Towards a Digital User Research Tool: A Digital Workflow of User Research for Software companies

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MSc Design for Interaction
Graduation Thesis
February 2019
Industrial Design Engineering

Master Thesis | Graduation Project

Towards a digital user research tool: a digital workflow for software companies

September 2018 - February 2019

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Acknowledgements

Finalizing this graduation project has ended a very important chapter in my life. For 6,5 years, I have been spending a great portion of my life as a student of the faculty of Industrial Design Engineering (IDE), of TU Delft. It has been a bumpy road, but the kind that has enabled me to become more familiar with my strengths and weaknesses. Because of that, I have been able to constantly improve myself, as a person and as a design engineer. For all this, I am very grateful.

My special thanks go, first and foremost, to my TU-supervisors. Thanks for my professor Natalia Herrera and my mentor Mariëlle Creusen. I would like to thank both for their guidance, but most importantly for pushing me to reach my limits. This final step of my journey as a student of IDE has especially been very rough. Without doubts, I can tell that without their patience, feedback, and honesty I would not have been able to reach the quality that the project ends with.

Big thanks to Frank Lagendijk, my company mentor at Grible. Thanks for him, for taking care of me at all times and for guiding me throughout the project. From him, I have learnt many knowledgeable things in the field of UX-design and -research. This was exactly one of things that I was after, during this graduation project. Besides that, he has always been a support for me throughout this project, sacrificing the minimal amount of time he has in his hectic, daily life. For all his support and him being an important source of knowledge, I would like to give him my special thanks.

Of course, big thanks to the entire team of Grible. First of all, thanks for them for offering me the opportunity to collaborate. Thanks very much for letting me work on their product and to include it in this graduation project. Also, thanks very much for being supportive at all times, helping me getting all the answers I needed throughout this project. Lastly, thanks for taking care of me at all times, letting me feel comfortable in a new environment. Steve, Lennart, and Gino, I very much appreciate all the things you have done for me.

Content

Executive Summary

The assignment that is of issue in this graduation project elaborates on Shipright. Shipright is a digital tool meant to be used to capture insights for customer research purposes. It offers a workflow to collaboratively process and analyze feedback, in order to find insights about customers' experiences with software products and possible directions to improve product design.

Shipright is meant to be used by scale-up SaaS companies to conduct user research on their products' users. SaaS (software as a service) is a software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted. The targeted SaaS companies are the small and medium businesses (SMBs = up to 100FTE / up until 10M revenue) and Mid-Market Businesses (100 – 500 FTE / 10M – 100M revenue). For outreach, though, the minimum of company size is set on 10 FTE. This allows start-ups to be included as a secondary target group.

Among this target group, user research is defined as the collection of user feedback and the analysis of it to get to actionable tasks. All the actions that goes around product decisions, revolves around product teams with typical key members of Product Managers / Owners, UX-researchers, designers and developers.

The problem encountered is that, though rich insights from user research is desired, the fast-paced environment of scale-up companies prevents them from being able to spend enough time and attention on user research. Shipright's original design is able to help scale-up SaaS companies to collect and organize feedback data from their products' users, and to turn these data into insights. But, users do not seem to fully understand the different steps to follow throughout this analytical process. Besides that, team collaboration is not supported yet.

The project starts off with an exploration phase that is planned to last for 3 weeks. To have an overview of my own activities in this phase, I would start this phase by formulating the following Research Questions (RQ):
- How does Shipright work?
- How does user research in scale-up (and start-up) SaaS companies look like?
- What design opportunities can be tapped into, in order to improve Shipright?

The answers to these questions are compared with the two topics of Problem

Definition mentioned in the Introduction: unclear intended workflow of analysis and lack of support for team collaboration in SaaS companies. Out of the identified needs among the target group and the detailed problems from Shipright's current design, three design opportunities are chosen:

1. How can product teams be supported in the analysis of raw data, so that they can identify patterns in user feedback, as much as possible, during (short) discovery sprints?
This design challenge focuses on the exploration of additional ways to bring product teams closer towards finding patterns in collected feedback data. The solution is expected to help them surface as much patterns in feedback as possible, within the limited amount of time in the fast-paced scale-up environment.

2. How can PM's / PO's / UX-researchers be enabled to store qualitative, customer data in a structured way, using Shipright?
This design challenge focuses on exploring the proper use of themes and theme-groups, so they can be used to further analyze insights (= group, compare and/or combine). Eventually, it is expected to create a clear workflow that is intended to store feedback data in a structured way.

3. How can customer facing teams and customers be made more involve in the product development process?
This challenge focuses on improving the support of team collaboration by Shipright. The results of the exploration showed that customer facing teams (CS and Sales) are always actively involved in recruitment and interaction with customers. Though, when it comes to interpreting the data they have collected from the interactions, only the product team seem to be active.

The solution for the first design challenge is a Home screen for Shipright, that guides users towards finding relevant data in Shipright. After finding them, relevant customer insights can be derived. However, further exploration needs to be done regarding a term to be used for imported feedback data in Shipright. Also, additional research is recommended, to find out what aspects of Intercom feedback data are relevant for analysis.

For the second design challenge, the solution is a redesigned workflow for insight creation and a redesigned lay-out for the repository of all created insights. The

new workflow for insight creation would show groups of Product Aspects and Customer Types to tag insights with. The redesigned lay-out for the repository for insights would show users that they can organize these groups in hierarchical structures. However, more exploration is needed about showing the existence of smaller-hierarchy groups during insight creation. More ways of showing product-aspect and customer-type groups (in the Insights section) need to be explored, too. In addition, different ways should be explored, of clarifying the possibility to combine groups into new groups of higher hierarchy-level.

The solution for the third design challenge is a two-way integration between Shipright and Intercom, that enables CS and customers to keep track with creation of, and changes made in insights. With this two-way integration, analysis lead can keep these two parties updated and use their knowledge to ensure verification of insights and their importance. But, further research regarding customer involvement in analysis is still to be done. Besides that, it still needs to be ensured, that CS agents are aware of an insight and the respective customers that are updated, when customers have questions / remarks about it. Additionally, different options to involve other internal stakeholders, (besides customer facing teams) in analysis, are to be explored. On top of that, it is recommended to still explore ways of preventing analysis leaders from feeling overwhelmed, when seeing notifications of colleagues' replies to insight-updates.

Glossary

Special Terms and Abbreviations

(Software) Bug
An error in software.

CRM (Customer-relationship management)
An approach to manage a company's interaction with current and potential customers. It uses data analysis about customers' history with a company to improve business relationships with customers, specifically focusing on customer retention and ultimately driving sales growth (Bain & Company, 2018).

CS (Customer Support)
The CS department in a company focuses on the interaction with their customers, to help them with any problems they encounter in (using) the company's product and/or services.

CSV (Comma-Separated Values)
A text file that uses a comma to separate values. A CSV file contains tabular data in plain text. These files are often used for exchanging data between different applications (Hoffman, 2018).

Dock-section (term used in Shipright)
One of the two main parts in Shipright, in which imported feedback data are stored and first insights from these data are made.

Documents (term used in Shipright)
Imported feedback data in Shipright. Highlights are made from these documents.

FTE (Full-time Equivalent)
A unit that indicates the workload of an employed person (or student) in a way that makes workloads or class loads comparable across various contexts (Eurostat, 2018). An FTE of 1.0 is equivalent to a full-time worker or student, while an FTE of 0.5 signals half of a full work or school load (Zimmermann, 2002).

FullStory
A SaaS-application that enables other SaaS-companies to track their customers' activities in their products. Company-specific information remain hidden for the 'trackers'.

Highlights (term used in Shipright)
Marked pieces of tekst, made from collected feedback data that are stored into Shipright.

IA (Insight Assistance)
New feature of Shipright that is still in development (see chapter 2, on page 47 - 48).

Inbox (term used in Shipright)
A place of storage in Shipright, that stores all feedback data right after import, from all supported sources.

Insights (term used in Shipright)
Interpretations made from (pieces) of feedback data.

Insights-section (term used in Shipright)
One of the two main parts in Shipright in which insights get stored and further analyzed, and from which insights can be shared with others (Shipright users).

Intercom
A live-chat-support tool used for business to interact with their customers. It is meant to be used by modern internet businesses, for support and growth purposes.

InVision
An internet-based application meant for quick prototyping of digital designs.

Lookback
An internet-based service meant to conduct remote user- and usability tests with. It enables tests to be recorded on video and audio, so they can be studied later on. Notes for these recordings can be made and stored as well. Also, it enables others to observe the test with permission from the moderator.

Menu Hierarchy
An arrangement of information, tools, or functions. This is meant for users to easily find these elements.

Mid-Market Business
A business in the middle range between small businesses and large companies, typically having between fifty and one thousand employees. Midmarket businesses are often subject to laws that do not apply to companies defined as small businesses despite not having the resources of large companies. (BD Dicitonary, n.a.). In this project, this refers to businesses with 100-500 FTE.

PM (Product Manager)
The person in a (SaaS) company, who is in charge of the long-term vision of the product and the roadmap (Cerrato, 2018).

PO (Product Owner)
The person in a (SaaS) company, who is in charge of the short-term vision of the product. The PO represents the customer in the development team and is in charge of prioritizing items for the backlog (Cerrato, 2018).

Product Backlog
A product backlog is a prioritized list of work for the development team that is derived from the roadmap and its requirements (Radigan, n.a.).

Product Roadmap
A product roadmap is a high-level visual summary that maps out the vision and direction of your product offering over time. A product roadmap communicates the why and what behind what you're building. It's a guiding strategic document as well as a plan for executing the strategy (ProductPlan, n.a.).

Revenue
Revenue is the amount of money that a company actually receives during a specific period, including discounts and deductions for returned merchandise. It is calculated by multiplying the price at which goods or services are sold by the number of units or amount sold (Kenton, 2017).

RQ (Research Question)
A topic for investigation, formulated as a question that is answerable. Formulating research questions is on of the initial steps in research.

SaaS (Software as a Service)
A software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted (Wikipedia, 2019).

Scale-up
A development-stage business, specific to high-technology markets, that is looking to grow in terms of market access, revenues, and number of employees, adding value by identifying and realizing win-win opportunities for collaboration with established companies (Onetti, 2014).

Slack
A cloud-based platform primarily meant to be used by businesses to communicate internally. It also integrate with several services and supports community platforms (for external communication).

SMB (Small and Medium-Sized Business)
A business with 100 or fewer employees is generally considered small (Rouse, n.a.). In this project, this refers to businesses with up to 100 FTE

Start-up
A temporary organization designed to search for a repeatable and scalable business model (Renderforest, 2019).

Themes (term used in Shipright)
Features in Shipright that are used to label insights, for categorization.

UI (User Interface)
In information technology, the user interface is everything designed into an information device with which a person may interact. This can include display screens, keyboard, a mouse, and the appearance of a desktop (Rouse, n.a.).

UX (User Experience)
"User experience" encompasses all aspects of the end-user's interaction with the company, its services, and its products (Nielsen Norman Group, n.a.).

1. Introduction

Grible and Shipright

The assignment that is of issue in this graduation project elaborates on Shipright. Shipright is a digital tool meant to be used to capture insights for customer research purposes. The product is primarily meant to be used by digital product teams to help them capture relevant insights from support-and-chat-services, internet websites, internet reviews, social media platforms, e-mails and CRM-applications. With Shipright, these insights can be grouped, categorized and shared among members of a product team. With this, it offers a workflow to collaboratively process and analyze feedback, in order to find insights about customers' experiences with software products and possible directions to improve product design.

Shipright is released by Grible, a digital design agency based in the center of Rotterdam. It offers digital solutions for its customers, which are relevant and easy to use, accompanied by clear, simple and modern graphic designs. It realizes such solutions with the young and ambitious team with mixed skills of data science, full-stack development and user experience design. With Shipright, Grible has started a Small Business (4 FTE), that is still positioned in the early start-up phases.
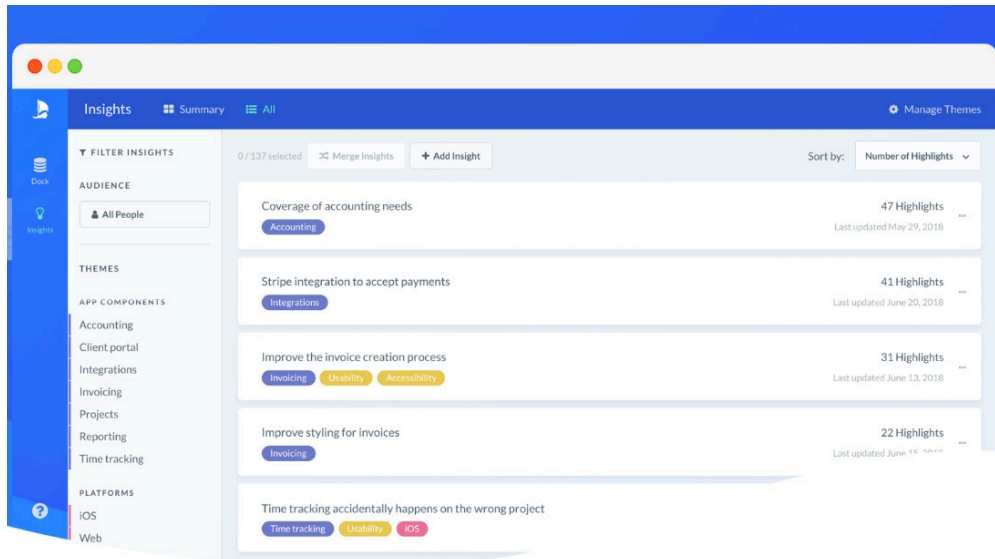
Capture user feedback anywhere on the Web with our browser extension

Import bulk feedback, such as survey results or interview data

Autosync all or only tagged Intercom conversations

Create notes during interviews, user tests, or customer calls

Let anyone on your team forward insightful e-mails to Shipright

More integrations coming soon

Figure 1.1: The assignment that is of issue in this graduation project elaborates on Shipright. Shipright is a digital tool meant to be used to capture insights for customer research purposes.

Why Shipright is Built

In general, almost all product teams consider feedback highly relevant for product decisions, but difficult to act on. The sheer volume, diversity and/or disorganized nature is experienced as overwhelming. As a result, user feedback and research (data) are not consistently considered in design- or product decisions and are hardly part of the development process. This increases the risk of not building the right things on the right time (Grible [1], 2018).

Luckily, more forward-thinking product teams have started to adopt lean approaches into their product development. Although, it was found that for SMB's several problems in the process still occur with respect to:
- 	Recruiting people for studies;
- 	Collating interview notes;
- 	Do research debriefs/reports;
- 	Gathering user feedback from different internal teams;
- 	Aggregating user feedback from different channels (like email, support system, ticketing systems);
- 	Keeping track and building up a searchable repository of user insights;
- 	Dealing with feedback from different user segments;
- 	Transferring knowledge from researchers to their product team;
- 	Limited awareness of proper user research approaches among many customer-facing people in support or sales;

(Grible [1], 2018)

Shipright was built to tap into these problems, with the focus more specified on the following goals:
- 	To enable teams to have all their user input available in one place.
- 	To enable teams to have a good process to discover and organize user insights over time.
- 	To make it easy for all team members to explore user insights.
- 	To make sure that research is never repeated, but complementary (to the previous research), and becomes actionable faster.

(Grible [1], 2018)

Shipright avoids associating feedback to features. The reason for this is to cultivate continuous learning and to guide product teams to build rich insights from user feedback over time. Also, Shipright helps in sorting out the most occurring and most recently added feedback topics, and to discover similar feedback. These functions form a good start to help users draw conclusions from the vast number of findings easier (Grible [1], 2018).

The Target Group

Shipright is meant to be used by scale-up SaaS companies to conduct user research on their products' users. SaaS (software as a service) is a software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted. Some examples of SaaS-products are Microsoft 365 and Dropbox.

See figure 1.2. The targeted SaaS companies are the small and medium businesses (SMBs = up to 100FTE / up until 10M revenue) and Mid-Market Businesses (100 – 500 FTE / 10M – 100M revenue). This group primarily entails scale-up companies. For outreach, though, the minimum of company size is set on 10 FTE. This allows start-ups to be included as a secondary target group. Furthermore, in these companies, user research / design is part of the culture; there is some level of UX-maturity to be recognized, but it is not fully matured (*company mentor, personal communication*).

Among this target group, user research is defined as the collection of user feedback and the analysis of it to get to actionable tasks that are to become part of the product backlog / roadmap. All the actions that goes around product decisions, revolves around product teams with typical key members of Product Managers / Owners, UX-researchers, designers and developers (*company mentor, personal communication*).
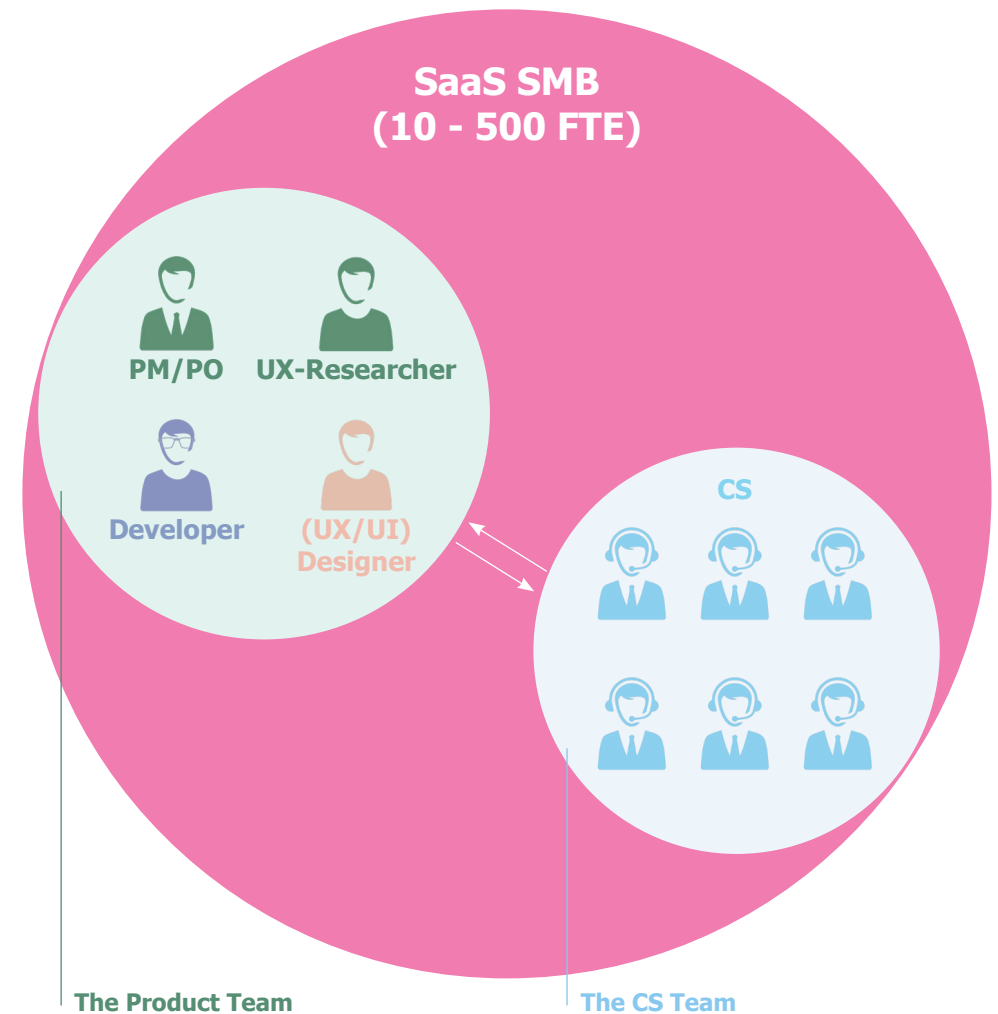
Figure 1.2: These parties of PM's / PO's, Researchers, UX-designers, developers and CS-teams actively interact with each other towards product decisions.

In most of the targeted companies, SaaS SMB's, PM's / PO's (product leaders) are the ones leading the user research analysis. Often, they work together with UX-researchers. Developers and Designers (UX/UI) tend to focus on building product features and prototypes, based on the results of user research. Out of all the key members of the product team, Developers' and Designers' engagement in the research process appear to be the smallest. In the larger companies, among the target group, Customer Support (CS) teams are also engaged in the collection of users' data, as they are the ones who speaks to customers directly but are still not considered part of the product team (*company mentor, personal communication*).

These parties of PM's / PO's, UX-researchers, designers, developers and CS-teams actively interact with each other towards product decisions. An example workflow that is identified from Grible's communication with the target audience is given in figure 1.3. In this workflow, it is to be seen how user feedback gets processed to a feature shipment.

It is common practice among these companies to release new features for their products regularly. These releases would follow after user research, when it is clear what product improvements are necessary. In theory, these releases are aligned with Agile sprints (see Agile, page 49) that the companies go through; new releases are made at the end of each sprint. Although, the rate of new releases of features to occur is quite diverse (L. *Nederstigt, personal communication*).
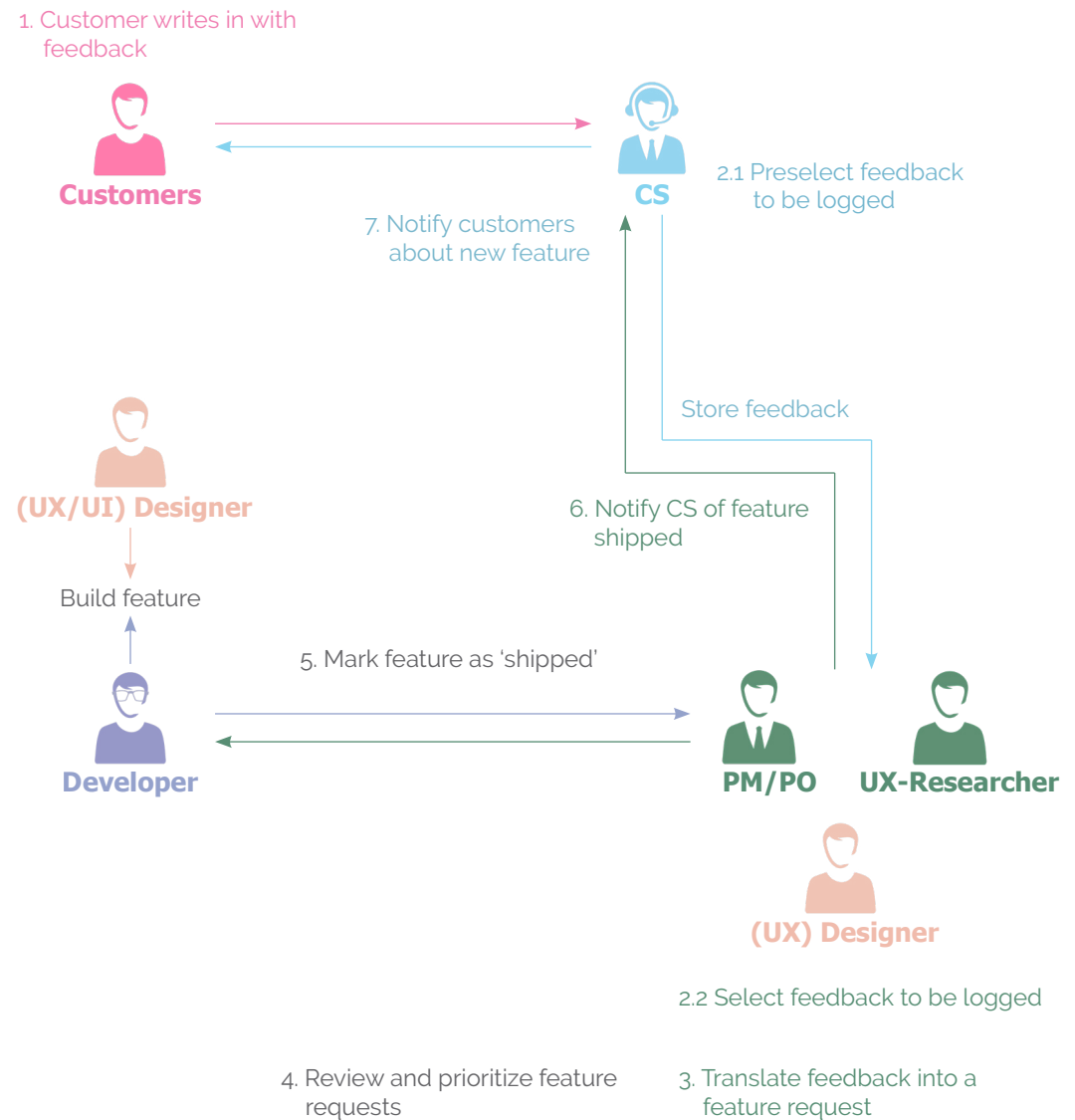
Figure 1.3: An example workflow that is found from Grible's previous conversations with the target audience (*C. Wiese, personal communication [Grible]*).

The Problem Definition

These scale-up SaaS companies do not have a full (user) research department, due to the limited amount of staff and resources. User research in these companies are conducted by a small team of UX-designers, product leaders and, sometimes, dedicated researchers. As mentioned before, the research is meant to gain insights about customers' experiences with SaaS-products and possible directions for improvements in product design. These improvements range from additional graphical features that adds up to product usability, to additions of new technological adaptations.

See figure 1.4. The problem encountered is that, **though rich insights from user research is desired, the fast-paced environment of scale-up companies prevents them from being able to spend enough time and attention on user research.**

Shipright's original design is able to help scale-up SaaS companies to collect and organize feedback data from their products' users, and to turn these data into insights. But, the analytical process to get to useful insights appears to still be experienced as slow and complicated, and therefore an inefficient process. That is because, **users do not seem to fully understand the different steps to follow throughout this analytical process.**

Besides that, **team collaboration is not supported yet**. Different company team members have to be able to easily communicate with one another. Firstly, the ones who are conducting the user research (UX-designer, product leader, etc.) have to work together to distinguish relevant data from the irrelevant ones and discuss the relations between different data and/or resulted insights. Secondly, the different stakeholders of the company (PO, UX-designer, lead programmer, etc.) have their own view on relevant improvements and need to be enabled to take the relevant insights in discussing possible directions to take. This is crucial, because different things such as short- and long-term goals of the company, and technological possibilities need to be considered, alongside user behavior around the product.

! To enable SaaS companies to get relevant customer insights, within the fast-paced scale-up environments.

Workflow of use

! Unclear intended workflow of analysis in Shipright

Shipright

! Lack of support for team collaboration in Shipright

Team collaboration
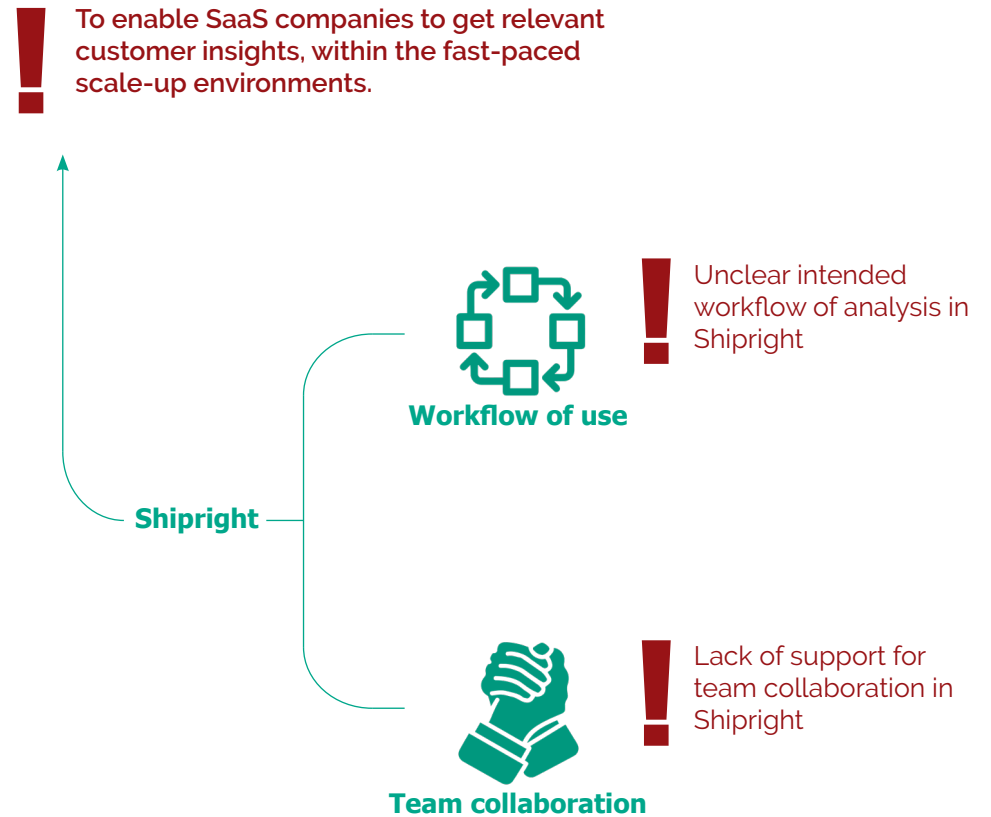
Figure 1.4: The main problem is to enable SaaS companies to get relevant customer insights, within the fast-paced scale-up environment, using Shipright. Two topics are recognized from this, regarding point of improvements for Shipright.
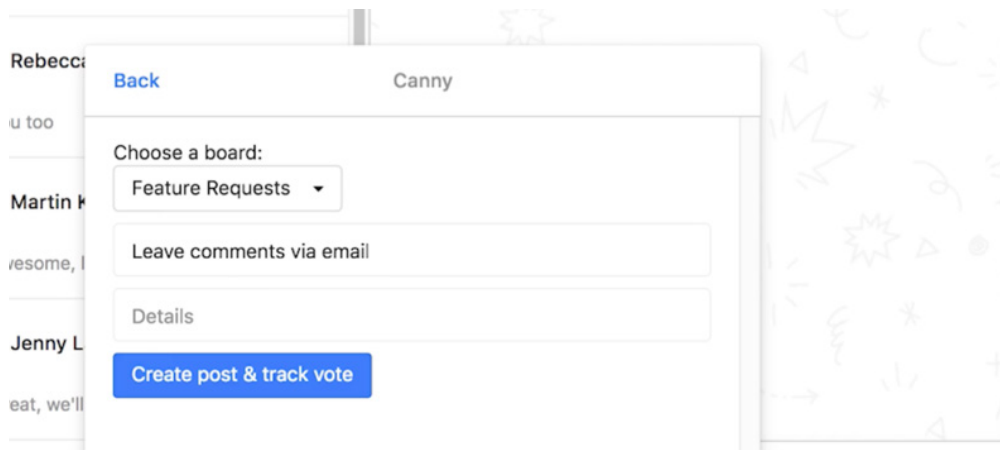
Figure 1.4: Canny comes with an Intercom integration that enables SaaS support agents to create 'posts' about customers' requests on features.
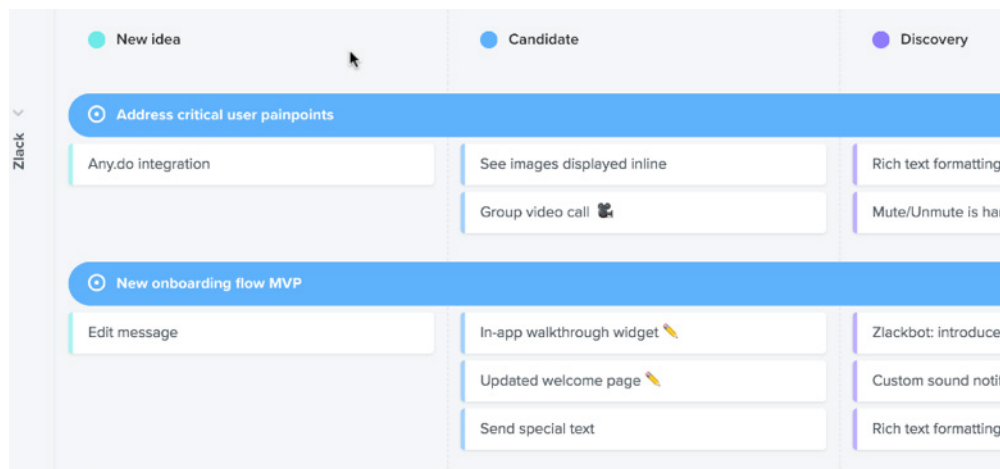
Figure 1.5: ProductBoard enables PMs to create a detailed Roadmap that can be shared with internal stakeholders. It can be used to show criteria to be met and users can limit access of information per different stakeholders.

Competitiors

In this analysis three competitors are analyzed: Canny, ProductBoard, and Airtable. The choice of these three is made because they provide SaaS products closely related to the problem defined in 'Problem Definition'. Each competitor will be described shortly in this sub-chapter.

The use of Canny and ProductBoard is explored in their respective websites (canny.io and productboard.com); ProductBoard is further explored using a trial account. As for Airtable, it is used by Grible itself for which I have access to. The results of this exploration are given in table 1.1 on the next page. As to be seen, they are related to the following: feedback collection and organization, feedback interpretation, internal collaboration, and customer engagement.

Canny
Canny comes with an Intercom integration that enables SaaS support agents to create 'posts' about customers' requests on features. PM's get notified about incoming feedback and requests by these posts, and from which customers. New customers' feedback related to this post can be added, enabling PM's to see which requests can be prioritized based on occurrence among their product's users (Canny, n.a.).

ProductBoard
ProducBoard offers a public portal, in which its users can share with their customers, what they are working on, what's been done and what they will work on later. These customers can vote on the ideas and give feedback, from which new ideas can be sourced. Also, it enables PMs to create a detailed Roadmap that can be shared with internal stakeholders. It can be used to show criteria to be met and users can limit access of information per different stakeholders (ProductBoard, n.a.).

Airtable
Airtable is a tool that works like a spreadsheet, while enabling its users to organize a broad range of information (Airtable, 2018). Users seem to like the flexibility in metadata (= a set of data that describes and gives information about other data) that is used (Grible [2], 2018).

Results from the competitor analysis	Related competitor
Feedback collection	
CS creates 'posts' about customers' requests on features, which PMs get notified about	Canny
A public portal in which feature-ideas and feedback can be outsourced from customers	ProductBoard
Feedback organization	
CS creates posts from customers' feature requests, to which similar requests from other customers are added; PMs can see which requests are mentioned the most	Canny
Feedback from customers is listed and grouped towards needs by PMs	ProductBoard
A spreadsheet-like tool with a broad range of features that can be applied to organize different kinds of data; users have to decide by themselves how to apply the features	Airtable
Feedback interpretation	
Customer feedback are translated into feature requests by CS and PMs would relate all created feature requests with other factors (trends, technical feasibility, etc.)	Canny
Feedback from customers is listed and grouped towards needs by PMs	ProductBoard
Internal collaboration	
CS collect feature requests and PMs analyze them further	Canny
Feedback is grouped towards needs; PM decides on features for these needs; features are shared with others internally via the RoadMap	ProductBoard
Customer involvement	
Customers' feature requests are turned into posts that are visible for them; PMs can assign different states to the post, so customers can keep track of the state of their request in product development	Canny
A public portal in which companies' ideas and plans for new features are shared with customers; customers point out the significance of these shared information; the results are used to prioritize features	ProductBoard

Table 1.1: Results of the competitor analysis.

As to be seen in table 1.1, the results of the competitor analysis are grouped in five different categories. They can be further related to the two problems described in Problem Definition:

- **Unclear intended workflow of analysis**
    - Feedback collection
    - Feedback organization
    - Feedback interpretation

- **Lack of support of team collaboration**
    - Internal collaboration
    - Customer involvement

Both ProductBoard and Canny are already a few steps ahead of Shipright in the engagement of internal stakeholders and/or customers in product development. However, they do that with feature requests/shipment as starting points. This by itself limits the extent of engagement to only being updated about results of analysis. For Shipright, there is the opportunity identified to provide updates about recognized needs and problems among customers as well, which eventually lead to updating them about features. By doing that, updated internal stakeholders and customers will become more aware of what goes on during analysis.

Airtable comes with a broad range of features, with a lot of flexibility for usage. This, however, comes with several tradeoffs in usability. As the flexibility is broad, usability is compromised (Steinbach et al, 2009). Because of that, several users find it difficult to get data into Airtable, it becomes hard to set things up and to present to others in the organization (Grible [2], 2018).
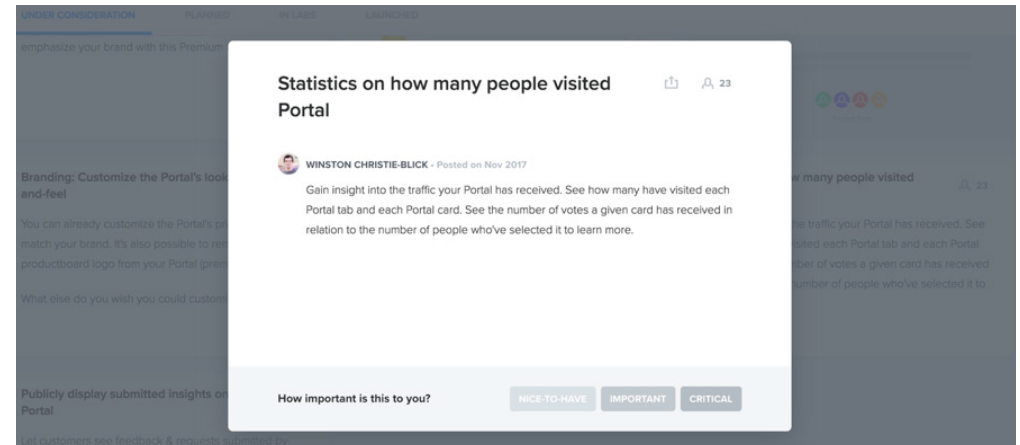
Figure 1.6: ProducBoard offers a public portal, in which its users can share with their customers, what they are working on, what's been done and what they will work on later.
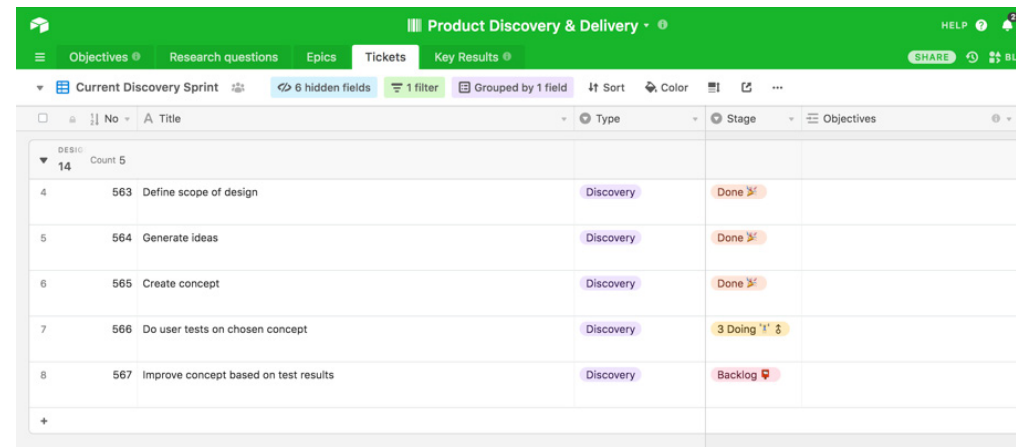
Figure 1.7: Airtable is a tool that works like a spreadsheet, while enabling its users to organize a broad range of information

The Assignment Description

Following up on the problem definition, the opportunity to design a digital workflow that fits in the fast-paced scale-up environment is identified. This workflow should enable small scale-up SaaS-company teams to collectively collect customer data and should be clear in guiding them to turn these data into useful insights. With this, the workflow should enable the target group to gain deep understanding about customers' experiences with SaaS-products and possible directions to improve product design. The current design of Shipright will be taken as a starting point to design the digital workflow. The result is meant to be solutions for proposed improvements of the current design of Shipright.

The scale-up SaaS company teams are aimed to, firstly, experience clear guidance in the analytical process of turning customer data into the insights they search for. Hereby, it is important for these teams to be able to identify occurring problems and needs among their products' users. In other words, the digital workflow should convey a clear analytical process that results in rich insights about customers behavior around SaaS-products.

Secondly, team members (of both the user research team and the whole company) should experience communicativeness among themselves, while going through this process. Each of the team member active in performing the user research should be able to communicate his/her view on the relations between different data and/or insights about customer behavior around product. Also, the relevant insights need to be communicated among the different stakeholders, so that each one of them can take these insights to discuss possible improvements in product design.

The Approach and Results

See figure 1.8 on the next page. The project will start with an exploration of the described problem definition. The goal with this is to narrow the problem down to three design challenges. After the exploration, 2-week sprints will follow. In total six different sprints are planned for this project and two sprints will be spent on each of the resulted challenges. Per challenge, the first sprint will focus on scope definition, ideation, and conceptualization. The second will focus on prototyping, user testing, and concept improvement. After the last sprint is done, the project will continue with documentation of all progress and results. Appendix I shows the overall planning for the entire project.

The expected results of this graduation project are conceptual solutions for a digital workflow, to be used by scale-up SaaS companies to conduct user research on their products' users. These conceptual solutions are meant to become proposals for improvement of Shipright. By the end of the project, a proposed digital workflow design will be ready to be presented.

The outcome of this project is expected to give the company a good sense of possible improvements for its current product. The company is expected to consider several of the proposed solutions to be incorporated in the improved version of Shipright. With that, a more relevant product for its target group can be offered, leading to a strengthened business strategy.

SaaS companies

Design Challenge 1

Design Challenge 2

Design Challenge 3
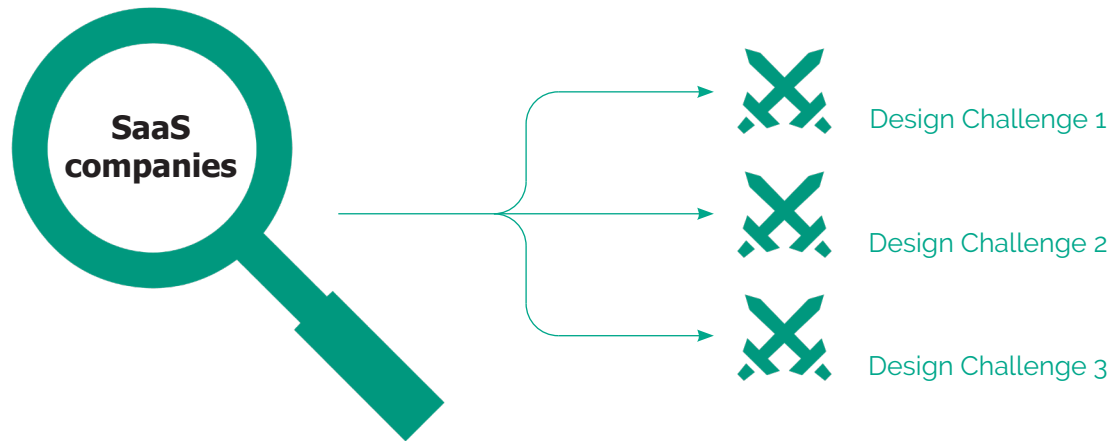
Exploration

| Week 1 | Week 2 | Week 3 |

Design Challenge 1

Design Challenge 2

Design Challenge 3

Sprint 1 and 2

| Week 4 | Week 5 | Week 6 | Week 7 |

Sprint 3 and 4

| Week 8 | Week 9 | Week 10 | Week 11 |

Sprint 5 and 6

| Week 12 | Week 13 | Week 14 | Week 15 |

Figure 1.8: The project starts with an exploration phase, that will result in three design challenges. Each challenge will be tackeled by two sprints; a total of four weeks per challenge.

2. Exploration

The project starts off with an exploration phase. The phase itself started by formulating three different Research Questions:

- How does Shipright works?
- How does user research in SaaS companies (10 - 500 FTE) look like?
- What design opportunities can be tapped into, in order to improve Shipright?

The goal of this exploration is to find answers to these questions. They will then be compared with the identified problems that were mentioned earlier, in Problem Definition: unclear intended workflow of analysis and lack of support for team collaboration in SaaS companies. Eventually three design opportunities are chosen, that would tap into these two problems.

Figure 2.1: To have an overview of all activities in this phase, this phase was kicked off by formulating Research Questions (RQ).

Exploration Set-up

The project starts off with an exploration phase that is planned to last for 3 weeks. To have an overview of my own activities in this phase, I would start this phase by formulating the following Research Questions (RQ):

How does Shipright work?
- What steps do you have to take throughout the use of Shipright?
- What positive and negative things are recognized in each step?

How does user research in scale-up (and start-up) SaaS companies look like?
- What is the theoretical approach that is applied by the target group in user research?
- What are the different steps to be taken in the process?
- Which team members are actively involved in each step and which are not?
- What is the desired level of involvement of each team member per step?
- What problems and needs are recognized in each step?

What design opportunities can be tapped into, in order to improve Shipright?
- What needs among the target group in user research are recognized?
- What problems are identified from the current design?

To get answers to these questions the following methods are applied:
- Surveys
- Interviews (with Grible's product team, current Shipright customers and potential Shipright customers)
- Literature review
- Review of the internal documents of Grible
- Review of Grible's communications with customers

The answers to these questions are compared with the two topics of Problem Definition mentioned in the Introduction: unclear intended workflow of analysis and lack of support for team collaboration in SaaS companies. Out of the identified needs among the target group and the detailed problems from Shipright's current design, three design opportunities are chosen. Further steps in this project focuses on exploring these opportunities.

How Does Shipright Work?

In this sub-chapter the results of my assessment of Shipright will be discussed. The goal of this assessment is to experience Shipright firsthand, and gain better understanding of the intended workflow. Each step of use will be described in page 36 - 44. Table 2.1 (page 45) and figure 2.15 (page 46) will show the most interesting findings I recognized from this assessment, regarding each one of the steps (see Appendix II for all findings). Eventually, these findings will be used to pinpoint design opportunities to improve Shipright upon.

As mentioned in the Introduction, Shipright is meant to be used by SaaS companies. Members of the company (usually Product Managers/Owners, UX-researchers, or Head of Customer Support) can get an individual account after purchase. After that, they can invite more of their colleagues and once agreed on, additional individual accounts will be made for them too. All of them will have access to the same Shipright platform (G. *Mangnoesing, personal communication*).

Shipright consists of two main parts: the Dock and the Insights section. The Dock consists of the Inbox and Archive. Feedback data can get imported for analylsis and these will get into the Inbox; data that have become irrelevant can be archived and stored in Archive. In the Inbox, the first interpretations of feedback data are made.

These interpretations are referred to as 'insights' and get stored in the Insights section, once made (in the Inbox). Once stored, all stored insights can be reviewed in this section, using the 'All insights' -view. Users can also create themes, intended to be used to tag created insights with, for categorization. Besides that, the Insights section includes a 'Summary' -view that shows insights created in the past month, insights created most recently, and an overview of all created themes. Users can choose one theme and view all stored insights tagged with it. Thereby, they get to the 'All insights' -view and can choose other / add more themes to filter the stored insights with.

Figure 2.2 shows the buttons to be used to switch between the Dock and Insights section during usage. Figure 2.3 on the next page, shows the menu hierarchy of Shipright. In this hierarchy, only the most important parts relevant to customer research are shown.
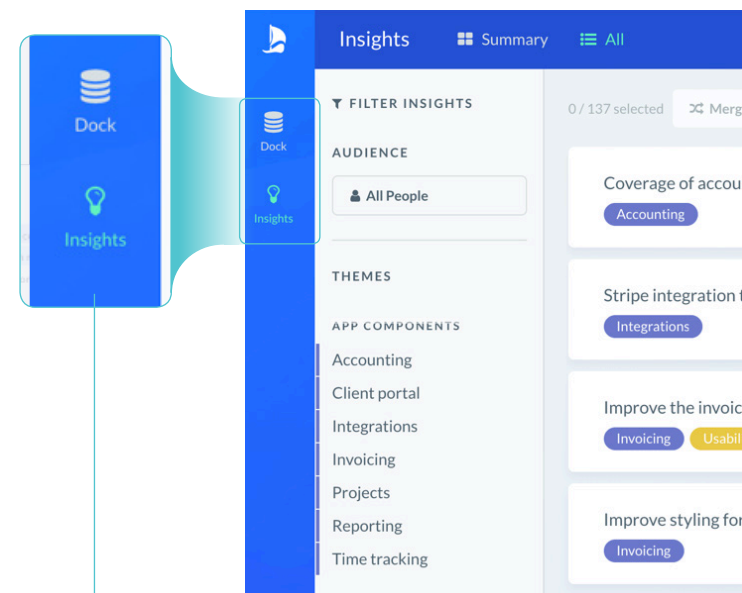
On the left side of the screen, the option to switch between the Dock and Insights section is shown.

Figure 2.2: Shipright consists of two main parts: the Dock and the Insights section.

Figure 2.3: Shipright's menu hierarchy with the most important parts for customer research analysis.
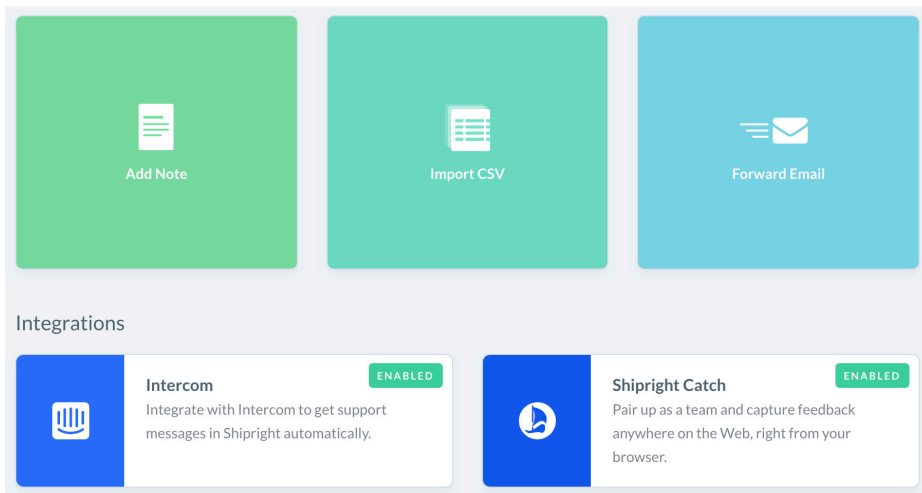
Figure 2.4: Supported data sources to import customer feedback into Shipright: self-made notes, CSV-files, e-mails, Intercom conversations, internet browser (Google Chrome / Safari).
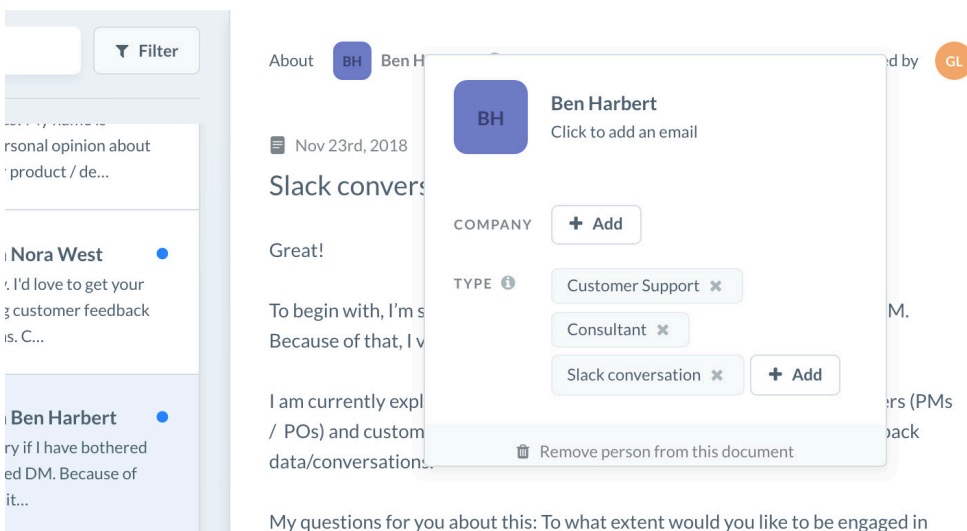
Figure 2.5: Shipright enables users to pre-categorize data by customer/stakeholder name, customer/stakeholder company name, and customer/stakeholder type.

1. Store feedback data

Users can store feedback data they have collected from different sources (see figure 2.4). Firstly, live-chat feedback data can be imported into Shipright. It comes with an Intercom integration (Intercom is a live-chat-support channel, used to interact with customers). Chat conversations done in Intercom will be imported automatically to Shipright, once the integration is activated.

Secondly, Shipright supports feedback data collected from the internet, which can be stored using the browser extension, Shipright catch. Interesting information from all over the internet can be marked (using the computer's cursor) and sent to Shipright for storage.

Another, source that is supported are CSV-files. CSV is a file format used to store tabular data, such as a spreadsheet or database. Files in the CSV format can be imported to and exported from programs that store data in tables, such as Microsoft Excel or OpenOffice Calc. This format is useful for feedback data originated from surveys and questionnaires.

Also, users are enabled to create separate notes in Shipright. Documentations of, for instance interviews or meeting summaries, can be copy-pasted and stored as a note to analyze later. Lastly, users are enabled to forward relevant e-mails from customers and stakeholders to Shipright. These e-mails' content can be analyzed later on.

Imported feedback data from all sources are stored in Shipright in a text format and are named 'documents'. These documents are stored in the Dock for analysis. The following steps will explain this in more detail.

2. Pre-categorize feedback

Feedback data from the various sources get into the Inbox (in the Dock section) once imported. There, they can be categorized. Shipright enables users to do
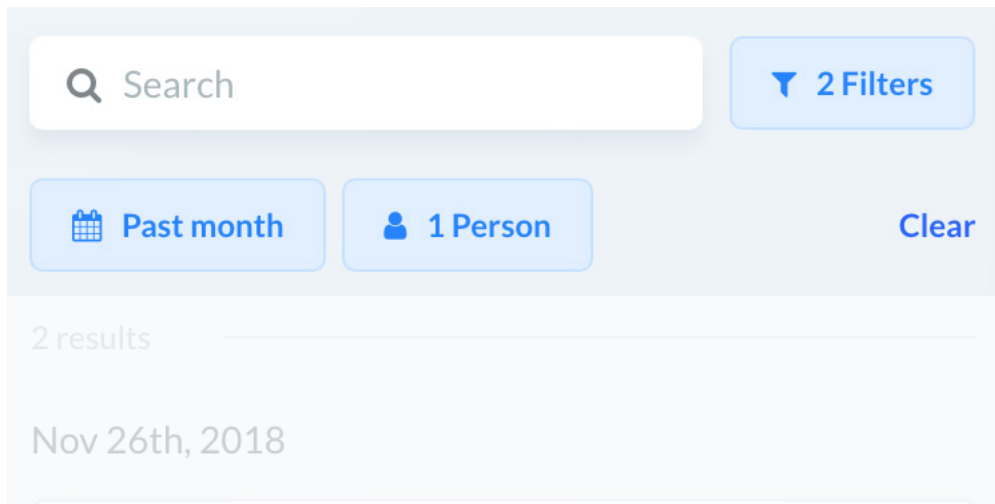
Figure 2.6: Users can distill feedback data by using the search function, time filter, and person filter.

so by customer/stakeholder name, customer/stakeholder company name, and customer/stakeholder type. Figure 2.5 shows how this is done (in the Inbox). These categories can be used to filter imported data in the Inbox and to filter insights (created from imported data) in the Insights section later on (see step 7, figure 2.11).

3. Distill feedback

See figure 2.6. The categorizations by name can then be used to distill the feedback data. this can be done in combination with the time filter. Furthermore, the search function can be used to add a search term as an additional filter.

4. Further data categorization: create themes

As mentioned earlier, users can create themes to tag to insights for categorization. This is to be done in the Insights section, in 'Manage themes' (see figure 2.7 on the next page). Shipright enables users to create them under larger theme-groups. While created in the Insights section, however, users can tag insights with them in the Inbox; **insights can only be tagged with themes, not with theme-groups**.

5. Insight creation: create and categorize insights from feedback

See figure 2.8, on page 39, and Appendix III. While going through imported data, interesting pieces of information can be marked by 'highlighting' them. These highlighted pieces of information will be referred to as highlights in the rest of the report. The workflow follows directly with the creation of an insight that can be made up from these highlights.

These created insights are to be categorized using the previously created themes. This categorization is part of the insight-creation process. Insights that are already created are stored and can be enriched with more highlights. This means that other highlights can be assigned to existing insights. Also, highlights can be assigned to multiple insights, that can either be completely new or and existing ones.
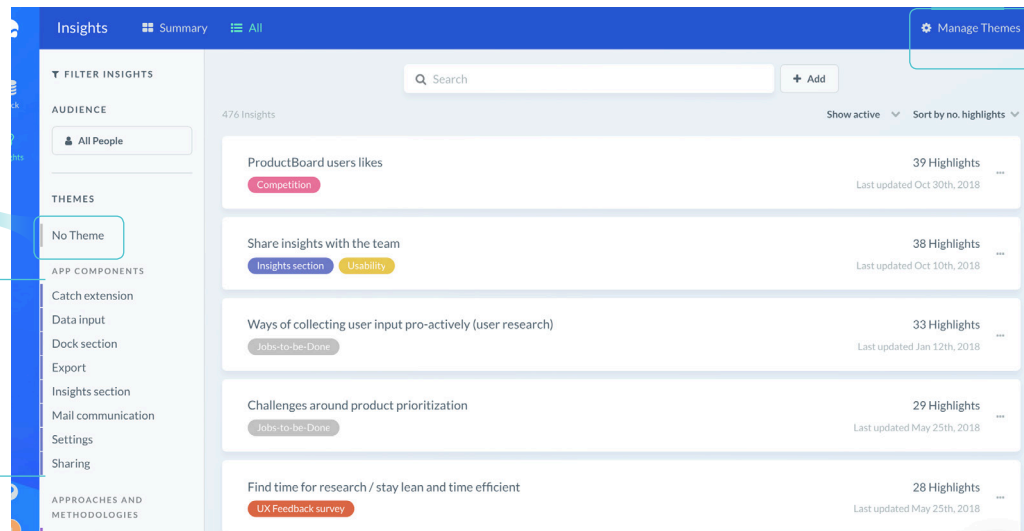
No Theme

The themes can be used to filter the insights that are shown. A combination of themes can be used.
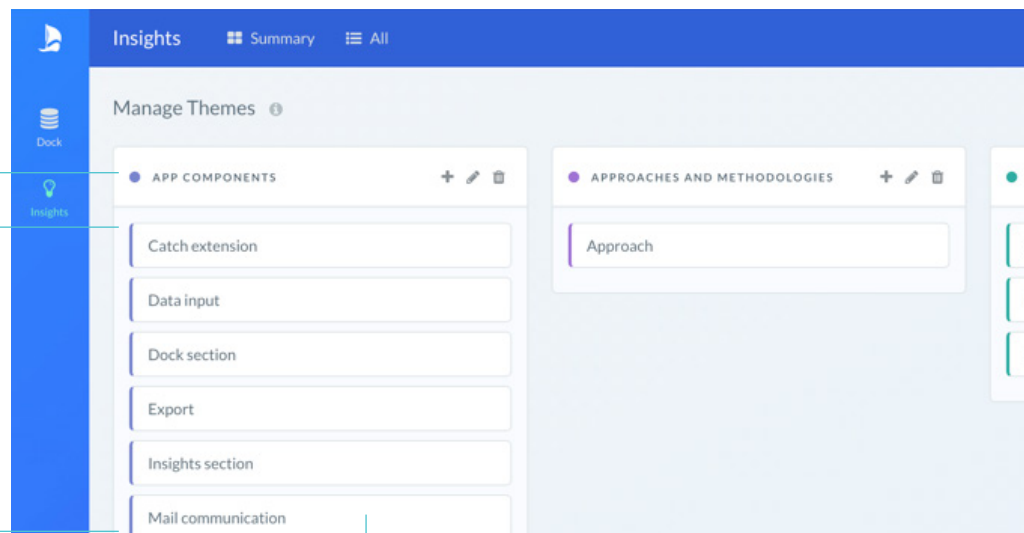
Manage Themes

Theme group

Theme group

In 'Manage Themes', themes can be created and removed. Themes are grouped per 'theme groups'. Theme groups, however, cannot be used to tag insights with.

Figure 2.7: Users can create themes to tag to insights for categorization. This is to be done in the Insights section, in 'Manage themes'. There is also an option to tag insights with 'no theme'.

1   **Highlight interesting pieces of feedback**

Nov 17th, 2018

Live session with Kanwar Anrora

User research is one of his key competences. Though, he isn't a PM/PO he has experience in working with SaaS companies and Agile approaches. He also has a lot of experience in building customer-centric SaaS products.

The difference between the subsets of 'potential feature requests' and 'new documents' was not clear. He wasn't sure whether the potential feature requests was resulted from only the new documents, or that it resulted from all documents which users may have or haven't read.

A suggestion from the participant. As the suggestions of potential feature requests are of more value, compared to the other subsets (at least, this is what was assumed) it can be given more space in the screen.

When looking at the Home screen, he didn't see that there were actually filters that could help him towards the relevant information. He rated the feeling of being guided towards the

2   **Create insight (= interpretation of the highlight)**

Nov 17th, 2018

Live session with Kanwar Anrora

Though paches.

UX ✕

UX   Create New

Confusing / Unclear use of design and/or structure ...

Lack of UX buy-in to trust feedback / listen to feedb...

Influx in support & feedback triggers interest

A suggestion from the participant. As the suggestions more value, compared to the other subsets (at least, ...
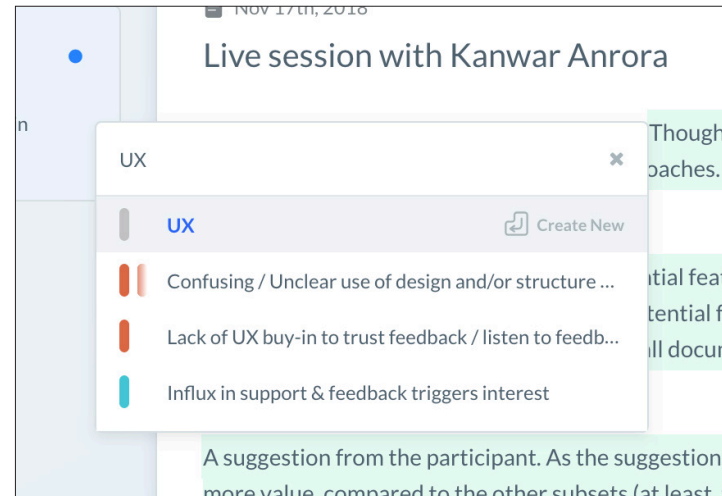
3   **Tag insight with created themes**

CHOOSE THEMES IT RELATES TO   ✔ Done

✔ Inbox   ○ Insights Repository
○ Key words   ○ Participants' ideas
○ Product aspects
✔ Relations between insights   ○ Relevance
○ UX/UI aspect   ○ Workflow   ○ Github
○ Intercom   ○ JIRA   ○ Trello
○ Awareness   ○ Churned   ○ Consideration
○ Decision   ○ Onboarding
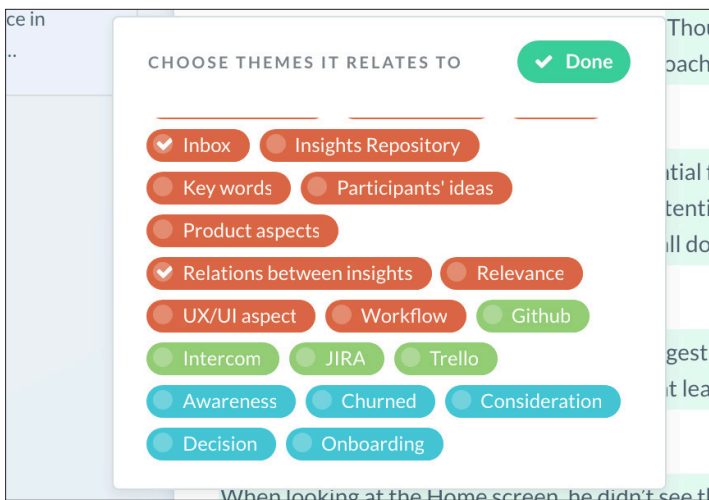
Figure 2.8: The main steps of insight creation. See Appendix III for the complete workflow of insight creation.
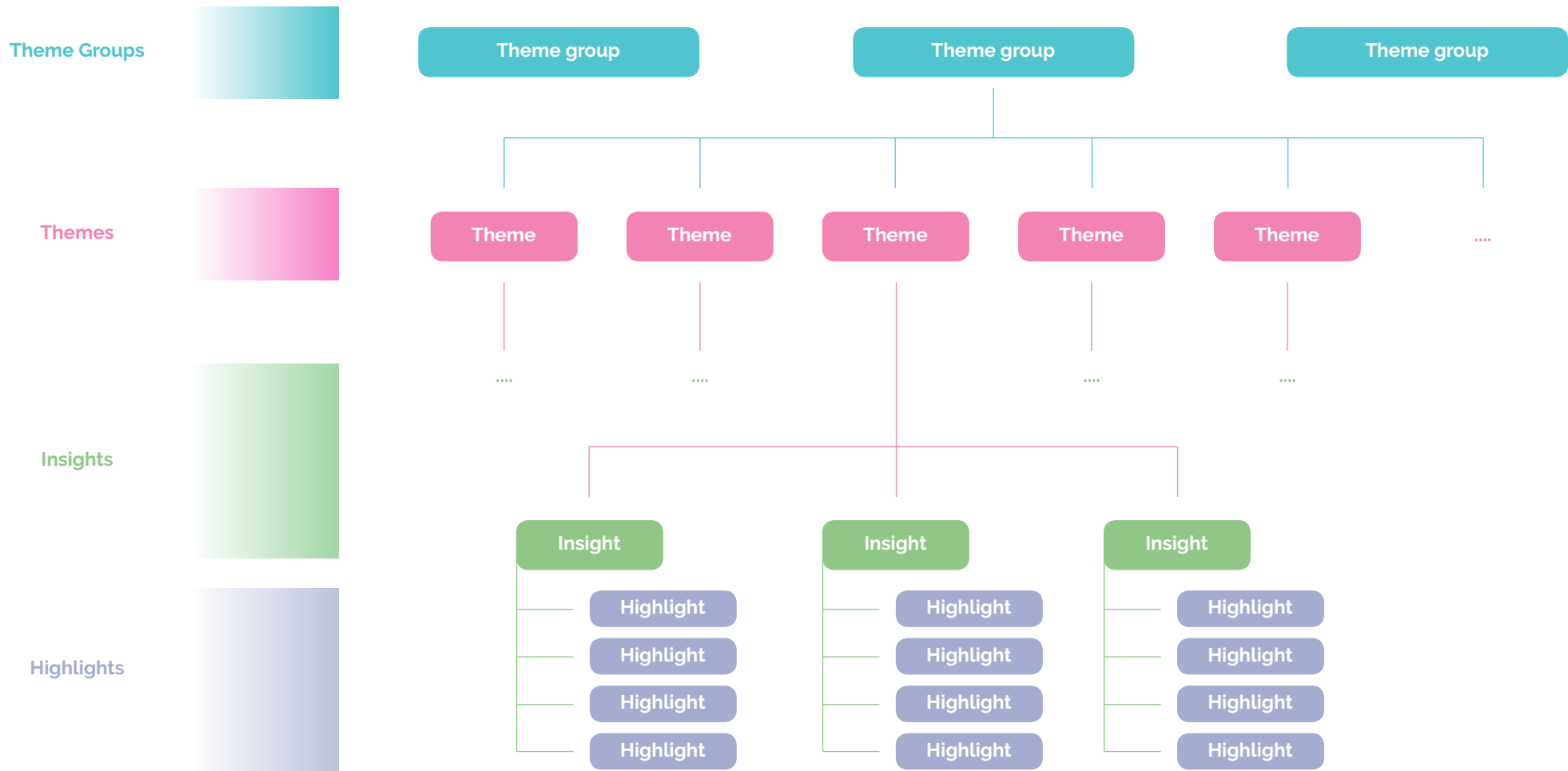
Figure 2.9: Feedback data are categorized as followed: Theme group - Theme - Insight - Highlight.

6. Further interpret insights

Created insights are stored in the Insights section for further analysis. Hereby, insights can be merged together, added themes can be adjusted, completely new insights can be created, and insights that have become irrelevant can be archived.

During insight creation, it was stated that new highlights can be assigned to existing insights. Each insight will then be enriched with highlights overtime. By looking at the number of higlights of a certain insight, the significance of that insight could be decided upon (see figure 2.10).

Highlights per insight can be reviewed and copied or replaced throughout different insights. It is also possible to create a completely new insight from highlights that are already assigned to existing insights. By clicking on one of the insights stored in the Insights section, the insight's details could be viewed, which contained all highlights added to it.

Of course, highlights and insights can be removed as well.

Figure 2.10: Created insights are stored in the Insights section for further analysis. By clicking on a stored insight, you can view its details, that include the stored highlights. This part of the Insights section is called 'All insights'.

7. View results' summary

The Insights section includes two important parts: 'All insights' and 'Summary'. 'All insights' shows all the stored insights that can be filtered by theme. The categories of customer/stakeholder name and type, and customer's/stakeholder's company can also be used as additional filters. In the Insights section, they are named 'Audience filter' and these categories are added to imported feedback data, not insights, as mentioned earlier. Though, insights can be filtered by these, based on the name/type/company added to documents, where highlights under insights are originated from (see figure 2.11).

'Summary' shows a number of different things. Firstly, it gives the top three insights with the most highlights that are made during the past month, that are named 'Trending insights' (see figure 2.12).. Secondly, it shows 'Recently updated insights', that refers to insights updated (= created and/or adjusted) most recently. Thirdly, users can view insights per theme. In 'Summary' they can choose one theme, that will bring them to 'All insights' with the chosen theme set active as filter. In 'All insights' additional themes can be added as more filters.
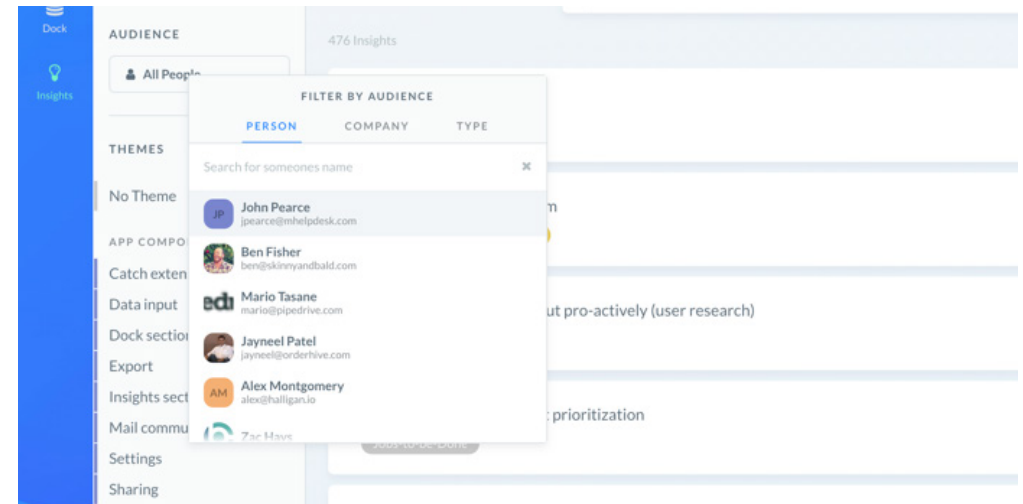
Figure 2.11: 'All insights' in the Insights section. Insights can be filtered by customer's/stakeholder's name/type/company, based on the respective categories added to documents, where highlights under insights are originated from.
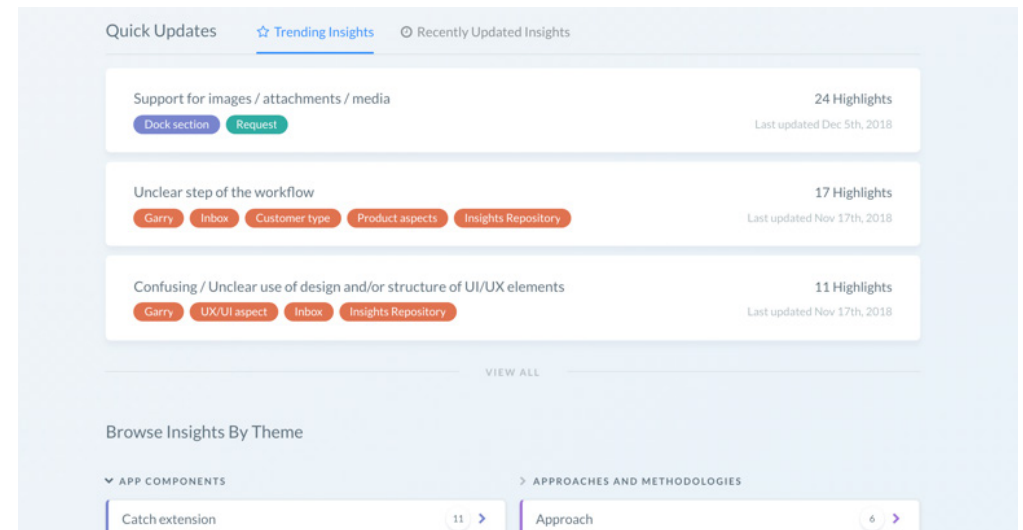
Figure 2.12: 'Summary' shows a number of things. One of that is the top three insights with the most highlights that are made during the past month. These are named 'Trending Insights'.
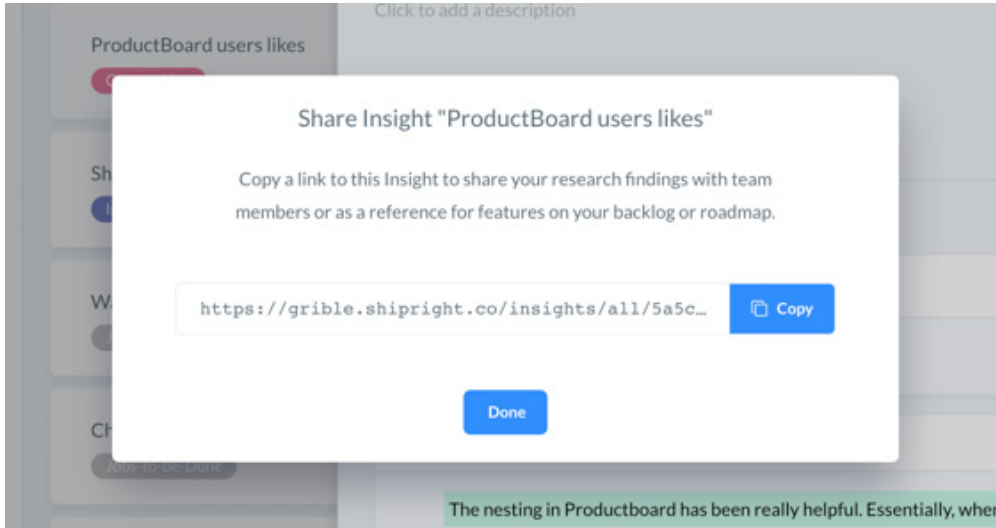
Figure 2.13a: The 'share' function is included per stored insight and generates a link to the respective insights. This link can be copied and shared digitally with other users.

8. Share results with colleagues

Separate insights can be shared with other users that have access to the same Shipright platform. Users can add a description to the insight prior to doing that. The 'share' function is included per stored insight and generates a link to the respective insights. This link can be copied and users can include it in a message (e-mail, chat, etc.) to share them. Also, it can be used as a reference for the Product Backlog or Roadmap.

Shipright has companies as clients, in which different users are part of. Each company client will be given a team-account and each individual user per client will be given separate individual accounts to get access to the respective team account. Shared insight-links can only be opened if you have an individual account to the Shipright-team-account of issue.

Shipright team account

Shipright individual accounts
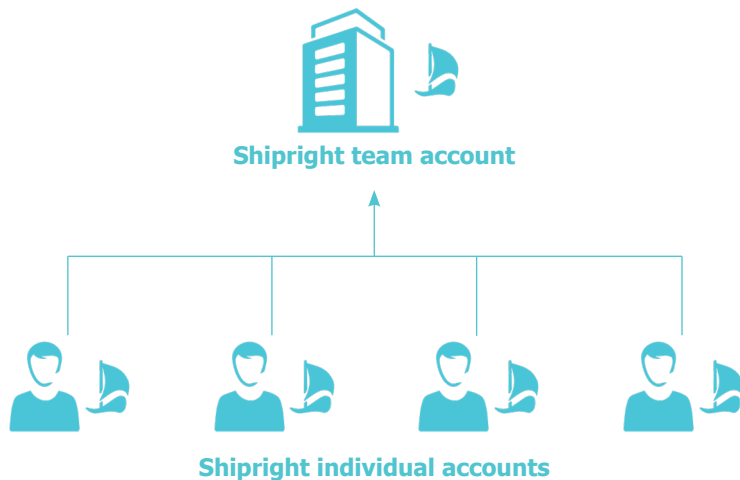
Figure 2.13b: Each company-client gets a Shipright team account. Each user will be given individual accounts to get access to the (team) account. Shared insights (see a) can only be viewed by those who have individual accounts.

Alternative view on Inbox documents

Steps 5 and 2 explained how customer's/stakeholder's name/type/company can be added to documents (= imported feedback data), and how insights can be created from these data and tagged with previously created themes. To provide more focus for users while going through these steps, Shipright offers an alternative view on Inbox .documents. It shows each one of the Inbox documents in an enlarged view. This function, though, can only be used to view new documents that are not opened yet. The figure on the right shows a wireframe screen that visualizes this function.
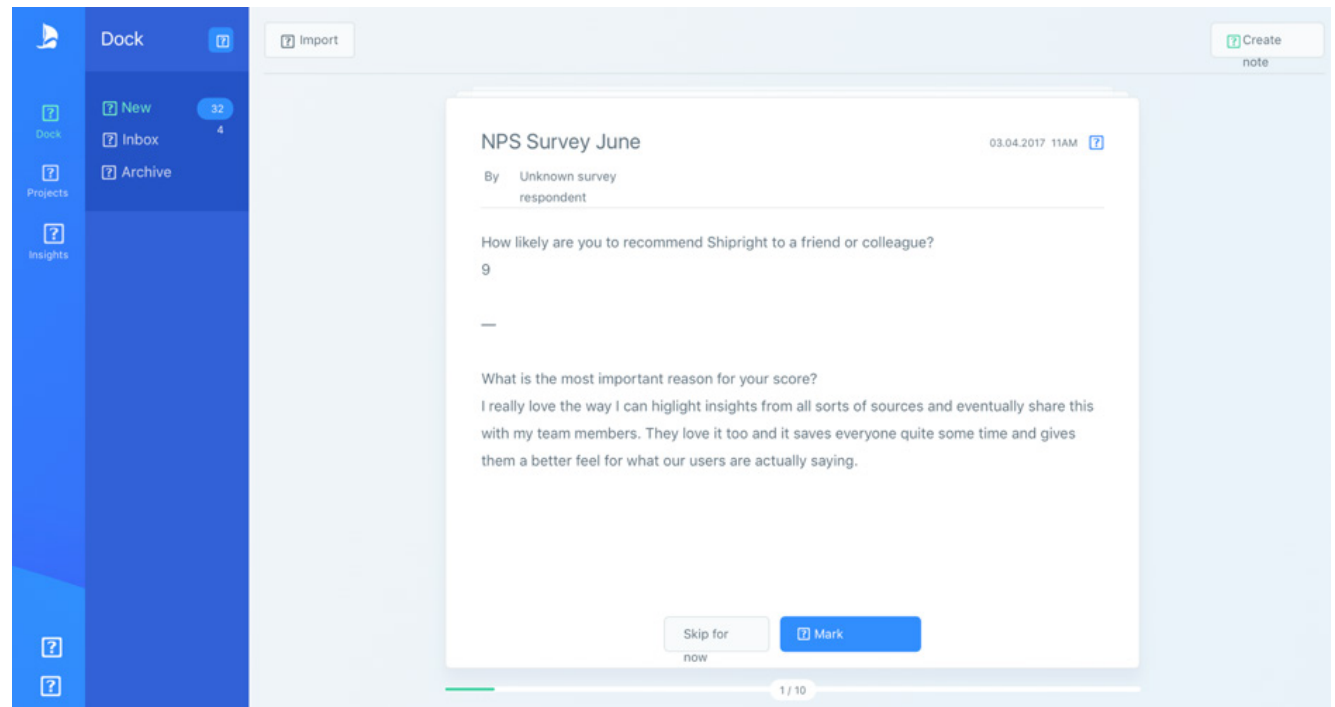
Figure 2.14: The alternative view shows each one of the Inbox documents in an enlarged view. This function, though, can only be used to view new documents that are not opened yet.

The positive and negative aspects I recognized in each step will be shown in this page and the next. Figure 2.15, on the next page, shows the most interesting ones, related to the two topics of Problem Definition (see figure 1.4 on p. 25).

Certain findings that are not related to these, but are still interesting, are given as well and shown in table 2.4. These findings are distinguished by their positive/negative nature, with the related steps of use shown. The full list of all positive and negative findings in this assessment can be found in Appendix II.

Other additional findings	Steps
Identified positive aspects	
Users are enabled to have an overview of all the groups of insights that is created.	6
When you are viewing insights per theme: you can have an overview of the insights under that theme and use them to come up with new, richer insights.	6
Insights stored in the repository can be reassessed, following by adjusting (= adding or deleting) themes that are assigned to them.	6
Insights in the repository can be adjusted by merging multiple ones with each other or copying / replacing highlights throughout different insights.	6
Identified negative aspects	
You cannot create themes while going through the imported documents.	5/6
There is a functionality included in Shipright, whereby users can merge multiple insights to create a new one. In the new insight, you can still see the highlighted passages which the merged insights are derived from, but you cannot see the insights that are merged together.	6
With the audience filter in the Insights section, it is not possible to see the departments each added person is from.	7
Insights can be sorted out based on the highlights included, but different highlights can still originate from one document describing one person's opinion; this is a major flaw in the prioritization of insights based on the number of highlights.	7

Table 2.1: Interesting additional findings resulted from my assessment of Shipright

1. Store feedback data

2. Pre-categorize feedback

3. Distill feedback

4. Create themes

5. Insight creation: Create and categorize insights from feedback

6. Further interpret insights

7. View results' summary

8. Share results with colleagues

Most Interesting Findings Related to the Need of a Clear Workflow of the Analytical Process	Steps
Identified positive aspects	
Best practices guide to set up themes is useful to new users who are not that experienced in performing user research	1
Highlighting interesting passages feels very intuitive.	5
Identified negative aspects	
The filter functionalities in the Inbox are not sufficiently noticeable. These should be made more distinct.	2/3
When tagging insights with 'themes', it may be the case that users are not sure which theme to choose (they forget what each theme stands for / they simply wanted to postpone tagging); this is more likely to happen as the number of themes and insights grow.	5/6
The intended use of themes and theme-groups is not clearly communicated.	4/5/6
Different insights should be grouped with, compared to and/or combined with each other (this is already possible, but the possibility is not clearly presented yet).	6/7

Most Interesting Findings Related to the Need of Support for Team Collaboration in Company Teams	Steps
Identified positive aspects	
To add a description to insights and highlights, and to be able to share these, can enable you to show where the insight is originated from.	8
Identified negative aspects	
Transferring knowledge of insights is solely possible by sharing an insight (alongside the passages that led to the insight). Input from other team members are limited if only separate insights are presented; different insights can possibly be combined or compared to each other still.	8
Sharing insights is only possible with other Shipright users.	8

Figure 2.15: Most interesting problems / needs identified from the steps of using Shipright, found during my assessment. See the full list of identified problems / needs in Appendix II.

Insight Assistance (IA)
An important goal in Shipright is to surface patterns in feedback. Patterns are found by making highlights. Therefore, highlighting is at the core of how users get value from feedback using Shipright. The tricky part is that patterns would only surface with sufficient volume of related highlights and this would not just happen; it needs some time and effort. Nevertheless, it was crucial to demonstrate how insights surfaced from feedback during onboarding and users should be convinced that they could manage to keep doing that over time. Hence, anything to speed up and/or make highlighting easier, would help (Grible [3], 2018).

IA is a new feature in development and with it the aim is to make it easier for users to surface a pattern in feedback. Hereby, users are assisted in focusing on a single insight and to find similar information from other documents, instead of highlighting all potential insights per document and hoping for a cluster to appear in one of multiple insights (Grible [3], 2018). Possible, similar contents are to be recognized by cues of, for instance, nouns and verbs in the highlighted pieces of text (due to confidentiality reasons, the exact cues cannot be shared publicly).

A concrete example for the use of these cues:
1.   Nouns and verbs are predefined as cues for the IA in Shipright.
2.   A user creates a highlight of the sentence "I want to analyze feedback".
3.   The IA algorithm would look for sentences that would contain "want" (verb), "analyze" (verb), and "feedback" (noun).
4.   Documents that would contain such sentences would be suggested as 'other documents with similar content'.

The workflow of highlighting and viewing suggestions are shown by figure 2.16 on the next page.

User test on the IA
The concept of IA is prototyped and tested with three Shipright paid customers (see Appendix IV). These customers are users who work a lot with English Intercom-chat data. The test sessions were carried out by Grible and are not part of this graduation project. Insights gained from the results are described in the following paragraph.

From participants, it received an average rating of 5.5 out of 7. The way this concept performed, seemed to be quite good. Participants tend to understand

it but did not respond with things like 'Awesome!'. This might be due to the test being focused on executing tasks one by one (see lessons learned), which avoided the ability to realize/internalize the value of the overall concept/bigger picture (Grible [4], 2018). It also appeared that the assistance was still slow in finding suggestions due to the complexity of the input calculation, that it slowed down the workflow of users (*company mentor, personal communications*).
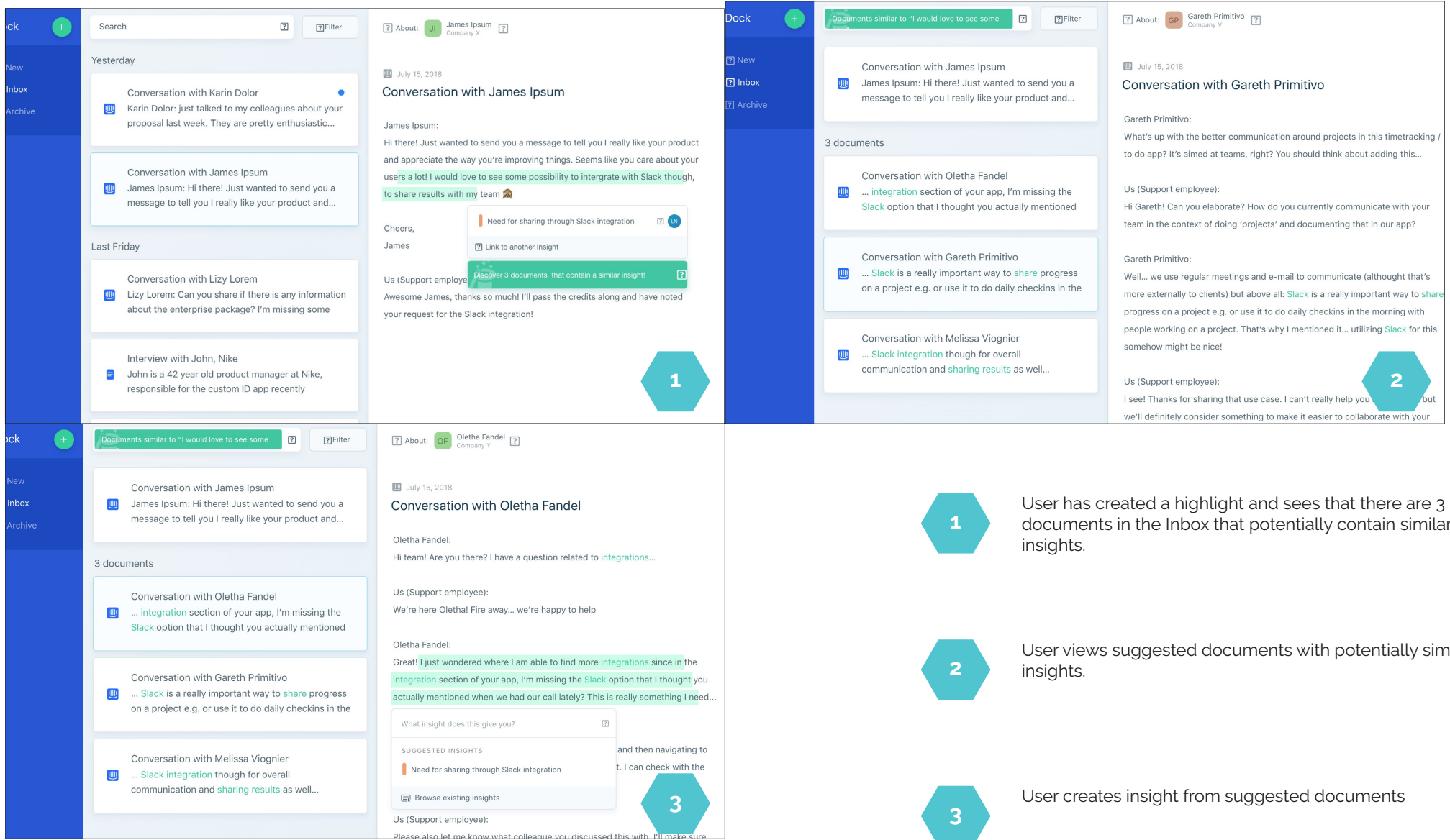
Figure 2.16: The prototype of IA that was tested.

1. User has created a highlight and sees that there are 3 documents in the Inbox that potentially contain similar insights.

2. User views suggested documents with potentially similar insights.

3. User creates insight from suggested documents

How Does User Research in Scale-Up (and Start-Up) SaaS Companies Look Like?

To answer this RQ, a literature review is done. This was meant to get familiar with the theoretical approach applied by the target group in user research. In this report Agile, Qualitative Data Analysis, and Product Discovery and Delivery will be described. The results are meant to enrich the identified steps and related stakeholders (see figure 1.3 in Introduction, on page 24) with more detailed information. This detailed information will be used later on to pinpoint the design opportunities and to narrow them further to specific design problems to design for.

For further enrichment of the information, the target audience was approached by the means of surveys and interviews too. The interviews, specifically, revealed more detailed information about the involvement of each internal stakeholder in user research. The results of these surveys and interviews are shown in Appendix V. These results are summarized in this main report and will be shown by the tables in pages 53 - 57. These results will ultimately be used, alongside the findings of my assessment of Shipright, to pinpoint design opportunities for Shipright's improvement.

Literature review
Agile
Agile is a particular approach to project management that is utilized in software development. This method assists teams in responding to the unpredictability of constructing software. It uses incremental, iterative work sequences that are commonly known as sprints (LinchpinSEO, n.a.).

User research among the target group often follows the Agile approach (*company mentor, personal communications*). As Shipright is meant to add value in this, the basic principles need to be understood and considered throughout the project.

The Agile Manifesto (2001) states the following principles, that are put into value, when applying an Agile approach/process:
- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

The agile process is iterative and incremental, with different development activity performed in parallel, rather than sequentially. Each development activity is repeated in different iterations and knowledge gained from one iteration is used to build on the new iteration. Customers are involved in the iterations and receive usable product versions in shorter increments (Cerrato, 2018).

Qualitative data analysis
As described in chapter 1, Introduction (page 21), Shipright is meant to be used to capture customer insights from different sources of feedback, such as support-and-chat-services. Insights that need to be captured are interpretations of the meaning of feedback data. Also, Gibson and O'Connor (2017) stated that qualitative analysis is concerned with meaning; data is a word which describe valid information that can help a researcher answer his/her question(s). In other words, Shipright supports qualitative analysis for its target audience. In order to pinpoint design opportunities for Shipright's improvement, the broader context of qualitative analysis is explored as well.

Formal systems for the analysis of qualitative data have been developed in order to help researchers get at the meaning of their data more easily. These systems involve:
- coding techniques for finding and marking the underlying ideas in the data
- grouping similar kinds of information together in categories
- relating different ideas and themes to one another
(Rubin and Rubin, 1995).

There are many components to this type of analysis and they include:
- organizing the data
- finding and organizing ideas and concepts
- building overarching themes in the data
- ensuring reliability and validity in the data analysis and in the findings
- finding possible and plausible explanations for findings
- an overview of the final steps
(Gibson, O'Connor, 2017)

In the traditional development processes, there is an entire phase dedicated to figuring out what you need to figure out. There might be weeks or months available for discovery, with plenty of time to design just the right study and include a lot of participants. This, however, is not realistic in Agile environments,

the field entails constant processes of learning, designing, building and launching (Stockwell, 2017).

The challenge is, of course, that research efforts are to be alligned with sprints that are usually 2-3 weeks long (Stockwell, 2017). The considerations for choosing research methods in an Agile environment remain the same. You still need to:
- Narrow down a specific question to answer and hypothesize about
- Determine whether you are looking for trends or reasons
- Consider the most appropriate context for your research
- Think through whether you need to look at behaviors or attitudes
(Stockwell, 2016)

Product Discovery and Delivery
It is not possible to build a product without discovery and delivery. In this case, discovery encompasses all the activities done, to the side of delivery. Discovery entails all the activities done, in order to decide what to build. Product Delivery, on the other hand, has to do with all the activities done, in order to build what is decided (Torres, 2016).

As Shipright supports qualitative analysis, it is to be used by SaaS companies to decide what is to be built for their customers. In other words, Shipright is meant to support Product Discovery among these companies. To find design opportunities to improve it, it is therefore relevant to include the theoretical knowledge of product discovery in this exploration.

Most (software) companies tend to overemphasize Delivery, while underestimating Discovery. This is influenced by the strong growth of Product Delivery for the past 15 years (Torres, 2016); Facebook makes multiple new feature releases daily (L. *Nederstigt, personal communication*). But, luckily, the same growth of Product Discovery is identified nowadays; areas such as Agile, are rapidly growing (Torres, 2016).

Continuous Product Discovery entails the following principles:
- Small research.
- Conducted every week (with the target audience).
- Make product decisions based on all sets of findings, that are collected.
(Torres, 2017)

Are we meeting stakeholder needs?

Can customers user it?

Do customers want it?

Are we solving a relevant problem?

Are we driving a desired outcome?

What to build?

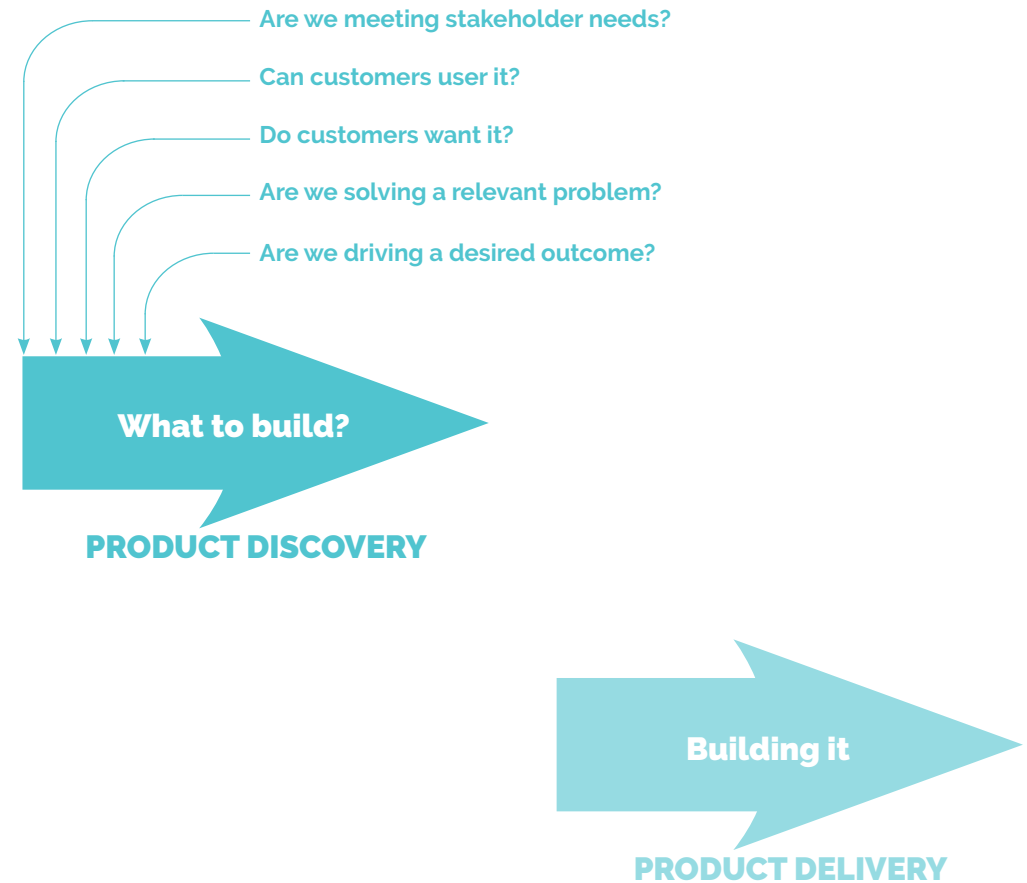**PRODUCT DISCOVERY**

Building it

PRODUCT DELIVERY

Figure 2.17: Product discovery and delivery. It is important for discovery to start before delivery.

In this, the main challenge that is to be tackled, is to prevent flops long before Delivery. Therefore, the focus should not lie on features, but on outcomes for customers that create values for the business. Hereby, the goal is to learn as fast and as much as possible, rather than to build as much and as fast as possible (Torres, 2016).

Throughout the process of Product Discovery, the following questions need to be kept in mind:
- Are we meeting stakeholder needs?
- Can customers use it?
- Do customers want our solution?
- Are we solving a problem customers care about?
- Are we driving a desired outcome?
(Torres, 2016)

Along the Discovery process, the goal is then to have answers to at least one of these questions. These answers can then be used as a yard stick (= a point for reference) in continuing the process. Eventually, of course, all these questions need to be answered. Agile is one of the tools to get to these answers. As we move forward towards the future, newer tools will keep emerging. Though only the tools that satisfy the following criteria should be adapted: it helps you to learn faster and it helps you to understand what you are learning along the process (Torres, 2016).

In order to get to those answers, several concrete steps need to be made:
- Firstly, define a clear desired outcome.
- Secondly, discover opportunities to drive that desired outcome.
- Then, discover solutions to deliver on those opportunities, by the means of experiments (= prototyping and testing)
(Torres, 2016)

It is common among the target group to go through Product Discovery and Delivery tracks. Both tracks are supposed to go in parallel with each other. Although, the Discovery track is supposed to start a couple of sprints earlier than the Delivery tracks. That is to make sure that Discovery-results can be used as a foundation to set up Delivery-goals (*company mentor, personal communications*).

While in theory there are supposed to be separate teams for either tracks, in practice the roles can overlap with one or more team members of the product team. This is more likely to occur in the smaller-sized companies within the target group. Hereby, it is still important for the Discovery track to be slightly ahead of the Delivery track, and for the Discovery goals and results to be in tuned with the Delivery counter parts (*company mentor, personal communications*).

Conclusion
From the findings that are collected, it can be concluded that Agile and qualitative data analysis are to deliver to the modern Product Discovery. Hereby, the focus is put on learning by making, in which companies are regularly experimenting with (product) ideas, to present this to their (potential) customers and collect feedback from. The feedback is then used to make product decisions.

The experiments include prototyping, testing, and learning. The prototypes used for this can emerge in the form of working (digital) tools, but also sets of questions, video representations, image representations or oral representations of ideas. All these activities done to gain insight knowledge about customers are part of the product discovery track. They occur in short increments of time, often called sprints, which typically last for 2-3 weeks in the targeted SaaS companies (*company mentor, personal communication*).

The need for customer collaboration in product discovery comes with the focus on qualitative research. Hereby, the different steps of organizing data, categorizing data, finding explanations for findings and creating an overview of the next/final steps, have to be done within the short sprints. This is a problem that is identified, as the sprints are too short to have all these steps completed. (Stockwell, 2017).

In SaaS companies, a Product Delivery track goes in parallel with the Discovery track. Whereas the goal of Discovery is to learn as much as possible in the shortest amount of time, the goal of Delivery is to build as much as possible in the shortest amount of time. Although, the Discovery track needs to start earlier, to first find out if a product idea is good and if it makes sense for it to be build (*company mentor, personal communication*). Successful findings of Discovery will then be put in the backlog of the Delivery track (De Lichtenberg, 2017).

Learning

Testing

Prototyping

2 - 3 weeks

PRODUCT DISCOVERY

Building it
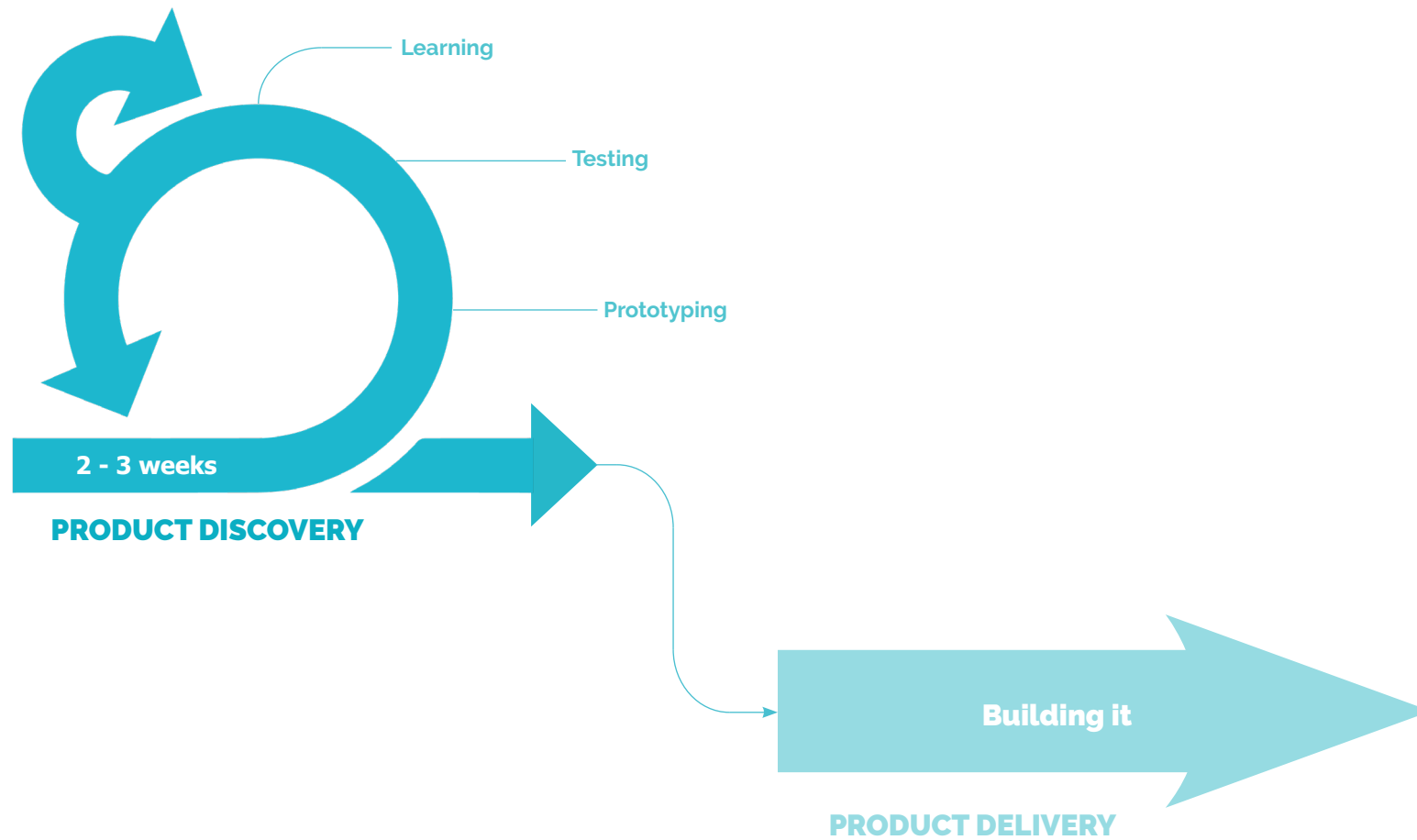
PRODUCT DELIVERY

Figure 2.18: Product Discovery entails experiments done, to find out what to build to satisfy desired outcomes for customers. Discovery results will be put in the backlog of Delivery (De Lichtenberg, 2017).

Product discovery among SaaS SMBs and Mid-Market Businesses
Table 2.2 shows the different steps of research in discovery tracks, that are identified. These steps are derived from findings collected from surveys, interviews, and Grible's internal documents and databases (see Appendices V, VI, VII, and VIII). As it became apparent, only PM's / PO's, UX-researchers, CS-teams and Sales teams are involved in these Discovery tracks. Although, UX/UI-designers and developers are desired to be engaged in the prioritization of feature requests; Since they focus on Product Delivery, they can give input regarding the feasibility of features.. In table 2.2, the related internal stakeholders are given per discovery step. The following pages show the identified problems and needs in these steps.

In chapter 1, Introduction, the steps of interaction between PM/PO, UX-researcher, CS, Developer, Designer and Customers are given by figure 1.3 (see page 24). Combined with the steps and internal stakeholders shown by table 2.1, the complete steps in feedback analysis is concluded. This is shown in table 2.3 on the next page.

In these steps, the problems / needs are found. These are shown by tables 2.4, 2.5, and 2.6 (see pages 55 - 57). Tables 2.4 and 2.5 show those that are related to the two topics of the defined problem in Shipright (see 'Problem Definition' in chapter 1). Other additional findings are shown by table 2.6.

Steps in Product Discovery	Internal Stakeholders Involved
0. Set up research	PM/PO, UX-researcher
1. Decide on methods to collect raw data	PM/PO, UX-researcher
2. Hire and recruit participants	PM/PO, UX-researcher, CS, Sales
3. Collect data	PM/PO, UX-researcher, CS, Sales
4. Select data to be logged	PM/PO, UX-researcher
5. Consolidate data in a format, accessible for analysis	PM/PO, UX-researcher
6. Link data to feature requests	PM/PO, UX-researcher
7. Communicate results with internal stakeholders	PM/PO, UX-researcher, Developer, Designer
8. Prioritize feature requests	PM/PO, UX-researcher, Developer, Designer

Legend

PM/PO   Sales

UX-researcher   Developer

CS   Designer

Table 2.2: Steps in Product Discovery. For each step, the internal stakeholder involved are given: PM/PO, UX-researcher, Developer, and (UX/UI) Designer.

Steps in Feedback Analysis	Involving Stakeholders
0. Prepare research	
Set up research	PM/PO, UX-researcher
Decide on methods to collect raw data	PM/PO, UX-researcher
Hire and recruit participants / approach customers	PM/PO, UX-researcher, CS, Research participant / Customer
1. Collect data	
Interact with participants / customers	PM/PO, UX-researcher, CS, Sales, Research participant / Customer
Preselect data to be logged	PM/PO, UX-researcher, CS, Sales
Store preselected data	PM/PO, UX-researcher, CS, Sales
2. Select data to be logged	PM/PO, UX-researcher
3. Interpret data	
Consolidate data in a format accessible for analysis	PM/PO, UX-researcher
Link data to feature requests	PM/PO, UX-researcher
4. Communicate results	
Share feature requests with delivery team	PM/PO, UX-researcher, Developer, Designer
Review feature requests	PM/PO, UX-researcher, Developer, Designer

Steps in Feedback Analysis	Involving Stakeholders
5. Decide what to build	
Prioritize feature requests	PM/PO, UX-researcher, Developer, Designer
Put prioritized feature requests in Delivery backlog	PM/PO, UX-researcher, Developer, Designer
6. Build features	
Build features	Developer, Designer
Mark features built as 'shipped'	Developer, Designer
7. Notify customers of new features	
Notify CS of new features	PM/PO, UX-researcher, CS
Notify customers of new features	CS, Research participant / Customer

Legend

- PM/PO
- UX-researcher
- CS
- Sales
- Developer
- Designer
- Research participant / Customer

Table 2.3: Concluded steps in feedback analysis. The results shown in table 2.1 (on the previous page) are combined with the information already known, as described in figure 1.3 in chapter 1 (see p. xx).

Problem / Need Related to Unclear Intended Workflow of Analysis	Steps in Product Discovery	Related Internal Stakeholders
It is difficult to perform research continuously, as it is hard to identify the most important aspects of research*	0, 1	PM / PO/ UX-researcher
There is a need to view feedback from different segments of sources*	1, 2, 3, 4, 5	PM / PO/ UX-researcher / CS / Sales
There is a need to capture interesting information easily	3, 4, 5	PM / PO/ UX-researcher / CS / Sales
There is a need for the support of file images (to refer findings to) and insight visualizations	**3, 4, 5, 7**	**PM / PO / UX-researcher / Designers (UX/UI) / Developers**
There is a limited awareness of proper user research approaches among many customer-facing people in support or sales*	2, 3	PM / PO/ UX-researcher / CS / Sales
Vague data (no values) are often collected*	3	PM / PO/ UX-researcher / CS / Sales
There is no final results for several cases; this would be left behind, and teams would continue working on other cases	**0, 5**	**PM / PO/ UX-researcher**
There is a need to enable teams to have a good process to discover and organize user insights over time	4, 5	PM / PO/ UX-researcher
There is a need to make sure that research is never repeated, but complementary (to the previous research), and becomes actionable faster	0, 1, 5, 6	PM / PO/ UX-researcher
There is a need to get a view of the most pressing drivers, to know what to focus on and be able to prioritize*	6, 7, 8	PM / PO / UX-researcher / Designers (UX/UI) / Developers
There is a very limited amount of time available for a proper research, while other types of work are to be considered as well*	0, 1, 2, 3, 4, 5, 6, 7, 8	PM / PO / UX-researcher / Designers (UX/UI) / Developers

Problem / need   Problems / needs already supported by Shipright
Problem / need*   Problems / needs partly supported by Shipright
Problem / need   **Problems / needs not supported by Shipright yet**

Table 2.4: Problems and needs that are related to unclear intended workflow of analysis in Shipright.

Problem / Need Related to the Lack of Support for Team Collaboration	Steps in Product Discovery	Related Internal Stakeholders
One person / department tends to do the data selection, while there is a need to engage all team members / internal stakeholders (representatives) in the process*	0, 1, 2, 3, 4, 5, 6, 7, 8	PM / PO / UX-researcher / Designers (UX/UI) / Developers
There is a need for transparency of the analysis results to enable the relevant stakeholders to be engaged in the research process*	3, 4, 5, 6, 7, 8	PM / PO / UX-researcher / Designers (UX/UI) / Developers
There is a limited awareness of proper user research approaches among many customer-facing people in support or sales*	2, 3	PM / PO/ UX-researcher / CS / Sales
There is a need to enable teams to make it easy for all team members to explore user insights	3, 4, 5, 6, 7, 8	PM / PO / UX-researcher / Designers (UX/UI) / Developers
It is difficult to get outside employee and management viewpoints, and empathize with customers	**0, 5**	**PM / PO/ UX-researcher**
Developers tend to be lacking in empathy towards end-users, so they often do not understand that product decisions should make users understand the product	**7, 8**	**PM / PO / UX-researcher / Designers (UX/UI) / Developers**
There is a need to consolidate feedback and ideas from internal teams / stakeholders	3, 4, 5, 6, 7, 8	PM / PO / UX-researcher / Designers (UX/UI) / Developers

Problem / need   Problems / needs already supported by Shipright
Problem / need*   Problems / needs partly supported by Shipright
Problem / need   **Problems / needs not supported by Shipright yet**

Table 2.5: Problems and needs that are related to the lack of team collaboration in Shipright.

Additional Identified Problem / Need	Steps in Product Discovery	Related Internal Stakeholders
Users tend to not provide feedback	**2, 3**	**PM / PO / UX-researcher / Designers (UX/UI) / Developers**
Users do not have any incentives to provide feedback	**2, 3**	**PM / PO / UX-researcher / Designers (UX/UI) / Developers**
Sometimes users do not understand what is being asked from them	**3**	**PM / PO / UX-researcher / Designers (UX/UI) / Developers**
There is a need to enable teams to have all their customer input available in one place	3, 4, 5, 6	PM / PO / UX-researcher / Designers (UX/UI) / Developers
There is a need to inform customers about the status of feature requests	**8**	**PM / PO/ UX-researcher / CS / Sales**

Problem / need   Problems / needs already supported by Shipright
Problem / need*   Problems / needs partly supported by Shipright
Problem / need   **Problems / needs not supported by Shipright yet**

Figure 2.6: Additional problems and needs that are identified from surveys, interviews, literature review, and analysis of Grible's internal documents and databases.

Figure 2.19: FullStory is another SaaS-product that is used to observe users behavior in digital products. Grible uses it to observe their customers' behavior in using Shipright.

Additional Exploration: FullStory Observation

In order to see current users' behavior on Shipright, remote observations via FullStory are done. In these observations users' actions regarding different parts in Shipright can be reviewed; for privacy reasons however, the specific data content are hidden. From these observations it can be seen if certain features are recognized and used, based on users' clicking and scrolling behavior.

The results of the observations are to be viewed in Appendix IX. From these results the following are concluded:

- Most insights created are to be linked themes or insights that are already existing.

- A lot of Inbox documents appear to be skipped, in the process of creating insights. The observations show that this occurred with purpose; users had to go through the skipped Inbox documents first, before actually deciding to skip them.

- Some of the users took more time than the others, when making up insights from highlights.

- None of the observed made use of the search function or Inbox filters by customer name, company and type of document.

What Design Opportunities Can be Tapped Into, in Order to Improve Shipright?

Several design opportunities have already become apparent from the findings above. The project continued with tackeling each one of these opportunities. Figure The design opportunities are formulated into the following three questions:

Design Challenge 1:
How can product teams be supported in the analysis of raw data, so that they can identify patterns in user feedback, as much as possible, during (short) discovery sprints?

IA (see page xx) has the aim is to make it easier for users to surface a pattern in feedback (= patterns of customer insights). It showed great potential in achieving this goal, but still lacked in quality performance to actually speed up the analysis workflow. This design challenge focuses on the exploration of additional ways to bring product teams closer towards finding patterns in collected feedback data. The solution is expected to help them surface as much patterns in feedback as possible, within the limited amount of time in the fast-paced scale-up environment. The next chapter (page 62 - 78) of this report shows the concept that is created as the solution and describes additional findings that lead towards it.

Design Challenge 2:
How can PM's / PO's / UX-researchers be enabled to store qualitative, customer data in a structured way, using Shipright?

Gibson and O'connor (2017) mentioned different components of qualitative analysis, among other things organizing data and building themes in data. Shipright already contained themes and theme-groups that support this. But during my assessment of Shipright I found that they still need to be improved in their application. Figure 2.15 (see page 46 in this chapter) showed that the intended use of themes and theme-groups is not clearly communicated. Also, the possibility to group, compare and/or combine insights is not clearly communicated.

This design challenge focuses on exploring the proper use of themes and theme-groups, so they can be used to further analyze insights (= group, compare and/or combine). The common way of categorization among the target group will be explored and are to be applied in the use of these features. Eventually, it

To enable SaaS companies to get relevant customer insights, within the fast-paced scale-up environments.

Unclear intended workflow of analysis in Shipright

Design Challenge 2

Shipright

Design Challenge 1

Lack of support for team collaboration in Shipright
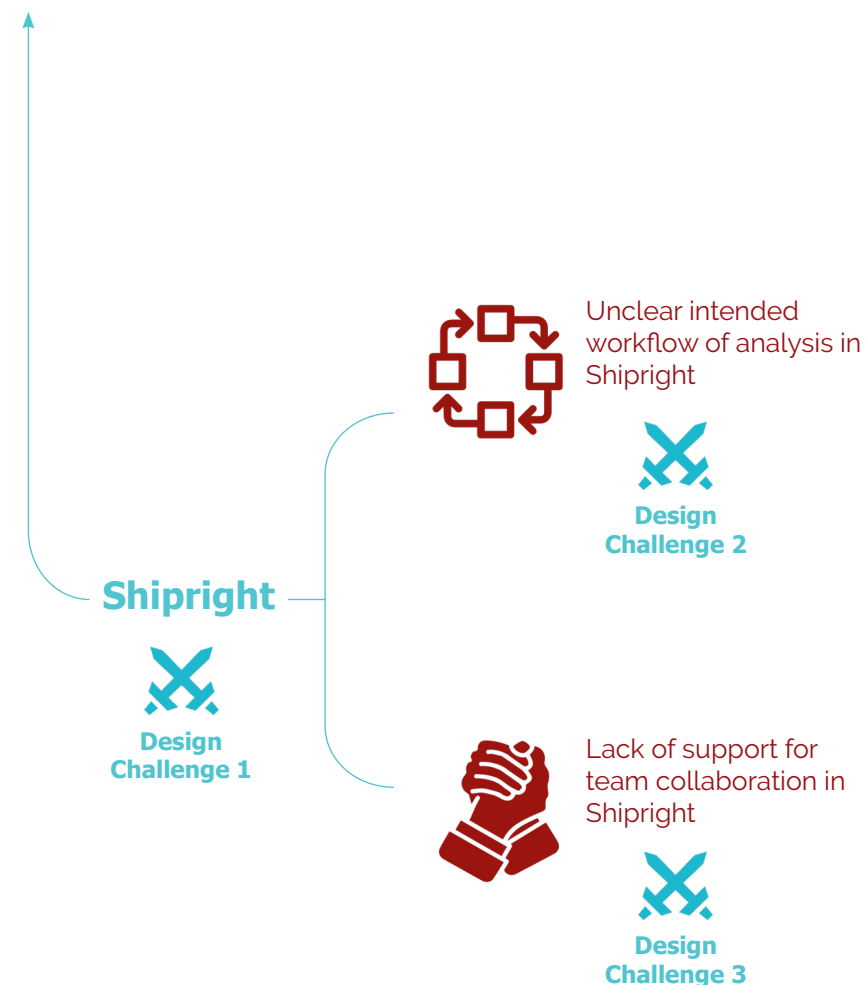
Design Challenge 3

Figure 2.20: Design Challenge 1 supports the overall Problem Definition. Design Challenges 2 and 3 will lead to direct solutions for the two topics that are part of the main problem.

is expected to create a clear workflow that is intended to store feedback data in a structured way. More about this is described in chapter 4 (page 80 - 99).

Design Challenge 3:
How can customer facing teams and customers be made more involve in the product development process?

Figure 1.3 in chapter 1 and table 2.3 in this chapter, showed that customer facing teams (CS and Sales) are always actively involved in recruitment and interaction with customers. Though, when it comes to interpreting the data they have collected from the interactions, only the product team seem to be active. This is very unfortunate as customer facing teams are assumed to have great understanding of customers' problems and needs, since they interact with customers on a daily basis. Also, figure 2.13a and b, on page 43, shows that Shipright's original design enables users to share insights with colleagues. But, shared insights can only be viewed by users who have individual Shipright accounts.

This challenge focuses on improving the support of team collaboration by Shipright. In chapter 5 (page 100 - 126) this problem will be further explored and a resulting concept solution will be described.

3. How can product teams be supported in the analysis of raw data, so that they can identify patterns and draw conclusions from user feedback as much as possible?

The design challenge is narrowed down to the following problem: **How to guide users towards the use of filters, to distill feedback out of integrated live-chat-support data?**

The targeted users are PM's / PO's / UX-researchers and CS-staff who work with live-chat data to analyze user feedback. These types of consumers would not be familiar with the use of Shipright yet and would have just started using it for the first time, as trial customers.

To tackle this problem, the following experiences are initially decided to design for: guidance, certainty, and freedom. Based on these experiences, a concept is created and different iterations on conceptualization is done. The results of the initial iterations are assessed by external parties and from those, it is decided to only include **guidance and certainty** in the design scope.

With this conclusion, a final concept iteration is done which is tested with a new sample of users. This chapter of the report describes the process that is gone through, from refining the challenge, to the final concept iteration, and to the analysis of the results gained from collected feedback on the created concept.

Design Scope

Who?
The targeted users are PM's / PO's / UX-researchers and CS-staff who work with live-chat data to analyze user feedback. These types of consumers would not be familiar with the use of Shipright yet and would have just started using it for the first time, as trial customers. While in trial, all features and functions in Shipright are available to use, though. Despite the focus on this specific group, users of a prolonged amount of time would be considered to find benefits of the solution as well.

What?
Based on the exploration in FullStory (see chapter 2, page 58, and Appendix IX), the available filters in the Dock's Inbox tend to not be used. This especially would become a problem when the Intercom integration would had just been activated, as a vast amount of chat conversations would be imported at once.

In other words, the scope is narrowed down to the following problem:
How to guide users towards the use of filters, to distill feedback out of integrated live-chat-support data?

Why?
In the previous chapter (page 59) it was mentioned that the bigger design challenge focuses on the exploration of ways, to bring product teams closer towards finding patterns in collected feedback data. But, before they can find patterns in these data, they have to get to the relevant ones first. This is especially relevant when distilling user feedback of imported live-chat-support data, such as Intercom. It is a problem among the target group (*company mentor, personal communication*) because a vast amount of data would be automatically imported, once integrated with Shipright. This will help users to have data and results from analysis be consolidated in one place, but imported data would still consist of both relevant and irrelevant ones. The vast amount makes it difficult to find the relevant documents (= imported data, see *Exploration* page 36) in the Dock, from which user insights are to be created and patterns of insights are to be found.

As observed in Fullstory, it is also found that existing users would often go through documents that seemed to not contain relevant information about their customers. Besides, none of the observed users make use of the search function or filters by customer name, company and type of document that are available. This shows that these functionalities are 'hidden' in Shipright, while they would have been helpful to get closer to the relevant information.

Figure 3.1: The problem problem occurred when users had activated the integration of live-chat-support tools (in this case it was an Intercom integration). A vast amount of data is imported, making it difficult for users to find the relevant ones to start analysis.

Where and When?

Figure 3.1 visualizes these parts of the design scope.

How?

Assumptions made

Certain assumptions are made beforehand. To begin with, it is assumed that the basic principles of the IA (see *Insight Assistance (IA)* in chapter 2, on page 47 - 48) can be applied to the eventual concept solution. Besides that, feature requests from customers are assumed to be one of the starting points for discovery work. Deeper customer needs can be derived from them and new features can be decided to build based on the concluded needs.

Experiences to design for

To solve the problem, the experiences of **guidance, certainty, and freedom** are decided to design for. These were, then, translated into the following sub-challenges:

- To guide users towards the use of filters
- To get users to feel closer towards the relevant information
- To enable users to recognize presence of relevant information
- To give users freedom to judge the relevance of information

Prior to ideation and conceptualization, a list of design criteria to adhere on were set. The criteria were derived from the sub-challenges above. They are to be viewed in Appendix X.

Guidance

users have to be guided towards the use of filters

Certainty

users have to recognize the relevant information and feel closer towards it

Freedom

while being guided towards the relevant information, they still should be able to judge on its relevance by themselves

Figure 3.2: The experiences of guidance, certainty, and freedom are decided to design for.

Present suggestions with a batch of five documents	-3	-2	-1	0	1	2	3
To guide users towards the use of filters				■			
To get users feel closer towards relevant information				■	■		
To enable users to recognize presence of relevant information				■	■		
To give users freedom to judge on the relevance of information				■			

A filter for potential feature requests	-3	-2	-1	0	1	2	3
To guide users towards the use of filters				■			
To get users feel closer towards relevant information				■	■	■	
To enable users to recognize presence of relevant information				■	■	■	
To give users freedom to judge on the relevance of information				■	■		

Present questions by the means of digital forms to initiate feedback distillation	-3	-2	-1	0	1	2	3
To guide users towards the use of filters				■	■		
To get users feel closer towards relevant information				■			
To enable users to recognize presence of relevant information				■			
To give users freedom to judge on the relevance of information				■			

Suggest customers to filter with, based on conversation volume	-3	-2	-1	0	1	2	3
To guide users towards the use of filters				■			
To get users feel closer towards relevant information				■	■		
To enable users to recognize presence of relevant information				■	■		
To give users freedom to judge on the relevance of information				■			

Let users choose the cues for IA from a set of example documents	-3	-2	-1	0	1	2	3
To guide users towards the use of filters				■			
To get users feel closer towards relevant information				■			
To enable users to recognize presence of relevant information				■			
To give users freedom to judge on the relevance of information				■			

Figure 3.3: These Harris-profiles visualize the potential of each promising idea in tackling the predefined sub-challenges.

Ideation

Based on the specified experiences and sub-challenges in *Design Scope*, a number of ideas are generated (see Appendix XI). In this ideation process, I would start to generate ideas myself. From the results, five most interesting were picked out.

These chosen ideas were created by iterating on other ideas (create ideas to fulfill desired experiences, and each idea as inspiration sources to create more ideas). The five most promising ones will be described in this section. Figure 3.3 shows the summary of the evaluation of these ideas, with respect to the sub-challenges.

'Filter sentences'

- I would like to...
- We would like to...
- It would be great if...
- Is there a way to...
- We prefer to...
- I prefer to...

- New Dock-section: Suggested

- 5 documents from the Inbox are selected, in which the 'filter sentences' appear

- user goes through each messsage and make highlights to create insights

- refresh selection and see a new batch of suggested documents

- documents with no highlights go stratight into the archive after refreshing
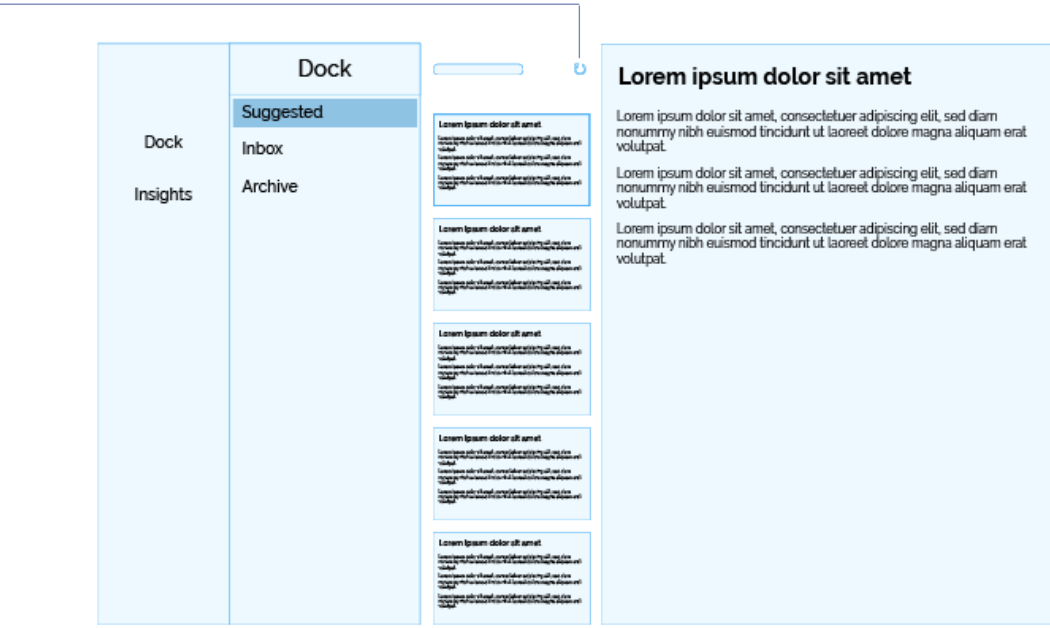
Figure 3.4: The first interesting idea is about using typical structures of sentences that often occurred in relevant conversations and to present the suggestions in batches of five Inbox documents.

First interesting idea: present suggestions with a batch of five documents
See figure 3.4 on the previous page.

To guide users towards the use of filters
The filter with respect to this idea would be the 'Suggested' sub-section of the Dock. This would be put on the very top, above Inbox and Archive. By doing so, it is expected to stand out among the two other sub-sections.

To get users to feel closer towards the relevant information
The term 'Suggested' is supposed to evoke the impression that the data would be preselected before users go through them.

'Suggested' itself would become a feature on its own, that would pre-analyze the documents before showing them to users. Documents would be preselected based on pre-defined sets of word-types or types of sentences. This is the same principal applied in IA (see *Insight Assistance (IA)* in chapter 2).

To enable users to recognize presence of relevant information
Users are meant to be given an increased ability to recognize relevant information, by providing five suggestions to analyze at each time. This is intended to enable users to focus on just five documents at a time, instead of tens or hundreds. With this increased focus, they are meant to become more efficient in finding relevant information.

To give users freedom to judge the relevance of information
The term 'Suggested' is supposed to also evoke the impression that the given choices are not definite yet and still need further confirmation (by users themselves).

On top of that, the refresh button would enable users to skip on suggestions viewed as irrelevant. They would do so by refreshing the 'Suggested' menu after they would have created highlights from the suggestions (= documents) they perceived as relevant.

Second interesting idea: a filter for potential feature requests
See figure 3.5 on the next page.

To guide users towards the use of filters
The idea is to include a filter that would lead users directly to potential feature requests from customers. Although, it still has to be decided how users could be guided towards using this filter.

To get users to feel closer towards the relevant information and enable users to recognize presence of relevant information
As assumed in *Design Scope*, feature requests from customers are important for discovery work. In other words, documents that would possibly contain feature requests are assumed to be relevant. Thus, the filter by itself is expected to be perceived as a means to get closer to and eventually find relevant information.

To give users freedom to judge the relevance of information
Freedom to judge on the relevance of information could be conveyed by putting the emphasis on the resulted suggestions. Users would have to understand that the results that would be given, are documents that would potentially contain feature requests. Users still have to find out by themselves, which ones really contain these requests.
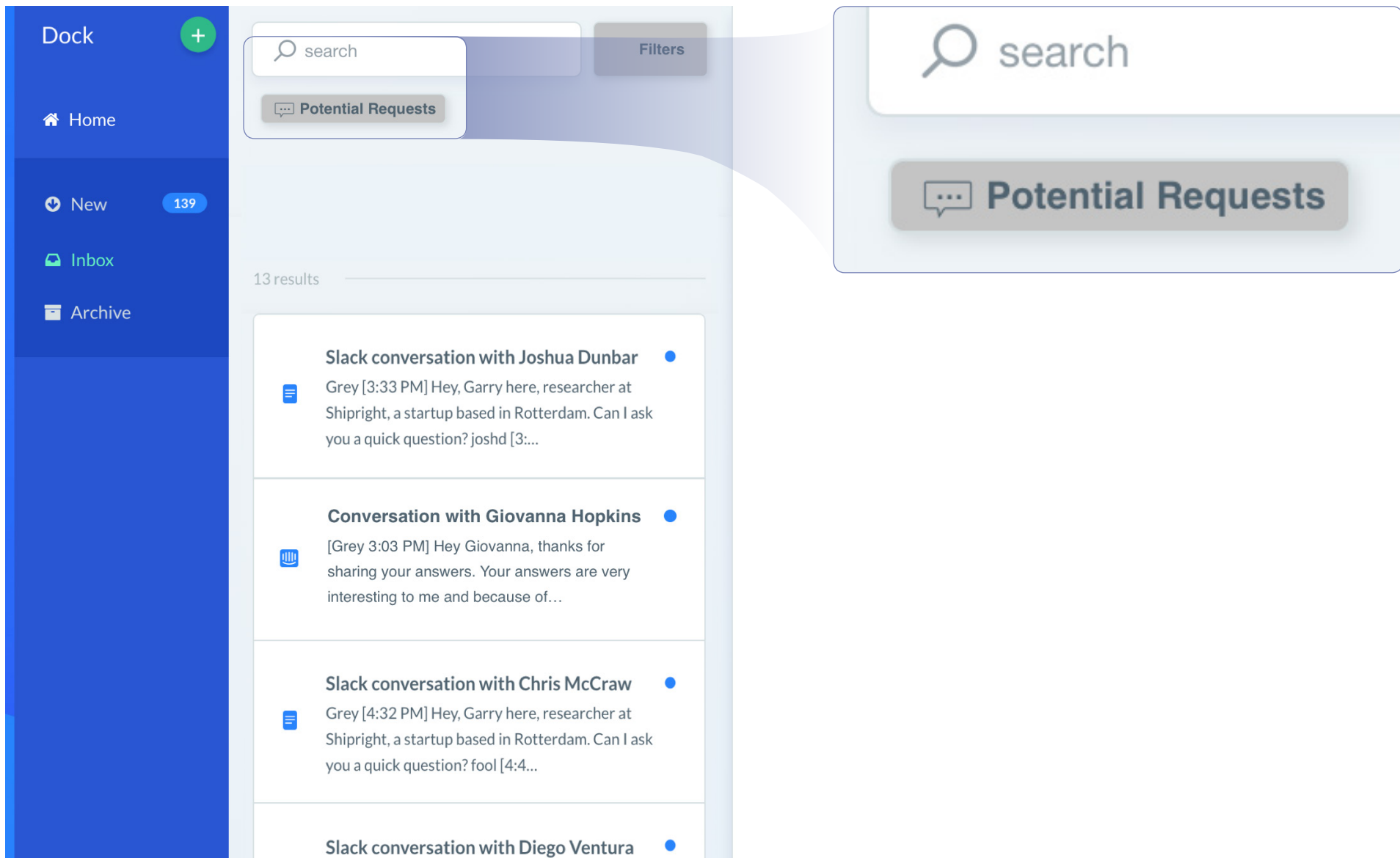
Figure 3.5: The second idea is an Inbox filter for documents with potential feature requests from customers.

I like these customers the most:

1. _____

2. _____

3. _____

I dislike these customers the most:

1. _____

2. _____

3. _____

Third interesting idea: present questions by the means of digital forms to initiate feedback distillation
See figure 3.6.

The targeted users are the ones that would maintain close contact with customers. Because of that, it is assumed that they would have certain customers in mind either in a positive or a negative way. Customers that are liked, could be used to filter data towards the relevant information, and to start finding patterns from the respective Inbox documents. Customers that are disliked, could either point out to harsh feedback that would still be relevant for analysis, or irrelevant feedback that can be archived in the Inbox.

To guide users towards the use of filters
Users would be enabled to answer given questions of which the answers would be used as the actual filters. This idea is also solely directed to the experience of guidance. This would have to be applied in combination with any of the other interesting ideas.

Figure 3.6: With the third idea, PM's/PO's and support/sales teams would be asked about the three customers they liked and disliked. This would be facilitated by the means of digital forms and the answers would be use to filter imported data.

Customer name

Conversation volume

customer 1	10 conversations
customer 1	8 conversations
customer 1	8 conversations
customer 1	6 conversations
customer 1	4 conversations
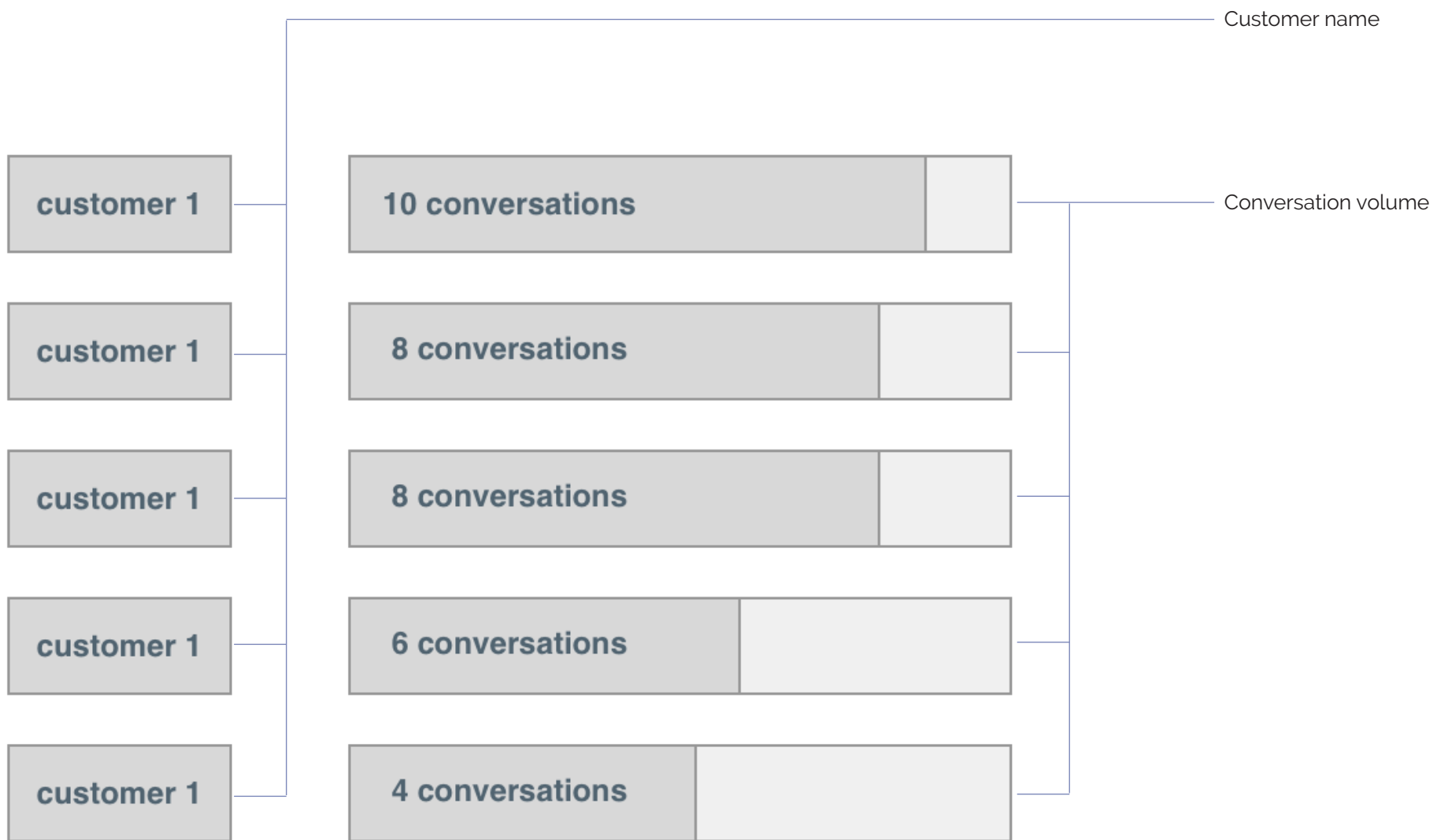
Figure 3.7: The fourth idea built on the previous one. The difference was that the customers to filter with were suggested, that would had been based on the length of the volume (= number / length) of conversations they had with the company.

Fourth interesting idea: suggest customers to filter with, based on conversation volume
See figure 3.7 on the previous page.

To guide users towards the use of filters
A similar case to the second interesting idea, it still had to be decided how users could be guided towards using this filter.

To get users to feel closer towards the relevant information and enable them to recognize presence of relevant information
Users are expected to feel closer towards relevant information, as they are assumed to also expect larger volume conversations to be more likely to contain relevant information. For the same reason, they are also expected to recognize relevant information for analysis.

To give users freedom to judge the relevance of information
Similar to the case of the second interesting idea, freedom to judge on the relevance of information could be conveyed by putting the emphasis on the resulted suggestions. Users should understand that the documents that would filtered out of the collection, would had been suggestions. It would still be up to them to decide which of these suggestions are (ir)relevant.

Fifth interesting idea: let users choose the cues for IA from a set of example feedback data
See figure 3.8 on the next page.

This idea is supposed to be combined with the IA, in which it would initiate preselection of imported documents; in the case of the original IA, this was initiated by creating highlights (see *Insight Assistance (IA)* in chapter 2).

To guide users towards the use of filters
Users would be guided towards the use of filters by encouraging them to choose the type of cues they would like to use to distill their feedback data.

To get users to feel closer towards the relevant information and enable them to recognize presence of relevant information
As users could choose the cues they would like to use themselves for preselection of data, an increased ability to recognize relevant information is expected. This assumption is made because they will be encouraged to set their own expectations, by choosing from the example results that are given beforehand. With that they are also expected to feel closer towards relevant information.

To give users freedom to judge the relevance of information
This is partly conveyed by the freedom to choose the cues for the IA to filter imported data. Though, the above description only mentioned structure of sentences, other types of cues, such as separate nouns / verbs / adverbs, names or job title, could also be applied.

1. Present new users five different examples of documents

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

Lorem ipsum dolor sit amet

2. Let these new users highlight the sentences that show feature requests, in these examples

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

3. The insight assistance uses the highlights as cues to search for messages with possibly relevant content for the new users.

The search is not based on the content of the sentences, but rather on their structure.

Lorem ipsum dolor sit amet

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

Figure 3.8: The fifth idea had to do with letting users choose the cues for IA from a set of example feedback data.

Concept

Different elements from the interesting ideas are combined into a concept. This resulted in the subset concept. It entailed a Home screen for the Dock section, that include different sets of filters to be used to distill imported data. Different iterations of conceptualizations follow up on the creation of this concept. They are described in Appendix XII.

The results (= previous versions of the concept) of these iterations are assessed with external parties. From the findings, the relevance of filters towards feature requests from customers is verified. This, indeed, proved to be the starting point of analysis, as described in *Design Scope* in this chapter.

Also, it is concluded that providing freedom of judgment of the relevance of information is not supposed to be given focus, regarding the created concept. The reason is that, this was only of relevance once users would have used the subsets and find preselected suggested documents to be analyzed. For the subsets themselves, it is relevant to give concrete directions towards using filters, before judging on the relevance of the suggested results.

But, it is also identified that the creation of a custom subset would be relevant for users. This would serve for freedom, though for the goal of giving users freedom to judge on the relevance of filters (regarding relevant information). Nevertheless, the creation of this feature does not fit into the given time for this phase of the project and is left outside of the design scope.

In other words, it is ultimately decided that the concept should solely focus on **guidance and certainty** (see figure 3.9). This section of the report will describe the concept that follows up on the mentioned iterations, with respect to the new specified sub-challenges.

Guidance

users have to be guided towards the use of filters

Certainty

users have to feel closer towards the relevant information and recognize its presence

Freedom

Figure 3.9: Based on the results of initial concept iterations, it is decided to leave 'Freedom' outside of the design scope.

Sub-challenges	Conceptualized solution
To guide users towards the use of filters	Subsets of filters would appear in the new Home screen of the Dock section
To enable users to recognize presence of relevant information	- 'Potential feature requests' - and 'Customers with most feedback' -subsets - Suggestions of customers in 'Customers with most feedback' to filter with - 'New document' -subset enables users to view unread documents (that came in the previous month) with the alternative focus view (see figure 2.14 in chapter 2)
To get users to feel closer towards the relevant information	- 'Potential feature requests' - and 'Customers with most feedback' -subsets - The lay-out of the Home screen follows the Z-rule, with 'Potential feature requests' shown first

Table 3.1: Summary of the conceptualized solution per sub-challenge.

To guide users towards the use of filters
The concept presents different sets of filters. These subsets would appear in the new Home screen of the Dock section. This screen is the first screen users would get to, in Shipright (see figure 3.10 on the next page). Each subset could be activated by clicking on them. This would lead users to the Inbox, whereby the corresponding sets of filters would be set active.

The exact filters that are included, are already existing in Shipright's original design, except for the potential feature request filter. This is newly added, in order to realize the 'Potential feature requests' -subset.

To enable users to recognize presence of relevant information
The solution for this is conveyed by the 'Potential feature requests' - and 'Customers with most feedback' -subsets. Both of these subsets are named literally after the results each would provide, when activated. As mentioned in *Ideation* in this chapter (see page xx) feature requests are assumed to be desired to be identified in Product Discovery and large conversation volumes are assumed to be associated with the presence of relevant information. As the names of both subsets reflected on each of their results, users are expected to recognize the presence of relevant information in collected data, both are trying to lead them towards.

The alternative view (see figure 2.14 in chapter 2, on page 44) is included in

this concept as part of the 'New document' -subset. In previous iterations for conceptualization (see Appendix XIII), it was found that this view on documents provided more focus when analyzing imported documents. It is concluded that this increased focus, would enable users to become more certain in judging the relevance of documents and in creation of insights from relevant data.

To get users to feel closer towards the relevant information
For the same reasons described above, 'Potential feature requests' and 'Customers with most feedback' are also expected to make users feel closer towards relevant information they would had been after.

The results of earlier concept iterations, also verified the importance of feature requests from customers for Product Discovery (see Appendix XII). To further enhance the experience of guidance, 'Potential feature requests't is placed on the top left, as one of the bigger elements. This decision is based on the Z-rule: in websites with low-level of text content, viewers tend to scan pages from the top left to the top right, and would move on to the bottom left before getting to the bottom right (Mialki, 2018). The same rule is assumed to be applicable for the Home screen, as it is a screen with low level of text content of a web-based software product.

The Home Screen
This will become the Home screen, that is the first screen users will get to when opening Shipright. As such, the given filters will be presented for them, providing guidance towards using them.

Customers with most feedback
Large conversation volumes are assumed to be associated with the presence of relevant information. Based on this assumption, this subset of filters is meant to let users recognize the presence of relevant data and feel closer towards them.

Dock

Home

New   139

Inbox

Archive

Last 30 days

Potential feature requests
Sort out Inbox documents with potential feature requests

13

VIEW DOCUMENTS

Do you consider this useful?

Last 30 days

Customers with most feedback
Filter inbox documents by customer name

Bob Brown	16
Roberto Maraldi	12
Ben Lennon	11
Nina van Alstreek	8

Filter by another customer

Do you consider this useful?

Last 30 days

New documents
View all new incoming Inbox documents separately

139

VIEW DOCUMENTS

Do you consider this useful?

Create new subset
Create a new subset of filters, based on your own specific needs.

Do you consider this useful?

Suggestions
Let us know what other cards you would like to see here...

LET US KNOW

Potential feature requests
Feature requests from customers are the starting points for discovery work. This subset is therefore meant to let users recognize the existence of customers' requests in the collected data and feel closer towards them.

New Documents
Unread documents would be shown with the alternative view (see *How Shipright Works* in chapter 2 on page xx). Using this view, users are to become more certain in judging the relevance of documents and in creation of insights from relevant data.

Figure 3.10: The concept includes the use of subsets of filters. These subsets would appear in the new Home screen of the Dock section. The Z-rule is applied to its lay-out.

User Test

The described concept is then turned into a testable prototype, to be tested with external parties. The test revolved around the concept's conceptual relevance. For that, it is tested on the experiences of guidance and certainty.

For time-efficiency in the project, this user test is done alongside that of the second design challenge. The prototypes of both concepts are tested alongside each other and shared the same set-up and participants (see *Concept* and *User Test* in the next chapter; page 88 - 95 and 96).

Approach
See figure 3.11 for the setup. Each session lasts around 10 minutes (only the part of the test that related to this design challenge). Participants are first presented about Shipright's overall context of use and the concepts' scope of design. Then they are shown the screen of the Home screen. They would then take a thorough look and answer a set of questions. These are rating questions used to determine the extent each sub-challenge is supported by the concept. Hereby, they are encouraged to explain each one of their answers. The session is wrapped up with having them answering a set of open questions and eventual details about their previous answers. Appendix XIV shows the materials used for this test.

Recruitment
To recruit participants, certain Slack users are approached by the means of sending out direct messages (DMs). Slack is an online platform that contained different communities of certain topics, for instance Product Managers and UX-researchers. These Slack users are picked from specified Slack communities, in which the targeted users (POs / PMs / UX-researchers of SaaS SMB's and Mid-Market Businesses) are part of. Figure 3.11 shows the participants recruited.
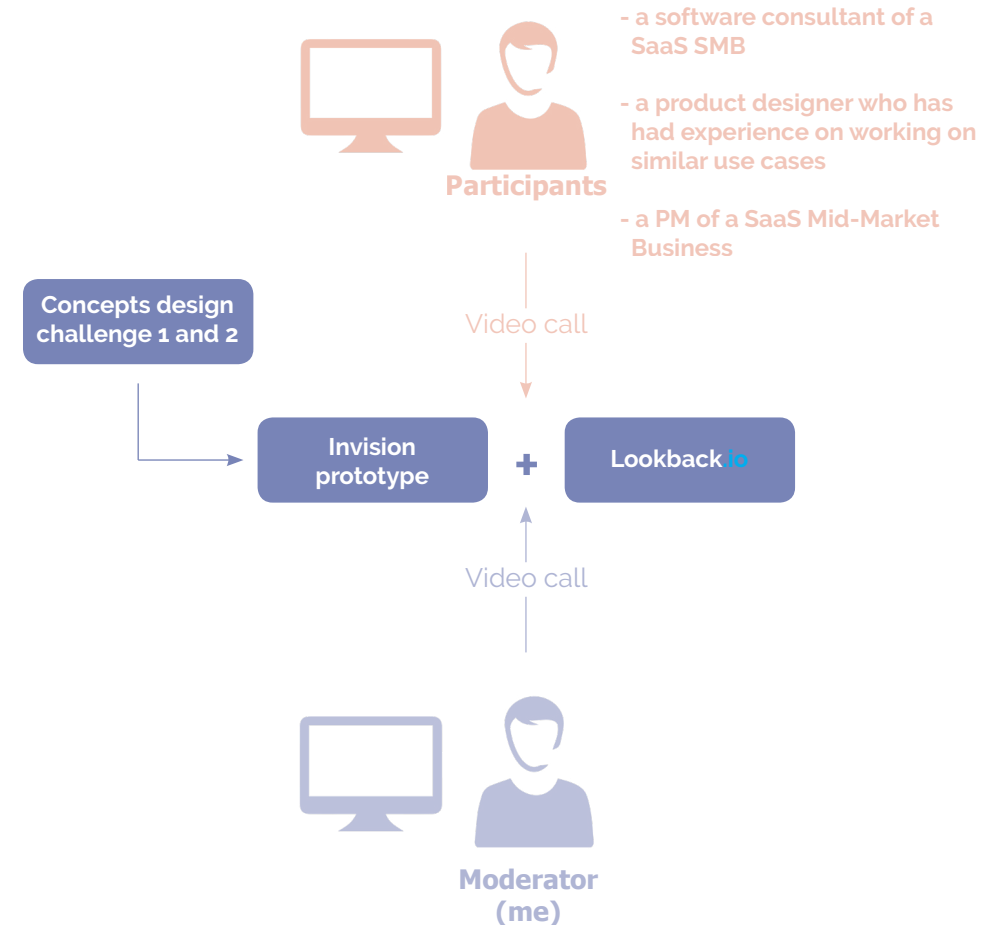
Figure 3.11: The setup of the user test. The concepts for this and the second design challenge are tested in one series of user tests.

Insights from User Test

Sub-challenges	Insight
To guide users towards the use of filters	- There are no references towards the use of filters to be found in the Home screen
To enable users to recognize presence of relevant information	- Without suggestions of topics, 'Potential feature requests' is insufficient - The relation between all documents, new documents and potential documents with feature request is unclear
To get users to feel closer towards the relevant information	See the second row above

Table 3.2: Summary of the collected insights from the user test.

The results of the test are visible in Appendix XV. In this sub-chapter, the concluded insights from the tests will be described. The explanation will be based on each of the predefined sub-challenges. A summary of these insights are to be viewed in table 3.2.

To guide users towards the use of filters
The concept is concluded to fail to evoke guidance. This is reflected on the low scores regarding to this sub-challenge: 1/7 from one participant and 3/7 from two. There are no references towards the use of filters to be found in the Home screen. Because of that, the participants did not feel guidance towards the use of filters at all (see Appendix XV).

To get users to feel closer towards the relevant information and recognize its presence
Furthermore, it is found that the guidance towards potential feature requests is not sufficient. 'Potential feature requests' did increase the feeling of being closer to relevant information, but still missed the exact topics of these requests (see Appendix XV).

Secondly, the presence of relevant information is not fully recognized. The relation between all documents, new documents and potential documents with feature request is unclear. It needed to be better communicated that each subset results are originated from the new documents.

Conclusion

In summary, the design challenge is narrowed down to the following problem: **How to guide users towards the use of filters, to distill feedback out of integrated live-chat-support data?**

The targeted users are PM's / PO's / UX-researchers and CS-staff who work with live-chat data to analyze user feedback. These types of consumers would not be familiar with the use of Shipright yet and would have just started using it for the first time, as trial customers.

To tackle this problem, the following experiences are initially decided to design for: guidance, certainty, and freedom. Based on these experiences, a concept is created. It entailed a Home screen for the Dock section, that include different sets of filters to be used to distill imported data. Different iterations of conceptualizations follow up on the creation of this concept.

The results of the initial iterations are assessed by external parties and from those, it is decided to only include **guidance and certainty** in the design scope. With this conclusion, a final concept iteration is done which is tested with a new sample of users.

From the insights of the user test it is firstly concluded that **familiar references to filters must be included in the subsets**. Users should not be left guessing what they could do with the subsets. Not only familiar, these references should be clearly visible as well.

Secondly, **it is concluded that 'Potential feature requests' need to be accompanied with suggestions of feature-request topics.** It was found that these topics were desired to distill feedback with. While evaluating this comment, I took a deeper look at the exact possibilities that were available in Intercom. I realized that Intercom conversations could be tagged with 'Feature Request' before imported into Shipright; for the Intercom integration, it is possible to specify these tags to select conversations to be imported as documents.

Suggesting feature-request topics is possible by using the same basic principle of Word Clouds. Word Clouds are a method of visualization that shows a cloud of words, picked from a selection of textual data. The more often a certain word appear in these data source, the bigger and bolder it would appear in the Word Cloud (Boost Labs, 2014).

For the intended application for 'Potential feature requests', the selection of words to suggest could be limited to nouns and verbs, for example. The specification of the technical details would, however, be left out of the scope. For the concept improvement, it is assumed that suggesting topics of feature requests is possible, with the focus put on making these clear as filters to be used.

4. How can PMs / POs / UX-researchers be enabled to store qualitative, customer data in a structured way, using Shipright?

The design challenge is narrowed down to the following problems:

1.   How to make it clear (to analysis leaders) that product-aspect and customer-type categories could be created during insight creation in Shipright's Dock section?

2.   How to make it clear (to analysis leaders) that created insights can be organized towards a hierarchical structure in Shipright's Insights section, using the categories?

The focus for the scope is put on the first problem, with the second taken to an extent. This will be further described in 'Design Scope' of this chapter.

For the solution it is decided to design for the experiences of **certainty** and **freedom**. Based on these experiences, a concept is created and prototyped to be tested. From the results though, the experience of **guidance** also is concluded to be designed for.This chapter of the report describes the process that was gone through, from refining the challenge, to conceptualization, to the analysis of the results gained from collected feedback on the created concept.

Design Scope

Who?
The target group to design for are analysis leaders of SaaS companies. This is shown in figure 4.1.

What?
The design challenge is narrowed down to the following problems:

1.   **How to make it clear (to analysis leaders) that product-aspect and customer-type categories could be created during insight creation in Shipright's Dock section?**

2.   **How to make it clear (to analysis leaders) that created insights can be organized towards a hierarchical structure in Shipright's Insights section, using the categories?**

Prior to analysis, customer insights are to be labeled/tagged with a category. The created categories would fall under either Customer Types or Product Aspect. Insights are to be labeled with these categories when they are created in the Dock section.

The focus is put on the first problem, as it would occur earlier in the analysis workflow. By targeting earlier steps, it is assumed that problems in later steps of analysis (= incorrect / insufficient data interpretation) are likely to be prevented from happening. As the problem stated, it is related to the insight creation in the Dock section.

To clarify the bigger context of the analysis workflow, the second problem would be included too, though only to an extent. This entails redesigning the overall layout of the 'All insights' -part of the Insights section (see *2. Exoploration, 'How Shipright Works?', '7. View data summary'* on page 42). This redesigned lay-out should communicate the possibility to further organize insights towards a hierarchical structure (see figure 4.2b on page 83).

Why?
In *Exploration* (page 59) it was mentioned that the common way of categorization among the target group are to be integrated in the use of themes and theme-groups in Shipright. In practice, labels would be used to categorize insights based on Product Aspects. The categories applied would depend on what the created insights would relate to, thus would emerge from data. Besides that, it is desired
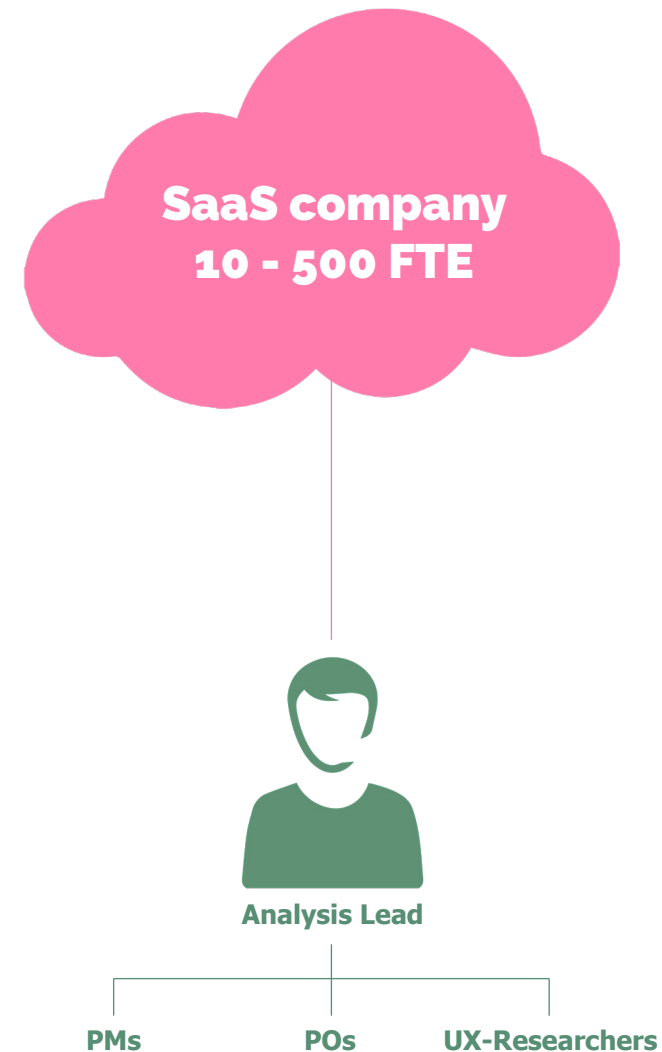
Figure 4.1: The target group that was to design for were POs, PMs and UX-researchers in SaaS companies. Throughout this chapter, these types of users will be described as analysis lead(ers).

1. Translate raw feedback data into customer insights

Feedback

Feedback → Insight

Feedback

Insight   Insight

Insight   Insight

Insight   Insight   Insight

Insight

2. Assign categories to insights

Insight   Insight

Insight   Insight   Insight
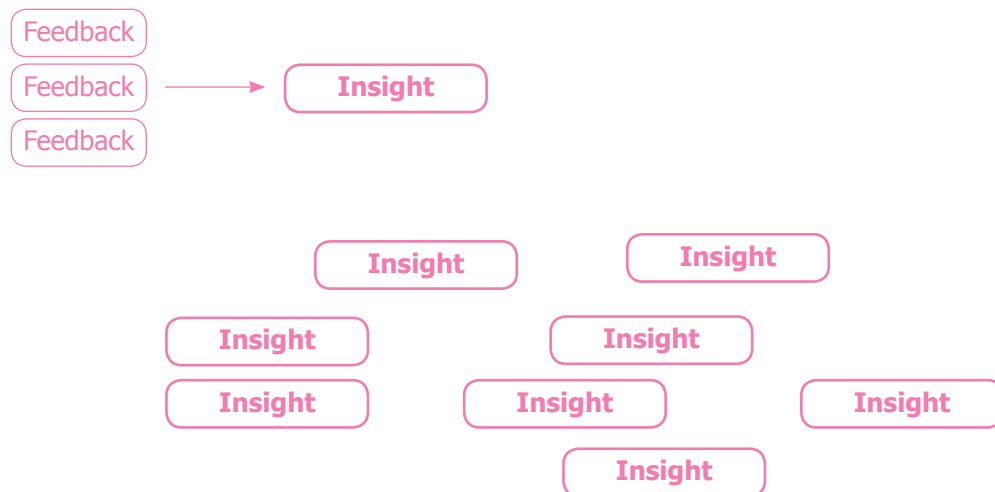
Insight   Insight

Insight   Insight

Customer Type

Product Aspect

Figure 4.2a: Created customer insights are meant to be assigned to Product Aspects and Customer Types.

to view which Customer Types relate to which insights. This showed the need to assign customer insights with Customer Types, next to Product Aspects (see Appendix XIII). With the original design of Shipright, insights can be labeled and structured using themes. But, these features are not always used to make the labels (= Product Aspects and Customer Types).

Using the labels, insights would then be structured into a structure of groups and sub-groups (see Appendix XIII). This hierarchy-creation is necessary to eventually identify customers' problems and needs (see figure 4.2a and Appendix XVI). It is already conveyed by the original design, however, is still limited to just the creation of two levels of hierarchy (see figure 2.7 in chapter 2).

Furthermore the possibility to create themes (= labels) are not clearly shown. As categories would emerge from data, users are supposed to be aware of theme creation already while creating insights. However, Shipright's original design only shows this possibility in the Insights section (see figure 2.7 on page 38), while insight creation occurs in the Dock section (see figure 2.8 on page 39).

Where and When?
The problem occurs when users go through the raw feedback data and created their first interpretations of these, in the Dock section. Hereby, the categorization process already starts. It continues in the Insights' section, where users would review all their first interpretations of data, in order to further analyze them towards problems and needs among customers. As mentioned in 'What?', the focus is put on the part of the workflow that occurred in the Dock section.

How?
Assumptions made
To begin with, it is found that categorization based on Customer Names was also desired (see Appendix XIII). The scope however, focuses solely on categorizing by Product Aspects and Customer Types. Hereby, it is assumed that documents in the Dock section (= imported feedback data) would already be assigned with related Customer Names.

Secondly, it is assumed that customer-type and product-aspect categories could be predefined (see 'What?' in this section, on the previous page). As such, analysis leaders should be made aware of this possibility. Despite that, it eventually still depends on the data which categories are to be applied.

Also, figure 2.15, on page 46, shows that users may want to postpone tagging

1. Assign categories to insights

Insight

Insight

Insight

Insight

Insight

Insight
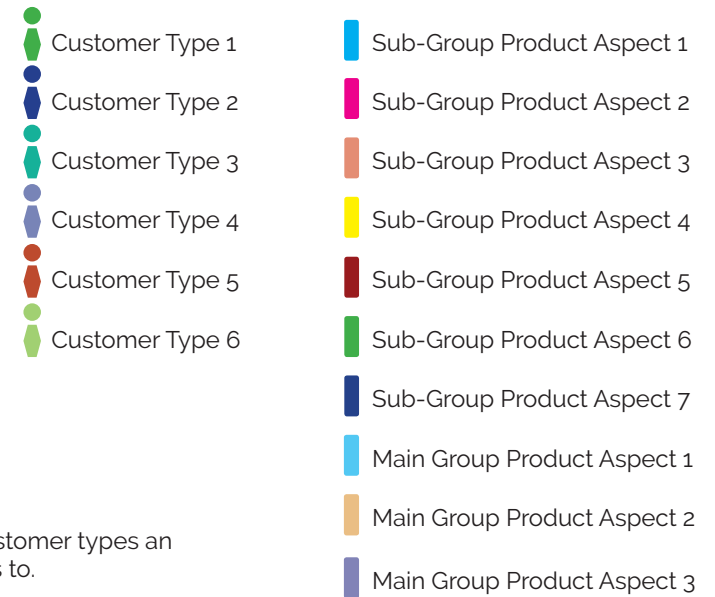
Insight

Insight

2. Hierarchy-creation towards problems and needs

Insight

Insight

Problem / Need 1

It is to be reviewed, to which customer types an identified problem/need relates to.

Insight

Insight

Insight

Problem / Need 2

Customer-type categories can overlap between different concluded problem / needs. Therefore, hierarchy-creation for these categories is assumed to be irrelevant.

Insight

Insight

Insight

Problem / Need 3

Problem / Need 3

One (New) main product-aspect category is created from three product aspects. This new category states the product aspect that the concluded problem/need relates to.

Figure 4.2b: After categorized, insight are to be structured towards occurring problems and needs.

their insights during insight creation. With this finding it is also assumed that users may not feel comfortable to immediately categorize their data immediately. Therefore, they are to be given freedom to categorize their insights or not.

Moreover, the hierarchy-creation is expected to occur in the Insights section. Hereby, the overview of Product Aspects and Customer Types taken to analysis have to be given. Hierarchy-creation, however, is only assumed for product-aspect-categories. For customer-type categories, this was left out due to possible overlap in product-aspect hierarchies (see figure 4.2b).

Lastly, they categories of Customer Types relate to the different types of customers of a SaaS company. Examples of such types are: users in trial, churned customers, and converted users. As for the categories of Product Aspects, they relate to all aspects of the SaaS company's product. This not only include its features, but also aspects like billing and (software) bugs. The exact customer-type and product-aspect categories to be applied, will differ per company-client.

Experiences to design for
Based on these assumptions and specification of the design challenge, the experiences of certainty and freedom are concluded to design for. These experiences are then translated into the following sub-challenges to be tackled:

-        To be aware of the existence of categorization means
-        To feel free to (not) use categorization means
-        To have an overview of stored data
-        To feel enabled to structure data

A list of design criteria is made based on these experiences and sub-challenges. It is eventually used for conceptualization. The list is to be viewed in Appendix XVII.

The Dock section had to make users aware of the existence of categorization means before applying them to structure created insights.

Certainty

The Insights section should make users certain that the applied categories were indeed used to structure these insights and were to be applied in hierarchy creation.

While communicating the existence of categorization means, the Dock section should show that users would be free to choose to either use them or not.

Freedom

Figure 4.3: The experiences of certainty and freedom were concluded to design for.

Ideation

Ideas were generated for each one of the sub-challenges. In this section of the chapter, the most interesting ones chosen for each sub-challenge will be described. Due to the larger scope of this design challenge, the evaluation of ideas per design challenge is left out from this main part of the report; this is to be seen in Appendix XVIII. Table 4.1 on this page shows a summary of the chosen ideas for each sub-challenge. Figures 4.4 - 4.8 on the following pages will explain each idea on its relevance.

Sub-challenges	Most interesting idea
To be aware of the existence of categorization means	1.1 To apply deviating color to the respective UI elements 1.2 To present them with phrases that entail assigning categories to data
To feel free to (not) use categorization means	2 To ask users whether they want to use the respective means or not
To have an overview of stored data (for the Insights section)	3 To use the left and top sides of the screen to give an overview
To feel enabled to structure data (for the Insights section)	4 To place 'Add new' -buttons alongside categories, that suggest the creation of new groups and sub-groups

Table 4.1: A summary of the most interesting ideas.
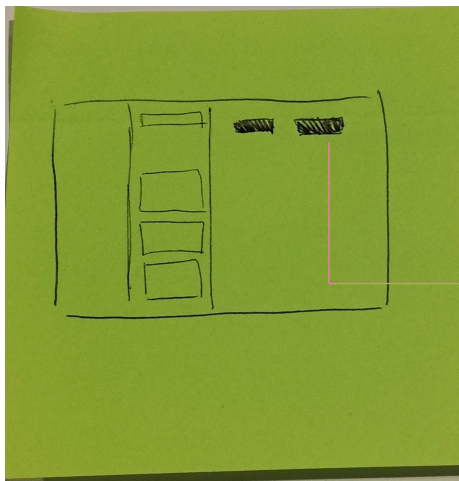
1.1 Deviating color
To make categorization means stand out by applying a color that deviates from other colors used in the screen, to them.

Figure 4.4: The use of elements with deviating colors.
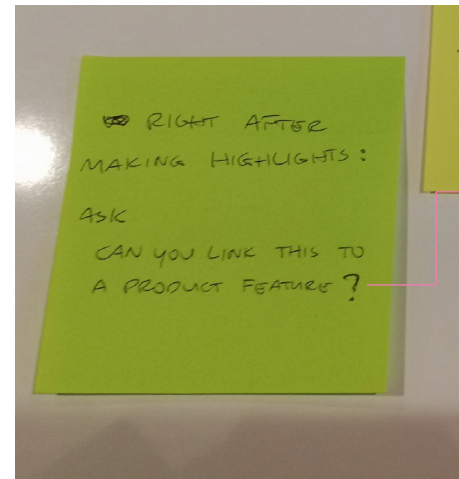
1.2 "Can you link this to a product feature?"
The use of phrases that entailed assigning categories to data. Using this kind of phrases, users are expected to understand that there are categories existing, that they could use to categorize their data.

Figure 4.5: The use of phrases that entailed assigning categories to data.
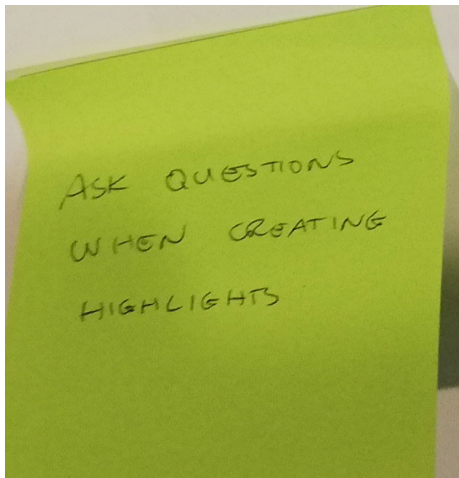
2 To present categorization means with questions
Questions are expected to come across as less persuasive, thus offering the intended freedom.

Figure 4.6: To ask users whether they want to use the respective means or not.
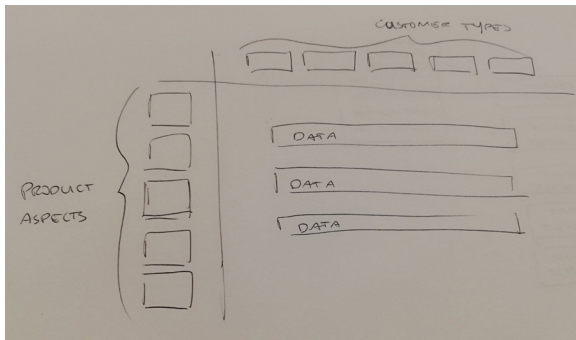
3 Use the left and top sides of the screen to give an overview
This idea is to be applied for the Insights section. With this layout, users are expected to be able to see these three elements all at once.

Figure 4.7: To use the left and top sides of the screen to give an overview.
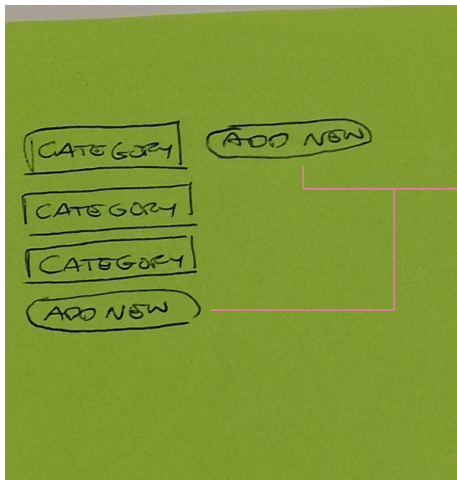
4 'Add new' -buttons
This idea is to be applied for the Insights section. Showing this button alongside the listed categories would imply that they could create new ones. By using different placements for this button, it was to be communicated whether newly created categories would be of the same level or lower level of group-hierarchy.

Figure 4.8: To place 'Add new' -buttons alongside categories, that suggest the creation of new groups and sub-groups.

Concept

For the scope of design described in *Design Scope* in this chapter, a concept is created. The concept makes use of tags, of Product Aspects and Customer Types. These tags are to be assigned to created insights in the Dock section. These were used to group insights together in categories, that will be shown in the Insights section. Because of that, these tags are referred to as 'groups' in the concept. Table 4.2 shows an overview of all conceptualized solutions.

Sub-challenges	Conceptualized solution
To be aware of the existence of categorization means	Customer Type: - to be assigned to an entire document, before insight creation - presented with a question in green, accompanied with an 'add' -button - categories are shown in the shape of a label Product Aspect: - part of the insight creation - presented with a question, accompanied with an 'add' -button - groups are shown in the shape of a label
To feel free to (not) use categorization means	- Functions of adding categories would appear as questions for users - When adding groups, users can choose between creating new ones or select from all previously created
To have an overview of stored data (for the Insights section)	- Product-aspect groups are listed on the left side of the screen - Customer-type groups are listed horizontally on the top side of the screen - Created insights are listed in the middle of the screen - Insights can be filtered using all groups listed; users can combine Product Aspects with Customer Types to do so
To feel enabled to structure data (for the Insights section)	- 'Add new' -buttons on the top and at the bottom on the list of product-aspect groups - When hovering or selecting a Product Aspect, a button 'add sub-group' would appear

Table 4.2: Summary of the conceptualized solution per sub-challenge.
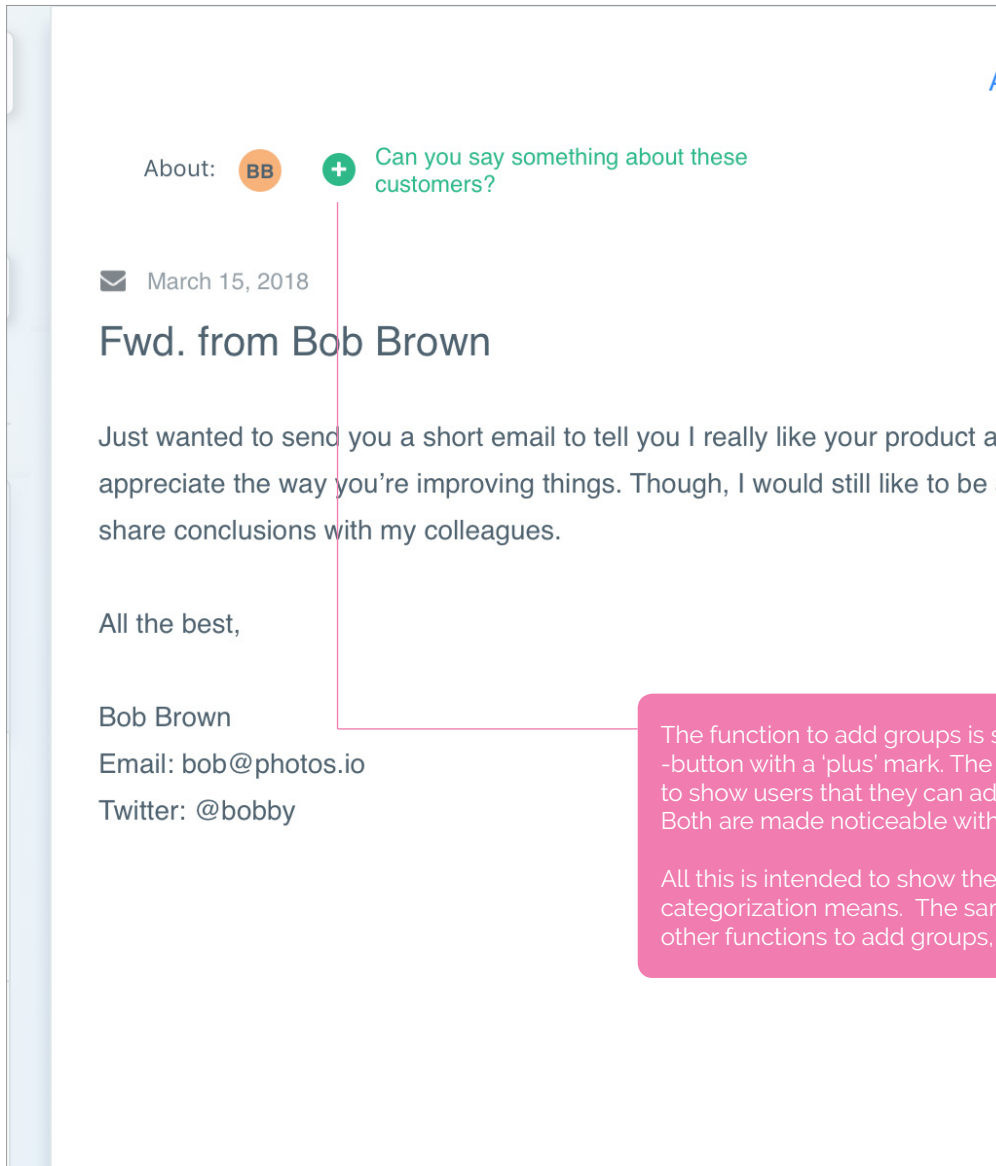
As assumed in *Design Scope*, documents (= feedback data) in the Dock section are already assigned with Customer Names. Once added, users would be asked to say something about the respective customer. Clicking on that, would lead them to a function to tag the added Customer Name with a customer-type group. With that, the entire document is tagged with a Customer Type. Insights created from highlights in the document will be tagged with the same Customer Type(s) automatically.

In insight creation, the option to add Product Aspects to the insight to be created, would be immediately visible right after the highlight is made. This enables users to assign Product Aspects to insights separately.

All the created groups of Product Aspects and Customer Types, and all created insights are visible in one screen of the Insights section. Users can view insights per Product Aspect, Customer Type, or combination from both. Also, new groups can be added in the Insights section. Additionally, sub-groups can be created and existing groups can be combined into groups of higher-level-hierarchy. This workflow is shown by figures 4.9 - 4.14 on this page and the following ones.

About: BB + Can you say something about these customers?

✉ March 15, 2018

Fwd. from Bob Brown

Just wanted to send you a short email to tell you I really like your product ar appreciate the way you're improving things. Though, I would still like to be a share conclusions with my colleagues.

All the best,

Bob Brown

Email: bob@photos.io

Twitter: @bobby

The function to add groups is shown alongside an 'add'-button with a 'plus' mark. The combination of both is meant to show users that they can add the respective type of groups. Both are made noticeable with the green color.

All this is intended to show the existence of these categorization means. The same elements are applied to other functions to add groups, shown in the next figures.

Figure 4.9: Once a customer name was added, users would be asked to say something about the respective customer.

All tags of predefined and/or previously created customer-type groups were to be reviewed and chosen from. On top of the list, the button to create a new group would be shown.

Though, its presence is increased with the green color, users are not persuaded to use it. This is conveyed by framing it as a question. With that users are given the freedom to (not) use the categorization means. This is also applied for the option to add Product Aspects in insight creation, as shown in figure 4.11.

Can you say something about these customers?

BB Bob Brown

+ add new

Product Owner   Product Manager
MSc student   PHD candidate
Teacher   Professor

Enter types

Can you say something about these customers?

BB Bob Brown

+ UX Researc

Product Owner   Product Manager
MSc student   PHD candidate
Teacher   Professor

Enter types
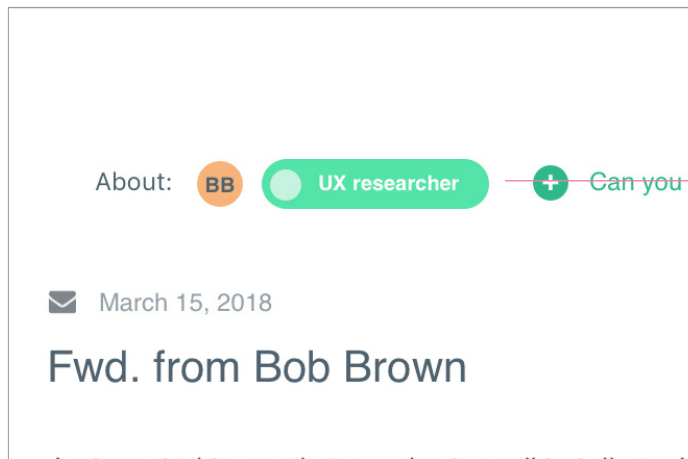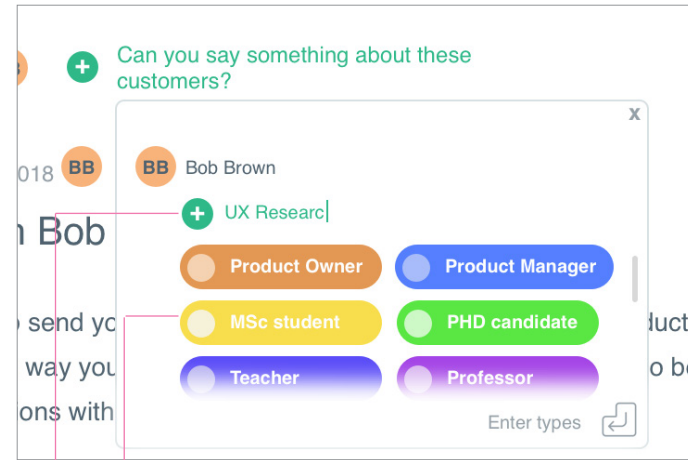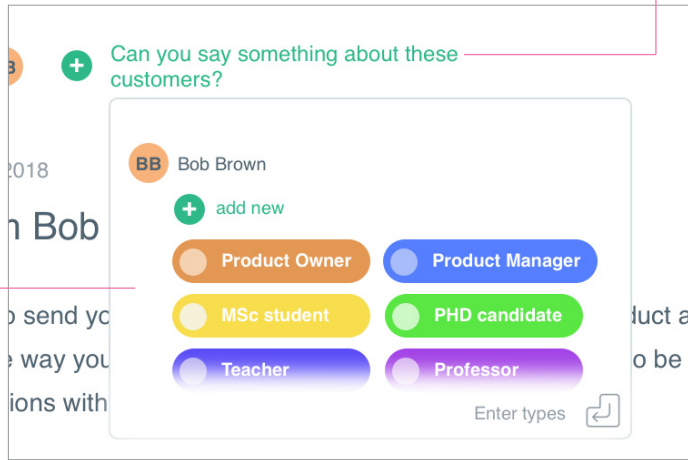
The tags would be listed as options to choose from and shaped as labels too.

New groups can be created using the 'add new' -button.

About: BB UX researcher + Can you a

March 15, 2018

Fwd. from Bob Brown

Once added, the tag would appear in the shape of a label, that was expected to indicate that these were to be used for later tagging, for categorization purposes.

Figure 4.10: Tagging an entire document with customer types. All insights that would be created from highlights taken from the respective document, would have the added customer-type groups (to the document) added to them automatically.

In insight creation, the option to add product aspects to the insight to be created, would be immediately visible right after the highlight would have been made. This would appear as a question for users.

New groups can be created using the 'add new' -button.

end you a short email to tell you I really like your produc

ay you're improving things. Though, I would still like to b

ns with my colleagues.

What insight does this give you?

⊕ Can you add product aspects to this insight?

Save insight

tos.io

conclusions with my colleagues.

best,

rown

bob@photos.io

r: @bobby

Need to share conclusions with colleagues

What aspect of the product is this about?   ⊕ add new

collaboration   import data

introduction   monthly payment

bug reports   data sharing

privacy   subscription plan

Save insight

Similar to customer type, tags for product-aspect groups would also be shown as labels, that was expected to let users understand they were meant for categorization.
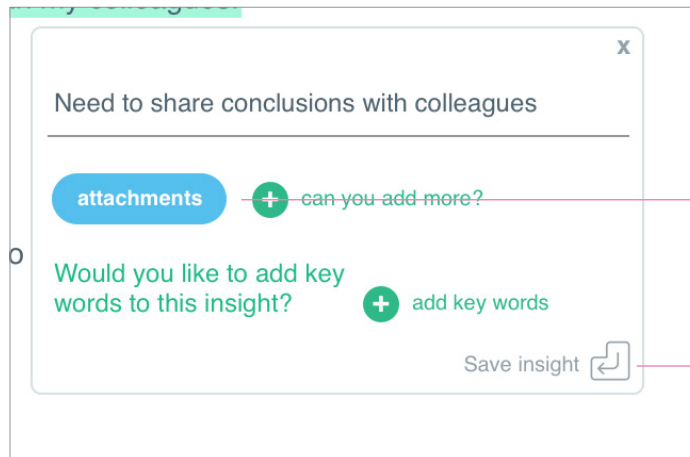
Need to share conclusions with colleagues

attachments   ⊕ can you add more?

Would you like to add key words to this insight?   ⊕ add key words

Save insight

Once added, the tag would appear in the shape of a label, that was expected to indicate that these were to be used for later tagging, for categorization purposes.

Insights can be saved without being tagged.

Figure 4.11: Categorizing with product aspects in insight creation. Unlike customer-type groups, product-aspect groups were to be added per created insight, instead of to an entire document.

All created Product Aspects, Customer Types, and Insights are shown in one view. This is meant to give an overview of stored data to users.

On the top side of the screen, the created customer-type groups were listed horizontally.

Insights   ▦ Summary   ▤ Categories   CUSTOMER TYPES   ⚙ Manage customer types

PRODUCT ASPECTS

All customers | Product Manager | UX-researcher | Professor | **PHD candidate** | BSc student | MSc stude | + add new

All product aspects

+ add new

communication

introduction

data sharing

attachments

billings

bug reports

privacy

preparation ? | + add sub-group

+ add new

🔍 search

+ Add

📅 Past month   1 Insight found   Show active ⌄   Sort by no. of people ⌄

To note deadlines in schedule   3 People

communication   PHD candidate   preparation   Last edited on 1 November 2018   ···

Dock

Insights

GL

⚙ Manage product aspects

On the left of the screen, all created product-aspect groups were listed vertically.

In the middle of the screen, all created insights were listed. Insights could be filtered by either Product Aspects or Customer Types, or a combination of both.

Figure 4.12: The redesigned lay-out for 'All insights' of the Insights section.

The 'add new' -buttons for groups and sub-groups are meant to show the possibility to create a hierarchy in product-aspect groups. With that, users are aimed to be certain of the possibility to structure their insights and groups.

To create new customer-type groups

Insights ▦ Summary ▣ Categories

CUSTOMER TYPES ⚙ Manage customer types

PRODUCT ASPECTS

All customers | Product Manager | UX-researcher | Professor | PHD candidate | BSc student | MSc stud + add new

All product aspects

+ add new

communication ? + add sub-group

🔍 search + Add

introduction

data sharing

📅 Past month | 📄 All sources

Show active ⌄ | Sort by no. .. ⌄

attachments

4 Insights found ⤨ Merge ↗ Move to 📋 Copy 🗄 Archive 🗑 Remove

billings

bug reports

Need to share conclusions with colleagues

10 People

communication Product Manager

Last edited on 1 November 2018

···

privacy

+ add new

Need to create summary from research

5 People

communication Product Manager

Last edited on 1 November 2018

···

To note deadlines in schedule

3 People

communication PHD candidate

Last edited on 1 November 2018

···

To create notes in documents

3 People

communication Product Manager

Last edited on 1 November 2018

···

⚙ Manage product aspects

When hovering or selecting a product aspect, a button 'add sub-group' would appear.

To create groups of the same level of hierarchy.

To combine existing groups into higher-level-hierarchy groups.

Figure 4.13: Using the product-aspect groups, users were enabled to create a hierarchy of insights. New, additional groups could also be created. Only the latter is possible for both Product Aspects and Customer Types.
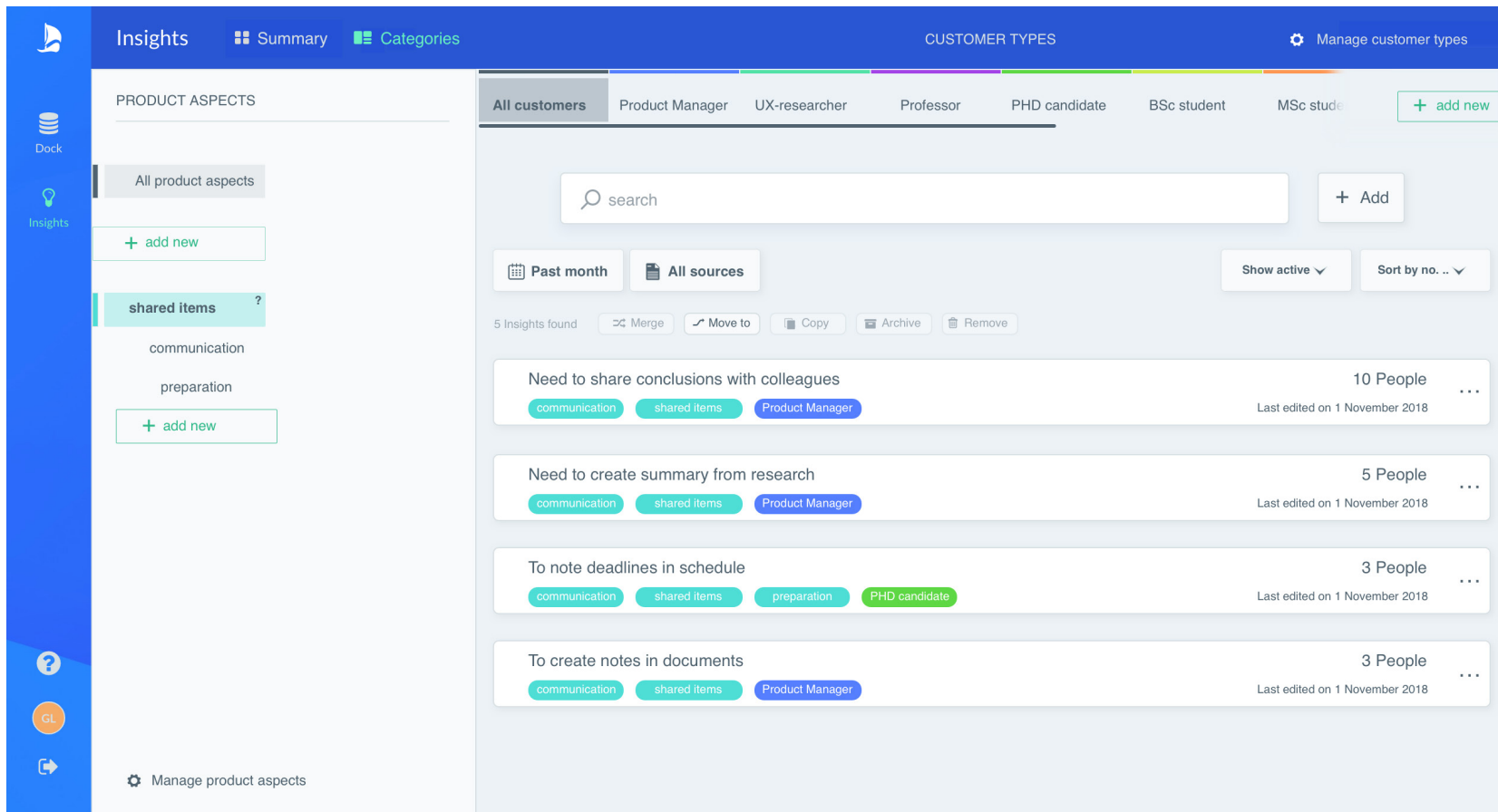
Figure 4.14: An example of an insight hierarchy based on Product Aspects. Insights grouped in 'Communication' and 'Preparation' were grouped together, in a bigger category of 'Shared items'.

To be aware of the existence of categorization means
This awareness is conveyed by showing the function to add groups alongside an 'add' -button (see figures 4.9, 4.10, and 4.11). This button includes a 'plus' mark, that is assumed to be a common button used to add a new element. Some applications in which the 'plus' mark was used to add new elements were Instagram, WhatsApp (Android), and MyFitnessPal.

As to be seen in the figures in the previous pages, the groups are shown in the shape of a label. This is meant to indicate that they are to be used for tagging, for categorization purposes (see figures 4.12, 4.13, and 4.14). This association, between labeling and categorization, is made because based on earlier findings it was assumed that the use of labels to categorize data was a common practice among the target group (see *Design Scope*, *Why?* in this chapter).

In case for the Customer Type groups, the question that show them to be added to documents and the respective 'add' -button, are shown in green, in order to increase its presence. With that, an extra emphasis is put on this step, which is the start of the workflow.

To feel free to (not) use categorization means
This freedom is conveyed by showing functions, to add groups, as questions. As mentioned in figure 4.6 in *Ideation*, questions are expected to come across as less persuasive, thus offering the intended freedom.

Also, when adding groups, users can choose between creating new groups or select from all previously created. With this option, analysis leaders are given freedom to choose which would be the most relevant for documents / insights. Figure 4.10 and 4.11 show how this is to be done for both Customer Types and Product Aspects.

To have an overview of stored data (for the Insights section)
The lay-out visualized in figure 4.12 is expected to give an overview of all created insights and categories of Product Aspects and Customer Types. These groups are to be used to filter the listed insights. For instance, the product aspect 'preparation' and customer type 'PHD candidate' could be selected, resulting only the insight(s) tagged with both to remain in the screen. Insights not tagged with these groups would disappear.

To feel enabled to structure data (for the Insights section)
- 'Add new' -buttons on the top and at the bottom on the list of product-aspect groups
- When hovering or selecting a Product Aspect, a button 'add sub-group' would appear

As assumed in *Design Scope*, hierarchy creation was only expected to be relevant for product aspects. It also was explained that the Insights section should make users certain that the applied tags were indeed used to structure these insights and were to be applied in hierarchy creation.

Using the groups, users are enabled to create a hierarchy of insights. This is possible with 'Add new' -buttons on the top and at the bottom on the list of product-aspect groups. In addition to that, when hovering or selecting a product aspect, a button 'add sub-group' would appear. These features are meant to show that structuring insights was possible, by creating a hierarchy in Product Aspects. They are visualized by figures 4.12, 4.13, and 4.14.

Also assumed in *Design Scope*, customer-type and product-aspect groups could be predefined. In the Insights section, users are enabled to define Product Aspects and Customer Types they would like to structure insights with, prior to insight creation. The created groups will then be available to select from, in the Dock section (see figures 4.10 and 4.11).

User Test

The concept was turned into a testable prototype, that was then tested with external parties. The test revolved around the concept's conceptual relevance. For that, it was tested on the above-mentioned experiences and sub-challenges. As mentioned in *User Test* of chapter 3, the user test for this challenge was done alongside that for the first design challenge.

Approach
The user test is done remotely, as described in chapter 3. Each session lasted around 30 minutes (only the part related to this challenge). Participants are first presented about Shipright's overall context of use and the concepts' scope of design. Then, they are guided through the entire workflow of insight creation in the Dock section. They would be explained about each feature and function included and are allowed to share their opinion. After that they are guided to the Insights section, of which they get to see the redesigned lay-out.

After finishing their walkthrough, they are asked to answer a set of rating questions, that relate to the defined sub-challenges (thus, the experiences too) described in *Design Scope* in this chapter. Thereby, they are encouraged to explain each one of their answers.

The entire walkthrough and materials used for this test are shown in Appendix XIV of this report.

Recruitment and participants
This test shared the same recruitment approaches and participants. These were described in *User Test* in the previous chapter, on page 76.
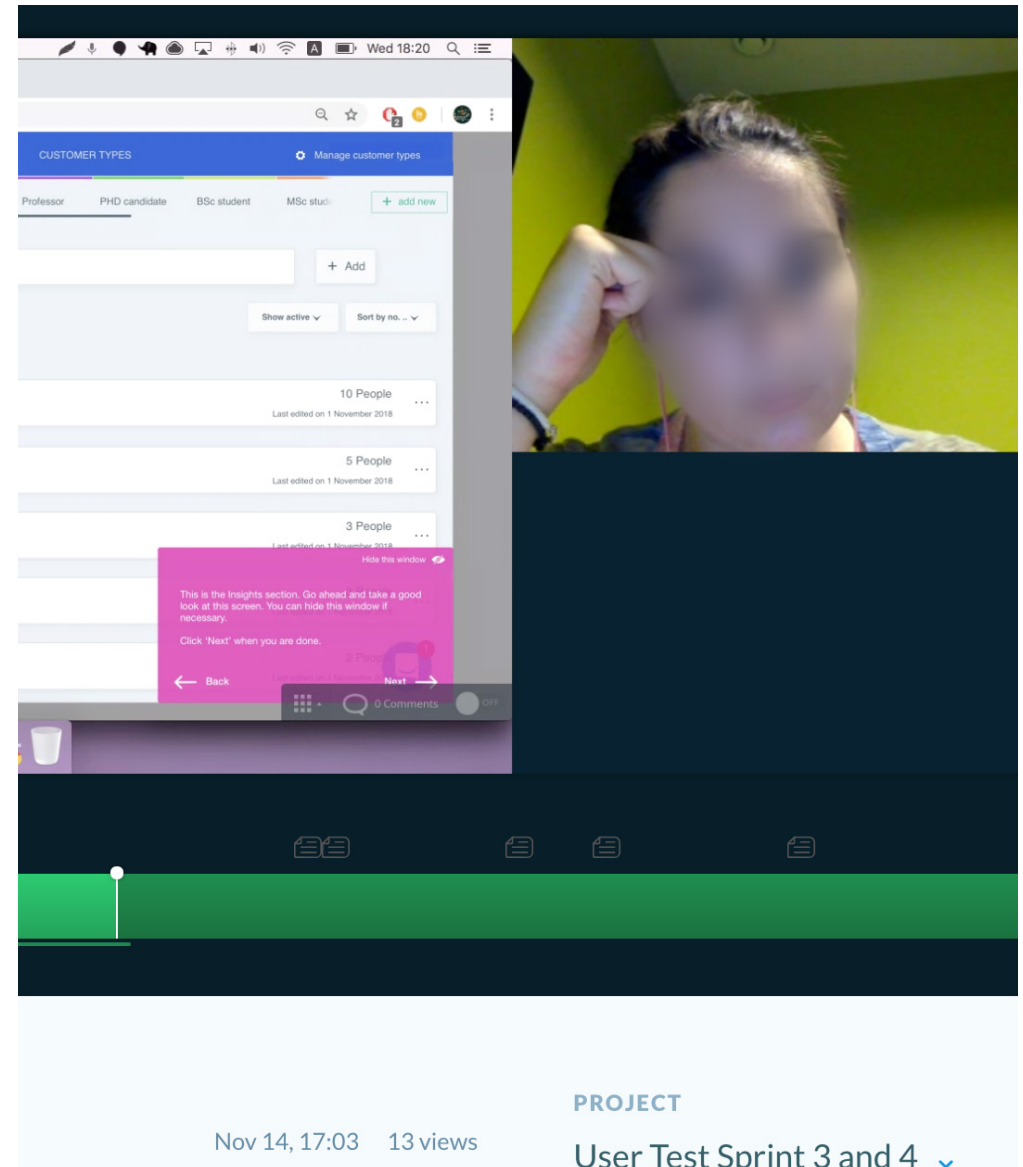
Figure 4.15: As mentioned in 'User Test' of chapter 3, the user test for this challenge was done alongside that for the first design challenge.

Insights from User Test

Sub-challenges	Insight
To be aware of the existence of categorization means	- The workflow seemed to be clear from a PM perspective - The workflow of insight creation could still be made more compact
To feel free to (not) use categorization means	- There is too much freedom provided in the insight creation, concrete directions for users are needed
To have an overview of stored data (for the Insights section)	- The relevance of both main categories (= Product Aspects and Customer Types) is verified - It is important for the workflow to convey equal importance of both main categories
To feel enabled to structure data (for the Insights section)	- Hierarchy creation is desired for Customer Types too - The placement of certain elements caused some usability issues that had a negative influence on this experience (see further description in this section)

Table 4.3: Summary of the collected insights from the user test.

The results of the test are visible in Appendix XV. In this sub-chapter, the concluded insights from the tests will be described. The explanation will be based on each of the predefined sub-challenges. A summary of these insights are to be viewed in table 4.3.

To be aware of the existence of categorization means
Creating insights from feedback data, tagging them with labels, and structuring them towards a hierarchy are familiar for a PM. Though, the workflow of insight creation could still be made more compact. A lot of cognitive effort seemed to be experienced by participants.

To feel free to (not) use categorization means
The extent of freedom for users, to choose to either make use of certain categorization means proved to be rated positively (one with 6/7 and two with 7/7). However, it appeared that there was too much freedom provided in the

insight creation. This caused the insight creation to feel overwhelming. More concerete directions could be given for users, in this part of the workflow.

To have an overview of stored data (for the Insights section)
The relevance of both main categories was verified. Though it appeared that it was important to keep both together when presented, as they share the same amount of importance in data categorization. It is important for users to already understand this during insight creation. This is not conveyed by the concept yet.

To feel enabled to structure data (for the Insights section)
The need to create a hierarchy in Customer Types is identified, to structure insights. In 'Design Scope', it was assumed that this need for this main category was irrelevant. Though, the results proved otherwise, as hierarchy-creation of customer types is useful to review main conclusions of feedback analysis.

On top of that, some usability issues in the concept negatively affected this experience. Three things, in particular, were mentioned about this:

-       The placement of the 'add new' button, to combine different product -aspect groups, is not clear of its function, as it stood apart from the groups (see Appendix XV).

-       The listed Customer Types are mistaken with access for internal stakeholders.

-       The existent of sub-groups could have been communicated more clearly. By doing so, it would have had become clearer that the possibility to create them exists in the workflow.

Conclusion

In summary the design challenge was narrowed down to the following problems:

1. **How to make it clear (to analysis leaders) that product-aspect and customer-type categories could be created during insight creation in Shipright's Dock section?**

2. **How to make it clear (to analysis leaders) that created insights can be organized towards a hierarchical structure in Shipright's Insights section, using the categories?**

The focus for the scope is put on the first problem, with the second taken to an extent.

For the solution it is decided to design for the experiences of **certainty** and **freedom**. Based on these experiences, a concept is created. It makes use of tags, of Product Aspects and Customer Types. These tags are to be assigned to created insights in the Dock section. These were used to group insights together in categories, that will be shown in the Insights section. These tags are referred to as 'groups' in the concept.

This concept is tested with three participants. From the insights, it was firstly concluded that the workflow was clear from a PM perspective. But, the part of insight creation could still be made more compact. As concluded, this was caused because the steps of adding customer-type and product-aspect tags were too separated from each other. Therefore, the workflow was perceived as being more extensive that it actually was.

Secondly, as there is too much freedom provided in the insight creation, concrete directions for users are needed. Although, freedom should not be completely left out as users are still to be given the choice, which exact groups to be used to tag insights with. Hereby, **it is concluded that the experience of guidance need to be designed for, alongside certainty and freedom**. This led to the following sub-challenges to be tackled:

- To be aware of the existence of categorization means, in insight creation
- To be guided towards labeling insights, in insight creation
- To be free to choose groups to label insights with, in insight creation
- To have an overview of stored data, in the Insights section
- To feel enabled to structure data, in the Insights section

Thirdly, the relevance of both Product Aspects and Customer Types is verified, but equal importance of both is not conveyed yet by the concept. From this, **it is concluded that the two main categories are to be presented next to each other in both the Dock (insight creation) and Insights section.** This also connects with another finding, which is to enable hierarchy-creation for Customer Types too, and not just for Product Aspects.

Adding on that, it was assumed previously that hierarchy creation for Customer Types needed to be left out due to possibility in overlaps (see figure 4.2b on page 83). The application of groups as filters in the Insights section, however, makes it possible for customer-type hierarchies to overlap with product-aspect hierarchies. As it is also desired, **hierarchy creation for Customer Types should be implemented in the concept.**

Lastly, certain usability issues (see previous page) are identified in the Insights section of the concept. This issues negatively affected the experience of certainty, of the ability to structure insights.

5. How can Customer Support teams and customers be made more involved in the product development process?

The design challenge is narrowed down to the following problem: **How to update CS teams and SaaS customers about the translation of Intercom feedback data into separate customer insights?**

The goal is to come up with a concept that enables CS teams and SaaS customers to be updated about the processing of incoming feedback. The updates would feed on the engagement of both parties in the analysis process.

To tackle this problem, the following experiences are decided to design for: **connection, significance, engagement, and comprehension**. Based on these experiences, a concept is created and prototyped to be tested. The user test that follows up, results in insights which are important for concept improvement. This chapter of the report describes the process that was gone through, from refining the challenge, to conceptualization, to the analysis of the results gained from collected feedback on the created concept.

Design Scope

Who?
The target group specified for this challenge includes the analysis lead, CS teams and customers of SaaS SMBs and Mid-Market Businesses (10 – 500 FTE). These companies are using Intercom to engage with their customers and collect customer feedback, through their SaaS products.

Prior to tackling this design challenge, Grible's internal team has made a major change regarding Shipright's business model. It is decided to focus more on Intercom using SaaS companies. Though, SMBs and Mid-Market Businesses (10 – 500 FTE) are still targeted. The focus is put on this niche, before scaling up (G. *Mangnoesing, personal communications*).

What?
The design challenge is narrowed down to the following problem: How to update CS teams and SaaS customers about the translation of Intercom feedback data into separate customer insights?

The goal is to come up with a concept that enables CS teams and SaaS customers to be updated about the processing of incoming feedback. The updates would feed on the engagement of both parties in the analysis process. Analysis leaders should be able to manage this engagement without asking too much effort from both. With the focus put on Intercom using companies, the data source taken for the scope are Intercom chat conversations.

The content of the update would be insights that are derived from customer feedback in these conversations. These conversations would occur between CS teams and customers.

The concept developed for the second design challenge focused on the creation of hierarchy of insights. However, it is concluded that more research is still needed regarding this topic (see *Conclusion* of chapter 4, on page 99). Because of that, the scope of this challenge only includes separate insights, translated from collected feedback.

Why?
In chapter 2 *Exploration*, it was described that Shipright's original design enables users to share insights with colleagues. But, these can only be viewed by colleagues who have individual Shipright accounts. With the findings described in that chapter, it was assumed that customer facing teams should become more involved in the analysis process. Additional interviews, showed that there

was a need for the involvement of both CS teams and customers in feedback analysis, towards insights of problems and needs. To facilitate this engagement, both customers and CS should be updated about the translations made from collected feedback (see Appendix XX).

CS teams need to be aware of the significance of their work (= interaction with customers), while customers of the significance of their feedback on the product. From the perspective of analysis leaders, CS is needed to help them verify interpretations of feedback (= insights). Customers are then meant to point out the importance of these insights (see Appendix XX, XVI, and XXI).

Some of Shipright's competitors are already a few steps ahead of Shipright, regarding the engagement of internal stakeholders and/or customers in product development. However, they do that while focusing on feature requests/shipment (see *Competitors* in chapter 1 on page 26 - 28). These should, however, not be the focus in product discovery.

Literature Review in chapter 2 (page 51) described that desired outcomes are to be focused on, not features. This shows the opportunity for Shipright, of providing updates about customer insights, that steers the focus of analysis towards outcomes desired by customers. With this, an increased quality of discovery results is expected.

Where? and When?
See figure 5.1 on the next page. The update would be given once customer feedback have come in and analyzed in Shipright. It would be provided digitally, by the analysis lead using Shipright.

How?
Assumptions made
The following assumptions are made beforehand. Firstly, the analysis lead would use Shipright, with Intercom integrated, to analyze feedback data. From created highlights it could be seen which customer gave the feedback, when opening the respective insight's details. Though, the names of the related CS staff, whom have had the chat conversation with these customers, are not assumed to be retrievable.

Secondly, not everyone of CS would have an individual account for Shipright. The leading functions of CS (manager, head of, director of, etc.) are the ones who

Customer Support

Conversation about product use via Intercom

Conversation imported to Shipright

Customers

Shipright with the Intercom integration activated

Distill feedback

Create separate insights from feedback

Analysis Lead

How??

Share update to establish engagement in the analysis process

Shipright would be taken as the platform to activate the update, but the exact channels for CS teams and customers to receive it, is open to ideate about.

Figure 5.1: Where? and When? of the design scope.

are assumed to be having an account. Previous interviews showed that they are more likely to kickstart the analysis process by preselecting feedback data to be logged (also see figure 1.3 (page 24) and table 2.3 (page 54)), while regular CS agents would only focus on interacting with customers (see Appendix XX); Shipright is not relevant for interaction with customers.

Thirdly, multiple internal stakeholders might have individual accounts to access Shipright's team account of their organization. Except for the analysis lead, these internal stakeholders are not assumed to be creating and analyzing insights but would only view the summary of the results.

Also, analysis leaders and all CS staff would have access to Intercom and all conversations. Those with access to Intercom would receive notifications about incoming messages or notes in chat conversations. These notifications could be received via e-mail.

Experiences and sub-challenges
The experiences to design for are:

-   Analysis leaders have to experience **connection** with CS and customers.

-   CS staff have to experience **significance**, that their interaction with customers are important, and **engagement** in the analysis process. When updated, they also have to experience **comprehension** of the insight creation.

-   Customers have to experience **significance** of their feedback on the product, and **engagement** in the analysis process. Similar to CS, they have to experience **comprehension** of the the insight creation, when updated.

Based on these experiences, the sub-challenges shown in figure 5.2 were defined. For the eventual conceptualization, a list of design criteria was set based on these sub-challenges. These can be viewed in Appendix XXII.

Analysis Lead

- **To be aware of the involvement of CS and customers, in analysis**
- **To be aware of the difference between CS teams and customers**
- **To be aware of the ability to reach out to CS and customers**

Customer Support

- **To feel heard**
- **To feel involved in the analysis process**
- **To understand the translation of feedback into insights**

Customers

- **To feel heard**
- **To feel involved in the analysis process**
- **To understand the translation of feedback into insights**

Figure 5.2: Sub-challenges to design for, per related stakeholder.
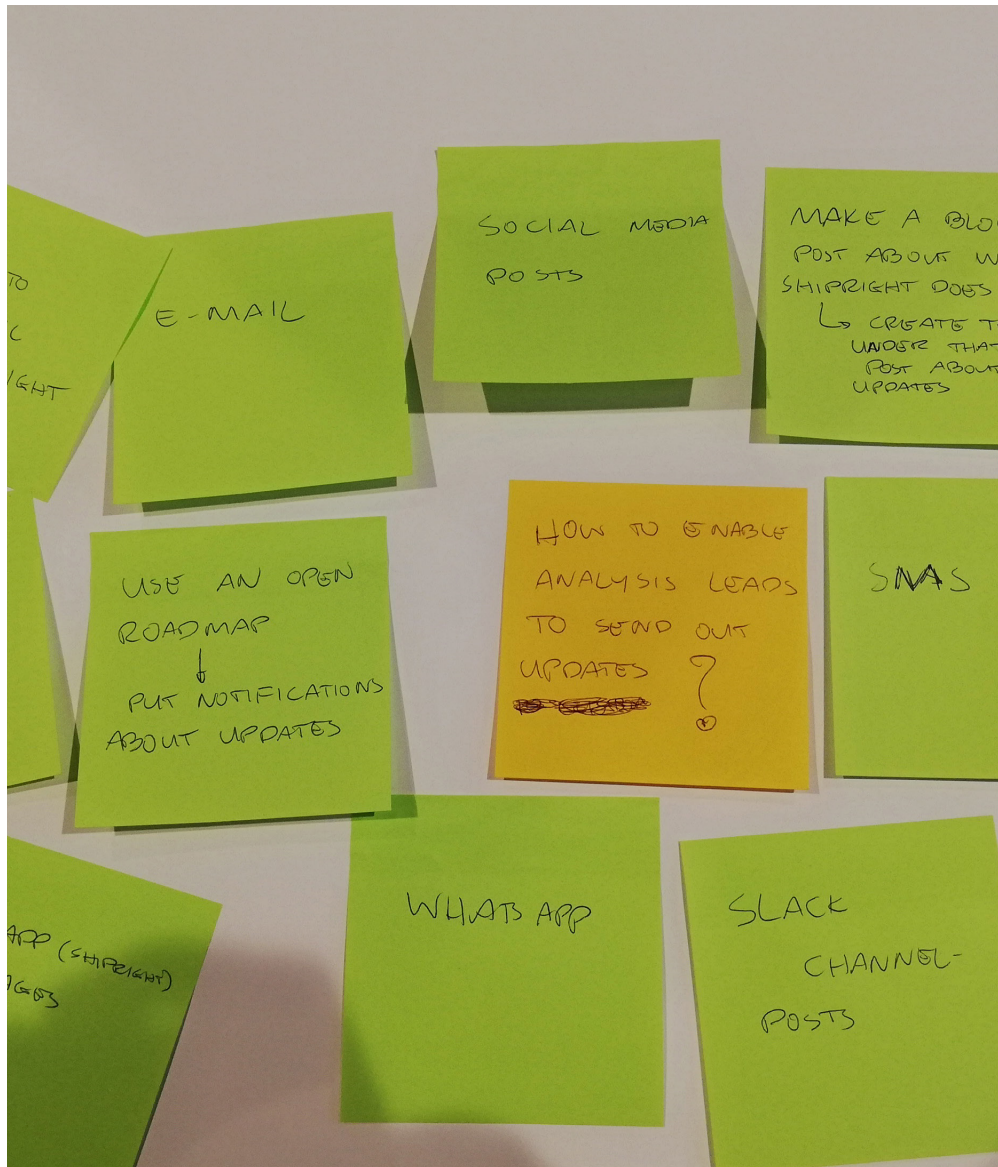
Figure 5.3: A few of the options that were considered.

Ideation

To form a basis for ideation, the sub-challenges described in the previous section are summarized in the following 'How to's':

1. How to enable analysis leaders to send out updates?
It was assumed that the analysis would be done with Shipright. Though, the ones who would receive the updates, including CS staff, would not necessarily have access to the data in Shipright. (see *Design Scope*, *How?* on the previous page).
It is therefore a challenge to enable analysis leaders to still update CS staff and customers about feedback analysis.

2. How to enable CS teams to receive and view updates?
Just as it is a challenge for analysis leaders to update CS staff about feedback analysis, for the CS staff themselves it is a challenge to receive and view updates. That is because they were assumed to not have individual accounts for Shipright (see *Design Scope*, *How?*). Therefore, they are also assumed to not have access to the feedback analysis data, thus need another medium to still be enabled to keep track of the analysis.

3. How to enable customers to receive and view updates?
Similar to CS, customers also need another medium to be enabled to keep track of the analysis.

4. How to make the translation of feedback self-explanatory?
The updates would have to be clear that created insights are based on collected customer feedback. This is important for customers, so they could understand that their feedback would feed on analysis. It also is important for CS staff, so they could understand that the feedback they have collected are of importance.

Overall, the following ideas were chosen to include in further conceptualization, (see Appendix XXIII for all generated ideas):
1.　　　Update channels:
　　　　1.1 Blog posts and threads
　　　　1.2 E-mail
　　　　1.3 Intercom messages

2.　　　Describe the 'Who', 'What', 'Where', 'Why', 'When', and 'How' of insights

The choice for these ideas will be explained in this section. In the explanation, the ideas will be related to the described 'How to's'.

1. Update channels

The three considered options, listed in the previous page, will be described in the following pages. The ideas will be explained based on the defined 'How To's'. Before jumping into description, the potential of each idea in tackling the specified sub-challenges (see figure 5.2 in *Design Scope*) and the expected rate of feasibility are visualized by the Harris-profiles in this page.

Blog post and threads	-3	-2	-1	0	1	2	3
CS							
To feel heard				█			
To feel involved in the analysis process				█			
To understand feedback translation				█	█		
Customers							
To feel heard				█			
To feel involved in the analysis process				█			
To understand feedback translation				█	█		
Analysis lead							
Awareness of the involvement of CS and customers				█			
Awareness of the difference of customers vs internal				█			
Awareness of the ability to reach out				█			
Feasibility			█				

E-mail	-3	-2	-1	0	1	2	3
CS							
To feel heard				█			
To feel involved in the analysis process				█			
To understand feedback translation				█	█		
Customers							
To feel heard				█			
To feel involved in the analysis process				█			
To understand feedback translation				█	█		
Analysis lead							
Awareness of the involvement of CS and customers				█			
Awareness of the difference of customers vs internal				█			
Awareness of the ability to reach out				█			
Feasibility				█	█		

Intercom messages	-3	-2	-1	0	1	2	3
CS							
To feel heard				█			
To feel involved in the analysis process				█	█		
To understand feedback translation				█	█	█	
Customers							
To feel heard				█			
To feel involved in the analysis process				█			
To understand feedback translation				█			
Analysis lead							
Awareness of the involvement of CS and customers				█			
Awareness of the difference of customers vs internal				█	█		
Awareness of the ability to reach out				█	█		
Feasibility				█			

Figure 5.4: These Harris-profiles visualize the potential of each idea in tackling the predefined sub-challenges.
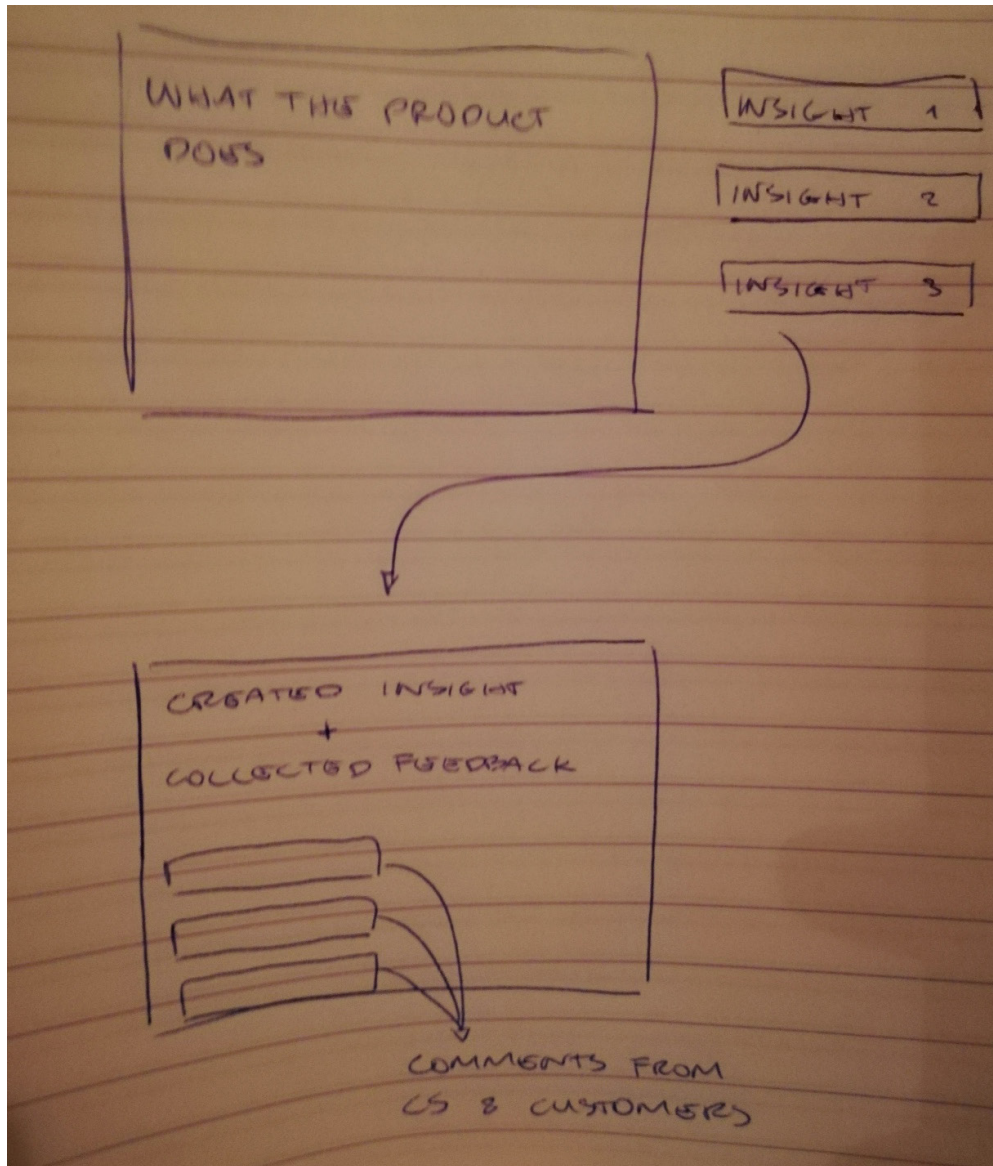
Figure 5.5: This option is about creating a blog post of what the product would do and threads per created insight.

1.1 Blog posts and threads

To enable analysis leaders to send out updates
This option is about creating a blog post of what the product would do and threads per created insight. With that, created insights could be related back to the main goal of the product. This would also enable analysis leaders to create a 'story of product improvement', making feedback translation clear for CS and customers.

For this, it is assumed that companies already would have a product description set (that they are already using for their websites). Additionally, the generation of insight-threads should become automated, with a pre-set template that could be used for different insights and feedback.

To enable CS teams to receive and view updates
As CS might have to be engaged in analysis, insight-threads could be a good starting point for discussions of insights and feedback. Though, CS staff should be made aware whenever new insight-updates get posted. Notifications about newly posted insight-threads could be received via e-mail or Intercom (as notes/messages).

To enable customers to receive and view updates
It is already a common practice among SaaS companies to put a page in their website, that would show what their product was about. Insight-threads could be a good extension of this practice. However, it is still to be considered that published insights cannot be just made public; customers might not want other customers to see what problems they are having with their products.
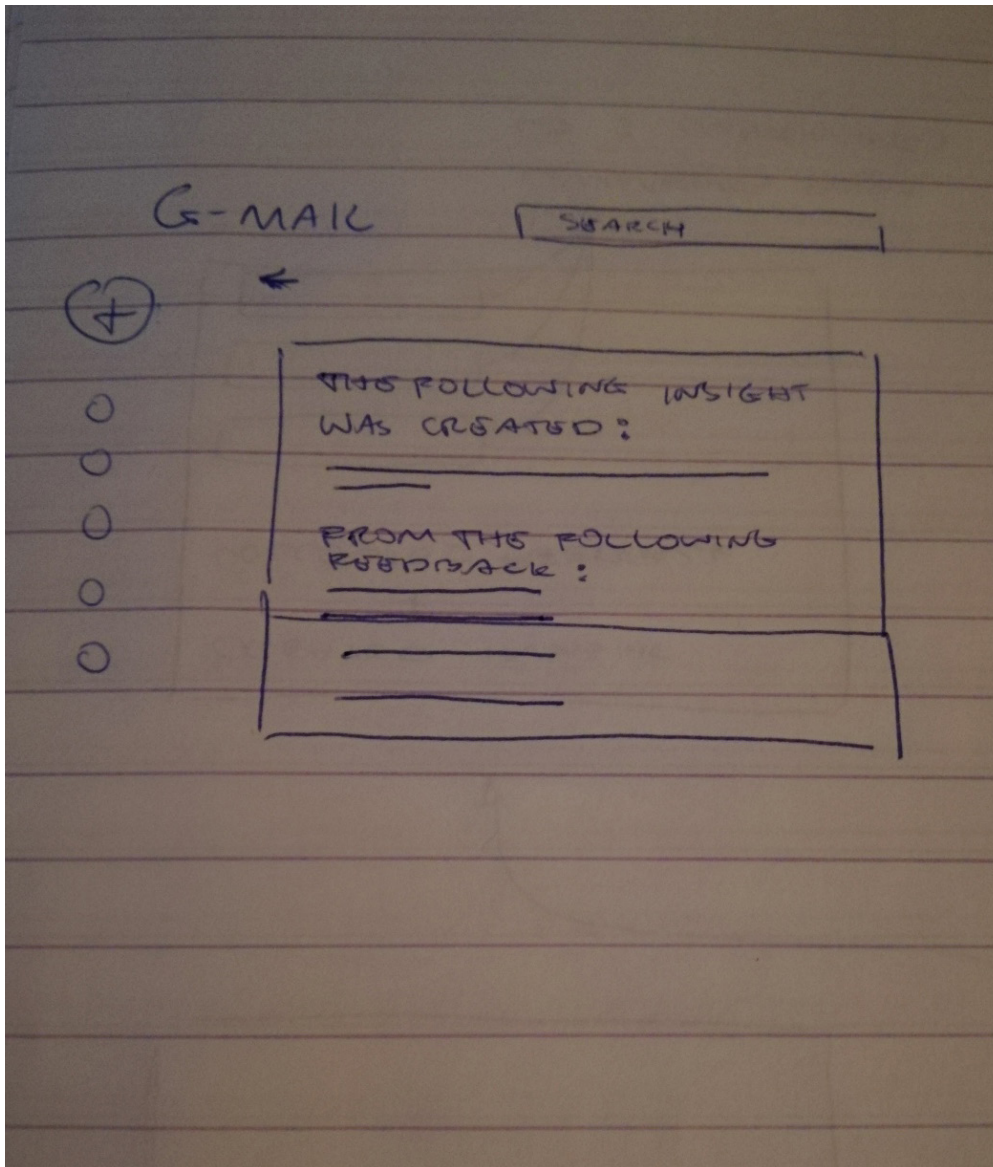
Figure 5.6: The option of updating customers and CS staff by e-mail about created insights.

1.2 E-mail
This option concerns sending out automated updates via e-mail. This method is the most common in receiving messages. Because of that, it is expected to be easily accepted by the target group.

To enable analysis leaders to send out updates
Analysis leaders could send out e-mails to customers and CS-staff about feedback and insights derived from that. Specific e-mail templates were needed for this, which could be easily automated and were applied often by organizations already.

To enable CS teams and customers, to receive and view updates
In most e-mail accounts, users could track specific sets of e-mails received from certain senders (for example Gmail and Outlook). With that, recipients could easily track all updates of insights. This could be of use for possible discussions with the analysis lead of the company, or to collect information to share with customers.
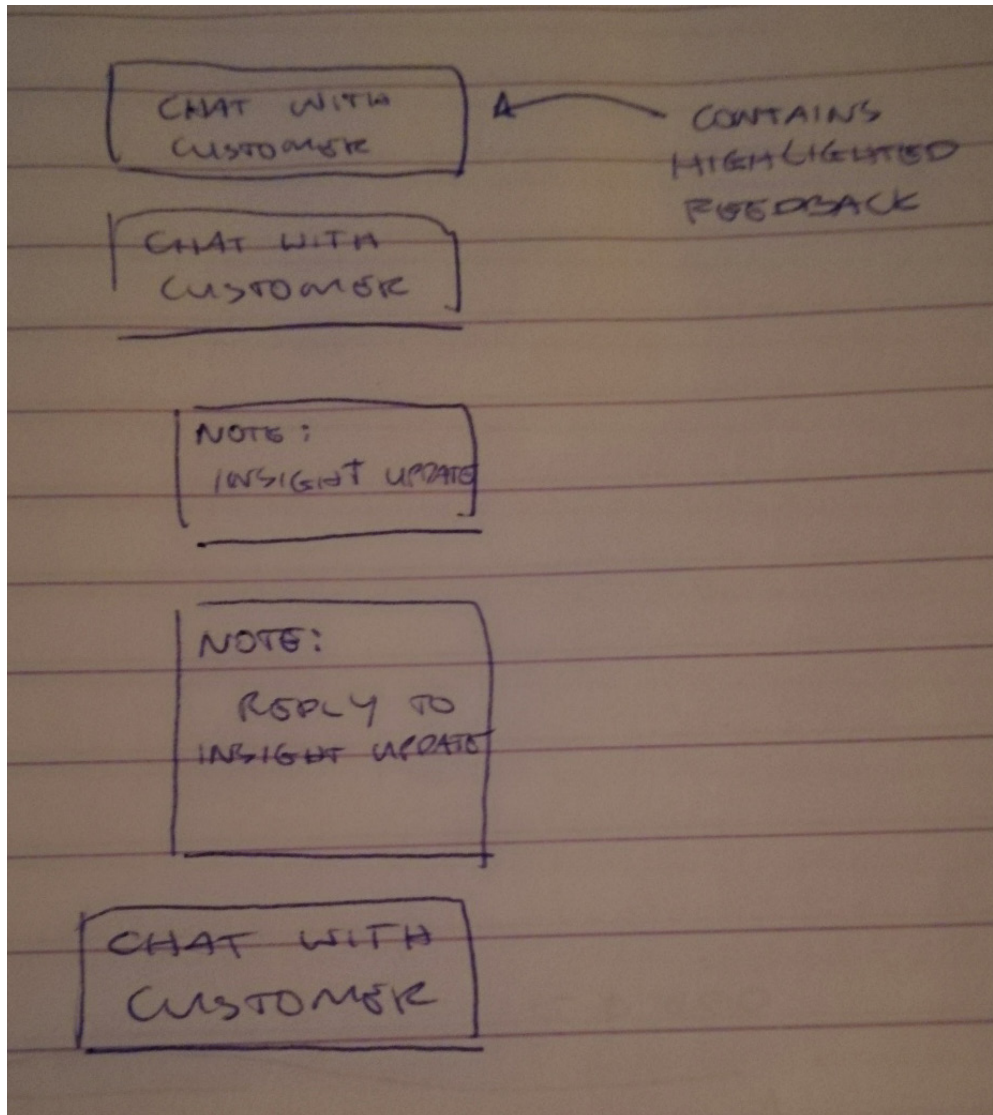
Figure 5.7: In the case of CS, updates could be sent as notes, instead of messages. These notes are to be put in the respective conversations with customers, where the exact feedback used for analysis would come from. When sent as notes, they would not be visible for customers.

1.3 Intercom messages

To enable analysis leaders to send out updates
Another option was to send out automated updates via Intercom. As Intercom using companies were targeted, it was a valid assumption that updates could be shared throughout these companies' Intercom channels. This idea fit well within Shipright's new business model, in which Intercom is the source of feedback data (see *Design Scope*, *Who?*).

To enable CS teams to receive and view updates
In the case of CS, updates could be sent as notes, instead of messages. These notes were to be put in the respective conversations with customers, where the exact feedback used for analysis would come from. When sent as notes, they would not be visible for customers. This might allow CS staff to discuss insights with the analysis lead, in the background of an Intercom conversation.

As the insight-update could be viewed as a note, in the respective conversations where feedback would come from, CS might be able to easily retrieve the exact feedback that was analyzed. This could make the update easy to understand. Having an internal conversation in chat conversations with customers, with notes not visible for customers, was a function that was already available in Intercom.

To enable customers to receive and view updates
As Intercom using companies were targeted, it was expected for their SaaS customers to be familiar with receiving information from Intercom. Receiving insight-updates via Intercom was therefore, a good extension for this practice.

Customers would only get to see the updates when they were using the product. Insight-updates were expected to be only relevant during usage; outside of that, they were expected to be irrelevant for users. As such, customers would not be bothered by the updates when they were not using their SaaS products.

Sent updates could be received as follow-ups to previous updates and could be grouped as an Intercom conversation. With that, customers could relate incoming updates back to previous updates and gain a perspective on the bigger (analysis) process. This, by itself, might make the update self-explanatory.
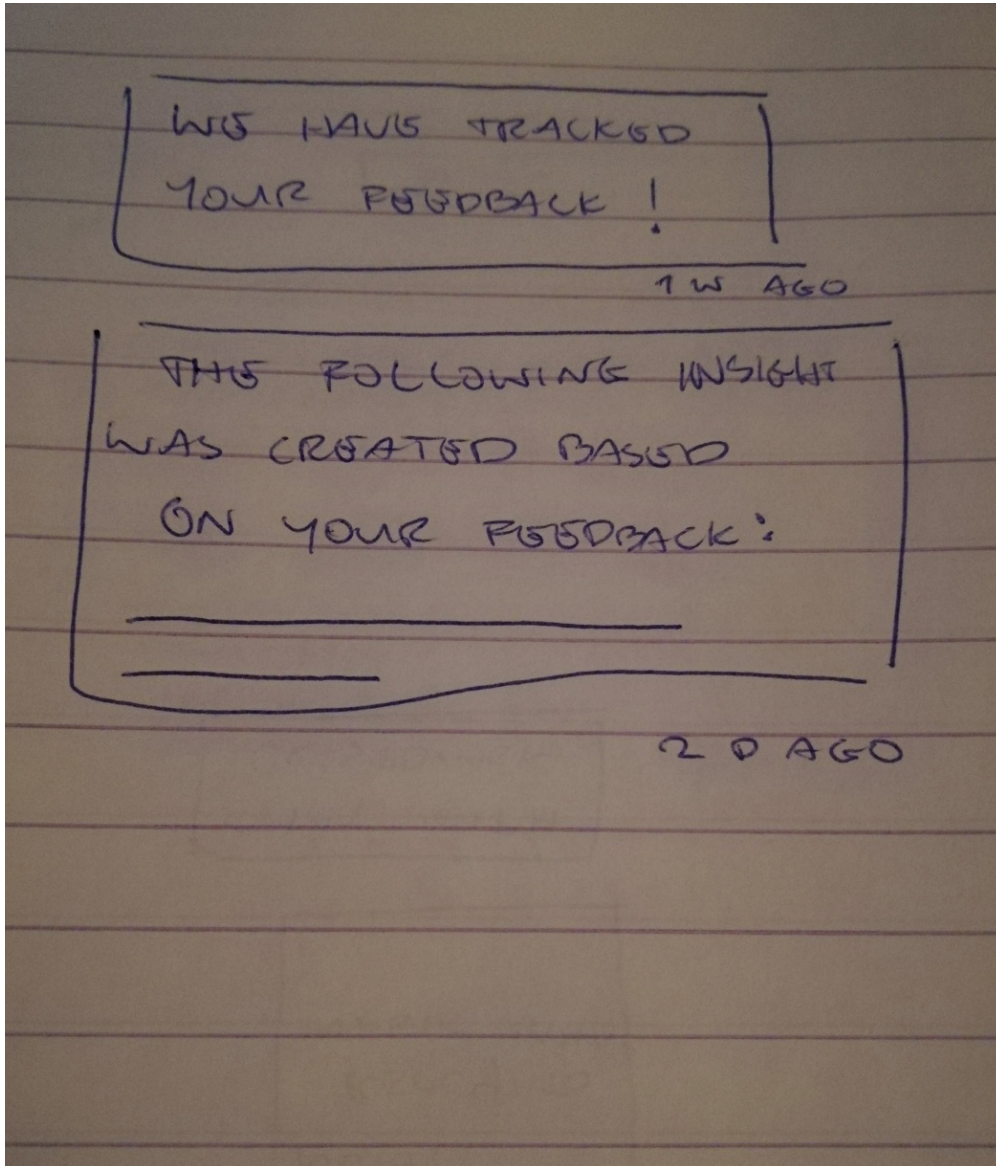
Figure 5.8: Customers could be updated about feedback analysis by the means of Intercom messages, and only get to see these updates during product use. Sent updates could be received as follow-ups to the previous ones and grouped as one conversation.

2. Describe the 'Who', 'What', 'Where', 'Why', 'When', and 'How' of insights

To make the translation of feedback self-explanatory

This option reflected on including context in the format of updates. Not all aspects of the 5W and 1H might be necessary to be included, but for the insight-updates to be self-explanatory it was assumed that the respective feedback analyzed, should be communicated too. This would give CS and customers a good context about insight-updates, so they could become aware of what the company was working on at the respective moment.

Internal Feedback on Ideas

The ideas described in Ideation, are materialized in different concept ideas. These are described thoroughly in Appendix XXIV. Using these, the most interesting ideas are presented on their potential of tackling the specified problem (see *Design Scope* in this chapter). This presentation is done internally, with the company mentor, which follows with feedback on the ideas. The exact results of this feedback are also to be seen in Appendix XXIV. All concluded insights from this feedback will be described in this section of the main report.

Firstly, Intercom is preferred as a channel to send out updates. It provides the best balance of feasibility and solutions for the sub-challenges to design for, compared to e-mail and blog post. Furthermore, it fits better in the new business model of Grible, which focuses on Intercom using companies.

Secondly, we have agreed on the assumption that notifying customers about the total amount of occurrences among the analyzed customer population, is relevant. This is expected to give customers more context about analysis. Customers would be given a sense of validity of the insight and that is expected to increase comprehension of feedback translation.

Thirdly, adding CS agents and customer names could be automated. In *Design Scope*, *How?* in this chapter it was described that this was not assumed for the names of the CS agents. This, however, is possible with Shipright.

Furthermore, it is important for updates to refer to the content of feedback and when it was given by customers. This is especially important when updating customers, because there might be a prolonged duration of time in between moments of feedback collection and steps of analysis. They would have to be reminded of the feedback they gave before and shown that the feedback was taken for analysis.

Lastly, certain moments of receiving updates can be assumed to be relevant. These are shown by figure 5.9.
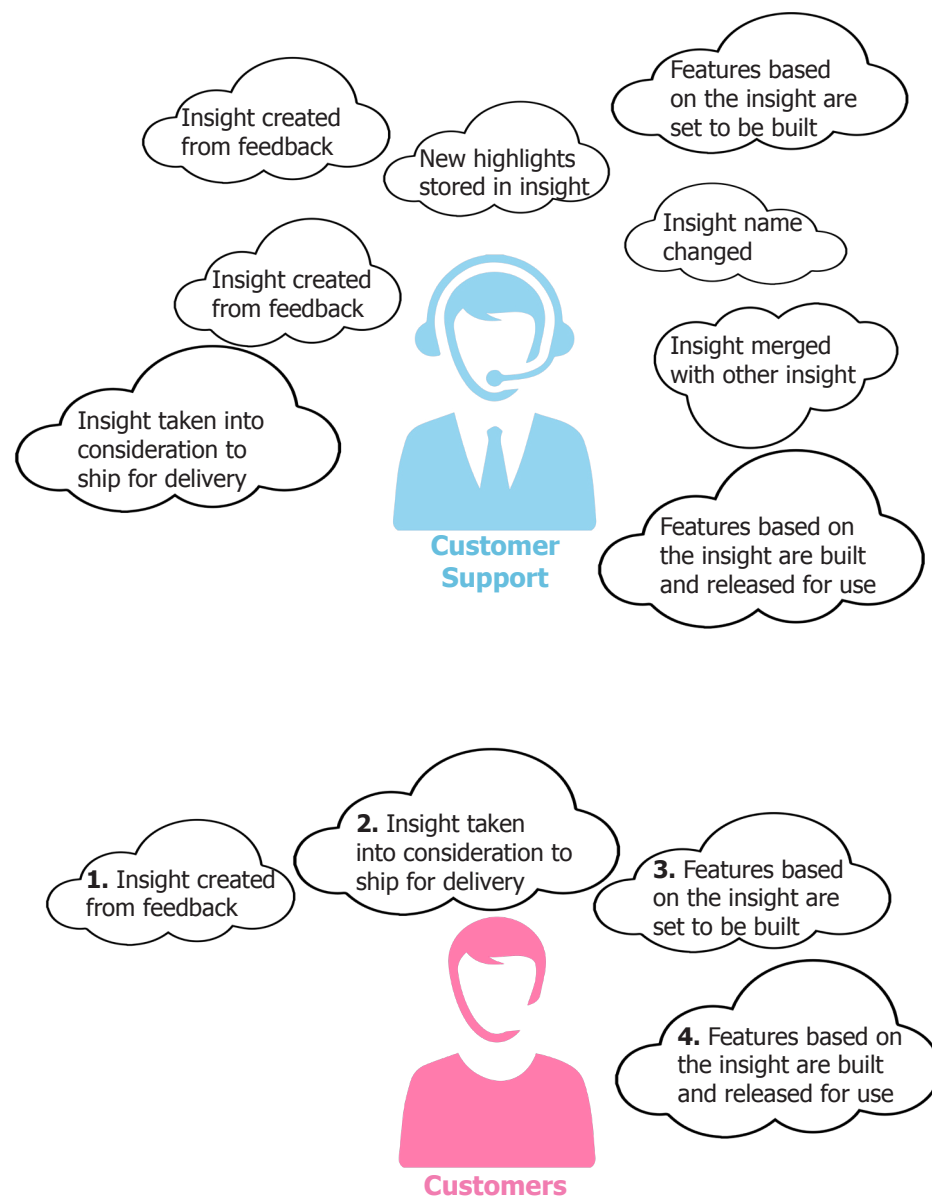
Figure 5.9: CS is assumed to be updated whenever something is done to feedback and insights derived from it (top). For customers, 4 different moments are assumed to be relevant (bottom).
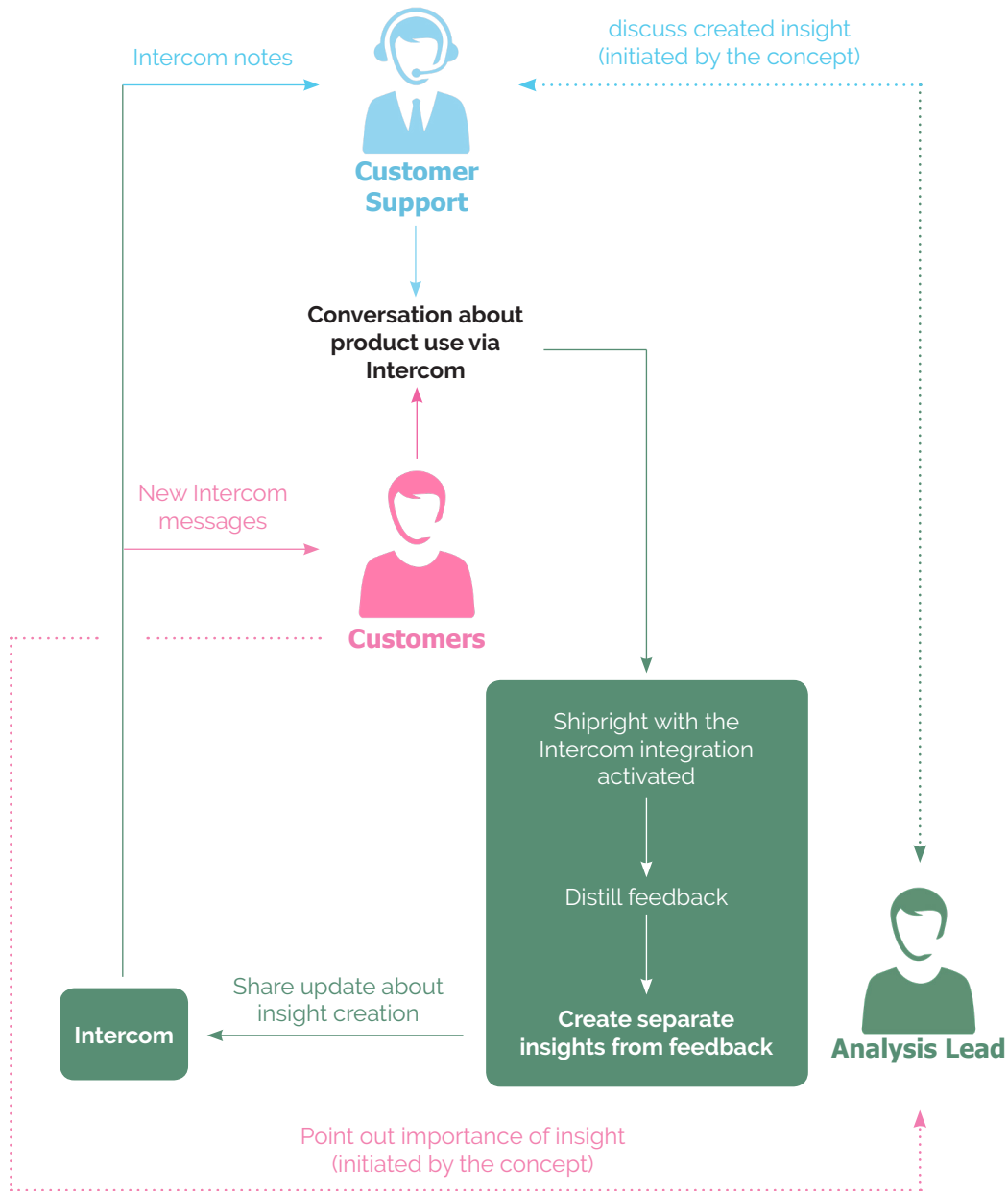
Figure 5.10: The analysis lead would send out updates about feedback analysis, to customers and CS staff, via Intercom.

Concept

For the scope of design described in 'Design Scope' in this chapter (p. xx) a concept is created. This concept uses Intercom as a channel to enable insight-updates to be shared with CS and customers.

The analysis lead would be enabled to assign different states to insights. These different states relate to four moments of updates, for both CS and customers (see figure 5.9 (on the previous page), 5.11 (on page 113) and 5.12 (on page 114)):

- **in storage**: when an insight is created from feedback (created insights would automatically be set as 'In storage' in the Insights' section);

- **under consideration**: when an insight is further enriched with a number of highlights from a number of customers and is taken into consideration (the number of highlights will be based on the total number of customers and will be different per company);

- **ready for delivery**: when a feature / function is set to be built based on the created insight;

- **completed**: when a feature / function based on the created insight is released for use.

Minimal attention is paid to insight updates concerning the last two states. The reason for this, is because they refer to how insights are to be translated into features to build. This is off the scope, as it would occur after insights are created from feedback (see 'Design Scope', 'What?' in this chapter). However they are still included, as new features based on insights is the ultimate goal for product improvement.

In further parts of this section, the concept will be described more thoroughly. Thereby it will be explained in its relevance with respect to earlier defined sub-challenges (and thus experiences) in 'Design Scope', 'How?' of this chapter (page 103). Table 5.1 on the next page gives a summary of the conceptualized solution for the sub-challenges.

Sub-challenges	Conceptualized solution
For analysis leaders	
Awareness of the involvement of CS and customers	Separate lists for colleagues and customers
Awareness of the difference of customers vs internal	- Separate lists for colleagues and customers - Names of colleagues are tagged with their respective departments
Awareness of the ability to reach out	- A pop up message which describes that added colleagues and customers to insights get updated when an insight status is changed - Marking colleagues as important to ask for an increased involvement
For CS	
To feel heard	The update shows that CS' work is taken for analysis
To feel involved in the analysis process	- The format of Intercom notes suggests that recipient CS can reply regarding unclarities/disagreements of created insights - CS marked as important are pushed to share their opinion
To understand feedback translation	- The updates appear in the analyzed conversation - The updates show what the created insight is; new updates follow up on all of the previous
For customers	
To feel heard	The update shows that their feedback is tracked, for analysis
To feel involved in the analysis process	The update shows that their feedback is tracked, for analysis
To understand feedback translation	- The updates show what the exact feedback is and when they gave the feedback - The updates show what the insight is, created from their feedback - Their second update shows the number of occurence of the given insight - New updates follow up on all of the previous

Table 5.1: A summary of the concept description, based on the predefined sub-challenges.

Although it was found that CS need to be updated about all activities in insights (see figure 5.9), earlier interviews still showed that continuous involvement of CS is not desired by PMs. Because of that, CS-staff and customers are given the same moments of insight-updates.
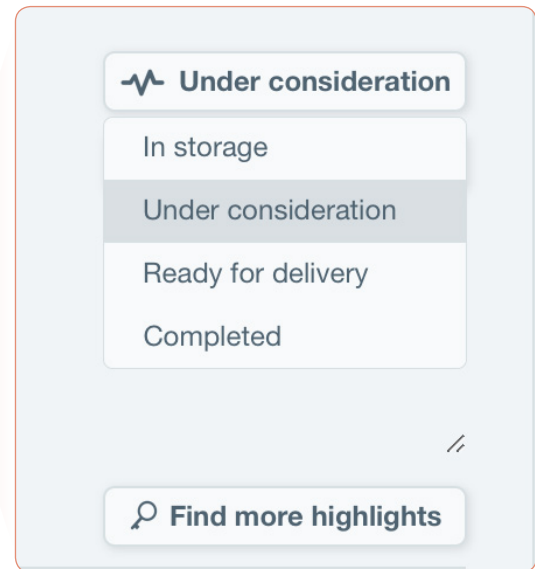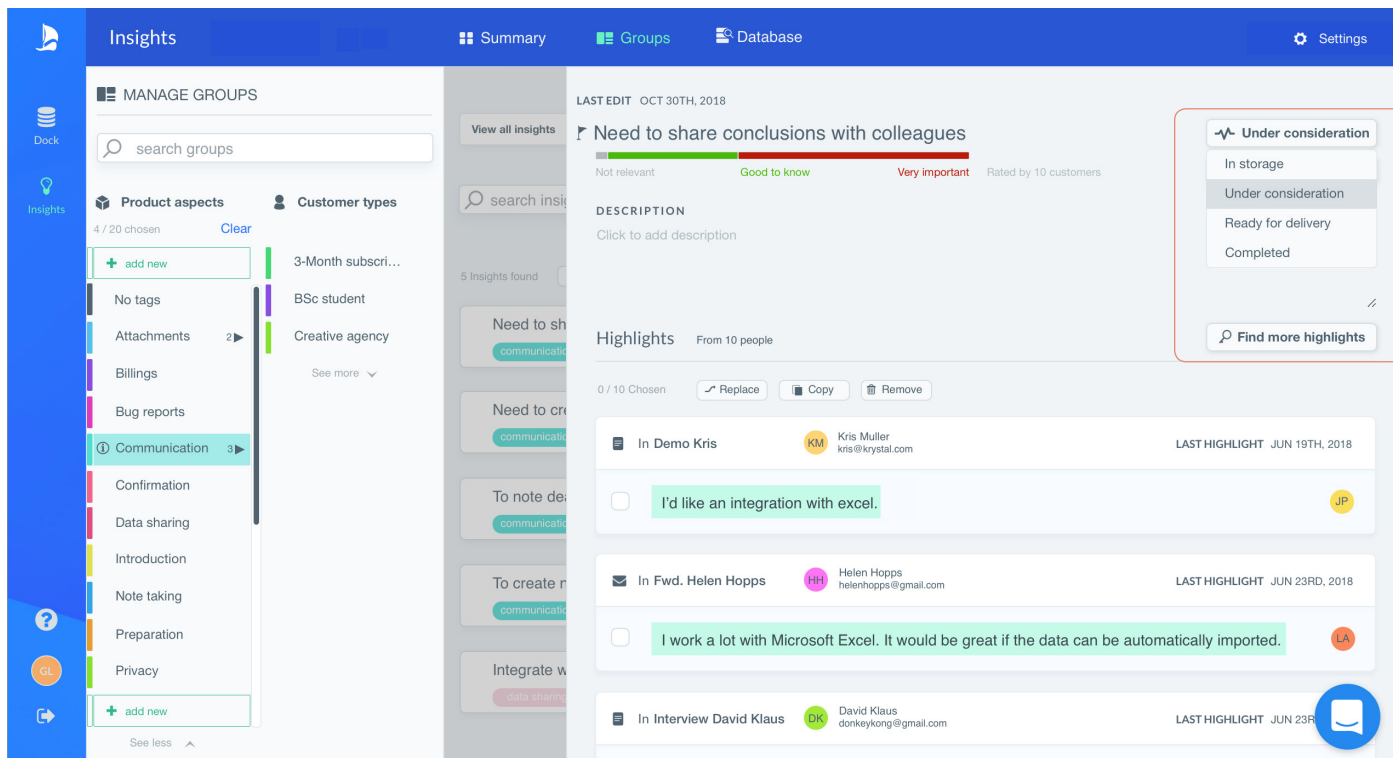
Figure 5.11: The analysis lead would then be enabled to change the insight status to 'Under consideration', 'Ready for delivery', or 'Completed', throughout the further steps of analysis.
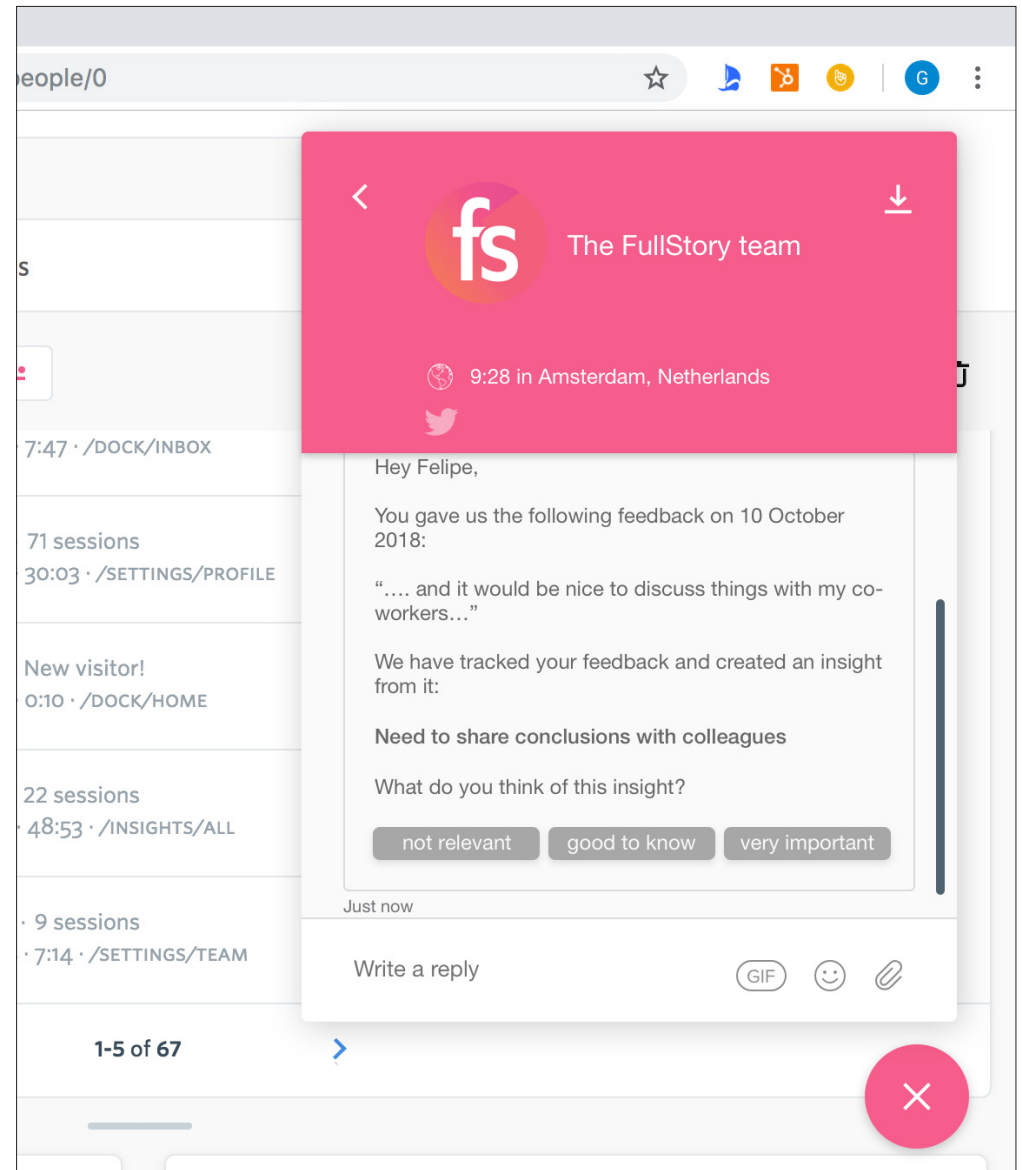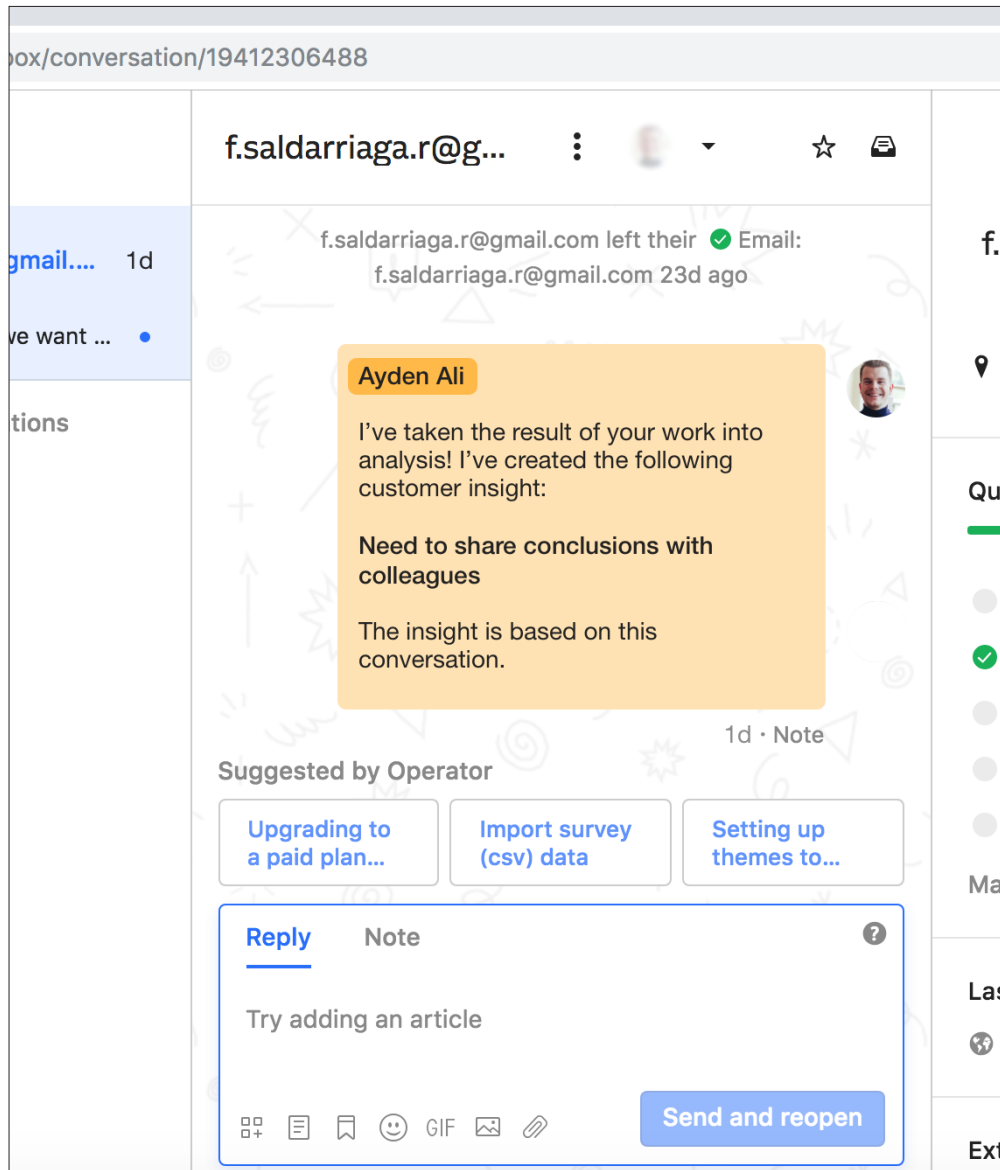
Figure 5.12: When a highlight is made, and an insight is created, the insight itself would be automatically set as 'In storage'. CS staff (left) and customers (right) who were added, would receive these updates.

For analysis leaders

To be aware of the involvement of CS and customers, in analysis
The awareness of the involvement of CS and customers is supported by including lists of added customers and colleagues. As shown in figure 5.13, the names of related CS staff and customers would be retrievable.

By clicking on a stored insight, in the Insights section, you can view its details. This is kept from the original design (see figure 2.10 in *Exploration* on page 41). Figure 5.14 on the next page shows how these names are listed in insight details.

To be aware of the difference between CS teams and customers
Both lists are separated from each other. Also, names of colleagues are accompanied by the internal department they are from (see figure 5.14). With this, analysis leaders are expected to be able to distinguish customers from CS staff (colleagues).

To be aware of the ability to reach out to CS and customers
Whenever the insight status is changed, added colleagues (CS) and customers would be automatically updated via Intercom. Firstly, a pop-up message would appear when an insight is changed in status. This message would show that added customers and colleagues will be updated about changes in insight status (see figure 5.15 on the next page).

Besides that, analysis leaders are enabled to mark colleagues as important and facilitate deeper engagement for them (see figure 5.16 on page 117 and figure 5.17 on page 118). With this concept CS-staff would receive the same updates as customers, despite that the contrary was found (see *Internal Feedback on Ideas* figure 5.9). The reason for that, is because it was still identified in earlier interviews that continuous engagement of CS was not desired by PMs. Though, in some cases, it would be necessary to provide more engagement of certain CS-staff regarding to specific feedback, in order to learn about their view on it (see Appendix XX). The function of marking colleagues as important and providing them with increased engagement, is a solution to this.

Customer Support

Conversation about product use via Intercom

Customers

Imported to Shipright:
- conversation
- name of Customer Support agent
- name of Customer

Shipright with the Intercom integration activated

Distill feedback

Make highlights from feedback

Analysis Lead

Retrievable from insights:
- conversation
- highlighted feedback
- name of Customer Support agent
- name of Customer

Create separate insights from feedback

Figure 5.13: Customers and CS agents who would have had a conversation with each other, would be automatically added to an insight.

The awareness of the involvement of CS and customers is supported by including lists of automatically added customers and colleagues.

By separating both, the distinction between them can be recognized.

Next to each colleague, it is to be seen what department he / she is from. This is meant to further clarify the difference between customers' and colleagues' list.

This message pops up whenever an insight's status is changed. By so, analysis leaders are meant to be aware of their ability to reach out to customers and colleagues added to the insight.

Figure 5.15: A pop-up message would appear when an insight is changed in status.
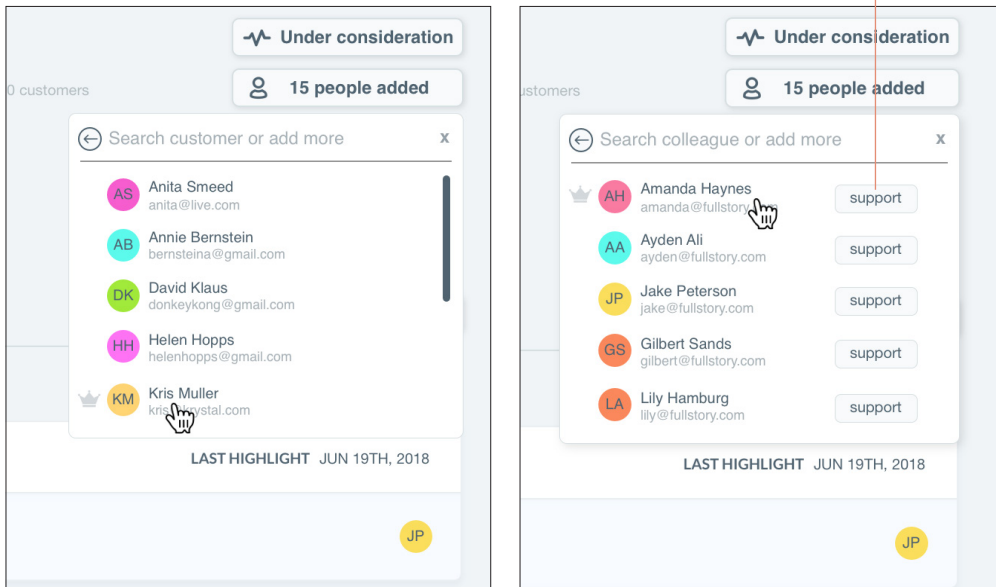
Figure 5.14: The names of customers and colleagues who are related to an insight, can be found in the insight's details.

The 'crown' next to a colleague shows that he/she was marked as important.

Leading staff of CS (Managers or Head of, for instance) might not be automatically added, but can still be added using the search function.

In some cases, specific CS agents may need to be involved more into analysis, when a certain insight needs further investigation.

Also, leading staff of CS may have to be involved more than regular CS agents in analysis. As they would preselect feedback data for analysis (see figure 1.3 and table 2.3), they can represent CS' view on feedback during moments of decision-making.

Important colleagues get to see more updates than customers (for instance, when an insight is enriched with more highlights or when its name is changed).

Figure 5.16: Analysis leaders could mark added CS staff as important. They would get to see more updates than customers.

Figure 5.17: Updates of an insight put 'In storage' (top) and 'Under consideration' (bottom). The updates show that the conversation they (CS staff) had with customers are analyzed. Recipients can reply to these notes by sending in other notes; notes will not be visible for customers.

For CS staff

To feel heard and involved in the analysis process
See figure 5.17 for the exact updates for CS staff. Primarily, it is intended to show them that their interaction with customers is valuable.

Also, the format of Intercom notes is intended to convey the possibility for all recipient CS-colleagues to reply to it, if they feel necessary (also see figure 5.18 on the next page). This is meant to evoke engagement in the analysis process. In that case, the analysis lead would get notified about this; as assumed earlier, analysis leaders would have access to their company's Intercom environment and could get notified about incoming messages or notes in chat conversations (see *Design Scope*, *How?* at page 101 - 103).

Furthermore, CS staff who are marked as important would get an update that would ask them about their opinion on the insight (see figure 5.16 and 5.18). This is expected to let them be and feel even more engaged into the analysis process.

To understand the translation of feedback into insights
Each new update would follow up on the previous, in the same chat conversation in Intercom. Therefore, recipients could retrieve earlier updates in order to gain context about each new update. Besides that, the updates would appear as notes (in Intercom) in the Intercom conversation that would have been analyzed (in Shipright) and would show what the created insight would be. With that, the recipients would be shown that the created insight is based on that respective conversation.

Moreover, when insights are put 'Under consideration', recipients would get notified about the number of other customers who mentioned things related to the created insight (see 'Internal Feedback on Ideas' why this is relevant).
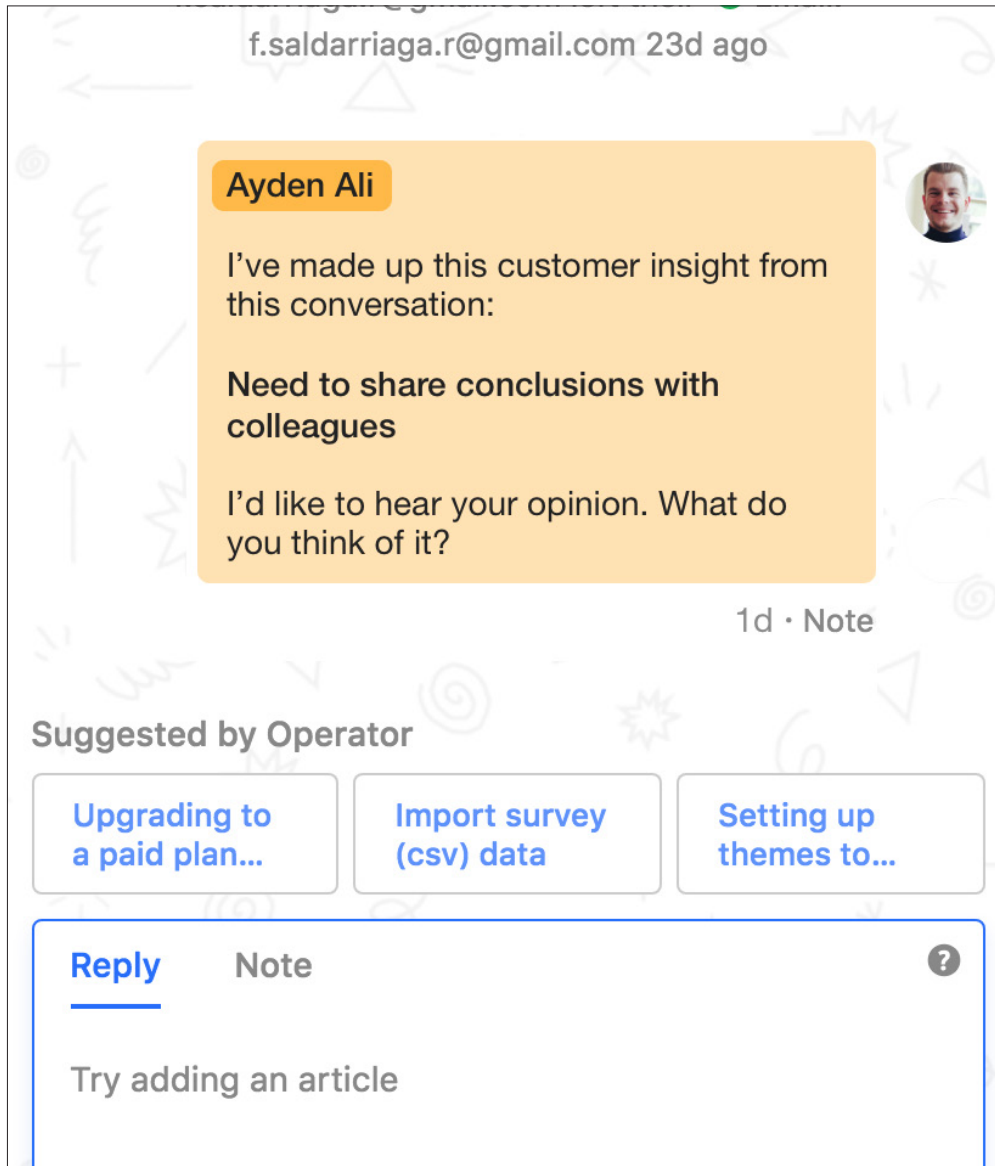
Figure 5.18: CS staff who are marked as important would be pushed into sharing their opinion about the created insight. This was intended to increase their experience of engagement in the analysis process.
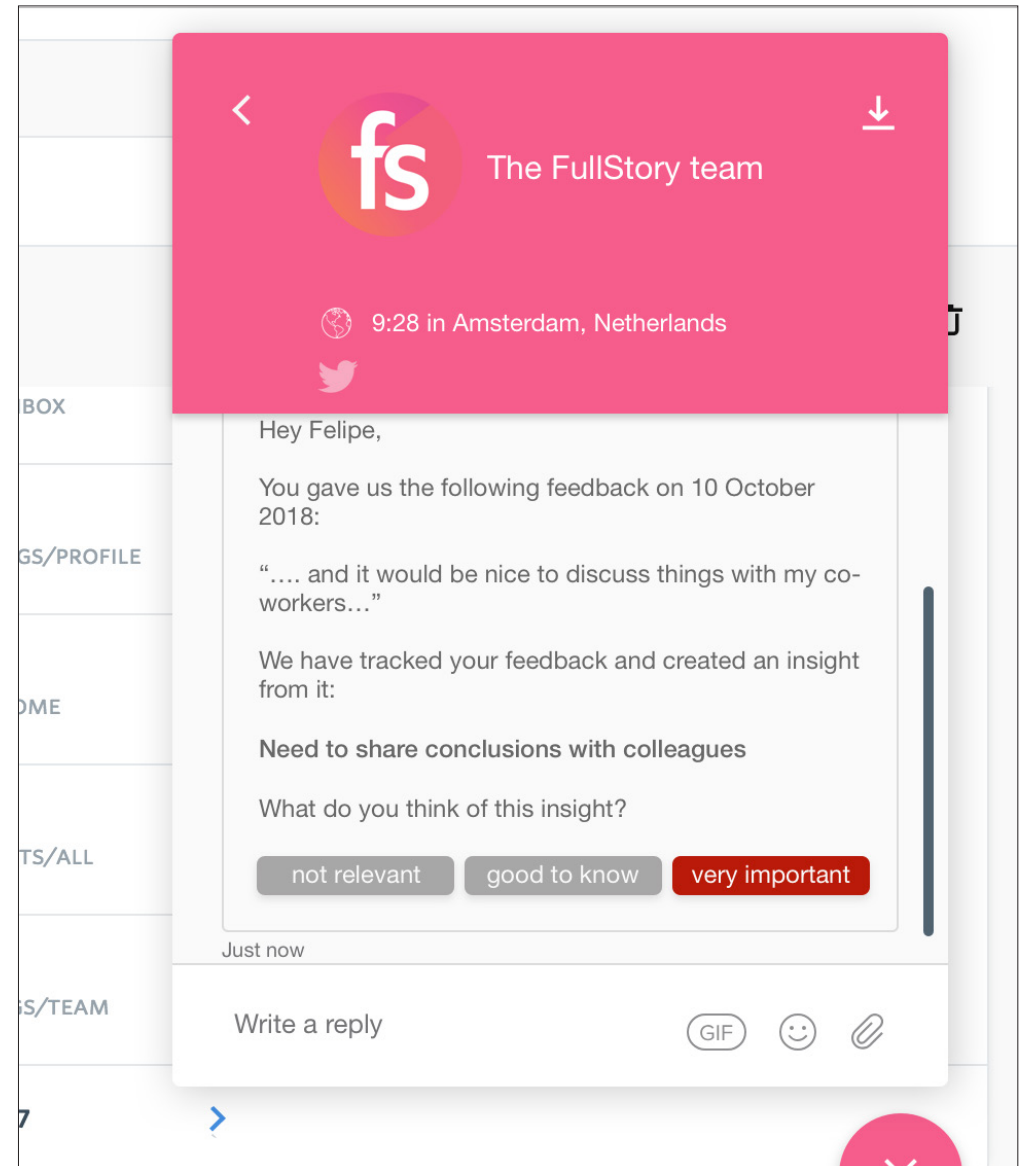
Figure 5.19: Customer update when an insight is just created and put 'in storage'.
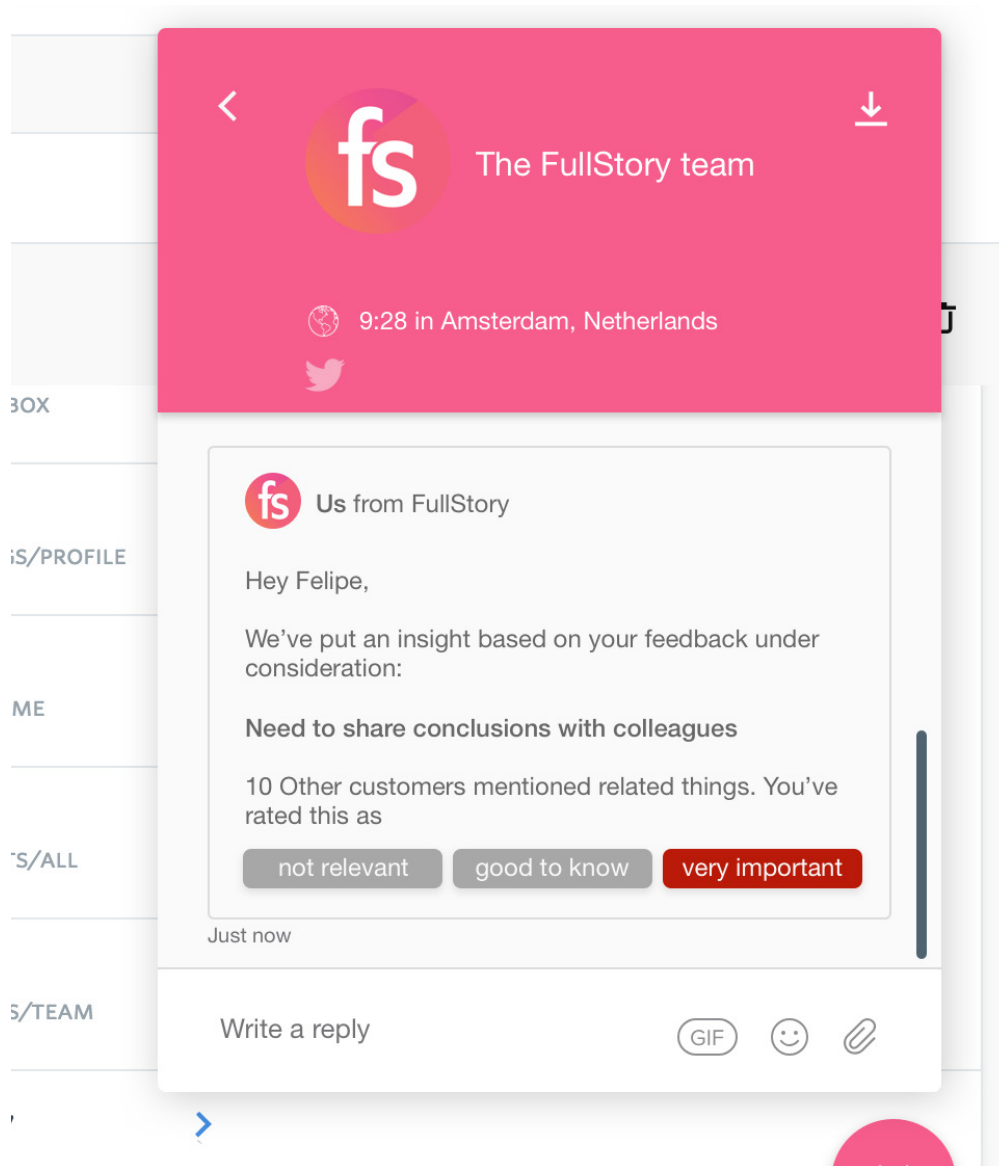
Figure 5.20: Customer update when an insight is put 'under consideration'. As the updates would follow up on each other, newer updates could be traced back to the first update, in which the customer's feedback was mentioned.

For customers

To feel heard and involved in the analysis process
To support these, the first update would show customers that their feedback was tracked and taken for analysis (see figure 5.19 on the previous page). The created insight would be related back to this feedback and would also be mentioned in the second update.

To understand the translation of feedback into insights
The first update would show what the feedback from the recipient (= customer) is, and when it was given. This is accompanied with mentioning the exact insight that is created based on that feedback. With this, customers are expected to understand that the insight is based on the feedback that they have given.

Similar to the case of CS staff, each new update would follow up on the previous. Therefore, customers could retrieve earlier updates in order to gain context about each new update. Their second update would also include the number of other customers who mentioned related things to the insight. This is meant to give them an extent of an understanding why the insight was taken in analysis.

User Test

The concept is then tested with external parties on its relevance. This revolves around the previously specified experiences of connection, significance, engagement and comprehension. *Design Scope*, figure 5.1 (page 102) showed the sub-challenges derived from these experiences, for each of the related stakeholders. The user test includes tests with representatives of each one of these stakeholders.

These tests are done remotely by the use of Lookback (see *User Test* in chapter 3 on page 76 and figure 5.22 on the next page). For this test, although, an adjustment in approach and recruitment are applied. These will be described in this sub-chapter.

Approach
See figure 5.21 for the setup. As mentioned in *Concept* (see page 111) regarding to the updates about created insights, the focus is put on the first two updates when insights would be set as 'In storage' and 'Under consideration'. Minimal attention is paid to the updates regarding insights set as 'Ready for delivery' and 'Completed', as these fell outside of the design scope. Although, it is decided to still present these additional moments of updates, briefly, during the user test. That is because this is expected to provide more of the overall knowledge with regards to the broader context: updating customers and CS about product improvement (not just feedback analysis).

Each session lasts around 20 minutes. Participants are first presented about Shipright's overall context of use and the concepts' scope of design. Then, they would follow specified list of tasks. Each stakeholder representatives are given different scenarios and lists of tasks. These are shown in Appendix XXV. At the end of the test they would answer a set of questions. These are rating questions used to determine the extent the sub-challenges, thus specified experiences, are supported by the concept. Hereby, they are encouraged to explain each one of their answers. The session is wrapped up with an additional interview to gain more detailed answers about participants' experiences with the concept.

Recruitment
To recruit participants, certain Slack users are approached by the means of sending out direct messages (DMs). To increase the success rate of recruitment, only members of certain sub-communities for feedback collection are approached.

These Slack users are picked from specified Slack communities, in which the
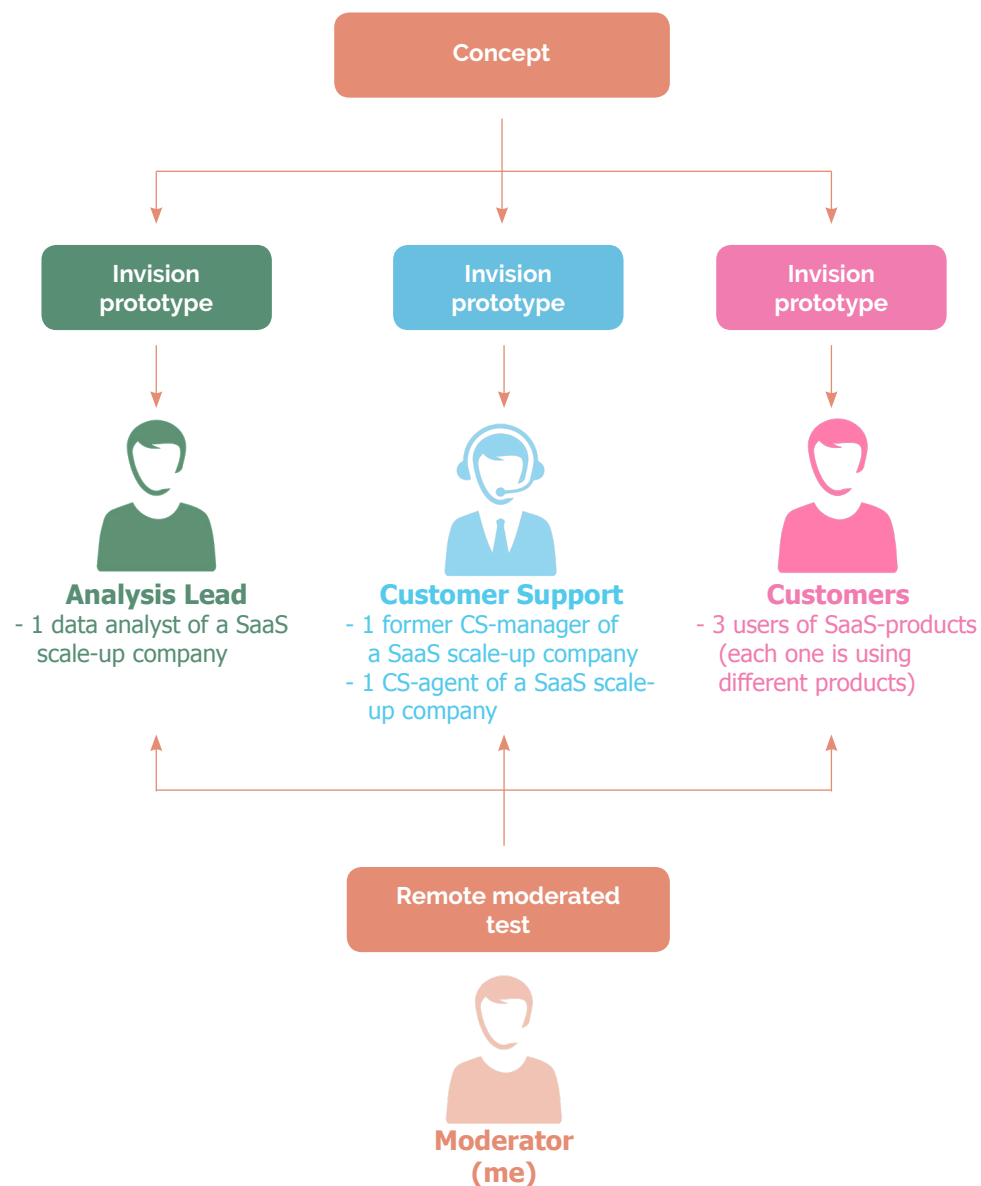
Figure 5.21: The setup of the user test

following stakeholders are part of:
- POs / PMs / UX-researchers of SaaS SMB's and Mid-Market Businesses
- (Head of) CS of SaaS SMB's and Mid-Market Businesses

Representatives of the third stakeholder, active SaaS customers, are not affiliated with SaaS companies and feedback analysis. This requirement itself is set to prevent biased opinions on what customers would like to see as updates; familiarity with the context of issue would lead participants to judge the updates from the perspective of SaaS companies, instead of the customers' perspectives.

Figure 5.22: The concept was tested with representatives of analysis leaders, CS staff and SaaS customers. This revolved around the experiences of connection, significance, engagement and comprehension. The tests were done remotely by the use of Lookback.

Insights from User Test

The results of the test are visible in Appendix XXVI. In this sub-chapter, the concluded insights from the tests will be described. The explanation will be based on each of the predefined sub-challenges. A summary of these insights are to be viewed in table 5.2 on this page.

Sub-challenges	Insight
For analysis leaders	
Awareness of the involvement of CS and customers	It had to be made clearer, that support staff and customers would get updated, right after insight creation
Awareness of the difference of customers vs internal	This difference is clearly shown
Awareness of the ability to reach out	- The need to engage customers in analysis and provide certain people of CS with an increased engagement, are verified - It is not clear that all added CS (not just those marked as important) could verify insights given by updates - It is not clear that the analysis lead would be the one who update customers about created insights - The insight status should be made more recognizable
For CS	
To feel heard	- The need is satisfied, but should be extended: - Besides verifying insights, CS should be able to propose ideas for features to be built too
To feel involved in the analysis process	CS staff should be able to ask for more engagement, in case they would need more information about analysis to communicate directly to customers
To understand feedback translation	This need is satisfied
For customers	

To feel heard	- The need is satisfied, but more involvement is still desired:
	    - Customers should verify a created insight based on their feedback
	    - Customers should propose features to be built
	    - Customers should keep track with completion of features

To feel involved in the analysis process	Same as in 'To feel heard'
To understand feedback translation	It is desired to be informed about features that will be built and why these features are chosen

Table 5.2: Collected insights summarized per sub-challenges.

Analysis lead
To be aware of the involvement of CS and customers, in analysis
The sub-menus showing the added customers and colleagues of CS are clear in showing the involvement of both. Although, it had to be made clearer, that support staff and customers would get updated, right after insight creation. At that point, the concept did not show any notifications of this update occurring.

To be aware of the difference between CS teams and customers
This difference is clearly shown as each is grouped separately, with the respective groups named 'colleagues' and 'customers'. Furthermore, it is clear that colleagues are of the CS department, as this is shown next to each name of these colleagues.

To be aware of the ability to reach out to CS and customers
The need to engage customers in analysis and provide certain people of CS with an increased engagement, are verified. The latter seems to be a familiar practice, but the concept appears like it only enables important colleagues, to verify created insight from customer feedback. As described in 'Concept', 'For CS staff' on page xx, all added colleagues are able to do so.

Furthermore, the concept is not clear in showing that the analysis lead could update customers about created insights. As it is common for CS to inform customers about such information, the same was assumed for the concept.

On top of that, the insight status should be made more recognizable. This is a relevant finding, as changing the status enables the analysis lead to send out updates to CS staff and customers. Of course, he/she should find the insight status first, before changing it.

Customer Support
To feel heard
The need of CS to feel heard is satisfied. This becomes apparent by the positive ratings on contribution to analysis (7/7 and 5/7). But, it was desired to propose ideas on new features to build as well. It also is important to see how these ideas would be taken throughout the analysis.

To feel involved in the analysis process
It is clear that support staff are enabled to reply to incoming updates. However,

it is found that CS staff should be able to ask for more engagement, in case they would need more information about analysis to communicate directly to customers. Hereby, it is important that the analysis lead would be made aware when the CS staff requested an increased engagement.

To understand the translation of feedback into insights
It is clear that the entire conversation could be reviewed, in order to check the created insight and provide feedback on it.

Customers
To feel heard and involved in the analysis process
This need is satisfied, but more extent of engagement is desired by customers. Customers should verify a created insight based on their feedback, and propose features to be built. Also, they would like to keep track with the completion of features, when decided to be built.

To understand the translation of feedback into insights
It is clear that the given insights are created based on earlier feedback. However, it is desired to be informed as well, what features will be built and why they are chosen, to satisfy certain insights.

Discussion
Certain points may have had influenced the results of the user tests. Firstly, only 1 representative for analysis lead, 1 for CS (and another one of whom the results still is to be analyzed) and 3 for customers, were tested with. These numbers are quite on the lower side and are to be considered in determining the significance of the findings. On top of that, the CS stakeholder was only represented by CS agents; none of the recruited participants were of leading functions in CS

Secondly, participants were explained about the context, while they went through the prototype. This was done to save as much time as possible. But, this might have caused the experiences to be rated more positive than they should have been. The reason for that is because they received a lot of clarification from me; from my previous experiences in user testing I was aware that unclarities can be of a significant influence on user experience.

Another point concerns the experience of comprehension, for CS staff and

customers to understand feedback translation into insights. This might had been highly influenced by the content of both the specific insights and highlighted feedback included in the update of the prototype. It only showed one example of a highlighted feedback, that was literally translated into an insight. In other possible cases where the feedback would not be translated as literally into insights, it is still arguable whether a comparable extent of comprehension would be experienced.

Moreover, each update was presented one after the other on separate screens, in this test. Because of that, it might not be completely clear that the updates would follow up on each other. The intention is for all updates to follow up on the previous updates of the same insight, so these previous ones could be retrieved to gain more context about a newly incoming update.

Conclusion

In summary, the third design challenge of issue is narrowed down to the following problem: **How to update CS teams and SaaS customers about the translation of Intercom feedback data into separate customer insights?** Hereby, the relevant stakeholders includes analysis leaders (PMs / POs / UX-researchers), CS staff (leading functions and agents), and SaaS customers.

To tackle this problem, the following experiences are specified to design for:

- **Connection** between the analysis lead, and both customers and CS staff.
- **Significance**; that the work that the CS staff have done and the feedback customers would have given, are both important for feedback analysis.
- **Engagement** of CS staff and customers in the analysis process.
- **Comprehension** of the translation of feedback into insights, that updates would contain.

A concept is eventually created to realize these experiences among the targeted users. It enables the analysis lead to assign different states to insights, which CS and customers would be updated about:

- **In storage**: when an insight is created from feedback (created insights would automatically be set as 'In storage' in the Insights' section);

- **Under consideration**: when an insight is further enriched with a number of highlights from a number of customers and is taken into consideration (the number of highlights will be based on the total number of customers and will be different per company);

- **Ready for delivery**: when a feature / function is set to be built based on the created insight;

- **Completed**: when a feature / function based on the created insight is released for use.

Then, a prototype is created for this concept, and tested with a sample of the related stakeholders. Insights concluded from the results are shown in table 5.2. Reflecting back on the concept, however, several things are concluded too, next to these insights.

Firstly, I believe that the names of customers and colleagues should have been placed together with the stored highlights. The reason for this thought is to make it clearer that the stored highlights are originated from the interaction between the added colleagues and customers, thus better conveying their contribution.

Secondly, I realized that none of the updates for CS shows the exact highlighted feedback, that is translated to insights. Instead, CS recipients are only shown that the insight is based on the entire chat conversation the update would appear in. Supposed they would like to verify this, they would have had to go through the entire conversation to find the exact feedback that was translated to the given insight.

Lastly, **I concluded that translations of insights into features, have to be completely left out off the scope of this design challenge.** Once insights are verified in their translation from feedback, features based on those insights should be ideated about. Customers and CS should then be involved in the ideation too and their input needs to be taken to decide on a final feature to build. These things create a large gap for further research, between the moment of insight verification (to focus on) and feature verification (to be built). While both eventually are necessary to be designed for, the latter stands too far apart from the former that it does not fit in the design scope of this challenge.

6. Proposed Concept

This part of the report will describe the proposed concept to improve Shipright as a user research tool for SaaS SMBs and Mid-Market Businesses. The proposed concept is based on all insights gathered from the processes that are gone through, in tackeling the design challenges. As described in the previous parts of this report these challenges are:

- **How can product teams be supported in the analysis of raw data, so that they can identify patterns and draw conclusions from user feed back, as much as possible, during (short) discovery sprints?**

- **How can PM's / PO's / UX-researchers be enabled to store qualitative, customer data in a structured way, using a digital product discovery platform?**

- **How can customer facing teams and customers be made more involved in the product development process?**

How Can Product Teams Be Supported in the Analysis of Raw Data, So That They Can Identify Patterns and Draw Conclusions from User Feedback, as Much as Possible, During (Short) Discovery Sprints?

As described in chapter 3 the scope was narrowed down to the following problem:
How to guide users towards the use of filters, to distill feedback out of integrated live-chat-support data?

The targeted users are PM's / PO's / UX-researchers and CS-staff who work with live-chat data to analyze user feedback. These types of consumers would not be familiar with the use of Shipright yet and would have just started using it for the first time, as trial customers.

To tackle this problem, the following experiences are decided to design for:

- Guidance
        - To guide users towards the use of filters

- Certainty
        - To get users to feel closer towards the relevant information
        - To enable users to recognize the presence of relevant information

The first part of the proposed concept will be described based on these sub-challenges in the following pages. Table 6.1 shows a summary of all conceptualized solutions and figures 6.1 and 6.2, on the next two pages, the visuals of the proposed concept. These solutions include improvements concluded from the user test insights described in 'Insights from User Test' of chapter 3.

Sub-challenges	Conceptualized solution
To guide users towards the use of filters	- Subsets of filters would appear in the new Home screen of the Dock section - A reference, for each subset, to the bigger whole of all newly incoming documents - Each suggestion (in 'Potential feature requests' and 'Customers with most feedback') are shown alongside a search icon
To enable users to recognize presence of relevant information	- 'Potential feature requests' - and 'Customers with most feedback' -subsets - Suggestions of customers in 'Customers with most feedback' to filter with - Suggestions of feature-request topics in 'Potential feature requests' to filter with
To get users to feel closer towards the relevant information	- 'Potential feature requests' - and 'Customers with most feedback' -subsets - The screen lay-out follows the Z-rule, with 'New documents' given the most prominence, followed with 'Potential feature requests' and 'Customers with most feedback'

Table 6.1: Summary of the conceptualized solution per sub-challenge. The ones shown in grey are those kept from the previous version of the concept (see *Concept* in chapter 3).

A filter-subset for new incoming documents from the previous month. New documents are related with documents that are imported in earlier months. With this, the function of filtering to only those from the previous months is presented better.

A filter-subset for documents with, possibly, feature requests from customers. By showing potential topics of feature requests, users are meant to recognize the presence of relevant data in all that is collected.

Three suggestions of customers to filter documents with. As concluded in chapter 3, this subset is relevant to let users recognize the presence of relecant data and feel closer towards them.

The option for users to compose a custom set of filters. This is left out of the design scope but was concluded to be a relevant feature for the proposed concept. Further research is recommended for this feature.

Figure 6.1: The subsets that are part of the proposed concept for the new Home screen of the Dock section. This screen is the first users get to, when opening Shipright.

'New documents' still should be viewed first, as users are meant to understand that all subsets are originated from this.

'New documents' is made bigger than the rest, with all the other subsets smaller and equal (to each other) in size.

Dock

Dock
Insights

🏠 Home

⬇ New   139
📭 Inbox
🗄 Archive

139 New documents came in the past month!

You can view these documents in the Inbox.

VIEW DOCUMENTS

139 documents

13 Are potentially feature requests!

Share
Conclusions
Colleagues

FILTER WITH ALL

These people gave the most feedback

Bob Brown
Ana Allin
Roberto Maraldi

FILTER WITH ALL

Create your own subset of filters

Set up a specifc subset of filters, based on your own needs. Select from all filters that are available in Shipright.

START CREATING

Let us know!
Let us know what other cards you would like to see.

A reference, for each subset, to the bigger whole. With that, it is expected from users to understand that each subset would create a selection of documents, out of a bigger set. This bigger set include newly incoming documents from the previous month.

Each suggestion is shown alongside a search icon (= magnifying glass). This is an element that is used for search functions in other SaaS products. Therefore it is assumed to be a clear reference to filters, so users can feel guided towards the use of filters.

Figure 6.2: Design elements that are meant to help users to be guided towards the use of filters and recognize the presence of relevant information. The subsets are placed according to the Z-rule.

To guide users towards the use of filters
The conclusionof chapter 3 (page 78) showed that the concept failed to evoke guidance. It was found that familiar references to filters should be included in the subsets.

Based on these insights, the proposed concept includes a reference, for each subset, to the bigger whole. With that, it is expected from users to understand that each subset would create a selection of documents, out of a bigger set of collected data (for instance, to filter towards potential feature requests with the topic of 'conclusions', out of all documents that came in the previous month).

Moreover, each suggestion ('Potential feature requests' and 'Customer with most feedback') is shown alongside a search icon (= magnifying glass). This is an element that is assumed to be a clear reference to filters. It would appear in most SaaS products to convey the function to 'search towards something' (for instance, the search function in Microsoft Words, Gmail, and Google).

To enable users to recognize presence of relevant information
The solution for this was conveyed, in the previous version of the concept, by the 'Potential feature requests' - and 'Customers with most feedback' -subsets. Both of these subsets were named literally after the results each would provide, when activated. However, the conclusion in chapter 3, showed that the relation of each subset with all collected data should be clearly communicated. Furthermore, it was found from the results that suggesting feature-request topics to filter with, would have added value to the subset.

Based on these insights the proposed concept includes a reference for each subset to the bigger whole, as described in the previous part of this section (also see figure 6.2). Additionally, topics of potential feature requests are given. These topics are placed alongside the described search icons, to clarify that users can use them to look for for documents with content related to the respective suggestions.

To get users to feel closer towards the relevant information
As described in chapter 3, the filters towards potential feature requests and customers based on conversation volume were perceived as relevant. Therefore, it was concluded that both would make users feel closer towards relevant information they would had been after.

Especially, feature requests were verified to be important in product discovery (see *Concept* in chapter 3). This subset is given more prominence than 'Customers with most feedback' by placing it right next to 'New documents'.

This location is based on the Z-rule as also mentioned in chapter 3. 'Potential feature request' is the most important subset, but 'New documents' still should be viewed first, as users are meant to understand that all subsets are originated from this. Following the Z-rule, 'New documents' is placed on the top left, following with 'potential feature requests' on the top right.

Also, following the Z-rule, 'Customers with most feedback' was placed on the bottom left, as it is less important than 'Potential feature requests'. Along the horizontal path towards the bottom right of the screen, the minor elements of the Home screen are placed. This is visualized in figure 6.2.

How Can PMs / POs / UX-Researchers Be Enabled to Store Qualitative, Customer Data in a Structured Way, Using Shipright?

The second part of the proposed concept entails a redesigned workflow for insight creation in the Dock section and a redesigned lay-out for the 'All insights' -view in the Insights section. This concept would enable analysis leaders to tag insights with Customer-Type and Product-Aspect groups, in order to categorize them later in analysis. This is part of the insight creation (see figure 2.8 on page 39 and Appendix III, for the insight creation of the original design).

In the Insights section, analysis leaders would be able to view all created groups of both Customer Type and Product Aspects, and all created insights. The insights would already be categorized per group, with the groups meant to organize insights towards a hierarchical structure.

As concluded in chapter 4 (see page 99), the experiences of **certainty, freedom, and guidance** are to be designed for the proposed concept. This lead to the following sub-challenges:

- To be aware of the existence of categorization means, in insight creation
- To be guided towards labeling insights, in insight creation
- To be free to choose groups to label insights with, in insight creation
- To have an overview of stored data, in the Insights section
- To feel enabled to structure data, in the Insights section

Of course, this affected the list of design criteria the concept needed to adhere to. The adjusted set of criteria are to be viewed in Appendix XIX.

In this section, the proposed concept will be further described. Table 6.2 shows an overview of the conceptualized solution per sub-challenge. After that, this part of the proposed concept will be further described.

To be aware of the existence of categorization means, in insight creation
See figures 6.3 - 6.6 on page 135 - 139. To tackle this sub-challenge Product Aspects and Customer Types are presented next to each other during insight creation (also in the Insights section). Users are still able to add Customer Types to an entire document, but these added types would be shown again in insight creation (from the same document). By doing so, both steps of labeling with customer types and product aspects are expected to be perceived as equally related to the created insight, thus as less separated from each other.

Though, users still have to be aware that customer-type and product-aspect groups are different. This is shown by applying slightly different shapes for each type of labels (see figure 6.3a).

To be guided towards labeling insights, in insight creation
After adding a Customer Name to a document, a pulsing notification mark leads users to tag it with a customer-type group. It helps users to navigate towards the 'add' -button for the tag. The steps to be taken are shown by figure 6.4. Similar to the previous version of the concept, the tag will be automatically applied to insights created from that document.

Also, when the insight creation box is opened (after making a highlight), 'add' -buttons for further tagging are immediately shown (see figure 6.3a and b). As described above, automatically added Customer Types will be shown too. This, however, is editable as it will be explained later in this section.

Additionally, users can search a group to tag insights with. If no results are given, they are shown the option to create a new group. The related steps are shown in figure 6.5. Users are being led to search throughout the predefined ones first, before creating new groups.

Sub-challenges	Conceptualized solution
To be aware of the existence of categorization means, in insight creation	- Customer Types can be assigned to an entire document, before insight creation - Product Aspects and Customer Types are presented next to each other during insight creation (also in the Insights section) - Both are shown as labels, having slightly different shapes from each other
To be guided towards labeling insights, in insight creation	- A pulsing notification mark leads users to tag documents with a customer-type group; the same tag is shown, and to be edited, per insight in insight creation - 'Add' -buttons for Customer Types and Product Aspects are immediately shown at the start of insight creation - Users can search a group to tag insights with; if no results are given, they are shown the option to create a new group
To be free to choose groups to label insights with, in insight creation	- Automatic tagging of Customer Type to insights can be edited in insight creation (tagging it to documents is still to be done manually) - Pre-created groups can be selected from
To have an overview of stored data, in the Insights section	- Product-aspect and customer-type groups are both listed on the left - Each list can be minimized when not used
To feel enabled to structure data, in the Insights section	- Hierarchy creation is applied for Product Aspects and Customer Types - Identified usability issues are fixed (see *Insights from User Test* of chapter 4 and figures 6.7 and 6.8 in this chapter)

Table 6.2: Summary of the conceptualized solution per sub-challenge. The ones shown in grey are those kept from the previous version of the concept (see *Concept* in chapter 4).

The proposed concept would present both categories, of Customer Type and Product Aspect, next to each other during insight creation. This is meant to make the proposed workflow compact, preventing users from feeling overwhelmed while noticing the existence of categorization means (= tagging insigts with Customer Type and Product Aspect).

Product-aspect tags are given slightly different shape from customer-type tags

Focus mode   Archive document

About: BB Bob Brown   Added by SA
            bob@photos.io   Add customer

✉ March 15, 2018

Fwd. from Bob Brown

Just wanted to send you a short email to tell you I really like your product and appreciate the way you're improving things. Though, I would still like to be able to share conclusions with my colleagues.

All the best,

Bob Brown
Email: bob@photos.io
Twitter: @bobby

Need to share conclusions with colleagues   x
                    Tag with groups
⊕ product aspect   ⊕ customer type
✓ Product manager   See more ⌄
                                        Save insight ⏎

See more ⌄

Focus mode   Archive document

About: BB Bob Brown   Added by SA
            bob@photos.io   Add customer

✉ March 15, 2018

Fwd. from Bob Brown

Just wanted to send you a short email to tell you I really like your product and appreciate the way you're improving things. Though, I would still like to be able to share conclusions with my colleagues.

All the best,

Bob Brown
Email: bob@photos.io
Twitter: @bobby

Need to share conclusions with colleagues   x
                    Or tag it with groups
⊕ product aspect   ⊕ customer type
● Attachments 2▶   ● Billings
● Bug reports   ● Collaboration 2▶
● Confirmation   ● Introduction
● Note taking   ● Preparation
● Privacy   ● Reflection   ● Remarks
● Review   ● Scheduling 2▶

● 3-Month subscription ● BSc student
● Creative agency   ● Group work
● Individual work

☐ No tags
                                        Save insight ⏎

Users are given freedom to choose groups to label insights with. They can select the groups thay they feel relevant, out of this list.

By clicking 'see more' the list of all created labels would be shown. The relevant ones could be selected to add to the insight.

Product-aspect tags are slightly separated from customer-type tags, with an increased spacing in between both groups of tags.

Figure 6.3a: The different steps of tagging with product-aspect and customer-type groups are put together, so the workflow of insight creation becomes compact.

Groups that contain sub-groups are marked.
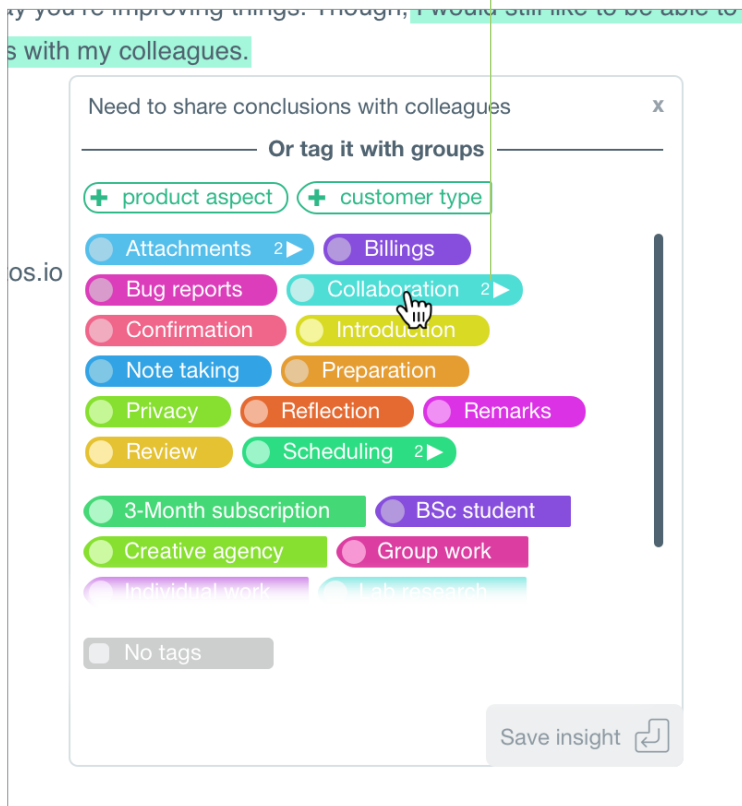
Suppose that users think that an insight may be related to 'collaboration'. By clicking on it, they can collapse it and view the specific sub-groups to use for tagging.
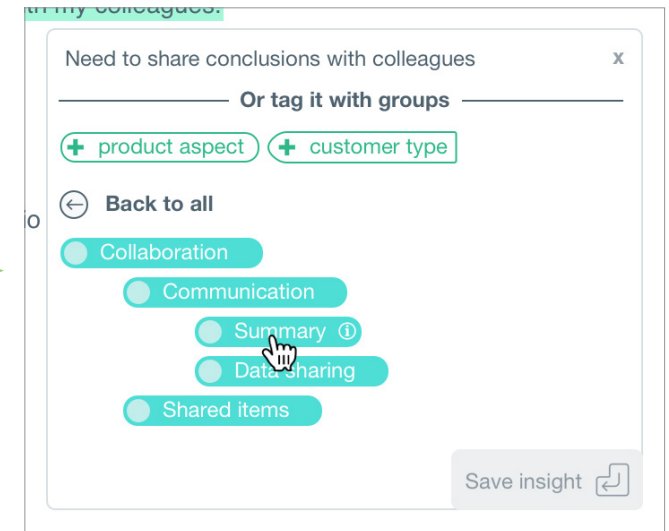
Suppose that users already know which specific sub-group they want to tag insights with, they can also search for a sub-group (see figure 6.5 on page 138, as well).
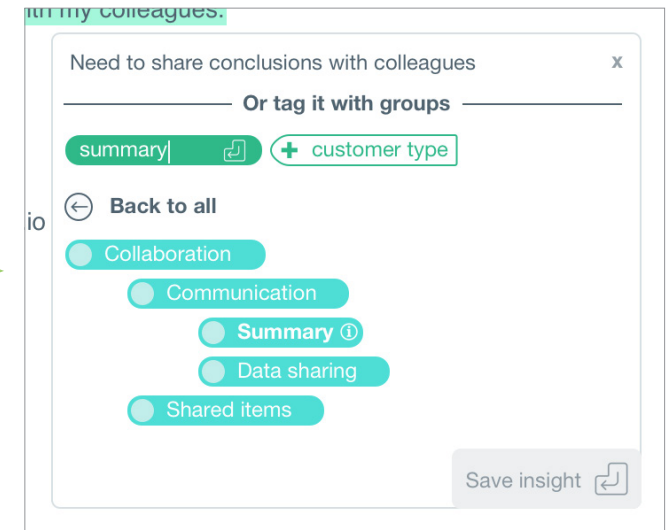
To keep an overview of the list, only the main groups are shown.

Figure 6.3b: The main groups are listed. Groups that contain sub-groups can be collapsed, by clicking on it. Users can also search for a sub-group.

1 Focus mode

About: **BB** Bob Brown
bob@photos.io

➕ Add customer

✉ March 15, 2018

Fwd. from Bob Brown

2 **BB** Bob Brown
bob@photos.io

➕ Add customer

✉ March 15, 2018

Fwd. from E

BB Bob Brown
bob@photos.io

TYPE ➕ add new

Just wanted to se ... your product a
appreciate the wa ... still like to be a
share conclusion ...

All the best,

🗑 Remove customer

The pulsing notification mark leads analysis leaders towards tagging the entire document with a Customer Type. This is intended to create guidance towards performing this step of the workflow.

Added customer-type group will be automatically added to insights created from the same document.

3 ◉ Focus mode

About: **BB** Bob Brown
bob@photos.io

➕ Add customer

✉ March 15, 2018

Fwd. from E

BB Bob Brown
bob@photos.io

TYPE Product Manager
➕ add new

Just wanted to se ... your produ
appreciate the wa ... still like to I
share conclusion ...

All the best,

🗑 Remove customer

Figure 6.4: Users would be led to the 'add new' -button to add a customer type label, by a pulsing notification mark. This would occur after a Customer Name is added to the document.

Both buttons to edit/add Product Aspects and to add Customer Types are presented in insight creation. This is meant to guide users towards using the respective groups to tag insight with.

Users can search for a previously created group to tag insights with.

Need to share conclusions with colleagues   x

Or tag it with groups

summary   + customer type

← Back to all

● Collaboration
    ● Communication
        ● **Summary** ⓘ
            ● Data sharing
        ● Shared items

Save insight

I you a short email to tell you I really like your product
you're improving things. Though, I would still like to be
vith my colleagues.

Need to share conclusions with colleagues   x

Tag with groups

+ product aspect   + customer type

✓ Product manager   See more ⌄

.io

Save insight

Guidance is further enhanced by leading users towards the step of searching through created groups first, before creating a new one.

Need to share conclusions with colleagues   x

Or tag it with groups

summary   + customer type

No existing groups found. Hit ⏎ to create a new one.

io

Save insight

Users can create a new group if the search does not give results.

Figure 6.5: Created groups (= labels) can be searched for and new ones can be created using the 'add' -button in the insight creation box. This is possible for both customer types and product aspects.

To be free to choose groups to label insights with, in insight creation

As mentioned before in this section, automatically added Customer Types will be shown at the start of insight creation (note that adding them to a document is still kept manually). Hereby, users are given the option to remove them from the insight or to add more Customer Typ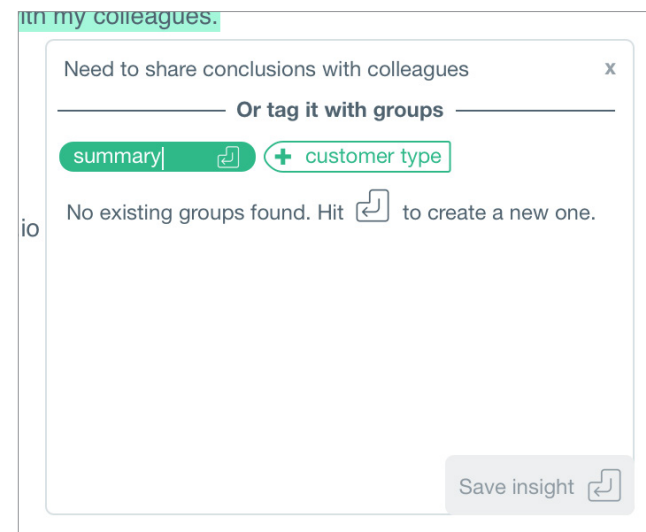es to it. They can do that before saving the insight. As an example, in figure 6.6 it is to be seen how a Customer Type group is removed.

Besides that, pre-created groups can be selected from. As shown in figures 6.3a and b, all created groups can be reviewed and selected from. Users can check the listed groups to use as tags. This (un)checking selections is the exact same way applied in the original design, to add themes to insights (see figure 2.8 in chapter 2, on page 39).

To have an overview of stored data, in the Insights section

See figures 6.7 and 6.8 on the next pages. The proposed concept would show both product-aspect and customer-type tags listed on the left. To keep the entire screen from containing too much elements, and negatively affecting the overview, each one of the lists could be hidden and shown (see figure 6.8).

To feel enabled to structure data, in the Insights section

The elements described here are all to be seen in figure 6.8. Firstly, hierarchy creation is applied for Product Aspects and Customer Types. This is enabled by showing 'add-new' buttons placed on certain areas in the screen. Also, the existence of sub-groups are shown with the respective marks on groups containing them.

Automatically added customer-type groups to insights can still be edited. With that analysis leaders are given freedom to decide on the relevance of these tags.
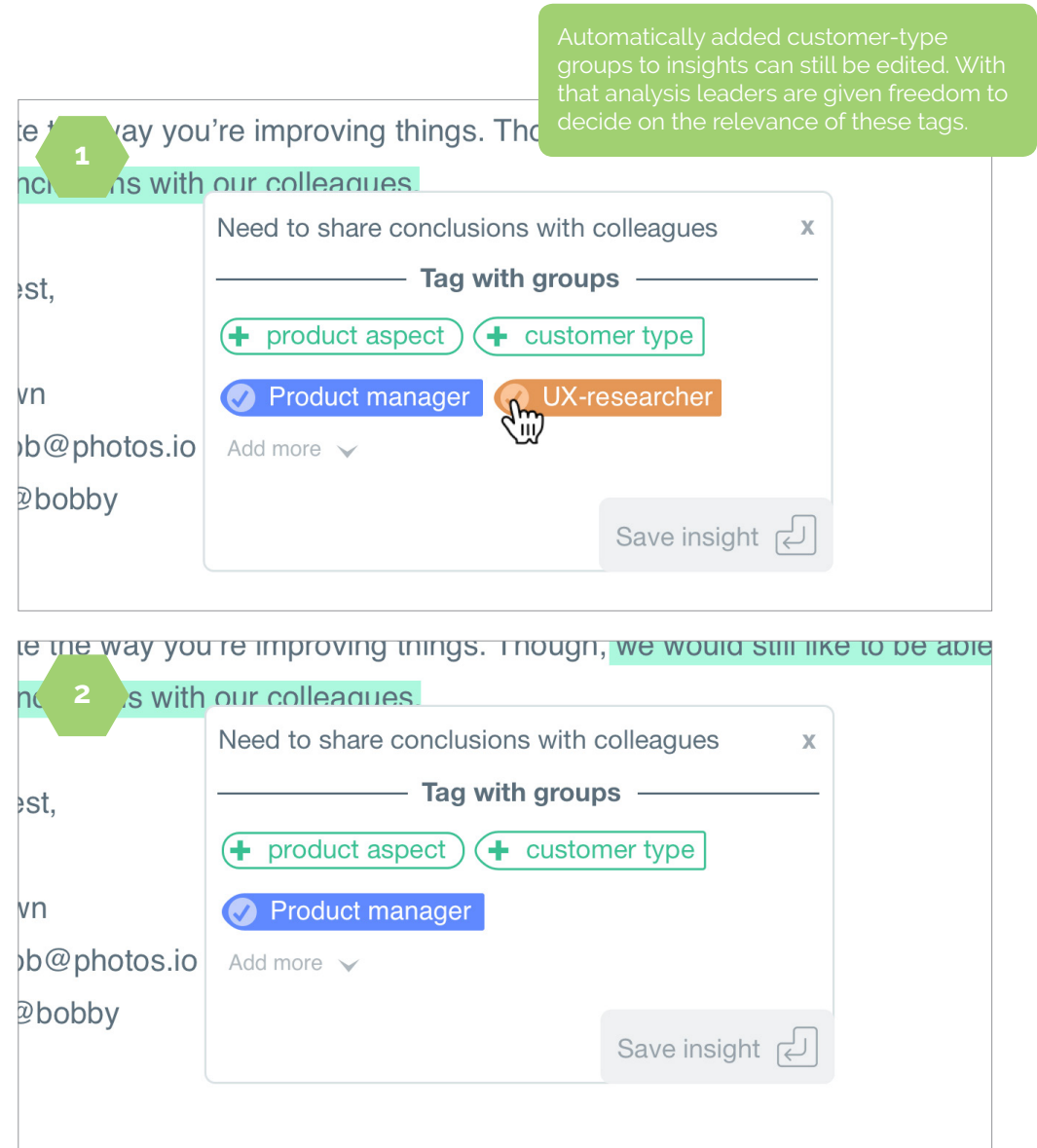
Figure 6.6: Automatically added Customer Types can be edited per insight, in insight creation. The group 'UX-researcher' is removed after it is automatically added.

All created Product Aspects, Customer Types, and Insights are shown in one view. Similar to the previous version of the concept (see *Concept* in chapter 4), this is meant to give an overview of stored data to users.

The proposed concept would show both product-aspect and customer-type groups listed on the left.

The insights would be listed in the middle.
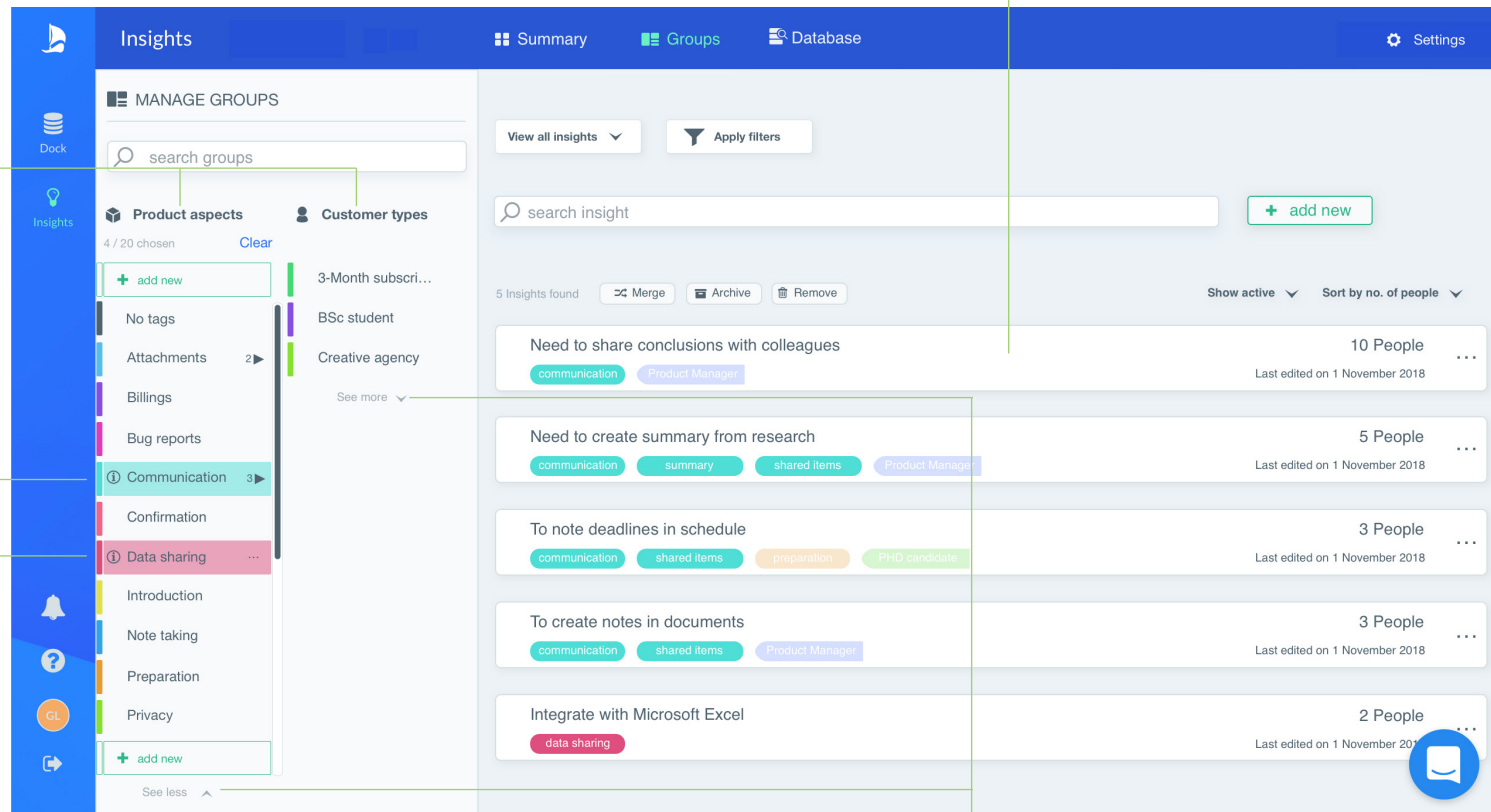
The tags acted as key terms in which related insights were grouped in. Therefore they are also to be used as filters.

To keep the entire screen from containing too much elements, and negatively affecting the overview, each one of the lists could be hidden and shown.

Figure 6.7: The overall view of insights and groups (= tags / labels) of Product Aspects and Customer Types.

Similar to the previous version of the concept, the placement of the 'add new' -buttons are meant to make users feel certain of the possibility to organize insights in a hierarchical structure of groups (see figure 4.14 on page 94, for an example).

This is further supported by showing a mark next to each group that contains sub-group(s).

Buttons to combine groups to create a group of a higher-level hierarchy.

When a group contained sub-groups, this would be marked so it would be visible for users immediately.
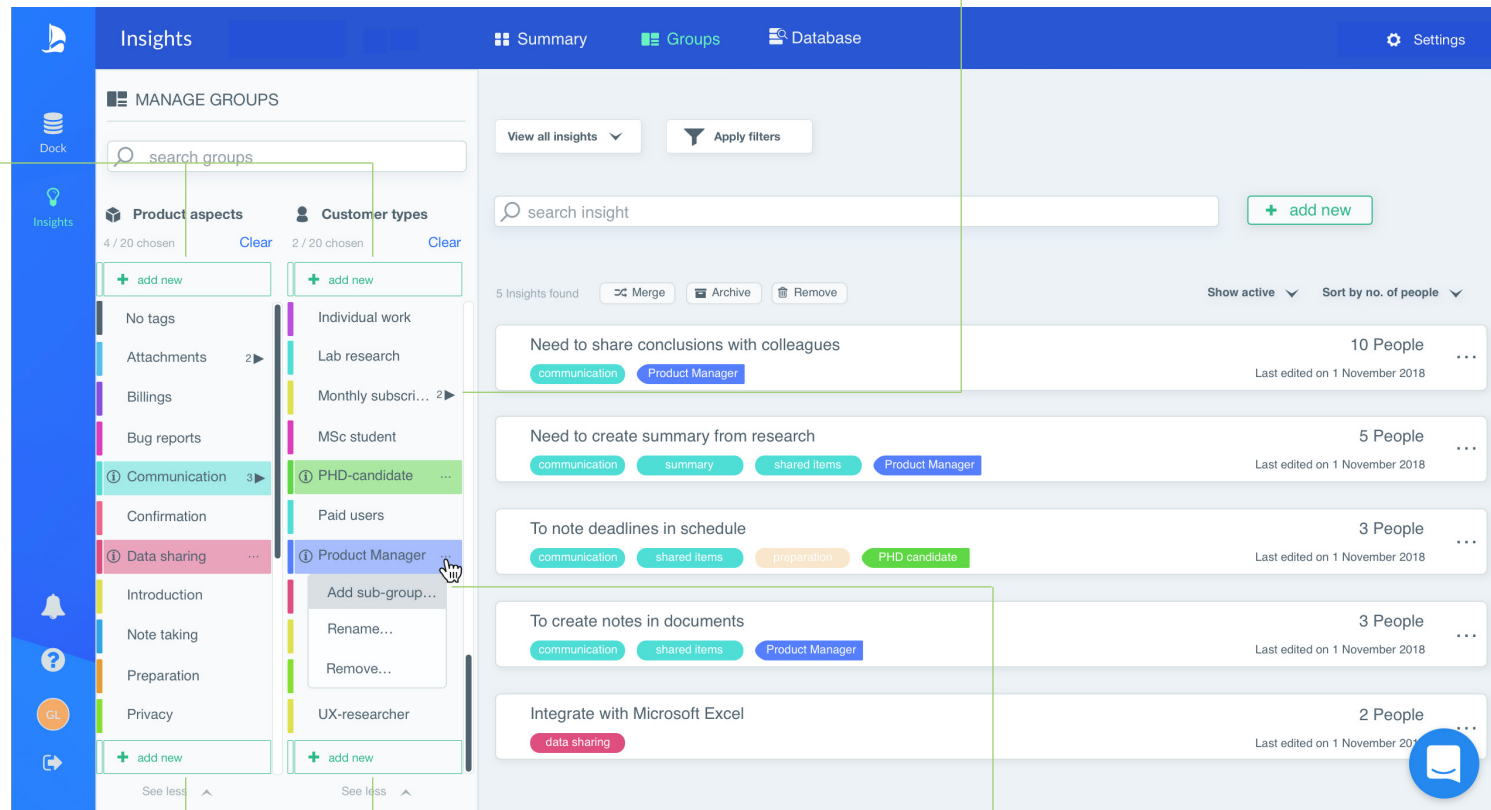
Buttons to create new groups of similar-level hierarchy.

New sub-groups could be created via an option menu per listed group.

Figure 6.8a: Hierarchy creation is applied to Customer Types as well.

Sub-groups can be further collapsed to view lower-level-herarchy groups.

Figure 6.8b: An example of a group hierarchy that can be created.

How Can Customer Facing Teams and Customers Be Made More Involved in the Product Development Process?

As described in chapter 5, the design challenge was narrowed down to the following problem:
How to update CS teams and SaaS customers about the translation of Intercom feedback data into separate customer insights?

The targeted users are analysis leaders (PMs, POs, and UX-researchers) of SaaS companies (10 - 500 FTE) that use Intercom. Other relevant stakeholders taken into the scope are their colleagues of CS and the companies' customers. The concept enables analysis leaders to update customers and CS staff about the translation of Intercom feedback data (= feedback collected from Intercom chat conversations) into separate customer insights.

To tackle the specified problem, this part of the proposed concept is designed for the experiences of **connection, significance, engagement and comprehension**:

- For analysis leaders
- To be aware of the involvement of CS and customers, in analysis
- To be aware of the difference between CS teams and customers
- To be aware of the ability to reach out to CS and customers

- For CS staff
- To feel heard
- To feel involved in the analysis process
- To understand the translation of feedback into insights

- For customers
- To feel heard
- To feel involved in the analysis process
- To understand the translation of feedback into insights

In this section, the respective part of the proposed concept will be described based on these sub-challenges, per relevant stakeholder. Table 6.3 on the next page shows an overview of the conceptualized solutions.

Update moments
In chapter 5 it was concluded that translations of insights into features, have to be completely left out off the scope of this design challenge. Because of this, it is decided to remove the insight states of 'Ready for delivery' and 'Completed' (see *Concept*, *Update moments* in chapter 5). Instead, the state of 'In focus' is added, meaning an insight is given focus in product improvement.

In other words, the proposed concept included the following insight states per insight:
- **In storage**, when a highlight is made and the insight is created
- **Into consideration**, when the insight is further enriched with a number of highlights from a number of customers and is given more attention (the number of highlights will be based on the total number of customers and will be different per company)
- **In focus**, when the insight is verified in its significance and taken for product improvement

Customers and colleagues would get updated about changes throughout these states of insight, that is to be made by the analysis leaders.

Sub-challenges	Conceptualized solution
For analysis leaders	
Awareness of the involvement of CS and customers	Separate lists for colleagues and customers next to highlights
Awareness of the difference of customers vs internal	- Separate lists for colleagues and customers - Names of colleagues are tagged with their respective departments
Awareness of the ability to reach out	- New update moments: In storage, Into consideration, and In focus - Check insight creation to be updated before saving (in the Dock section) - The updates sent are shown as 'sent messages' in insight details - Marking colleagues as important to ask for an increased involvement - Notification in Shipright when a colleague replies to an update
For CS	
To feel heard	The update shows that CS' work is taken for analysis
To feel involved in the analysis process	- The format of Intercom notes suggests that recipient CS can reply regarding unclarities/disagreements of created insights - CS marked as important are pushed to share their opinion
To understand feedback translation	- The updates appear in the analyzed conversation - The updates show, which feedback the insight is based on - The updates show what the created insight is; new updates follow up on all of the previous - The number of occurence of the given insight is shown
For customers	
To feel heard	The update shows that their feedback is tracked, for analysis
To feel involved in the analysis process	The update shows that their feedback is tracked, for analysis
To understand feedback translation	- The updates show what feedback is taken for analysis, and when the customer gave that feedback - The updates show what the insight is, created from their feedback - The number of occurence of the given insight is shown - New updates follow up on all of the previous

Table 6.3: A summary of the concept description, based on the predefined sub-challenges. The ones shown in grey are those kept from the previous version of the concept (see *Concept* in chapter 5).
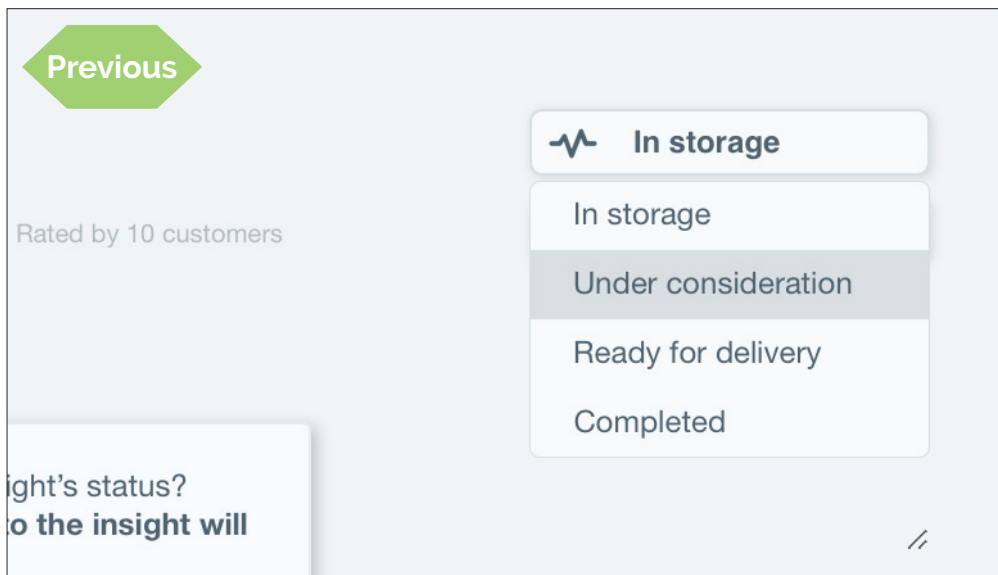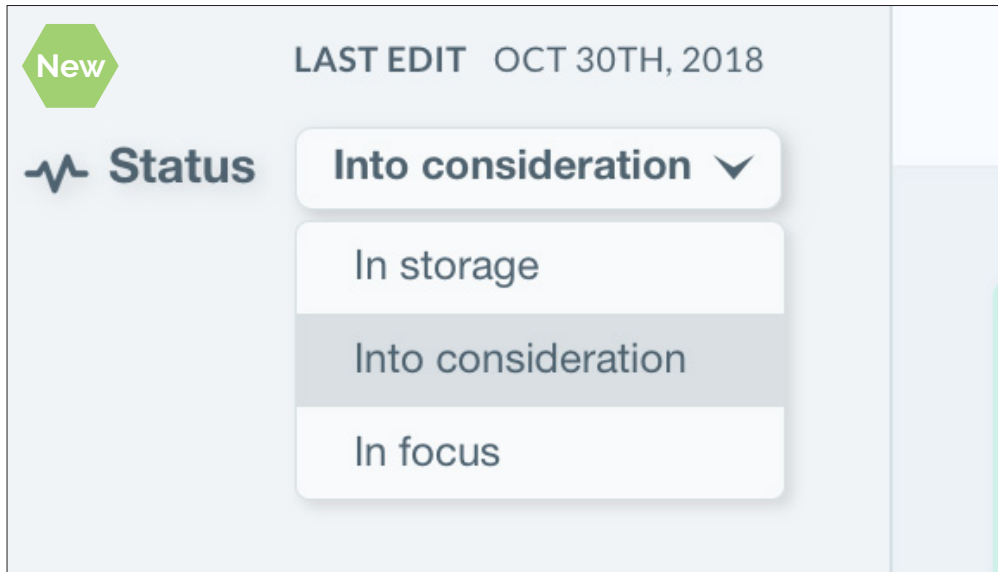
Figure 6.9: How the insight-status-feature is shown in the proposed concept (top) and how it was shown in the previous version (bottom).
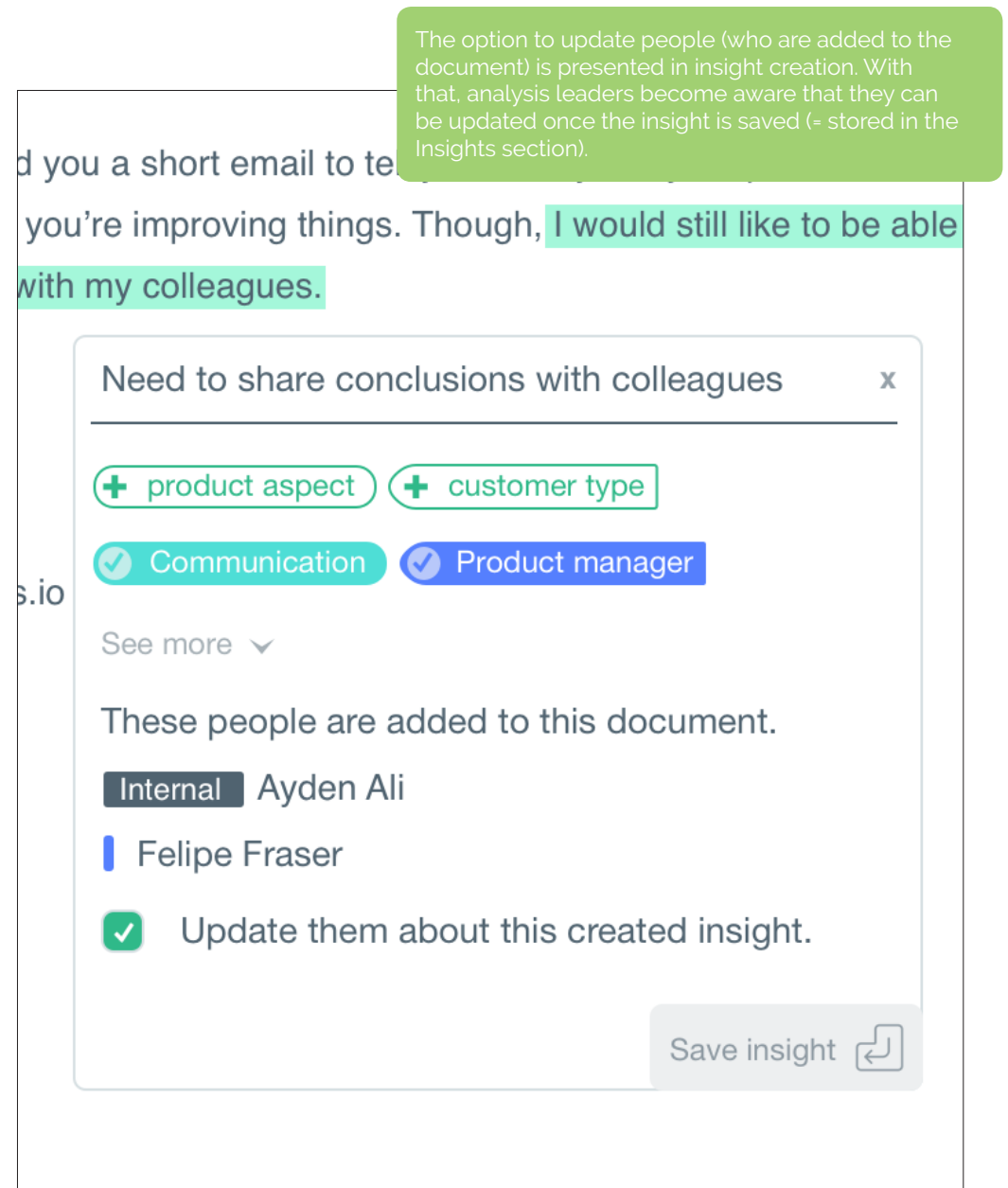
Figure 6.10: The proposed concept includes a check box to update added customers and colleagues in the insight box.
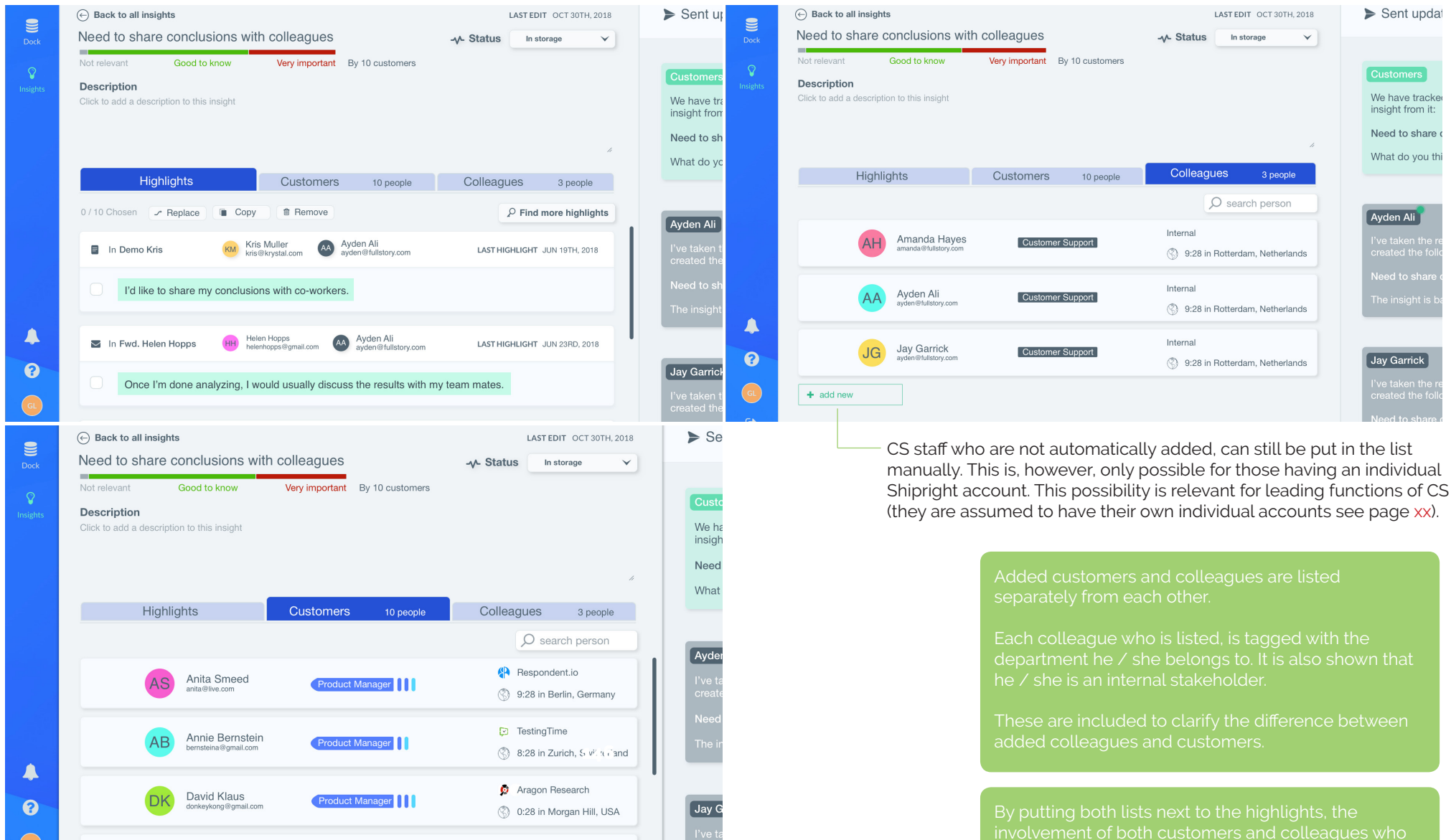
CS staff who are not automatically added, can still be put in the list manually. This is, however, only possible for those having an individual Shipright account. This possibility is relevant for leading functions of CS (they are assumed to have their own individual accounts see page xx).

Added customers and colleagues are listed separately from each other.

Each colleague who is listed, is tagged with the department he / she belongs to. It is also shown that he / she is an internal stakeholder.

These are included to clarify the difference between added colleagues and customers.

By putting both lists next to the highlights, the involvement of both customers and colleagues who are listed, is meant to be better conveyed.

Figure 6.11: The proposed concept includes both lists alongside the stored highlights, per insight. This is expected to show the contribution of CS and customers in analysis (customers were the feedback sources and CS collected this feedback).

By marking colleagues as important, they would be pushed to share their opinion on the created insight with the update. The discussion about the insight is then meant to follow up on this update, in Intercom using notes (see figure 6.13). This feature is meant to convey the connection between analysis leaders with related customers and colleagues.

Sent updates are shown as 'sent messages'. This serves as visual feedback for analysis leaders, after sending out insight-updates. By so, the awareness of the ability to reach out to customers and colleagues are meant to be strengthened.
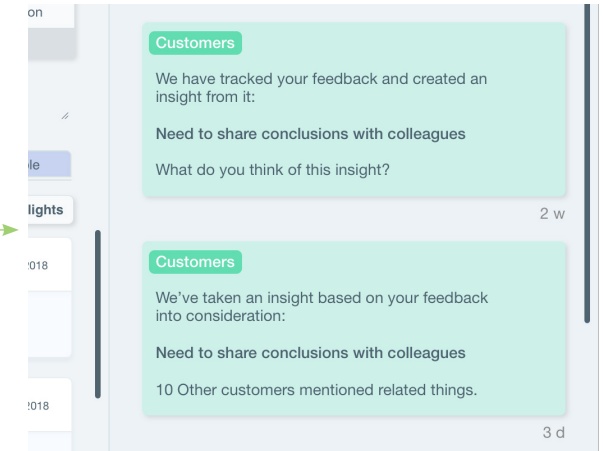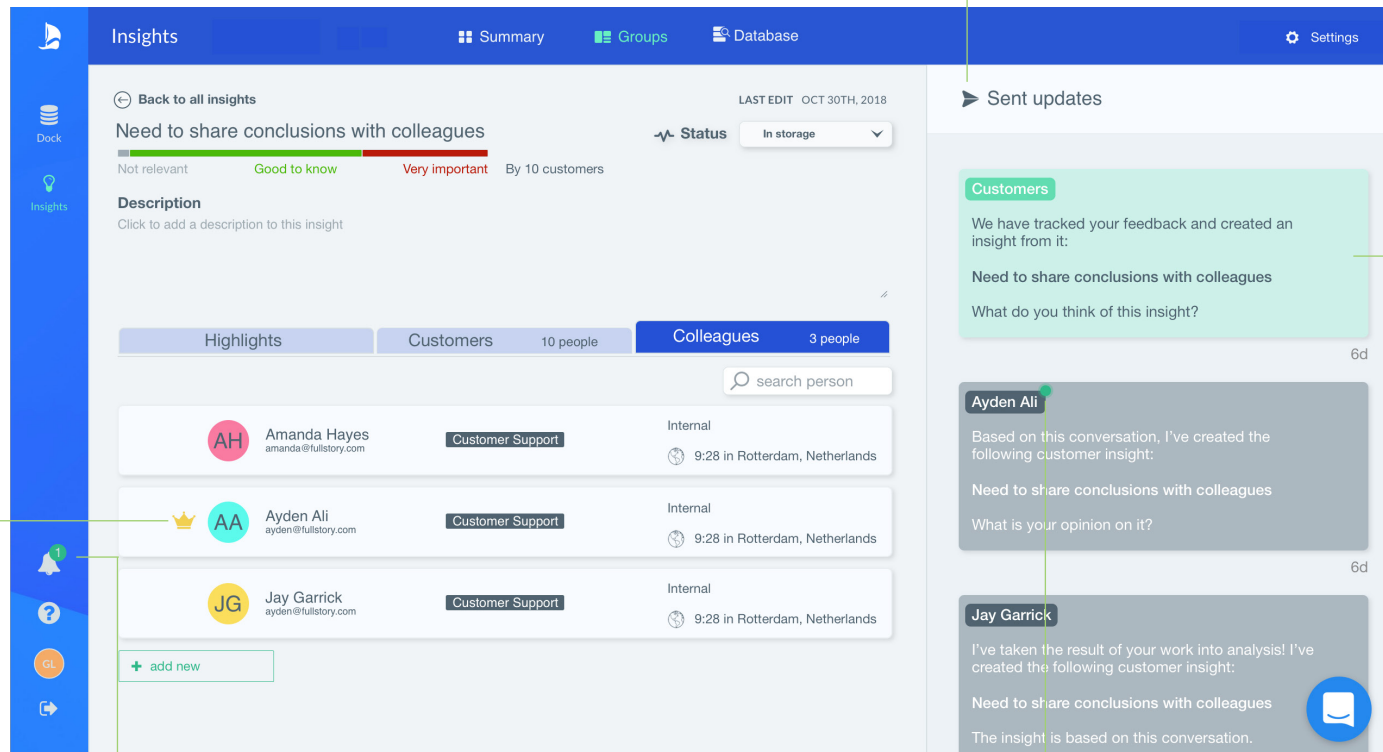
When clicking on the updates for customers, analysis leaders would get to see the general part of update content and all previously sent updates.

Notifications about replies to sent updates would be viewable in a separate notification menu. This is to be seen from the Dock section as well.

In case updated colleagues reply back to their updates in Intercom, the analysis lead would see a notification mark in Shipright. Clicking on one of these (grey) updates will bring them to Intercom, to enable them to see the reply and/or follow up on it.

Figure 6.12: An overview of the insight details, of the proposed concept.

For analysis leaders

Awareness of the involvement of CS and customers, and of the difference between both

See figure 6.10 on page 145. Similar to the previous version of the concept, related customers and CS-staff would be automatically added to created insights. The lists of both names would be separated from each other. Also, names of colleagues would be accompanied by the internal department they are from. With this, analysis leaders were expected to be able to distinguish customers from CS staff (colleagues).

New in this concept, is that both lists will be shown next to the highlights. With this, analysis leaders are expected to to make it clearer, that the highlights were made from conversations between customers and CS staff. Thus, the involvement of CS and customers is assumed to be better conveyed.

Awareness of the ability to reach out to CS and customers

To design for this awareness the insight-creation-box would, firstly, show the names of colleagues and customers who have had the conversation, that would be analyzed. It includes a check box to verify the insight creation to be shared with them. As such, the analysis lead is meant to become aware that he/she will (not) send the update. This is visualized by figure 6.9 on page 145.

Secondly, all sent updates are shown as 'sent messages' in insight details. This is to be seen in figure 6.12 on the previous page. This is applied to ensure analysis leaders that updates are sent (or not).

Thirdly, colleagues can be marked as important. Analysis leaders can do this to ask for further engagement of these colleagues. This is also visualized in figure 6.12. Figure 6.13 shows the exact content of the update for important colleagues.

Figure 6.13 also shows that recipient CS colleagues can reply back to updates and start discussing the given insight. When this happens, analysis leaders will be notified in Shipright. This way of notification is shown in figure 6.12.
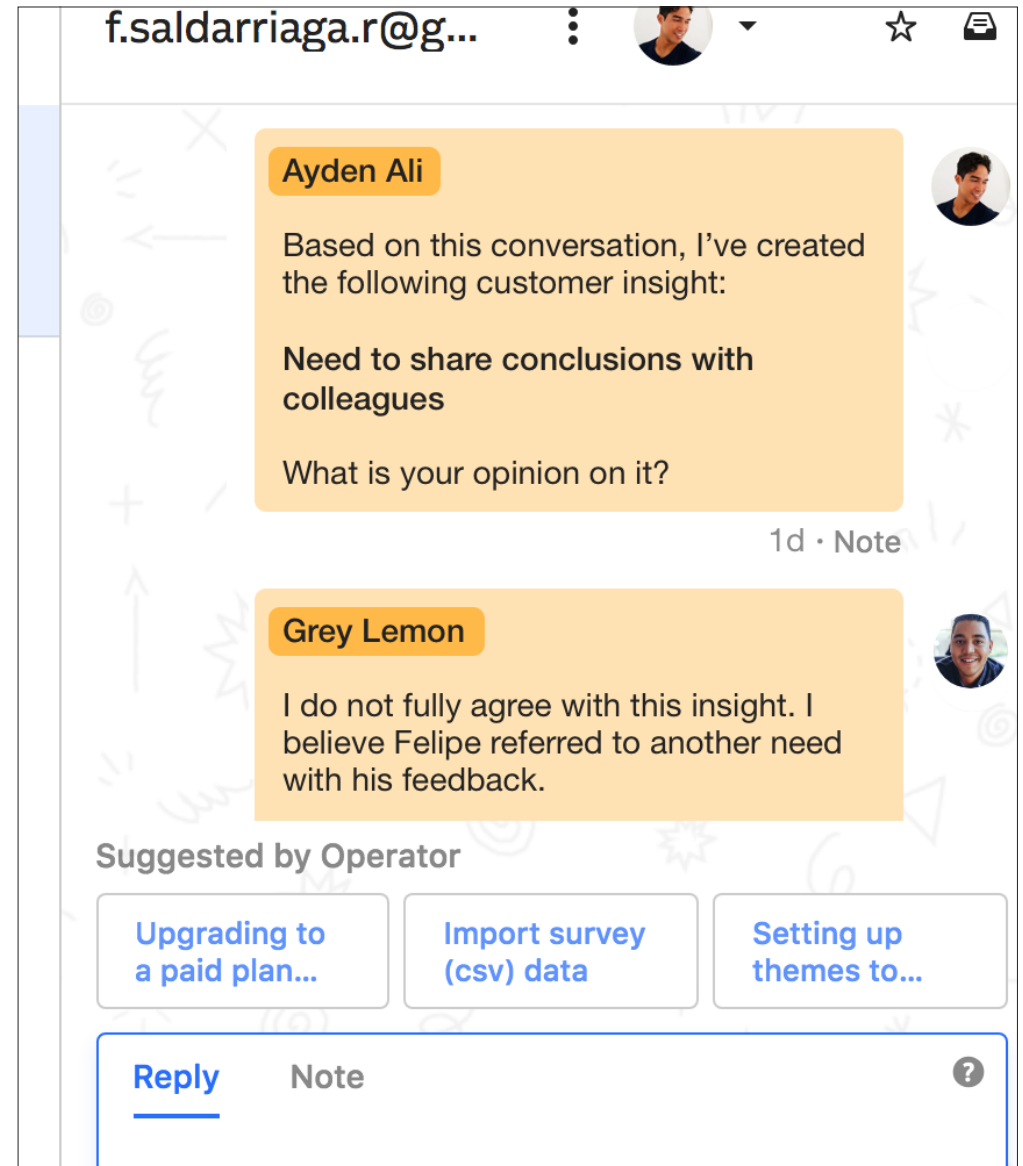
Figure 6.13: Insight-update for colleagues marked as important. They would be pushed to share their opinion on the created insight with the update.

The first update starts with mentioning that the work of the recipient is taken into analysis. This is to show that their work is valuable, so that they know their contribution is heard.

The aspects annotated in this figure, serve for providing context of the given insight. This context is meant to let recipients understand the meaning and significance of the insight.

In storage

1d

Ayden Ali

I've taken the result of your work into analysis! I've created the following customer insight:

Need to share conclusions with colleagues

The insight is based on feedback in this conversation:

"…. and it would be nice to discuss things with my co-workers…"

1d · Note

Into consideration

f.saldarriaga.r@gmail.com 23d ago

Ayden Ali

I've taken an insight based on this conversation into consideration!

The insight is:

Need to share conclusions with colleagues

10 other customers mentioned related things.

Just now · Note

Suggested by Operator

In focus

1d

f.saldarriaga.r@gmail.com left their ✓ Email: f.saldarriaga.r@gmail.com 23d ago

Ayden Ali

Based on this conversation, I've verified an insight to improve our product upon:

Need to share conclusions with colleagues

10 other customers mentioned related things.

Just now · Note

Suggested by Operator

The update mentions the created insight

The update shows, which feedback the insight is based on

The number of occurrences of the insight, among customers, is given

New updates follow up on all the previous; previous updates can be reviewed when a new one comes in

Figure 6.14: Updates for colleagues not marked as important. Each one of the updates for CS staff would mention that the conversation they had with customers is taken for analysis.

For CS

To feel heard
See figure 6.14 on the previous page. The update shows that CS' work is taken for analysis. This is intended to show that their work has been valuable for analysis.

To feel involved in the analysis process
The format of Intercom notes suggests that recipient CS can reply regarding unclarities/disagreements of created insights. Figure 6.13 shows an example scenario, in which a recipient CS replies back due to a disagreement.

As mentioned earlier, CS staff marked as important will be asked to share their opinion on the given insight. As such, they are expected to experience an increased involvement.

Besides that, when receiving updates, recipient CS can reply to ask for more information about insights. This is possible for all CS recipients (see figure 6.15). This would be of relevance when they would like to know more about an insight to communicate towards customers they interact with.

To understand feedback translation
See figure 6.14. To begin with, the updates appear in the analyzed conversation when sent. Because of that, recipient CS can understand that the given insight is based on that conversation. The updates would appear as notes and will not be visible from the customer's end of the conversation.

Also, the updates show, which feedback the insight is based on and states the created insight. With that, recipients are meant to understand the exact source of the insight creation so it can be evaluated.
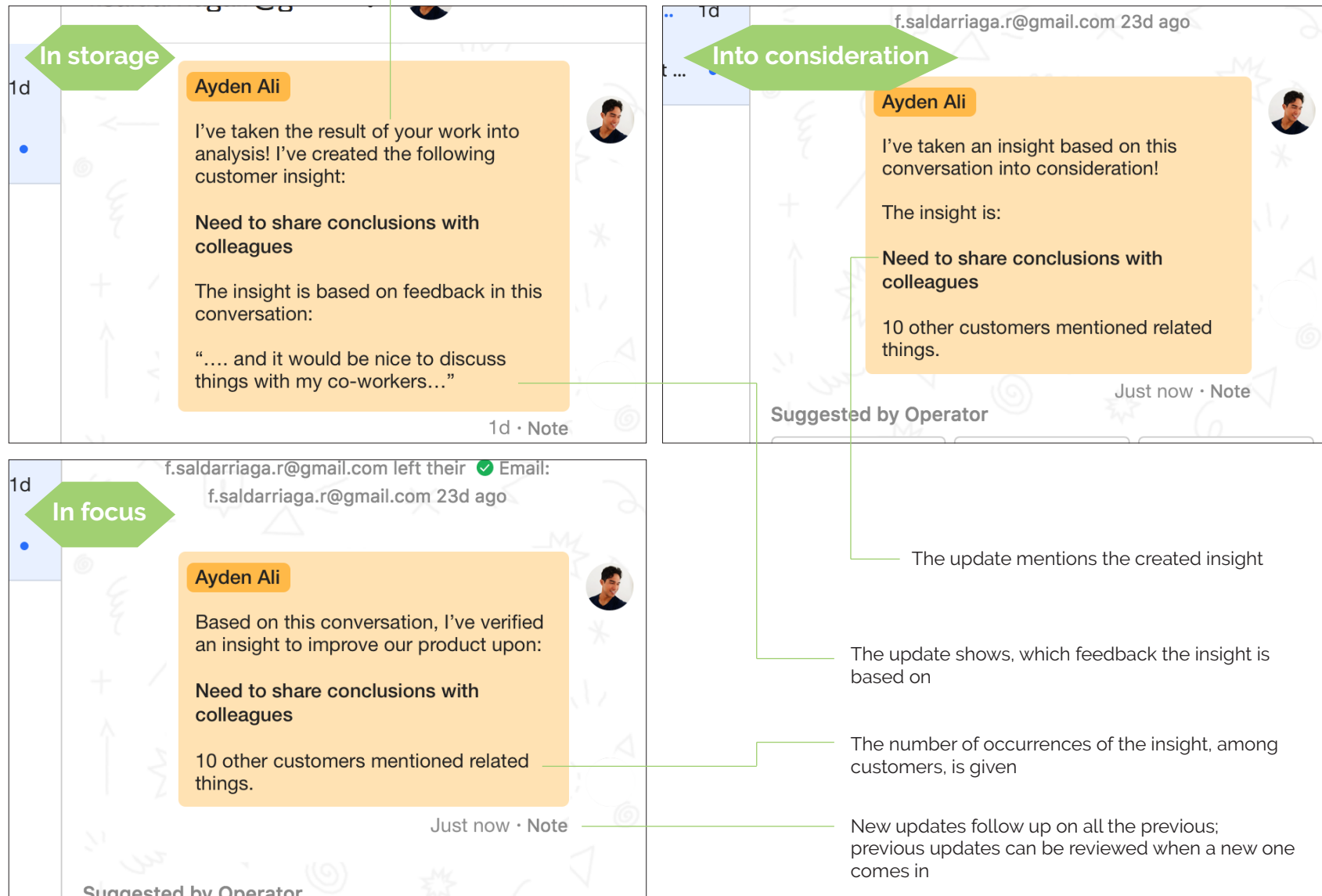
As to be seen in figure 6.14, new updates would follow up on the previous. This enables users to scroll back to view all the previous ones. Previous updates are expected to give context about each newly incoming updates.

Lastly, the number of occurrence (among customers) of the given insight is shown. This is meant to give recipients an understanding about the significance of the insight (more occurrences = more importance, from the user's point of view).

Figure 6.15: With the proposed concept, CS could make request an increased engagement by replying to an update they would have received.

By stating that their feedback is taken for analysis, their input is shown as valuable. This is to let them know that they have been heard and are contributing to analysis.

The aspects annotated in this figure, serve for providing context of the given insight. This context is meant to let recipients understand the meaning and significance of the insight.

In storage

9:28 in Rotterdam, Netherlands

Hey Felipe,

You gave us the following feedback on 10 October 2018:

".... and it would be nice to discuss things with my co-workers…"

We have tracked your feedback and created an insight from it:

Need to share conclusions with colleagues

What do you think of this insight?

[not relevant] [good to know] [**very important**]

Into consideration

Hey Felipe,

We've taken an insight based on your feedback into consideration:

Need to share conclusions with colleagues

10 Other customers mentioned related things. You've rated this as

[not relevant] [good to know] [**very important**]

Just now

Write a reply   GIF ☺ 📎

In focus

Us from FullStory

Hey Felipe,

Based on your feedback, we've verified an insight to improve our product upon:

Need to share conclusions with colleagues

10 Other customers mentioned related things. You've rated this as

[**very important**]

Just now

Write a reply   GIF ☺ 📎

They show what feedback is taken for analysis, and when the customer gave that feedback.

The number of occurence of the given insight is shown.

New updates follow up on all the previous; previous updates can be reviewed when a new one comes in

Figure 6.16: Updates for customers. They would receive all their updates following up after each other, in a new thread (separate from the conversation they have had with CS).

For customers

To feel heard and involved in the analysis process
See figure 6.16 on the previous page. The update shows that their feedback
is tracked, for analysis. By showing this, recipient customers are expected to
understand the value their feedback has, for product improvement. This feedback
is meant to be interpreted as their (= the customers') contribution.

To understand feedback translation
In figure 6.16, it is also shown how customers get notified about the exact
feedback taken for analysis. The updates that came out of it is also shown.
This provides context about why and when the insight is created. The 'why' is
further conveyed by the number of occurrence, of the given insight among all
customers, that shows the significance of that insight. Similar to the updates for
CS, new updates for customers will also follow up on all the previous.

7. Overall Conclusions and Recommendations

In Introduction it is described that the target group includes SaaS SMBs and Mid-Market Businesses (10 – 500 FTE). For this audience, the following problem was described: **the fast-paced environment of scale-up companies prevents product teams from being able to spend enough time and attention on user research.**

Shipright's original design is meant to tackle this problem, but it still is not optimal as a solution. Two topics of Problem Definition are recognized:
-        **The intended workflow for analysis is unclear.**
-        **Support for team collaboration is lacking.**

As described in the last sub-chapter of Exploration, three design challenges are chosen in order to improve Shipright upon these topics. In this part of the report, the proposed concept described in the previous chapter will be reflected upon the defined problem. In doing so, the solution for each design challenge will be discussed. Based on the remaining gaps between the proposed concept and defined problem, recommendations for further steps will then be given. Table 7.1, on the next page, shows a summary of this chapter.

Problem	Solution	Extent of problem solved (1= not solved; 7= fully solved)	Remaining gaps
To enable SaaS companies to get relevant customer insights, within the fast-paced scale-up environments, using Shipright (main problem).	The Dock Home screen that guides users towards finding relevant documents in Shipright, from which customer insights are to be derived from.	★ ★ ★ ★ ★ ★ ☆	- Further exploration needs to be done regarding a term to be used for imported feedback data in Shipright. - Additional research is recommended, to find out what aspects of Intercom feedback data are relevant for analysis.
The intended workflow in Shipright is unclear (first topic of problem).	To show groups of Product Aspects and Customer Types to tag insights with, during insight creation in the Dock section. In the Insights section, users are then shown, that they can use these groups to organize insights in hierarchical structures.	★ ★ ★ ★ ☆ ☆ ☆	- More exploration is needed about showing the existence of smaller-hierarchy groups during insight creation. - More ways of showing product-aspect and customer-type groups (in the Insights section) need to be explored. - Different ways should be explored, of clarifying the possibility to combine groups into new groups of higher hierarchy-level.
Support for team collaboration is lacking in Shipright (second topic of problem).	To enable CS and customers to keep track with creation of, and changes made in insights.	★ ★ ★ ★ ☆ ☆	- Further research regarding customer involvement in analysis is still to be done. - It still needs to be ensured, that CS agents are aware of an insight and the respective customers that are updated, when customers have questions / remarks about it. - Different options to involve other internal stakeholders, (besides customer facing teams) in analysis, are to be explored. - It is recommended to explore ways of preventing analysis leaders from feeling overwhelmed, when seeing notifications of colleagues' replies to insight-updates.

Table 7.1: Summary of the overall conclusions and recommendations.

To Enable SaaS Companies to Get Relevant Customer Insights, Within the Fast-Paced Scale-Up Environments, Using Shipright

In Proposed Concept the solution for this challenge is described as a Home screen in Shipright's Dock section, that presents subsets of filters to be used to distill collected feedback data (see page 129 - 132).

This solution is meant as an overall support for the two topics of problem definition (see the introduction of this chapter). These two topics are related to the steps of analysis process that start with feedback-data-interpretation. Before arriving at these steps, however, analysis leaders have to find the relevant data (= documents) that 'can be analyzed' first. The described solution taps directly into this particular step by guiding users towards the use of filters to get to these data.

The experiences of guidance and certainty are decided to design for. In Proposed Concept, on page 129, three sub-challenges regarding these experiences are described. Two of these sub-challenges are concluded as not fully solved, with the first part of the proposed concept. The following part of this sub-chapter will describe this further.

How is the problem solved?
The first sub-challenge, 'To guide users towards the use of filters', is expected to be solved. The reason for that is because users are immediately presented the filters to be used, every moment they open Shipright; the Home screen with the subsets of filters will be the first screen they get to (see figure 6.1 on page 130). In addition, in figure 6.2 on page 131, it can be seen that the Home screen includes the following elements:
- References, for each subset towards the bigger set of documents
- The use of familiar icons for suggested filters

These aspects are found to be necessary to solve this sub-challenge, as shown from the insights gained from the user test done with the previous version of the concept (see table 3.2 on page 77). With their inclusion in the proposed concept, it can be assumed that it is able to guide users towards using the filters, thus getting them closer towards relevant customer insights to start the analysis. This also brings the assumption that the two topics of Problem Definition is successfully supported.

Further steps towards releasing product improvements

! Categorize insights & find patterns

Workflow of use

Create insights

Team collaboration

Interpret feedback in documents

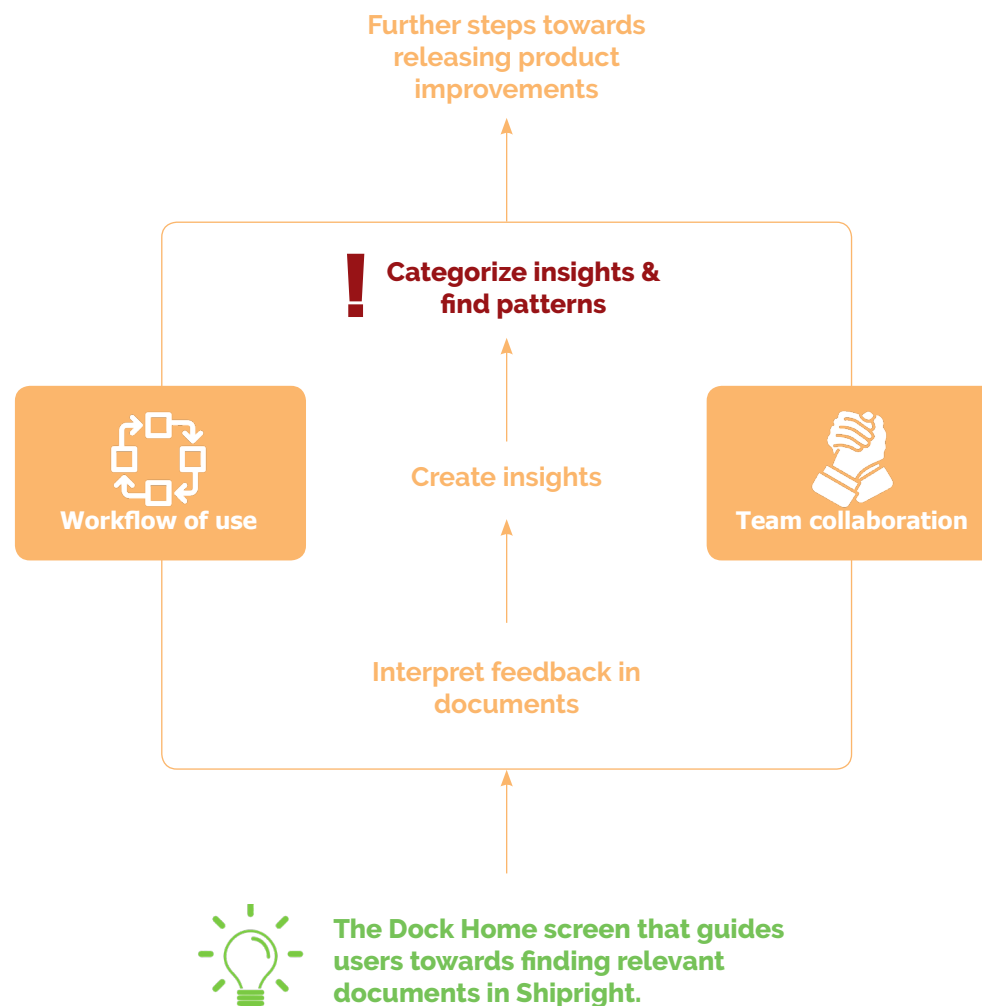The Dock Home screen that guides users towards finding relevant documents in Shipright.

Figure 7.1: The first part of the proposed concept taps into the step, that occurs before team collaboration and workflow of use come into play.

To get users to recognize the presence of relevant information
Regarding certainty, one of the defined sub-challenges was 'To get users to recognize the presence of relevant information'. The term 'documents' for imported feedback data is kept in the proposed concept, from the original design. Users, however, may get confused what 'documents' stands for; especially with the new business model of Shipright with the focus put on Intercom conversations, as sources of feedback data. Because of this, the sub-challenge mentioned, may still not be sufficiently solved.

Further steps:
For further steps, it is recommended to look into a name that could properly represent the imported feedback data. Despite that the focus of data source is shifted to Intercom chat-conversations, other data sources (see page 36, in Exploration) should not be neglected in this. In other words, 'documents' have to be renamed with a term that represents the focus on Intercom chat-conversations as data source, while still not neglecting other sources of data that are included.

Looking at this from another angle, it could also be concluded that users need to be made aware that 'documents' stands for imported feedback data. This calls for an introduction during first (trial) use of Shipright, in which this is properly explained.

To get users to feel closer towards the relevant information
With the elements included in the proposed concept (see figures 6.1 and 6.2, and table 6.1 (page 129)), it is still arguable if this concept is enough to get users feel closer towards the relevant information. The reason for that is because, not enough time and effort are given yet into research about relevant aspects of Intercom chat-conversations; what aspects from this type of data source are relevant for analysis? The choice of subsets for the Home screen should then be based on the answer to this question.

Further steps:
With Shipright's new business model, it is recommended to perform research to find out what aspects of Intercom feedback data are relevant for analysis. For that the following RQs are recommended:

- *What aspects of Intercom chat-conversations are commonly included in analysis, among SaaS SMBs and Mid-Market Businesses (10-500 FTE) that use Intercom?*

- *What aspects of Intercom chat-conversations need to be included in analysis, among this companies?*

- *What are the aspects (existing features and functions) of Intercom that can be taken into fulfilling these needs?*

To be summarized, this part of the proposed concept is meant to be an overall support for the two topics of Problem Definition. It is intended to be so, by guiding users towards the use of filters, to distill imported feedback data in Shipright. This is supported by the proposed concept, but further exploration needs to be done regarding a term to be used for imported feedback data in Shipright.

Also, additional research is recommended, to find out what aspects of Intercom feedback data are relevant for analysis. The answers to this, should then be implemented into the concept-solution, in order to let users feel closer towards the relevant information that they are after.

The Intended Workflow in Shipright is Unclear

The solution for this design challenge is meant to directly support the first topic of Problem Definition: the intended workflow of analysis is unclear. In Proposed Concept (page 133 – 142) it is described that the solution entails a redesigned workflow for insight creation in the Dock section and a redesigned lay-out for the 'All insights' -view in the Insights section.

Also stated in Proposed Concept, the experiences of certainty, freedom, and guidance are decided to be designed for. Four sub-challenges to be solved, are derived from these experiences. The proposed solution supports all of these sub-challenges, but certain ones are still not fully solved yet. These will be thoroughly discussed in the following parts.

How is the problem solved?
Overall, the intended workflow of analysis is meant to be clarified, by showing that insights are to be tagged with groups of Product Aspects and Customer Types, during insight creation in the Dock section. In the Insights section, users are then to be shown, that they can organize their created insights, by structuring these groups in hierarchies. As the groups act as filters (see figure 6.7 on page xx), tagged insights will be taken into the hierarchical structure.

As mentioned in Exploration on page 59 - 60, the original design of Shipright does not communicate the intended use of themes clearly. As found in interviews with the target audience (see page 81 – 82 in chapter 4, and Appendix XIII), insights are commonly categorized by group-types of Product Aspects and Customer Types. This familiar practice is made explicit in the use of themes, as described for the second part of the proposed concept. By aligning the use of these features with the familiar practice in analysis, insight categorization is assumed to be made clearer.

As stated, created insights can still be structured further. However, certain aspects still remained unaddressed, regarding this part; these will be described in the next parts of this sub-chapter.

Workflow of use

! Unclear intended workflow of analysis in Shipright

To show groups of Product Aspects and Customer Types to tag insights with.

To show that groups of Product Aspects and Customer Types, can be organized in group-hierarchies.

Figure 7.2: Solutions that support clarification of Shipright's intended workflow.

To be aware of the existence of categorization means and to be guided towards labeling insights, in insight creation
See figures 6.3a and b on pages 135 and 136. The proposed concept is expected to show the existence of product-aspect and customer-type groups (to tag insights with). But it is still arguable whether the existence of sub-groups is sufficiently communicated (see figure 6.3b). This is related to the scenario, in which the list of sub-groups has become very long over time. As shown in figure 6.3b, the proposed concept only shows two layers of group-hierarchy-screens: that of the main group and that of the sub-groups. Smaller sub-groups (sub-sub-groups) are included in the latter screen. However, this may cause users to lose overview on all the groups existing to tag with, as the number of smaller-hierarchy groups (sub-groups, sub-sub-groups, and so on) grow over time. This issue is especially relevant when users do not know yet, which specific groups to use for tagging (see the top option in figure 6.3b).

Further steps:
Regarding this issue, it is recommended to explore ways to communicate the existence of smaller-hierarchy groups, during insight creation. It should be considered that the overview of all groups needs to be maintained.

To have an overview of stored data, in the Insights section
With the proposed concept, users are expected to be aware that all created Customer Types, Product Aspects, and insights are shown in the respective view of the Insights section. However, the presentation of both customer type and product aspect groups in the Insight section could be refined. During this project, the need for both main categories in analysis are verified by three participants. Though presenting both together, including group hierarchies in each, still evokes the question if there is a different way to do that. The problem that could occur, is that the view on all created groups may make users feel overwhelmed, when the number of groups has grown a lot after some time.

Further steps:
Regarding this issue, different ways of showing product-aspect and customer-type groups need to be explored. As the focus of the design scope was put on insight creation in the Dock-section, the exploration for this was very limited. As to be seen in the second sub-chapter of chapter 6, the proposed solution still resembles the original design; groups that are used to tag insights with are shown on the left, with the insights on the middle of the screen (also see figure 2.7 in Exploration).

For the exploration, completely different concepts from the original design can be considered. Also, it needs to be considered that both group-types of Product Aspects and Customer Types have to be presented with an equal amount of importance (see Insights from User Test and Conclusions in chapter 4, on page 97).

To feel enabled to structure data, in the Insights section
According to the scope of this design challenge, the redesigned lay-out for the Insights section's 'All insights should show possibilities to organize insights in a hierarchical structure (see figure 6.8a and b, on page 141 and 142). With the elements included, it is expected that the creation of groups of similar hierarchy-level and of groups of lower hierarchy-level (= sub-groups) are made clear. However, it is still arguable if the possibility to combine groups into groups of higher hierarchy-level, is already clarified sufficiently by this redesigned lay-out. This concern stems from the way the respective button for this function is named (see figure 6.7 and, 6.8 a and b); it is named 'add new', exactly the same as the button meant to create new groups of similar hierarchy-level. Reflecting back on the proposed solution this may create confusion among users, regarding the functions of both buttons.

Further steps:
Regarding this, different ways should be explored, of clarifying the possibility to combine groups into new groups of higher hierarchy-level. Some concept directions that can already be proposed are:
- *Renaming the respective button for the function in such a way, that this possibility becomes clear to users.*
- *Further designing the user-workflow for this function, in such a way that the steps and included UI-elements communicate the possibility of issue.*

In summary, the intended workflow of analysis is expected to have become clearer with the concept solution. Reflecting back on the proposed solution, however, more exploration is needed about showing the existence of smaller-hierarchy groups during insight creation. Also, different ways of showing product-aspect and customer-type groups (in the Insights section) need to be explored. Hereby, it is important for the view to include as little elements as possible. However, the equal amount of importance for both types of groups should still be conveyed. Additionally, also related to the Insights section, different ways should be explored, of clarifying the possibility to combine groups into new groups of higher hierarchy-level.

Support for Team Collaboration is Lacking in Shipright

The solution for this design challenge is meant to directly support the second topic of Problem Definition: support for team collaboration is lacking. In Proposed Concept (see page 143 - 152) the solution for this challenge is described as three different states that can be assigned to insights, in which analysis leaders decide on the states that are relevant to insights. When an insight is created, it automatically will be assigned a state and throughout the course of Product Discovery tracks, the insight status per insight will be edited. With a proposed two-way integration of Shipright and Intercom, CS teams and customers will be updated about these edits. In other words, collaboration is supported by enabling CS and customers to keep track with creation of, and changes made in insights.

For this design challenge, different sub-challenges are defined to be solved, regarding three stakeholders: analysis leaders, CS staff, and customers. In this sub-chapter the remaining gaps between the proposed concept and the above-mentioned topic of Problem Definition will be discussed.

How is the problem solved?
As mentioned above, team collaboration is supported by enabling CS and customers keep track with the creation of, and changes made in insights. As described in Proposed Concept, this is done by the means of updates in Intercom. All CS staff will be given general updates, though the analysis leaders can pursue certain people to be given more updates. These updates are then meant to make analysis-related information transparent for CS. This transparency is expected to feed on collaborative interpretation of customer feedback. The initial steps of this are included in the proposed solution (see figures 6.13, 6.14, and 6.15, on pages 148 - 150); further steps (= physical meetings, presentations, informal discussions, etc.) however are left out of the scope.

Team collaboration

Lack of support for team collaboration in Shipright

To enable CS and customers to keep track with creation of, and changes made in insights

Figure 7.3: The solution for the lack of support for team collaboration in Shipright.

Customer-involvement should have been left out of scope

As a point of reflection, the involvement of customers should have been completely left out of scope. In hindsight, this deviated from the topic of Problem Definition of issue; the topic only is related to internal team collaboration. Additionally, customer-involvement still needs to be looked deeper into, separately. Regarding this, it is important to find out to what extent created insights need to be shared with customers. During the user tests it is verified that their verification is relevant for insights, regarding product improvement. Though, it is still arguable if any insight can just be shared openly with customers, considering protection of companies' intellectual property.

Further steps:
Based on the above conclusion, additional research regarding customer-involvement in product improvement is needed. Proposed RQs for this:
- *Which types of insights can be shared publicly with customers and which cannot?*
- *To what extent can insights be shared public for customers?*

For CS to feel involved in the analysis process

The proposed solution is expected to support involvement of CS in analysis. However, a certain aspect is overlooked. Supposed that insight-updates for customers are included in the concept as described in Proposed Concept; if customers reply to their updates, it needs to be ensured that the support agent who will reply back, knows about the insight. This is not supported yet by the proposed solution. As described, these updates will be sent via Intercom as a new 'message' for customers, which they can reply to. When a customer replies to an insight-update, there will be no guarantee that they will get back a response from the CS agent they gave product feedback earlier. In fact, chances are high that another CS agent will respond, who is not aware that the customer have given feedback earlier and/or totally not aware of the insight (given in the update) at all.

From the moment that such CS agents see such reply to a customer-update, they are expected to feel less involved in the analysis process. This is hypothesized because they will come across something that is new, which is obviously is ongoing among their company and its customers.

Further steps:
This issue can possibly be tackled if insight-updates for customers are included in the analyzed chat conversations too, similar to the updates for CS (see page 148 – 150, in Proposed Concept). These updates would then be visible for the respective CS agent as well. This agent will then be informed of the insight-update immediately. If more clarification is needed from the analysis lead about the insight, he/she can reply to his/her insight-update to ask about it before responding to customers insight-update-replies (see figure 6.15 on page 150, the customer will not be able to see them asking about the insight). When a recipient customer replies to the insight-update, the customer will then be ensured to speak to a related CS agent who is aware of the given insight.

Involvement of other teams, besides CS

Regarding to this involvement, it will be discussed how the proposed solution stands with respect to other customer facing teams and other internal stakeholders, besides CS.

The concept supports updates to be sent to analyzed Intercom-conversations, which are to be viewed in Intercom. As described in Design Scope of chapter 5, the target group taken into the scope includes companies that use Intercom. They would use Intercom to interact with customers and based on that, all customer-facing teams (besides CS are Customer Success, Sales, and Customer Happiness, for instance) are assumed to have access to the company's Intercom platform. With this, it can be concluded that the proposed concept is able to let customer facing teams, in general, be involved in analysis.

Those having access to the company's Shipright account, can also be involved. As described in Proposed Concept (figure 6.11, on page 146) CS staff who are not automatically added can still be put in the list manually. The possibility to be added to an insight is only described for leading CS, but basically, all internal staff with access to the company's Shipright account can be added to the list of colleagues per insight. This is however is also a limitation; those without an individual account cannot be added, cannot be involved in analysis. This is especially relevant in the early stages of Shipright adoption (during trial period and shortly after purchase), when the number of users in a company-client is still low; not everyone who has to be involved, has individual Shipright-accounts yet.

Also part of the proposed solution, is that analysis leaders will get to see

notifications in their Shipright accounts whenever updated colleagues reply back to their insight-updates (see figure 6.12 on page 147). Reflecting back on it, though, they may be left feeling overwhelmed seeing that they have to respond back to multiple colleagues. Regarding support for team collaboration, this is an important aspect to be considered in further steps.

Further steps:
For further steps, different options to involve internal stakeholders without access to Intercom or Shipright, have to be explored. An example solution for this could be to share insight-updates via e-mail, that includes an option to schedule a physical meeting. Also, it is recommended to prevent analysis leaders from feeling overwhelmed in further concept-iterations, when seeing notifications of colleagues' replies to insight-updates. An example idea for this is to put all added colleagues in one group-conversation, so the analysis leaders can respond to them all at once.

In summary, team collaboration is supported by enabling relevant stakeholders to keep track with creation of and changes made in insights. Further research regarding customer involvement in analysis is still to be done but, supposed that insight-updates for customers are included, the concept needs to be improved. This improvement is about ensuring CS agents to be aware of an insight and the respective customers that are updated. With that, they are also ensured to feel involved with analysis that would go on among their companies and its customers. Furthermore, different options to involve other internal stakeholders, (besides customer facing teams) in analysis, are to be explored. Hereby, those without (possible) access to the company's Shipright account and Intercom platform, should be included in the scope. Lastly, it is recommended to explore ways of preventing analysis leaders from feeling overwhelmed in further concept-iterations, when seeing notifications of colleagues' replies to insight-updates.

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