which matters most? Which should we act on first? (...)"
— Council, D. (2015)

Section 4 of the Thesis report, titled 'Research in practice' corresponds to Phase 2 of the Designer Process
(02. Define).
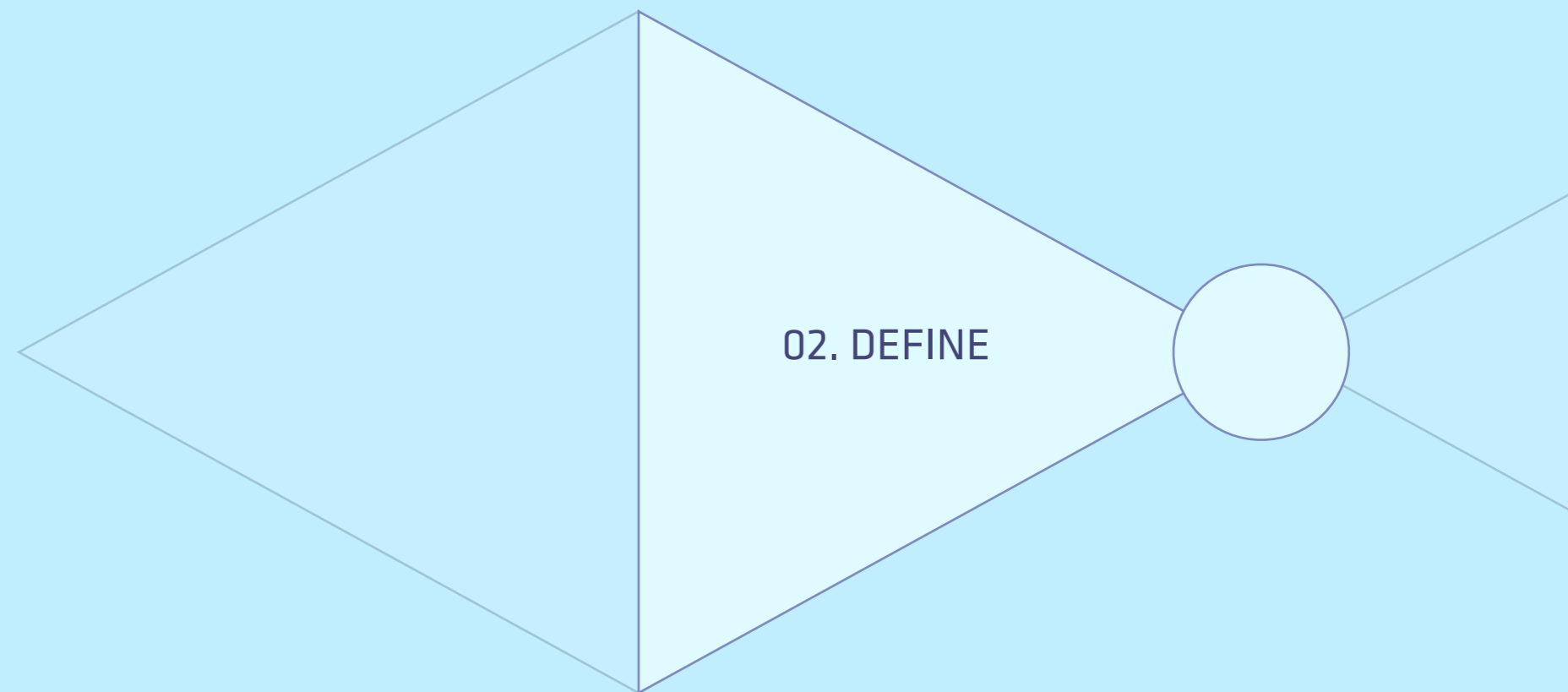
02. DEFINE

4.1 From theory to practice

Section 3 explored the need for Qualitative Research at Werkspot. Starting from a general point of view, customer expectations are addressed. Afterwards, the focus was placed on Werkspot, by understanding the company's needs that drive research. To address these needs, a distinction is proposed between Explorative and Validative Research. Finally, four research methods were selected to be pilot tested at the company. Section 4 goes from theory to practice, by implementing the selected research methods with real consumers. The objective is to get familiarized with these methods and address the fit with the company. This is done in preparation for the creation of a Qualitative Research process for Werkspot.

Understanding the as is Research situation at Werkspot

In preparation for testing qualitative research methods at Werkspot, the internal situation of research was assessed. This was done with the purpose to understand the willingness of people at the company to participate in research efforts. The aim is for people to see the value and join organically, not make research a mandatory endeavor. A survey was designed to assess if people see the value in research and would be willing to participate. Some highlights of the results can be observed in the following figures.

The company is organized in a track structure, which can be described as multidisciplinary teams with an oriented focus. These areas of focus are divided in diverse areas, two of which are consumer focused, and other are focused on the Service Professionals. From the results of the survey, we can conclude that 59% of the respondents belong to the consumer tracks (Consumer Acquisition and Consumer Matching). This is relevant because the focus of the present thesis was conducted with the Consumer Acquisition track. If the tracks that are consumer oriented see the value in research, it can prove easier for qualitative research to be adopted within the organization.

In the survey, one question asked if they had research needs within their tracks. The answers pointed out to the fact that there is a need to better understand consumers and receive feedback. When faced with the question *"How familiarized are you with Werkspot users?"* only 3 people responded to being in constant contact with users. These responses are coherent with the findings and areas of opportunity *(Section 1, page 24)*. It refers to a high volume of people working based on assumptions, due to the fact that they have no direct interaction with end consumers.

What track(s) are you a part of?

- **4%** Opperational Excellence
- **15%** Platform Track
- **19%** Other
- **19%** Service Pro Experience
- **37%** Consumer Acquisition
- **22%** Consumer Matching

27 PARTICIPANTS IN TOTAL
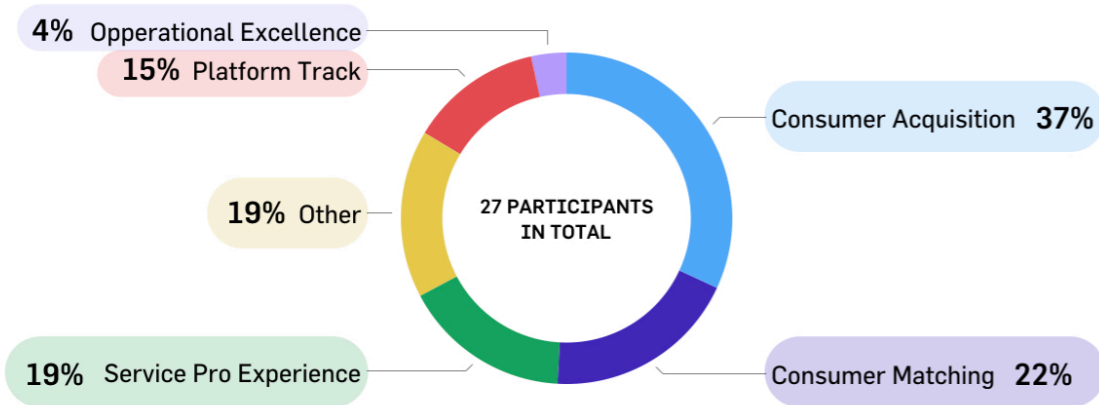
Fig. 11. Survey responses to the question: "What track(s) are you a part of?"

How familiarised are you with Werkspot users?

- **7%** I have never spoken to a user before, and I don't need to. (2)
- **11%** I am in constant contact with Werkspot users. (3)
- **19%** I have not had much contact with users, but I would like to. (5)
- **37%** I know who our users are, but I haven't talked to any of them. (10)
- **26%** Other. (7)
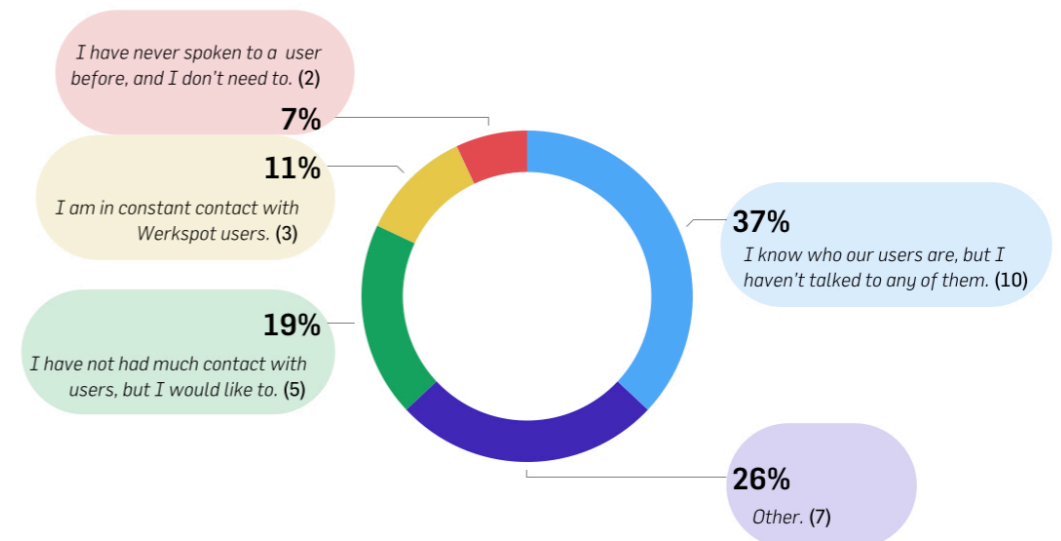
Fig. 12. Survey responses to the question: "How familiarised are you with Werkspot users?"

When asked the question *"Do you consider it important for Werkspot to be more in contact with our users?"*, all 27 respondents indicated yes. This proves to be relevant as there is a need for research and a prevalent perception that user involvement should be more present. But the aim is to actively involve more employees in research efforts, for which the following question as asked: *"If Werkspot were to organize events for us to be more in touch with our users, would you participate?"*. The responses indicated that 93% (25 participants out of 27) would participate in events to be more in touch with platform users. These results speak to a 'willingness' of people to participate and know more about Werkspot's end users. We also seek to assess their 'readiness' and 'ableness'. In accordance to the "Ready, Willing, Able Framework", all three aspects must be present for a change to take place (McCabe et al, 2010).

- **Readiness to conduct Qualitative Research:**
  The "readiness" speaks of a general state of preparedness, in the context of Werkspot, it seeks to convey the overall readiness of the company to implement an organizational change and adopt a new qualitative research process which requires additional resources (time and money) but if conducted could transform in an economical benefit for Werkspot.

- **Willingness to conduct Qualitative Research:**
  On the other hand, "willingness" refers to a favorable predisposition to take part in qualitative research efforts. This would be a "call to action" so to speak, the survey answers pointed out to a willingness to participate, however, people can state a favorable answer and not actually do it, thus, it needs to be proven further.

- **Ability to conduct Qualitative Research:**
  The "ability" refers to the employees possessing the knowhow and tools necessary to take part in research efforts. It's not enough to be willing to do it, there is a previous knowledge that they need in order to ensure valid research outcomes.

The graduation project provides evidence that all three components are present at Werkspot, in order to ensure a favorable outcome when implementing the Qualitative Research Process. These measures are required to make sure that the process achieves long term results and is an accurate fit with the company's current way of operating. The Ready, Willing, Able framework is re-evaluated in the final section of the thesis report.

If Werkspot were to organise events for us to be more in touch with our users, would you participate?

7%
No. (2)

93%
Yes. (25)

Fig. 13. Survey responses to the question: "If Werkspot were to organise events for us to be more in touch with our users, would you participate?"

4.2 RESEARCH CASE STUDIES

The four research methods that were selected (Online Concept Testing, Usability Testing, Diary Study, and Interviews) were pilot tested and reported as Research Case Studies.

What is reported?
Method, process, accelerated phases, and areas for improvement.

CASE STUDY 1: ONLINE CONCEPT TESTING   **CATEGORY:** VALIDATIVE RESEARCH

"A researcher shares an approximation of a product or service that captures the key essence (the value proposition) of a new concept or product in order to determine if it meets the needs of the target audience; it can be done one-on-one or with larger numbers of participants, and either in person or online."

— Nielsen Norman Group, 2014

- **Objective of conducting online concept testing:**

    Evaluate new design for the landing pages (a web page which serves as the entry point for a website).

- **How is it conducted?** Method: Concept comparison

    A/B testing: Conducting a selection between two landing page alternatives (current and new design) and provide written feedback to support the choice.

    It can also be done by comparing 2 or more new designs for the user to make a selection and provide a reason for selecting such option. The users are asked to select the design that would best fit a specific goal, in this case: finding a service professional for their job.

- **Why should Werkspot do online concept testing?**

    It's important to implement a consumer touchpoint and receive feedback on the designs before being development.

    This way, user feedback can be received regarding the design appeal. Most importantly, the company can receive feedback regarding if the customers can accomplish the goals such landinpage is intended for.

- **Who participated in online concept testing?**

    In order to keep a balanced outcome, the participant sample was sent to both Werkspot users and non-Werkspot users. It is important to keep a wide sample because Werkspot is vastly used by new users, so it is relevant to receive feedback from people who have not used the platform yet.

    The online concept testing for the landing pages provided insights to iterate and continue testing. This approach was repeated several times until a significant result was obtained. Significant was defined as a score above 70% of preference for the new design. The number of respondents of the diverse iterations was 300 people (including Werkspot and non-Werkspot users).

Fig. 14. Landing page that was tested with consumers

Elements of the landing page

Trustpilot was included in the landing page to provide more elements to build trust by showcasing the trustworthiness of the platform.

For customers, knowing the price of the service is important and is part of their decision process.

Why to use Werkspot is another section that aims to build trust, especially for users who are new to the platform.

Why to use Werkspot is another section that aims to build trust, especially for users who are new to the platform.

For the users, one of the stages where trust is built is through the service professional's reviews. This was enhanced through the landing pages.

Trigger questions: These questions are integrated in the landing page as a low barrier for the user to start filling the service request.

Online Concept Testing can reach broader audiences

The Online Concept Testing initiative is part of the Product Discovery stage. The goal is to test early on with consumers by presenting non-functional prototypes of landing page (a web page which serves as the entry point for a website). The participants are presented with 2 (or 3 options) in a survey, they have to indicate preference and answer follow-up open-ended questions. The landing page options are tested to asses if the design is aesthetically pleasant, and if it fits with the Werkspot's brand image. Most importantly, the company seeks to understand if the presented content of the landing page is functional and provides sufficient information for consumers to accomplish the goal of hiring a professional for a specific type of job.

Through the method Online Concept Testing, we have managed to receive input from over 300 homeowners in the Netherlands (n=200+), Italy (n=37) and France (n=61). This proved to be very valuable, as we learned from the consumers themselves on the type of content they value on a landing page, and most importantly, why.

The following research questions were developed to be able to gather focused findings from Online Concept Testing:

- What landing page option would users prefer to use when looking for a plasterer online? (the options are the current landing page and the new design)

- What is the reason for selecting this landing page option?

- Keeping in mind that the user is looking for a plasterer online, what information is relevant to users (or currently lacking) in the presented landing page?

- Would users actually use this site to find a plasterer? Why or why not?

- What is the user expectation when continuing the process in this site?

- From the presented content on the landing page, which section proves more useful for achieving the goal of hiring a plasterer?

Figure 15 showcases one of the questions from the qualitative open-ended survey participants received. In this figure, the following question is asked *"Why did you select this option?"*. Users explain in their own words why the selection was made, keeping in mind that the objective is to choose the landing page that would be best for finding a plasterer. The user can scroll freely through the page in a mobile format.

A successful outcome is only achieved when the preference for the newly designed landing page is 70% or higher, which can be observed in figure 16. This was an iterative process, before reaching a successful outcome, the landing pages were improved with user feedback from these surveys.
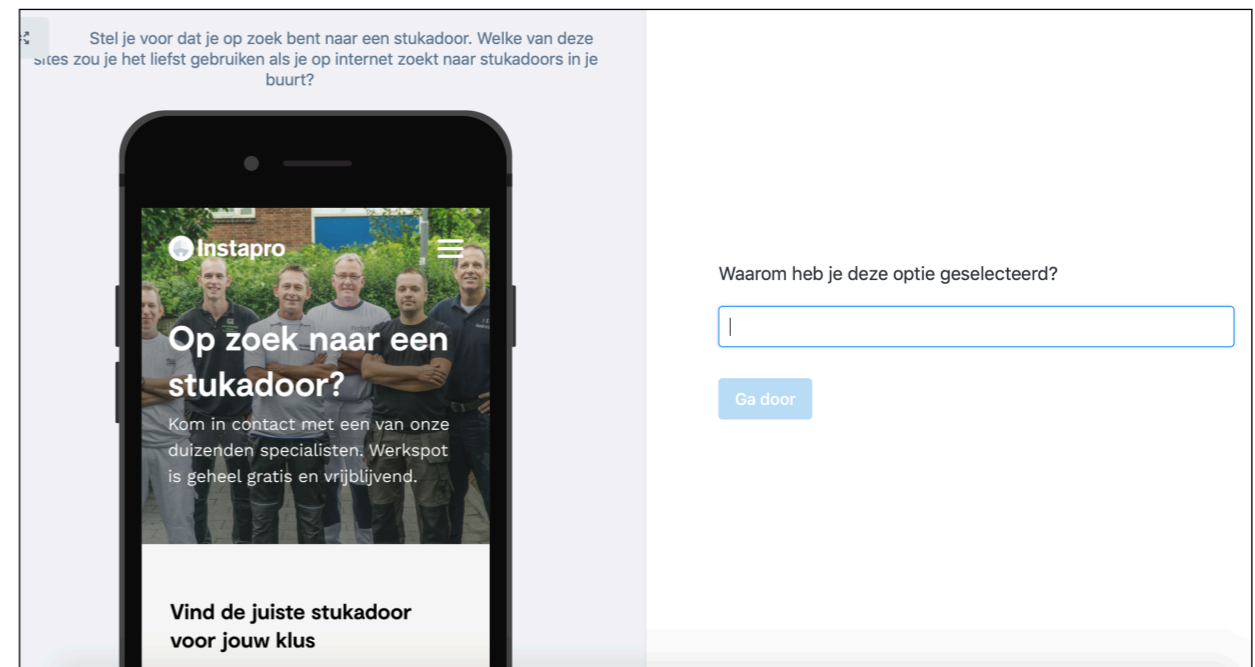
Fig. 15. Screen capture from the open-ended survey conducted

Fig. 16. Result from the open-ended survey, indicating a preference for the new design

Fig. 17. Online Concept Testing - mapping the research process

ONLINE CONCEPT TESTING— RESEARCH PROCESS

SYMBOL	NAME
⬭	Start/End
→	Arrows
▱	Input/Output
▭	Process
◇	Decision
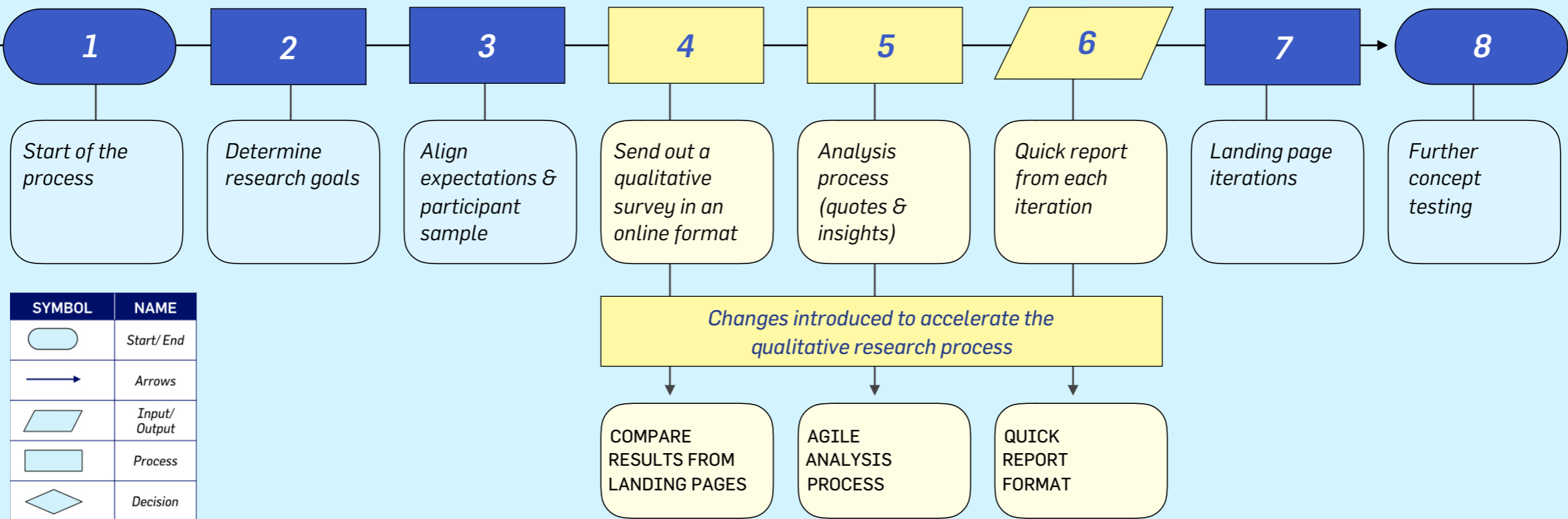
Process used to conduct Online Concept Testing

In order to understand more about the steps taken to conduct Online Concept Testing and how to make it operate more agile, the process was mapped out.

1) Start of the process: when the need arises to conduct concept testing. At this stage, the Discovery Team discusses which initiatives have the priority to undergo a concept validation process. In this case, the landing pages (a web page which serves as the entry point for a website) were selected for a redesign. The aim is to validate before development based on aesthetics and functionality to reach user goals.

2) Determine research goals: The Product Manager, UX Designer and User Researcher discuss how to test the landing pages. At this stage, the research questions are created to determine what information needs to be gathered.

3) Align expectations with co-researcher & determine participant sample: The UX designer works on the concept alternatives that will be tested and the User Researcher prepares the qualitative survey that will be sent out to participants. The Product Manager, UX Designer, and User Researcher align expectations regarding the concepts and survey questions. The participant sample is determined (Werkspot or non-Werkspot users) and the amount of participants is decided (e.g. 3.000 users to increase the chances of obtaining a good number of responses).

4) Send out a qualitative survey: The survey is composed of open ended questions. Through these questions participants are asked to indicate a preference between 2-3 concepts. A reason for selecting such alternative is required. The participant is encouraged to make a selection based on the alternative that would best in achieving the goal of finding a professional to hire.

5) Analysis process: The analysis process uses quotes, and percentages of preference between concepts. This information is interpreted by the User researcher to gather insights that can help to iterate the presented concepts.

6) Quick report format: The report includes insights and feedback to improve the presented concepts in preparation for further concept testing.

7) Design landing page iterations: Iterations are made based on the feedback.

8) Further concept testing until the outcomes are conclusive and significant. (above 70% preference)

How was the process accelerated for a better fit with Agile?

In order to address the fit with Werkspot's current mode of operation, the research methods have to be able to operate rapidly. It can be said that research is made Agile by making certain changes that accelerate the process. This is what is aimed for, as the company needs to make decisions based on research outcomes.

Phases of the Online Concept Testing process that were accelerated:

- **Sending a qualitative survey in an online format:**
  Surveys are not new to Werkspot, but the company was not using this research method for Online Concept Testing. Through this method, Werkspot is able to reach a broader audience to receive feedback on proposed concepts and designs. This is method is operates agile because it does not depend on face-to-face interactions. The survey is sent out to a wide audience and the responses are enriched by the open-ended questions. This allows to receive responses in the participant's own words, which facilitates the understanding of their priorities given the topic of study.

- **Analysis process:**
  The analysis process operates rapidly by relying on quotes which facilitate the understanding of the participant's perceptions. Participant's responses give insight into the percentages of preference for one of the presented concepts (please refer to figure 16 to see the percentages). Insights can be drawn from this information which facilitates drawing comparisons between what is preferred in the Netherlands, versus Italy or France. This process is made agile by being able to collect and analyze the information online. We make use of a platform called UsabilityHub which provides information per participant and overall results. This facilitates a quick analysis process from which conclusions can be reached to make further iterations. A significant result is only reached if the preference for the new design is 70% or higher.

- **Quick report format:**
  A short report format is used to share the learnings from Online Concept Testing. The results showcase the user preference and provide insights into the reasons for selecting a given concept. This report is short and easily shared with Consumer Acquisition track members. Especially the UX Designer, who makes use of this information by making iterations to the landing page so further testing can be done until a successful outcome can be reach. The reports are meant to be quick and in a digestible format because they contain information that must be acted upon.

Areas of opportunity for Online Concept Testing:

Online Concept Testing proved to be a successful method by allowing Werkspot to receive fast feedback on concepts that are being developed. By sharing these concepts early on with consumers, a user perspective is integrated into the design process. Some areas of improvement for further use of this research method include the following:

- **Werkspot user panel:**
  Some companies make use of a panel of consumers who are easily reachable and can participate in diverse phases of the design or development process. If Werkspot nurtures a user group for this purpose, it could prove advantageous for brand awareness and these users could also operate as brand ambassadors.

- **Standard procedure:**
  This method proved to be successful by its implementation to iterate and choose a new landing page design. Conclusive results were reached which allowed Werkspot to choose a user-proof new landing page design that is now being developed. An area of opportunity is to make Online Concept Testing a part of a standard procedure. It is quick, easy, and low investment with a high return in user value.

-

Usability is defined by 5 quality components:

*1) **Learnability:** How easy is it for users to accomplish basic tasks the first time they encounter the design?*

*2) **Efficiency:** Once users have learned the design, how quickly can they perform tasks?*

*3) **Memorability:** When users return to the design after a period of not using it, how easily can they reestablish proficiency?*

*4) **Errors:** How many errors do users make, how severe are these errors, and how easily can they recover from the errors?*

*5) **Satisfaction:** How pleasant is it to use the design?*

— Nielsen Norman Group, 2012

- **Objective of conducting Usability Testing:**

  Usability Testing is one of the most important methods that should be integrated within the development profess of a platform. This is due to the fact that the navigation flows can be complex (e.g. going from Google to the Werkspot platform and posting a job request through a multi-step process). It is important to pilot test these flows with consumers to see if they are able to accomplish the tasks on their own and detect any issues that might be present and can cause conflict through the use of the platform.

- **How is it conducted?**

  Prototype testing: Users are given a task to complete on their own. An observatory role is taken at this stage so that the user can interact freely with the prototype as they would on a real scenario. The user is encouraged to narrate their thoughts as they use the prototype.

  Follow-up interview: The prototype is revisited alongside the users to discuss their experience and go screen-by-screen asking follow-up questions that allow us to understand their point of view better.

- **Why should Werkspot do online Usability Testing?**

  Usability testing should always be done before development process, through a working prototype so that issues can be detected early on and not when the product has already been built. This helps to improve the concepts through user feedback so that they can solve users needs when they are actually developed. This can save the company valuable development time.

- **Who participated in online Usability Testing?**

  Usability testing was conducted with Werkspot users. The participants had an interaction with Werkspot by having posted a service request to the platform in the past.

Usability Testing to fine-tune the user experience

The Usability Test was conducted to understand if consumers are able to complete tasks using the platform. In this case, users were presented a prototype of the service request flow (form to be filled to post a job). Through the Usability Test, users can post a job through a functional prototype. They follow a step-by-step form that begins with the price guide and follows a series of steps by filling out information about their specific job until it has been successfully published to the Werkspot platform. Users are encouraged to use as the real website to understand if the steps taken are logical and understandable. The goal of the Usability Test is to understand from a user perspective if the tasks are clear and understandable. Any parts that are not clear or intuitive for users can be described as usability issues and must be solved before the development process. This way, the user experience can be improved by taking into account a user-centered perspective.

The service request was created as a functional prototype that users could interact with and fill information, but it was not part of the actual Werkspot platform. This type of test is useful to provide insight into the experience of a user by following along with them. The method for such test includes observation of the user interacting with the prototype, followed by an in-depth interview to better understand the pain points or highlights from their experience. The Usability Test follows a step-by-step from to complete a task, the ideal method for capturing such information is a Consumer Journey. Journeys visibly represent the pain points and highlights from each participant's experience. This facilitates comparing how each participant experienced the prototype and if there are commonalities within the usability issues that were detected.

The test subjects for the usability test were people who had used Werkspot some years ago, this meant that they are familiar with the platform, but they had not interacted with the most recent changes that Werkspot had implemented. Due to the extensive nature of the test, it allowed us to get a better picture of who the consumers are. This evidenced some of the reasons why consumers choose to hire a professional online, or why they prefer not to. This is crucial as we seek to understand more about the moments in which trust is built so that Werkspot can provide a positive experience and address consumer anxieties that might be preventing them from using the service.

The following research questions were developed that we aimed to answer through the Usability Test:

- Do users understand what the platform is about?

- What information do consumers need before they hire a professional?

- Are consumers able to find a price estimation on the price guide?

- What is the consumer expectation when clicking on the CTA (call to action) "Post your job"?

- What is the consumer experience while posting a service request?

- Do consumers have all the information needed to fill in the service request form on their own?

- Are there any steps that consumers have trouble with? Why?

- Are the areas of trouble similar for all participants?

- What are consumer anxieties that limit them from using Werkspot?

USABILITY TESTING— RESEARCH PROCESS

Fig. 18. Usability Testing - mapping the research process

SYMBOL	NAME
⬭	Start/End
→	Arrows
▱	Input/Output
▭	Process
◇	Decision

1 Start of the process
2 Research goals & interview guide
3 Briefing co-researchers
4 Conduct Usability Test (observations & interviews)
5 Debrief from usability test with co-researchers
6 Analysis process
7 Report from Usability Test
8 By sharing the findings the process is finalized

Changes introduced to accelerate the qualitative research process

FOCUSED GATHERING OF INFORMATION

DEBRIEFING SESSION WITH CO-RESEARCHERS

AGILE ANALYSIS PROCESS AND JOURNEYS

TRIGGER CURIOSITY FOR RESEARCH

Process used to conduct Usability Testing

1) Start of the process: when the need arises to conduct Usability Testing. The Product Manager, UX Designer, and User Researcher discuss what concepts have the priority to conduct Usability Testing. In this case, it was decided that the Service Request flow (subsequent steps a customer takes to post a job in the platform) was going to be tested for any usability issues that might arise.

2) Determine research goals: The goals of the research study are determined by the Product Manager, UX Designer, and User Researcher. At this stage, the UX Designer focuses on preparing a working prototype users can test, and the User Researcher creates interview guide that will be used for the Usability Test.

3) Briefing co-researchers: An invitation is extended for other track members to participate in the Usability Testing. They take part as observers or co-researchers. This means that they can observe and take focused notes, or they can participate in asking follow-up questions to the users.

4) Conduct Usability Test: The Usability Test is conducted. First the user experiences the prototype by himself with a task to fulfill. The researchers take an observing role. Afterward, an interview is conducted to clarify the participant experience while using the prototype.

5) Debrief from usability test: A debrief session is conducted with the co-researcher(s). The aim is to align on what was observed from the interview and their perception about the participant's experience with the prototype.

6) Analysis process: The analysis process is conduced by reviewing notes and the footage from the session, the participant's face and the mobile screen with the prototype are both recorded. The goal is to match usability issues at with participant's quotes. The information is gathered in an Experience Journey Map.

7) Report from usability test: A report is created to convey the findings. It highlights the screens of the prototype that were categorized as useful or enjoyable. On the other hand, it also captures any usability issues that were present. This is mapped out in an experience journey format to visualize high points and low points.

8) By sharing the findings the process is finalized: This is done through presentations with track members. An open invitation is encouraged for other track(s) that want to join to hear the findings.

How was the process accelerated for a better fit with Agile?

As it has been previously mentioned, the research methods that were pilot-tested had to be modified to operate more rapidly. This would facilitate the integration within the Agile working process that exists at Werkspot.

Phases of the Usability Testing process that were accelerated:

- **Conduct Usability Test:**
  Usability Tests had once been conducted at Werkspot, it was not a method used with frequency, nor used as a standard practice. In order to make this method easier to implement within Werkspot's current operation, the test itself can be improved by implementing a focused gathering of information. This was accomplished by developing an Experience Journey Map format. This is similar to a Customer Journey, but it differs by mapping out the end-to-end experience matched with the screens from the prototype, and aligned with the participant's reactions and quotes. This format facilitates a focused gathering by knowing upfront which information is required for the analysis process.

- **Debrief session from Usability Test:**
  Through the debrief session that is held with the co-researcher(s), the findings are aligned. This is useful in accelerating the analysis process by not relying in one single observation or interpretation. A consensus view is reached by the researchers and observer(s) or co-researcher(s) involved in the Usability Test.

- **Analysis process:**
  The analysis process is made more agile by not creating full transcripts from the test. The richness is instead captured by reviewing the researcher's notes and the footage from the session. This information is filled in the Experience Journey Map which offers a complete overview steps taken to fill in the service request form and the usability issues participants encounter in the process.

Areas of opportunity for Usability Testing:

The first misconception about this method is that it is too extensive to conduct with frequency. This was disconfirmed by conducting multiple Usability Tests throughout the duration of the graduation project. Some areas of improvement for the method are the following:

- **Remote Usability Test:**
  Usability Tests can be conducted remotely through diverse research platforms that offer this service. This is an area of opportunity that can be explored by Werkspot to expand the reach of Usability Testing. The preferred alternative is face-to-face to interact with participants and clarify with them, but remote tests can prove to be an asset for research in multiple countries.

- **Standard practice:**
  This type of test is very useful and can save the company time and effort by detecting issues before development. Thus, it should be set as a standard practice that can be easily conducted with Werkspot users by presenting them with diverse prototype formats (low or high fidelity).

- **Sharing knowledge:**
  This method has proven very useful and other tracks from Werkspot can also benefit from it. By sharing learnings on the method, its use can be expanded within the company.

What is the outcome from Usability Testing?

The data was analyzed by analyzing each step of the service request flow to be able to draw comparisons on the experience from all participant. An Experience Journey Map was used to share the findings. The emotions and reactions from the participants reflected the pain points or highlights from the experience in a visual an engaging way.
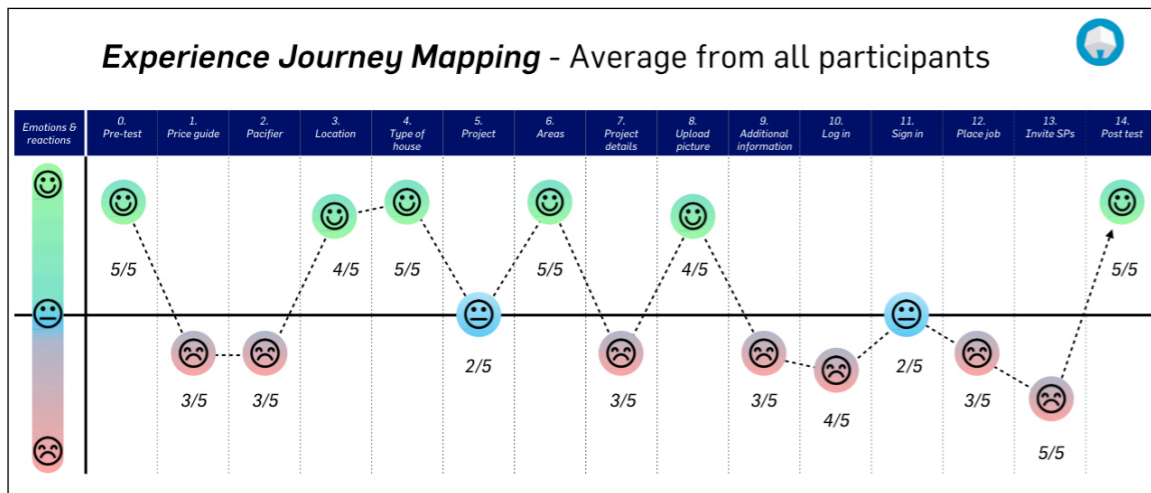
Fig. 19. Experience Journey Mapping - Average from all participants from the Usability Test

The selected format, Experience Journey Map, proved to be a successful tool to present the rich data obtained from the Usability Test and be able to efficiently communicate it to an internal audience. The outcomes were useful for both the Consumer Acquisition track (CSA) and the Consumer Matching track (CSM) as the end-to-end customer experience touches upon areas that are pertinent to both tracks. The learnings can be used to improve the overall experience for users.

A report format was developed to compile all the feedback received in the step-by-step form that is the service request flow. An example of how the insights and user quotes were presented can be found below (For more detailed information, please refer to the appendix).
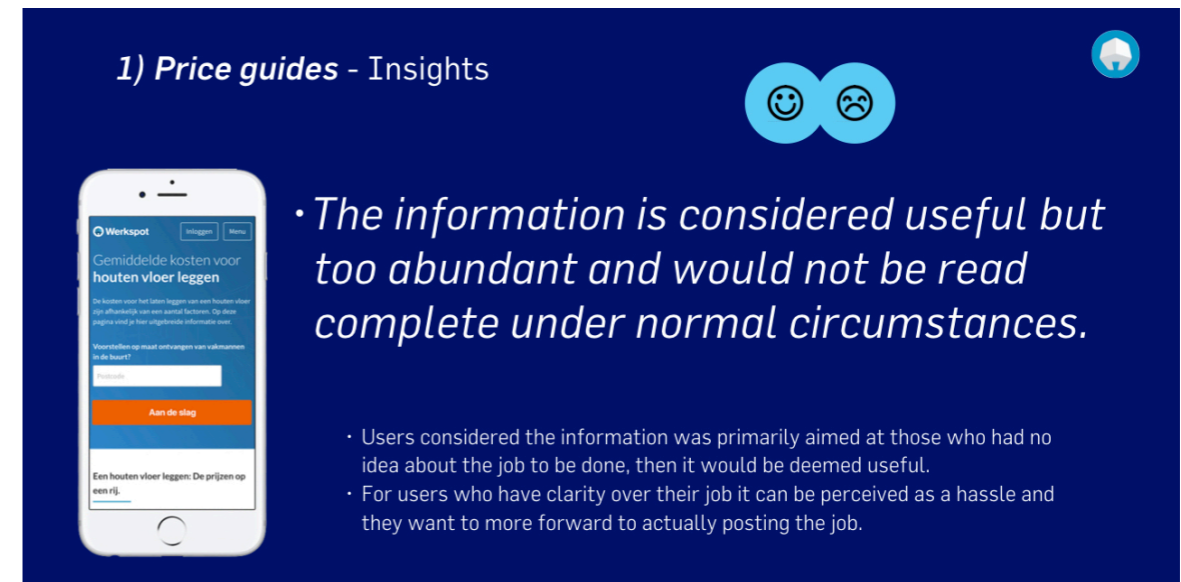
Fig. 20. Usability Test for the Service Request Flow - Price guide insights
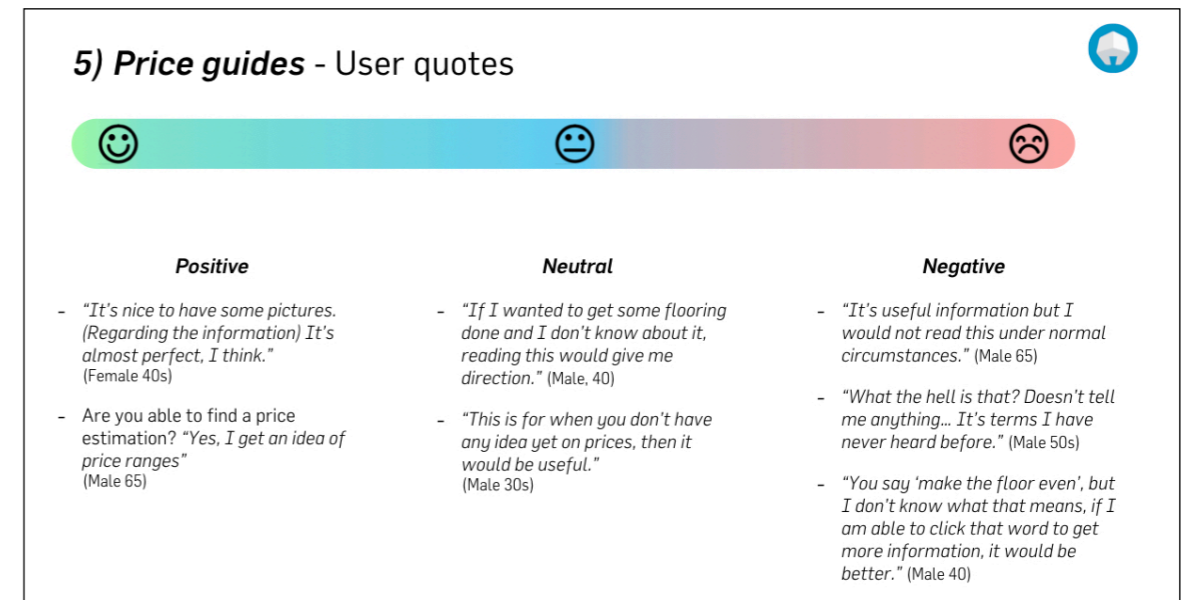
Fig. 21. Usability Test for the Service Request Flow - Price guide - User quotes

CASE STUDY 3: DIARY STUDY   **CATEGORY:** EXPLORATIVE RESEARCH

In Diary Studies, a log of participant activities is kept over a certain period of time. This can be done in diverse ways: through video recordings, physical diaries with daily activities, or daily conversations with participants.

- **Objective of conducting Diary Studies:**

  Get a better understanding of how consumers experience renovation projects over time, including what means and channels they are using to reach their goals (external and/or Werkspot).

- **How is it conducted?**

  Screening process: People are invited and the criteria for participation is set. Subsequently the participants are screened according to the goal of the study.

  Diary logging period: One week (or more) in which there are daily WhatsApp conversations with homeowners. The topic is their renovation process and its different stages. This data that is logged and analyzed.

  Customer journey: The rich data obtained from conversations with consumers is transformed into a customer journey. The ups and downs of the renovation process are made visible.

  Debrief session: After the logging period, there is a follow up interview with participants.

  Sharing findings: The overall findings are transformed into insights and recommendations to be shared at Werkspot.

- **Why should Werkspot do Diary Studies?**

  Diary Studies give insight into many relevant consumer aspects. We can learn about the other alternatives consumers use to fulfill their goals. This way, Werkspot can develop a better understanding into who the competitors are in terms of consumer attention, value, and satisfaction. On the other hand, Diary Studies give a complete picture overview over a specific topic (in this case, a renovation process), which allows to detect opportunities that have not been explored before.

- **Who participated in the Diary Study?**

  The Diary Study was a cross-track initiative between Consumer Acquisition and Consumer Matching. This is relevant because the consumers experience one single journey, and as a company, it's important to collaborate towards delivering a homogenous end-to-end experience.

  The Diary Study participants were recruited through social media and networking. After an introductory conversation, 4 participants were selected. They were all in different stages of the renovation process, which gave insight into the context of use, before, during, and after using Werkspot or a competitor. Having used Werkspot to hire a professional was not a pre-requisite, the aim was also to explore competing alternatives.

Diary Studies provide rich insights into the renovation process

The Diary Study is part of the Explorative Research category. Through a one week logging period, daily conversations are held with homeowners regarding their renovation process. The researchers interact with users and explore main themes while also diving deeper with specific follow up questions to get a broader sense of the individual context.

This is the most extensive type of research that was conducted throughout the graduation project, and as such, it required more than one active researcher gathering data during the logging period. It also proved to be the perfect opportunity to implement cross-track collaboration by working alongside the Consumer Matching track (CSM).

In order to accelerate this research process, the process was mapped to explore which changes would allow the method to operate faster and be a better fit with Agile. A social media and networking recruitment process was held by making use of filtering questions to determine which participants fit the criteria (lives in the Netherlands, homeowner, has undergone a renovation process recently or is currently undergoing the renovation process). Traditional Diary Studies regularly operate by sending participants a booklet to fill in with daily tasks over a one week period (or even months). In order to operate faster, this diary study was conducted over What's App. This allowed to explore the main topics of the renovation process, and allowed us to react on the spot and clarify through follow up questions per participant. All necessary information was sent via What's App, including a briefing document that explained the study and used examples to clarify what we wanted to know about their renovation process. We encouraged all participants to be proactive and send any information that would be useful, even if it was not specifically asked for. Having all information online facilitated an agile analysis process by being able to search and categorize the participant data. This was used to develop one Consumer Journey per participant and was presented to them during the follow up interviews. The reason for presenting users with their journeys was to receive their input on how accurately their experiences were represented. As well, to add any information that might be missing. The research goal was to dive deeper into each participant's experience through their renovation process.

The participants that took part in the study were in different stages of their renovation process and had taken different steps to achieve their goals. Nonetheless, patterns were uncovered through their individual processes that help us get a better picture of the overall consumer journey, even before Werkspot comes into the picture, and after the renovation has been finalized. This information proves useful for Werkspot and allows us to explore areas beyond the current offering.

Some of the results obtained from the Diary Study can be observed in the following images:

Fig. 22. Diary Study: Example of the findings obtained.

Insight

Trust online comes with difficulty, but it is helped by evidence of quality.

Recommendation 1

Werkspot could provide more trust by aiming to increase the number of reviews and making the reviewing process easier.

Findings

#Fear of the unknown

- Skeptical users are more likely to react against anything that is considered to be 'strange'.
  - **Examples:** Service Professional's communication skills, how often they communicates, etc.

" When I have the **slightest weird feeling about it, it's a NO**. A comment that I might think 🥴 or the contractor himself makes a weird response, then whatever... (I drop it and look somewhere else) "

Desiree,
Full house renovation

Fig. 23. Diary Study - mapping the research process

DIARY STUDY— RESEARCH PROCESS

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

| Start of the process | Planning and preparation | Participant recruitment process | Pre-study briefing session | Logging period & creating Customer Journeys | Post-study interview | Data analysis & creating report | By sharing the findings the process is finalized |

SYMBOL	NAME
⬭	Start/End
→	Arrows
▱	Input/Output
▭	Process
◇	Decision

Changes introduced to accelerate the qualitative research process

| ONLINE RECRUITMENT THROUGH SOCIAL MEDIA | REMOTE BRIEFING SESSIONS VIA WHATS APP | DIARY LOGS VIA WHATS APP CONVERSATIONS | INTERVIEW VIA SKYPE WITH CONSUMER JOURNEY |

Process used to conduct a Diary Study

1) **Start of the process:** By setting goals of the Diary Study. This type of study has a generative approach, it is not dependent on concepts. This initiative was picked up by the two User Researchers from Werkspot (one from the Consumer Matching track and the second from the Consumer Acquisition track). In this case, the objective was to explore the renovation process homeowners undergo.

2) **Planning and preparation:** This stage is crucial because Diary Studies have not been conducted at Werkspot before. At this stage, the phases of the renovation were mapped out so that the participants could be easily categorized according to predefined renovation stages. The goals of the study were fine-tuned and the method was decided. For this test, it was decided to use WhatsApp as the medium of communication with homeowners during a one week period.

3) **Participant recruitment process:** For this study, it was an open invitation sent out through diverse networks and social media. We asked for specific characteristics and had a conversation prior to selecting people as participants.

4) **Pre-study briefing session:** At this stage, we aligned expectations with the participants. Instructions were given, as well, examples of detailed answers we were expecting on their part.

5) **Logging period:** This period lasted for a week in which the renovation process each participant experienced was explored. Daily conversations allowed to ask many questions in an organic way and clarify with participants. At the end of the week these conversations were used as input for the creation of preliminary customer journeys from each participant's renovation process.

6) **Post-study interview:** The participants were asked to participate in a remote interview via Skype. The objective was to ask follow-up questions from the conversations had throughout the week. Most importantly, participants were shown their own customer journeys and they contributed with feedback or by expanding the journey with more content.

7) **Data analysis and creating report:** Insights and comparisons were drawn using the data from the conversations, interviews and customer journeys to create a report.

8) **Sharing findings:** Multiple sessions were held to present the findings.

Participant: Vaiva. **Status: Renovation done, only one pending appointment with the contractor.**

PHASES	01. EXPLORATION				02. PROPOSAL/ QUOTE			03. EVALUATING			04. FULFILLMENT		
SUB-PHASES	BUYS FLAT	NEED FOR RENOVATION	SEARCH FOR SP	JOB UNDERSTANDING	RECEIVE QUOTE/ PROPOSAL			INSPIRATION	WAITING/ DECIDING	MATERIALS	RENOVATION PROCESS		
GOALS	Acquire new house	Renovate new house	Find a reliable professional	Understand price, materials, etc	Get informed on prices	Define materials and areas to renovate	Accept or modify proposal	Search for inspiration for renovation	Deciding on colors and final materials	Receive materials for renovation	Start the process	Complete the process	Good results
ACTIONS	Buys flat in August 2018	Immediate need to renovate	Key: RELIABLE	Professional comes for house visit	Receive quote after home visit via email	Define materials and house areas.	Accept price or make modifications	Pinterest for bathroom ideas	Weeks in between accepted proposal and renovation start	Some materials bought by consumer and others by professional	Started while they were away on holiday		
			Contractor recommended by friends	March holiday, professional can work meanwhile	Fix walpaper, square meters, walls to paint, electricity sockets, hourly rate.				Deciding on final details	Receive tiles from Hornbach	Bathroom renovation		
				Professional recommends paint, tiles, etc					Visits tile shop: not right color		Painting walls		
				Need to install curtains					Hornbach: buys tiles for home delivery		Curtain installation		

FEELINGS (Emotional journey)

HAPPY/ SATISFIED — Just bought new apartment · More clarity on renovation after SP visit · Receives and reviews proposal · Inspiration on Pinterest · Receives materials for renovation · Other than the curtains, satisfied with job

INDIFFERENT — Store visit to find materials · Not able to order materials online · Had to carry heavy tiles to the apartment · Taking out rubish from renovation, can't be taken out into the regular trash

SAD/ DISAPPOINTED — Need for a renovation · Uncertain: unfamiliar with Dutch language · Uncomfortable to cover furniture · No clear information on curtain - ordering and istallation · Professional and store gave contradicting advise on curtains · Curtain pole bended due to weight

Fig. 24. Diary Study - Participant journey

In order to achieve a good fit with Agile, certain phases of the process were accelerated:

- **Participant recruitment process:**
  This study had an open approach towards recruitment. By looking for participants in diverse networks such as word of mouth recommendations or social media, we were able to find a diverse sample of homeowners undergoing a renovation process. This process was made fast by recruiting through diverse channels. The participants were screened through conversations to assess if they were the right fit for the study.

- **Pre-study briefing session:**
  To align expectations with participants, a short briefing session was held. This was done, like the rest of the study, via WhatsApp. It facilitated the participants asking doubts and learning from what was expected on our part. WhatsApp facilitated making the process fast and within the participant's comfort zone.

- **Logging period:**
  Daily conversations were held in an organic thanks to communication via WhatsApp. This also facilitated the analysis process by having all information in a digital format from the start, which allows to categorize information easily.

- **Post-study interview:**
  The follow-up interview was held via Skype. This proves to be low entry a participants are used to Skype and feel conformable using it to communicate. It was a quick an easy way to receive consumer input regarding their Customer Journeys.

The diary studies are a powerful research method which gives insight into the complete renovation process, and the participant's context of use (before, during, and after the renovation). It allows to explore the role of Werkspot and the competitors that are present as diverse alternatives for consumers. Some of the areas of opportunity include the following:

- **Setting schedules from the start:**
  This was the first time Werkspot conducted a Diary Study, it was a good way to get familiarized with the method. A learning was to set schedules from the beginning. Participants are encouraged to respond in their own free time, but sometimes this can be late at night and the researchers have to be available to respond with follow-up questions. For future studies, schedules will be discussed with participants prior to the study.

- **Diary Studies require more than one researcher:**
  This method can have diverse applications and the gathered insights are very valuable. Nonetheless, it requires a researcher team of at least two persons. Managing participant conversations and replying on the spot is no easy task, so multiple researchers have to divide participants and assume the task of the daily conversations and follow-up questions. An area of opportunity is to involve more track members would for further Diary Studies, which require a daily commitment for a one-week period.

"A researcher meets with participants one-on-one to discuss in depth what the participant thinks about the topic in question."

— Nielsen Norman Group, 2014

- **Objective of conducting Interviews:**

  Interviews are conducted to assess a consumer's perception regarding a topic; the chosen topic can be broad or specific. The nature of this study is not to validate, but to obtain a consumer's point of view. Thus, it can be used to explore consumer perceptions and develop understanding around a given topic.

- **How is it conducted?**

  Defining a topic: A topic is defined for Werkspot to explore consumer perceptions about it. For this case Study, it was decided to explore consumer perceptions regarding the Directory page (service professional directory page from Werkspot).

  Approach: It can be decided to do different type of interviews. A structured interview follows closely an interview guide, as for a semi-structured which can have some variation between the interview guide and follow-up questions that arise through the interview.

  Selecting participants: At this stage, it is decided to recruit within the company's consumers or non-Werkspot users.

  Conducting user interviews: The user interview has an approximate duration of 1 hour per participant. This is usually conducted through face-to-face interviews, although it can also be done remotely.

- **Why should Werkspot conduct Interviews?**

  User Interviews are a common method due to the nature of this research. It is not concept dependent, so it can be conducted at any moment with an exploratory approach towards a given topic. It provides insights into the way consumers approach different topics and allows us to understand more about their decision making process. It can also uncover information about possible competitors. (Diary Studies resemble the semi-structured interview format, but differ in having daily touch points, while interviews are a one-time occurrence.)

- **Who participated in the Interviews?**

  The sample of participant for the interviews were people who have used Werkspot to submit a service request for a given job. The aim was to have a semi-structured interview regarding their perception of a Directory page and the categories that they consider important when searching for a service professional to hire.

Interviews are a good way to understand user perceptions

The User Interviews are part of the Explorative Research categorization, and as such, seek to explore consumer perceptions on specific topics. They focus on what "people say" as users are not actively performing a given task, in comparison to the Usability Test. The interviews were all conducted out of context, by receiving interviewees at Werkspot's office in Amsterdam.

Prior to the interviews, several stakeholders from the Netherlands, France and Italy came together for a workshop in which the future of the Service Professional Directory was discussed. After proposing ideas there was a consensus on which type of information could prove useful for consumers and it was decided that rather than working based on business assumptions, consumers would be directly approached and asked about such information that could help facilitate the hiring process when searching for a service professional in Werkspot's directory page.

The research goal of the interviews was to be able to talk to customers and listen to their opinion regarding what we refer to as the Directory flow. This was done by asking about a scenario in which they start at Google searching for a plasterer and enter the Werkspot Directory page. At that stage users would be presented with filters and categories to search for professionals. The aim was to understand if the process is logical from a consumer point of view. Sketches to exemplify the type of categories that would be presented (e.g. Stukadoors in Amsterdam die nu beschikbaar zijn - translation: Plasterers in Amsterdam that are available now).

The interviews were conducted with co-researchers (Product Manager and UX Designers). This co-researcher method proved successful during the Usability Test by integrating multiple perspectives and observations from the interviews. The process was mapped out to understand the steps involved and how the process was accelerated to have a better fit with Agile.

As this is an Exploratory Research, the objective is to explore in depth what users are looking for when "browsing" through professionals in the Directory page. Patterns from these interviews can facilitate an overview regarding which categories would help users to search for professionals.
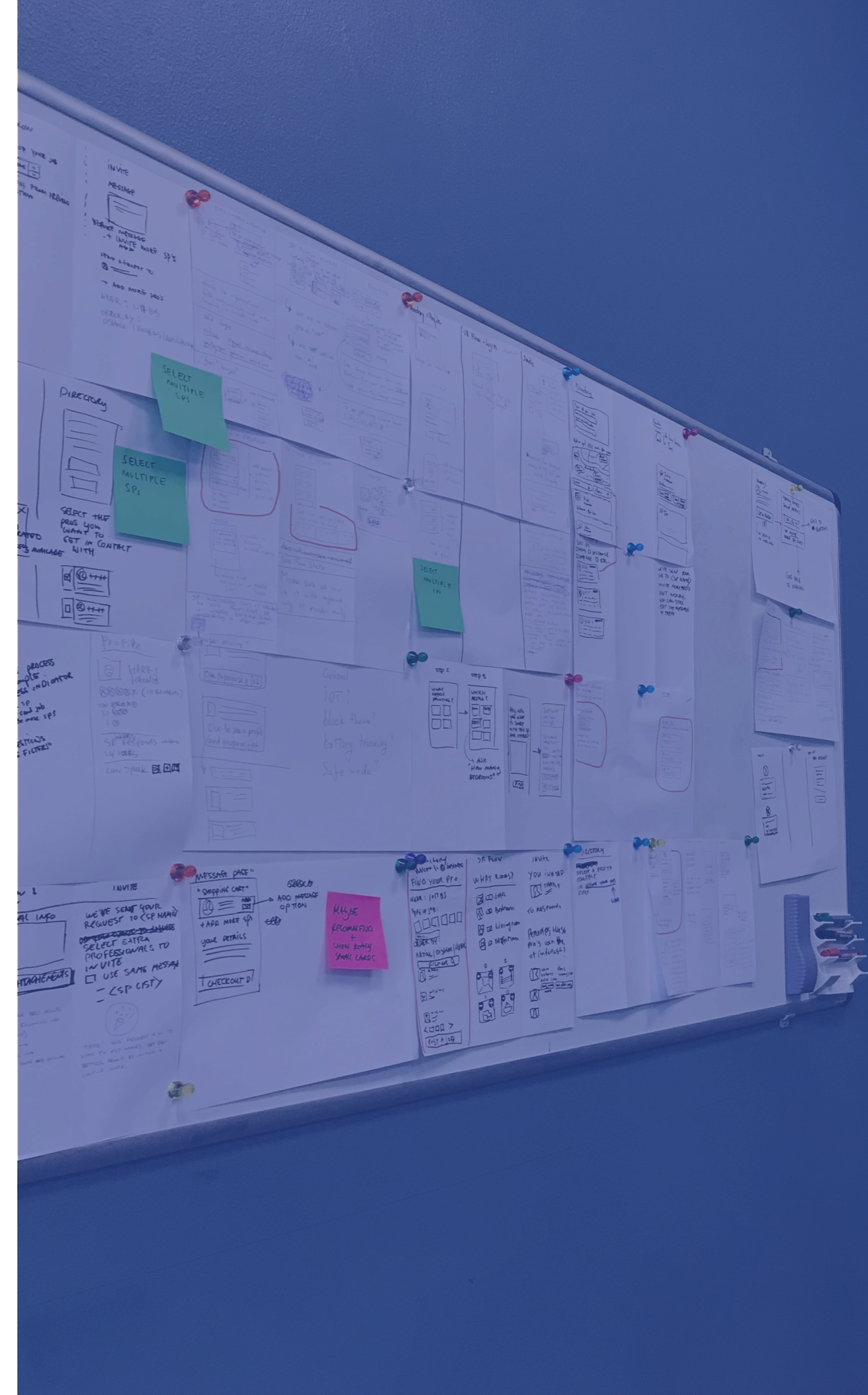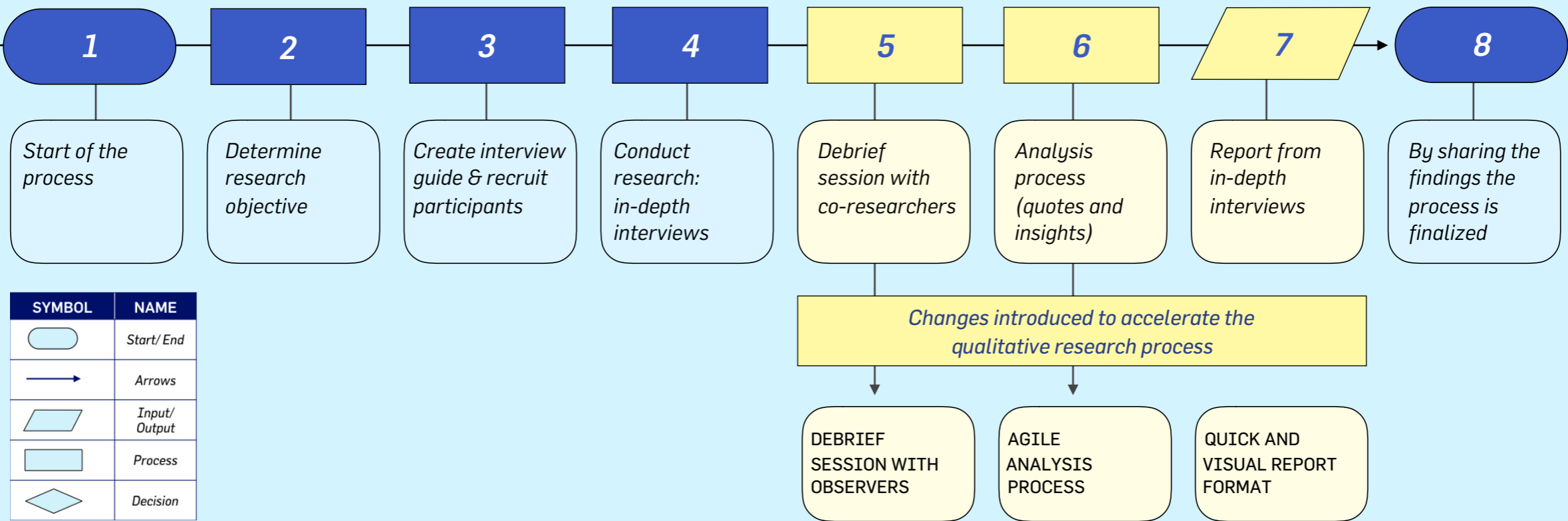
Fig. 25. Interviews - mapping the research process

INTERVIEWS— RESEARCH PROCESS

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

1 Start of the process

2 Determine research objective

3 Create interview guide & recruit participants

4 Conduct research: in-depth interviews

5 Debrief session with co-researchers

6 Analysis process (quotes and insights)

7 Report from in-depth interviews

8 By sharing the findings the process is finalized

SYMBOL	NAME
⬭	Start/End
→	Arrows
▱	Input/Output
▭	Process
◇	Decision

Changes introduced to accelerate the qualitative research process

DEBRIEF SESSION WITH OBSERVERS

AGILE ANALYSIS PROCESS

QUICK AND VISUAL REPORT FORMAT

Process used to conduct Interviews

1) Start of the process: When the need arises to receive consumer input through Interviews. This can be discussed by the Discovery Team collectively or by any of its members including the Product Manager.

2) Determine research objective: This is normally done by the Product Manager, UX Designer, and UX researcher (commonly known as the Product team). The objective of the interviews is determined, this can be a topic that the Werkspot can benefit from gaining knowledge on. The topics can be general or specific (e.g. a renovation process, or the consumer's experience with Werkspot.)

3) Create interview guide & recruit participants: The interview guide is created by the User Researcher in accordance to the research objectives that have been determined. The interview approach can vary from a structured interview that follows the interview guide closely, or it can be a semi-structured interview that makes use of an interview guide but has more flexibility. The participants for the interviews can be Werkspot or non-Werkspot users.

4) Conduct research: The interviews are conducted by the User Researcher, other people from Werkspot are encouraged to participate as observer(s) or co-researcher(s). This depends on the level of involvement, from observing and taking focused notes or as co-researchers asking follow-up questions throughout the interview.

5) Debrief session: This is a short session with the observer(s) or co-researcher(s) to align on the findings from the interview.

6) Analysis process: The analysis process relies on analyzing quotes to explore the topics of the interview. Insights can be drawn with the provided data.

7) Report from in-depth interviews: A report is created to compile and be able to share the findings in the form of insights. Recommendations can also be made depending on the content of the interviews.

8) Sharing the findings: The process is finalized through sessions where the findings are shared with track members. External tracks participation is also encouraged, as the topics might be of interest for multiple areas of the company.

How was the process accelerated for a better fit with Agile?

Making certain phases operate faster allows for the research methods to be more easily adopted at Werkspot. The phases of the process that were accelerated are the following:

- **Debrief session:**
  This short session with the observer(s) or co-researcher(s) helps to focus the gathered findings right after the study is conducted. A consensus view can be reached by discussing the findings each researcher observed from the interviews.

- **Analysis process:**
  The analysis process makes use of quotes to explore the topics of the interview. Interview transcripts are not encouraged due its time consuming nature, the depth of the study relies on focused quotes that explain the participant's perception on a given topic of interest. Insights are drawn from the gathered data.

- **Report from in-depth interviews:**
  A quick report format is used to give an overview into the highlights of the interview. This quick format aims to inform other people about the content of the interview and to be easily comprehended.

Areas of opportunity for Interviews:

The interview is the most common research method from the four that were selected to be conducted at Werkspot. These interviews can be easily integrated within weekly operations, which facilitates the adoption into the company's current operation. Some of the areas of opportunity encountered are the following:

- **Interview training:**
  Skilled interviewers are well versed in soft skills to make users feel comfortable and open up more easily. This is a skill that can be acquired through practice. People who are interested in research at Werkspor and have never participated in one can assist to a quick session to be prepare for the interview process.

- **Format for focused findings:**
  When observers or co-researchers were asked to take notes on their own, these could prove to be quite general. An area of improvement can be to create formats to unify the findings and give observers a better idea on what kind of information needs to be gathered from the interview.

4.3 Criteria for Valid Research Outcomes

Once the Research Case Studies were successfully concluded, it proved that making use of diverse research methods within the Qualitative Research spectrum can help the company to best understand it's end customers. Whether it is to validate a concept or idea for a new feature (Validative Research), or explore consumer behavior (Explorative Research), it proves relevant to maintain open lines of communication with the end users. Only they can accurately depict their own experiences. This was effectively done and proven through the Research Case Studies. Nonetheless, an important consideration throughout this project was to make sure the right criteria were taken into account to deliver trustworthy and valid research outcomes. The following diagrams (Fig. 26-28) represent the initiatives implemented throughout the Research Case Studies to ensure valid research outcomes.

VALIDITY

INTERPRETATIVE VALIDITY

Trying to use the words and concepts of the people studied.

DESCRIPTIVE VALIDITY

Factual accuracy of the data, recording and transcribing

DEPENDABILITY

- Consistent & stable over time.
- Answers your research questions

Fig. 27. Validity strategies used throughout the research process (Ravitch, 2015)

TRIANGULATION

PERSPECTIVAL TRIANGULATION

Participants:
different occupations, age ranges, gender, etc.

INVESTIGATOR TRIANGULATION

Multiple researchers
involved in the study.

METHODICAL TRIANGULATION

Different methods:
Interviews, observations and field notes.

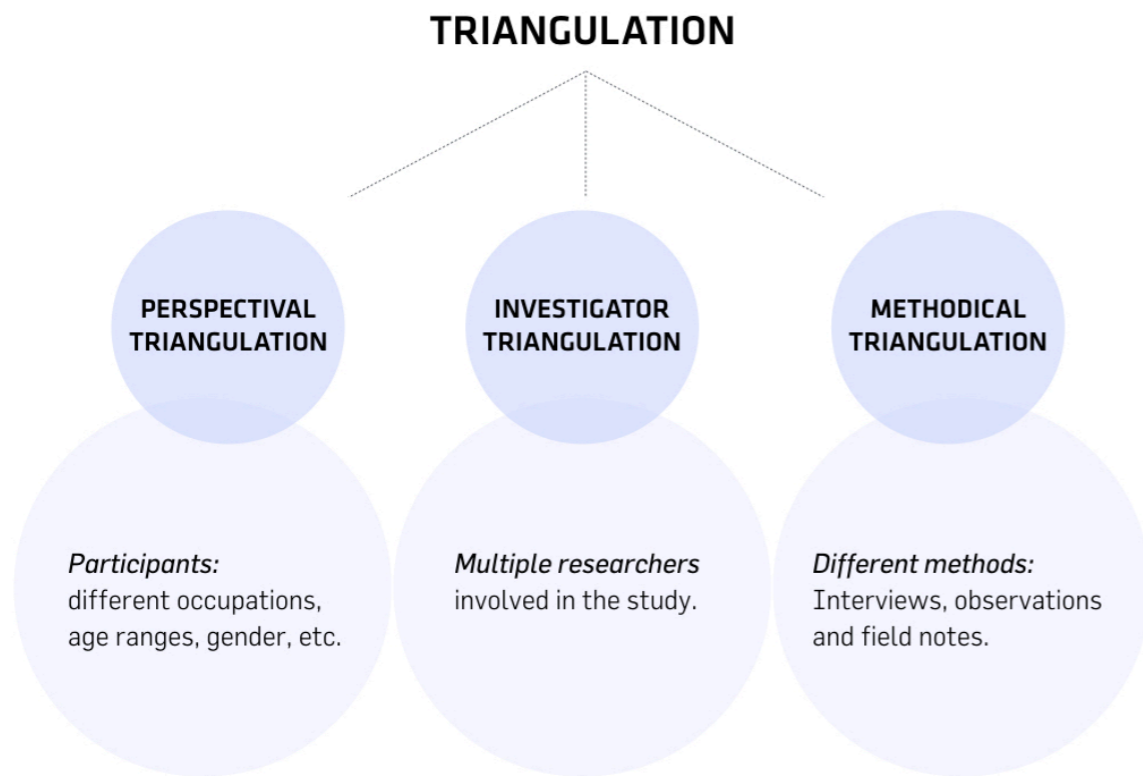Fig. 26. Triangulation - Validity strategies used throughout the research process (Ravitch, 2015)

By accelerating certain stages of each research process while ensuring validity criteria are present, it can be concluded that it is possible to do qualitative research in an agile way. The information gathered about the users and the process itself provided a point of reference into moving forward with a research process. It is important to emphasize that the developed process will be an additional process to current quantitative research efforts conducted by Werkspot.

The Case Study that best conveys the importance of conducting research prior to moving forward with the development process is the Online Concept Testing (Case Study 1, p.54). This is because it successfully proved that if the first landing page would have been developed, it would not have performed better than the current one, from a consumer point of view. While it looked better visually, it was missing elements that are valued by users when looking for a service professional. By iterating and learning through research, designs were improved and others entirely discarded because they were not helping consumers in fulfilling their hiring goals. Before the development process, user research should always be conducted to increase the chances of success and address any consumer anxieties that might be present.

DIALOGIC ENGAGEMENT

PEER DEBRIEFS, CRITICAL FRIENDS OR CRITICAL INQUIRY GROUPS

Sharing your research with others is to create the conditions in which others (and yourself) can *challenge your interpretation* of the research process and data at all stages of the research process.

Fig. 28. Dialogic engagement - Validity strategies used throughout the research process (Ravitch, 2015)

4.4 Lessons towards a Qualitative Research Process

The Case Studies were an excellent way to pilot-test the research methods and introduce them to Werkspot in an organic way. This was done by having an open approach that anybody could join. Through the four research methods, valuable information was gathered, which started to ignite a change within the organization. It can be said that qualitative research has been validated as a source of consumer knowledge that is actionable. Some of the results include the landing page design, which was validated through iterations receiving consumer feedback (Online Concept Testing). Currently, the design that achieved the highest percentage of user preference is now in development. On the other hand, the results from the Diary Study are also being used to create new types of content which can appeal to broader audiences. Through a combination of Usability Testing and Interviews, the Discovery and Delivery teams collaborated in conducting research together. This was a great exercise for the team and helped strengthen user empathy. It proved to be a valuable opportunity, as most developers had never seen users interact with the product, and the insights gathered sparked an ideation session, resulting in more changes to the Directory page prototype. This will be re-tested with Werkspot users and then move into development shortly after.

As we learn more from consumers, research has proven to be a valuable asset that can help Werkspot deliver a product that fits real user needs. Reflecting from the Case Studies, some learnings that can build towards the creation of the Qualitative Research Process are the following:

- **The importance of formats:**
  Formats proved to be a useful tool to have when conducting Usability Testing, it facilitated a focused gathering of information. As well, the end result is a visual and digestible format which conveys the gathered insights. Formats should be part of the qualitative research process because they can also help observers and co-researchers learn more about conducting research and focus the findings. This is reiterated from the experience with Interviews, by first learning that when people are asked to take notes on their own, these can be general. Introducing a format can help bring focus to diverse parts of the interview, which also helps accelerate the analysis process.

- **Standard procedure:**
  As it was mentioned in diverse methods of research, these should be part of the daily operations as a standard procedure which helps to gather consumer knowledge and validate concepts. This proves beneficial for the company to move into development with concepts that can have a stronger performance by having received a user point of view before being released.

- **Research training:**
  It has been mentioned that Werkspot has sister companies in France and Italy. Currently, all research initiatives are being pilot-tested in the Netherlands. This makes Werkspot a 'research hub' that can share knowledge. This can be internal, through collaboration within the tracks at Werkspot, and it can also be external by sharing knowledge with the sister companies in other countries. This can be done through research training in sessions to showcase the results that can be obtained and to teach about how to best apply these research methods. This is especially important because research will not always be conducted by researchers, thus, other roles will adopt research tasks and have to be properly prepared.

- **Valid research outcomes:**
  Taking into account the last mentioned point, that not only researchers will take part in conducting research, it proves important to set criteria for valid research outcomes. This can be done by setting standard practices of how research can be conducted and ensuring the findings are on the same level to be comparable. This is an important task and must not be taken lightly because research outcomes are being used at Werkspot for decision making. Thus, we must ensure research is always conducted properly and the results are reliable.

CONTEXTUALIZED INTERACTIONS

"79% of customers are willing to share relevant information about themselves in exchange for contextualized interactions in which they're immediately known and understood."

—Salesforce Research (2018)

SECTION 5

Developing a Research Process

CONTENT

05.

SECTION 5

Developing a Research Process

INTRODUCTION

Through Section 4, the Case Studies proved to be a good way to pilot-test research methods and address how these can have a better fit with Werkspot's current operation. Having learned valuable lessons from research in practice, Section 5 introduces the creation of a Qualitative Research Process.

The Qualitative Research Process aims to close the gap between the Discovery and Delivery teams have with the end-users of the platform. This gap can be closed by introducing a process that facilitates the continuous practice of Qualitative Research at Werkspot.

ABOUT THE DESIGNER PROCESS — *Phase 03.* *Develop*

"The third quarter marks a period of development where solutions or concepts are created, prototyped, tested and iterated. This process of trial and error helps designers to improve and refine their ideas."
— Council, D. (2015)

Section 5 of the Thesis report, titled '*Developing a Research Process'* corresponds to Phase 3 of the Designer Process
(03. Develop).
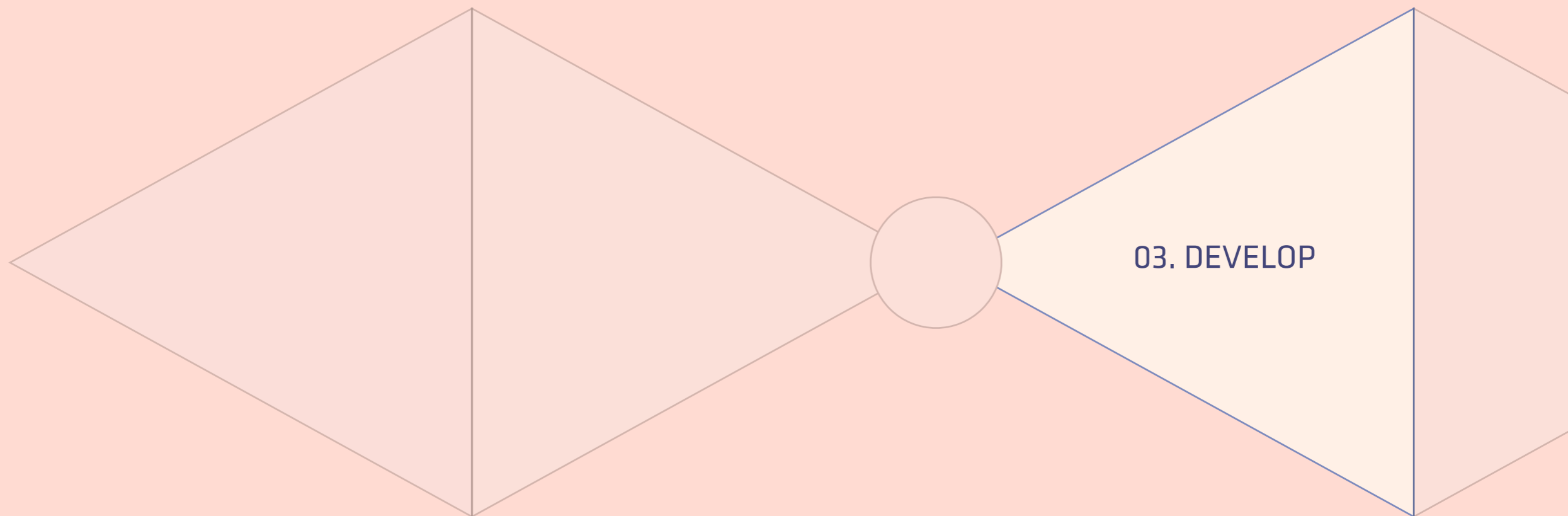
03. DEVELOP

05. DEVELOPING A RESEARCH PROCESS

5.1 Transforming input into a Qualitative Research Process

Qualitative Research has proven to be a crucial step that can help Werkspot learn more about their end-users to provide better experiences for them. This graduation project started with a current situation where the end-users of the platform and the teams in charge of the development of the platform (Discovery and Delivery teams) were two independent entities who interact with the product (platform) but not directly with each other. This is not an ideal situation because it favored a work approach where business values were prioritized due to the lack of interaction with end-users. On the other hand, it also promoted working based on assumptions about the end-users, due to the lack of representation of consumers in the development process.
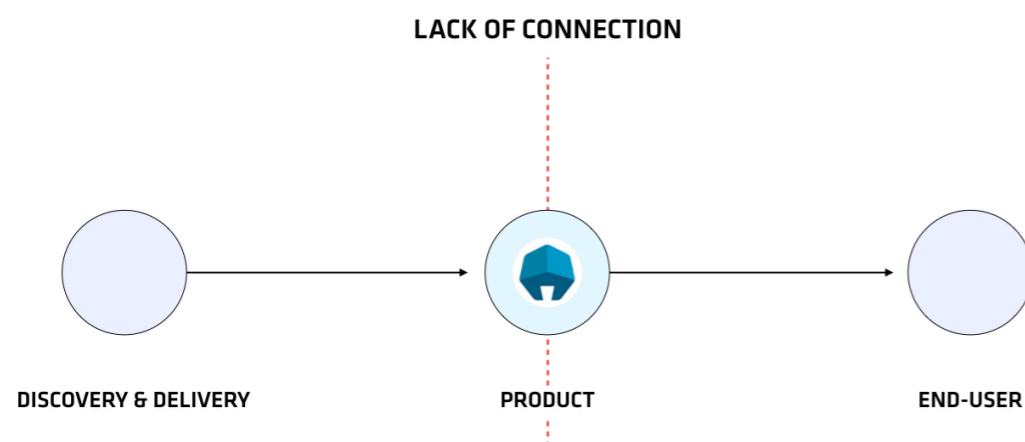
Developing a Qualitative Research Process

The approach taken towards the creation of the Qualitative Research Process was by learning through research. In this way, theoretical knowledge was obtained through the revision of literature, which was later validated in a practical manner through the Research Case Studies. The learnings from the four pilot-tested research methods, along with the areas of opportunity of the company, paved the way for what Research at Werkspot should operate like. Through the research needs of the company, we learned that Werkspot has two main goals. One is to *Validate* initiatives before these undergo development and are released to the market. The second is to *Explore* more about consumers (e.g. behavior, needs, context), which can lead to detecting new areas of opportunity. Thus, the distinction was made between Explorative and Validative Research at Werkspot. The two types of Research are integrated into the Qualitative Research Process for Werkspot, which aims to establish a connection between the Discovery and Delivery teams with the end-users.

LACK OF CONNECTION

DISCOVERY & DELIVERY PRODUCT END-USER

Fig. 29. Missing connection between Discovery and Delivery teams with the end-users of the platform

ESTABLISHING THE MISSING CONNECTION

DISCOVERY & DELIVERY PRODUCT END-USER
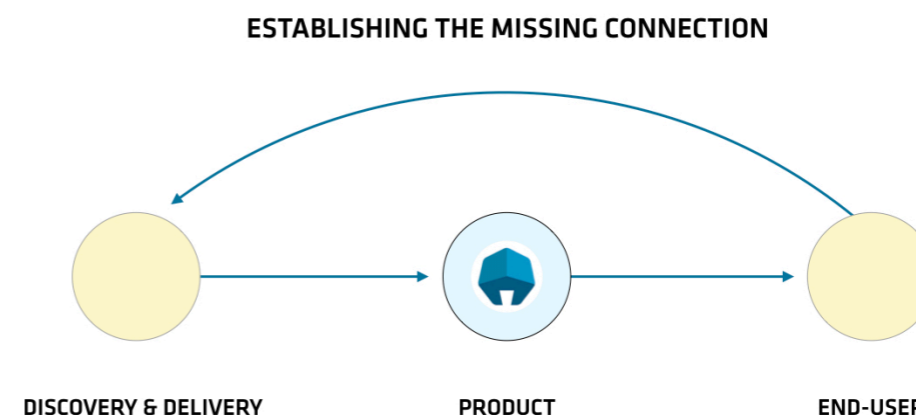
Fig. 30. Establishing the missing connection between Discovery & Delivery with the end-users

Werkspot recognized the need for improvement in bridging the distance with end-users. This was showcased through their commitment towards the implementation of Qualitative Research *(Section 4: Case Studies 1-4)*. Nonetheless, the objective was not solely to pilot-test research methods. The end goal was to find a way that research could be a continuous practice at the company. By doing so, Werkspot can expand their user knowledge and provide a better user experience, which can also add value for the company. A better product can be achieved by involving the users early on in the design process and receiving feedback which leads to making improvements even before the development process. The end result is releasing a product that has received validation and can perform better for users. For Werkspot, the optimization of the development process results economic value.

VISION— *of the Qualitative Research Process*

"The Discovery and Delivery teams are in close contact with the end-users, as we aim to understand their needs better and deliver value through the platform."

5.2 Product stages where Research is conducted

Types of Research (Explorative or Validative) in the Product Funnel

The way the platform is currently created follows a funnel structure. This funnel originally had three stages: Discovery, Development, and Evaluation. A new funnel stage was added, which is *stage 0. Exploration*. This new stage was added as a consequence of the Research Case Studies. It became evident that *Exploratory Research,* when conducted in the beginning of the funnel, occurs prior to the Discovery stage. The research conducted in the Exploration stage can help detect new areas of opportunity that can be validated in the Discovery stage.

Qualitative Research is integrated into the Product Funnel by understanding the role research should play in the different product stages. Explorative and Validative Research solve different needs, as such, they play a different role in diverse stages of the Product Funnel *(Refer to Fig. 32 for more reference)*. The four different roles of research in the product funnel can be described as follows:

A. Explorative Research in the Exploration Stage:
In the Exploration stage, Explorative Research can be conducted with the objective to learn more from users (behavior, needs, context). This leads to detecting new areas of opportunity which can be later validated through Validative Research.
An example of a research method that can be conducted in this stage is: Interviews.

B. Validative Research in the Discovery Stage:
In the Discovery stage, Validative Research is conducted to validate concepts and ideas before development. This helps to receive a user perspective in the design process before committing to a finished concept that will undergo development. It also increases the chances of success of product features, by having been validated prior to development.
An example of a research method that can be conducted in this stage is: Online Concept Testing.

C. Validative Research in the Evaluation Stage:
In the Evaluation stage, Validative Research helps to assess the performance once a finished concept has been launched into the market. It can help determine if it is being adopted or if optimization is needed to achieve a better performance.
An example of a research method that can be conducted in this stage is: Usability Testing.

D. Explorative Research in the Evaluation Stage:
In the Evaluation stage, Exploratory Research can also be conducted. This gives insight into the *context of use:* before, during, and after users come in contact with the product or service.
An example of a research method that can be conducted in this stage is: Diary Study.

Explorative or Validative Research are conducted through the Qualitative Research Process (Fig. 32).

Criteria to be satisfied to move forward in the product funnel

In moving from one stage to the next one (e.g. from Exploration to Discovery) there are certain criteria which must be satisfied to move forward. Nonetheless, the state of product maturation is different in every stage (e.g. Discovery stage—rough concept, and Evaluation stage—finished product). This means that the criteria to move forward in the product funnel is different for every stage to move onto the next one. The criteria that were taken as a point of reference to assess moving forward in the funnel is the *Criteria for Successful Solutions, created by Solution Space and adapted from IDEO.*

- **From Exploration to Discovery:** The criteria to be met is to determine if the ideas from the Exploration stage can move into Discovery are the following: alignment with business values, such as OKRs (Objective Key Results), which represents *Business Viability*. The second criteria is the value for end-users, which represents *User Desirability*. It can be answered with the following questions:
  - **Business Viability:** Is this in line with our business objectives (OKRs)?
  - **User Desirability:** Would this provide added value for our end users?

- **From Discovery to Development:** This is the most crucial criteria to be met because the concepts validated in the Discovery stage will be developed. The criteria to be met is: 1) alignment with business values *(Business Viability),* 2) value for end-users *(User Desirability),* 3) determine if the technical capabilities are present *(Technological Feasibility)*, and last, 4) assess the team reliability to perform the given task (Innovator Reliability). It can be answered with the following questions:
  - **Business Viability:** Is this in line with our business objectives (OKRs)?
  - **User Desirability:** Would this provide added value for our end users?
  - **Technological Feasibility:** Is this feasible to do from a technical point of view? Do we have the technological capabilities to build it?
  - **Innovator(s) Reliability:** Is the internal team able to perform the given task?

- **From Development toEvaluation:** When the finished product is launched into the market, the last criteria to be met is to asses if it is being adopted and used. The criteria to be met is *User Desirability*.
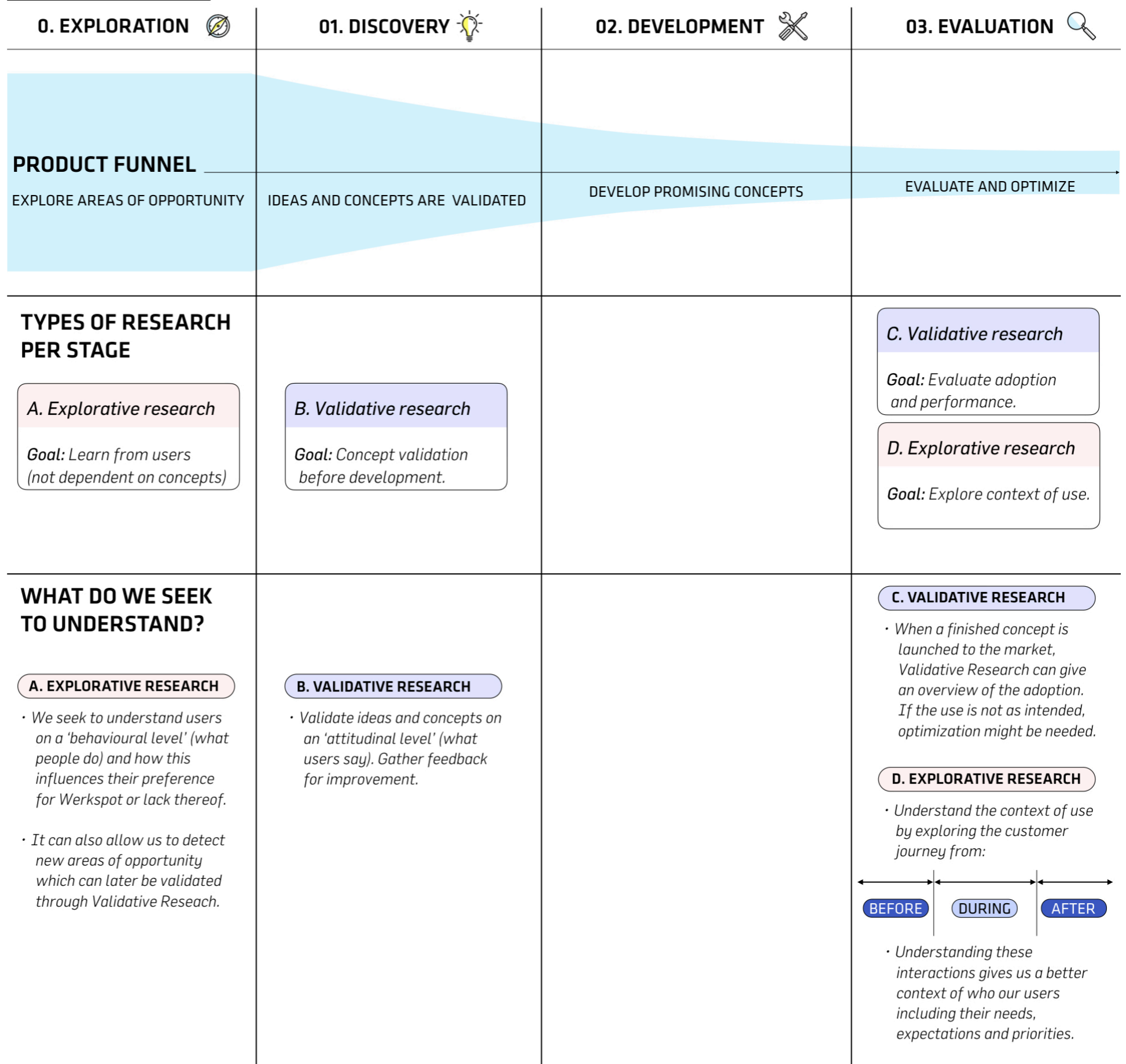 - **User Desirability:** Does this effectively add value for our end-users?

PRODUCT STAGES

	0. EXPLORATION 🧭	01. DISCOVERY 💡	02. DEVELOPMENT ⚒️	03. EVALUATION 🔍
PRODUCT FUNNEL	EXPLORE AREAS OF OPPORTUNITY	IDEAS AND CONCEPTS ARE VALIDATED	DEVELOP PROMISING CONCEPTS	EVALUATE AND OPTIMIZE

TYPES OF RESEARCH PER STAGE

A. Explorative research

Goal: *Learn from users (not dependent on concepts)*

B. Validative research

Goal: *Concept validation before development.*

C. Validative research

Goal: *Evaluate adoption and performance.*

D. Explorative research

Goal: *Explore context of use.*

WHAT DO WE SEEK TO UNDERSTAND?

A. EXPLORATIVE RESEARCH

· *We seek to understand users on a 'behavioural level' (what people do) and how this influences their preference for Werkspot or lack thereof.*

· *It can also allow us to detect new areas of opportunity which can later be validated through Validative Reseach.*

B. VALIDATIVE RESEARCH

· *Validate ideas and concepts on an 'attitudinal level' (what users say). Gather feedback for improvement.*

C. VALIDATIVE RESEARCH

· *When a finished concept is launched to the market, Validative Research can give an overview of the adoption. If the use is not as intended, optimization might be needed.*

D. EXPLORATIVE RESEARCH

· *Understand the context of use by exploring the customer journey from:*

← BEFORE | DURING | AFTER →

· *Understanding these interactions gives us a better context of who our users including their needs, expectations and priorities.*

Fig. 31. Product Funnel: Stages, types of research and research objectives.

5.3 The Qualitative Research Process

How does the Qualitative Research Process work?

The Qualitative Research Process is intended as a guide for people at Werkspot to conduct and participate in research efforts. As the title of the Master's thesis states, it is meant to *Foster a Culture of Research within Agile Processes*. In doing so, the steps of the process recognize the fast-pace nature of the Agile work environment at Werkspot. Therefore, some elements of Qualitative Research in an Academic context, such as full interview transcripts, have been discarded from this process. In synthesizing the research process, and to address the validity of research, criteria were developed to ensure valid research outcomes (this is explained in Section 6: Research Process Implementation).

The six steps of the Qualitative Research Process help guide the research being conduced at the company. These steps facilitate the understanding of the phases that are involved in the practice of research. The six-step process is meant to create a low-entry barrier. The steps are easily explained and facilitate the participation of people with no previous research experience. The six steps of the Qualitative Research Process can be described as follows:

- **01. Research Approach:**
  In the beginning of the Qualitative Research Process, the first step is to define an approach. This can be either Explorative (broad scope, open-ended) or Validative (focused scope, aims to validate). The main people involved would be the Discovery Team, nonetheless, research initiatives can also be proposed by other people from the tracks at Werkspot.

- **02. Define Research Topic:**
  Defining the topic is the second step. At this stage the research study becomes more focused by determining the topic that will be explored or validated. We aim to understand the 'why' behind the topic selection to determine the relevance of the research study. The main roles involved are the Product Manager, UX Designer and Researcher. These roles work together to bring in a business and user perspective into the development process.

- **03. Plan Research Study:**
  After the approach and topic have been selected, the research study can be thoroughly planned. This is the most extensive step, as it encompasses multiple sub-steps. The planning starts by selecting a suitable Research method and the Research tool(s) for such method *(Fig.34 facilitates this decision process)*. The research objectives are made explicit through research questions. Afterwards, the interview guide is created (if applicable, interview guides are useful for Interviews and Usability Testing). Once the research objectives have been clearly stated, it can be defined which participants would be most suitable to patriciate in the research study, they can be Werkspot users or non-Werkspot users. Having selected the participant sample, the recruitment process can begin, this is

done by sending invitations online. At this stage, the technical requirements for the research study are dealt with (e.g. arrange recording equipment for the sessions, to capture audio and video). The roles involved in this step are the Researcher as the lead role, Co-researcher(s), and/or Observer(s). To ensure valid research outcomes it is recommended to have at least two people from Werkspot present during research studies. The level of involvement determines if a person takes the role of Co-researcher (actively involved) or an observer (passive role).

- **04. Data Collection:**
  This step begins by having a briefing session between the Researcher, Co-researcher(s), and/or Observer(s). In the briefing session, expectations from the research study are aligned and the role each member will take is discussed. The data collection begins when the participant takes an active role (physically, or remotely) in the study. During the research study, focused information can be gathered by making use of Research tools (explained in Section 6: Research Process Implementation). Every physical interaction with research participants is recorded for the Data Analysis. The Researchers are encouraged to record audio and video when possible.
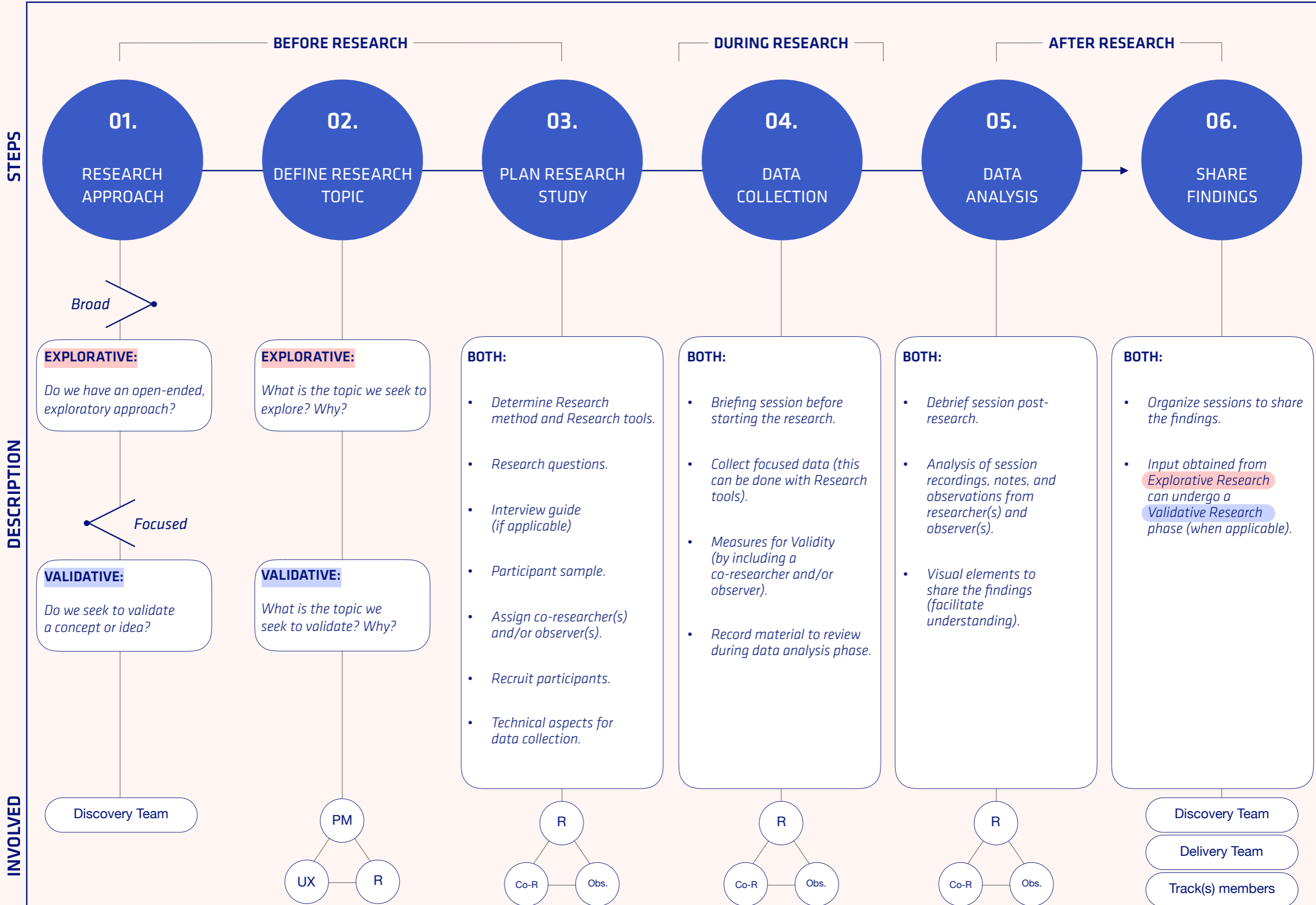
- **05. Data Analysis:**
  Data Analysis begins by having a debrief session, this is held with the roles involved in the research study (Researcher, Co-researcher(s), and/or Observer(s)). The purpose of the debrief session is to discuss the highlights from the research study. Researcher notes are discussed when possible, to create alignment from the observations. In this way, research validity is addressed by having more than one researcher interpretation for the findings. During the Data Analysis, the findings are integrated into a report or presentation format to be shared with other people at the company. The Research lead visualizes the findings as much as possible to facilitate its understanding. This is also done to make the sharing of findings an enjoyable experience for all involved.

- **06. Share Findings:**
  The last step of the Qualitative Research Process is to share the findings. This is done through sessions where a presentation is held. Active audience participation is encouraged to make it enjoyable and to activate the findings and clarify any doubts. Exploratory Research outcomes can lead to Validative Research when applicable (e.g. We learned about user priorities that can be reflected differently in the platform, we then prototype and undergo a Validative Research study).

QUALITATIVE RESEARCH PROCESS — *What happens in each step and who is involved*

STEPS

BEFORE RESEARCH | DURING RESEARCH | AFTER RESEARCH

01. RESEARCH APPROACH

02. DEFINE RESEARCH TOPIC

03. PLAN RESEARCH STUDY

04. DATA COLLECTION

05. DATA ANALYSIS

06. SHARE FINDINGS

DESCRIPTION

Broad

EXPLORATIVE:
Do we have an open-ended, exploratory approach?

Focused

VALIDATIVE:
Do we seek to validate a concept or idea?

EXPLORATIVE:
What is the topic we seek to explore? Why?

VALIDATIVE:
What is the topic we seek to validate? Why?

BOTH:

- *Determine Research method and Research tools.*
- *Research questions.*
- *Interview guide (if applicable)*
- *Participant sample.*
- *Assign co-researcher(s) and/or observer(s).*
- *Recruit participants.*
- *Technical aspects for data collection.*

BOTH:

- *Briefing session before starting the research.*
- *Collect focused data (this can be done with Research tools).*
- *Measures for Validity (by including a co-researcher and/or observer).*
- *Record material to review during data analysis phase.*

BOTH:

- *Debrief session post-research.*
- *Analysis of session recordings, notes, and observations from researcher(s) and observer(s).*
- *Visual elements to share the findings (facilitate understanding).*

BOTH:

- *Organize sessions to share the findings.*
- *Input obtained from Explorative Research can undergo a Validative Research phase (when applicable).*

INVOLVED

Discovery Team

PM / UX / R

R / Co-R / Obs.

R / Co-R / Obs.

R / Co-R / Obs.

Discovery Team
Delivery Team
Track(s) members

Fig. 32. Qualitative Research Process

5.4 Qualitative Research Decision Tree

Layers of the Qualitative Research Process:

A decision tree (Fig. 33) was created to facilitate the first three steps of the Qualitative Research Process, which account for the planning before the actual research study is conducted and data can be collected. The decision tree is meant to simplify the research choices that have to be made early in the Research Process. The decision tree visualizes and simplifies information to make it accessible for people who don't have a research background. The layers of research are visualized, these can be described as follows:

- **Qualitative Research Process:**
  The six-step Qualitative Research Process is the overarching layer that functions as guide for research to be conducted at Werkspot (Fig.32). This process is applicable for both Explorative and Validative Research. Through the Product Funnel (Fig.31), we learned about the role of Explorative and Validative Research at different product stages (e.g. Evaluation Stage— Validative research to assess performance). When any type of Research needs to be conducted, the Qualitative Research Process comes into play.

  - **Step 1. Research Approach:**
    The Research Approach is the first step of the Qualitative Research Process. In this step, the decision has to be made to undergo an Explorative or Validative Research Study. This decision depends on the goals of the study. For example, when there is a concept in process, there is a need for user feedback and validation before development, in this case, Validative Research is the best approach. To facilitate this decision making, a decision tree can helpful (Fig. 33).

  - **Step 2. Research Topic:**
    The Research Topic is decided during the second step of the Qualitative Research Process. The topic goes hand in hand with the research approach. For example, when you select an Explorative Research approach, you can have an open-eded topic exploration of a renovation process, to understand consumer experience. If the choice had been made to undergo a Validative Research, then it is concept dependent. Therefore, one choice influences the other.
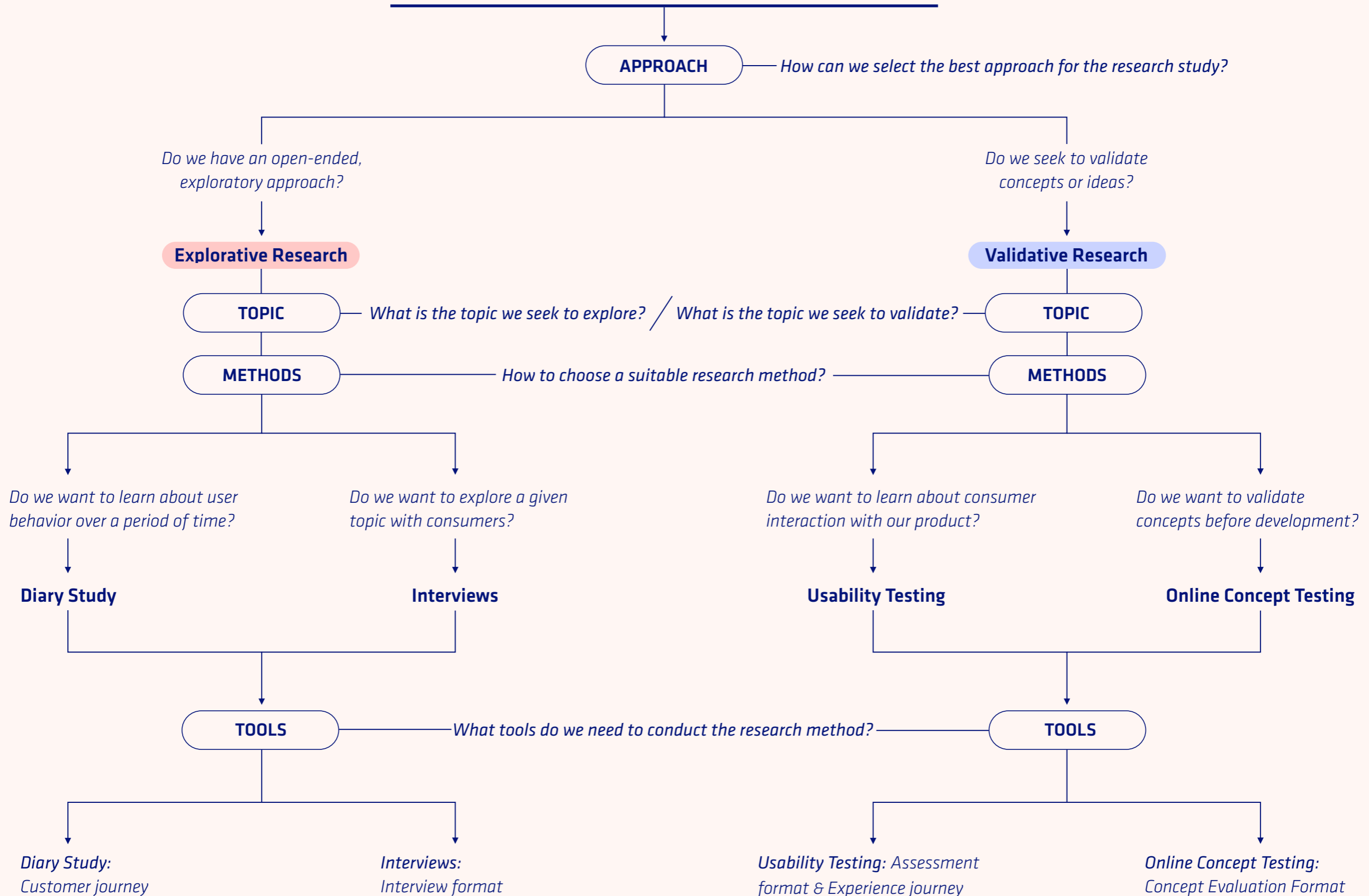
- **Step 3. Research Method:**
  The Research Methods are decided during step 3 of the Qualitative Research Process. This can be one of the complex decisions, as it requires more research knowledge to determine the suitability of the method for the research objectives. Thus, the decision tree aims to facilitate this decision by asking four questions that lead to the selection of a Research Method. The decision tree only includes the four pilot-tested methods from the Research Case Studies (Section 4: Research in Practice). The decision tree can be expanded once Werkspot has tried other methods and found success by its implementation.

- **Step 3. Research tools:**
  The Research Tools are directly related to the Research Methods. Thus, there is no decision to be made, rather an implementation of the tool(s) that correspond to the given method (The Research Tools are later explained in Section 6: Research Process Implementation, p.96).

How to plan a Qualitative Research Study?

QUALITATIVE RESEARCH DECISION TREE

APPROACH — *How can we select the best approach for the research study?*

Do we have an open-ended, exploratory approach?

Do we seek to validate concepts or ideas?

Explorative Research

Validative Research

TOPIC — *What is the topic we seek to explore?* / *What is the topic we seek to validate?* — **TOPIC**

METHODS — *How to choose a suitable research method?* — **METHODS**

Do we want to learn about user behavior over a period of time?

Do we want to explore a given topic with consumers?

Do we want to learn about consumer interaction with our product?

Do we want to validate concepts before development?

Diary Study

Interviews

Usability Testing

Online Concept Testing

TOOLS — *What tools do we need to conduct the research method?* — **TOOLS**

Diary Study:
Customer journey

Interviews:
Interview format

Usability Testing: Assessment format & Experience journey

Online Concept Testing:
Concept Evaluation Format

Fig. 33. Qualitative Research Decision Tree

5.5 Involvement in the Qualitative Research Process
RACI Model

The RACI model describes four levels of involvement in the Qualitative Research Process going from Responsible until Informed. It is meant to keep an overview of the involvement in research efforts.

- **Responsible:**
  The Researcher, Product Manager and UX Designer are the most active research roles. Primarily the Researcher, who is actively involved in planning the research, collecting data, analyzing the output, and so forth. Other members that can assume a *'responsible'* role are Discovery and Delivery team members. This can be done through participation in research as Co-researchers or Observers.

- **Accountable:**
  The accountable role is held by Product Manager and/or Track Lead. They are the overarching roles that are always aware or in coordination of research initiatives in order to make sure the results are actively pursuing business objectives by addressing the OKR's (Objective Key Results) of the company.

- **Consulted:**
  The consulted role can be assumed by diverse track members such as Front-end and Back-end Developers. It is beneficial to include a technical feasibility perspective and determine if the research outcomes are actionable, and if implementation is possible from a technical point of view.

- **Informed:**
  The informed role is notified of research processes or outcomes. This is the less active role in the practice of research. It can be held by members of diverse teams such as Product Discovery or Product Delivery. Consumer Acquisition (CSA) track members and members of other tracks at Werkspot can also be informed of research outcomes.

Fig. 34. RACI Model

88
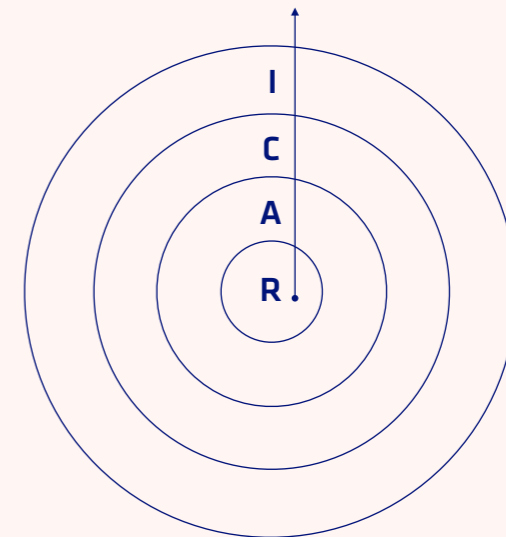
CUSTOMERS = PERSONS

"84 of customers say being treated like a person, not a number, is very important."

—Salesforce Research (2018)

SECTION 6

Research Process Implementation

06.

SECTION 6

Research Process Implementation

INTRODUCTION

This closing section deals with the implementation of the Research Process into Werkspot. In order to *Foster a Culture of Research within Agile Processes*, the elements that integrate a culture have to be revised to understand how this lands within the organization.

ABOUT THE DESIGNER PROCESS — *Phase 04.* *Implement*

"*The final quarter of the double diamond model is the delivery (Implement) stage, where the resulting project (a product, service or environment, for example) is finalised, produced and launched.*" — Council, D. (2015)

Section 6 of the Thesis report, titled '*Research Process Implementation*' corresponds to Phase 4 of the Designer Process *(04. Implement)*.
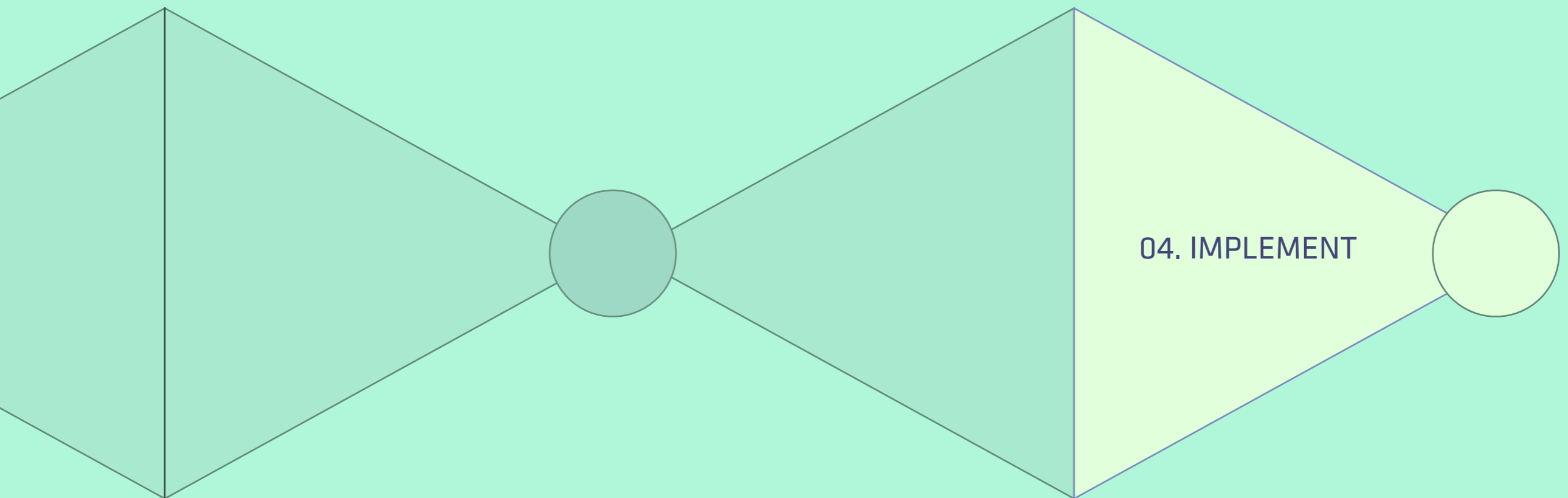
04. IMPLEMENT

06. RESEARCH PROCESS IMPLEMENTATION

6.1 Fostering a Culture of Research within Agile Processes

Section 5 introduced the Qualitative Research Process (Fig.32) and provided insight into the moments when research should be conducted throughout the Product Funnel (Fig.31). These moments were detected as most beneficial due to the type of consumer knowledge we can gather and what it represents for the platform at that stage (e.g. By conducting Validative research during the Product Discovery stage, we can learn about consumer use for certain features by prototyping and make iterations before these undergo development). After learning from the benefits of research and culminating a process for Werkspot, it is crucial to address the implementation at the company. In order to implement the Qualitative Research Process at Werkspot, we aim to showcase the added value that research can bring. This is meant to be an enjoyable experience which can incentivize more people at the company to join research efforts. Looking at the future of research at Werkspot, we recognize that change and adoption will not happen over night. Addressing the conditions that can foster a culture of Research is a first step towards expanding the reach of research practices. Some of the elements that make a culture, which are applicable to Werkspot can be described as follows:

- **People:**
  The people are they key 'ingredient' which holds the success factor of any initiative at the company. Research has to be an enjoyable experience that brings added value in order for people to join. In doing so, research has to be a practical endeavor that differs from daily or routinely activities at Werkspot. Often, employees at the company have busy agendas due to constant meetings and presentations. An area of opportunity is to have interactive sessions to share research findings and adopt a Workshop format. In this way, people directly engage with the findings and these can become actionable.

- **Language:**
  Language is one of the most important elements of a culture, it conveys a shared meaning and facilitates communication. In developing a shared research language, Research Tools such as formats are very useful. This way, research conducted in different areas of the company can bear resemblance and have a shared 'language' which facilitates standardization. This can also be useful for conducting research at along Werkspot's sister companies (Instapro—Italy, and Travaux.com—France). By having a shared research language through the unification of Tools such as formats, the findings can be easily compared which facilitates the decision making process.

- **Norms:**
  These are commonly described as standard expectations for behaving. Having norms comes in useful in setting standard practices for interaction for consumers. We have to remember to always be respectful and inviting. As researchers for an online platform, we have an important task. Often, we are the first and only physical interaction a consumer has with Werkspot, as all other touchpoints with the platform are online. This has a big impact on consumers, as we experienced during the Research Case Studies. The vast majority of consumers are eager to share their experiences and like being heard. Research can even have a positive impact on the NPS (Net Promoter Score), in a small scale, due to people feeling more connected to the company after having participated in the improvement of the platform. We heard on different occasions of research participants who would further use and recommend Werkspot to their acquaintances.

- **Practices:**
  In order to foster a culture of research at Werkspot, research has to become a common practice. A way to do so is to establish practices, or periodic events in which people at the company join and experience first-hand a research study by interacting with consumers. This is also good to make it an enjoyable experience and further increase the trust for Qualitative Research. Werkspot's yearly operation is divided in quarters, the start of every quarter is a busy time where priorities are being set. This proves a useful opportunity to kick off the quarter with a research study which can boost team performance by making team members more engaged with the product by seeing the impact on real consumers. This notion was put to the test with the Delivery team participating in a Usability Test with consumers. The Product Manager, UX Designer and Researcher led three teams of Developers (Front-end and Back- end) along with the Scrum Master/ Agile Coach. Each team was given the task to perform a Usability Test with a Werkspot user. The input was later analyzed by the whole team and a brainstorming session was held where the all team members proposed solutions for the encountered usability issues that could be improved.

- **Beliefs:**
  As part of the culture at Werkspot, Core Values were established some years ago. Making Research part of the company culture, means that it is also connected with its belief system. Some of the Core Values are related to the practice of research are *Focus on customer value* and *Collaborate and support each other*.
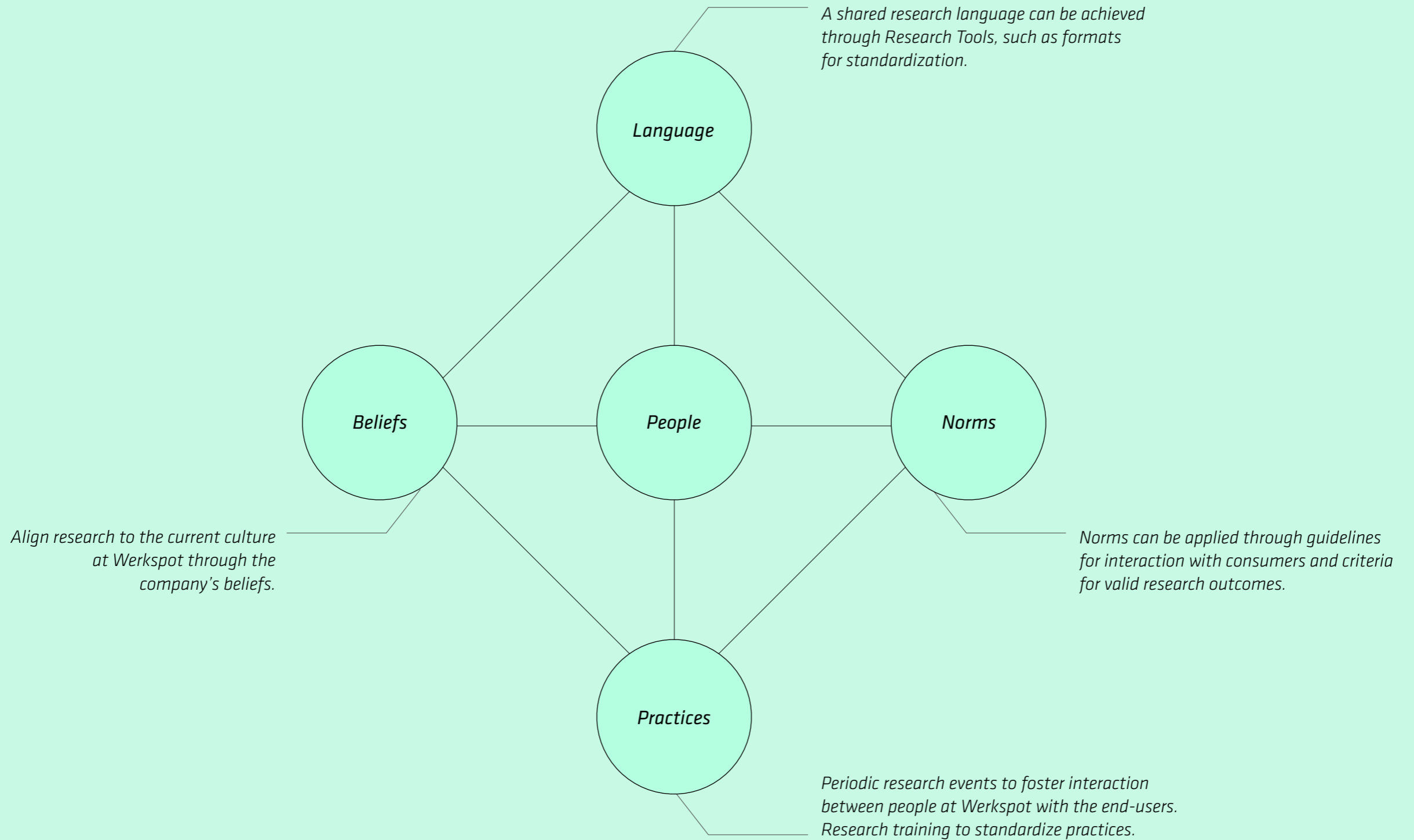
FOSTERING A CULTURE OF RESEARCH

A shared research language can be achieved through Research Tools, such as formats for standardization.

Language

Beliefs

People

Norms

Align research to the current culture at Werkspot through the company's beliefs.

Norms can be applied through guidelines for interaction with consumers and criteria for valid research outcomes.

Practices

Periodic research events to foster interaction between people at Werkspot with the end-users. Research training to standardize practices.

Fig. 35. Visualization of the elements of a Research Culture

6.2 People—

Are people ready, willing, and able to participate in research?

As previously mentioned, the most important element of a culture (in this case a culture of research) are the people who activate it, and make it a part of the organization. A culture is an intangible, but people are directly involved in it and have the ability to shape it. In order to assess the ability of the company to adopt new research practices, a framework was introduced. The Ready, Willing, Able Framework (Section 4: Research in Practice, p.52) describes the Readiness, Willingness, and Ability of people to take part and embrace change. This is especially important because commitment and involvement from people are required to ensure the adoption and implementation of the Qualitative Research Process. Revisiting the RWA Framework, are people at Werkspot *Ready*, *Willing*, and *Able*?

- **Readiness to conduct Qualitative Research:**
  The "readiness" speaks of a general state of preparedness. This was assessed through a survey sent out internally at Werkspot, where employees were asked questions relating the conduction of more research initiatives and their willingness to participate. The results indicated that people at Werkspot do see the value of having more interaction with the end-users, but very few actually interact with them. In the survey, people were also asked to indicate if they would participate in events to get in contact with end-users, to which 93% indicated yes. With the input gathered from the survey, it was determined that people seek to know more about Werkspot's end-users. Many expressed they have research needs in their departments and indicated they would participate in such events if they were to be organized. The interest is present and the responses indicated a readiness to participate. Nonetheless, this needed to be further validated in practice.

- **Willingness to conduct Qualitative Research:**
  "Willingness" refers to a favorable predisposition to take part in qualitative research efforts. The willingness was put to the test throughout the Research Case Studies. An open policy was encouraged and people were invited to sign up and participate in a consumer Interview or Usability Testing. This proved to be a successful approach, people felt curiosity to participate and the choice was up to them. People from diverse areas participated, which further proves the willingness exists at the company, it's a matter of offering the opportunities to do so. The highest involvement was from the Product Manager, UX Designer who are actively involved in research initiatives along with the Researcher. Among the participants were people with diverse roles such as Marketplace Manager, Online Marketeer, Developers (Front-end and Back-end), Scrum Master/ Agile Coach, among other.

- **Ability to conduct Qualitative Research:**
  The "ability" refers to the employees possessing the knowhow and the necessary tools to take part in research efforts. After it was concluded that the Readiness and Willingness are present at Werkspot, the knowhow can be addressed. The Qualitative Research Process (P. 85, Fig. 32) was developed as a step-by-step guide to planning and executing a research initiative. Additional resources are provided through the Qualitative Research Decision Tree (P.87, Fig. 33) to facilitate the decisions that have to be made early in the research process. Considering the expansion of research practices and the involvement of more people who do not have experience conducting research, further Research Tools were developed. The aim is to provide simple formats that can be helpful to gather focused information when conducting a research method. The Qualitative Research Process, Decision Tree, and Research Tools all address the *ability* of people to participate and conduct research at Werkspot. The objective is to expand the reach of research by standardizing practices which are helpful not only for Werkspot, but also for the sister companies in Italy and France.

RESEARCH TOOLS

Online Concept Testing– Concept Evaluation Format

CONCEPT TESTING *(Validative Research)*

Research Method: *Concept Testing*
To be filled by: *Researcher, Co-researcher(s) and/or Observer(s).*

When: *To be filled during Online Concept Testing.*
Purpose: *Gather feedback to iterate the concept that was presented.*

1) INFORMATION *(text)*:

1A) *Is the information clear and understandable to our users?*

1	2	3	4	5
Not clear		Somewhat clear		Very clear

1B) *Does it match with the user's perception of the company?*

Yes / More or less / No → Why?

2) VISUALS *(images and graphics)*:

2A) *Are the visuals considered attractive by the users?*

1	2	3	4	5
Not at all		More or less		Very attractive

2B) *Does it match with the user's perception of the company?*

Yes / More or less / No → Why?

3) PERCEIVED ADDED VALUE:

3A) *Did the user learn something new?*
Yes / No → Why?

3B) *Does it help to accomplish the user's goal?*
(e.g. Hire a service professional)
Yes / No → Why?

3C) *Does the user consider it relevant?*
Yes / No → Why?

4) OVERALL IMPRESSION:
Positive / Indifferent / Negative → Why?

Usability Testing– *Assessment format and Experience Journey Map*

ASSESSMENT FORMAT *(Validative Research)*

Research Method: *Usability Testing*
To be filled by: *Researcher, Co-researcher(s) and/or Observer(s).*

When: *To be filled during the Usability Testing session.*
Purpose: *Gather feedback to iterate the concept that was presented.*

Participant's Reaction: / Something important the participant said: / Card no.

Very Positive / Positive / Indifferent / Negative / Very Negative

GUIDE: *Does this screen provide guidance for the user?*

NAVIGATE: *How does the user experience the sequence of steps at this stage?*

INFORM: *Is the user sufficiently informed to perform the task?*

COMPLETE: *Is the user able to complete the task on his own?*

Which screen of the prototype are you evaluating?

Usability Test - SR Flow

Customer Interviews– *Interview format*

INTERVIEW FORMAT *(Explorative Research)*

Research Method: *Customer Interviews*
To be filled by: *Researcher, Co-researcher(s) and/or Observer(s).*

Purpose: *Gather information regarding the user perspectives on a given topic.*

1) ABOUT THE PARTICIPANT:

1B) *What kind of user did we talk to?*
New user / Repeat user / Other?

1B) *What job did they use the platform for?*

1C) *How was their experience using Werkspot?*

2) MAIN PRIORITIES:

2A) *What does the participant value?*

2B) *Why is this important to them?*

2C) *How can we address these priorities?*

3) MAIN CONCERNS:

3A) *Does the participant have concerns?*
Yes / No → Why?

3A) *Are these concerns related to Werkspot?*
Yes / No → Why?

3C) *How can we address these concerns?*

4) OVERALL IMPRESSION: *How did the participant act during the interview?*
Positive / Indifferent / Negative → How can we improve?

Diary Study– *Customer Journey*

CUSTOMER JOURNEY *(Explorative Research)*

Research Method: *Diary Study*
To be filled by: *Researcher, Co-researcher(s) and/or Observer(s).*

Purpose: *Map out the user experience to better understand the customer journey.*

PHASES	01. EXPLORATION	02. REQUEST	03. INVITING	04. EVALUATION	05. FULLFILMENT	06. FEEBACK
SUB-PHASES						
GOALS						
ACTIONS						

EMOTIONAL JOURNEY

REACTIONS						
HAPPY/ SATISFIED						
INDIFERENT						
SAD/ DISAPPOINTED						

Fig. 36. Research tools — Formats to collect and analyze data

6.3 Language—

Standardizing Research practices

Having a shared research language can be very useful to standardize practices at the company. This can facilitate the communication by having homogeneity in research outcomes, which can be compared between departments or even countries. This standardization can be reached through the implementation of Research Tools. These tools are used during Steps 4 and 5 of the Qualitative Research Process (Fig.32), when we collect data and conduct the data analysis.

Why make use of Research Tools?

- **Homogeneity:** As a European company there is a lot of collaboration in between the sister companies Werkspot, Instrapro (Italy) and Travaux.com (France). This increases the need for homogeneity in formats because research initiatives are regularly conducted in parallel in multiple countries, and we seek to obtain comparable results. This can only be done by obtaining the same level of information. To facilitate this process, a format can help by pointing out the information that must be captured.

- **Digestible information:** Most people don't have the time to read an extensive report. This means we have to facilitate access to the information obtained from research. This can be done by synthesizing the essential information that must be transmitted through a short and digestible format.

- **Accessible:** Facilitate access to research outcomes by making it directly available to a wider audience. The company is still in the early stages of research maturation, this means practices can be set for how to conduct research. Currently, there is only one active researcher in Werkspot. The reach of Research cannot be so extensive due to the time limitation of having sessions to share the findings with multiple departments. Nonetheless, by making use of formats, the research outcomes can be directly shared with multiple stakeholders. This facilitates reaching a wider audience that can act upon research findings.

What are Research Tools?

Research Tools were first introduced in Section 5: Developing a Research Process (pp.86-87), these tools have been created to facilitate the practice of research at Werkspot. Formats are important because these accelerate the research process, into operating in a more Agile way by collecting focused data from the start. This way, people who participate as Co-Researchers or Observers can have an overview of the information to collect and/or observe. These formats were developed throughout the Research Case Studies and respond to the type of information that is most useful to gather for each of the 4 pilot-tested Research Methods.

- **Explorative Research: Diary Study—** *Customer Journey*
  The Customer Journey was actively used throughout the Diary Study. This proved to be a useful format to capture the experience of a renovation process, from the early stages of buying a house and looking for a Service Professional until the job was executed. The Customer Journeys were crafted per participant and were shown to them to gather input on how accurately these represented their renovation experience. It proved to be a good tool to capture the highlights and pain points of a house renovation. Furthermore it evidenced areas of opportunity for Werkspot to tackle, the findings are already being brought to action points by some teams at the company.

- **Explorative Research: Interviews—** *Interview Format*
  Consumer Interviews are one of the most widely used research methods for its ease of implementation. An Interview Format was created to be used to gather information during the Customer Interviews. This is additional to the Interview Guide, as the guide varies per the content of the interview. The objective of the Interview Format is to gather the main user priorities and concerns regarding the given topic that is being addressed. These priorities and concerns can lead us to detect patterns among users which need to be addressed.

- **Validative Research: Usability Testing—** *Assessment format and Experience Journey Map*
  An Assessment format was created to be used during Usability Testing, this format can be used for every screen of the prototype that is presented to users. Thus, the same format is used multiple times which allows us to detect the areas of friction for users. Once the data has been gathered through the Usability Test, the information collected in the Assessment format can be placed in the Experience Journey Map. This last format visualizes the highlights and pinpoints of the user experience throughout the use of the presented prototype.

- **Validative Research: Online Concept Testing—** *Concept Evaluation format*
  A Concept Evaluation format was crafted to assess if the concept is appealing for the users and most importantly, to understand if it helps the user to achieve their goals (e.g. Does the concept provide enough information for the consumer?). By assessing the concepts in this way, we can understand its limitations and improve them before undergoing development. The concepts can be tested as many times as needed until a successful outcome has been reached.

- **Explorative and Validative Research—** *Insights format*
  Building insights is an important tools to possess for diverse areas of the company. This format has a simple 3 step structure which facilitates capturing information to build a proper insight. It can be used with research outcomes from diverse types of research, and it clearly states the consumer truth, need, and friction.

6.4 Norms—

Criteria that can help throughout the Qualitative Research Process

Academic Qualitative Research is a rich practice with extensive theory. In the application of Qualitative Research for Werkspot, the following criteria were selected as most suitable to apply at the company. As the research process was accelerated to operate more agile, these criteria are important to ensure validity in research outcomes (Ravitch, 2015).

Criteria for Valid Research Outcomes:

- **Interpretative Validity:**
  Implement the use of quotes to transmit the direct words of the people studied. This way, we can make sure we are accurately representing the participant experience.

- **Descriptive Validity:**
  Factual accuracy by the use of recordings where we can review the collected data. The recommendation is to record audio and video to review in the analysis process.

- **Dependability:**
  Make sure the outcomes provide an answer to the research questions.

- **Perspectival Triangulation:**
  Diversify the participant sample. Invite people from different occupations, age ranges, gender, among other.

- **Investigator Triangulation:**
  Make sure multiple researchers are involved in the study, this can be done in the form of Co-researchers, and/or Observers.

- **Methodical Triangulation:**
  Make use of different research methods. This way, we make sure we gather a diverse range of information and accesses diverse layers of knowledge. (Fig. 10, P.45)

- **Dialogic Engagement— *Peer debriefs, Critical friends or Critical Inquiry Groups***
  Share your research with others to create the conditions in which others (and yourself) can challenge your interpretation of the research process and the collected data. This way, you can become more aware of any bias present throughout the research study.

To summarize, these norms can be applied in the practice of the Qualitative Research Process (Fig.32, P.85) during *Step 3:* Plan Research Study, *Step 4:* Data Collection and *Step 5:* Data Analysis. In this way, we make sure to maintain the integrity of research outcomes by relying on factual information such as participant quotes. As well, observations can be shared and challenged by having multiple Researchers in the process (this can be in the form of Co-Researchers or Observers). Diversification also plays a role in ensuring research validity, this can be done by implementing the use of diverse research methods, as well, a diversified participant sample with people from diverse ages, gender, etc. The Criteria for Valid Research Outcomes are taken by the Researcher, who ensures it is applied throughout the research study.

On the other hand, small guidelines for interaction with consumers were created. The objective is to maintain a user-centric perspective throughout the research study, and make sure the participant is comfortable at all times:

- **Respect:**
  The participants have agreed to give us their unbiased opinion through this research study, as such, they are free to speak their mind. There are no right or wrong answers and we must remain respectful as the participants express their opinion. Even if a participant makes a criticism, we must understand our areas for improvement and respect the participant.

- **Listen and react:**
  Our role is to listen carefully to the participant's opinion, we don't challenge their opinions, but we react with follow-up questions to make sure we have properly understood what they mean.

- **Enjoyable experience:**
  Receiving a participant for a research study is like receiving a guest in your home. As such, we must remain attentive to them and do our best to make sure they have an enjoyable experience. We can do this by making the process feel like a conversation instead of a scripted interaction.

6.5 Practices—

How does research fit within the day to day operations?

Practices can be adopted to make sure we expand the Research touchpoints. In this way, we make sure all involved are kept informed of research initiatives that are in process, and to convey the research outcomes. Some of the practices where research can fit into Werkspot's day-to-day operations are the following:

- **Weekly:**
  With the Consumer Acquisition track: The Product Discovery team has a Stand-up meeting three times per week, this means that the team members gather to share a quick update on ongoing initiatives such as research and experiments. The Product Discovery stand up is a great opportunity to keep team members informed regarding ongoing Research initiatives (Explorative or Validative Research).

  With members of other tracks and countries (FR, IT): The recently established Research Guild will be having weekly Research alignment sessions. This means that members of the guild can share the progress of ongoing research initiatives and can collaborate in the planning of future studies. In the Research Guild, research is aligned on both sides of the spectrum, research with homeowners, and research with Service Professionals. This also presents an opportunity to align on the Research tools that will be used to collect and analyze data.

- **Monthly:**
  Research Newsletter: The Research Guild will send out email with the main insights gathered in the month. This will also be shared on Slach, the chosen platform for communication at the office. This can help to spread research findings within the organization and spark curiosity.

  Open invitation to participate in research: Make research initiatives open by extending an invitation to all track members who wish to join continuous research initiatives, such as Customer Interviews.

  Monthly alignment with UX Guild: The UX and Research guilds have a close relationship due to the cyclical nature of its work. The UX Designers work on different concepts and prototypes that are tested through research. As such, close collaboration is needed. Through the research findings the UX Designers can improve the concepts and continue testing until successful outcome has been reached.

- **Quarterly:**
  Research events: Involving the Front-end and Back-end Developers in a Usability Testing study proved successful and enjoyable for all involved. This was recognized by the members of the team and it was encouraged to become a continuous practice. The best moment to conduct research events with the whole team is in the beginning of the Quarter. At this moment, the business priorities (OKRs- Objective Key Results) have been set and the whole team can collaborate to set initiatives that can help to achieve such results. Through the Research events the Product team: Product Discovery and Product Delivery can collaborate and gather insights from end-users. This can be done in the form of Consumer Interviews by exploring and framing problems. Or through Usability Testing when we already have a concept in mind, and this can be tested with consumers.

  Research training sessions: To align the practice of research throughout the organization, training sessions can be done in the form of workshops. This way, the Research Guild can showcase the methods that are being used and the best practices to conduct them. This can be useful to unify the operation in the Netherlands, and sister companies in France, and Italy.

6.6 Beliefs—

How does research align with the company values?

There is an established culture at Werkspot. Through the company culture, Core Values are used as a source of recognition among employees. In order to expand the culture of research, it can be embedded into the company's organizational culture. Some of the Core Values can be experienced through the practice of research, which connects them with the operation at the company. Some of these Core Values are:

- **Focus on customer value:**
  Werkspot defines this as:
  "I prioritize creating value for consumers and service professionals."

  Conducting research is intimately related to customer value. Research is a way to integrate the voice of consumers into the development process, which makes them active participants. Receiving feedback directly from consumers we can address their needs better, which translates into delivering better user experiences.

- **Collaborate and support each other:**
  Werkspot defines this as:
  "We ask for help, offer help and enjoy working together."

  Research can foster this value by prioritizing cross-track collaboration at Werkspot, and as a European company, also foster more collaboration with the French and Italian sister companies. The Customer Journey represents the way consumers undergo the end-to-end experience. Internally, the company is divided into a track organization that covers different areas of the Customer Journey. These areas are Consumer Acquisition (acquiring new consumers to the platform) and Consumer Matching (matching consumers to Service Professionals). By fostering more collaboration regarding research, Werkspot can learn more about the Consumer Journey and as a consequence improve the customer experience.

KNOWLEDGE OF CUSTOMER NEEDS

"78% of business buyers seek salespeople that act as trusted advisors with knowledge of their needs and industry."

—Salesforce Research (2018)

SECTION 7

Conclusions and Personal Reflection

CONTENT

07.

07. CONCLUSIONS

7.1 What did we learn along the way?

This project provided an opportunity to showcase the added value that User Research can provide. Especially in fast-paced Agile environments where decisions that bear impact on the end product have to be made continuously. Research can provide an extra layer of knowledge towards building a stronger product through user feedback and validation. Finalizing this graduation project, and towards implementation, the current processes Werkspot uses to conduct Quantitative experiments must not be discarded. The graduation project is built by adding to the existing environment, which can enrich it. Qualitative and Quantitative Research can be conducted in parallel. Through Qualitative Research, we bridge the gap between the teams in charge of developing the platform with the end-users. This provides a sense of empathy and the voice of consumers can be heard throughout the development process. Quantitative research on the other hand, helps to reach a broader audience. Through these two approaches the reach and depth of research can be expanded. This benefits Werkspot by enriching the company's customer knowledge through the validation of concepts from its early stages. As well, it facilitates the in-depth exploration of user behavior, their context, and needs which results in detecting new areas of opportunity.

The company recognized the need to expand User Research through changes implemented in the last months. Product Discovery was integrated to the Consumer Acquisition track, which facilitated having a team overview of Qualitative Research and experiments conducted. On the other hand, the Research Guild was established which further integrates the operation of Werkspot along its sister companies Instapro and Travaux.com regarding research initiatives in the 3 countries of operation. Through the Research Guild, members of different tracks and counties are represented, which facilitates aligning research with the two customer segments: Homeowners and Service Professionals.

Through the company's commitment towards continuous improvement, the Research Methods were tested with real consumers which improved the quality of the results. Most importantly, the value of research was recognized by taking the findings from the research methods and translating them to action. The Online Concept Testing research method resulted in the validation of a new Landing page design. The Diary Study uncovered new areas of opportunity for the current User Journey, which translated in the diversification of content with the Content Team. The Interviews were adopted as the most widely used method, through which Werkspot ensures remaining in contact with end-users continuously. Finally, the Usability Testing provided user feedback for concepts, which resulted in its improvement before development.

Revisiting the Research Questions:

1. **How can we successfully integrate consumers throughout the development process?**
   Through the Product Funnel (Fig.32, P.83), the different product stages can be observed, these are: 0. Exploration, 1. Discovery, 2. Development, 3. Evaluation. We can make sure to integrate consumers throughout the development process by involving them in research initiatives. This can be through Explorative or Validative Research (depending on the goal and desired outcomes).

2. **In which stages would it be more beneficial to receive consumer input?**
   Three product stages from the Product Funnel are considered the most beneficial to receive consumer input, this is due to the product state and the need for feedback or to explore along consumers. *1. Exploration stage*—Explorative Research: During the Exploration stage, we can learn from users which allows us to better understand their behavior and needs. This can lead to detecting new areas of opportunity which can later be validated. *2. Discovery stage*—Validative Research: In the Discovery stage, it is beneficial to validate ideas and concepts before development. Lastly, *4. Evaluation stage*— In the evaluation stage, both types of research can be conducted. Validative research can help us understand concept performance and detect if optimization is needed. On the other hand, Explorative Research helps us learn about the context of use (before, during, and after a user comes in contact with a touchpoint from Werkspot).

3. **Who should be the persons involved in the research process?**
   The RACI Model (Fig 35, P.88) describes four levels of involvement in the Research Process. These can be described as Responsible, Accountable, Consulted, and Informed. It is useful to make these distinctions to clarify who to consult in research related matters.

4. **How to simplify qualitative research without disregarding the key components that provide rich data?**
   Qualitative Research was simplified by removing lengthy elements such as full interview transcripts. Rich data is maintained throughout the process because all sessions are recorded for reference, and quotes are significantly used to accurately represent the user's experience in their own words.

5. **How can we ensure valid research outcomes?**
   In the simplification of Qualitative Research to operate within an Agile environment, Criteria for Validity (P.98) are needed to ensure that research outcomes still maintain elements that make them credible and valid. These criteria are selected from Academic Research as most suitable to implement at Werkspot.

6. **What is the best format to communicate research outcomes?**
   Research tools in the form of Formats (pp.96-97) are useful to capture focused information during research. And certain tools are also visual representations which can convey findings in an engaging way. Two examples are Customer Journeys and Experience Journey Mapping.

7. **How can we make research part of the Werkspot culture?**
   This can be achieved by linking together the elements that conform a culture which can be embedded into Werkspot's current operation (pp.92-100).

5.2 Personal Reflection:

My personal motivation for doing my Master Thesis with Werkspot comes from the excellent experience I had working alongside the company in my first semester of the Masters, during the course Design Strategy Project. I approached my mentor, Jeroen Coelen who is incredibly proactive and was quick to put me in contact with the company.

This graduation project was an incredible experience which allowed me to grow as a professional. I was given full freedom to propose and conduct research initiatives for the company. Even though I was an Intern, my team at Werkspot embraced me as any other employee which made me feel part of the company from the start.

I learned a lot about my role as a Strategic Designer and the areas that I find most interesting. Starting my Masters, I didn't know that I would specialize in Research. Nonetheless, professors like P.J. Stappers and Pieter Desmet peaked my interest into the tools and methods at the intersection of Research and Design.

This project taught me a lot in the translation of academic knowledge into working environments. Academic knowledge is the first step, but its application is engrained with challenges and intricacies that we must be ready to embrace and tackle. I am grateful for the knowledge obtained throughout the duration of my Masters Degree, I consider myself equipped with knowledge which has proven quite valuable in practice.

The thesis process, was a challenging experience, as many other graduates recognize, it is no easy process. It makes you fundamentally question your knowledge and your process as an individual. All the Masters and at work, we are used to operating as part of a team. Nonetheless, the Thesis process assesses us as individuals, which is not always easy. Furthermore, this process allowed me to learn more about myself, and I found a deep passion for research which I will continue to explore. At the conclusion of my Master Thesis, I will assume the role of User Researcher at Werkspot.

CUSTOMERS SEEK BETTER EXPERIENCES

"57% of customers have stopped buying from a company because a competitor provided a better experience."

—Salesforce Research (2018)

SECTION 8

References

CONTENT
References used as theoretical support for the graduation project.

08.

08. REFERENCES

- Council, D. (2015). The Double Diamond. The Design Process URL: https://www. designcouncil. org. uk/news-opinion/design-process-what-double-diamond [accessed 2019-03-09]

- Council, D. (2007). Eleven lessons: Managing design in eleven global companies-desk research report. Design Council.

- Gilmore, J. and Pine II, B. (1998). Welcome to the Experience Economy. [online] Harvard Business Review. Available at: https://hbr.org/1998/07/welcome-to-the-experience-economy [Accessed 10 March. 2019].

- Kalbach, J. (2016). Mapping experiences. 1st ed. O'RREILY.

- Braun, V., & Clarke, V. (2013). Some very important starting information. Successful qualitative research: A practical guide for beginners (pp. 3-18). London: SAGE.

- McCabe, O. L., Barnett, D. J., Taylor, H. G., & Links, J. M. (2010). Ready, willing, and able: a framework for improving the public health emergency preparedness system. Disaster medicine and public health preparedness, 4(2), 161-168.

- Sanders, E. and Stappers, P. (2012). Convivial design toolbox. Amsterdam: BIS.

- Visser, F. S., Stappers, P. J., Van der Lugt, R., & Sanders, E. B. (2005). Contextmapping: experiences from practice. CoDesign, 1(2), 119-149.

- Braun, V., & Clarke, V. (2013). Ten fundamentals of qualitative research. Successful qualitative research: A practical guide for beginners (pp. 19-41). London: SAGE.

- Reynolds, T. J., & Gutman, J. (1988). Laddering theory, method, analysis, and interpretation. Journal of advertising research, 28(1), 11-31.

- Zimmerman, J., Stolterman, E., & Forlizzi, J. (2010, August). An analysis and critique of Research through Design: towards a formalization of a research approach. In proceedings of the 8th ACM conference on designing interactive systems (pp. 310-319). ACM.

- Mirnig, A. G., Meschtscherjakov, A., Wurhofer, D., Meneweger, T., & Tscheligi, M. (2015, April). A formal analysis of the ISO 9241-210 definition of user experience. In Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems (pp. 437-450). ACM.

- Zimmerman, J., Forlizzi, J., & Evenson, S. (2007, April). Research through design as a method for interaction design research in HCI. In Proceedings of the SIGCHI conference on Human factors in computing systems (pp. 493-502). ACM.

- Hassenzahl, M., & Tractinsky, N. (2006). User experience-a research agenda. Behaviour & information technology, 25(2), 91-97.

- Kirman, B., Casey, S., Lawson, S., & Rowland, D. (2008). User powered games for research.

- Rohrer, C. (2014). When to Use Which User-Experience Research Methods. [online] Nielsen Norman Group. Available at: https://www.nngroup.com/articles/which-ux-research-methods/ [Accessed 1 Mar. 2019].

- Bernoff, J., Cooperstein, D., Lussant, M., & Munchbach, C. (2011). Competitive Strategy in the Age of the Customer. CMO & Marketing Leadership Professionals, Forrester (June 10, 2011).

- Costello, T. (2012). RACI—"Getting Projects" Unstuck". IT Professional, 14(2), 64-63.

- Varhol, P. (2019). The complete history of agile software development. [online] TechBeacon. Available at: https://techbeacon.com/app-dev-testing/agility-beyond-history-legacy-agile-development [Accessed 4 Apr. 2019].

- STAPPERS, P. and GIACCARDI, E. (n.d.). The Encyclopedia of Human-Computer Interaction, 2nd Ed.. [online] The Interaction Design Foundation. Available at: https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/research-through-design [Accessed 1 Mar. 2019].

- Abras, C., Maloney-Krichmar, D., & Preece, J. (2004). User-centered design. Bainbridge, W. Encyclopedia of Human-Computer Interaction. Thousand Oaks: Sage Publications, 37(4), 445-456.

- The Interaction Design Foundation. (2019). What is User Centered Design?. [online] Available at: https://www.interaction-design.org/literature/topics/user-centered-design [Accessed 7 Apr. 2019].

- Braga, C. and Teixeira, F. (2019). The State of UX in 2019. [online] UX Trends. Available at: https://trends.uxdesign.cc [Accessed 15 Apr. 2019].

- Carl III, W. J. (1996). Six Thinking Hats: Argumentativeness and Response to Thinking Model.

- Sriram, V. (2019). Time to talk about Research-Ops. [online] UX Collective. Available at: https://uxdesign.cc/time-to-talk-about-research-ops-cbacd8446dbe [Accessed 20 Apr. 2019].

- Wiedmaier, B. (2019). Field Report: In-Context Research at The North Face That Engages Participants and Stakeholders. [online] dscout. Available at: https://dscout.com/people-nerds/the-north-face-research-strategies?utm_source=Researcher+Mailing+List&utm_campaign=f5128c529b-Newsletter+6.2.19_COPY_01&utm_medium=email&utm_term=0_1cde768bb8-f5128c529b-102927573 [Accessed 24 May 2019].

- Calabretta, G., & Kleinsmann, M. (2017). Technology-driven evolution of design practices: envisioning the role of design in the digital era. Journal of Marketing Management, 33(3-4), 292-304.

- Kleinsmann, M., Valkenburg, R., & Sluijs, J. (2017). Capturing the value of design thinking in different innovation practices. International Journal of Design, 11(2), 25-40.

- Sadri, G., & Lees, B. (2001). Developing corporate culture as a competitive advantage. Journal of Management Development, 20(10), 853-859.

- Kuruppu, D. (2019). Agile development from a programmer's perspective. [online] Level Up Your Code. Available at: https://levelup.gitconnected.com/agile-from-a-developers-perspective-27b23ea665f0 [Accessed 1 Jun. 2019].

- Backhouse, R. E., & Fontaine, P. (Eds.). (2014). A historiography of the modern social sciences. Cambridge University Press.

- Salesforce.com. (2019). What Are Customer Expectations (and How Have They Changed)?. [online] Available at: https://www.salesforce.com/research/customer-expectations/# [Accessed 5 May 2019].

- Salesforce.com. (2018). State of the Connected Customer Report. [online] Available at: https://c1.sfdcstatic.com/content/dam/web/en_us/www/documents/e-books/state-of-the-connected-customer-report-second-edition2018.pdf [Accessed 20 May 2019].

- Sriram, V. (2019). *Time to talk about Research-Ops - UX Collective.* [online] Medium. Available at: https://uxdesign.cc/time-to-talk-about-research-ops-cbacd8446dbe [Accessed 3 May 2019].

- Menold, J., Simpson, T. W., & Jablokow, K. W. (2016, August). The Prototype for X (PFX) framework: assessing the impact of PFX on desirability, feasibility, and viability of end Designs. In *ASME 2016 International Design Engineering Technical Conferences and Computers and Information in Engineering Conference* (pp. V007T06A040-V007T06A040). American Society of Mechanical Engineers.

- Nielsen, J. (2019). *Why You Only Need to Test with 5 Users*. [online] Nielsen Norman Group. Available at: https://www.nngroup.com/articles/why-you-only-need-to-test-with-5-users/ [Accessed 28 May 2019].

-

- Medium. (2019). *Design thinking vs lean startup; If you build it, will they come?*. [online] Available at: https://medium.com/@uctgsbsolutionspace/design-thinking-vs-lean-startup-if-you-build-it-will-they-come-1ad929e619b5 [Accessed 13 Jul. 2019]

- 2012books.lardbucket.org. (2019). *The Elements of Culture*. [online] Available at: https://2012books.lardbucket.org/books/sociology-brief-edition-v1.1/s05-02-the-elements-of-culture.html [Accessed 10 Jun. 2019].

- Ravitch, S. M., & Mittenfeller Carl, N. (2015). Validity: Processes, strategies and considerations. Qualitative research: Bridging the conceptual, theoretical, and methodological (pp. 185-213). London: SAGE.

RESEARCH-OPS

"Research-Ops is an emerging discipline. The primary goals are to:

- *• **Operationalize customer research**.*

- *• Make research more relatable and **encourage cross-functional team participation**.*

- *• Make **research insights more accessible"***

–Vidhya Sriram (2018)

SECTION 9

Appendix

CONTENT

09.

A. Project Brief

3/02

DESIGN
FOR our
future

TUDelft

IDE Master Graduation
Project team, Procedural checks and personal Project brief

This document contains the agreements made between student and supervisory team about the student's IDE Master Graduation Project. This document can also include the involvement of an external organisation, however, it does not cover any legal employment relationship that the student and the client (might) agree upon. Next to that, this document facilitates the required procedural checks. In this document:

- The student defines the team, what he/she is going to do/deliver and how that will come about.
- SSC E&SA (Shared Service Center, Education & Student Affairs) reports on the student's registration and study progress.
- IDE's Board of Examiners confirms if the student is allowed to start the Graduation Project.

❗ **USE ADOBE ACROBAT READER TO OPEN, EDIT AND SAVE THIS DOCUMENT**
Download again and reopen in case you tried other software, such as Preview (Mac) or a webbrowser.

STUDENT DATA & MASTER PROGRAMME
Save this form according the format "IDE Master Graduation Project Brief_familyname_firstname_studentnumber_dd-mm-yyyy".
Complete all blue parts of the form and include the approved Project Brief in your Graduation Report as Appendix 1 !   ❗

family name	Romero Valdes Victoria
initials	D given name Daniela
student number	4743865
street & no.	Dunne Bierkade 13
zipcode & city	2512BC, Den Haag
country	The Netherlands
phone	+31640951114
email	daniela.romero.valdes@gmail.com

Your master programme (only select the options that apply to you):

IDE master(s): ( ) IPD   ( ) DfI   (★) SPD
2nd non-IDE master: _____
individual programme: ___ - ___ (give date of approval)
honours programme: (Honours Programme Master)
specialisation / annotation: (Medisign)
                             (Tech. in Sustainable Design)
                             (Entrepreneurship)

SUPERVISORY TEAM **
Fill in the required data for the supervisory team members. Please check the instructions on the right !

** chair	Henk Kuipers	dept. / section: ID/AED
** mentor	Jeroen Coelen	dept. / section: PIM/M&C
2nd mentor	Kris Boon	
	organisation: Werkspot	
	city: Amsterdam	country: The Netherlands

comments (optional)   Company mentor

❗ Chair should request the IDE Board of Examiners for approval of a non-IDE mentor, including a motivation letter and c.v..

❗ Second mentor only applies in case the assignment is hosted by an external organisation.

❗ Ensure a heterogeneous team. In case you wish to include two team members from the same section, please explain why.

IDE TU Delft - E&SA Department /// Graduation project brief & study overview /// 2018-01 v30   Page 1 of 7

Procedural Checks - IDE Master Graduation

TUDelft

APPROVAL PROJECT BRIEF
To be filled in by the chair of the supervisory team.

chair Henk Kuipers   date 08 - 03 - 2019   signature

CHECK STUDY PROGRESS
To be filled in by the SSC E&SA (Shared Service Center, Education & Student Affairs), after approval of the project brief by the Chair.
The study progress will be checked for a 2nd time just before the green light meeting.

Master electives no. of EC accumulated in total: 15 EC   ( ) YES   all 1st year master courses passed
Of which, taking the conditional requirements
into account, can be part of the exam programme 15 EC   (✓) NO   missing 1st year master courses are:

List of electives obtained before the third
semester without approval of the BoE

ID 4355-10

name D. Vleescher   date 10. 3. 19   signature

FORMAL APPROVAL GRADUATION PROJECT
To be filled in by the Board of Examiners of IDE TU Delft. Please check the supervisory team and study the parts of the brief marked **.
Next, please assess, (dis)approve and sign this Project Brief, by using the criteria below.

- Does the project fit within the (MSc)-programme of the student (taking into account, if described, the activities done next to the obligatory MSc specific courses)?
- Is the level of the project challenging enough for a MSc IDE graduating student?
- Is the project expected to be doable within 100 working days/20 weeks ?
- Does the composition of the supervisory team comply with the regulations and fit the assignment ?

Content: (✓) APPROVED   ( ) NOT APPROVED
Procedure: (✓) APPROVED   ( ) NOT APPROVED

comments

name A. Kuwae   date 1 - 4 - 2019   signature

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Initials & Name D   Romero Valdes Victoria   Student number 4743865
Title of Project Setting Up a Research Process for Continuous Improvement at Werkspot

Personal Project Brief - IDE Master Graduation   *TU*Delft

Setting Up a Research Process for Continuous Improvement at Werkspot   project title

Please state the title of your graduation project (above) and the start date and end date (below). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

start date   04 - 03 - 2019   02 - 08 - 2019   end date

**INTRODUCTION **
Please describe, the context of your project, and address the main stakeholders (interests) within this context in a concise yet complete manner. Who are involved, what do they value and how do they currently operate within the given context? What are the main opportunities and limitations you are currently aware of (cultural- and social norms, resources (time, money,...), technology, ...).

I was introduced to Werkspot during the first semester of the Master's Degree (Sept. to Feb. 2017) while following the course Design Strategy Project (ID4350). Due to the company's interest in continuous innovation and its openness to new ideas, I was intrigued to pursue future collaboration opportunities. Werkspot is the leading home improvement platform in the Netherlands, their shared purpose is to "Create the easiest and most reliable way to arrange home services." Currently, they operate in three different countries in Europe; the Netherlands, France, and Italy. They have the vision to align the way all three platforms operate by 2020, for the purpose of this graduation project I will focus mainly on the Netherlands to conduct user research. One of the goals I seek to achieve from this research process is scalability by defining a roadmap to implement the research process for France and Italy as well, based on the findings from the pilot research process in the Netherlands.

Due to Werkspot's growing popularity, the company was acquired by HomeAdvisor in 2013. HomeAdvisor is a company with a similar service offering in the United States and owns several other brands within the same domain (Travaux in France, My Builder in the UK, Instapro in Italy, etc). As a digital platform that connects Service Professionals with consumers (homeowners). There are two customer segments in Werkspot's business model. The first being the Service Professionals (Service Pros) that enroll in Werkspot's service to gain access to new consumers. On the other hand, the second segment of Werkspot's customers are the homeowners. They have more control over the service because they pose a request to which Service Pros reply in the form of a proposal, and ultimately, the homeowners make the choice to give the job to one of the presented proposals. During the Design Strategy Project Course, I had the opportunity to develop a project that focused on Service Pros. This time, I will join Werkspot as part of Consumer Acquisition track and focus on the consumers (homeowners) by developing a research process (mostly focused on qualitative research) to help Werkspot become more customer-centric. At the same time, it is a project that will allow me to research into their three existing markets (FR, NL, IT) and understand the differences between the consumer behavior while focusing on ways to implement the research process that will drive continuous improvement for Werkspot.

Digital solutions currently dominate the market which has reached levels of saturation, as a consequence, consumers are plagued with alternatives as brand loyalty is decreasing for generations like Millennials and Gen Z. Nonetheless, Werkspot has been able to capitalize on their agile way of working by adapting to customer demand on both sides (Service pros and homeowners). Werkspot is able to provide fast value by running experiments on their platform and application which gather quantitative data, the premise is that if the experiment improves the current indicator it is worth developing for implementation. The experimentation mindset is something that I plan on integrating during my graduation project by adopting the agile way of working and iterating on methods of research, as well on ways to analyze the data fast and best display the findings, which will be tested with real consumers throughout the duration of the project.

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introduction (continued): space for images

Werkspot's Model   GRADUATION PROJECT SCOPE
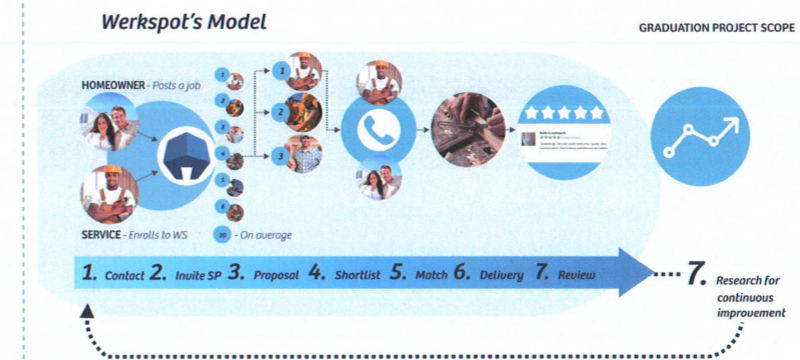
image / figure 1:   Werkspot's Model and Graduation Project Scope.

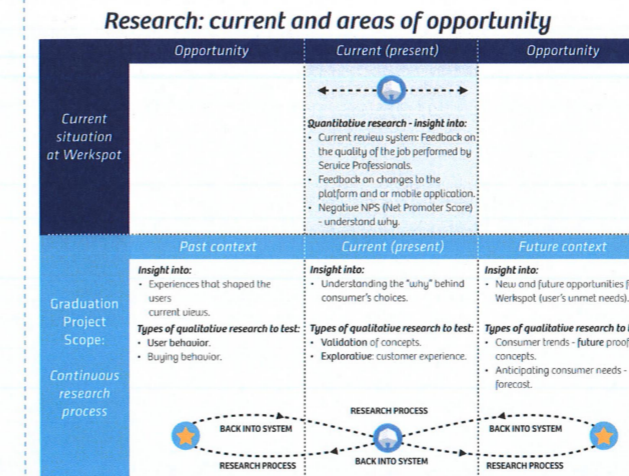**Research: current and areas of opportunity**

image / figure 2:   Existing research at Werkspot and Graduation Project Scope: Continuous Research Process.

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PROBLEM DEFINITION **
Limit and define the scope and solution space of your project to one that is manageable within one Master Graduation Project of 30 EC (= 20 full time weeks or 100 working days) and clearly indicate what issue(s) should be addressed in this project.

How can Werkspot drive continuous improvement at all stages of the customer journey? The main objective of my graduation process is to implement an ongoing research process that can optimize the gathering and analyzing of data. Part of the process is the transformation from raw data into actionable insights, the research outcome can then be integrated back into a certain stage of the customer journey to improve on it.

Werkspot, as an online platform which offers a service through Service Professionals (Service Pros), has limited to no physical interaction with their consumers. In order to better their service and become more consumer-centric, there is a need for an effective research process that allows Werkspot to listen to their consumers beyond online feedback forms. Werkspot is currently operating in three countries: the Netherlands, France, and Italy. In order to continue growing their operations, there is a need to better understand the customer segments in their existing markets and leverage their differences towards a single platform operation by 2020. One of the main challenges to be addressed during my graduation project is the fact that currently, Werkspot does not get enough customer feedback (online feedback forms show that only 5% to 10% service requests posted on the platform get a review). This poses an obstacle to consumer-centricity. Another consideration is that Werkspot operates under agile processes, my deliverable must tackle the challenge of developing proper research while still working under Werkspot's operations through short development cycles. The research process must adapt to the company's way of working.

ASSIGNMENT **
State in 2 or 3 sentences what you are going to research, design, create and / or generate, that will solve (part of) the issue(s) pointed out in "problem definition". Then illustrate this assignment by indicating what kind of solution you expect and / or aim to deliver, for instance: a product, a product-service combination, a strategy illustrated through product or product-service combination ideas, ... In case of a Specialisation and/or Annotation, make sure the assignment reflects this/these.

This project focuses on the development and testing of an ongoing research process that can help drive continuous improvement for Werkspot. The research process will include testing diverse research methods, as well, developing tools that allow for the agile gathering and analyzing of data to present actionable findings for the development team.

Werkspot has a vast diversity in their cross-functional teams (tracks under which they operate). This diversity is a great asset for research purposes, as Werkspot can benefit from integrating people from diverse expertise who have different world-views and are able to provide insights that allow exploring customers in-depth. One of the goals is to involve people from different areas, especially developers for them to better understand the end user of the products they develop.

The project will operate under the agile design process through which I will develop a research process with diverse methodologies which will be iterated and tested with real consumers in the form of qualitative research. Some tools that could prove useful are creative facilitation, design for emotion methodologies or co-creation techniques in order to reach a deep and meaningful understanding of Werkspot's consumers. The end result of the project will be in the form of a research process that contains different methodologies, tools to gather and analyze data and be able to present actionable findings. On the other hand, to achieve scalability, an implementation roadmap will be developed to explore implementation in all three markets. The different research needs call for diverse methods and the goal is to teach people at Werkspot which type of research method to select based on the research questions they seek to answer and make sure that those methods are optimal in terms of effort and cost, as well to deliver performance indicators that can make it clear for non-researchers if the process is going as it should.

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PLANNING AND APPROACH **
Include a Gantt Chart (replace the example below - more examples can be found in Manual 2) that shows the different phases of your project, deliverables you have in mind, meetings, and how you plan to spend your time. Please note that all activities should fit within the given net time of 30 EC = 20 full time weeks or 100 working days, and your planning should include a kick-off meeting, mid-term meeting, green light meeting and graduation ceremony. Illustrate your Gantt Chart by, for instance, explaining your approach, and please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any, for instance because of holidays or parallel activities.

start date _4_ - _3_ - _2019_   _2_ - _8_ - _2019_   end date

I will be working full time on my graduation project starting on March 04th. From here on, I will be working from Werkspot's headquarters in Amsterdam.

The week from April 08 until April 12 I will be working at the TPM faculty on TU Delft to fulfill my duties as teaching assistant. I will not count this as a working week for my graduation project. On the other hand, I will take a family holiday from May 02 until May 06, which has also been discarded as a working week from my project planning. Although both weeks were discarded from the planning, I will work remotely on high priority tasks.

In my main activities, I list several activities that will take place during the duration of the project from research until the "Implementation process (onboarding sessions)" in which I will transmit the research process to the internal teams at Werkspot. Because I am following an agile design process, there will be cycles of iteration on the research process which will be followed by user testing with Werkspot consumers in diverse forms of qualitative research. My planning is adaptable in order to make sure the iterations and user tests are properly set to ensure the best possible outcome.

During the last cycle of user research on week 16 (June 24-28) I will onboard diverse persons from Werkspot in the research process in order to measure adoption and implementation. I am flexible the schedule so the graduation ceremony date might vary depending on availability from my graduation team (Mentor, Company Mentor and Chair). The milestones of the project will be reached in the following weeks: week 1 (Feb. 25) with the kick-off meeting, week 8 (May 08) with the midterm evaluation, then the green light meeting on week 16 (July 01), and finally on week 20 (July 29) with the graduation ceremony.

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MOTIVATION AND PERSONAL AMBITIONS
Explain why you set up this project, what competences you want to prove and learn. For example: acquired competences from your MSc programme, the elective semester, extra-curricular activities (etc.) and point out the competences you have yet developed. Optionally, describe which personal learning ambitions you explicitly want to address in this project, on top of the learning objectives of the Graduation Project, such as: in depth knowledge a on specific subject, broadening your competences or experimenting with a specific tool and/or methodology, ... Stick to no more than five ambitions.

Before pursuing my MSc in SPD I worked in the Consultancy field in my country of origin which is Mexico. The Master's Programme helped me understand more about how the European market operates in areas like fast-moving consumer goods by working for Unilever, also on the aviation industry with KLM. I would like to gain more hands on working experience in the form of a user researcher during the duration of this graduation project. It is very interesting for me because I am familiar with Werkspot as a company from the Service Pro side, but this project allows me to explore in-depth the other customer segment, which is homeowners.

During the first semester of the Master's Degree (Sept. to Feb. 2017) I was introduced to Werkspot while following the course Design Strategy Project (ID4350). I really enjoyed the working experience at Werkspot and concluded the project getting a clear sense of the company culture, which was very interesting to me as an international. The company showed genuine interest in the projects developed while inviting us to fully immerse and test with their customers which provided depth to our results. On the other hand, our DSP lecturer Jeroen Coelen, was a great mentor and his extensive knowledge of areas like Lean Research inspired me to follow in his footsteps. My first ambition would be to continue expanding my knowledge on areas like lean research which will prove useful not only for this project but also for my overall working experience.

During my MSc Programme, I learned very valuable tools in the field of qualitative research such as context-mapping where the end users are integrated into the design process (Stappers). As well, diverse tools from Design for Emotion (Desmet) which allows a deeper look into the micro-emotions that we experience through product or service interactions. I would like to use qualitative research methods that allow me to gain an in-depth understanding of Werkspot's customers in order to better design a research process that can efficiently drive continuous improvement.

I am used to working in multidisciplinary teams and thrive in team work, this is a project that I will develop by immersing into Werkspot and will require the knowledge from diverse internal expertises, but the responsibility lies on me and I want to further develop my skill set in project management.

Lastly, I want to conclude my Master's Degree by delivering a Roadmap for implementation (Simonse) which can help Werkspot in implementing the research process in their other two markets, France and Italy. I found this tool to be incredibly useful during projects developed in the Masters and would like to use this tool once more to strengthen my skills.

FINAL COMMENTS
In case your project brief needs final comments, please add any information you think is relevant.

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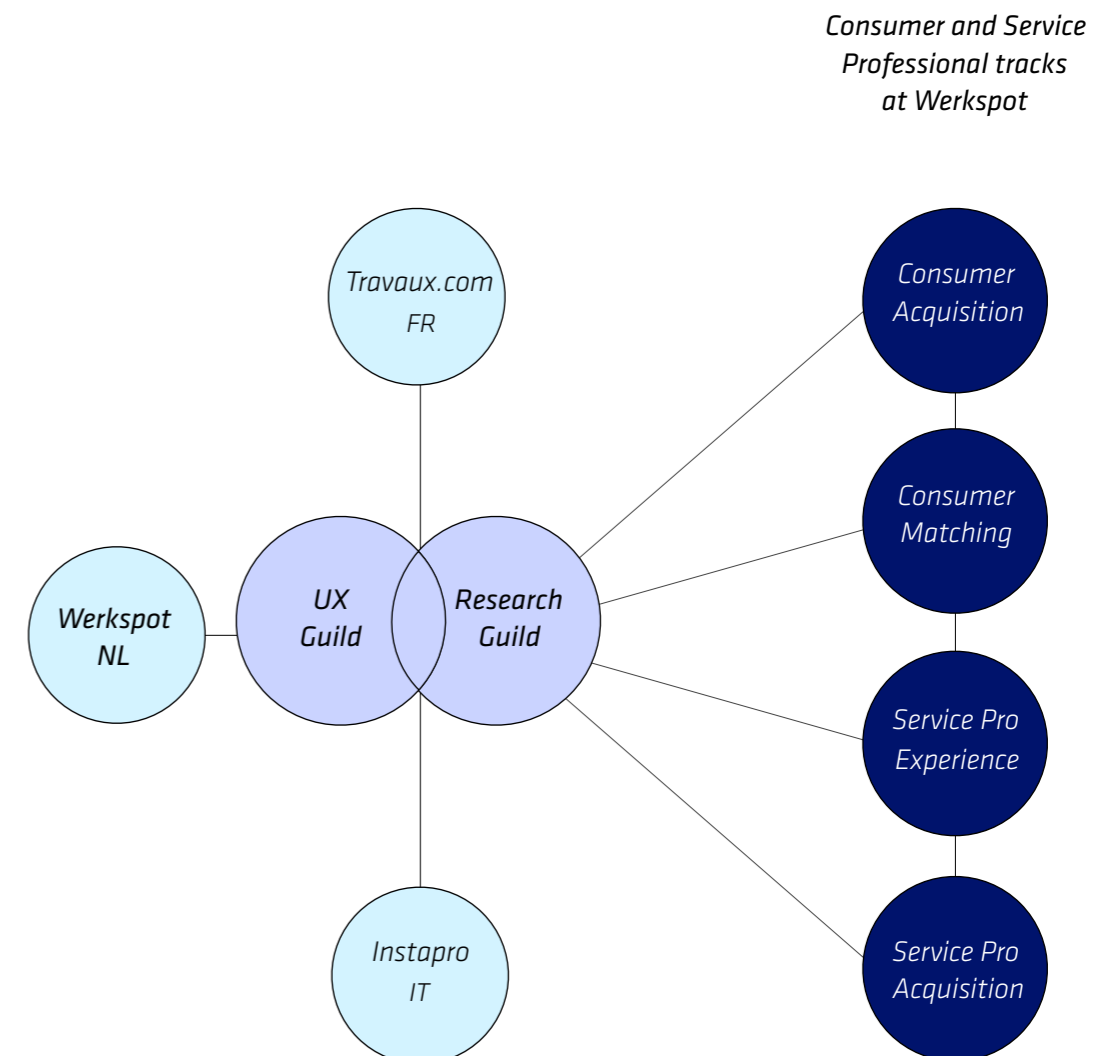## B. Internal organization at Werkspot

The organizational chart from the company helps to put in context the focus of the graduation project. This project was developed in collaboration with the Consumer Acquisition track at Werkspot. Through the Diary Study research method, collaboration was fostered between the two consumer tracks: Consumer Acquisition and Consumer Matching (highlighted in the organizational chart).

On the other hand, a visualization was created to explain the relationship between the UX Guild and Research Guilds with Werkspot (NL), travaux.com (FR), and Instapro (IT). The two guild operate in close collaboration and work alongside each other. This is done to develop prototypes that can be tested through research, and with research outcomes, make modifications into the proposed prototypes. The UX and Research Guilds work within the Consumer and Service Professional tracks at the company, which are showcased in the visual (Fig.38).

Fig. 38. Research Guild and the track organization

Consumer and Service Professional tracks at Werkspot

Tracks		CSA	CSM	SPX	SPA	OX	PFM	DATA
	Guild/ Specialty	Consumer Acquisition	Consumer Matching	Service Pro Experience	Service Pro Acquisition	Operational Excellence	Platform Track	Data & BI
Product	Lead	●						
	Product Mgr.	●						
	Product analysis	●						
Tech & Design	Agile Coach	●						
	UX (Design & Research)	●						
	Back end	●						
	Front-end/Mobile	●						
	Data	●						
	Other	●						
Contributors	NL/ Italy	●						
	France	●						
	Consumer tracks							

Fig. 37. Organizational chart

C. Visual representation of the Agile Methodology and User-Centric Design

AGILE METHODOLOGY

Iterative and fast development cycles.

SPRINT 1 — Review, Test, Build, Design, Plan, Launch
SPRINT 2 — Review, Test, Build, Design, Plan, Launch
SPRINT 3 — Review, Test, Build, Design, Plan, Deploy

USER-CENTRIC DESIGN

Iterative process that focuses on understanding the end user.

Understand context of use → Specify user requirements → Design solutions → Evaluate against requirements

Fig. 39. Agile Methodology (Kuruppu, 2019) and User-Centric Design (The Interaction Design Foundation, 2019)

D. Imperatives to achieve alignment

The project was developed through a Research Case Study approach by learning through conducting research, for which certain considerations were necessary. As Kalbach states, organizations are having an increasing problem of alignment due to the fact that they are out of sync with what the people they serve actually experience (Kalbach, 2016). This challenge was identified at Werkspot, yet it is not exclusive to this company, other companies across industries face similar challenges. As Kalbach, the author of Mapping Experiences states, there are three imperatives to achieve this missing alignment:

Inside-out perspective
What we offer consumers, taking into account primarily business objectives for the development process.

Outside-in perspective
What we offer consumers, basing our development process in consumer centricity. How users perceive our offering.
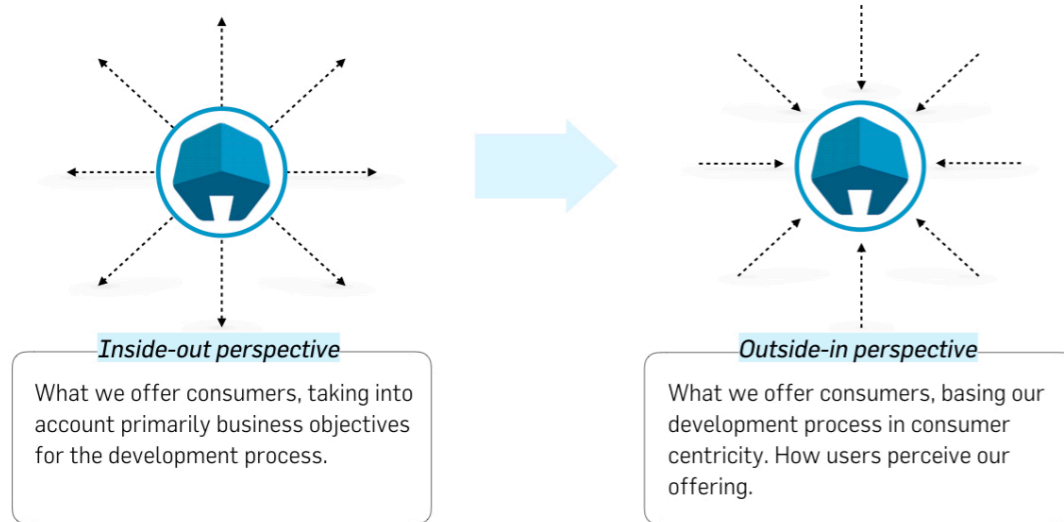
Fig. 40. Outside-in perspective for Werkspot

1. View your offerings from outside-in rather than inside-out

An outside-in perspective refers to being able to view our offering through a consumer point of view and including them in the development process. Research is emphasized to develop more empathic relationships between the two sides of the spectrum, on one side being the teams in charge of developing the platform (Discovery and Delivery teams at Werkspot) and secondly, the end-users. This way of operating contradicts the current one in which the development process tends to favor business objectives and excludes a consumer point of view. The way to achieve an 'outside-in perspective' at Werkspot is by maintaining close contact with end-users and involving them in the development process.

"Organizational silos prevent alignment. Aligned organizations instead work across functional boundaries." (Kalbach, 2016)

CROSS-TRACK COLLABORATION

(Involving Consumer tracks)
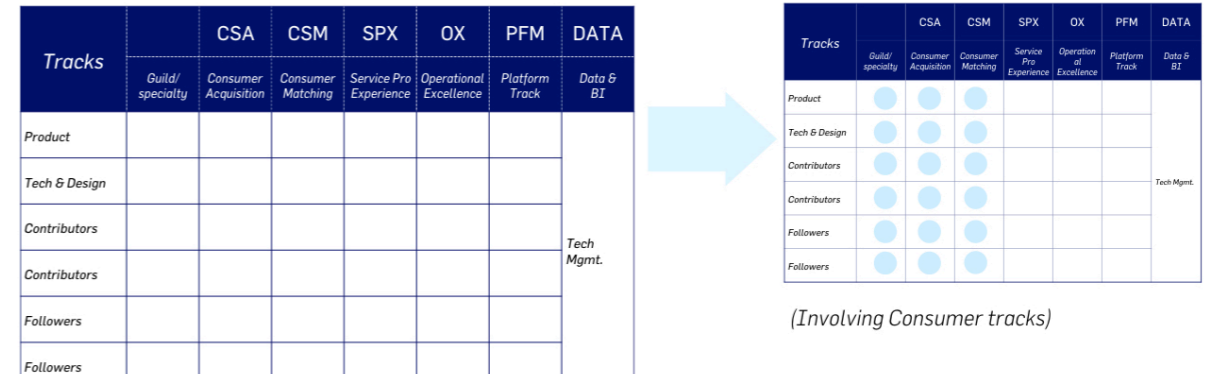
Fig. 41. Outside-in perspective for Werkspot

2. Align internal functions across teams and levels

The way Werkspot operates, is divided into work organizations called tracks. Nonetheless, due to the fact that more interaction is needed in between such tracks, these can become organizational silos. This can happen because the customer journey is divided into Consumer Acquisition and Consumer Matching which operate separately in spite of their customer focus. This gap needs to be bridged as I identified through joint research efforts that both tracks benefit from having the same level of customer interaction and knowledge. Both tracks should be kept at a level of "informed" about each other's research efforts. In order to achieve alignment across the organization, the Consumer Acquisition and Consumer Matching track should collaborate closer together in favor of a unified consumer journey.
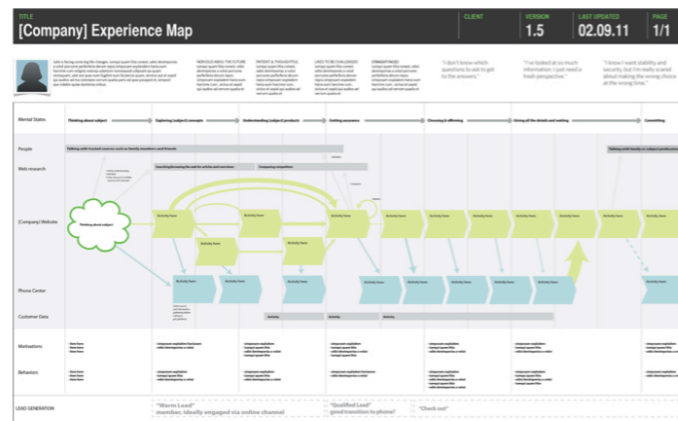
3. Create visualizations for a shared purpose

According to Kalbach, visualizations help organizations to break down siloed thinking. This is needed at Werkspot to achieve two key objectives, one is to become more consumer centric, the second is to favor collaboration among tracks. One type of visualization that emphasizes on visually conveying the experience from a consumer point of view are Consumer Journeys.

Kalbach three imperatives to achieve alignment were considered throughout the creation of the

"Visualizations are a key device to break down siloed thinking." "They are a key way of seeing the market from the customer's perspective."

VISUALIZING FOR A SHARED PURPOSE

Example of a blank model for a multichannel experience map created by Chris Risdon (Mapping Experiences, Kalbach, James, 2016)

Fig. 42. Visualizing for a shared purpose

Credibility is described as the ability of a research to take into account all complexities that might present themselves throughout a research process. The way qualitative researchers can establish credibility is by implementing validity strategies such as: triangulation, member checks, presenting thick descriptions, pier debriefs, among others. Another validity criteria is Transferability, which refers to the way a qualitative study can be applicable to other contexts while still maintaining its the richness of its specific context. As for confirmability, it refers to how the research findings should be able to be confirmed which can be accomplished by diverse methods such as triangulation strategies, researcher reflexivity processes, and external audits. (Chapter 5. Research Case Studies exemplifies how these strategies were applied)

research process, yet another important consideration is how to ensure the validity of the research outcome due to the fact that the process will be simplified and made faster to fit within an agile work environment. In order to ensure valid research outcomes, we must define what we aim to achieve. Validity in the context of qualitative research, refers to the different ways that researchers can affirm that their findings were in fact faithful to the experience of a participant. In accordance to the concept of validity, there are different criteria to which qualitative research should adhere to in order to produce valid results, these are defined as validity criteria and have been applied throughout the research case studies developed for this project.

E. Visualization— What is the added value of Research?

How do Consumer Acquisition track members benefit from research? Figure 42 provides an overview of the contribution and added value each member receives in return from taking part in research efforts.
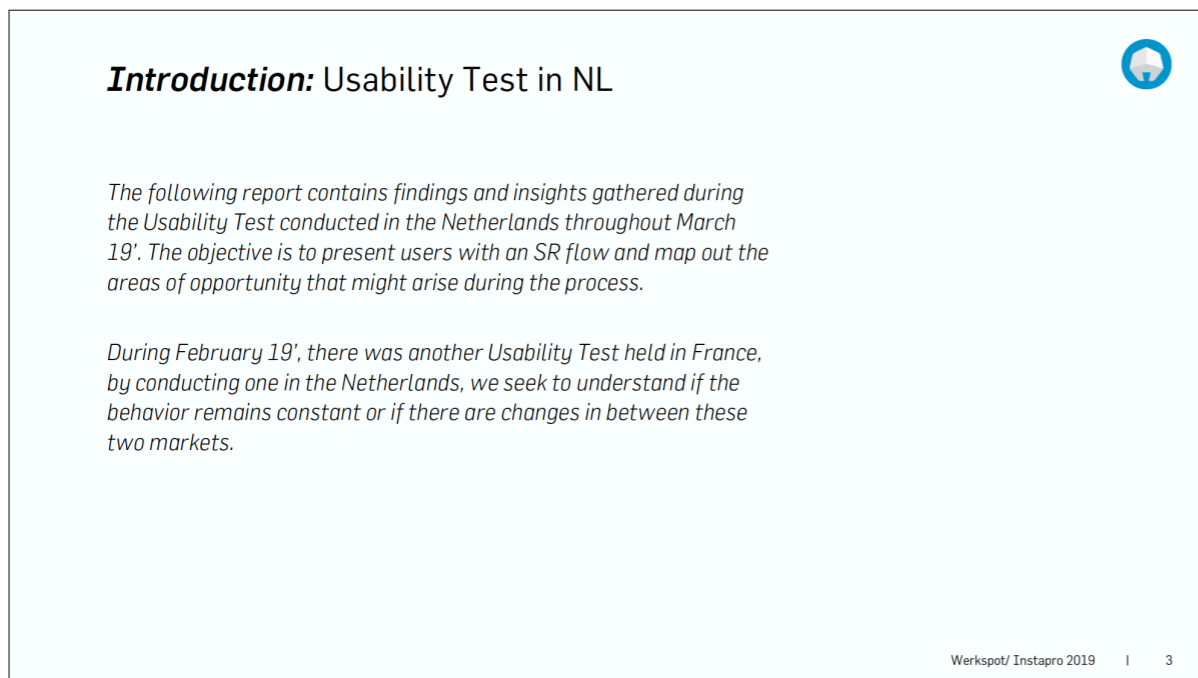
PRODUCT MANAGER

How do they contribute?
· **Lense:** *Business Viability.*
· **Focus:** *Are we discovering things that align with our business objectives?*
· **Role:** *Prioritization of tasks and team efforts.*

What is the added value for them?
· *Feedback prior to the development phase.*
· *Concept/ idea optimization.*
· *Strengthening user impact by validating prior to development.*

TRACK LEAD

How do they contribute?
· **Lense:** *Business Viability.*
· **Focus:** *Is the team aligned and in track with the business objectives?*
· **Role:** *Overview and alignment with business objectives.*

What is the added value for them?
· *Gather input on current initiatives and how research can strengthen the product.*
· *Achieve concept validation before development.*

CONTENT TEAM

How do they contribute?
· **Lense:** *User Desirability.*
· **Focus:** *How can we deliver useful content that can help solve user needs?*
· **Role:** *Implementing based on user feedback.*

What is the added value for them?
· *Validation on clarity and effectiveness of content for users.*
· *User-centric perspective for other content initiatives.*

SCRUM/ AGILE COACH

How do they contribute?
· **Lense:** *Technical Feasibility.*
· **Focus:** *Planning, asses team productivity, have a team overview.*
· **Role:** *Team management.*

What is the added value for them?
· *User knowledge to make sure user-centered perspective is applied into the development process.*

WHAT IS THE ADDED VALUE FOR ALL INVOLVED?

USER RESEARCHER

How do they contribute?
· **Lense:** *User Desirability.*
· **Focus:** *How can we incorporate a user-centric perspective into Discovery & delivery?*
· **Role:** *Voice of consumers within the company.*

What is the added value for them?
· *Knowledge on how to apply UCD into Werkspot.*
· *Gathering actionable insights to drive continuous improvement.*

DEVELOPERS (BACK-END & FRONT-END)

How do they contribute?
· **Lense:** *Technical Feasibility.*
· **Focus:** *Application from the ideas and concepts.*
· **Role:** *Decide what is feasible to build.*

What is the added value for them?
· *Information about bottlenecks identified by users.*
· *Sensitizing to user needs.*
· *Optimizing product based on user feedback.*

UX DESIGNERS

How do they contribute?
· **Lense:** *User Desirability.*
· **Focus:** *Implementing feedback and research findings back into the design process.*
· **Role:** *Implementation after research.*

What is the added value for them?
· *Feedback from ideas and concepts, aesthetic and perception.*
· *Validating concepts.*

Fig. 43. What is the added value for all involved?

F. Usability Testing Report

Usability Test in the Netherlands (Q1, 2019)

Werkspot/ Instapro
2019

Amsterdam
April 1, 2019

Usability Test in the Netherlands:
Research Findings & Insights

1

Context

Usability Test in NL

1

2

Introduction: Usability Test in NL

The following report contains findings and insights gathered during the Usability Test conducted in the Netherlands throughout March 19'. The objective is to present users with an SR flow and map out the areas of opportunity that might arise during the process.

During February 19', there was another Usability Test held in France, by conducting one in the Netherlands, we seek to understand if the behavior remains constant or if there are changes in between these two markets.

Usability Test in NL after the one conducted in FR (Feb, 19')
Goals: Compare results

Conduct a Usability Test to see the whole process of the SR flow with special attention to these three fields due to the results obtained in France:

1

GENERAL INSIGHTS
This report offers an in-depth look at the journey someone experiences when going through the SR flow, as such, you can find insights from the overall experience.

2

PRICE GUIDES
Understand if users are able to get a price estimation. Evaluate the current information that is being presented in terms of clarity or lack-thereof.

3

PACIFIER
Observe the role it has for the user. Identify if it is useful to have or not.

4

INVITE PAGE
After the results in France, there is special attention on this page to see if the users are understanding how the model works or not.

Slide 1 (page 5)

Content

Slide 2 (page 6)

General perceptions

The following insights are general perceptions expressed by participants from the Usability Test.

Most relevant findings of the SR flow

2

Slide 3 (page 7)

1) First approach to find SPs - Insights

· *Word of mouth recommendations are top of mind when the need arises to hire an SP.*

· 4 out of 5 users mentioned asking in their network for recommendations when it comes to hiring an SP for any given job around the house.

· Users also mention using Google to search online, this can be directly for SPs or to get informed on the job that they need to do.

Slide 4 (page 8)

1) First approach to find SPs - User quotes

Word of mouth

- *"First step is that I always ask in my network, community, neighborhood..."* (Male, 50s)

- *"I mainly ask around or use the Yellow Pages"* (Male, 65)

- *"Normally what you do is ask friends, people you know, that's the best way because they can say if he's reliable"* (Male 40)

Combined approach

- *"I do ask friends or family, but also I look with Google"* (Female, 40s)

Online search

- *"Internet is convenient for me, I don't have the network (to ask) because I have moved so many times in my life"* (Male 30s)

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Slide 1

2) Process to hire - Insights

- *Google is the main source of information when the need for a job arises.*

- *Users seek to have a budget overview for their jobs.*

  - Before posting a job or hiring an SP, users have the need to get informed about the project they seek to do, Google is the main ally in this process.
  - Budget planning is sought out by users in order to remain in control over the whole process.

Slide 2

2) Process to hire - User quotes

It is not a linear process that all 5 users have in common. This is a summary of their priorities when looking to hire an SP:

Seeks Pros

1 — Google

2 — Budget

Compares materials

Search by location

Reviews/ Ratings

- "I first need to search to get clarity on the job to do." (Male 50s)
- "For my job, I went to Google and you mainly find examples not how to do the job." (Male 40)
- "I Google around to find a price range" (Male 30s)

- "First thing I think, what can we afford?" (Male, 65)
- "For me it's about having a good price with the right person" (Female, 40s)

- "I would compare materials such as wood, stone, etc." (Male, 50s)

- "I look for people around Amsterdam Area" (Female, 40)

- "For me, it's about the reviews" (Female, 40)

Slide 3

3) How SPs are perceived - Insights

- *There is a negative perception present when referring to SPs.*

  (e.g. foreign, want fast euro. This perception is not only about Werkspot SPs)

  - 3 out of 5 participants have mentioned a negative perception against SPs. This can come from a first hand negative experience or by word of mouth through people they know.

Slide 4

3) How SPs are perceived - User quotes

Positive

- "I have experience with Werkspot, I like the company and the service (SPs)" (Male 30s)

Neutral

- "Nice guy, not Dutch in background, maybe Turkish or something." (Female 40s)
- No previous experience with Werkspot. (Male 65)

Negative

- "I think the guy that are in there (WS platform) are there for the fast euro..." (Male 50s)
- "They are on the internet, they are on Werkspot, guys that are not to trust..." (Male 40)

122

Slide 13

4) Previous experience with Werkspot - Insights

• *The majority of previous experiences with Werkspot have been positive.*

• Users express positive opinions about Werkspot as a company, whether it is by first hand positive experiences or searching the company online against competitors.

Slide 14

4) Previous experience with Werkspot - User quotes

Positive experience

- *"I use Werkspot for the cars, as well as for the painters."*
  (Male 50, has posted 5 SRs, 4/5 were executed)

- *"I had a nice experience with Werkspot."*
  (Female, 40s)

- *"I have used Werkspot for renovations more than once because I have moved around a lot."*
  (Male, 30s)

- *"The guys who did my ceiling had no reviews but they were a new company. Good people and I was very happy with their job, I gave them a review, we help each other out."*
  (Male, 40)

No experience

- *"I have no experience with Werkspot, but I looked it up, I also looked at your competition and your platform looks more professional."*
  (Male 50s)

Slide 15

SR Flow Insights

3

The presented results derive from the Usability Test conducted with 5 participants in the Netherlands.

Users are the experts of their own experiences

Slide 16

5) Price guides - Insights

• *The information is considered useful but too abundant and would not be read complete under normal circumstances.*

• Users considered the information was primarily aimed at those who had no idea about the job to be done, then it would be deemed useful.
• For users who have clarity over their job it can be perceived as a hassle and they want to more forward to actually posting the job.

Slide (top-left)

5) *Price guides* - User quotes

Positive	Neutral	Negative
- *"It's nice to have some pictures. (Regarding the information) It's almost perfect, I think."* (Female 40s) - Are you able to find a price estimation? *"Yes, I get an idea of price ranges"* (Male 65)	- *"If I wanted to get some flooring done and I don't know about it, reading this would give me direction."* (Male, 40) - *"This is for when you don't have any idea yet on prices, then it would be useful."* (Male 30s)	- *"It's useful information but I would not read this under normal circumstances."* (Male 65) - *"What the hell is that? Doesn't tell me anything... It's terms I have never heard before."* (Male 50s) - *"You say 'make the floor even', but I don't know what that means, if I am able to click that word to get more information, it would be better."* (Male 40)

Slide (top-right)

6) *Pacifier* - Insights
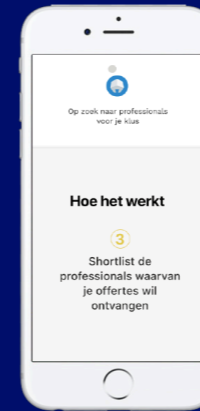
•*The pacifier's purpose is not clear. It is perceived as a loading process and as such, its content is not deemed necessary.*

· Most users had no comment about the pacifier until the screen was revisited and the majority of the comments were negative or neutral.

Slide (bottom-left)

6) *Pacifier* - User quotes

Positive	Neutral	Negative
- *"Good, that's the thing that I wanted to read, it's good."* (Male 40)	- *"It's okay... I can't say much."* (Male, 50s)	- Does not notice the pacifier, when asked about it:*"It doesn't really add anything for me."* (Male 30s) - *"I try to recall it, but it was too quick..."* (Female 40s) - *"It is too fast to pay attention to it."* (Male 65)

Slide (bottom-right)

7) *Measuring areas* - Insights
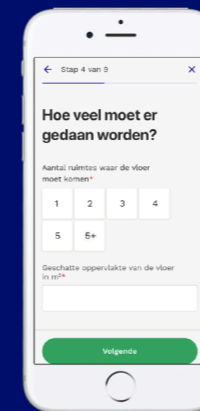
•*There is some confusion regarding if the users should actually measure the area or not.*

· Users are divided between actually measuring the space or just making a guess to estimate on it.
· It is mentioned that Werkspot should clarify which information is needed, as this will measurement will influence the price of the proposal by the SP.

Slide 1 (top left)

7) Measuring areas - User quotes

Positive	Neutral	Negative
- *"Some people might do it on a hunch, you have to do it anyway in order to go to a shop and buy the flooring."* (Male 50s)	- *"I already know to add the 10% extra space."* (Male, 30s)	- *"You are asking for an estimation, so I will estimate on it."* (Will not measure) (Male 40)
- *"Me, personally, I figure it out myself pretty easily."* (Female 40s)		- *"I would write down an estimation, I will not measure myself."* (Male 65)

Slide 2 (top right)

8) Project details - Insights

• *There is a perception of the 'starting date' having an influence over the price of the service.*

• *Clarification over 'flexibility' of start date*
• *would help users feel more secure.*

    · The majority of the participants understand the three presented options for the staring date, nonetheless, more information would clarify and make them feel more comfortable with the process of posting an SR.

Slide 3 (bottom left)

8) Project details (starting date) - User quotes

Positive	Neutral	Negative
- *"The three options are clear to me."* (Male, 65)	- *"It's good to have some options but it will influence the price, if you want it now it would be more expensive."* (Male, 30s)	- *"I don't understand why there's three options..."* (Seems confused) (Male, 65)
- *"Three options are perfect."* (Female, 40s)	- *"The options are clear, but what I am missing here is, I am flexible but until a certain point..."* (Needs an estimate for the start date) (Male 40)	

Slide 4 (bottom right)

9) Upload picture - Insights

• *Upload picture is primarily qualified as a good feature for the SP to get more context on the job to be done.*

    · The only negative perception is due to the fact that the user considers it should be upfront where you are describing the job, instead of at the end of the SR.

Slide 25

9) *Upload picture* - User quotes

Positive

- *"It's useful because if I have an offer they ask for more information and now it's already there."* (Female, 30s)

- *"It's useful for the professional to get more in context of the home."* (Male, 65)

- *"This is always good, to have the option to upload pictures or drawings."* (Male, 40)

Negative

- *"Everything was logic until here... When you want to buy something it's natural to first explain, upload the picture should be before."* (Male, 50s)

Slide 26

9) *Log in* - Insights
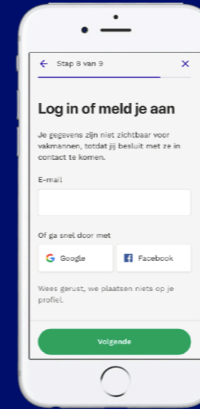
- *Facebook and Google log ins are avoided by most users due to privacy concerns.*

  - The only user who opted for a Facebook log in was a Millennial and he had trouble remembering passwords, thus, he preferred to log in through Facebook.
  - Users over 40 mentioned privacy concerns and the fact that Werkspot could access their information, which prompted them to select email log in only.

Slide 27

9) *Log in* - User quotes

Positive

- (Facebook) *"Actually, I use it a lot because of the passwords."* (Male, 30s)

Negative

- *"Always email, never Facebook, I don't want you to have my information."* (Male, 50s)

- *"Facebook or Google, never because of privacy..."* (Male, 65)

- *"Maybe it's a personal thing, but I would never go on the Facebook or Google account, I know it was personal information."* (Female, 30s)

- *"Email, Facebook no, it's personal and private. Maybe a phone number..."* (Male, 40)

Slide 28

10) *Invite page (original copy)* - Insights

- *Users fail to read the text and there is a sense of confusion regarding the number of SPs and criteria to select.*

  - Users pay special attention to the ratings and reviews in order to select an SP, even though some express concerns regarding the authenticity of the reviews.

10) *Invite page (original copy)* - User quotes

Positive

- *"I find it nice, before it was a bit messy (referring to old SR), via email it was hard to compare. I can choose now who I think it's best."*
(Female, 40s)

- *"I look at the ratings, area (location), for me it's quite important."*
(Female, 40s)

Negative

- *"It should be sent to everybody, not just the ones I select... then Werkspot doesn't add anything to the process"*
(Male, 50s)

- *"I don't get why I have to choose a specialist, if I do that then I don't need Werkspot."*
(Male, 50s)

- *"For me, those 10 vakmannen are confusing, I never would send 10 requests because it's too much work to review 10 proposals."* (Female, 40s)

- *"It would be useful to filter through a table by best reviews, location, etc. I would select a maximum of 3 to 5."*
(Male, 65)

- *"Explicitly state that these reviews are real, provided by real people."*
(Male, 65)

10.1) *Invite page (modified copy)* - Insights

· *The change in copy did not have an influence on the understanding of the model.*

- 3 to 5 SPs is still mentioned as the "ideal quantity" of SPs to select. Otherwise, the perception is the job will fall on them by having to review and compare multiple proposals.
- Reviews are still mentioned as the predominant reason to hire an SP.

10.1) *Invite page (modified copy)* - User quotes

Positive

- *"I would choose the one with the higher score and reviews, so that one most probably will be on top."*
(Male, 30s)

Neutral

- *"Quality is more important than the location. If it's around the corner it's convenient for him, not for me."*
(Male, 30s)

Negative

- *"For me it's a maximum of 3 to 5 (SPs) otherwise you have so much to compare..."*
(Male, 30s)

10.2) *Invite page (auto-invite)* - Insights
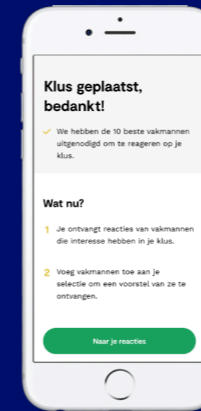
· *User would not want to select SPs on his own. He places his trust in Werkspot to deliver the best 10 SPs.*

- Even though this way is perceived to be more reliable, there remain doubts about how Werkspot selects these "10 best SPs", is it by reviews, area?

10.2) Invite page (auto invite) - User quotes

Positive	Neutral	Negative
"In my mind, there is a feeling of reliability, but Werkspot also assumes responsibility because I trust when you say it's the 10 best ones." (Male, 40)	*Would you prefer to select the SPs yourself? "No, I would not want to because I don't know them and I would have to check."* (Male, 40)	*"How do you know they are the best? Also, why 10? Why not 15 or 20?"* (Male, 40)

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11) SP Reviews - Insights

· *Reviews are crucial in the decision process to hire, yet, users question their authenticity.*

· Users explain that reviews are important when deciding to hire an SP or comparing proposals, yet, there is an embedded perception that reviews are often faked by companies.

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11) SP Reviews - User quotes

Positive

- *"For me it's not important if they are old or new (to the platform), it's about the ratings."* (Female, 40s)

- *"For me, the reviews are important. I compare prices and reviews to decide."* (Male, 30s)

Negative

- *"I would never post a review because I question if they are real or not, I know companies buy reviews..."* (Male, 65)

- *"I read reviews but I know they are not always trustworthy, like with other companies, they fake reviews, I know that happens..."* (Male, 40)

- *"Reviews on a site, of course they give me an indication, not more than that..."* (Male, 40)

Experience Journey Mapping

By using this tool we were able to have an in-depth look at the participants reactions step by step.

Detailed look per participant

4

Experience Journey Mapping format used to analyze data

Usability Test - SR Flow

Consumer Mapping - Usability test participants

BIG ORDER

Participant 5:
'one timer'

Participant 4:
'Super user'
Multiple SRs

Participant 1:
'maintenance'
Cars & painting

E.g. Painting, plastering,
wall/ floor tiling, etc.

E.g. Complete house renovation,
house expansion, custom furniture, etc.

LOW LEVEL

HIGH LEVEL

ORDER SIZE

Participant 2:
'one timer'

E.g. Maintain garden, install laminate
floor, plumbing, moving service, etc.

E.g. Carpeting, electrical, etc.

Participant 3:
No experience

SMALL ORDER

JOB COMPLEXITY

- Single trade: Mostly one man.

- Multiple trades: Team of people.
- Custom design.

User profile - Participant 1

· **Name:**

· **Age:** 50s

· **Living arrangements:**
  Homeowner in Hilversum

· **Work:** Global Event Manager at
  Xsens (Technology industry)

· **Experience with Werkspot:**
  Posted 5 SRs, 4/5 were
  successfully completed
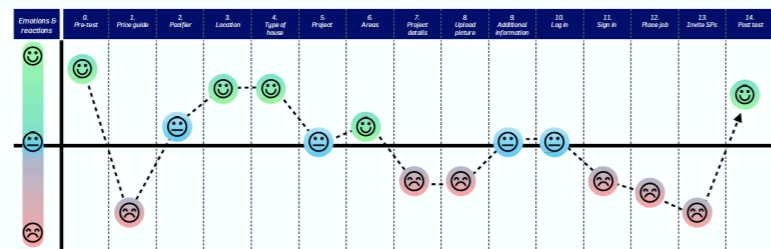
User profile - Participant 2
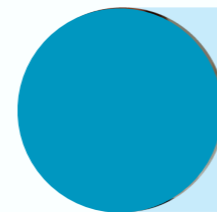
· **Name:**

· **Age:** 40s

· **Living arrangements:**
  Homeowner in Amsterdam
  (apartment)

· **Work:** Banking industry

· **Experience with Werkspot:**
  Has posted and executed SRs
  previously
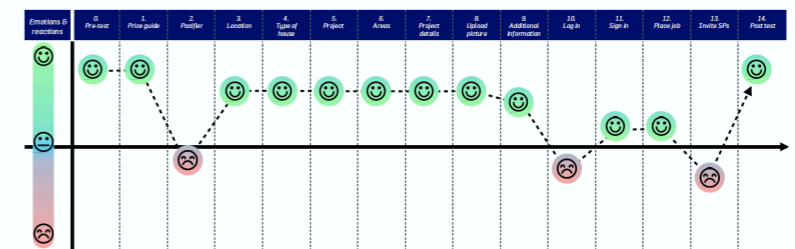
User profile - Participant 3
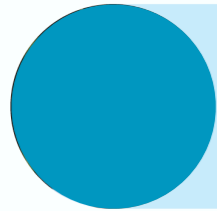
- **Name:**
- **Age:** 65
- **Living arrangements:** Homeowner in Enschede
- **Work:** Retired
- **Experience with Werkspot:** Has not posted an SR yet

Emotions & reactions

0. Pre-test | 1. Price guide | 2. Pacifier | 3. Location | 4. Type of house | 5. Project | 6. Areas | 7. Project details | 8. Upload picture | 9. Additional information | 10. Log in | 11. Sign in | 12. Place job | 13. Invite SPs | 14. Post test
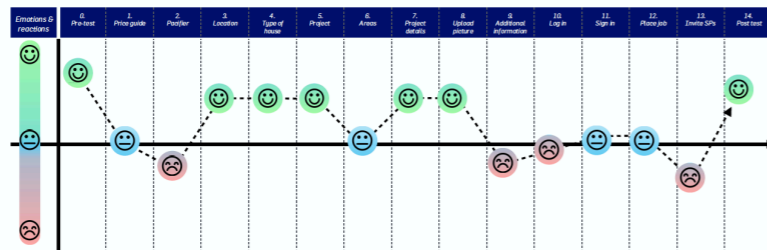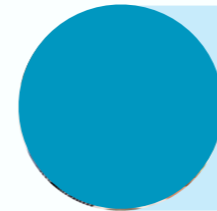
User profile - Participant 4

- **Name:**
- **Age:** 30s
- **Living arrangements:** Homeowner in Den Haag
- **Work:** Finance - freelancer
- **Experience with Werkspot:** Posted and completed more than one SR for house renovation

Emotions & reactions

0. Pre-test | 1. Price guide | 2. Pacifier | 3. Location | 4. Type of house | 5. Project | 6. Areas | 7. Project details | 8. Upload picture | 9. Additional information | 10. Log in | 11. Sign in | 12. Place job | 13. Invite SPs | 14. Post test
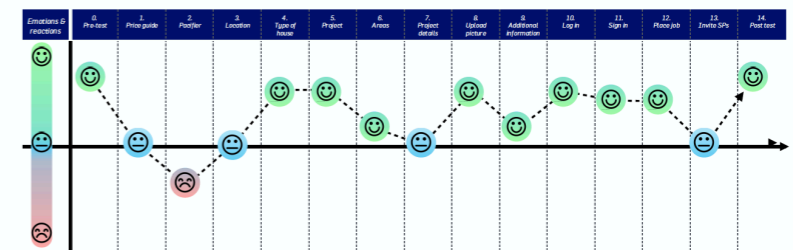
User profile - Participant 5
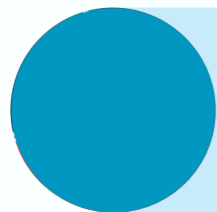
- **Name:**
- **Age:** 40
- **Living arrangements:** Homeowner in Amsterdam
- **Work:** Government related
- **Experience with Werkspot:** Posted SR for big renovation project

Emotions & reactions

0. Pre-test | 1. Price guide | 2. Pacifier | 3. Location | 4. Type of house | 5. Project | 6. Areas | 7. Project details | 8. Upload picture | 9. Additional information | 10. Log in | 11. Sign in | 12. Place job | 13. Invite SPs | 14. Post test

Experience Journey Mapping - Average from all participants

Emotions & reactions	0. Pre-test	1. Price guide	2. Pacifier	3. Location	4. Type of house	5. Project	6. Areas	7. Project details	8. Upload picture	9. Additional information	10. Log in	11. Sign in	12. Place job	13. Invite SPs	14. Post test
	5/5	3/5	3/5	4/5	5/5	2/5	5/5	3/5	4/5	3/5	4/5	2/5	3/5	5/5	5/5

130

Experience Journey Mapping - Pain point 1 - Price guide

> "Doesn't tell me anything... It's terms I have never heard before."

> "The most logical step at this point would be to search (filter information), maybe I'm too 'Google' minded..."

> "This is for when you don't have any idea yet on prices, then it would be useful."

Experience Journey Mapping - Pain point 1 - Price guide

Stage	Insights - User experience	Areas of opportunity
Step: *Price guide*	• The information is considered useful but too abundant. • Some participants state they would not read all the information under regular circumstances. • Some terms used on the price guide can be confusing. • 'Google mindset' - Participants would like a search tool to look for specific information. • 'Wikipedia mindset' - Participants would like to be able to click terms and have more information about it. • Coolblue is mentioned as a best practice to be able to ask experts about doubts they have for their job. • Participants would like a price calculator to have a more precise price estimation. • In a mobile interface, the call to action to post an SR is often missed and participants are confused about where to click to start the SR process.	• Participants were positive about the graphical elements that facilitated the understanding about information, such as price tables and pictures. • Some terms in the price guide, especially technical terms can be clarified to make it easier to understand. • The three most mentioned features that would improve the user experience are: Coolblue - ask an expert, Google - searching tool, Wikipedia - click words for clarification.

Experience Journey Mapping - Pain point 2 - Pacifier

> "It does not add anything for me..."

> "I try to recall it, but it was too quick."

Experience Journey Mapping - Pain point 2 - Pacifier

Stage	Insights - User experience	Areas of opportunity
Step: *Pacifier*	• The vast majority of the participants consider that the pacifier is too fast to be able to pay attention to the text. • It can be perceived as a loading process, and as such, the information it contains it's not deemed necessary. • Most participants fail to read the information stated unless explicitly told to look at it. • Only one participant was positive about the pacifier.	• Due to the fact that the vast majority of participants did not consider the pacifier to be a useful feature, some changes are needed or, it can be removed because it does not influence the rest of the process.

Experience Journey Mapping - Pain point 3 - Project details
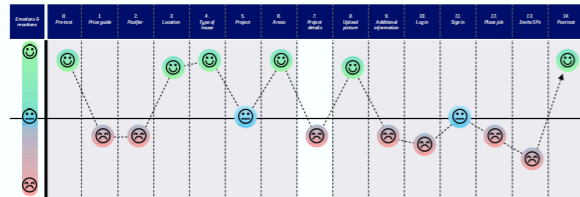
"It's good to have some options but it will influence the price, if you want it now it would be more expensive."

"What I'm missing here is, I am flexible, but until a certain point…"

(requires clarity over what it means 'time wise' to select the 'flexible' option.)

Experience Journey Mapping - Pain point 4 - Additional info.

Stage	Insights - User experience	Areas of opportunity
Step: *Additional Information*	· The participants want to be guided throughout the process, and it is unclear what the expectation is from Werkspot on what kind of information should be stated in this stage. · When participants select the option for the SP to buy the material, they consider there were no questions asked about this and consider it should be asked in the SR.	· Participants ask not to rely on them to remember which information to write, if it is a required field, it should be built into the SR questionnaire. · Participants want more questions related to the materials if the SP will buy it for them, it should be built into the SR or clarified, otherwise it makes them question what to put in the 'additional information' field when the material information is missing.

Experience Journey Mapping - Pain point 5 - Log in

"Email always… I don't want you having more information than you need."

"If I put my Google or Facebook I would start getting all these 'shitty things'…"

Experience Journey Mapping - Pain point 5 - Log in

Stage	Insights - User experience	Areas of opportunity
Step: *Log in*	· The vast majority of the participants consider email to be the preferred medium to log into Werkspot. · There is a strong perception of the lack of privacy when signing in with Facebook or Google accounts. · Participants don't trust companies to make the best use of their personal information and it is mentioned that if you sign in with Google or Facebook they would receive unwanted advertisement, even if this is not the case.	· As long as it is optional, it is okay to remain with the three possible log in options (Facebook, Google and email). · The copy for the Log in page could include that Werkspot's main concern is to protect their users privacy for reassurance that their data will not be mishandled.

Slide 131

Experience Journey Mapping - Pain point 6 - Place job
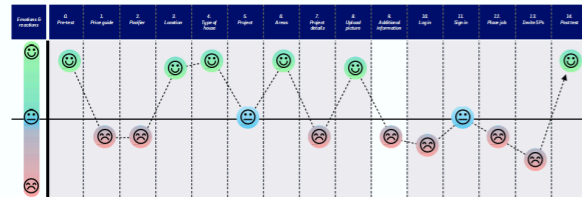
"State you're not obligated to buy anything, it's an RFP and the final deal is between you and the specialist."

"If Werkspot would provide me with some Warranty, or information, for example, the companies that we work with have a certificate."

"If the job goes terribly wrong, can I come to you? To Werkspot, as Airbnb. They help you if someone destroys your home..."

Slide 132

Experience Journey Mapping - Pain point 6 - Place job

Stage	Insights - User experience	Areas of opportunity
Step: *Place job*	· There is a need to balance expectations and clarify what Werkspot is offering. Some participants mention to include this is an RFP 'request for price' and not an obligation to buy. · In order to feel more secure at this stage, some mention the need to see a budget overview. · There is a general doubt when they select the option for the SP to buy the material for them, because they consider there were no questions asked about this crucial part of the process. · Another concern is the type of warranty that Werkspot offers, especially when the job is very complex, like a house renovation.	· Werkspot could clarify that by posting an SR, the user is not obligated to pay, and the payment comes until a deal has been struck with the professional. · The option for the SP buying the material should be better developed with followup questions, or integrate in the text that this will be a conversation with the professional, otherwise it causes confusion on users. · For some participants, it is needed to have some form of warranty for the job to be done.

Slide 133

Experience Journey Mapping - Pain point 7 - Invite SPs
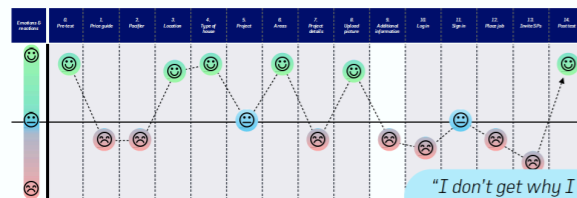
"I don't get why I have to choose a specialist, if I do that then I don't need Werkspot..."

"It should be sent to everybody, not just the ones I select... Then Werkspot doesn't add anything in the process."

"How do you know they are the best? Also, why 10? Why not 15 or 20?"

"In my mind, there is a feeling of reliability, but Werkspot also assumes responsibility because I trust when you say it's the 10 best ones."

Slide 134

Experience Journey Mapping - Pain point 7 - Invite SPs

Stage	Insights - User experience	Areas of opportunity
Step: *Invite SPs*	· Participants mention the need to have a filter to best select SPs (Filters based on ratings, location, etc.) · 10 SPs is considered a big number, the vast majority of participants would be comfortable selecting between three to five SPs from the list. The perception is that if they were to select more, it would be harder to compare. · There is a doubt of whether the request gets send to more SPs outside the ones selected. · Some users expressed concern over the value of Werkspot if they have to select the SPs by themselves. · On the other hand, with the screen changed to the auto-select SPs, the participant expressed he would not like to choose because he would not know how to decide. · Ratings/ reviews are the main decision factor to choose an SP, yet they question their authenticity because the assumption is reviews can be bought.	· The higher the number of presented SPs, the harder it is for the user to compare. · The users seek for filtering options that could facilitate the selection process. · It can be stated in the text if more SPs would be contacted outside these 10. · Include in the copy that all reviews have been verified and are provided by real Werkspot consumers.
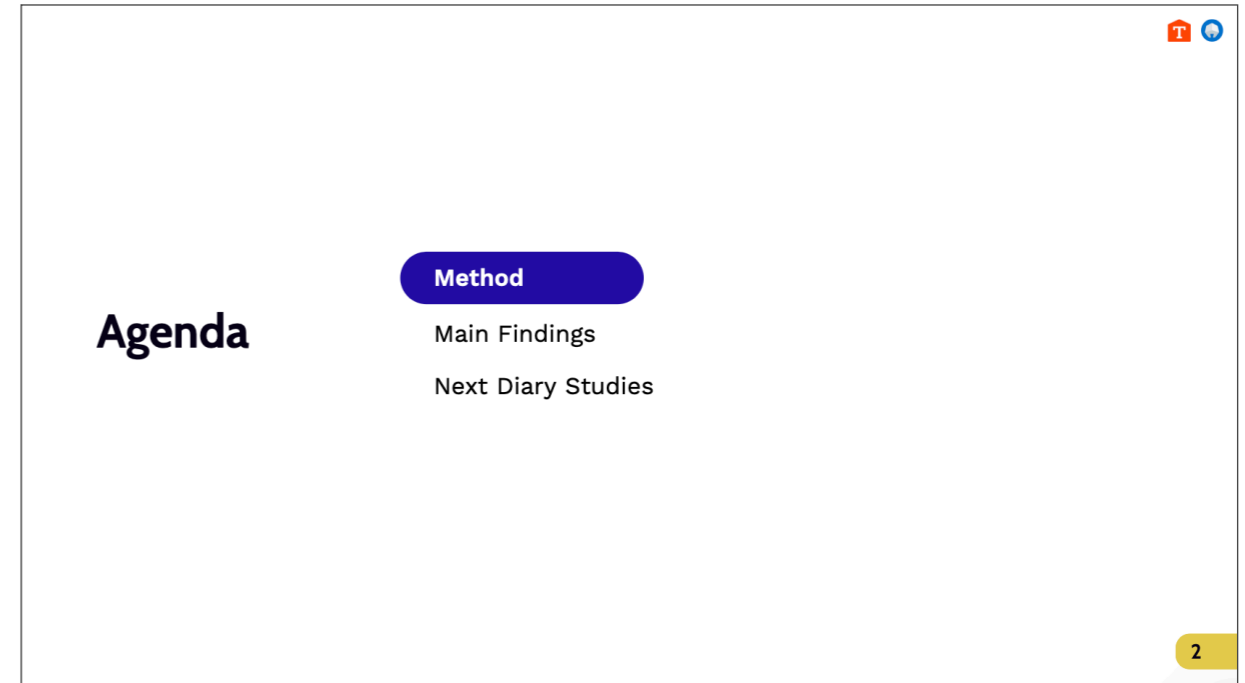
The Renovation Experience – diary studies

May-July '19, Amsterdam
Researchers: Roxana Cociorba, Daniela Romero
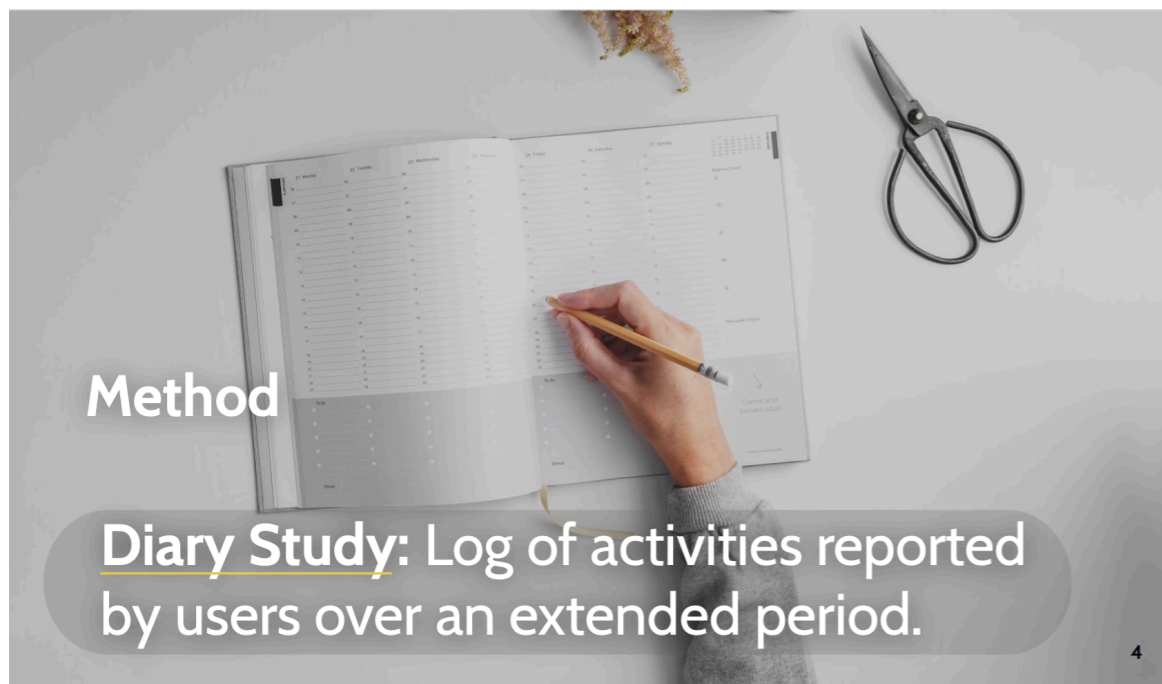
1

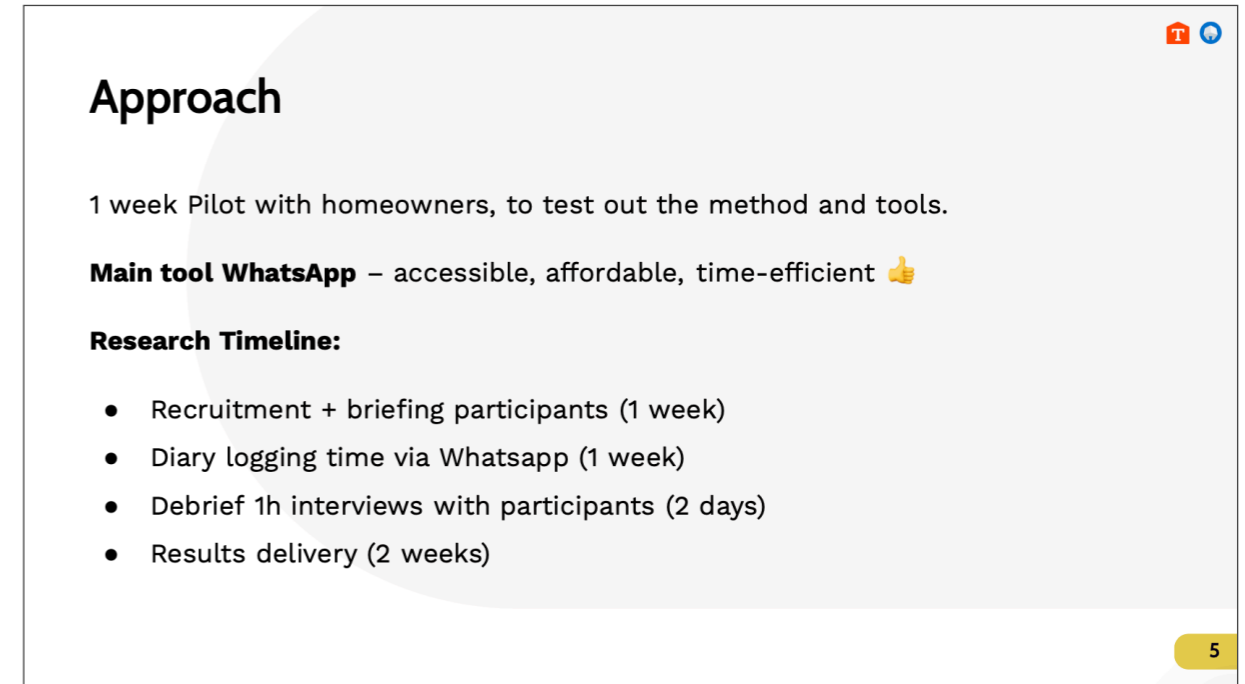Agenda

Method

Main Findings

Next Diary Studies

2

Method

Diary Study: Log of activities reported by users over an extended period.

4

Approach

1 week Pilot with homeowners, to test out the method and tools.

Main tool WhatsApp – accessible, affordable, time-efficient 👍

Research Timeline:

- Recruitment + briefing participants (1 week)
- Diary logging time via Whatsapp (1 week)
- Debrief 1h interviews with participants (2 days)
- Results delivery (2 weeks)

5

Approach

Extras:

- Created briefing pdf. with examples of message logs
- Screener survey
- Conversation scripts
- Visualised user journeys - used them as prompts in the debriefing interviews

Main Findings

Renovations start before buying the house

- Consumers who want a renovation credit (Bouwdepot) start planning renovations before owning the property. This means anticipating what is needed, planning a budget, discussing with contractors or acquaintances and applying for the renovation credit with the mortgage.

- For us, this means a number of consumers will start looking for price information and personalised advice way before having the intention to hire a professional.

"**The purchase of the house was all about the renovation**, otherwise we would not have bought it. As I have a background in interior design, **I made constructional drawings**, **we requested prices for the biggest construction parts**, and based on these drawings we could **ask for an 'Evaluation Report'** before and after construction, so we could request a building credit. **(bouwdepot)** "

(D) **Desiree**,
Full house renovation

Findings

- Before formal property ownership, high intent users start looking for information about their renovation via professionals and network.

- Preparations like constructional drawings are useful for evaluations and requesting a mortgage.

Insight

The renovation journey starts before property ownership.

11

Recommendation

Our target customers can also be in the early stages of property ownership which means we can cater to new audiences.

12

13

136

Building understanding

- Research in renovation work is essential, and consumers say they are forced to learn about the industry, whether they like it or not.

- To precisely communicate expectations, various tools are used: technical drawings, spreadsheets to keep a budget overview, pdfs with photos of every corner and desired changes, moodboards, materials lists, etc.

- Each consumer finds their own tools and methods, as long as it helps them communicate with the SPs. The most knowledgeable cs used industry jargon and were very specific about what results they wanted.

14

Findings

" Initially, the only things I wanted to do was changing the floors, remodel or change the stairs and enlarge/renovate the bathroom/toilet. I got a **bouwdepot** with the mortgage for this work. This proved to be complicated due to the floor plan of the apartment (...). I was planning to use dedicated companies for each one of these services (e.g. **Uipkes, Brugman**), but **I felt it was risky** since I **didn't know the proper order** and there would be **preparation work** that these companies wouldn't do. "

U **Ulysses**,
Full house renovation

- Some homeowners need more information to decide between hiring dedicated companies versus one single contractor.

- With complex renovations, consumers need technical knowledge to make decisions.

Findings

" I received the keys of the house in February, and I **expected to start the renovation** as **soon** as possible. I spent part of the first two months away and doing very little research on how to do the renovation, so **it all went very slowly**. "

U **Ulysses**,
Full house renovation

- Some renovations can be slow, they require time for the user to search for information and be convinced.

- Some users resort to making documents that facilitate explaining their needs and serve as a basis for their SRs and conversations with SPs.

Findings

" They of course do also a lot of calculations and also from a technical perspective it was handy to reflect my plans with them. That was all for the sake of gut feeling. To get the price of a contractor **I asked at the office for connections**. And in our circle of friends/family as Utrecht is not the city where I have my connections. **Drawings make it really easy to have a solid good discussion**. Otherwise it's very easy to have misunderstandings "

D **Desiree**,
Full house renovation

- Word-of-mouth continues to be the primary medium for finding SPs.

- Drawings facilitate an informed discussion between consumers and professionals, and help avoid misunderstandings.

Budget Spreadsheets

This is our overview page of costs

and this is an example per room more in dept in this document

left is estimation, right is our actual spendings

18

Budget Spreadsheets

19

Keeping a record of materials:

20

'Renovation Pdf' - an extensive document of changes wanted

21

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Technical drawings

22

Detailed customer email towards SP

Goal: make sure the work and wishes is clear towards the SP, and that they have agreed upon materials, expectations and budget.

23

Detailed drawing & checklist of spots that need repainting, after the initial painting job
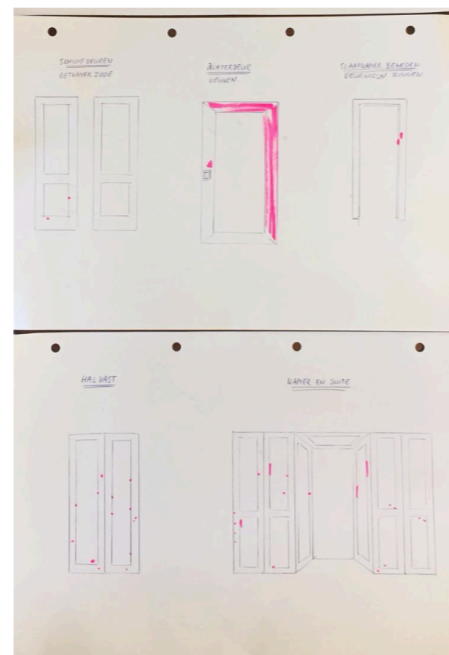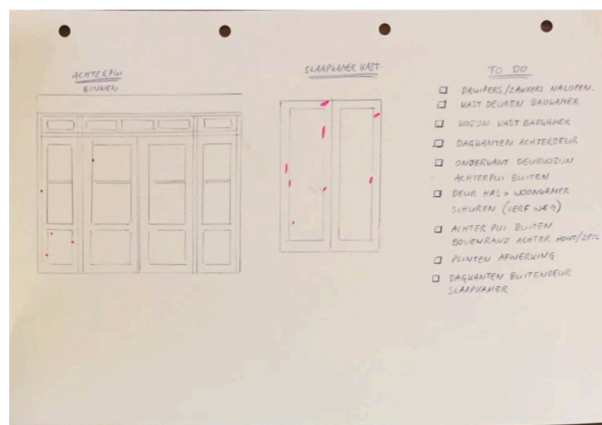
24

Insight

Consumers need to build deep understanding of the renovation work but don't always know how

25

Recommendation 1

WS could <u>act as a tool</u> for consumers to learn about the renovation and plan it.

26

Recommendation 2

Some users need more guidance than others. <u>WS could provide assistance</u> to users on how to best communicate their wishes.

27

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It's all about trust

- Online is unknown territory and it's subject to assumptions.

- Anything that seems strange will immediately defer the user - from the visual aspect of the site and profiles, to the way SPs communicate, how often they communicate, nr. of reviews, etc.

- Consumers mentioned they take reassurance in reviews and proofs of quality, but only if these are above a certain number and look realistic.

29

Findings

#Fear of the unknown

> " When I have the **slightest weird feeling about it, it's a NO**. A comment that I might think 🫣 or the contractor himself makes a weird response, then whatever... (I drop it and look somewhere else) "

D **Desiree,**
Full house renovation

- Skeptical users are more likely to react against anything that is considered to be 'strange'.
  - **Examples:** Service Professional's communication skills, how often they communicates, etc.

Learnings

> " **I asked for him** (invited SP). So **he was not from the losers list who were chasing jobs**.
>
> Another guy kept on contacting me via whatsapp, sms, call, I get super irritated by that. It gives me the feeling that you need the job too much and I don't trust that situation so you're out "

D **Desiree,**
Full house renovation

- Showing too much availability makes can make users perceive the SP "needs the job too much".

Findings

#Online skepticism

> " It does not really has its best reputation. I come from an area where live many contractors etc. The overall saying is that the **good people are not on Werkspot**. (...) So **it's risky** to hire someone via Werkspot because it's often people who deliver a bad job.
>
> If I would live in the area where I am from, I also would never use it because I know there a lot of people in various fields of expertise. Only now I am in Utrecht and **my network is not here**. "

D **Desiree,**
Full house renovation

- Some users consider it 'risky' to hire via Werkspot due to the 'bad quality' that SPs might deliver.
  - This is part of the trust barriers that users have to break when hiring SPs online.

- Some users are motivated to use Werkspot by not having access to a network that can recommend an SP.

Findings

> " I posted my renovation job on Werkspot, but I didn't act upon the responses. The reason: I was traveling and **I didn't see the data that would give me confidence** (high quality before and after photos, number of reviews)... "

U **Ulysses,**
Full house renovation

- Some users in the early stages want to hire specialized companies, this depends on the type of renovation that will be made.

- Skeptical users need more evidence of quality (before/after photos and reviews) from Werkspot SPs.
  - If they are not 'reassured' they are quick to migrate to alternatives.

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" Posting the request was fine, but it's a different mindset than the old experience of 'shopping around' for a company. I did this **shopping around at Bouwnu** looking at companies that would serve my area and had lots **(100+) of positive reviews**. Even though **the process** with Bouwnu **made me more comfortable**, almost all companies were busy and wouldn't take any work. **"**

(U) **Ulysses**,
Full house renovation

Findings

- Hiring SPs online is an uncertain process, users rely heavily on reviews (quantity and quality).

- Bouwnu (competitor) is considered by some users to have more professionals with 100+ reviews than Werkspot.
    - There is a correlation between reviews and user trust.

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Insight

Trust online comes with difficulty, but it is helped by evidence of quality.

Recommendation 1

WS could provide more trust by aiming to increase the number of reviews and making reviewing easier.

36

Recommendation 2

WS could provide a standard way of documenting portfolio photos for SP's to build on the users trust.

37

Recommendations are low barrier to trust

- A renovation is a 'foreign territory' for most people. Knowing someone with a similar experience who provides a recommendation is very easy to trust.
- There is a 'familiar component' that is not present online.
- Consumers consider recommendations to be easier, it takes the hassle away from having to look for an SP. 👷

...but don't always live up to the expectations

- There is little evidence of quality from the SPs work.
- Even if the consumers can see the work the SP did in another house, it does not guarantee the quality will be the same.
- Consumer satisfaction with the results of SPs hired via WS was stated to be just as high, if not higher than WoM-SPs.
- However, **(for SPs hired via WS)** when asked if they wrote a review - **consumers mentioned they will recommend the SPs to others (via WoM)** but didn't remember if they reviewed them or not.

" He came out to our house before it was finished and gave us recommendations based on our floor plan, and **we also had seen his work at a friend's house** so we thought the result would be good. Unfortunately **they did a very bad job and caused us a lot of stress**. They couldn't fix the floor for 7 times in a row. We had to move out of the house for 3 weeks with a 4-month old baby. "

J   **Jamie**, Several renovations: cement flooring, garden, kitchen and bathroom renovation

Findings

- WoM recommendations, are easy to trust but don't guarantee the quality the SP will deliver.

- Word of mouth is still the predominant mean to hire SPs, even with uncertain outcomes.

Insight

Friends & family recommendations are easier to trust for the initial hire, but the results are not necessarily better.

42

Recommendation 1

Facilitate a WoM type of recommendation via WS. Convey a 'familiar feeling' behind the person recommending the SP.

43

Insight 2

Even when consumers are satisfied with SPs hired via online, the tendency is to recommend them via WoM – thus not closing the loop online.
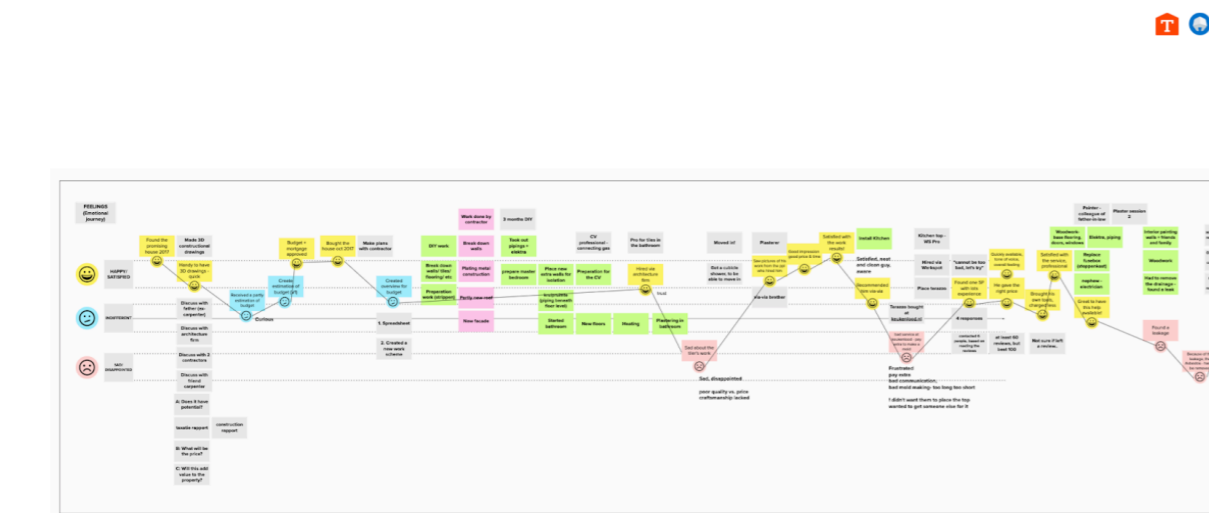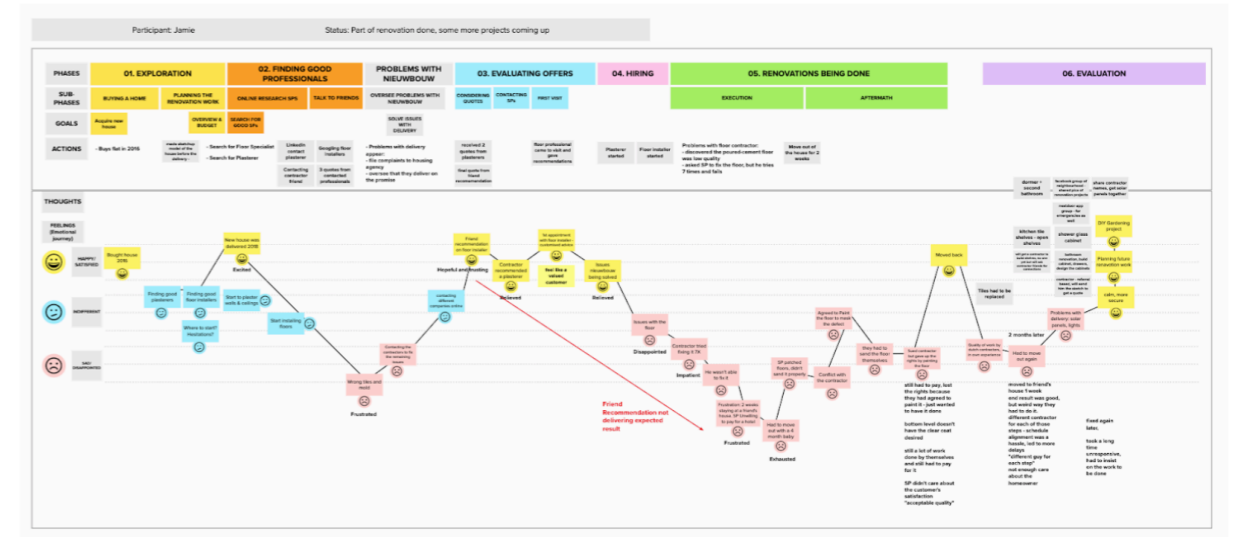
44

Recommendation 2

Make it worthwhile to review and recommend online, to close the loop; this in turn will create stronger profiles + trust for new consumers.

45

It's quite the journey!

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We learned about the steps prior and during renovations

Prior to renovation	During renovation

Prior to renovation

- **House mortgage:**
  - Bouwdepot + hypotheek
- **Renovation advice:**
  - architecture firm
  - own network, acquaintances
  - contractors
  - friends, family
 - google search
- **Finding a house:**
  - Funda, others

During renovation

- **Finding a professional online:**
  - Werkspot, Google, Facebook pages and independent contractors.
- **Alternatives:**
  - Bouwnu (SPs with 100+ reviews) Zoofy, etc
  - WoM recommendations
  - Specialized companies (Uipkes, Brugman, Loodgieter, etc)

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G. Online Concept Testing Report

Online Concept Testing is a research method that was continuously applied through the graduation project with over 300 people in the Netherlands, France and Italy. It was conducted until a successful outcome had been reached. This is one of the multiple reports that were delivered.
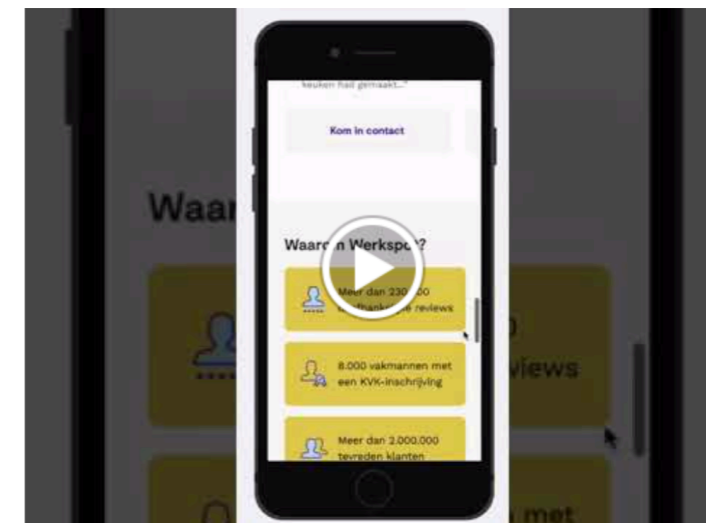

Option A: New design

Most selected:

30 **responses** in total.

70% > 30%

Option B: Current design
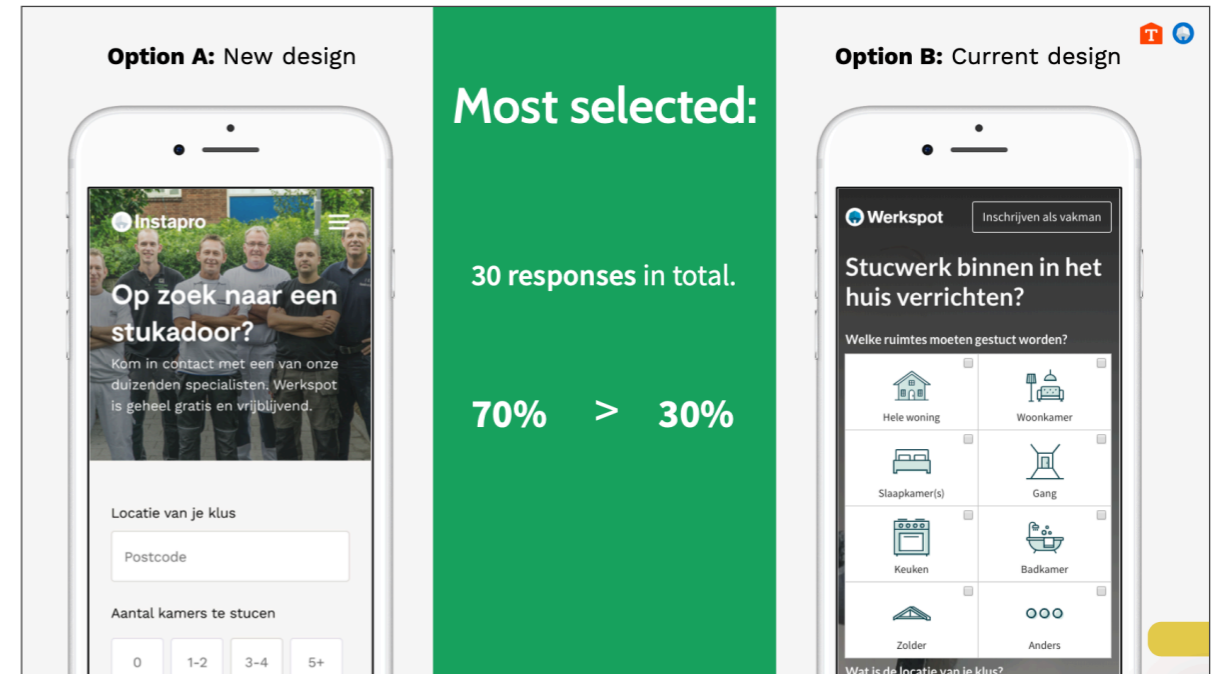
Confidence in new design

The design is still undergoing iterations, nonetheless, we are heading in the right direction by reaching higher levels of user preference.

How does the new design look like?

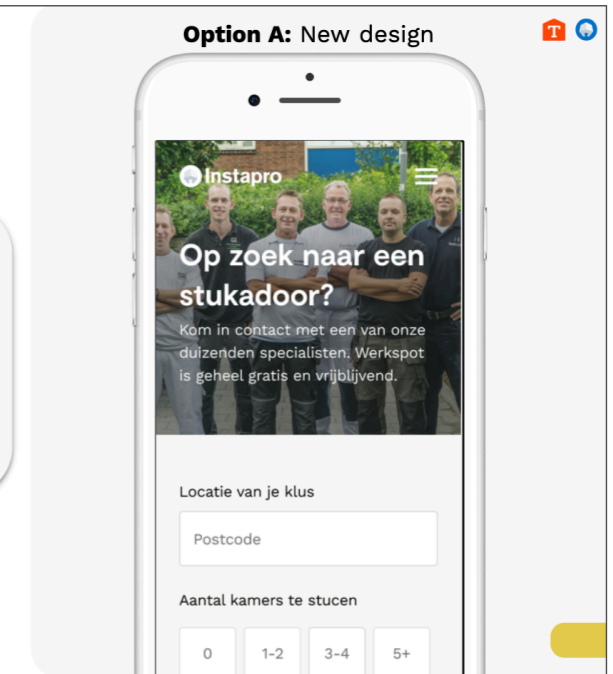## Slide 1 (top left)

Why was it selected the most?

Some elements that favored the selection of this option were:

- **Photos** (Make it more personal)
- **Reviews** (Reliability/ Confidence)
- **Clarity** (Information & design)

(phone mockup)
Instapro
Op zoek naar een stukadoor?
Kom in contact met een van onze duizenden specialisten. Werkspot is geheel gratis en vrijblijvend.

Locatie van je klus
Postcode

Aantal kamers te stucen
0   1-2   3-4   5+

Slide 2 (top right)

User Quotes

"**Generates confidence** (because of the **photo**) because you immediately see who you are doing business with. In addition, **clear and fresh design**, less businesslike and more personal than the others."

😊

(phone mockup)
Instapro
Op zoek naar een stukadoor?
Kom in contact met een van onze duizenden specialisten. Werkspot is geheel gratis en vrijblijvend.

Locatie van je klus
Postcode

Aantal kamers te stucen
0   1-2   3-4   5+

Slide 3 (bottom left)

What information is relevant if you are looking for a plasterer?

- **Reviews** (x12)
- **Plasterer experience** (x10)
- **Availability** (x3)

Insights

- Users want to immediately know more about the plasterers before they can hire (skills, expertise, previous work, availability)

- They most valuable information are the customer reviews.

Slide 4 (bottom right)

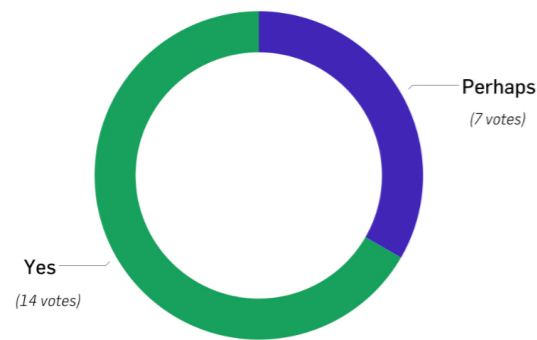# What information is missing if you are looking for a plasterer?

- **Price/ Cost** (x15)
- **Price per m²** (x4)

Insights

- The most sought after information is cost of plastering, especially in the context of cost per m².

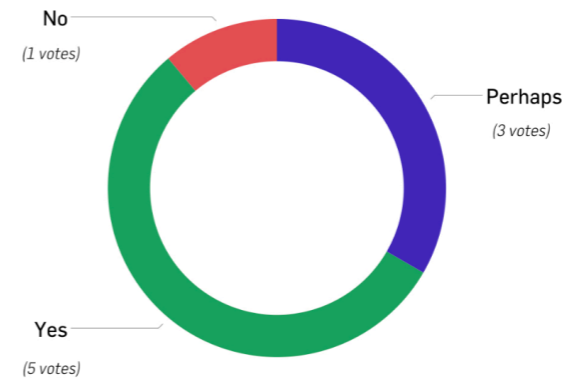- The pricing cluster of landing pages could be re-explored.

147

Would you use this website?

Perhaps
(7 votes)

Yes
(14 votes)

New design

The majority of people answered they would use this website. (14 out of 21)

Would you use this website?

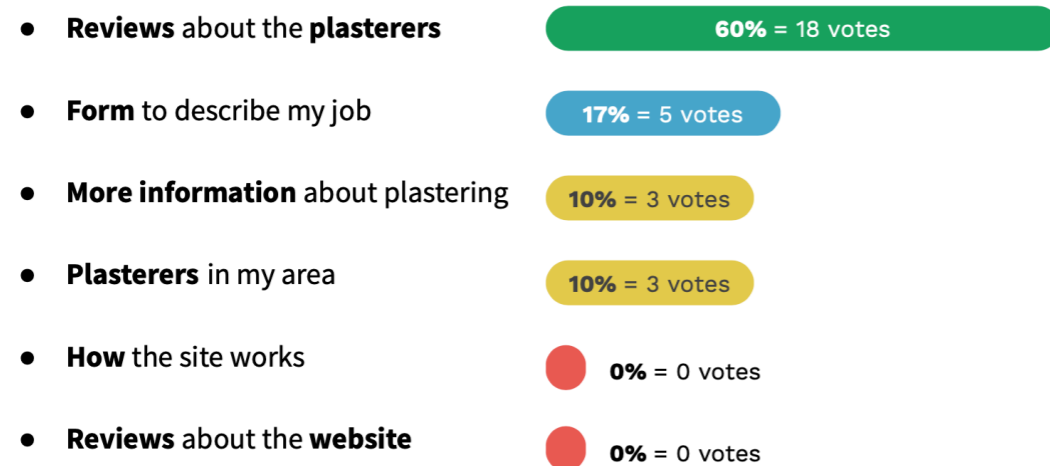No
(1 votes)

Perhaps
(3 votes)

Yes
(5 votes)

Current design

5 out of 9 respondents that chose this option stated they would use it.

Only 1 person out of 30 indicated they would not use the site.

Information that would help the users the most:

- **Reviews** about the **plasterers**   **60%** = 18 votes
- **Form** to describe my job   **17%** = 5 votes
- **More information** about plastering   **10%** = 3 votes
- **Plasterers** in my area   **10%** = 3 votes
- **How** the site works   **0%** = 0 votes
- **Reviews** about the **website**   **0%** = 0 votes

What does it look like in the landing page?

- **Reviews** about the **plasterers**   **60%** = 18 votes

Stukadoors die binnenkort beschikbaar zijn

The Freehander Man
★★★★★ (135)
✓ Lid sinds 2015

"Ton heeft super mooi en strak onze keuken gestuct. Is nog een keer terug gekomen om zijn eigen werk te controleren..."

Kom in contact

Best beoordeelde stukadoors

Stukadoorsbedrijf van Gaalen
★★★★★ (384)
✓ Lid sinds 2015

"...goede communicatie met een 'niet lullen maar poetsen' mentaliteit, dat zie je tegenwoordig niet meer zoveel !

Kom in contact

What does it look like in the landing page?

- **Form** to describe my job — 17% = 5 votes

What does it look like in the landing page?

- **More information** about plastering — 10% = 3 votes

What does it look like in the landing page?

- **Plasterers** in my area — 10% = 3 votes
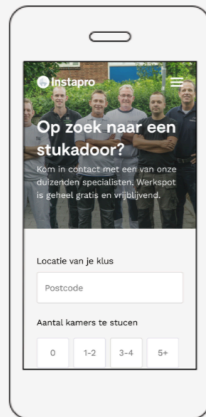
User quotes

Why did you select this option?

"This option really **takes the customer as a starting point**, you can **indicate** which **space** should be plastered. The other option I think contains too many photos, which adds nothing to my idea."

Current design

User quotes

New design

Why did you select this option?

"**Sounds reliable**. **Easy to search** by filling in a few things. Glad there are also **reviews**. Gives **extra confidence**"

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