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

Appendices

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Appendix II: Recognized Positive and Negative Aspects from My Assessment of Shipright

Using a demo version, I was able to perform a thorough assessment of the software. Below, my personal findings are listed.

Positive points
- It is convenient to be able to archive inbox documents in the Dock section, as these can always be reviewed later (which is not possible when they are deleted immedieately).

- Highlighting interesting passages feels very intuitive.

- One passage can be used to create different insights.

- You can easily pick positive and negative customer input and distinguish both using themes.

- Best practices guide to set up themes is useful to new users who are not that experienced in performing user research.

- Users are enabled to have an overview of all the groups of insights that is created from the vast amount of user data.

- 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.

- To have the trending hits already sorted out; this can help to determine the significance of an insight.

- To enable users to make notes directly in Shipright; this can be used to make your own transcriptions of video and/or audio recordings, for instance.

- In view insights per theme: 'sort by number of highlights' can be used as an indicator of the significance of a problem/need.

- 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.

- Archiving insights is convenient, as you can always retrieve all archived insights to reassess them.

- Insights stored in the repository can be reassessed, following by adjusting (= adding or deleting) themes that are assigned to them.

- Insights in the repository can be adjusted by merging multiple ones with each other, or copying / replacing highlights throughout different insights.

- The functionality of creating a completely new insight offers users the chance to document new insights, when they get new ideas during the process of reviewing stored insights in the repository.

Negative points
- There is no option to delete irrelevant documents in the Dock's inbox.

- The filter functionalities are not sufficiently noticeable. These should be made more distinct.

- At the beginning, it felt difficult to make up an insight out of a sentence. I knew that certain sentences were important, but just were not sure how to define the insight. This was caused by my limited knowledge of the context, though.

- When tagging insights with 'themes', it may be the case that users are not sure which theme to choose and forget what each theme stands for; this is more likely to happen as the number of themes and insights grow.

- Highlighted passages can be tagged to a theme before they are turned into an insight (by assigning a 'meaningless' theme to them, first, and merging multiple of these 'meaningless' insights later on). The possibility, however, is not clearly communicated.

- Once a passage is highlighted, the tag screen appears, and the passage cannot be reread.

- Different data should be grouped with, compared to and/or combined with each other (this is already possible, but the possibility is not clearly presented yet).

- The 'Add group'-button is confusing at the beginning; the menu title is 'Manage Themes', so it was confused with adding a new theme, while it is meant for adding a new theme group.

- To create a new insight, in the insight's repository – all insights, might not be very useful, as users might get overwhelmed by the vast amount of all insights.

- 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 conclusions are presented; these conclusions of insights can possibly be combined or compared to each other still.
    - Sharing insights is only possible with other Shipright users.

- You can copy a highlight of an insight to another existing insight, but you still have to remember where you want to copy it to.

- In insight summary: insights are sorted out based on the last time they were updated. The flaw in this, however: when you think you can add more highlights to an existing insight, have done it, but delete your changes after all; this will still count as an update, even though no changes were made in the end.

- 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.

- With the audience filter, it is not possible to see the departments each person is from.

- There is no summary of all highlights made per team member.

- The use of themes and groups are not immediately clear; I was wondering where the themes can be created.

- When creating insights, in some cases, certain highlights cannot be tagged with a theme because there were no suitable themes that existed.

- 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.

- To search for documents in the inbox, full words need to be typed in. This, however, is not shown clear enough in Shipright.

- When creating new insights, sometimes it is useful to be able to review all the existing insights. Going back and forth between the insight's repository and a specific document in the dock, is although very inconvenient.

- Sometimes a part of a highlighted passaged can be turned into a separate insight; this, however, is not supported yet.

- When you want to merge multiple insights (in the repository) together, all insights are to be searched for manually; the search bar cannot be used to do this.

- In the repository, when reviewing all highlights under a certain insight, you can create a completely new insight out of these highlights. The possibility however, is not clearly communicated.

Appendix III: Shipright's Original Design - Insight Creation

Make highlight

Type insight

Select a theme that relates to the highlight

Previously created insights are shown

Previously created insights, tagged with the selected theme, are shown

The highlight can be added to existing insights

Yes

No

Select existing insight to add the highlight to

Hit 'Enter' to create new

All created themes are shown

Select (more) themes to add to the new insight

Figure 2a: The workflow of insight creation in Shipright's original design.

Create new / Add to another insights

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

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,
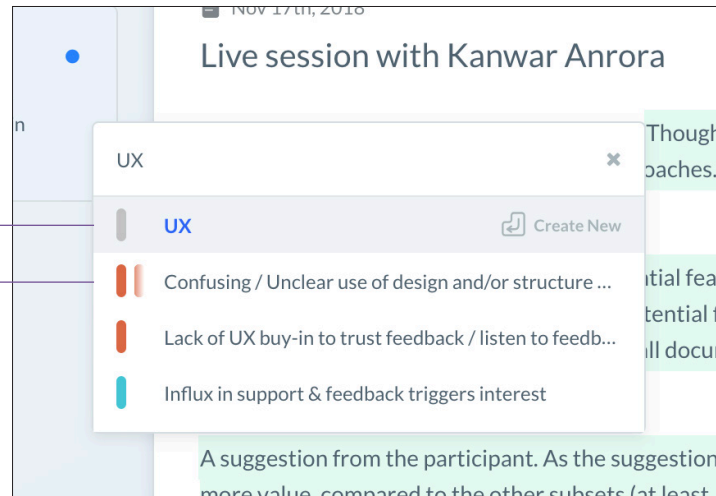
Previously created insights are shown

Create a new insight, if the highlight cannot be added to existing ones

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 2b: The main steps of insight creation in Shipright's original design.

Appendix IV: User Test on Insight Assistance (IA) – Set-up, Procedure, and Results

Objective
Will users understand the interaction to curate similar highlights under one insight?

- How will existing users / ones that recently started respond? > our focus for now
- Will new users get this from the get? (as a lot to do with on-boarding of the overall app as well…)

Type of users
Existing users that are working with English Intercom data quite a lot.

Type of data expected
- Video recording (qualitative, what things are going wrong / when / how long does it take, do they try to click other things in the interface?)
- Rating scale (how do they classify their own understanding / how do they like it when asked)

Procedure
See figure 3 for an overview of the setup and materials. An InVision prototype for the IA-concept is created. Participants would complete the tasks described in the task list, in the prototype. After the last taks is completed, participants are asked to fill in the survey.

Each session is done unmoderated. The InVision prototype, task lists, and survey are sent to participants via a Lookback-link; when opening the Lookback-link and starting the test, the respective links for the prototype and online survey are given.

Results
See the following pages.

Participants

- Existing users
- Work alot with English Intercom data.

Invision prototype IA

Task list + Lookback.io

Online survey

Record session on audio and video

Video recording + Rating scale and remarks on IA
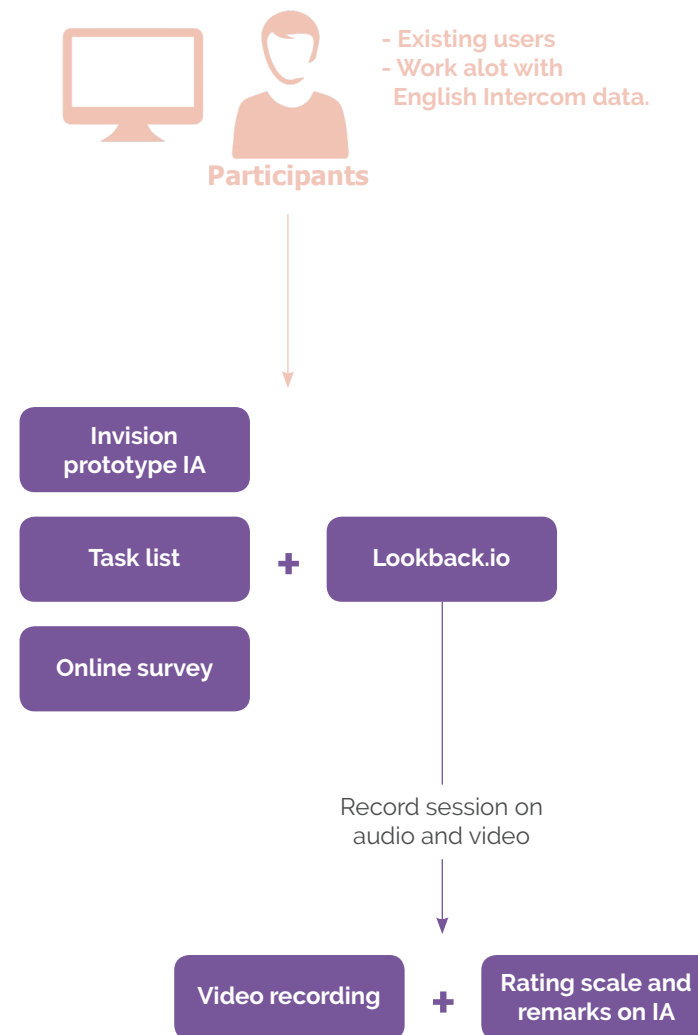
Figure 3: Overview of the setup and materials for the user test on the IA.
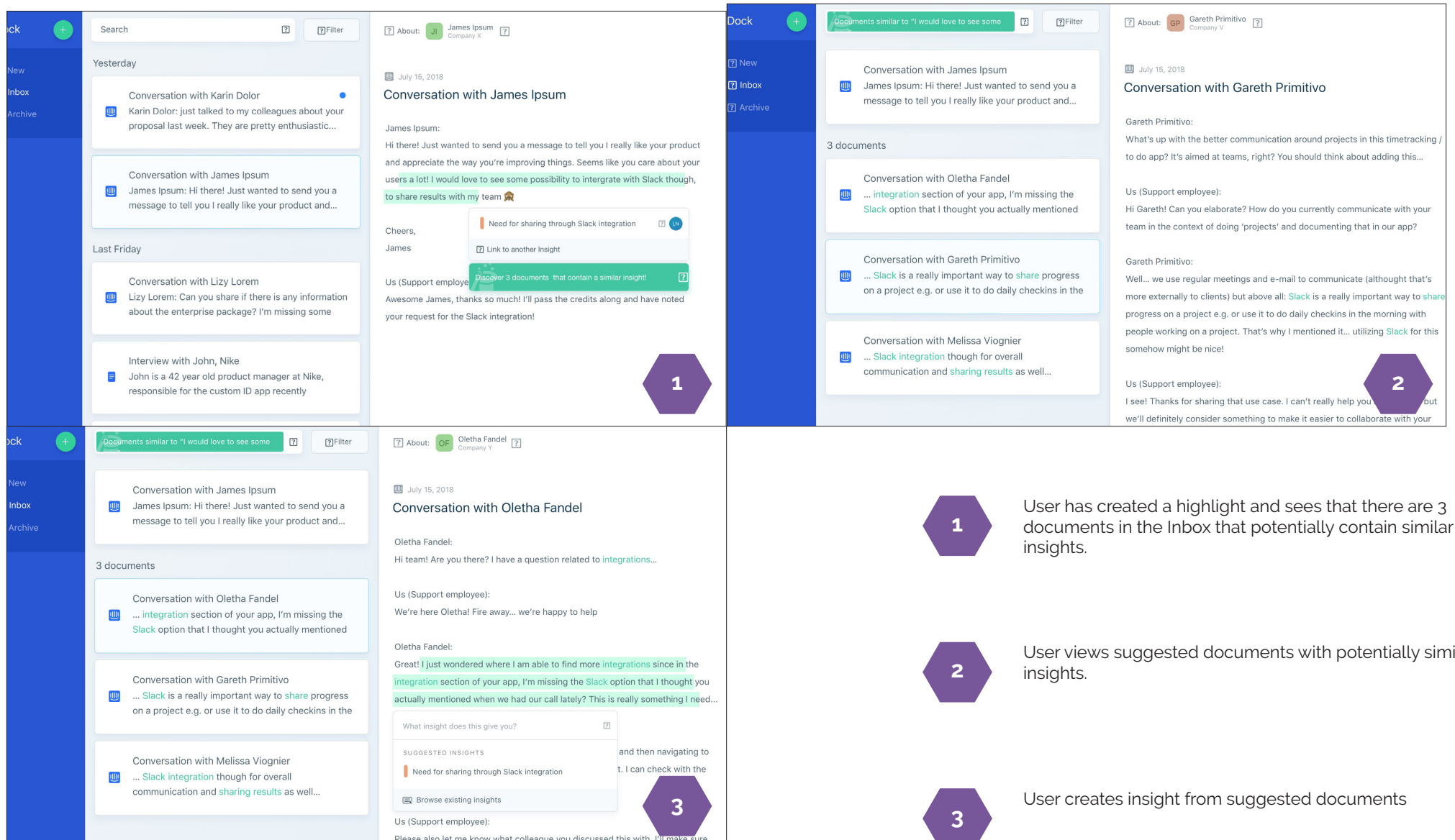
Figure 4: The prototype of IA that was tested.

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

Participant #1

Task	Succes	Completion time	SEQ*	Remarks
Find the feature request in the message that's already open and save it as an insight	✅	~30 sec	4/7	• Clicks on '+' icon (top of doc) first when exploring the screen • Sticks pretty long on the 'comment' part, explaining the set insight name
Get to a list of documents similar to the insight you just created	✅	~5 sec	7/7	
Open one of the documents and look for a similar feature request, then store it	✅	~25 sec	6/7	• I didn't expect this to go so swiftly, she spots the sentence pretty fast • not distracted by other parts of context menu • this time from finish task 2 till finish task 3. Finding the insight within the chosen document goes way faster compared to finding the first insight (task 1) > of the overall task, this takes up ~15 sec
The overall concept of finding similar documents based on an insight you've already found feels:*	-		5/7	

Participant #2

Task	Succes	Completion time	SEQ*	Remarks
Find the feature request in the message that's already open and save it as an insight	✅	~30 sec	5/7	
Get to a list of documents similar to the insight you just created	✅	~4 sec	4/7	
Open one of the documents and look for a similar feature request, then store it	✅	~25 sec	5/7	• Clicks on document that's already open • not distracted by other parts of context menu • this time from finish task 2 till finish task 3. Finding the insight within the chosen document goes way faster compared to finding the first insight (task 1) > of the overall task, this takes up ~10 sec
The overall concept of finding similar documents based on an insight you've already found feels:*	-		5/7	

Participant #3

Task	Succes	Completion time	SEQ*	Remarks
Find the feature request in the message that's already open and save it as an insight	✅	~25 sec	7/7	
Get to a list of documents similar to the insight you just created	✅	~10 sec	7/7	
Open one of the documents and look for a similar feature request, then store it	✅	~20 sec	5/7	• clicks around on the 3 suggested documents (others didn't do this, picked one) • not distracted by other parts of context menu • this time from finish task 2 till finish task 3. Finding the insight within the chosen document goes way faster compared to finding the first insight (task 1) > of the overall task, this takes up ~10 sec
The overall concept of finding similar documents based on an insight you've already found feels:*	-		6/7	

Shared thoughts, feedback, or ideas regarding the concept

- Participant #1: "I'm not sure how this is different to just collecting the in sights anyway? Seems like it's just providing a quick click to get to that?"

- Participant #2: "The instructions themselves weren't entirely clear. Once I understood the task, the actual task was fairly straightforward within the interface."

- Participant #3: "It made finding similar entries very easy. What would be awesome is not actually having to search for it. This means you open a message and it suggests you a tag."

Overall metrics & findings

Task 1: Find the feature request in the message that's already open and save it as an insight
SEQ avg: 5.5/7

Task 2: Get to a list of documents similar to the insight you just created
SEQ avg: 6/7

Task 3: Open one of the documents and look for a similar feature request, then store it
SEQ avg: 5.5/7

Overall concept
Score: 5.5/7

- Think the way this concept performs is quite good. People tend to understand it but don't respond with things like 'Awesome!'. Think this might also be due to the test being focused on executing tasks one by one (see lessons learned), which avoids the ability to realize/internalize the value of the overall concept/bigger picture. Though, it might be useful to incorporate something to explain the value / market the feature better.

- Finding the first insight in a message takes quite a lot of time (~25/30 secs). Not something that we can use for this version of assistance, but something to keep in mind for later. I expected this to go faster since the message is really short (compared to real life messages) and the (one) insight is really obvious…

- This also relates to the third task: they need to find an insight in a suggested document here, that relates to the first insight. These docs are even a bit longer than the one from task 1, but finding that insight goes faster (~10/15 secs), compared to the time needed for task 1. This might be due to the highlighted keywords.

Appendix V: Survey Exploration Phase – Questions and Summary of Results

Questions asked

1. What is your job title?

2. What is your company's website?

3. How would you describe your company?
   More than 1 selection possible

   - (Mobile) Apps
   - SaaS (= Software as a Service)
   - Agency / Consultancy
   - Government organization
   - Small-/Medium-sized business
   - Multinational enterprise

4. Does your company conduct user research?
   User research also entails collecting user feedback, via live and support channels, besides the more familiar procedures such as setting up a research plan and performing user tests.

   - Never
   - Seldom
   - Sometimes
   - Regularly

5. How would you rate the efficiency of user research in your company?

   | | | | | | | |
   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
   Insufficient .... *Great*

6. What are the three biggest problems you have recognized in this?

7. How would you rate the efficiency of user research in your company?

   Research setup

   | | | | | | | |
   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
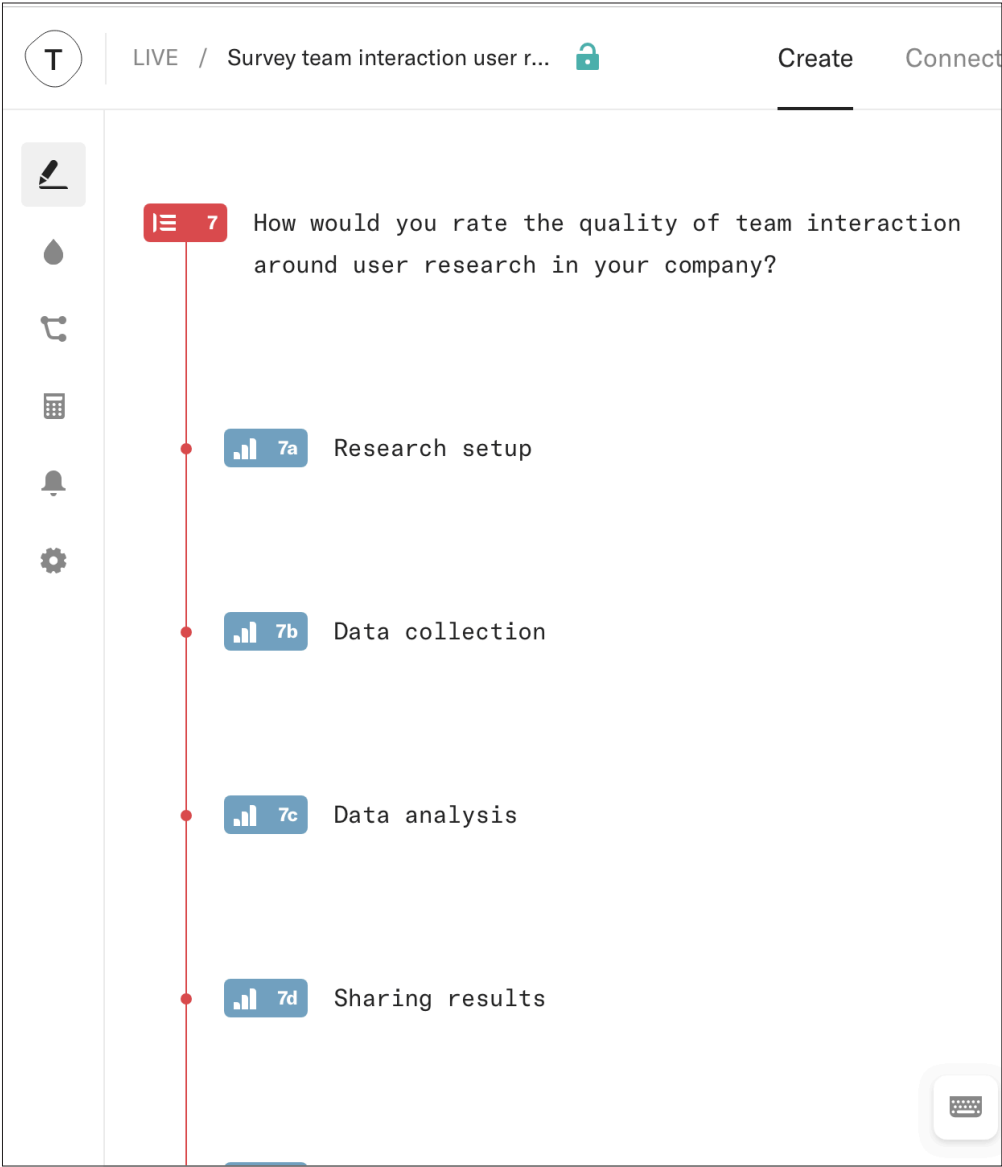   *Bad* .... *Great*

Figure 5: The survey was prepared in Typeform. This figure shows the preparation of one of the questions that were asked. The result was a digital survey.

Data collection

1	2	3	4	5	6	7
Bad						*Great*

Data analysis

1	2	3	4	5	6	7
Bad						*Great*

Sharing results

1	2	3	4	5	6	7
Bad						*Great*

Executing insights

1	2	3	4	5	6	7
Bad						*Great*

8. What are the three biggest problem(s) you have recognized in this?
This includes the entire process, from raw data collection from user feedback, to sharing relevant results, and executing actionable insights.

9. Would you be interested in a short interview (around 15 minutes) in which you can elaborate more on your answers?
Selecting 'yes' means you are open to let us get in touch with you, after submitting this survey.

- What is your full name?
- What is your e-mail address?
- What is your Slack user name?

Summary of results
Only the responses that chose 'SaaS (= Software as a Service)' and 'Small-/ Medium-sized business' in question 3, were taken for analysis.

Problems in user research:
- It can be difficult to get end-users to be involved in the development process.
- To cover the number and variety of users.
- Difficult to change sites, by getting outside employee and management viewpoints.

- Not understanding that product decisions should make users understand the product.
- Allocating time in user research.
- Categorizing the collected feedback is difficult, since there are many user tickets.
- CS-teams are the ones who hears user feedback most often, but they are too busy to collect feedback.
- Users tend to not provide feedback.
- Users do not have any incentives to provide feedback.
- Sometimes users do not understand what is being asked from them.

Problems in team interaction in user research:
- The end goal of research is often not clear, as definite work items are not jotted.
- Difficult to perform research continuously, as it is hard to identify the most important aspects of research.
- Some companies still rely heavily on quantitative research and only take advice from conferences; qualitative research with end-users is disregarded.
- Each team member is too busy to share the results.
- Each team member is too busy to execute actionable tasks, which causes these to be delayed.
- Data collection is a responsibility for multiple departments, but not everyone sees the importance in it.
- Letting users know about the status of feature requests.
- Structure of data is not normalized.
- Sharing relevant results.
- Using the feedback and acting upon it.
- Loss / damage of data.
- Vague data collection (no values).
- Sometimes when executing insights there is no final results for several cases, and we left it behind and go with another cases.

The following steps in user research are scored the lowest:
- To set up research
- To collect data
- To execute actionable tasks

Appendix VI: Interview Grible (Four People) – Questions and Resulted Insights

Interviewees
- Frank Lagendijk (Product Management, Sales, UX- and UI-Design, Customer Research)
- Gino Mangnoesing (Product Development)
- Steven Aanen (Product Management, Product Development)
- Lennart Nederstigt (Product Development)

In between brackets are the main roles of each team member in Grible. In practice, however, the roles would overlap. Also, other roles, such as Customer Support / Service and Finance, are shared among all four members.

Interview questions
1. What are you currently focusing / working on, regarding Shipright?

2. Can you tell me something about the target group?

3. Are there any recent findings that you can share?

Concluded insights
At the moment of the project, the focus of Shipright was to enable users to quickly distill recurring requests / needs / findings from feedback channels. Also, Grible was working towards a new release of a completely new functionality. It was meant to assist users in making as much highlights as possible to create insights from; in other words, to analyze as much data as possible, in the shortest amount of time.

Some more knowledge about the target group was also gained. First of all, it was found that It was common practice among the target group companies to release new features for their products regularly. In theory, these releases are aligned with the sprints that the companies go through.

Second of all, it is common among the target group to go through product discovery and delivery tracks. As mentioned in earlier findings, discovery tracks are meant to discover the things need to be built to satisfy customers' needs, while delivery tracks are about making these things. This came with the conclusion that Shipright was not necessarily meant to be a user research tool, but rather a product discovery platform. The goal of this platform is, then, to collect user feedback data, analyze them, and make sense of the actionable

tasks that are to become part of the product backlog / roadmap from the results.

All the actions that goes around product decisions, revolves around product teams with typical key members of Product Managers / Owners, UX-designers and developers. In most of the targeted companies, PM's / PO's are the ones leading the user research analysis. UX-designers are often closely engaged in the analysis too but tend to not be leading the process. One thing that these stakeholders have in common, is that they are not specialized (meaning educated) in user research. The developers, on the other hand, tend to focus on building the product and / or prototypes, and not so much in the progress of research (they especially focus on delivery and not so much on discovery). In the larger companies, among the target group, Customer Support 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. While in theory there are supposed to be separate teams for the discovery and delivery tracks, in practice the roles can overlap with one or more team members of the product team.

One of Grible's team members had done a Skype call with a trial-customer, which was about the problems the customer experienced when using Shipright. Out of his findings, the following problems and needs were identified from the customer:
- The intended workflow of user feedback analysis was not completely clear.
- There was an insecurity about the extent of knowledge possessed by other departments, regarding proper user feedback analysis.

Appendix VII: Interviews Exploration Phase – Questions and Resulted Insights

Interviews with non-users (UX-researcher and Product Manager)

Questions

1. To what extent do you have experience in working with SaaS scale-up companies and/or agile environments?

2. Can you tell me something about user research in that environment? (this includes collecting and analyzing user feedback from live and support channels, such as intercom)

   - What are different steps that are typically taken?
   - How are the results stored, used and shared?
   - What are the biggest hurdles you have encountered, so far?

3. Can you tell me something about the involvement of each company/ team member around user research? Around user research meaning: not only in performing the user research itself, but also the preparation of the research, communicating its results, and deciding on further steps to be taken.

4. How do you feel about these levels of involvement of the different stakeholders?

Concluded insights
In Agile environments, the typical steps of the user research process are still to be walked through:
1. Starts to understand 'what are we trying to understand here?'; the most common way to do that is by doing stakeholder interviews.
2. Prepare research plan: to turn the business questions into research questions, and identify methods to apply to get the answers to these questions.
3. Stakeholders approve the plan.
4. Fielding: collecting raw data.
5. Convert data to a format that can be used for analysis.
6. Analysis of raw data.
7. Communicate results with stakeholders.

The problems that were identified in each step are:

- Hiring and recruiting participants in fielding.

- Engaging all team members / internal stakeholders (representatives) in the process, by the means of briefings / meetings in preparations, plan approvals, data analysis and sharing of the results; this is most likely not possible due to time restrictions.
  - A sub-problem in this is that developers tend to be lacking in empathy towards end-users.
  - Also, there is a need for transparency of the analysis results to enable the relevant stakeholders to be engaged in the research process.

- In Agile environments, documentation tends to be lacking, due to the high pace of work. This is especially a problem in fielding and converting data to useful formats for analysis.

The following stakeholders should be involved in user research: the technical (development), business, design, marketing and customer support representatives. With respect to contribution, firstly, a stakeholder review should be implemented in each phase of user research (fielding, analysis, etc.) Secondly, the research lead should be able to check everything from a larger perspective, to check if the user research is conducted to meet the specified goals or not.

Interview with a user (CS-manager)

Questions

1. Can you tell me about your experiences with Shipright so far? What do you like and what are the problems you have encountered?

2. Can you tell me something about the involvement of each company/team member around user research, in your product/company team? *Around user research meaning: not only in performing the user research itself, but also the preparation of the research, communicating its results, and deciding on further steps to be taken.*

3. How do you feel about these levels of involvement of the different stakeholders?

4. Has this changed to any extent ever since you started using Shipright?

Concluded insights

To be concluded, the customer experienced Shipright as useful in organizing and categorizing insights. It was also concluded that Shipright is positively experienced in creating insights about customers' problems and needs, and to use these insights to decide about further steps to be taken. Furthermore, the Intercom integration is seen as a useful feature, as it makes (qualitative) user data collection automated. This saves a significant amount of time and more time in analysis of these data can be spent.

Overall, the customer seemed to be happy with Shipright. Though, some points for improvement were mentioned. Firstly, the analysis of raw data can be enabled to start from themes, instead of highlights. This means, to also be able to start by creating themes based on early assumptions and/or knowledge, and to search for insights based on these themes; the current design only allows users to create themes based on the insights that are gathered beforehand. Secondly, the insight creation and assigning themes to insights, can already be done while making catches from the internet. What this means, is to skip the Dock's inbox when making catches, and just create insights directly from relevant internet data and store them in the insight's repository immediately.

When it comes to user feedback analysis, it appears that one department tend

to do the analysis process, which is creating the insights out of the collected user feedback. Other departments who are focused in design and development, would only need to review the results of the analysis and treat it like a list of requirements for the product. The interviewed customer seemed to be happy about this task division in his company.

Appendix VIII: Summary of Findings from Grible's Internal Documents and Databases

The target group of SaaS companies make use of Agile approaches to improve their products. Hereby, the focus lies on small and medium businesses (up to 100FTE / up until 10M revenue) and medium markets (100 – 500 FTE / 10M – 100M revenue). This group of businesses entails scale-up companies in its majority. For outreach, however, it was established by Grible to focus on businesses with a minimum of 10FTE. This may include, not just scale-up sized businesses, but also start-ups. Furthermore, in these companies, there is some level of UX-maturity to be recognized, but it is not fully matured (*company mentor, personal communication*). Key players that are recognized in these companies are product founder / lead with a strong affinity in UX and UX-designers/-design consultants/researchers.

From the analysis of Grible's internal documents, it was concluded that Shipright was built to help these key players to achieve the following:
-        To capture interesting information easily.
-        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 get a view of the ost pressing drivers, to know what to focus on and be able to prioritize.
-        To be able to make a certain decision related to a specific product aspect, there is a need of an objective overview of user findings for a specific driver, that can be used as input to build up the decision.
-        To provide transparency of user findings towards internal stakeholders, so they are continuously in touch with our user and get some feel for urgency.
-        To enable teams 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.

Certain additional needs were also identified from Grible's competitor analysis. These are listed below:
-        A lightweight tool (meaning simple and clear)
-        Support for file images (to refer findings to) and insight visualizations
-        To consolidate ideas and feedback from their teams
-        To view feedback from different segments of (internal) sources
-        To be able to export and edit notes

Other problems and needs that are identified in Grible's internal documents are the following:
-        Recruiting people for studies is difficult
-        Do research debriefs/reports
-        Transferring knowledge from researchers to their product team
-        There is a limited awareness of proper user research approaches among many customer-facing people in support or sales

Additionally, specific feature requests among existing users are found. To be summarized, the top requests are the following:
-        Improved insight reporting (quantitative representation)
-        Support for images
-        Support for audio / video recordings
-        Support for Word / PDF files
-        Slack integration
-        Editing notes after they are put in dock
-        Permission of access per employee role / department

Appendix IX: FullStory Observations on Users' Actions in the Dock Section

Findings
Observed user #1 (CS - paid customer for 2.5 months)

- Most of the insights he created were linked to existing insights or tagged with existing themes.

- He skipped a lot of Dock messages. Judging from his quick way of scrolling down, these might be useless data, which he has noticed immediately.

- He sometimes took a long time reading a document but did not create any highlights. Judging by its size, it should have stood out, so he took time to go through it. Though, he could not find relevant data in it.

- He went way downwards before starting looking into Dock messages. He possibly decided on a time frame first, in selecting data to be analyzed.

- He went back and forth, between data from a few days before and data from approximately 3 weeks before. There were a lot of Dock messages in between.

Observed user #2 (User Research - paid customer for less than a week)

- He seemed to prefer to create an insight without any themes assigned to it and add all the themes later. Though, there is a possibility that he was just navigating through the possibilities in Shipright.

- He seemed to be unsure, a couple of times, whether a certain passage can be turned into an insight or not.

- He seemed to be unsure, a number of times, about existing themes and insights a new created insight should be linked to. Hereby, he also tended to assign more themes to insights later, in the insights' repository.

Observed user #3 (CS - paid customer for 2 months)

- She was the first user that was encountered, in this observation, who actually used the filter of only viewing the new Dock messages. This was also the case in other recordings, made in other dates of use.

- She seemed to have linked highlights to existing insights, mostly. She barely created a completely new insight.

Observed user #4 (CS - paid customer for less than a week)

- She used the filter to only view the new Dock messages but skipped a lot of messages. These are most likely to be useless data.

- It appeared that, while using the view for new incoming Dock messages, viewed messages cannot be archived.

Observed user #5 (User Research - paid customer for 2 months)

- He also used the filter to only view the newly incoming Dock messages but did not start with that. Unlike the other users observed, who used this filter, he started to go through older Dock messages first.

- When viewing the newly incoming messages, he skipped a lot. There is a possibility that these are irrelevant data. Although, as observed earlier, he would go through older messages, which are not marked as new anymore. This leads to the assumption of another possibility, that is for him to simply keep the Dock messages to analyze later. His motives to do so are still unknown, however.

Main conclusions
- Most insights created are to be linked with existing themes or insights
- A lot of Dock messages appear to be skipped, in the process of creating an insight
- It can be difficult to make sense of data that are encountered
- Time frame and new messages appear to be the filters that are used among the observed users
- None of the observed has used the search function or other filters (names, company, etc.)

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?

Appendix X: First Design Challenge – Design Criteria

- The available filters can be viewed
- The function of the filters are clear
- The filters can be activated and deactivated
- Filters can be adjusted, enabling users to zoom the filters in and out (for instance, to change the time frame back and forth between 'last week' and 'last month')

- New data must be distinguished from existing data
- Sources of data (customers and companies) are visible
- An overview of the available data must be available in one place

- Data existence must be confirmed
- Variety of sources must be confirmed
- Time frame of occurrence must be confirmed

- Relevant documents can be identified
- Irrelevant data are retrievable
- Irrelevant data are accessible
- Users are able to decide by themselves if data are relevant or not

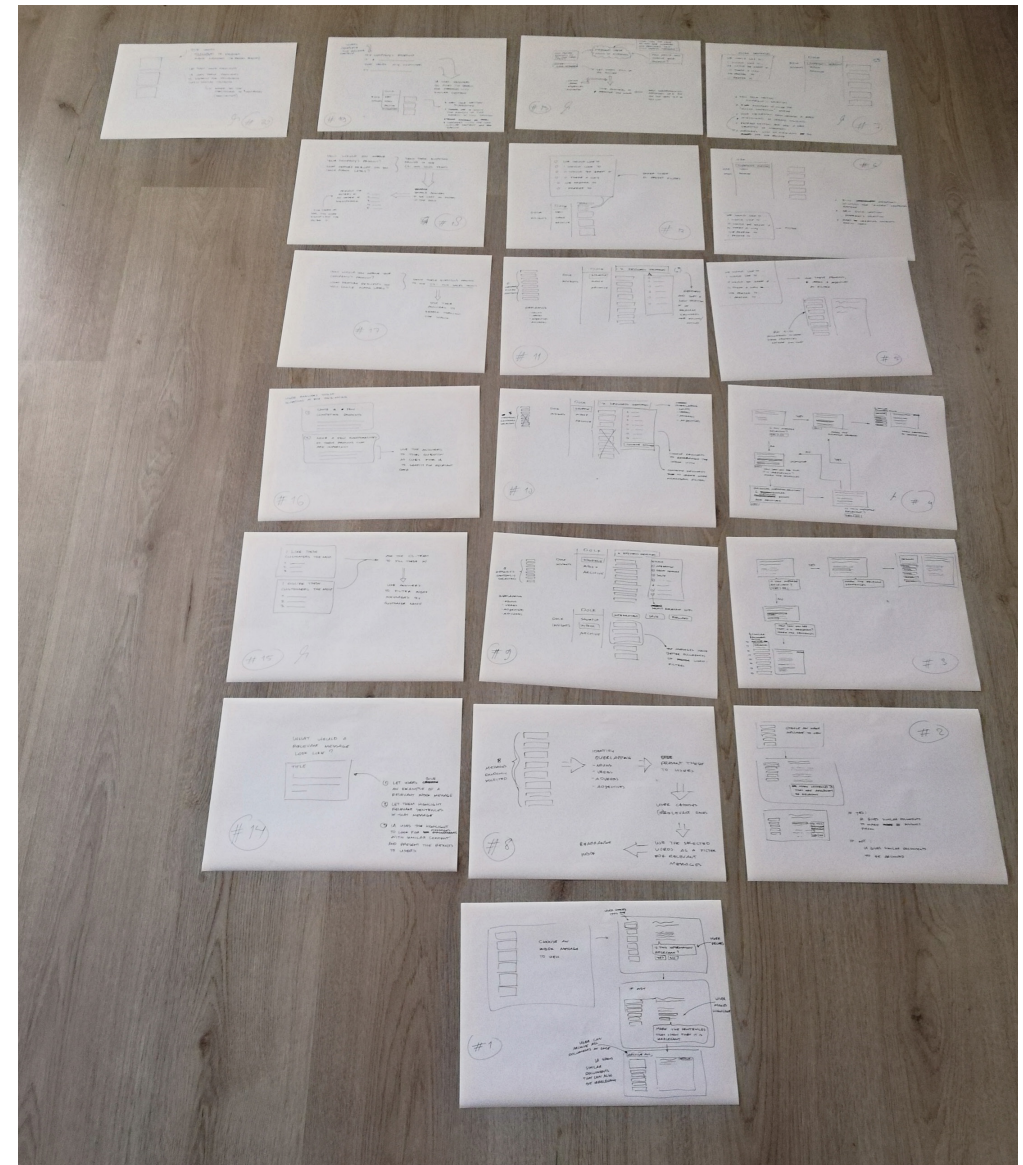## Appendix XI: First Design Challenge – Generated Ideas

Figure 5a: Generated ideas.
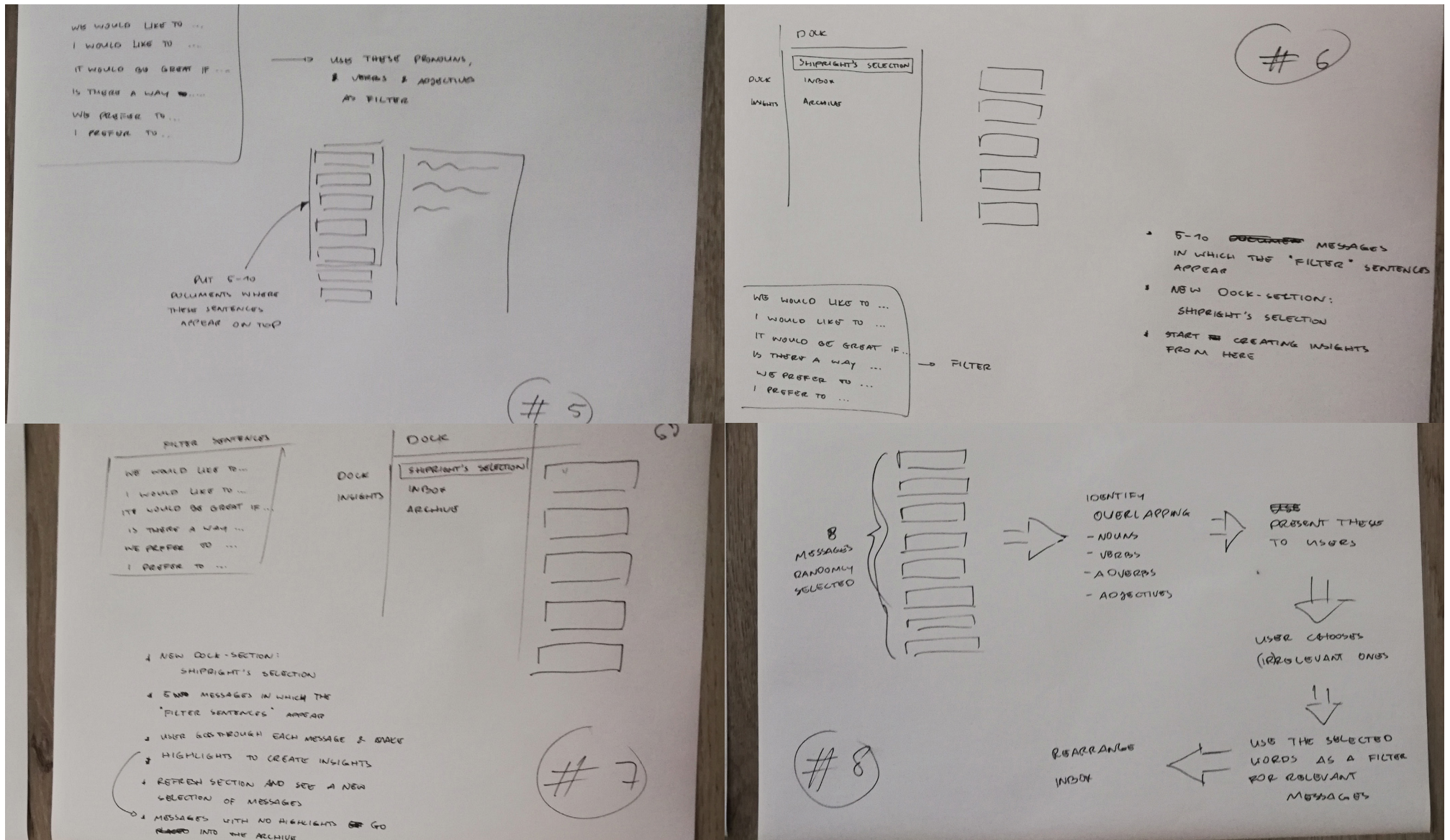
Figure 5b: Generated ideas.
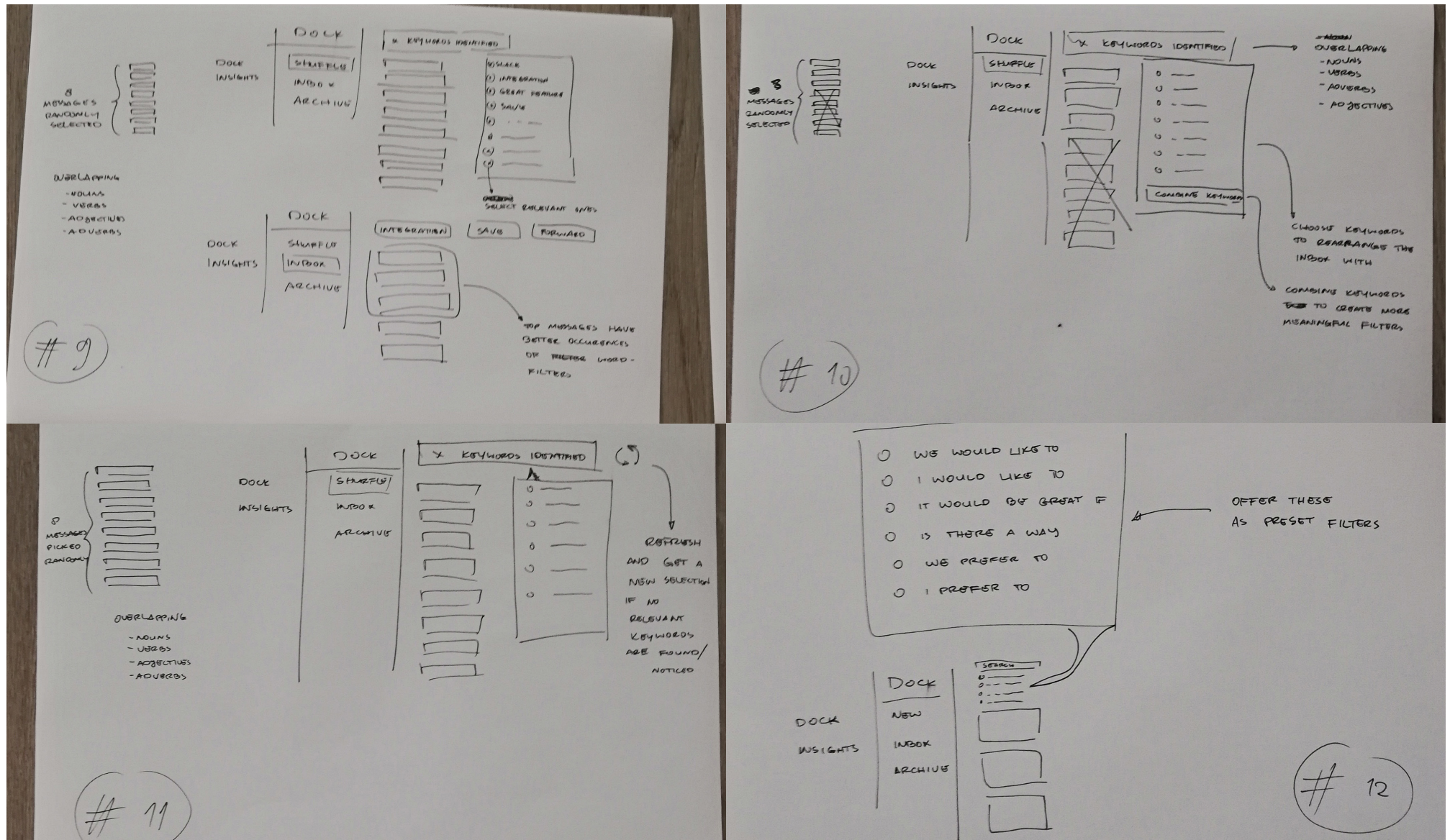
Figure 5c: Generated ideas.
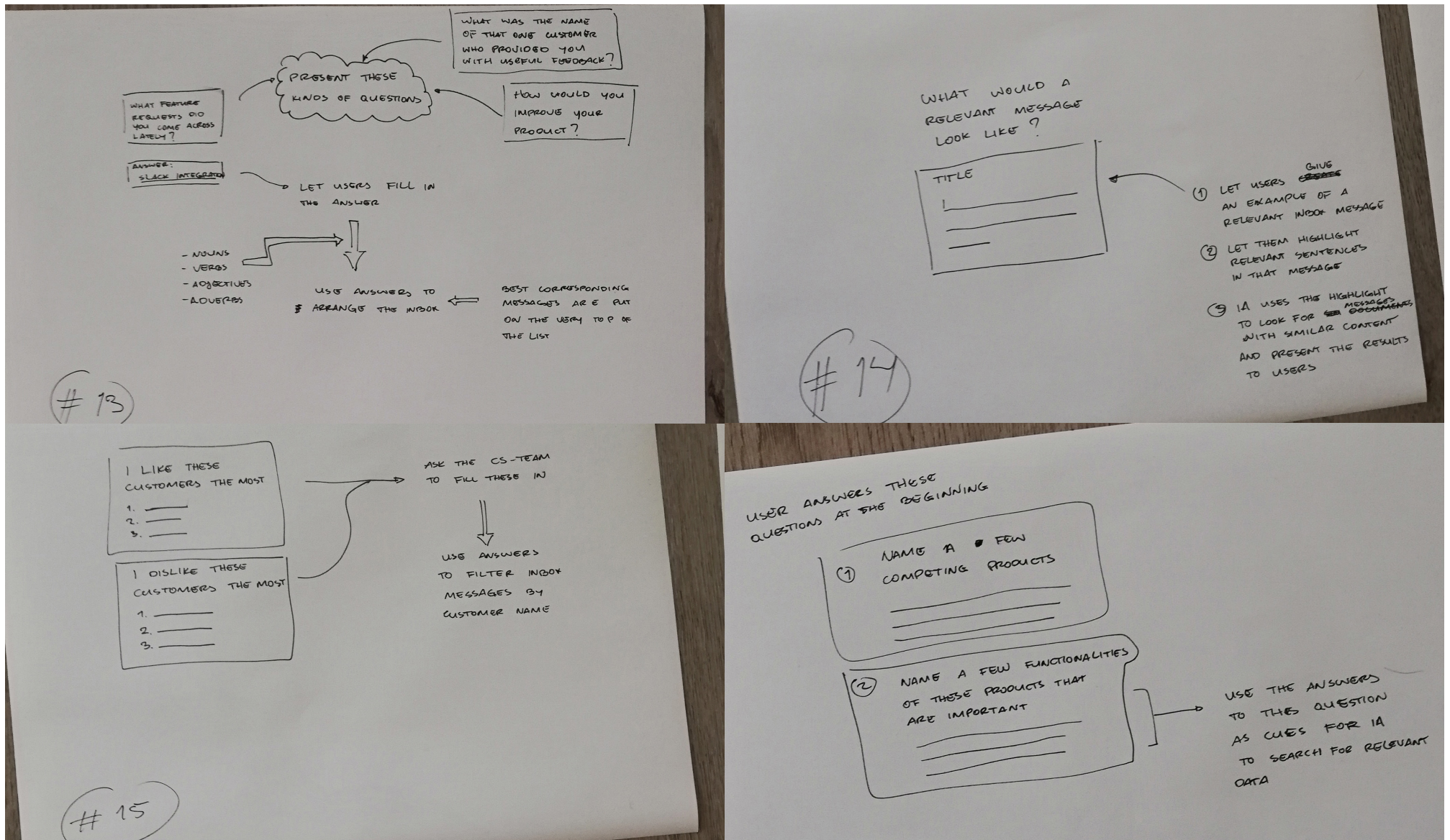
Figure 5d: Generated ideas.
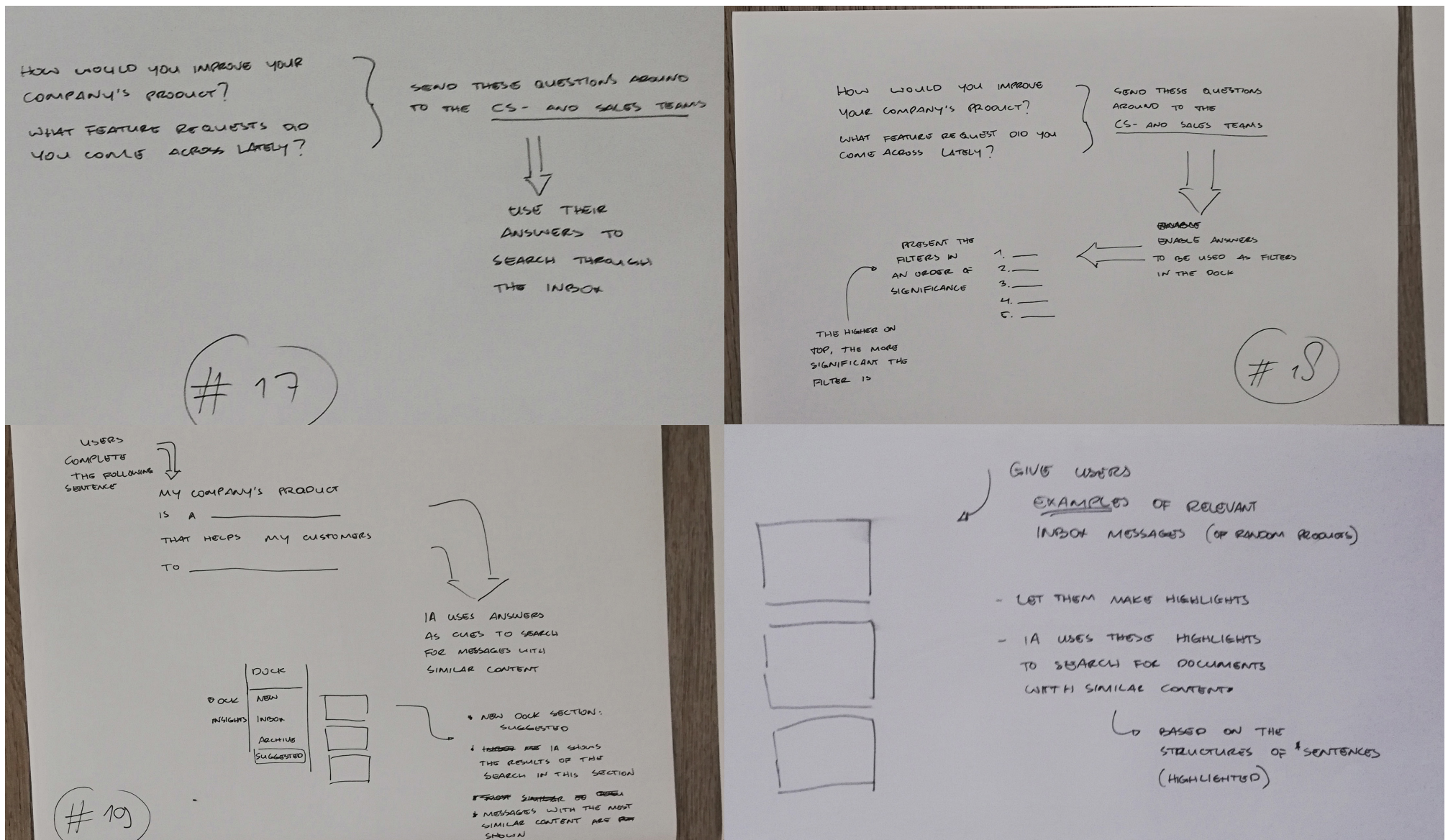
Figure 5e: Generated ideas.
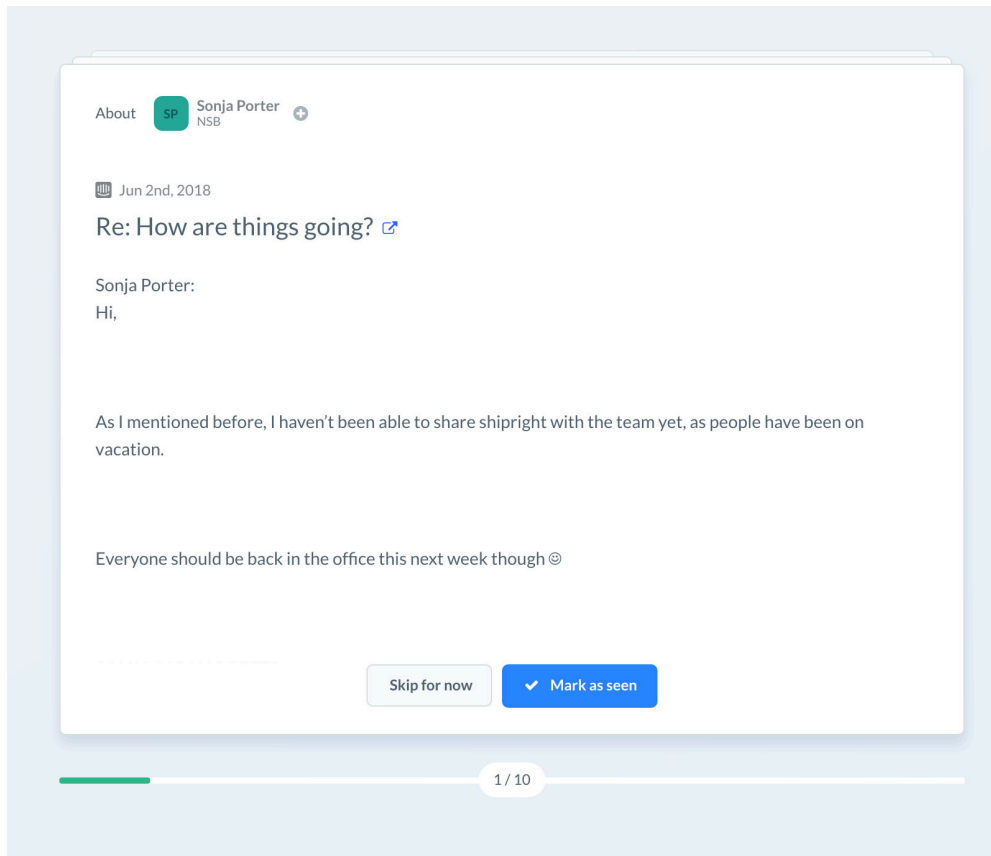
Figure 5f: Generated ideas.

Figure 6a: Concept original: New-documents view.

Appendix XII: Concept Original, Concept Alternative, and Concluded Insights from External Feedback

Concept original

As a delivery goal for the internal team, the concept had to be built within a week, for it to be released right away. Then, feedback from users would be collected, in order to check the assumptions that were made and find solutions to improve the design of Shipright. The concept that was released is described in this section of the report.

The new design included a Home screen in the Dock section. Users would get to this screen after they have imported their data in Shipright (for first time users, they are guided towards the import of data, right after logging in). In this Home screen, the subsets were placed. As already mentioned, a subset was a set of filters in the Inbox section of the Dock and when activated, Inbox documents will be filtered by corresponding sets of filters. Using these subsets, users would be enabled to filter their imports by new incoming data, potential feature requests, customer name and company name.

'New documents' -subset

This subset showed the newly, incoming Inbox documents. For first time users, this would not have much of value. However, users of a prolonged period of time appeared to make use of this function, as observed in Fullstory (see Appendix IX).

'Potential feature request' -subset

As concluded in the ideation session, this was assumed to be a relevant filter for users. Though, the team was not completely sure about its feasibility. After exploring the possibilities and limitations, they concluded that it was achievable to be built and released within a week-time. Inbox documents that, possibly contain feature requests from customers, would be recognized by certain structures of sentences that appeared in their contents (due to confidentiality reasons, the exact structures cannot be shared publicly). Furthermore, only the documents that came in within the past 30 days would be analyzed.

'Customer with most feedback' -subset

As mentioned, it was expected to bring users closer to relevant documents (/ conversations) if a filter was shown, that gives suggestions of customers to filter the Inbox documents with. These suggested customers would then be those with whom the longest conversations were made. This subset showed the suggestions, by the means of histograms that represented the volume of the corresponding conversations made with the suggested customers. Also, for this subset, only the documents that came in within the past 30 days would be analyzed.

Subset to filter towards documents that came in the previous month.

Subset to filter towards documents that possibly contain feature requests from customers, out of all incoming from the past month.

Choose customers, based on document-volume shown per customer. The top five with the most volume are suggested, based on incoming documents from the past month.

New documents
Document count

174

VIEW DOCUMENTS

Do you consider this useful?

Potential feature requests
Document count

8

VIEW DOCUMENTS

Do you consider this useful?

Customers with most feedback
By document count

COWORKER COMMUNITY	4
Flo Kandler	3
Gaby Verwegen	2
Green …	1
Yellow …	1

Do you consider this useful?

Companies with most feedback
By document count

Roadmap™	2
Cuéntica	1
Sketch	1
ZIVVER	1
MessageBird	1

Do you consider this useful?

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

LET US KNOW

Choose companies, based on document-volume shown per customer. The top five with the most volume are suggested, based on incoming documents from the past month.

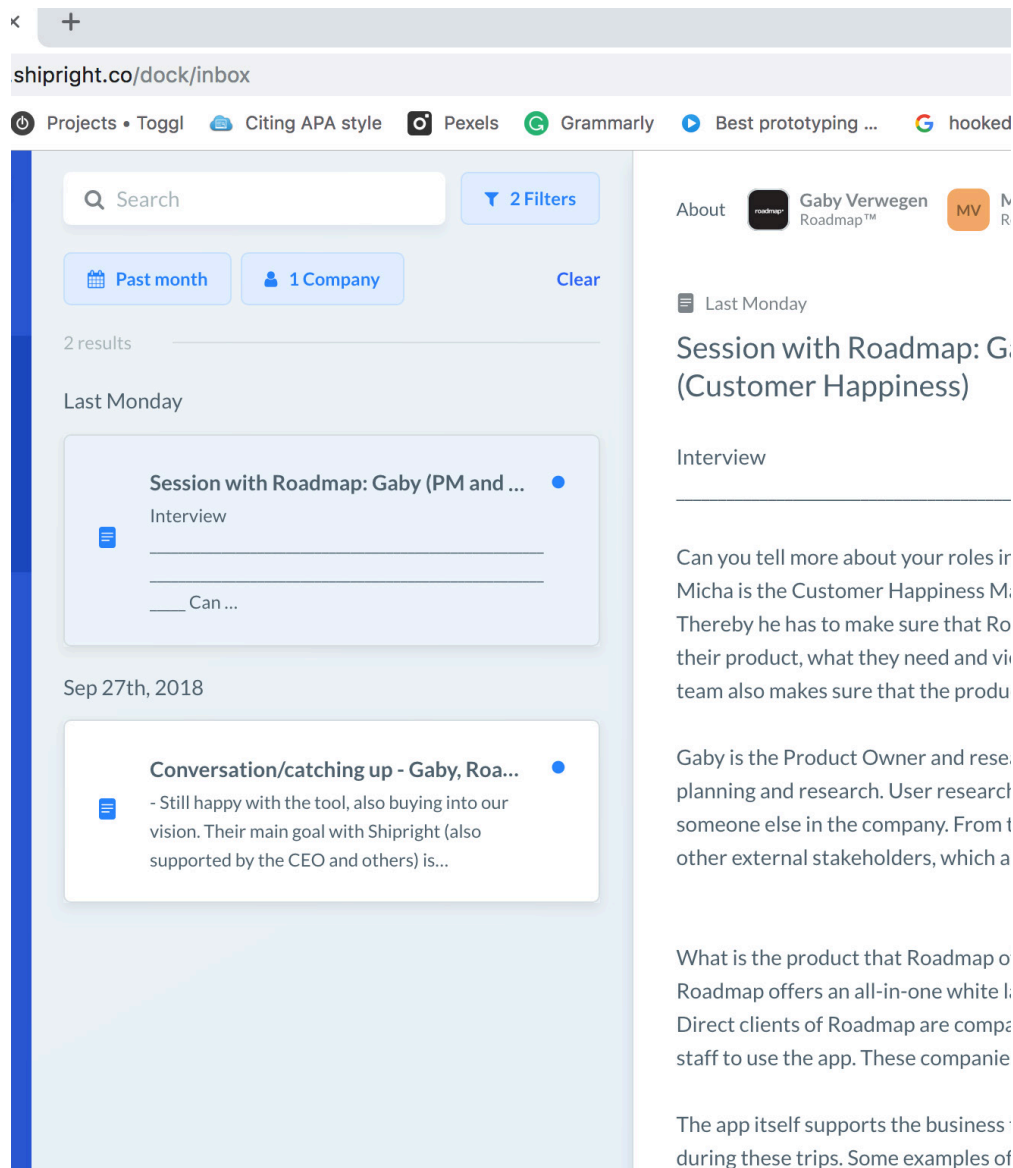Figure 6b: Concept original: overview of all filter-subsets.

Figure 6c: Concept original: activation of Inbox-filters..

‘Company with most feedback’ -subset
As some of the users tend to have companies as clients, a separate subset was included, that would filter Inbox documents by company name. While the ‘Customer with most feedback’ -subset offered suggestions of individual customers, this subset offers suggestions of companies. The use of histograms was applied too, to visualize the volume of conversations made per company-client.

Inbox filters
It was explained earlier, that the activation of a subset would turn on certain filters that would be combined to distill imported data in the Dock section. After activating a subset (by clicking on it in the Home screen), users would get inside the Inbox of the Dock section, with the corresponding filters set active. Hereby, they are still enabled to deactivate some / all of these filters.

Concept alternative

As it was mentioned earlier, the concept had to be built within a week, for it to be released right away, as a delivery goal for the internal team. Because of that, the design of the concept was based on a lot of assumptions about the context of use. With this came the risk of certain assumptions and/or knowledge to be overlooked during the assessment of the concept.

In order to minimize this risk, a concept alternative was created as well. This alternative contained a few adjusted parts, compared to the original. As a discovery goal, it was also meant to be finished within a week time. This was however not released to customers, but only kept as a high-fidelity representation. Using an InVision link this concept alternative was sent out to the target group and evaluated in its possible relevance. This section of the report describes the alternative design of the concept.

'Unread documents' instead of 'New documents'

First of all, the original's name of 'New documents' was assumed to cause confusion in the interpretation of the documents filtered by the subset. The name, 'New' was expected to be associated with documents that came in after a certain point in time, which is the latest time of logging in. Users might, however, have logged in without having the chance to go through all the documents that were 'New'. This was actually not the case, as 'New' documents implied all documents that were not marked as read yet. However, it was expected that users would not realize this and still associate 'New' with documents that came in after the latest time of logging in. If so, they were expected to experience the feeling of getting further away from the relevant information. Figure 7 shows the mark (blue dot) that was used to show unread documents.

Besides that, there was the assumption that the concept original's view of the 'New documents' (see figure 6a) would increase the ability to recognize relevant information. This assumption was made because users were expected to feel less overwhelmed by the amount of imported data, that are otherwise visible in the regular view (see figures 6c and 7). So, they could focus more on the analysis of individual Inbox documents. This, however, was not fully confirmed yet. The alternative design would then include the regular view of the Inbox and challenge this particular assumption; while the concept original uses the alternative view (figure 6a), the concept alternative would show the 'New documents' with the regular view.
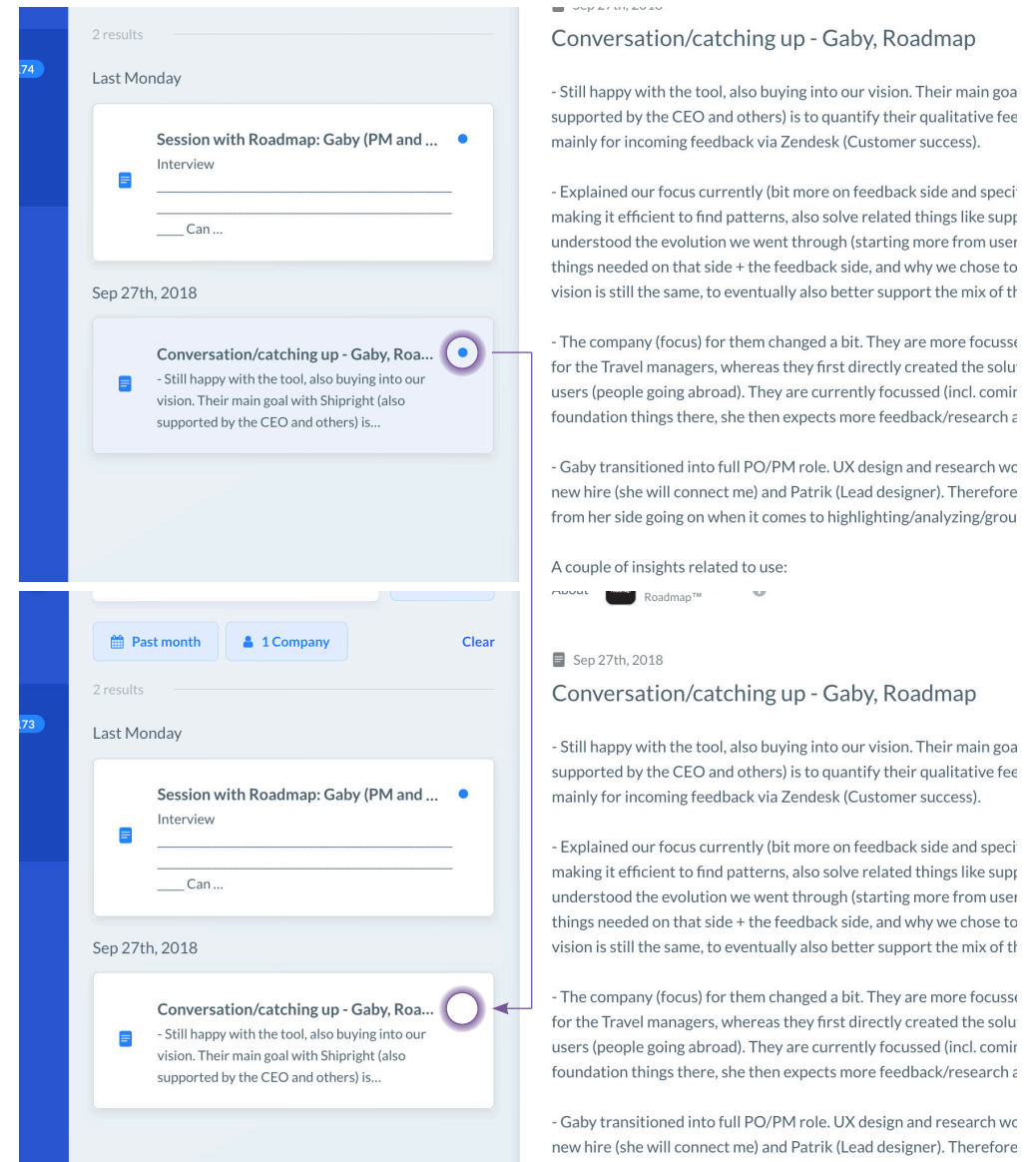

Figure 7: By clicking on the blue mark, you can remove it. By doing that, you can mark documents as already read.
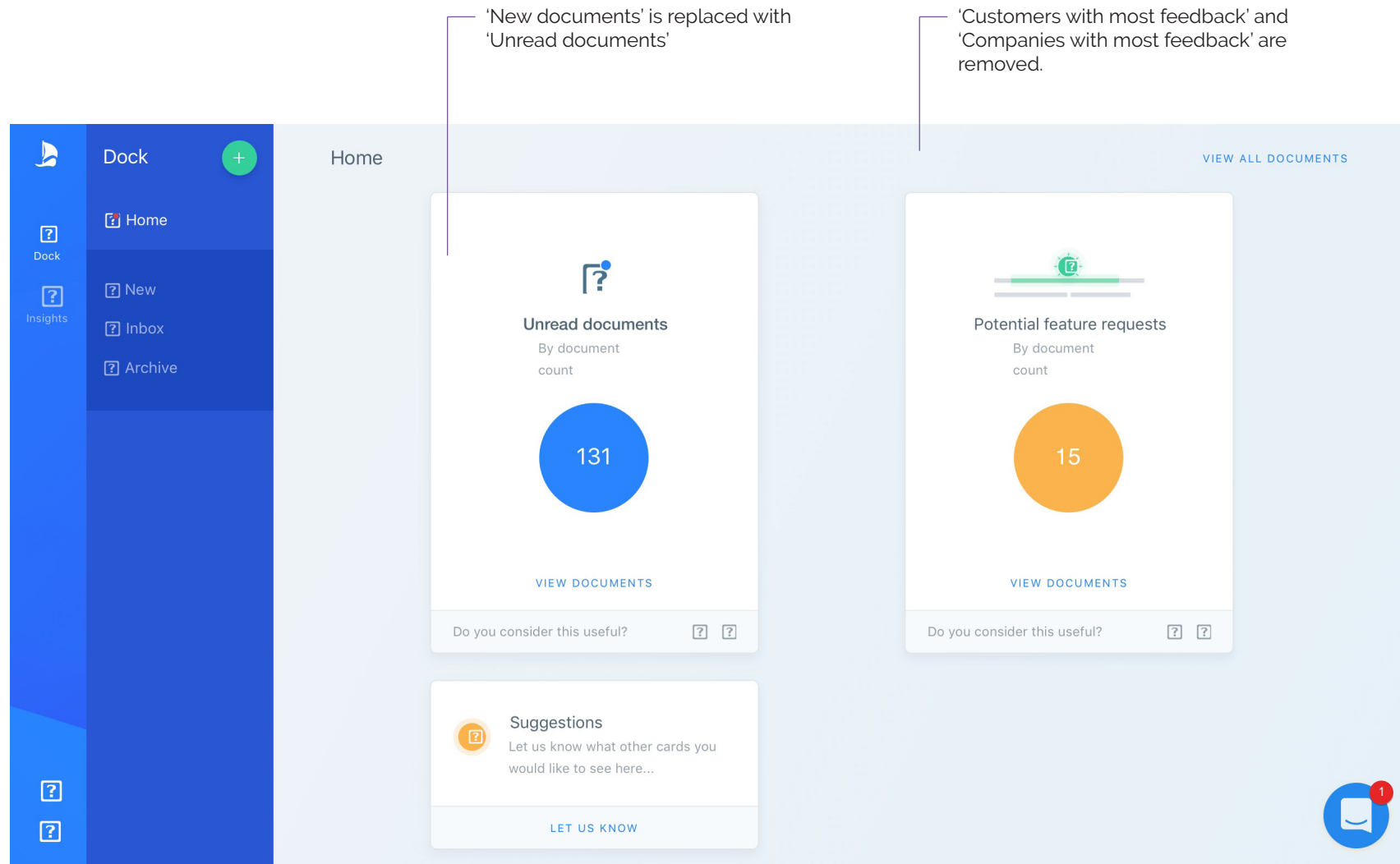
'New documents' is replaced with 'Unread documents'

'Customers with most feedback' and 'Companies with most feedback' are removed.

Dock +

[?] **Home**

Dock

[?] **New**

Insights

[?] **Inbox**

[?] **Archive**

Home

VIEW ALL DOCUMENTS

Unread documents

By document count

131

VIEW DOCUMENTS

Do you consider this useful? [?] [?]

Potential feature requests

By document count

15

VIEW DOCUMENTS

Do you consider this useful? [?] [?]

Suggestions

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

LET US KNOW

Figure 8a: Wireframe-screen of the concept alternative's Home screen.

'Customers with most feedback'- and 'Companies with most feedback' -subsets removed from the Home screen
In order to increase the experience of getting closer to the relevant information and guidance towards the use of filters, it was optimal to combine multiple subsets. This was, although, difficult to realize, as mentioned by the developers of the team (*Mangnoesing, G., Nedestigt, L., personal communications*). To still be able to achieve the before-mentioned experiences, it was decided as a testable idea, to guide users more towards activating the filters by customer and company once they would have had activated either one of the other subsets ('New documents' or 'Potential feature requests'). This would leave the subsets of 'Customers with most feedback' and 'Companies with most feedback' unnecessary. The alternative design would have these subsets removed from the Home screen.

External feedback on concept original and alternative

Goal
The goal of these assessments was for the target group to get a first impression of the core values of the concept and evaluate its relevance. Usability aspects were not given much attention in these assessments. The results are to be used to gain an understanding about the impact certain parts of the concept original and its alternative would have, regarding the experience of use. These experiences will feed on the relevance for the target group and are listed below.

- Guidance towards the use of filters
- Getting closer towards the relevant information
- Ability to recognize relevant information
- Freedom to judge the relevance of information

Approach
The concept original and/or concept alternative was presented to a sample of the target group. They were asked about their first impression of the concept, based on the four listed experiences. Both current customers and non-customers were approached. For non-customers, it was avoided to present both the original and alternative, as they would have had been more likely to decline the participation otherwise (the session would become too long).
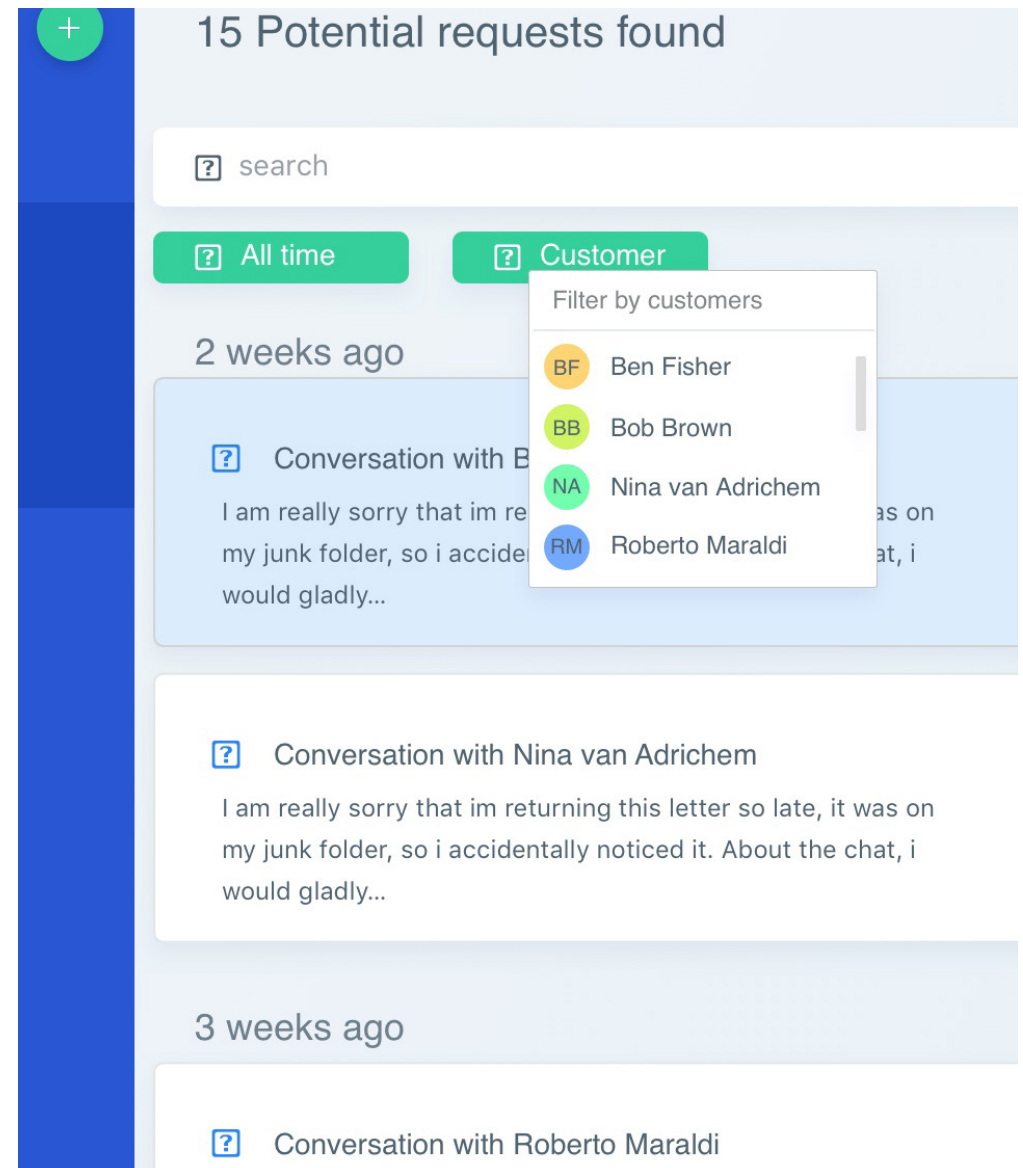

Figure 8b: Wireframe-screen of the concept alternative's Inbox-filters. After activating a subset, you can continue to filter by customers in the Inbox.

Recruitment

The following methods were used to recruit participants:

- Invite existing customers for a meeting, in which both the alternative and original would be presented and assessed.
- Create an InVision representation of the alternative concept (done by myself), send out the link in social media communities (Slack) that are used by the target group, and engage in conversations through chat messages or Skype-calls.
- Create a public demo of the original concept (done by the internal team), send out the link in social media communities (Slack) that are used by the target group, and engage in conversations through chat messages or Skype-calls.

Participants

Six participants provided feedback on the concept original and/or alternative. These are to be viewed in table 1.

Concluded insights
Relevance of the concept

Five interviewees were of the opinion that the use of the subsets would be of relevance. One reason for that is because users can emphasize the focus of their search more on one thing and less on the other. Besides, the subsets gave the impression that the relevant information do exist, causing users to possibly feel an increased ability to recognize them. Also, four of these participants mentioned that the use of subsets will be more of relevance once feedback volume is large, whereby different staff / internal stakeholders have to collaborate in processing the vast amount of feedback.

One of these five, although, made it clear that he would not have liked to see the 'unread documents' (he only viewed the representation of the concept alternative). The participant showed that this was not the information that he wanted. Because it was placed on the left-hand side of the screen, he also got the impression that he had to process them first, manually, before filling the 'Potential feature request' -subset with content. This was viewed as a negative impression.

A sixth interviewee, however, thought it was not relevant. The subset-concept tried to help users to find the relevant user feedback that they can analyze later

Participant's job title	User / Non-user of Shipright	Feedback on: Concept original / Concept alternative
Product Owner and Researcher	User	Both
Customer Happiness Manager	User	Both
Head of Product	Non-user	Concept Alternative
Director Customer Support and Training Operations	Non-user	Concept Original
Median Co-Founder	Non-user	Concept Original
UX-Designer and Support Specialist	Non-user	Concept Alternative

Table 1: Participants for the feedback session, on the concept original and/or concept alternative.

on. This, however, was not a need that he recognized in his own use case. For the participant it was, although, important to be able to see what the feedback themes are, what patterns in feedback are, if there are conflicting feedback, and what the downstream impact is when certain types of feedback are not resolved. But he made it clear that user feedback data were primarily collected through monthly CSAT (customer satisfaction) surveys, that was beyond the scope of the specified context.

To what extent do users feel guided towards the use of filters, to distill user feedback?
Overall, the concept was expected to be able to guide users towards the use of filters. However, this had to be communicated clearly and users should be made aware of it in the Home-section already. Furthermore, they had to not only be given guidance towards the use of these filters, but also the ability to not use these filters.

One of the participants, on the contrary, mentioned that he did not feel the need to be guided towards the use of filters. This, however, only applies to the concept if the automatic selection could provide him with correct suggestions. Additionally, he also mentioned that it was important to enable users, especially new users, to build trust in the automatic selection. Hereby, it was essential to make them aware of the selection process and to keep them reminded about the existent of this process.

To what extent do users feel getting closer to the relevant information?
The subsets were perceived as giving the impression that the relevant information does exist. The subsets might be able to make users retrieve information that they are after, without thinking too much about which specific filter functionalities to use. Especially the 'Potential feature request' -subset was expected to evoke this experience, when feedback data is large in volume. Though, as mentioned above, users were to be enabled to build trust in the selection process of suggestions.

However, one interviewee made it clear that he would not have liked to see the 'unread documents' (he only viewed the representation of the concept alternative). The participant showed that this was not the information that he wanted. Because it was placed on the left-hand side of the screen, he also got the impression that he had to process them first, manually, before filling the 'Potential feature request' -subset with content. This gave him the impression that he was actually further away from the relevant information.

To what extent do users feel being able to recognize relevant information?
As mentioned before, the subsets gave the impression that the relevant information did exist. Knowing this, the feeling of being able to recognize them was increased. Moreover, sorting out key words per document is expected to help users to recognize relevant information. It was, however, required that users are to be able to find these words back in the raw data themselves.

To what extent do users feel free to decide, if information is relevant or not?
From two participants, it became apparent that the concept (original and alternative) would give users enough space to still decide whether suggested data are relevant or not. These participants mentioned that they understood the purpose of the features to only provide suggestions to users. One participant, though, did not feel like he was free to decide himself, but he did not feel that this was a bad thing per se. For new users, it is important for them to be given concrete directions. However, he could imagine that users who are already familiar with Shipright would have wanted something customizable.

For the conclusion it has to be considered that the latter participant was not familiar with the use of Shipright as a user-feedback-analysis tool, whereas the first two were already familiar with the product. Therefore, a lot of context of use was not considered by the latter participant, which included highlighting important passages, creating insights, grouping insights, and reviewing and sharing these insights. This is an important issue, as making highlights is exactly the part where users will decide that information is relevant. The first two participants, that mentioned they felt the freedom to still decide by themselves on the relevance of information, took the insight creation into account.

In other words, the subset-concept itself was not expected to let users feel free to decide by themselves whether information was relevant or not. Although, this was not the case if you would take the entire context of the use of Shipright into account, as later steps of the user-feedback processing would enable users to directly decide on the pieces of data that should be taken to further analysis. Not feeling free to decide on relevance, however, was not necessarily a bad thing. Especially when it came to new users, concrete directions should be given. Though, it was important to feel this freedom once familiarity with Shipright had been built. The reason for that was because the suggestions that were provided were not always correct, and that it was expected from users to make their own decisions.

Appendix XIII: Additional Interview – Existing Users

Interviewees
- Product Owner and Researcher
- Customer Happiness Manager

Both are employees of one of Shipright's existing company-clients.

Interview questions and answers
Can you tell more about your roles in [their company]?
[The Customer Happiness Manager] He is responsible for contacts with customers. Thereby he has to make sure that [the company] gets to know what customers want to see from their product, what they need and view as important. Besides that, the Customer Happiness team also makes sure that the product (the app) is accessible for customers.

[The Product Owner and Researcher] She takes care of product strategy, planning and research. User research with end-users, however, was recently transferred to someone else in the company. From then on, she is more focused on doing research with other external stakeholders, which are the company's direct clients.

What is the product that [their company] offers?
[The company] offers an all-in-one white label travel app, meant to be used for business trips. Direct clients are companies that have entered a legal contract to enable their staff to use the app. These companies' staff are, in other words, the end-users of the app.

The app itself supports the business trips by providing necessary information to the end-users during these trips. Some examples of information are which location to go to for a meeting or which hotel to go to in order to visit a client.

To what extent do you use Shipright?
[The Product Owner and Researcher] uses Shipright a lot to create user insights out of the incoming qualitative data. [The Customer Happiness Manager] has not used Shipright a lot recently but is familiar with the functionalities. At the times when he uses it, he would only put the customer feedback in and would not make highlights and create insights.

Who are the internal stakeholders, that are engaged in user feedback processing, in [their company]?
The biggest internal stakeholder is Customer Happiness. They are responsible for putting all user feedback data from Zendesk into Shipright. As part of Customer Happiness, the Customer Support team is responsible with direct contacts with customers (direct clients and end-users). Besides that, the Sales team is also close to customers and look at the early stages at the missing pieces of the product, from customers' points of view.

All information gathered by the Customer Happiness, Support and Sales teams are put together in Shipright. The internal stakeholder that does the actual analysis of incoming data is Research. At the moment, this only consists of [the Product Owner and Researcher] as a one-man team (as mentioned earlier, another person will take over the user research with end-users). Then, there is the product (strategy) team that includes [the Product Owner and Researcher], alongside developers and product designers. This stakeholder uses Shipright to validate assumptions with incoming user feedback. The developers and designers do not look into Shipright regularly and are only interested in the main conclusions that can be / are drawn.

To what extent do these stakeholders contribute to the user feedback analysis process?
Everybody in [the company] is welcome to contribute to everything that goes on in the company and this includes user feedback processing and the use of Shipright. As mentioned above the product (strategy) team is solely interested in the main conclusions that are drawn from collected feedback data, in order to validate and/or challenge their previous assumptions.

The Customer Happiness (and Support) and Sales teams also solely look back at the analyses. As mentioned above, they are focused on putting in data into Shipright. Although, the number of occurrences of certain mentions is an interesting thing for them to look at. The reason for that is because customers, sometimes, are wondering whether others are experiencing the problems that they have with the app.

In [the company], [The Product Owner and Researcher] is the only one who creates user insights in Shipright. Though, it was mentioned that everybody in the company is welcome to contribute to the user feedback analysis process,

[the Product Owner and Researcher] mentioned that she would not like the Customer Happiness (and Sales) team to create insights alongside herself. The reason for this is because she would like to be driven by needs among customers in drawing conclusions. The customer facing teams, however, tend to look at problems per customer and/or end user, instead of the overall target group population or segments.

Although, because this team closely interacts with customers, it would be useful for its members to be able to communicate the importance of certain mentions. The customer facing people can judge the importance of certain feedback based on their own impressions of the emotional severity regarding the feedback and the number of occurrences. Also, it would be useful for the analysis to know what the relation is between feedback and [the company]'s position in the market. With respect to the use of Shipright, these customer facing teams sort out the relevant information in advance, prior to storing them in Shipright for further analysis. The data are sorted out based on features, customer type, etc.

From [the company]'s product team (developers and product designers), more engagement was desired. It was mentioned that these stakeholders have full access to all collected data, including the ones stored in Shipright. Although, the insight creation in Shipright is only done by [the Product Owner and Researcher] and she would like the other members of the product team to actively do this too. One thing that is important to consider with this, however, is that they should be interested in doing so themselves.

Can you tell me more about other steps taken in the analysis process?
[The Product Owner and Researcher] uses labels to categorize research findings. These labels are defined based on specific app-features, customer types, etc. Under each label, sub-labels are defined as well, for more specific categorization. This hierarchy is used to identify patterns, draw conclusions and review conclusions. Shipright is not used for this categorization, as she felt that the capability to do so is not supported yet.

What problems do you come across with the use of Shipright, regarding the analysis of user feedback?
[The Product Owner and Researcher] thought the Insight section did not give her the extent of clarity (in overview of insights) yet. It was mentioned that

the prioritization of insights is not optimal yet, as certain nuances are missing. She would like to be able to count the number of occurrences and to make distinctions between customer types in doing so. From there on out, she would like to be able to see whether certain findings only occur to one customer (type) or more. She believed that these aspects should be considered in drawing conclusions of analysis.

Furthermore, she believed that the current function of prioritizing insights is too automated. Because the abovementioned steps are missing, she tends to be hesitant in following the results that are given. It was mentioned that more influence in making these priorities were desired.

The need to count the number of occurrences and make distinctions between customer types did not only come from [the Product Owner and Researcher]. Apparently, these needs were also present among the Customer Happiness staff. They would like to be able to communicate the insights regarding occurrences of certain problems and needs towards customer they interact with.

Another problem that occurs within Roadmap is that all data cannot be put in one platform effectively yet. First of all, Zendesk is used and because it is not supported by Shipright yet, it is still inconvenient to put user feedback data in it. Second of all, [the Product Owner and Researcher] has a lot of qualitative data originated from creative sessions with customers, which need to be analyzed. Shipright, however, was not viewed as something that is capable of storing these amounts of data, due to its lack of structure in detailed data organizing. This had to do with the abovementioned missing capabilities of organizing data per customer and customer types, and the missing capability of detailed categorization of occurrences (which she referred to with using labels and sub-labels).

Appendix XIV: First and Second Design Challenges – User Test Procedure and Materials

The concept, as described in chapter 3 and 4 of the main report, are turned into a testable InVision prototype. Besides this prototype, other materials were used as well. These additional materials will be shown in this Appendix, alongside the procedure that was applied.

Steps and procedure

0. The participant opens the Lookback-link that he / she has received via e-mail. He / she then gets connected with me (the moderator) via Lookback; I would be ready to open up the connection at the time that we would have had agreed on.

1. The participant gets a general introduction of the use of an InVision prototype.

2. The participant opens the InVision-link (to see the prototype) and gets an introduction about Shipright.

3. The participant gets the introduction about the scenario of the test.

4. The participant opens the first Typeform-link and answers the first set of questions: name, company, and participant ID.

5. The participant sees the Home-screen-prototype (concept for the first design challenge, described in chapter 3).

6. The participant answers the second set of questions in the first Typeform-link. He/she explains the answers while doing so.

7. The participant submits the second answers and continues going through the rest of the prototype (concept for the second design challenge, described in chapter 4). He/she receives context-explanations while going through the rest of the prototype.

8. The participant sees the last screen and answers the last set of questions in Typeform. He/she explains the answers while doing so.

9. The participant gets additional questions asked. The questions are meant for clarification of his/her previous answers and/or remarks. Therefore, they differ per person.

Introduction, scenario, and context explanations
General introduction
Throughout this test, you will get to see the concept using an InVision prototype. You will be guided in the use of this prototype. While going through the concept, you will be asked to answer certain questions. For this, you will need the Typeform-link that was sent to you in the e-mail. In return for your feedback, I would like to arrange a free trial account directly for you, so you can skip the waiting line for that. If you are interested in this, please fill in your information in the Typeform-link.

Introduction about Shipright
Shipright is a digital product discovery platform that can be used in discovery tracks to gather customer feedback and analyze it in one place. Feedback data can be gathered from different sources: self-made notes, Shipright catch, Intercom integration, forwarded e-mails and csv-exports.

Scenario and context explanations
You are a product discovery lead at Typewriter. Typewriter is a software tool that helps its users collect text documents for (research) study-report purposes. You have just installed Shipright a few days ago and have already put in some customer data. At this point, you are about to use Shipright to analyze users' feedback about Typewriter.

[After observing the Home screen and answering the second set of Typeform-questions]

- Activate 'Potential feature requests' by clicking on it. Now, you get to see the documents that possibly contain feature requests from customers, that came in the past month. Open the first document on the list.

- As you can see, the customer's name is already added to the document. Next to it is a button to add a Customer Type as well. Click on it and see what happens.

[The list of pre-created customer-type groups are given]

- Supposed that the added customer is a UX-researcher. Therefore, you want to add that type to the document.

- After that, you go through the document. You have just come across an interesting sentence in this document. In Shipright you can highlight this sentence and make up an insight that you can derive from it. Click on the highlight to create an insight.

[Participant views a screen that shows the insight that is created for this test]

- You have just made up the insight: 'Need to share conclusions with colleagues'. You can add product aspects that relates to the insight you've just created. You can type in a new one, or choose out of the existing ones.

- You think that collaboration is suitable for the insight. Choose and add it. After that, enter this insight and try to finish the insight creation.

[Participant gets presented an additional feature: adding keywords to the insight. This, however, is not relevant for this project.]

- After seeing the insight creation, please continue to the Insights section.

[Participant views a screen that leads him/her to the Insights section]

- This is the Insight's Repository. All insights you have created are stored here. You are also able to recategorize insights: create new groups and sub-groups. On the left, the groups based on product aspects are listed, while on top the groups based on customer type are listed.

[Participant views separate screens of the overall lay-out, creating new groups, creating sub-groups, and editing tags; he/she gets back to see the overall lay-out after seeing these screens]

- You are now back at the total overview of all insights. Look closely to the first insight, on top of the list. On the right of the insight bar, you can see how many people are assigned to the insight.

  Now, click on the '...' button on the far right of the insight bar.

[Participant views a screen that shows the respective insight's details]

- Here, you get to see more details to that insight. Here you can see the different highlights and the exact people assigned to these highlights.

[The additional feature, of key words, gets presented as well.]

- This is the last screen of the prototype. Now, I'd like you to get back to Typeform and fill in the last set of questions.

Typeform-questions - first set

1.   What is your job title?

2.   What is your company's website?

3.   How would you describe your company?
        More than 1 selection possible

        - (Mobile) Apps
        - SaaS (= Software as a Service)
        - Agency / Consultancy
        - Government organization
        - Small-/Medium-sized business
        - Multinational enterprise

4.   What is the participant number that you receive for this test?

Typeform-questions - second set
Participant no.:

"Based on what you've seen in the Home screen,"

1.   To what extent do you feel guided towards the use of filters?

        1   2   3   4   5   6   7
        I didn't feel guided   *I felt strongly guided*

2.   To what extent do you feel closer towards relevant information?

        1   2   3   4   5   6   7
        I feel further away   *I feel really close by*

Typeform-questions - third set
Participant no.:

"Based on what you have seen from the Inbox and Insights section,"

1.   To what extent are you aware of the existence of the categorization means?

        1   2   3   4   5   6   7
        I am not aware   *I am aware*

2.   To what extent do you feel free, to either categorize data or not?

        1   2   3   4   5   6   7
        I don't feel free   *I feel completely free*

3.   To what extent do you feel the ability to categorize your data?

        1   2   3   4   5   6   7
        I can't do it   *I can do it*

4.   To what extent does the categorization process feel effortless?

        1   2   3   4   5   6   7
        I takes a lot of effort   *It is effortless*

5.   To what extent do you have an overview of the stored data?

        1   2   3   4   5   6   7
        I don't have any overview   *I have a great overview*

6.   To what extent do you feel free to think about relations between data?

        1   2   3   4   5   6   7
        I don't feel free   *I feel completely free*

"Answer the following questions if you wish to get a free trial account for Shipright."

What is your full name?

What is your (company) e-mail address?

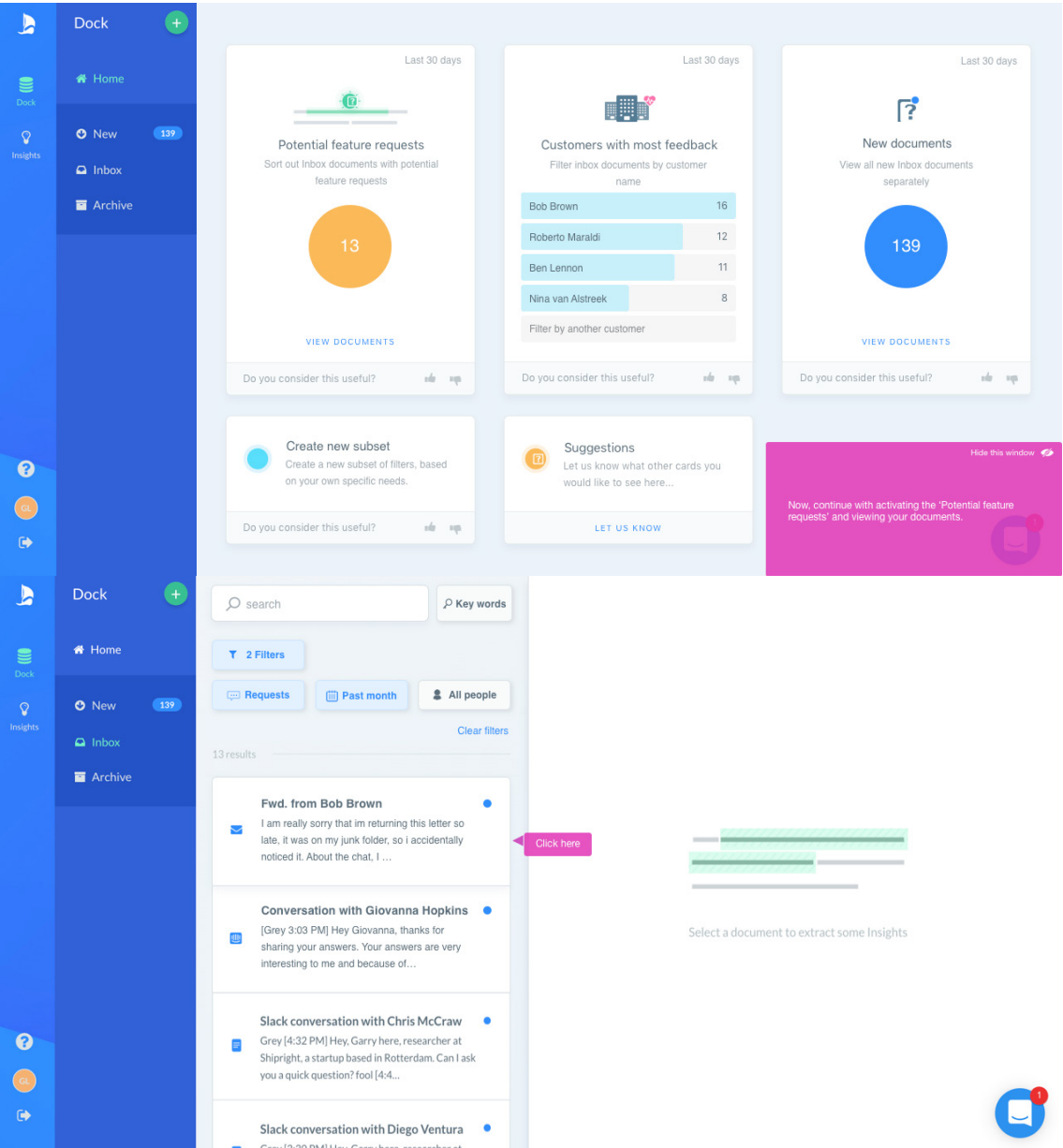What is your company name?

Prototype-screens

Figure 9a: Prototype-screens for the user test of design challenges 1 and 2.
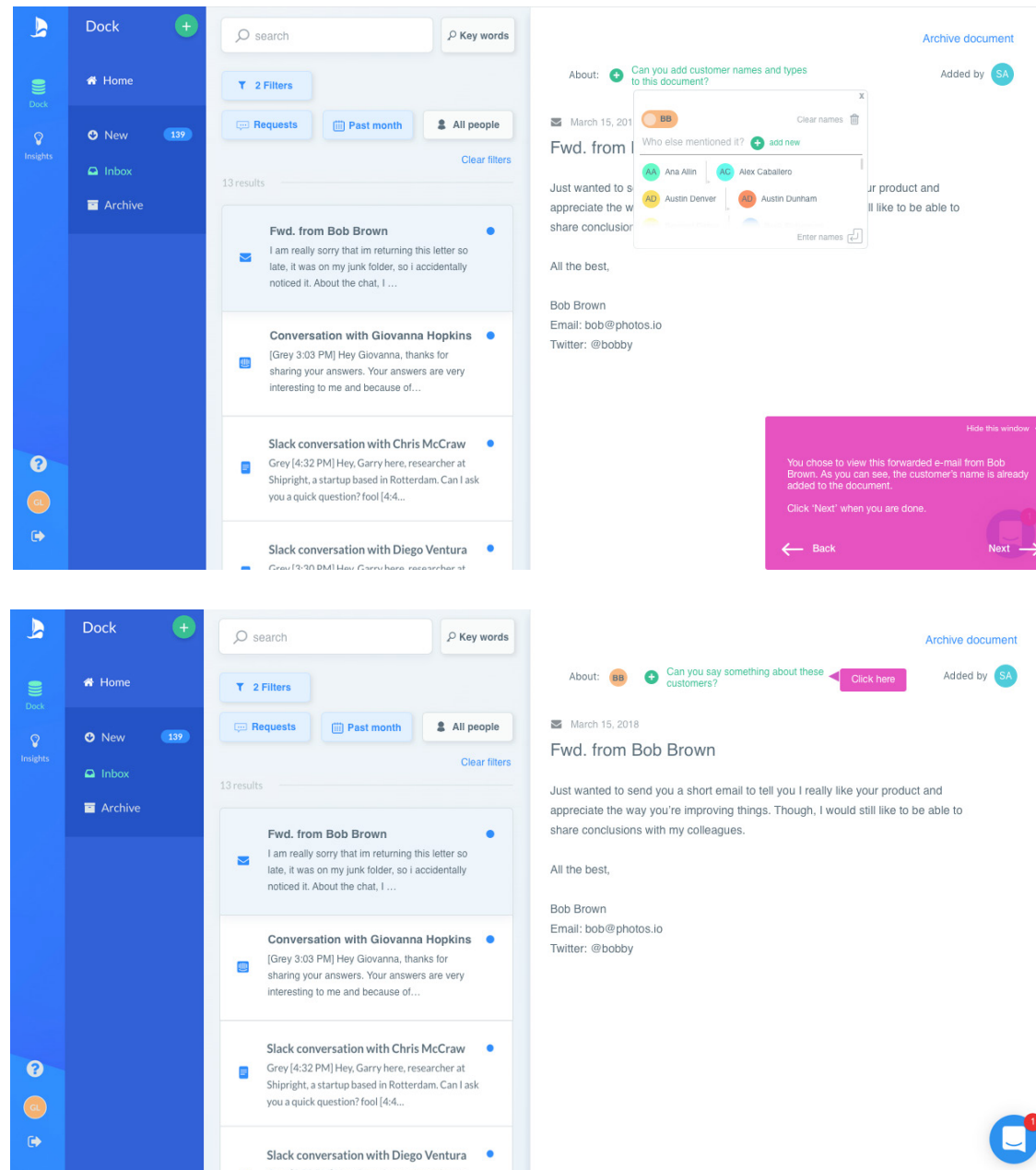
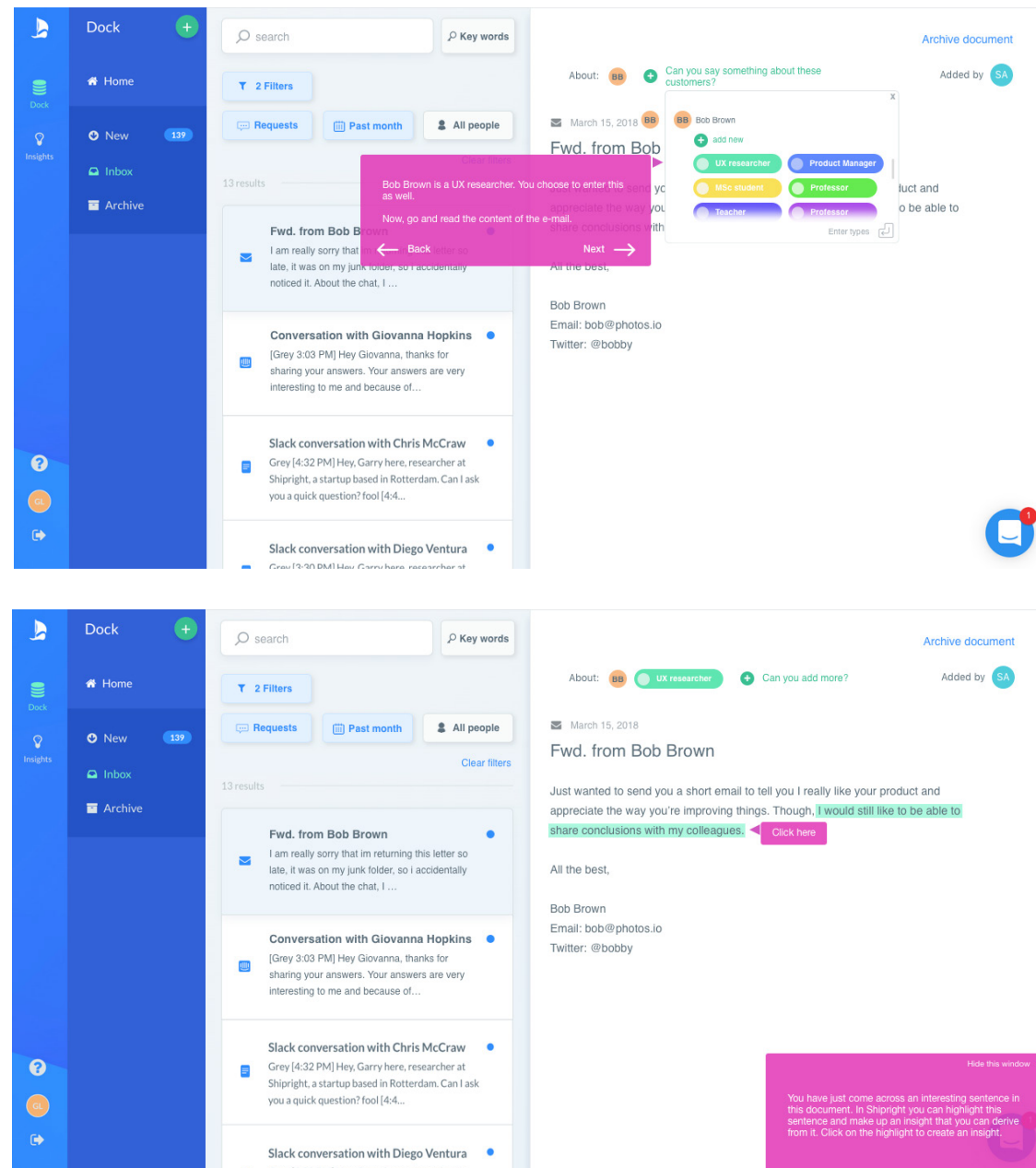Figure 9b: Prototype-screens for the user test of design challenges 1 and 2.

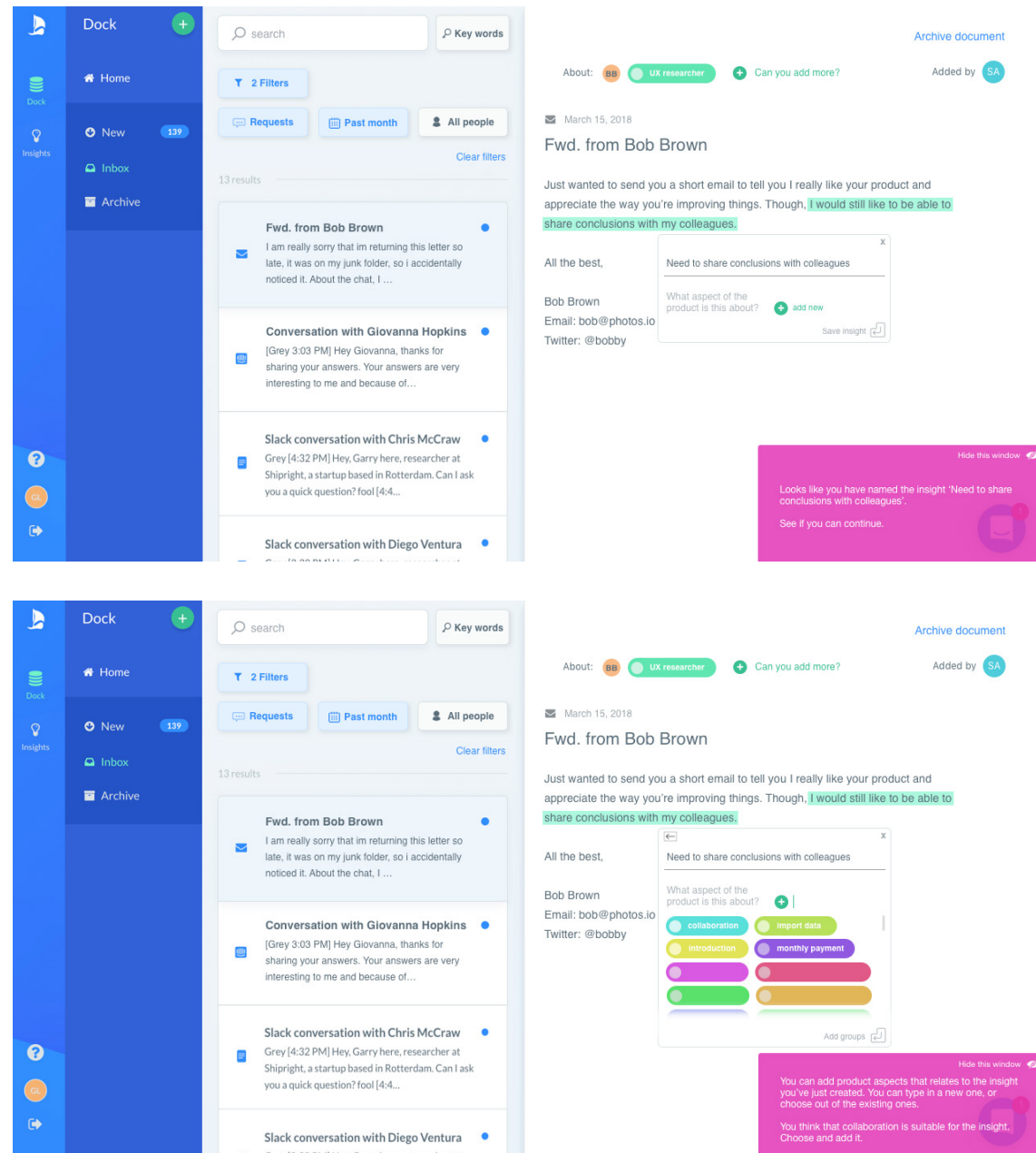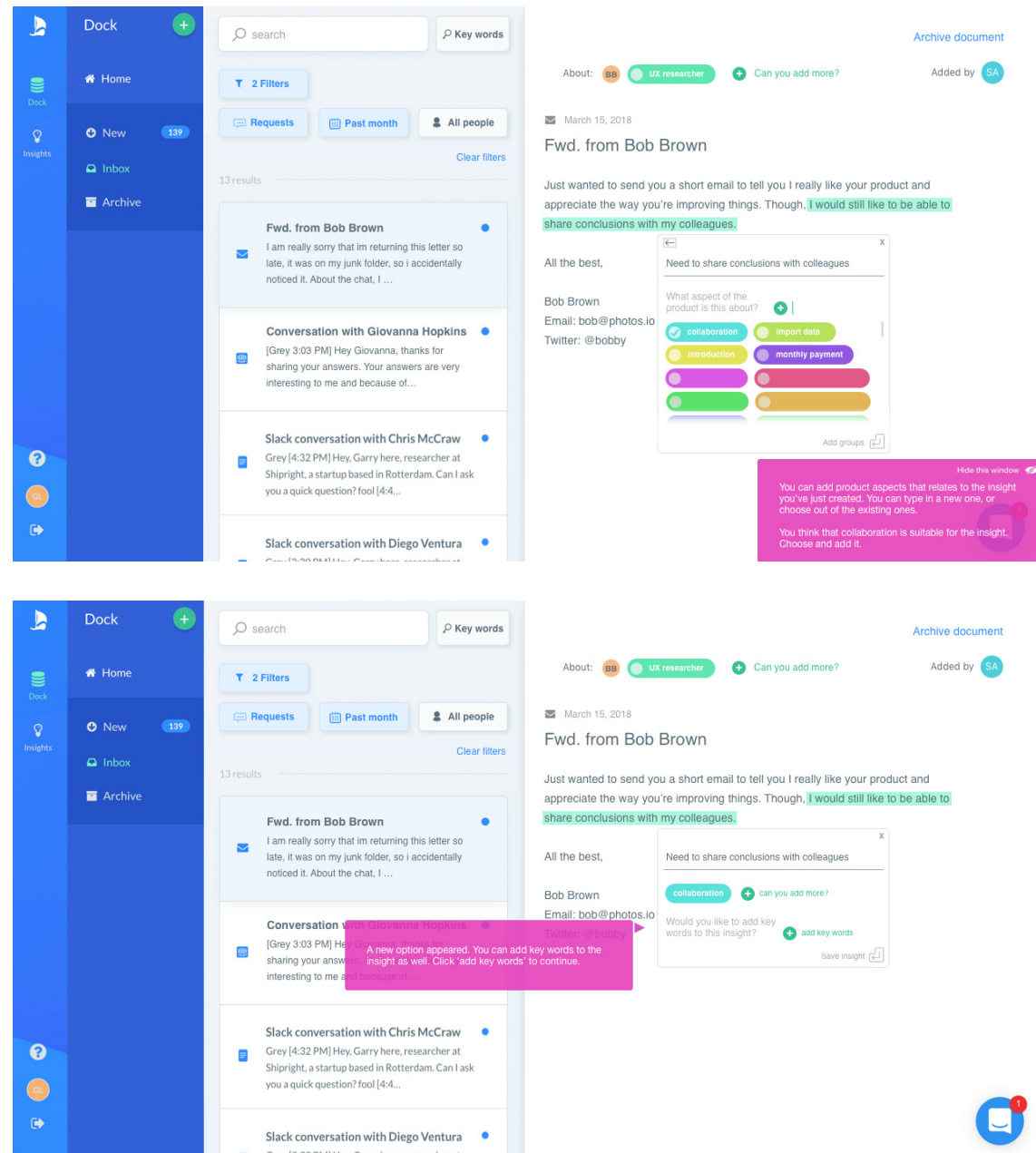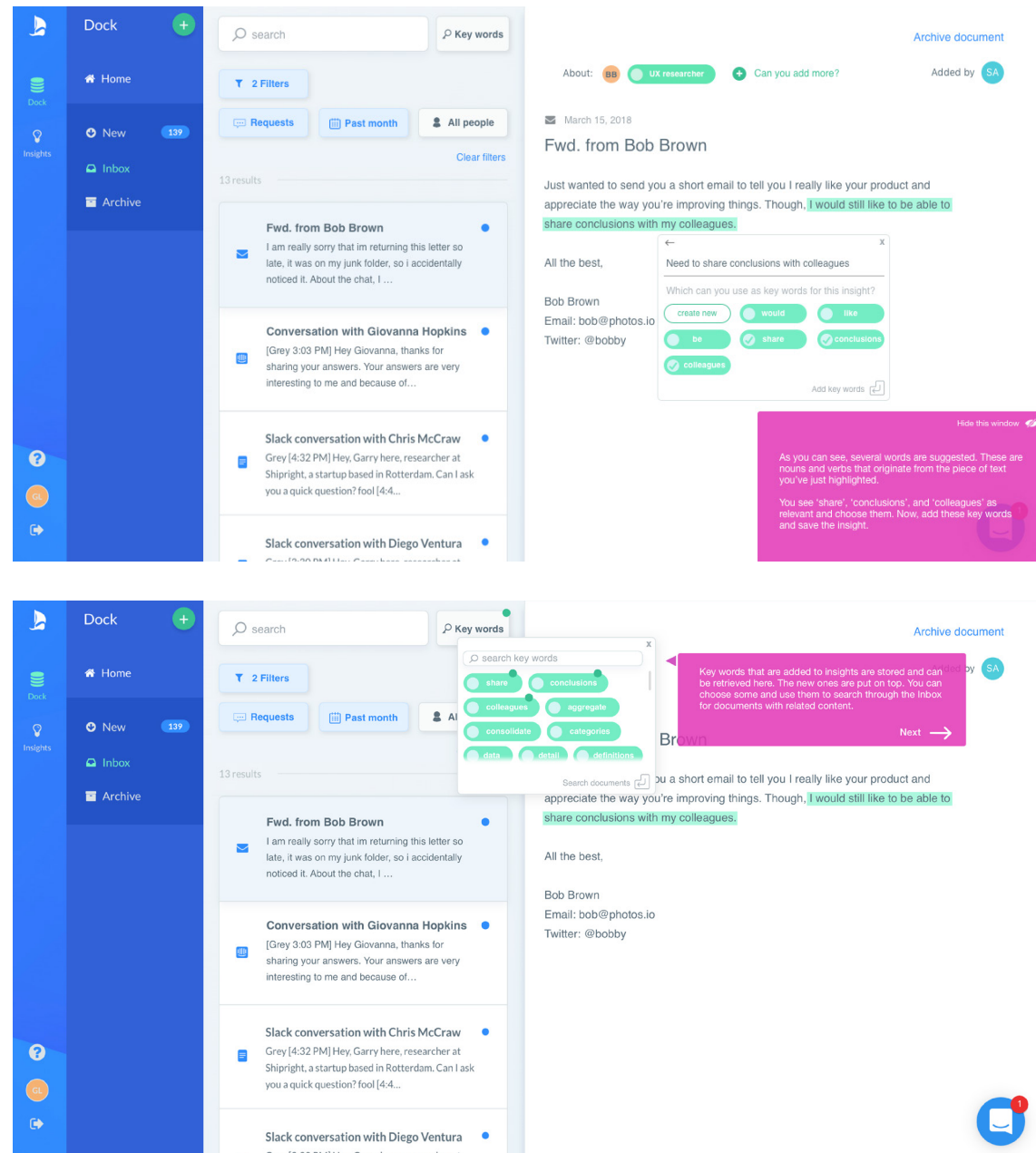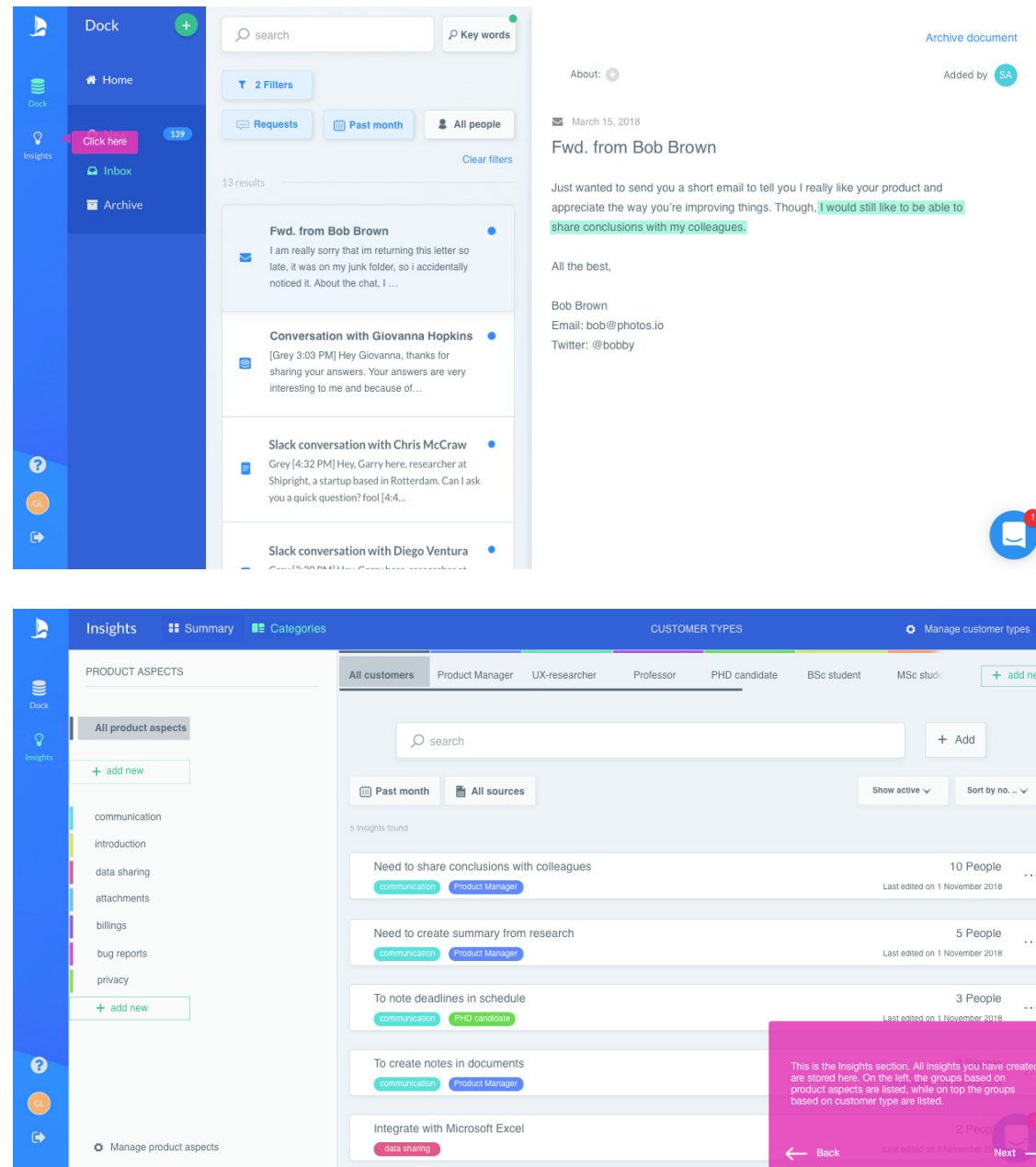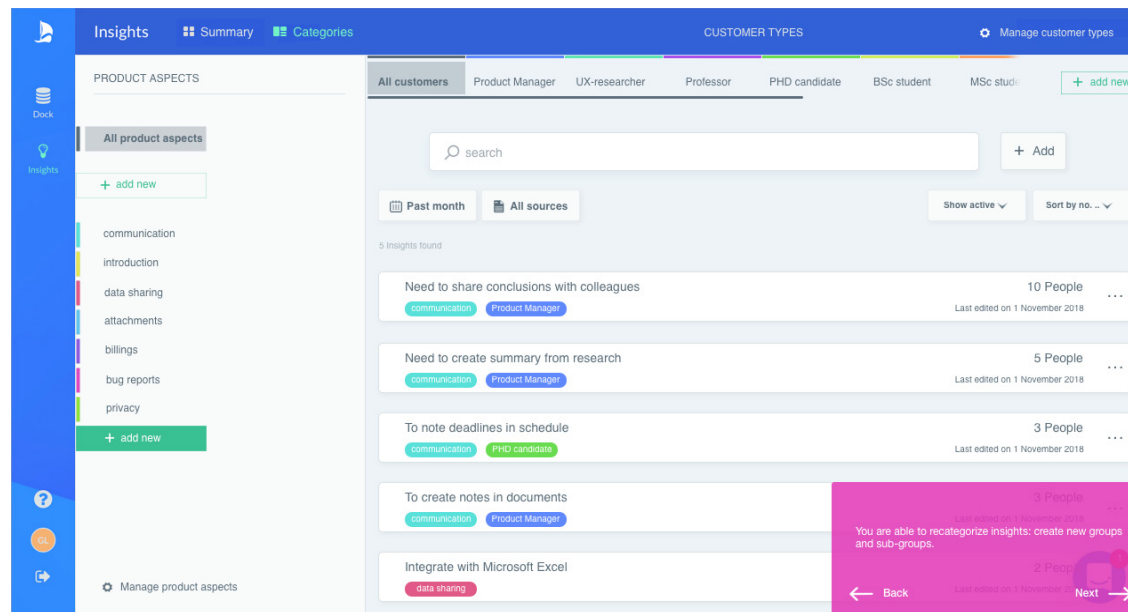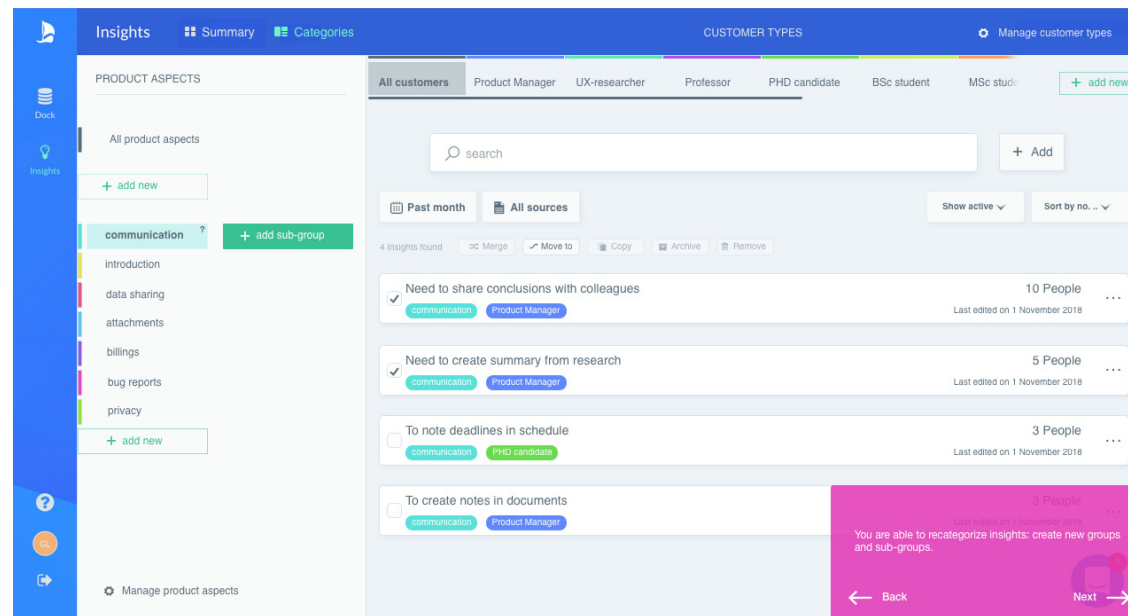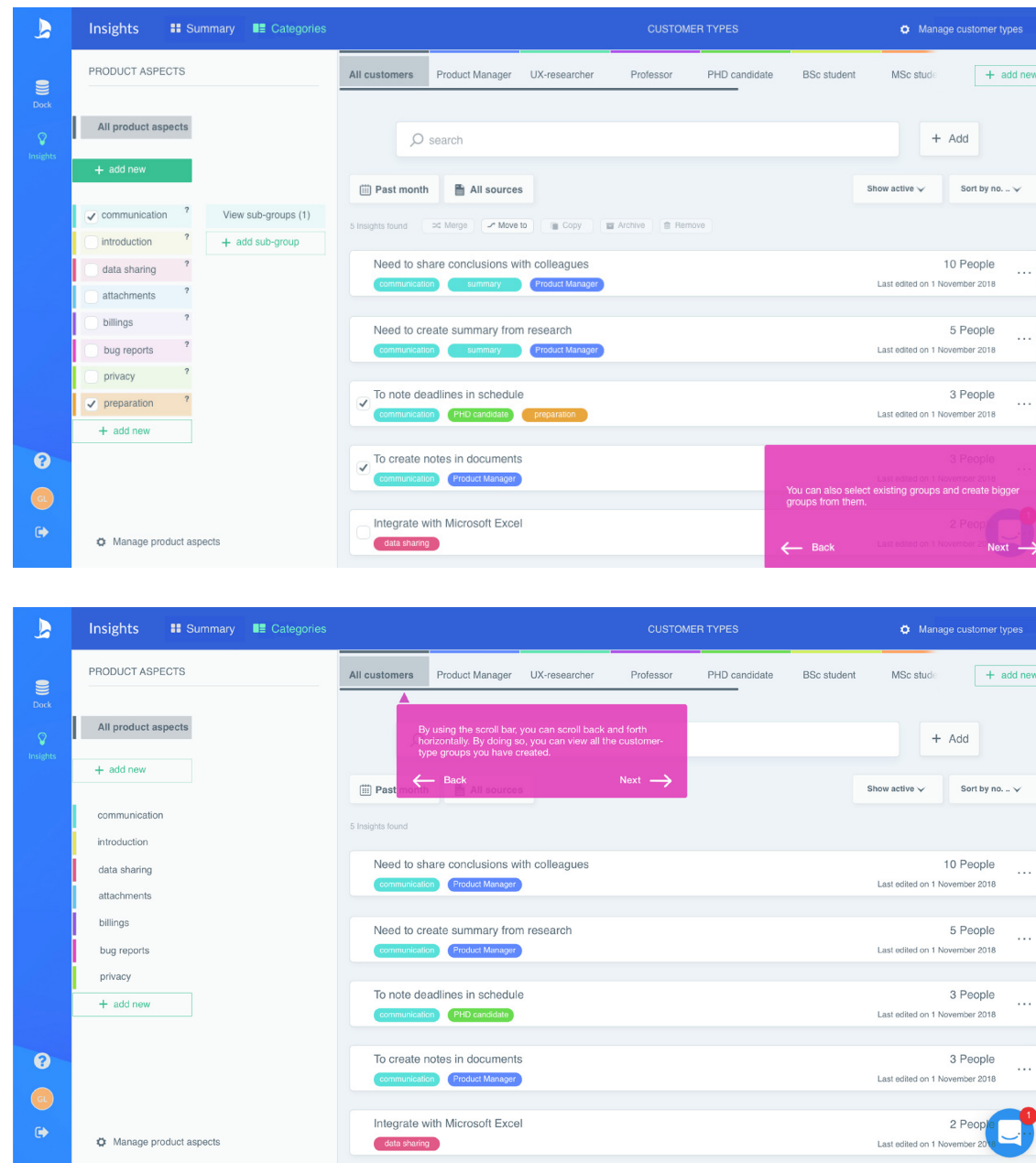Figure 9c: Prototype-screens for the user test of design challenges 1 and 2.

Figure 9d: Prototype-screens for the user test of design challenges 1 and 2.

Figure 9e: Prototype-screens for the user test of design challenges 1 and 2.

Figure 9f: Prototype-screens for the user test of design challenges 1 and 2.

Figure 9g: Prototype-screens for the user test of design challenges 1 and 2.

Figure 9h: Prototype-screens for the user test of design challenges 1 and 2.

Figure 9i: Prototype-screens for the user test of design challenges 1 and 2.
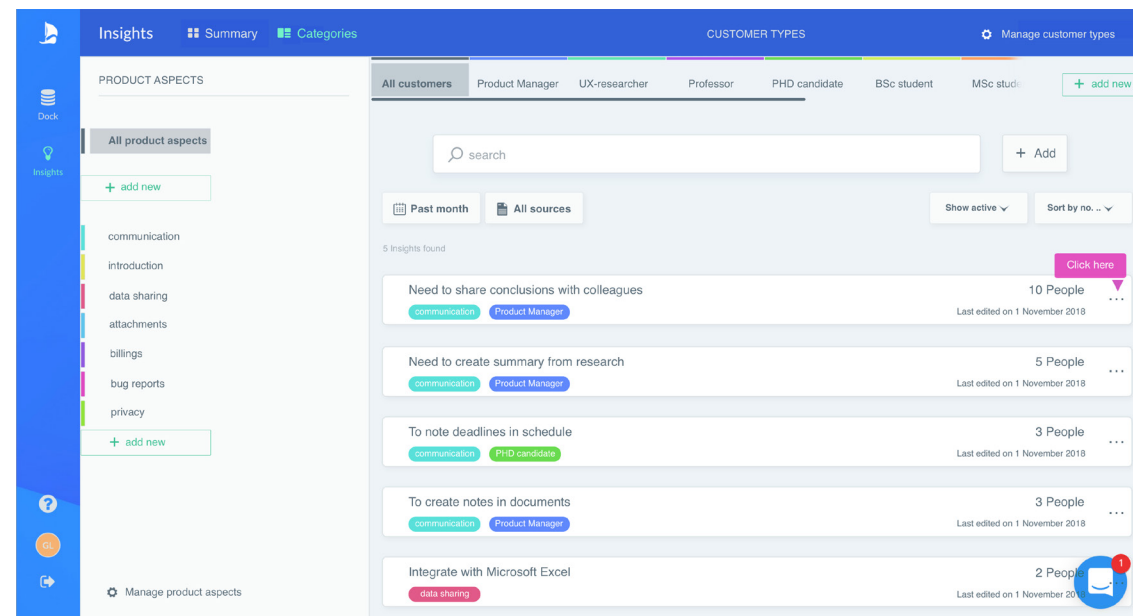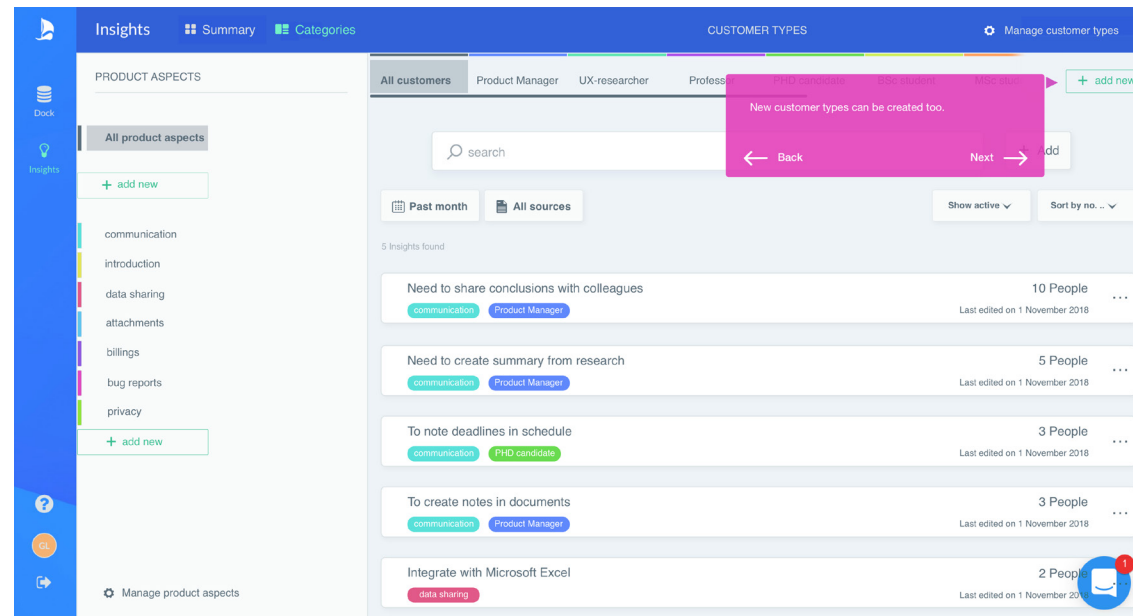
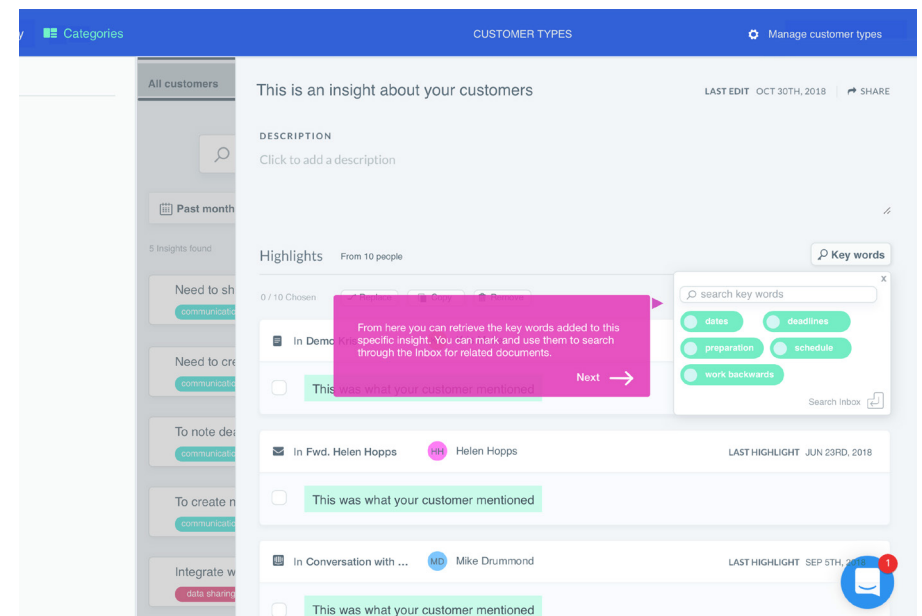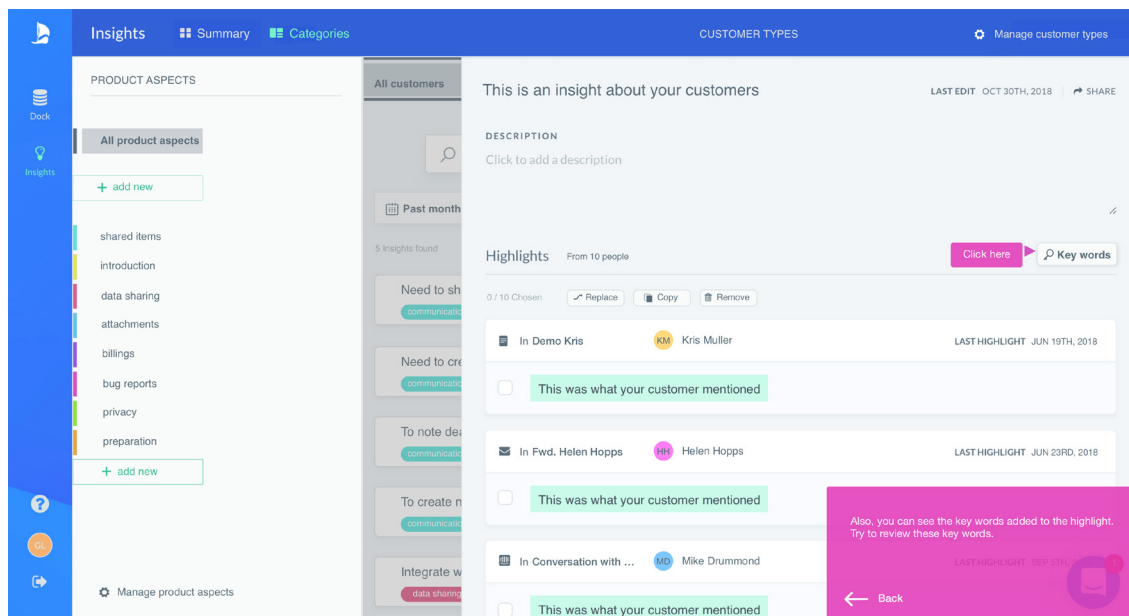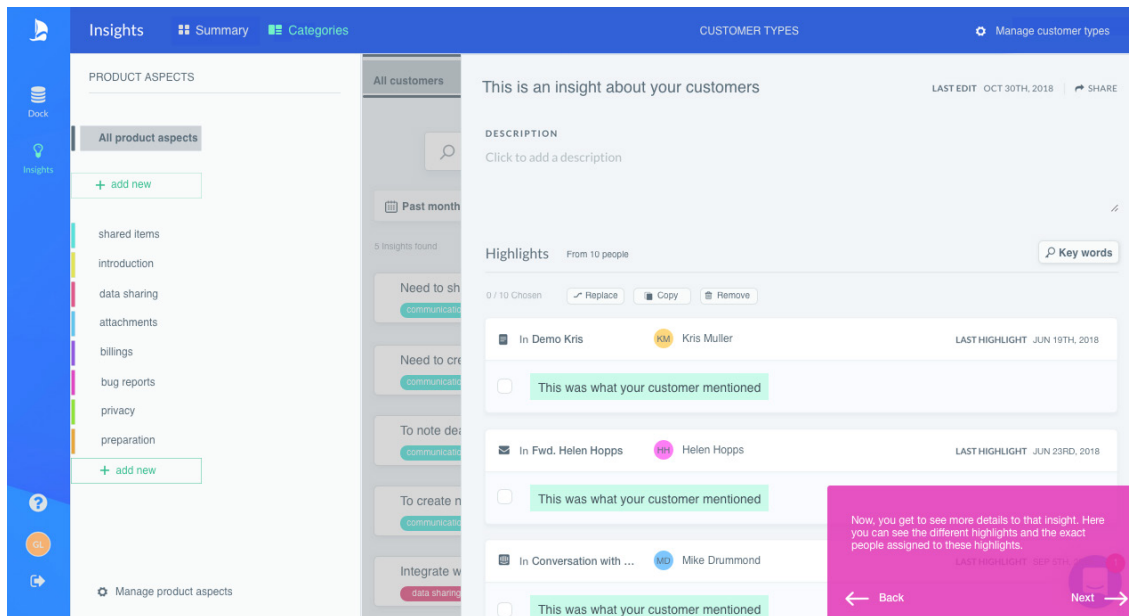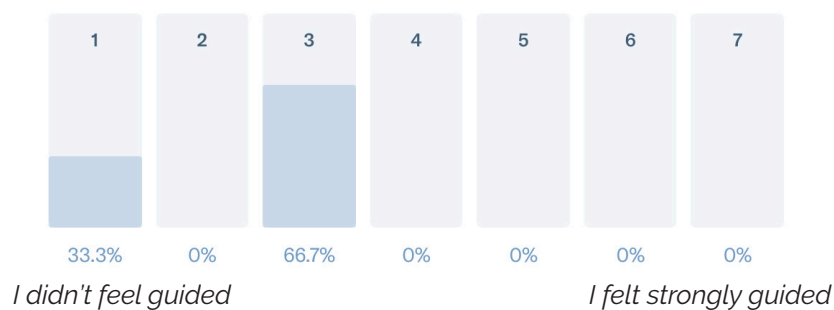Figure 9j: Prototype-screens for the user test of design challenges 1 and 2.

Figure 9k: Prototype-screens for the user test of design challenges 1 and 2.

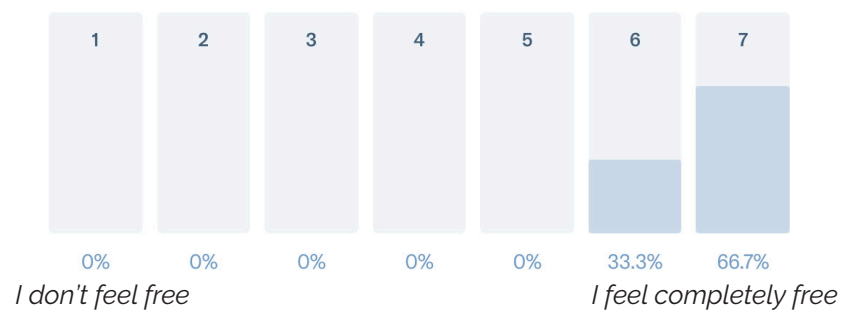## Appendix XV: First and Second Design Challenges – User Test Results

To what extent do you feel guided towards the use of filters?
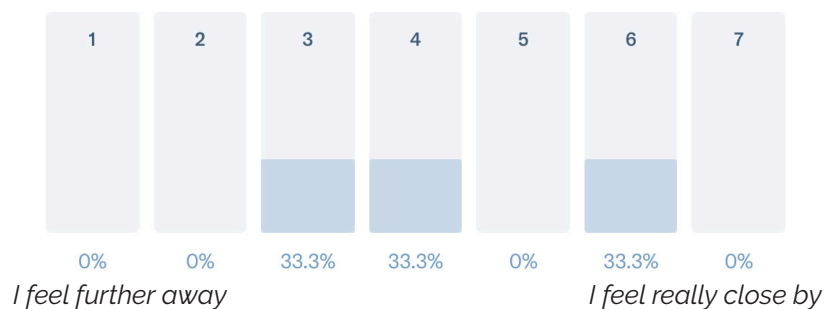Average score: 2.3

1	2	3	4	5	6	7
33.3%	0%	66.7%	0%	0%	0%	0%

I didn't feel guided   *I felt strongly guided*

To what extent do you feel free, to either categorize data or not?
Average score: 6.7

1	2	3	4	5	6	7
0%	0%	0%	0%	0%	33.3%	66.7%

I don't feel free   *I feel completely free*

To what extent do you feel closer towards relevant information?
Average score: 4.3

1	2	3	4	5	6	7
0%	0%	33.3%	33.3%	0%	33.3%	0%

I feel further away   *I feel really close by*

To what extent do you feel the ability to categorize your data?
Average score: 6.3

1	2	3	4	5	6	7
0%	0%	0%	0%	0%	66.7%	33.3%

I can't do it   *I can do it*
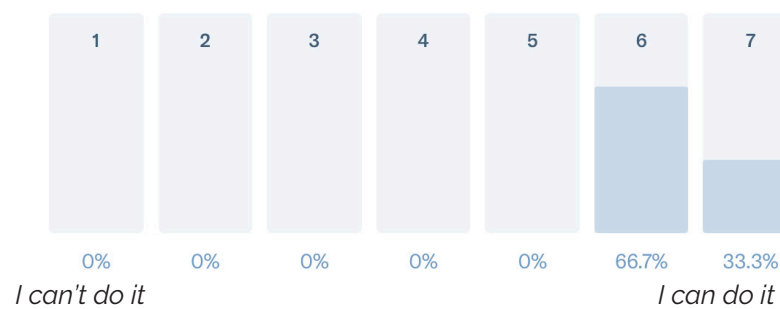
To what extent are you aware of the existence of the categorization means?
Average score: 6.3

1	2	3	4	5	6	7
0%	0%	0%	0%	0%	66.7%	33.3%

I am not aware   *I am aware*
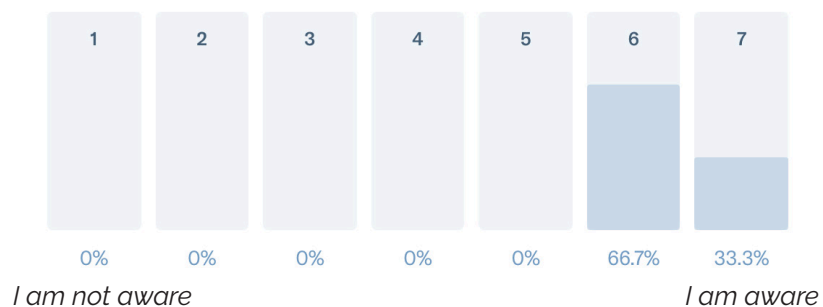
To what extent does the categorization process feel effortless?
Average score: 4.7

1	2	3	4	5	6	7
0%	0%	33.3%	0%	33.3%	33.3%	0%

I takes a lot of effort   *It is effortless*
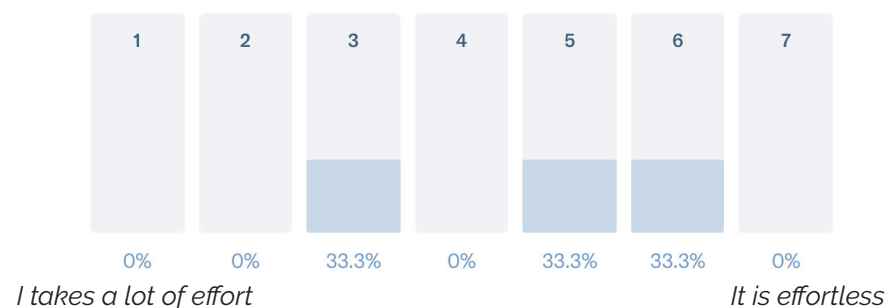
To what extent do you have an overview of the stored data?
Average score: 5

1	2	3	4	5	6	7
0%	0%	33.3%	0%	33.3%	0%	33.3%

I don't have any overview   *I have a great overview*
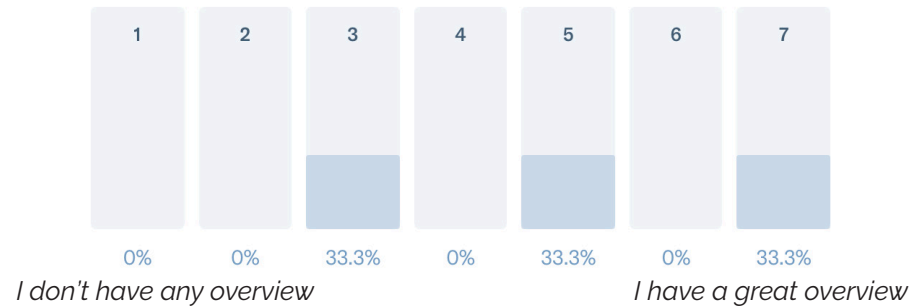
To what extent do you feel free to think about relations between data?
Average score: 5.7

1	2	3	4	5	6	7
0%	0%	0%	0%	66.7%	0%	33.3%

I don't feel free   *I feel completely free*
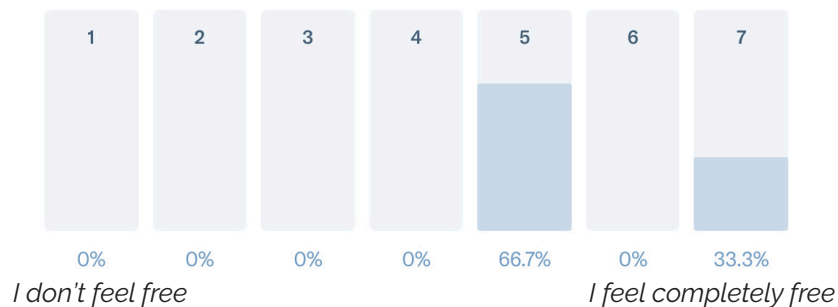
The Dock Home screen
Guidance towards filters were rated with an average of 2.3 out of 7

- The experience of being closer to relevant information was rated with an average of 4.3 out of 7. The PM rated this experience with 6 out of 7, while the other participants rated it with 3 and 4.

- All three participants did not see the filters that the subsets were meant to guide them towards. It was found that this was caused because there were no (familiar) references to filters that stood out from the subsets.

- One of the participants, who was a PM, mentioned that 'potential feature requests' increased the feeling of being closer to relevant information. Though, she would have liked to see the topics of feature requests as well.

- One participant found it confusing, what the relation was between 'new documents' and 'potential feature requests'. He was unsure whether 'potential feature requests' were derived from the 'new documents' or not. This showed the need to show the origins of subset data from the Home screen.

- The design characteristics of the Inbox filters should make clear that there are three filters that can be combined with each other.

- One participant was not aware of the possibility to use search terms as additional filters, that can be combined with prior activated set of filters, in the Inbox.

Insight creation (Dock section) and storing (Insights section: redesigned layout for 'All insights')
Awareness of the existence of categorization means was rated with an average of 6.3 out of 7

- These categorization means that were conveyed, are very familiar to a PM.

- Though, the overview of the stored customer-type groups, in the Insights section, was not recognized. It was an unusual way to view them horizontally and these groups were expected to be found on the left side of the screen.

- Another participant completely forgot about the categorization by customer type. He mentioned that the presented workflow was focused more about tagging Product Aspects and much less on tagging with Customer Type.

- The placement of other elements negatively contributed to this experience too. It was found that buttons with specific functionalities should be clustered with other elements that relate to the same functionalities, which was not always the case in the concept.

Freedom to either use categorization means or not, was rated with an average of 6.7 out of 7
- One of the three participants, who was a PM rated this freedom as positive. From a PM perspective, everything was familiar and clear. Two other participants, however thought that the possibilities to categorize can be overwhelming. For this, more concrete directions should be given to users. These categorization means were quite all over the place in the concept, as became clear from the latter two participants.

The ability to categorize data was rated with an average of 6.3 out of 7
- This, of course, correlates with the positive rating of the freedom to use categorization means.

- Although, the improper use of certain UX/UI elements negatively influenced this experience. These are shown by figure 9 on the next page.

The extent that the categorization felt effortless was rated with an average of 4.7 out of 7
- As mentioned before, the means of categorization were quite all over the place throughout the concept. This strongly affects this experience, in a negative way. Internal feedback also showed that the concept's workflow can be experienced as a lot of cognitive effort, due to the number of steps.

- There is a strong need to simplify this workflow. The different steps that are included in insight creation were overwhelming.

The feeling of having an overview of stored data was rated with an average of 5 out of 7
- As mentioned above, the categorization means were clear for a PM, which correlates positively with this experience.

- However, it was found that the use of filters to sort out stored insights had to be consistent. 1 participant pointed out the usual way of having filter options to be viewed on the left side of the screen, which was not the case in the concept. 'Customer Types' were viewed on top, horizontally, and this appeared to be unintuitive for users.

The extent of freedom to think about relations between data was rated with an average of 5.7 out of 7
- The overall freedom was positively rated, though some points of improvements were found. Firstly, it was recognized that the possibilities to create (sub-) groups should be communicated better. For that, the existence of sub-groups in particular should be clear at first glance.

- Secondly, the possibility to relate data was seen as good for individual use. Though, it missed some details that related to collaborative analysis.

- Furthermore, the creation of different layers of groups was desired for Customer Types as well, and not only for Product Aspects. It is common to create hierarchies for these groups in analysis. As an example, it was mentioned that users would be grouped based on subscription plan.

Other additional needs
- To include a customer data base as a foundation of the categorization of customer types.
- To include an option to add additional filters, which can be very specific per company.
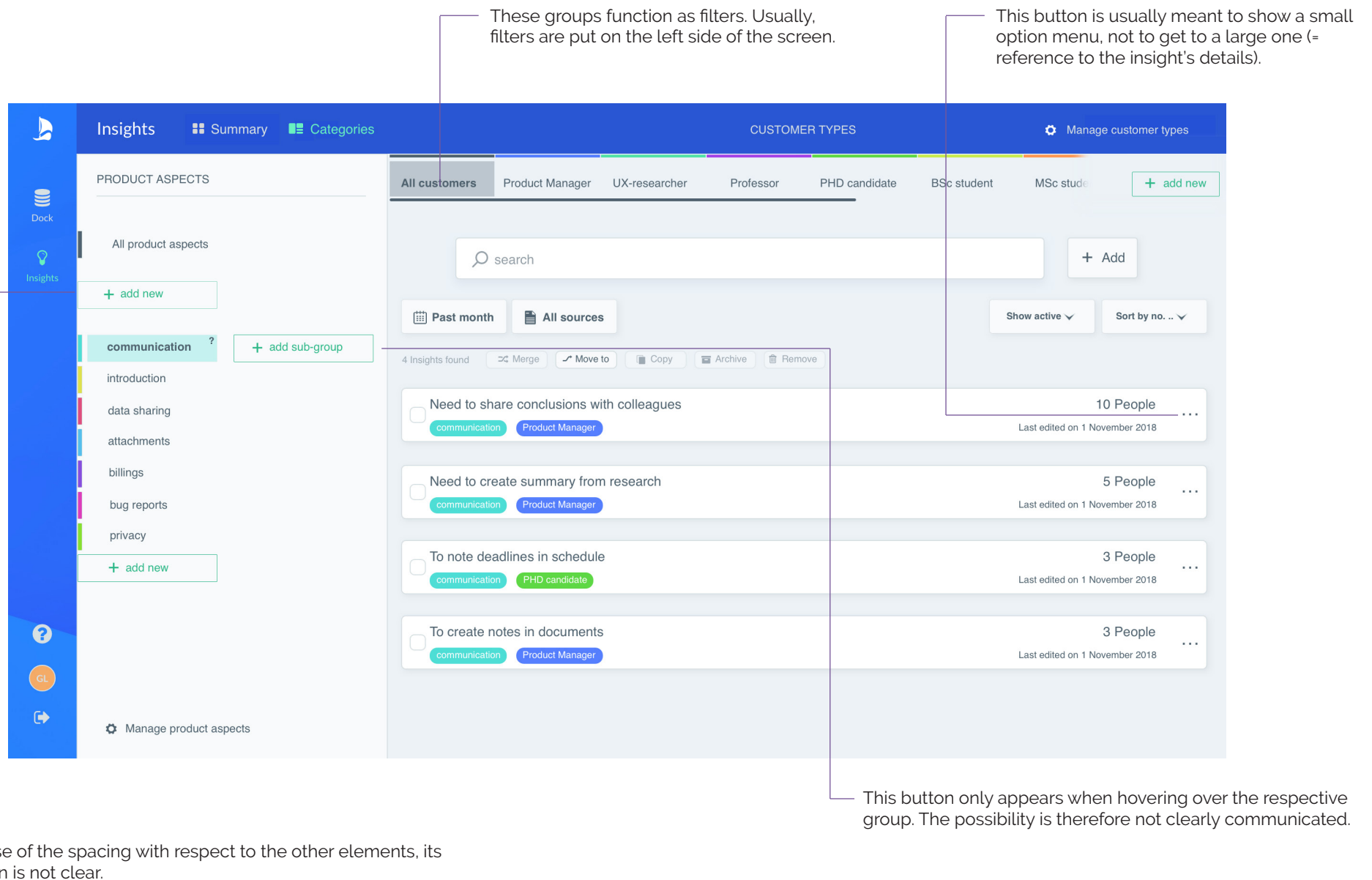
These groups function as filters. Usually, filters are put on the left side of the screen.

This button is usually meant to show a small option menu, not to get to a large one (= reference to the insight's details).

This button only appears when hovering over the respective group. The possibility is therefore not clearly communicated.

Because of the spacing with respect to the other elements, its function is not clear.

Figure 10: Identified usability issues in the redesigned Insights section.

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

Appendix XVI: Additional Interview – Non-User of Shipright

Interviewee
Product Manager of a Mid-Market Business.

Can you tell me a bit more about your company and your role in it?
[The company] offers a platform that allows teams and organizations to build their own training content for their internal teams. There are roughly 500-600 customers now. They have been in business for 6 years now, with 100 employees. He, as a PM, is responsible for managing all things that revolve around product development: stakeholder expectations, customer feedback, prioritizing work to do with the development teams, working with the design team to accomplish solutions.

They do their best to talk with customers and try to talk to at least one customer a day. These conversations come in all shapes and sizes. It is however not always possible to achieve this goal, in practice. Because of that, they rely heavily on their CS- and sales teams to convey what customers say to them, with respect to the product's performance. He is tasked to systematize the customer feedback that is transferred by the CS- and sales teams through different mechanisms. The PM is responsible of making this feedback useful to make product roadmap decisions.

What are the exact steps of distilling feedback to you?
Currently, their primary support team uses Zendesk for different reporting means (such as bug reports). A secondary support team uses forms, which they let customers fill in via Zendesk. These forms are based on the reporting that is delivered by the primary support team and are meant to gain more details about the reports.

An additional form is also used, which is meant for the CS and sales teams to send to customers, which is about customers' ideas and feature requests. With this form, customers are also asked to describe the problem as specific as possible. In certain cases, the abovementioned team would also start a conversation with customers who have submitted the form to ask follow-up questions.

One person of the company is tasked with making sense of, and categorizing, the results of these forms and conversations. That person would also inform the sales and CS teams about the categorizations that are made, to show that their input has been heard. They are also enabled to receive updates about the

status of features / functionalities (ideas) via e-mail. This is made possible by ProductBoard, in which company team members can be added as followers to feature / functionality ideas. This concludes the end of distilling feedback, until features / functionalities are decided to be built.

Which steps are the problematic ones and what are the exact problems?
What he struggles with currently are two things. One is getting the team to think about problems to be solved, instead of surfacing features / functionalities directly from customers' feedback. He believes it is important to really understand the problems customers experience, before starting to think about features / functionalities to build. The second problem is to categorize user feedback in such a way that these problems become apparent. From his experience, it is necessary to be able to communicate identified problems with developers, whereby prioritizing features are based on these.

In other words, an ideal user feedback analysis tool would enable him to tag and group feedback and let him ask questions, in order to identify problems. In addition to that, all company team members must be given some sort of resolution of the conclusions of the analysis. So far, he has not come across any product that satisfies these needs.

Can you tell me more about other things to consider when distilling user feedback?
Besides understanding the problems and needs, he believes it is also important to capture the personas of where feedback comes from. In the case of [the company], there are different customer segments ranging from small businesses to large companies. Furthermore, there are always multiple sub-segments involved per customers. Because of that, it is essential to also group data, so these customer personas become apparent.

In the process of distilling feedback, to what extent do you use your previous assumptions and knowledge about your company's product?
He feels that current tools are giving up the possibility to ask questions in user feedback analysis. Instead, the focus is put on collecting data as much as possible and to show what features are to be focused on. While having the desire to ask questions about occurring problems and needs, he believes that the process still should start from the data (= user feedback). He believes that he should put his own thoughts and ideas about product improvements aside and let conclusions be made from collected data.

Appendix XVII: Second Design Challenge – Design Criteria

- (Insights of raw) data can be categorized based on Product Aspects
- (Insights of raw) data can be assigned with customer names
- Specific Customer Types can be specified
- (Insights of raw) data can be categorized based on Customer Types that users can specify themselves
- Manual data categorization does not overlap with automatic data categorization

- An overview of all stored (Insights of raw) data can be reviewed after categorized
- An overview of all stored (Insights of raw) data can be reviewed per category
- Switching categories, to review (Insights of raw) data, is easy

- Separate (Insights of raw) data can be reviewed
- Separate (Insights of raw) data can be searched for

- Groups and sub-groups can be made, to categorize insights
- Groups and sub-groups are to be made based on findings in raw data
- New groups can be made while going through raw data in the Dock section
- New groups and sub-groups can be made while going through raw data in the Insight section

- The existence of groups and sub-groups is clearly communicated
- An overview of groups and sub-groups can be reviewed
- Groups and sub-groups for categorization can be deleted

- (Insights of raw) data can be added in groups and/or sub-groups
- (Insights of raw) data can be added in more than one group / sub-group
- (Insights of raw) data can be deleted from groups / sub-groups

- Exemplars from raw data can be added to insights in groups and/or sub-groups
- Exemplars from raw data can be added to multiple insights in groups and/or sub-groups
- Exemplars from raw data can be reviewed in groups and/or sub-groups
- Exemplars from raw data can be deleted from groups and/or sub-groups

- (Insights of raw) data are always retrievable
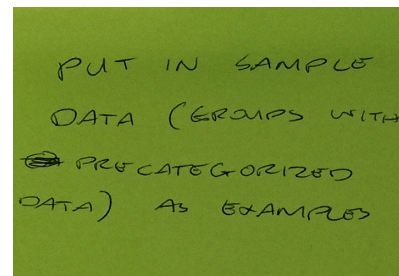- (Insights of raw) data can be filtered by specified time ranges

Appendix XVIII: Second Design Challenge – Generated Ideas and Evaluation of Ideas

1. To be aware of the existence of categorization means
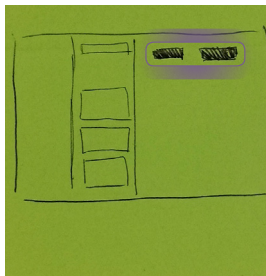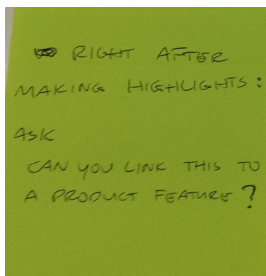

1.1 Deviating color
To make categorization means stand out by applying a color that deviates from other colors used in the screen, to them.

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.

1.3 Explain the intended way of categorization with a video
The use of an instructional video that explains users the possibility of categorizing data. The steps to be taken can be explained, alongside the existence of the related features.
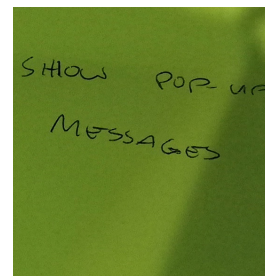

1.4 Show examples of properly categorized data
To communicate the existence of categorization means, by showing an example of the result of categorization.
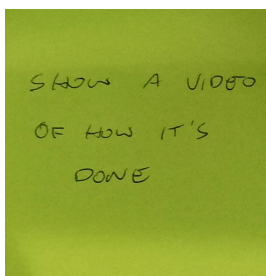

1.5 Show pop-up messages that tell users what to do
To show pop-up messages next to the respective categorization features and using these messages to explain the features' functions.

Evaluation

- Ideas 1.3, 1.4, and 1.5 are very clear in showing the existence of categorization means, but they are too robust to be included in the design. This comes with the risk of making the overall result becoming too overwhelming with different elements. But, they are most suitable as parts of a one-time introduction on Shipright, for first time users, rather than to be a permanent design element.

- Ideas 1.1 and 1.2 may not be as clear, but are expected to still be sufficient to communicate the existence of categorization means. Besides that, they can be implemented in a subtle way in the design.

## 2. To feel free to (not) use categorization means
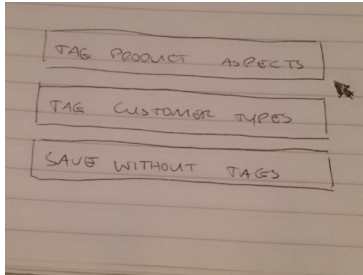
2.1 Show a list of options users can choose from
This list would include an option to save categorization for later. This is meant to take away the persuasion of using the categorization means.
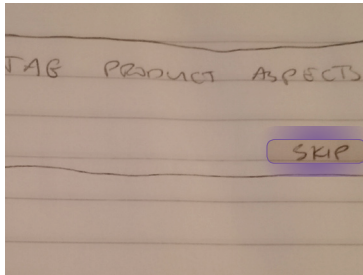
2.2 Show a 'skip' -button
By presenting a 'skip' -button, users are expected to understand that the related step of categorization, can be skipped for a later moment.
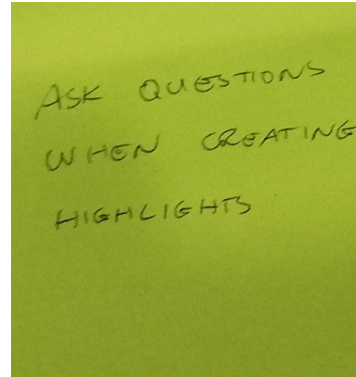

2.3 To present categorization means with questions
Questions are expected to come across as less persuasive, thus offering the intended freedom.

Evaluation

- Though freedom needs to be conveyed, users still have to be guided towards the proper steps of categorization. Ideas 2.1 and 2.2 are expected to successfully convey this freedom, but are to clear in showing the possibility to skip the steps of categorization. This comes with the risk that users will ignore these steps too often.

- Contrary to the first two ideas, idea 2.3 does not present the specific option to skip the steps of tagging. It still guides users towards the intended steps, only presenting them in a less persuasive way by the means of questions.

3. To have an overview of stored data (for the Insights section)
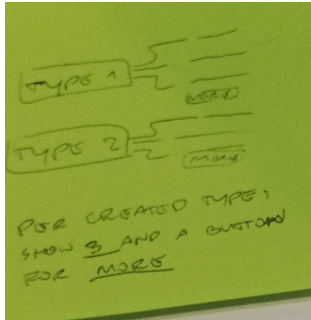
3.1 Show three insights per group alongside a button to see more
Present all created groups and reveal three insights, alongside an option to view more. Choosing this option enables users to view all insights tagged with the respective group.
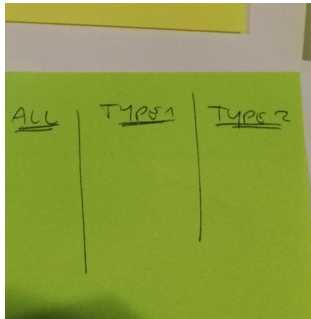
3.2 List insights per created group
List all created groups horizontally on top. Users can select a group and view all insights that are tagged with that group. An option to view all insights can be included too.
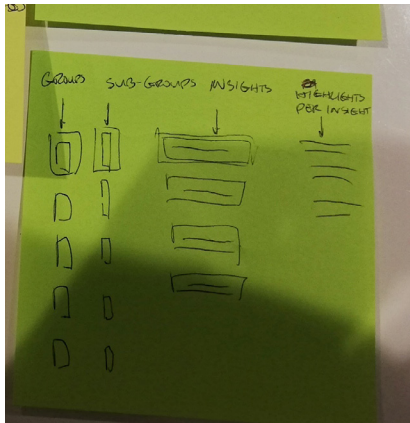
3.3 Select (sub-)group and view the related insights and higlights next to it
This option is similar to the second one, only the groups are shown vertically on the left of the screen. The insights will then be listed vertically, next to the groups. This will give more space to show more elements in the screen; highlights of a selected insight can be listed on the right side.

3.4 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 lay-out, users are expected to be able to see these three elements all at once.

Evaluation

- Groups of Product Aspects and Customer Types need to be presented together, with all the insights created. Ideas 3.1, 3.2, and 3.3 are not suited for this, as they are more optimal to show either one of the two types of groups.

- Idea 3.4 is a combination of ideas 3.2 and 3.3. Contrary to the other three, it is able to show all groups while still distinguishing Product Aspects from Customer Types. Also it can show all insights that are created.

4. To feel enabled to structure data (for the Insights section)
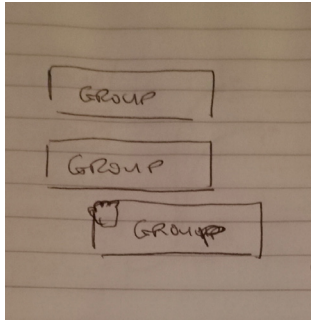
4.1 Replace groups to combine them together
This idea only is about merging multiple groups together into a group of higher-hierarchy-level. Users can drag a group and by dropping it on another group, both can be combined.

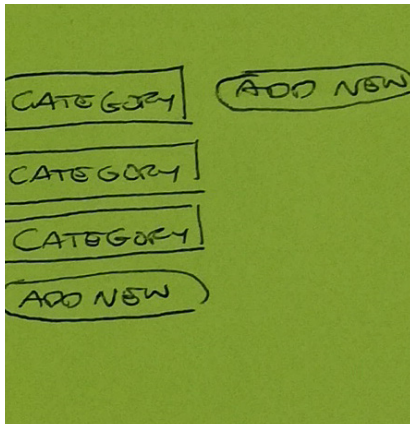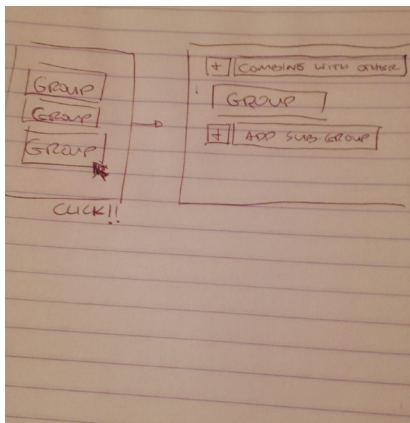

4.2 'Add new' -buttons
This idea is to be applied for the Insights section. Showing this button alongside the listed categories would imply that they could create new ones. By using different placements for this button, it was to be communicated whether newly created categories would be of the same level or lower level of group-hierarchy.

4.3 Present hierarchy-template for each group
When clicking on a group users get to see the options to create a hierarchy structure based on / with that group. The options shown are: 1) to combine it with another group and create a higher-level-hierarchy group, or 2) to create / add sub-groups under it.
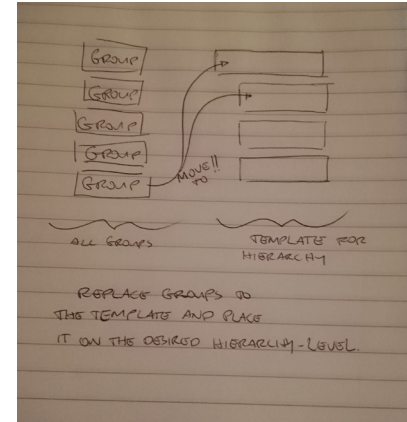
4.4 Present hierarchy-template next to all groups
With the hierarchy-template shown next to all groups, it becomes clear that the possibility is there. Groups can be organized in a hierarchical structure by dragging and dropping them on the template.

Evaluation

- Ideas 4.1 and 4.3 do not enable users to see the possibility of creating a hierarchical structure immediately. This is, however, conveyed by ideas 4.2 and 4.4.

- In the case of idea 4.4, the template next to groups may take a significant amount of screen-space. This screen-space may have to be used to show all created insights as well. A solution for this may be to show both in separate screens.

- With idea 4.2 it is more likely that the possibility of hierarchy-creation, can be shown alongside all created insights.

Appenxid XIX: Second Design Challenge – Adjusted Design Criteria after User Tests

- (Insights of raw) data can be categorized based on Product Aspects
- (Insights of raw) data can be assigned with customer names
- Specific Customer Types can be specified
- (Insights of raw) data can be categorized based on Customer Types that users can specify themselves
- **Groups of Product Aspects and Customer Types are presented next to each other**
- **Users can choose the specifc groups to tag insights with**
- Manual data categorization does not overlap with automatic data categorization

- An overview of all stored (Insights of raw) data can be reviewed after categorized
- An overview of all stored (Insights of raw) data can be reviewed per category
- Switching categories, to review (Insights of raw) data, is easy

- Separate (Insights of raw) data can be reviewed
- Separate (Insights of raw) data can be searched for

- Groups and sub-groups can be made, to categorize insights
- Groups and sub-groups are to be made based on findings in raw data
- New groups can be made while going through raw data in the Dock section
- New groups and sub-groups can be made while going through raw data in the Insight section

- The existence of groups and sub-groups is clearly communicated
- **An overview of groups and sub-groups can be reviewed during insight creation**
- **An overview of groups and sub-groups can be reviewed in the Insights section**
- Groups and sub-groups for categorization can be deleted

- (Insights of raw) data can be added in groups and/or sub-groups
- (Insights of raw) data can be added in more than one group / sub-group
- (Insights of raw) data can be deleted from groups / sub-groups

- Exemplars from raw data can be added to insights in groups and/or sub-groups
- Exemplars from raw data can be added to multiple insights in groups and/or sub-groups
- Exemplars from raw data can be reviewed in groups and/or sub-groups
- Exemplars from raw data can be deleted from groups and/or sub-groups

- (Insights of raw) data are always retrievable
- (Insights of raw) data can be filtered by specified time ranges

Those shown in grey are kept from the previous version of the list; see Appendix XVII.

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

Appendix XX: Additional Interviews – Customer Support in SaaS SMBs and Mid-Market Businesses

Interviewees
- Former CS staff (currently a digital marketing manager in a SaaS scale-up company)
- CS manager in a SaaS scale-up company
- Former CS manager in a SaaS scale-up company (currently a Sales manager in the same company)
- CS manager in a SaaS scale-up company
- VP of Product in a SaaS scale-up company

All the interviews were done via Slack, by the means of chat conversations. These chats took multiple days (due to late responses from interviewees) and because of that, the questions were kept as short as possible. Therefore, the interviewees were only asked one question:
- To what extent would you want CS teams to be engaged in this analysis process? To what extent would you want CS teams to be updated about the 'transformation of customer feedback into customer insights'?

They would then be asked to elaborate on their answers.

Slack conversation #1: former CS staff (currently a digital marketing manager in a SaaS scale-up company)
Grey [11:03 AM]
Hey! My name is Garry. I'd love to get your personal opinion about using customer feedback for product / design decisions.

Can I ask you a few questions?

[Interviewee] [10:51 AM]
Hi Grey! Sorry for the late reply. I've been away on a short vacation. Sure, I'd love to help out if I can :slightly_smiling_face:

Grey [6:10 PM]
Great! I very much appreciate that.

I am currently exploring the extent of collaboration between product leaders (PMs / POs) and customer facing teams in deriving insights from customer feedback data/conversations.

My questions for you about this: To what extent would you want CS teams to be engaged in this analysis process? To what extent would you want CS teams to be updated about the 'transformation of customer feedback into customer insights'?

[Interviewee] [9:31 AM]
Alright, two questions:
- To which extent should the CS teams be informed? Enough so that they see the connection between what they're doing, the data they're gathering and generating, and what decisions are made. Will this take more than, say, a monthly presentation from the people who use the data? Probably not, but it might. Beware that this requires a degree of transparency that some organisations are not comfortable with, but I do see a lot of value in POs/PMs having a news session every once in a while, so why not include this too?

- To which extent should the CS teams be involved in the analysis itself? I wouldn't want to involve everyone in analysis work like this, but: 1) I would want everyone to be able to give feedback based on what they see/experience; 2) You _can_ involve one or a few people from CS in the analysis as ambassadors, but you have to have an idea that they can actually contribute; 3) This should probably go for all customer facing teams and not just CS, just like you say.

To summarise: Everyone should be informed about how their work is used by others. Only some might be able to contribute, and you should definitely include those.

I've worked both sides of the fence on this one, and I know we would have done better in CS if we had been better informed, probably to the point of missing out on an overall improvement of customer data quality by 25%. People didn't bother categorising conversations & gathering customer data, because they simply thought it was sent into the void.
I would also add that there should be a continuous and closed feedback loop from CS and most other functions in the company. That means weekly, bi-weekly, monthly sit-downs with data that is shared by CS to others.

Grey [9:30 PM]
Yes, thx! I'd like to have some clarifications on some things.

"Beware that this requires a degree of transparency that some organisations are not comfortable with…"

What exactly are they not comfortable with and why? Can you name specific factors to pay attention to?

"You _can_ involve one or a few people from CS in the analysis as ambassadors, but you have to have an idea that they can actually contribute"
How can you know whether they can contribute or not? What would this decision be based on?

By 'contribute' do you mean to contribute in the entire analysis phase? Or only to an extent (if yes, to what extent)? Or is this something that would be different per company (if yes, what would be the common things in scale-ups and mid-market businesses)?

[Interviewee] [10:28 AM]
Hiya! I'll jump right in:

EDIT: Whoa. I wrote a lot. If you think of publishing anywhere, please let me know in advance :slightly_smiling_face:

A note on company stage and size
First, I assumed we were talking mid-market or larger and established companies. I think smaller companies, scale-ups and earlier stage ones, can afford to and sometimes must play by completely different rules when it comes to involving employees in cross-functional activities, especially for product. In short, there are two reasons why: 1) Younger companies need to build culture and constantly "test" their narrative and product. One way of doing both effectively is using your own employees in analysis and processes that might instigate change and/or help decide direction; 2) There won't be any big data sets for these companies, no several years of history while having run established processes, so they either have to go by others' research (only possible to a certain extent) or by anecdotes and/or observations to try to improve decision making. This is very brief and doesn't fully convey the differences and reasons, and I don't get to address assumptions I made here.

To be or not to be transparent - why wouldn't you?
This has to do with what motivates people in CS, and how a company's internal communication has been executed historically. Let's say you're doing analysis, fairly routine stuff, for a product roadmap update. This commonly includes dimensions that relate to growth, margin, possible new markets, upselling

opportunities, etc. - all the commercially driven stuff - _plus_ a bunch of other dimensions that aren't directly about the black and red, answering questions like "How does solving this problem for our users further the company's mission?" or "To which degree would this new feature enable users to do X, which is a soft goal of ours?".

Let's say that the outcome of the analysis is that you need to spend half a year to do something for purely commercial reasons. Quite common, right? If that's how you tell it, the people of CS typically wouldn't be motivated by it at all. This mostly stems from the fact that CS managers are taught to make their employees really buy into the vision and mission of the company. This is an effort to add meaning to a job function that suffers from high churn and burnout. And people who tend to stay in CS are the ones that are empathic: They want to believe in the vision and they want to help customers at almost any cost. Exposing them in a very transparent fashion to purely commercially driven decisions runs the risk of demotivating them. If a company's management has failed to impart that "we're here to do this, but we're also a business" and they fail to connect those two purposes, then you end up with an environment where you sometimes don't tell the entire truth. Then you build on that. And build on that. I think you can see how it happens. You end up in a place where backtracking on the story you've been telling for quite some time could be perceived as a political disaster, and therefore management won't do it.

I don't believe it has to be that way, but I've witnessed it a few times myself and there definitely seems to be a disconnect between motivation of CS staff and other employees in (most) companies. It can be bridged by telling the right stories, but not everyone manages to do that.

Which qualities to look for in CS staff to involve in analysis
No guarantees, but I'd look for people with this kind of knowledge and these traits:
- Ability to think statistically (three occurrences does not make a trend, one isolated incident is not necessarily a product-related problem)
- They have an overview of what CS is contacted about
- They are able to see beyond their own needs and desires
- They are analytical

Notice that there's nothing in there about prior experience. And I'd rather include one person too many than too few.

Contribute how?
I only meant to an extent. It would be interesting to try to involve them all the way through, but I've never seen it done. The most succesful process I've witnessed did it this way:
1a) Invite _everyone_ for input every once in a while. Ideas are then categorised and subjected to initial analysis.
1b) PMs keep track of their own ideas as well.
2) Diagnosis by PM group. Describe problems first and foremost, not solutions.
3) Involve a smaller group to look at all ideas and current stated problems. Try to generate solutions, check for technical feasibility.
4) PMs go back and subject everything that remains to further analysis and consolidates it into a roadmap.

I'd normally invite all of CS to 1a and one or two to 3.

Would this be different in larger companies? I'd say it depends on the size of the CS department. If you have a contact center with 100 people and a sales department with the same, then you can't very well pull everyone out very often. Most of the time you'd get the same result with 30 as with 200. So the logical thing is simply to not involve everyone. But that's only logical if you're looking at the result of the analysis and not considering the environment of the entire company. It's very important for these people to feel heard, and you can absolutely make that happen anyway - for instance you can open up an idea bank and/or simply keep your door open. So are there differences? Yes, and there should be. But people shouldn't forget about CS as they are a treasure trove of customer insight and they often need to be involved for motivational reasons. (edited)

[I asked if the participant would be interested to be involved in upcoming user test and ended the chat with thanking him]

Slack conversation #2: CS manager in a SaaS scale-up company
[I asked for a chance to ask her some questions and she gave a positive reply]

Grey [9:50 AM]
Great!

To begin with, I'm sorry if I have bothered you by sending this unsolicited DM. Because of that, I very much appreciate it that you've replied.

I am currently exploring the extent of collaboration between product leaders (PMs / POs) and customer facing teams in deriving insights from customer feedback data/conversations.

My questions for you about this: To what extent would you like to be engaged in this analysis process? To what extent would you like to be updated about the 'transformation of customer feedback into customer insights'?

[Interviewee] [6:25 PM]
i think those are great questions! and i don't see it as too unsolicited, so no worries. this is a group for people that are into this kind of stuff :slightly_smiling_face: i would be interested to see your final takeaways.

To what extent would you like to be engaged in this analysis process?

- I'd at least like to see what PMs do for the analysis process the first few rounds to see if I could offer feedback on it. Once the process is clear to me, I would be glad to join on an ad hoc basis, likely when there is user feedback that i think is especially important to act on from support's POV.

To what extent would you like to be updated about the 'transformation of customer feedback into customer insights'?

- Regularly whenever there's something to share. It doesn't need to be meeting based, but a tag in a Trello/JIRA/whatever ticket that is related to feedback from support's side is always appreciated so my team can keep track of developments. Or, just having access to whatever doc or tool is being used to create these customer insights.

- Currently, I create and share quite a few customer feedback/insights

presentations just with support data and everyone knows how to access the data in my company. I'd want similar transparency for whatever the next team does with it as well.

Let me know if I was on the right track for what you were asking or if you need anything else.

Grey [8:06 AM]
Yes, these are great answers! I'd like to follow up on some of your answers.

You'd at least like to see what PMs do for the analysis process the first few rounds to see if you could offer feedback on it. Can you explain what this feedback can be? What specific parts of the process would you like to have clarified?

As you'd like to have the process clarified, I assume there are certain types of sub-results you'd really like to see too. I was wondering if you were able to name them? (examples: created categories, data hierarchy, feature-request prioritization, etc.)

I was also wondering if this feedback you mentioned, might have to do with feedback to PMs on how they interpret raw customer data (= how they combine and compare feedback data to define (deeper) insights about customers)?

[Interviewee] [6:26 PM]
Can you explain what this feedback can be? What specific parts of the process would you like to have clarified?
- making sure they are taking the feedback I bring seriously enough if it needs to be taken seriously, making sure they understand the associated user stories for issues that support would deem high priority.

sub-results: request prioritization & understanding when the feedback we bring will get eng attention and how. seeing how it might fit with other feedback coming from other areas of the company.

& yes for your 3rd point, making sure things don't get lost in translation, making sure they understand how things are playing out with our customers.

Grey [8:02 PM]
Aah great, thank you, it is all very clear to me now!

[I asked if the participant would be interested to be involved in upcoming user test and ended the chat with thanking her]

Slack conversation #3: former CS manager in a SaaS scale-up company (currently a Sales manager in the same company)
[I asked for a chance to ask him some questions and he gave a positive reply]

Great!

To begin with, I'm sorry if I have bothered you by sending this unsolicited DM. Because of that, I very much appreciate it that you've replied.

I am currently exploring the extent of collaboration between product leaders (PMs / POs) and customer facing teams in deriving insights from customer feedback data/conversations.

My questions for you about this: To what extent would you like to be engaged in this analysis process? To what extent would you like to be updated about the 'transformation of customer feedback into customer insights'?

[Interviewee] [2:38 AM]
Hey! No need to apologize. We all work in tech for the most part, so we know that helping each other is a great way to meet and collaborate.

I'd love to hear more about how you are addressing this. **Full disclosure: we work in the same space, so I like to stay up to date with current technologies in the same space. As you know, not every company is a good fit, so I like to be able to recommend other solutions to prospects.

Grey [8:21 AM]
Great tx! The company that I work for, offers Shipright (https://shipright.co/), which is meant to be used to analyze customer feedback data. From what I've found so far, this analysis tend to be led by PMs / POs. As customer facing teams (especially support teams) are the ones closest to customers, I am convinced of the need to let them be more engaged in interpreting raw feedback data, to form insights of customers.

Therefore, I am exploring ways to have this supported by a digital tool and am curious about your answers to the questions mentioned earlier.
shipright.co
Shipright – Turn Intercom conversations into product insights
Make tracking customer needs, requests & pain points from Intercom

conversations a breeze.

[Interviewee] [8:27 AM]
Before I can answer either of the aforementioned questions, what is included in the analysis process and what do you mean when you talk about being "updated about the 'transformation of customer feedback into customer insights'"?

Grey [8:46 AM]
Oh yes, of course. The analysis process means interpreting raw customer feedback (for instance, Intercom/Zendesk conversations and survey results) to an extent that it becomes clear what customers want from certain products/services; what these products/services should provide.

What it comes down to is, interpreting feedback from customers and use the resulted interpretations to make product/design decisions.

Now, with being "updated about the transformation of customer feedback into insights", I meant being updated about the creation of the interpretations of customer feedback data. To what extent should CS teams be involved in this?

[Interviewee] [8:39 PM]
Thanks for clarifying those points.

I firmly believe that CS teams should be involved in the process as little as possible. This allows for an unbiased, consistent and highly accurate source of insights to surface from the data. This means CS teams don't need to budget more time on time top of what they're doing. Of course, ideally the insights surfaced allow product teams to know what to focus on so the incoming tickets/chats should decrease, but if the business is growing (hopefully) the ticket load should stay as close to constant as possible because solving the insights should reduce the existing friction points.

In short, it's key to focus on what the customer is saying without input from internal teams.

Grey [8:34 PM]
Ah okay, thx for the answer. I'd like some clarification on something you've

[I asked if the participant would be interested to be involved in upcoming user test and ended the chat with thanking him]

Slack conversation #4: CS manager in a SaaS scale-up company
[I asked for a chance to ask him some questions and he gave a positive reply]

Grey [9:52 AM]
Great!

To begin with, I'm sorry if I have bothered you by sending this unsolicited DM. Because of that, I very much appreciate it that you've replied.

I am currently exploring the extent of collaboration between product leaders (PMs / POs) and customer facing teams in deriving insights from customer feedback data/conversations.

My questions for you about this: To what extent would you like to be engaged in this analysis process? To what extent would you like to be updated about the 'transformation of customer feedback into customer insights'?

[Interviewee] [8:29 PM]
Hi Grey, of course! I love the support driven committee and am always here to assist however I can! For Guru I try as much as possible to handle all of the analysis myself. Our team tags things feedback and I process it in our feedback system. I definitely work with them as to what should be tagged feedback but overall I do the analysis myself mostly. This is in part because I like to see it directly from the customers myself and the support team appropriately so isn't always keyed in to what's happening in the market so they understandably might over or under emphasize trendsI definitely work with them as to what should be tagged feedback but overall I do the analysis myself mostly. This is in part because I like to see it directly from the customers myself and the support team appropriately so isn't always keyed in to what's happening in the market so they understandably might over or under emphasize trendsI definitely work with them as to what should be tagged feedback but overall I do the analysis myself mostly. This is in part because I like to see it directly from the customers myself and the support team appropriately so isn't always keyed in to what's happening in the market so they understandably might over or under emphasize trends

Grey [8:45 PM]
Ah, yes thx!

I'd like some clarifications on some things you've mentioned.

"Our team tags things feedback and I process it in our feedback system."
So you're using your team to filter incoming data to 'feedback', am I correct?

"This is in part because I like to see it directly from the customers myself and the support team appropriately" Do you mean, that you'd like to see it directly from the customers yourself, but still to hear your teams' opinion on it, in part?

"... so they understandably might over or under emphasize trends"
Would you be able to explain the exact reasons why they might over/under emphasize trends?

[The interviewee replied back with a verification on the first two assumptions that I asked]

[The third question was answered, though the answers were not taken for analysis for this design challenge]

[I asked if the participant would be interested to be involved in upcoming user test and ended the chat with thanking her]

Slack conversation #5: VP of Product in a SaaS scale-up company
[I asked for a chance to ask him some questions and he gave a positive reply]

Grey [7:26 AM]
Great! I very much appreciate that.

I am currently exploring the extent of collaboration between product leaders (PMs / POs) and customer facing teams in deriving insights from customer feedback data/conversations.

My questions for you about this: To what extent would you like to engage customer facing teams (with an emphasis on Customer Support teams) in this analysis process? How does it look like currently? To what extent should they help transform 'raw feedback' into relevant 'customer insights'?

[Interviewee] [6:52 PM]
Ah, good question.
We use the customer facing teams to collect the raw feedback, but my team (the PMs) always does user research to determine the root problems/needs that the user is having.

The customer-facing teams often only communicate about solutions ("user X needs feature Y") whereas my team is my more trained in digging into the "why" and finding the true insights.
Let me know if that doesn't make sense

Grey [4:14 PM]
Yes, so you're saying that your team does take ideas for features from the customer facing teams AND take these ideas as starting points to dig deeper into the true insights, am I correct?

[The interviewee verified this assumption and elaborated more on the separation of customer facing teams and PMs in his company; this however can be summarized to his above-mentioned answer]

[I asked if the participant would be interested to be involved in upcoming user test and ended the chat with thanking him]

Concluded insights
There is a need for direct opinion, of CS teams, on feedback data (from the side of analysis leaders). They need to be involved in the first steps of analysis. In Shipright, this reflects to the first step of insight creation. In bigger companies, with bigger CS departments, representatives of CS would be the ones that are to be involved.

CS teams, in general, are motivated by the vision to help customers to the best of their abilities. From the side of CS managers, they need to verify translations feedback data, that is done by analysis leaders. Also found, is that CS agents would appreciate to know, when the conversations they have had with customers are taken for analysis. It creates a sense of significance of their work.

On the other hand, involvement of CS staff should be kept minimal, because they are not paid for doing analysis work on feedback data, but rather to support customers with the use of their (SaaS) products.

Appendix XXI: Grible – Notes of Interview with a Head of Product in a SaaS Scale-up Company

- Highlights in the color of a need? Because you could see the differences of importance between customer needs. It is only useful if you make different highlights from a feedback. If not, it will be a nice-to-have feature.

- How does 'Archive' works with bigger amounts? Can you search / filter the insights?

- Going back (= 'After care') to end-users is important.

- Going back (= 'After care') to developers is valuable. It is motivating for them and can help developers become more customer-centric.

- The value of a need is relative to the user-base of a product.

- They would like to prioritize insights based on annoyance factor. This factor is based on urgency of needs from customers' point of view.

Appendix XXII: Third Design Challenge – Design Criteria

CS teams and customers
- The stakeholders feel heard
- The update shows clearly what feedback is analyzed
- Identified customer problems and needs can be included in updates
- The update shows clearly what insights came out of feedback
- The update shows clearly who were involved in the interaction, when the feedback was collected
- The update is received digitally
- The update can be viewed at any time

Analysis lead
- It is clear which CS agents / members are involved in the interaction, when the feedback was collected
- It is clear which customers are involved in the interaction, when the feedback was collected
- It is clear that the stakeholders involved can be updated
- The possibility to update involved stakeholders exists
- The possibility to update involved stakeholders can be found easily
- It is clear that the update will contain the translation of feedback to insights

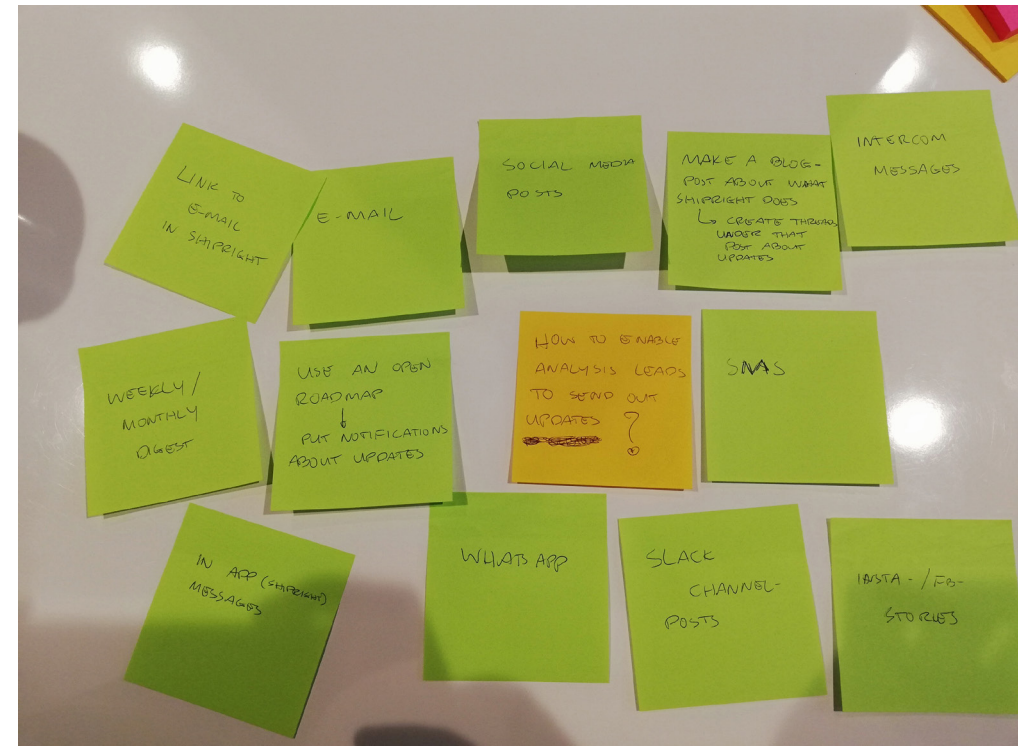## Appendix XXIII: Third Design Challenge – Generated Ideas

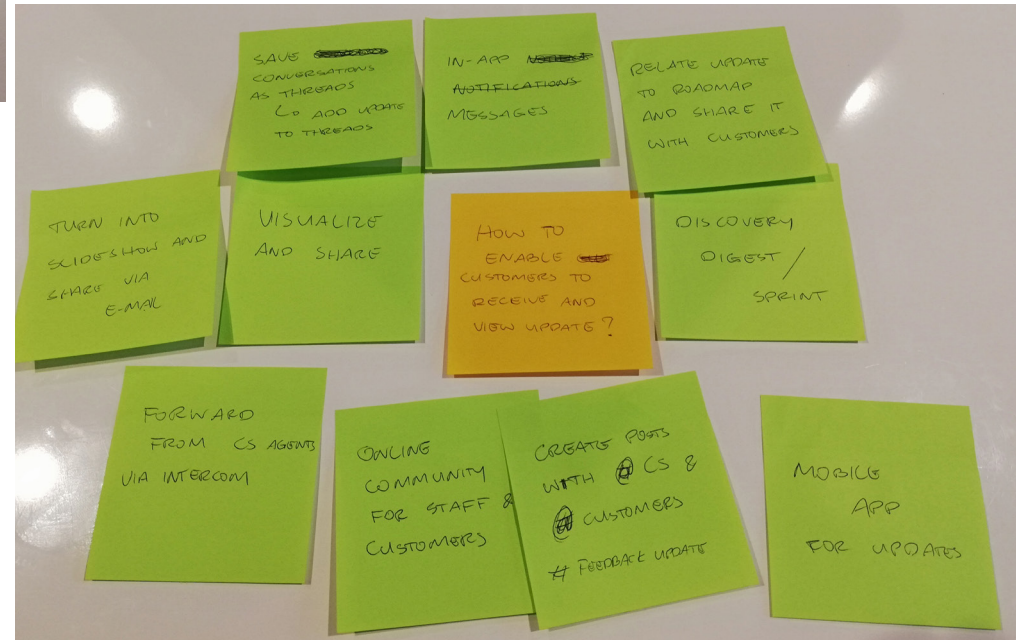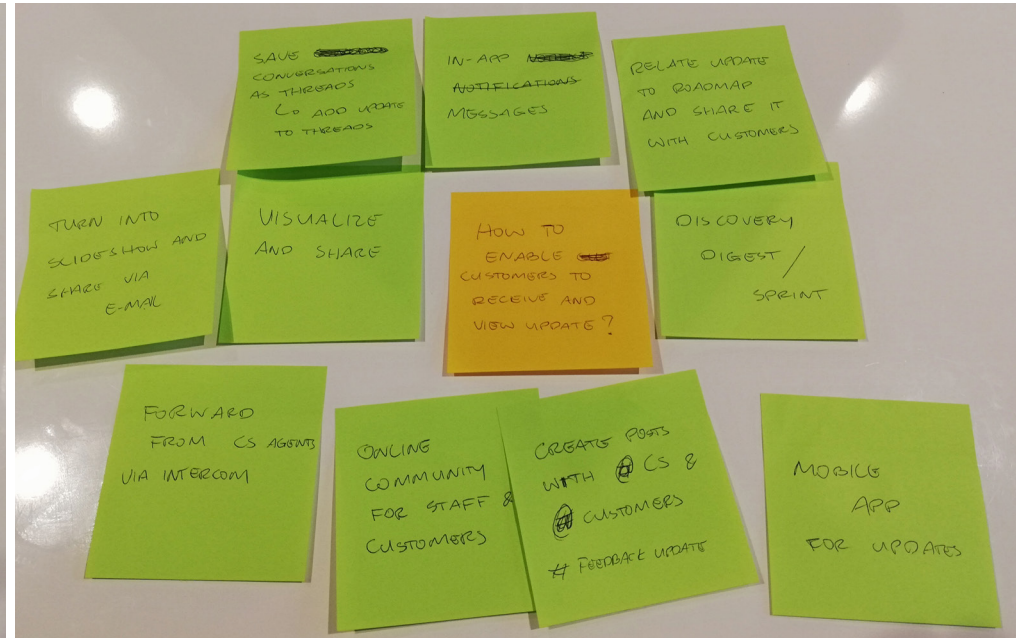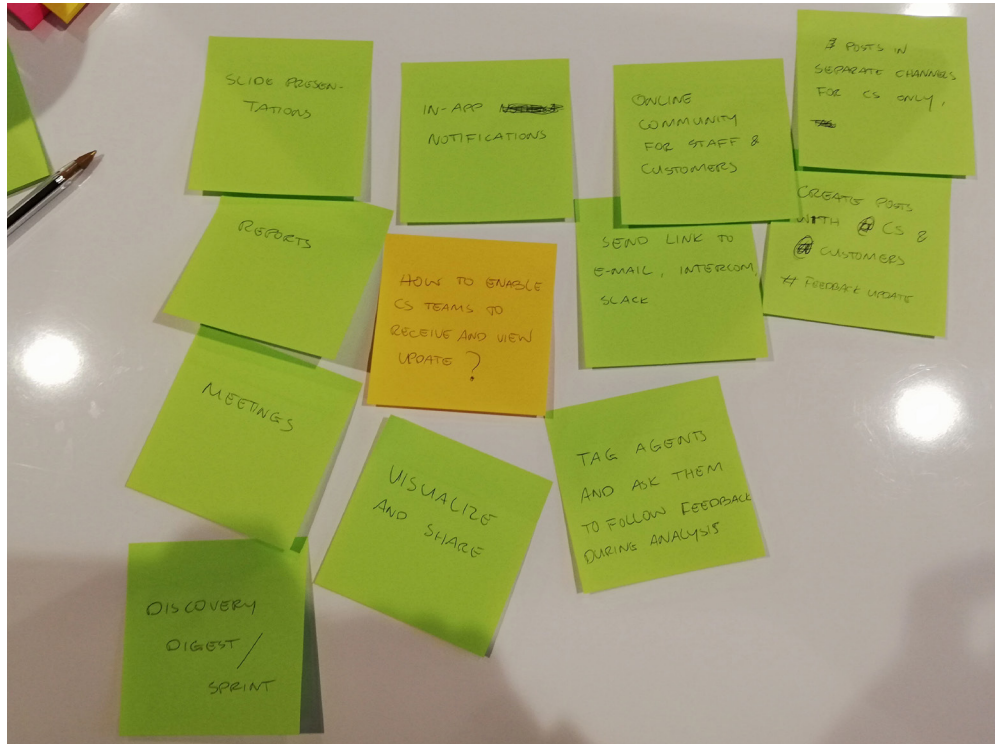Figure 11a: Generated ideas for the third design challenge.

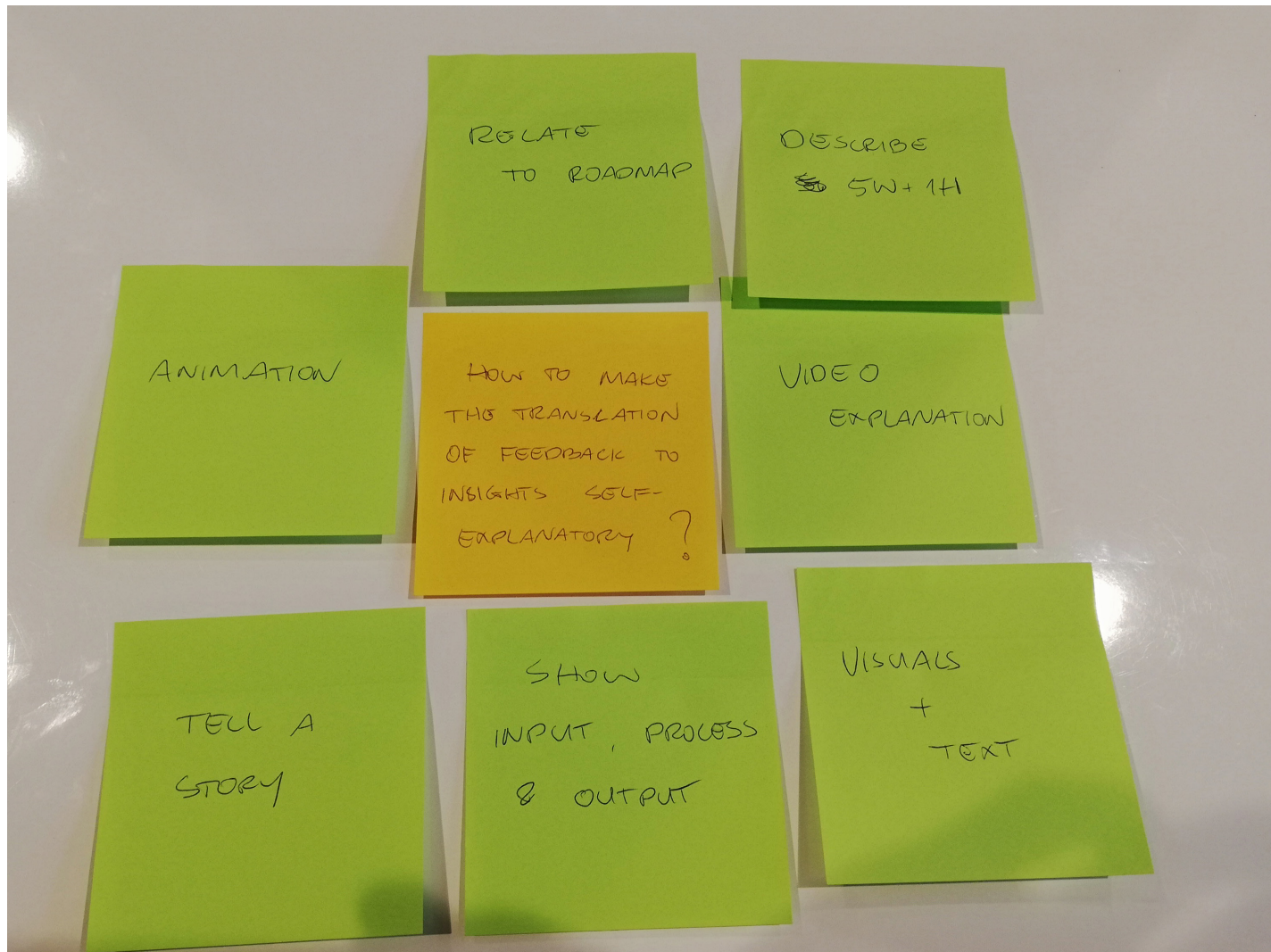Figure 11b: Generated ideas for the third design challenge.

Figure 11c: Generated ideas for the third design challenge.

Appendix XXIV: Third Design Challenge – Description of and Feedback on Concept Ideas

Concept idea 1: share updates via e-mail

This concept idea is shown and described by the figures of 12. These are to be seen on this page and the following ones.

The analysis lead tags specific support agents to insights, based on documents that highlights are originated from
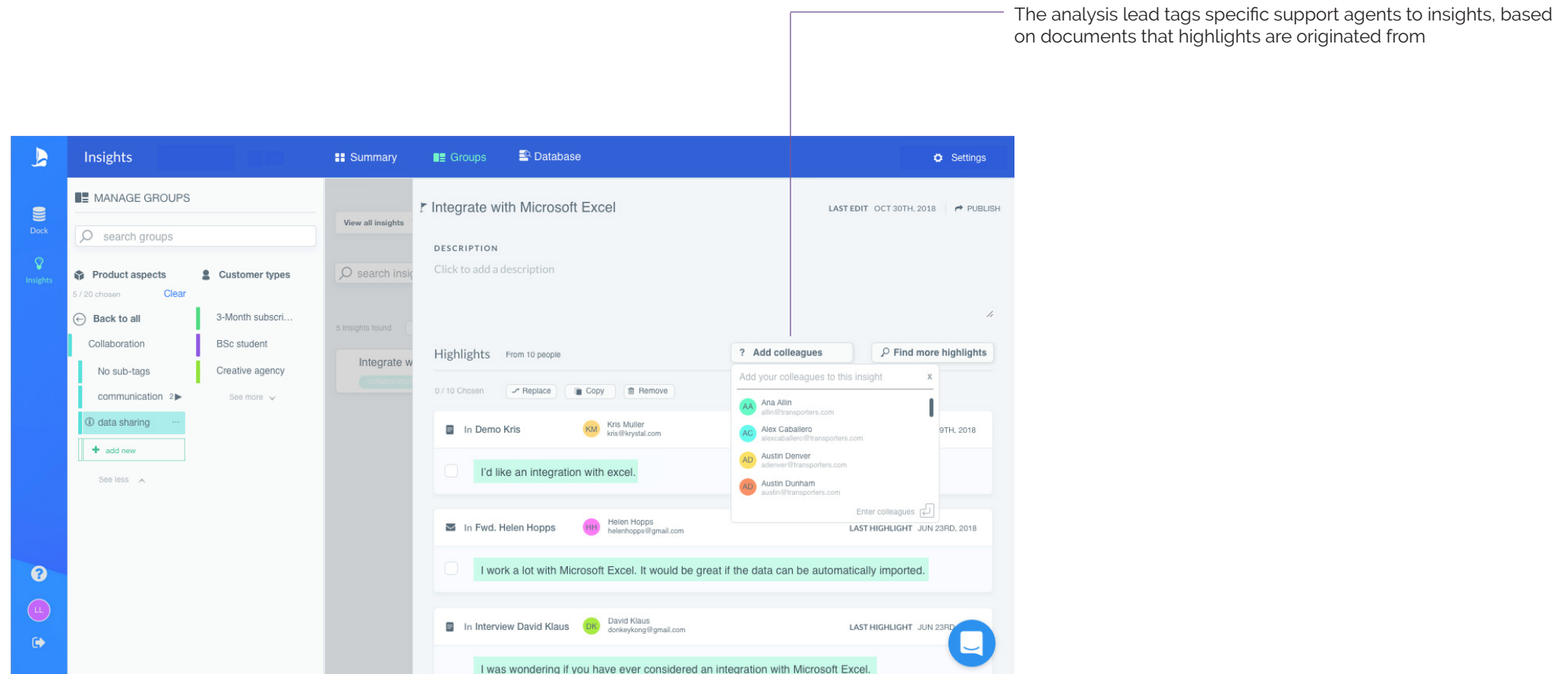

Figure 12a: Concept idea 1 - sharing updates via e-mail.
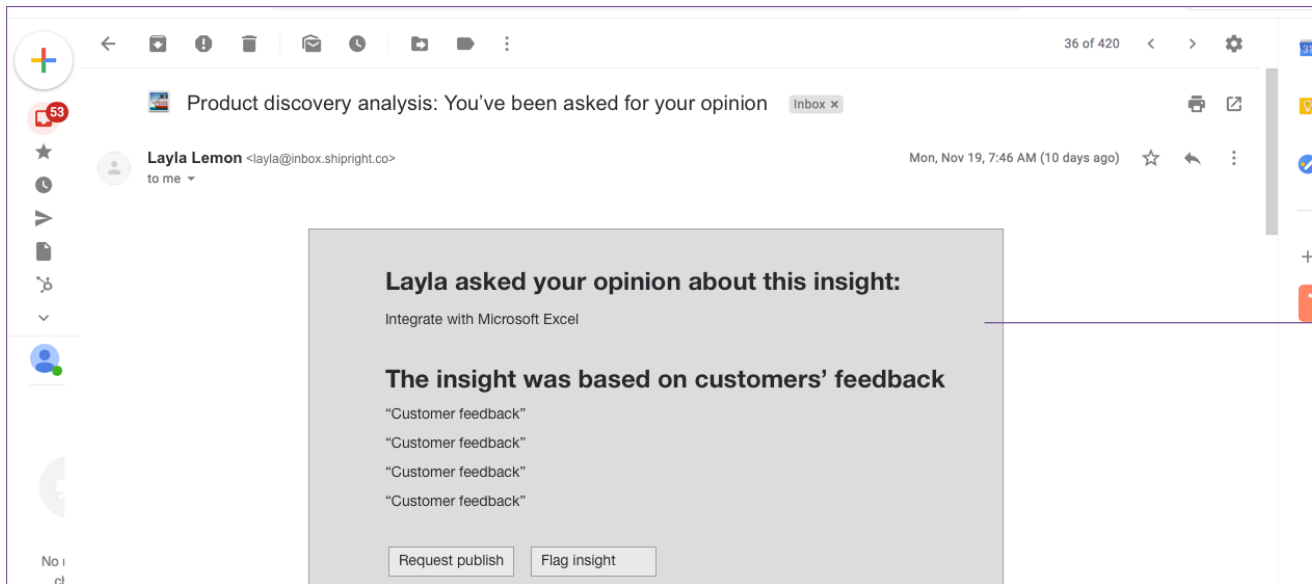
Once colleagues are added to an insight, the insight is converted into an e-mail that gets sent automatically to the added colleagues.

After viewing the e-mail, they can request the insight to be published or flag it for discussion.

Figure 12b: Concept idea 1 - sharing updates via e-mail.
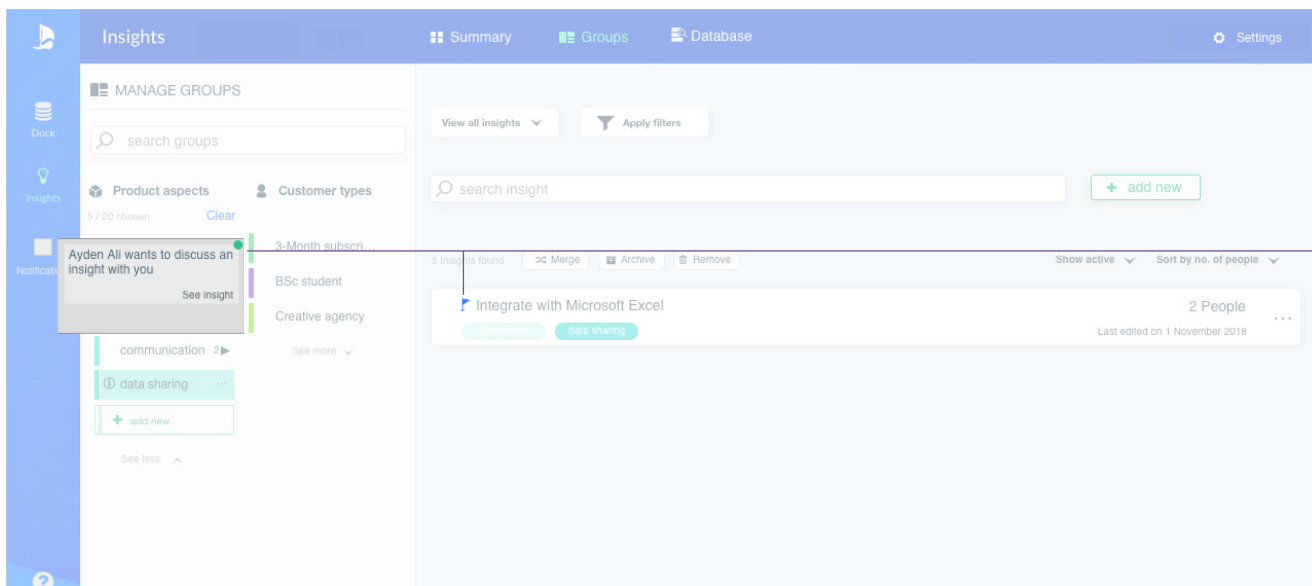
Supposed that recipient CS have flagged the insight for discussion, the analysis lead will see it in Shipright.

(It is still to be decided how this will work with multiple requests for flagging)

Figure 12c: Concept idea 1 - sharing updates via e-mail.
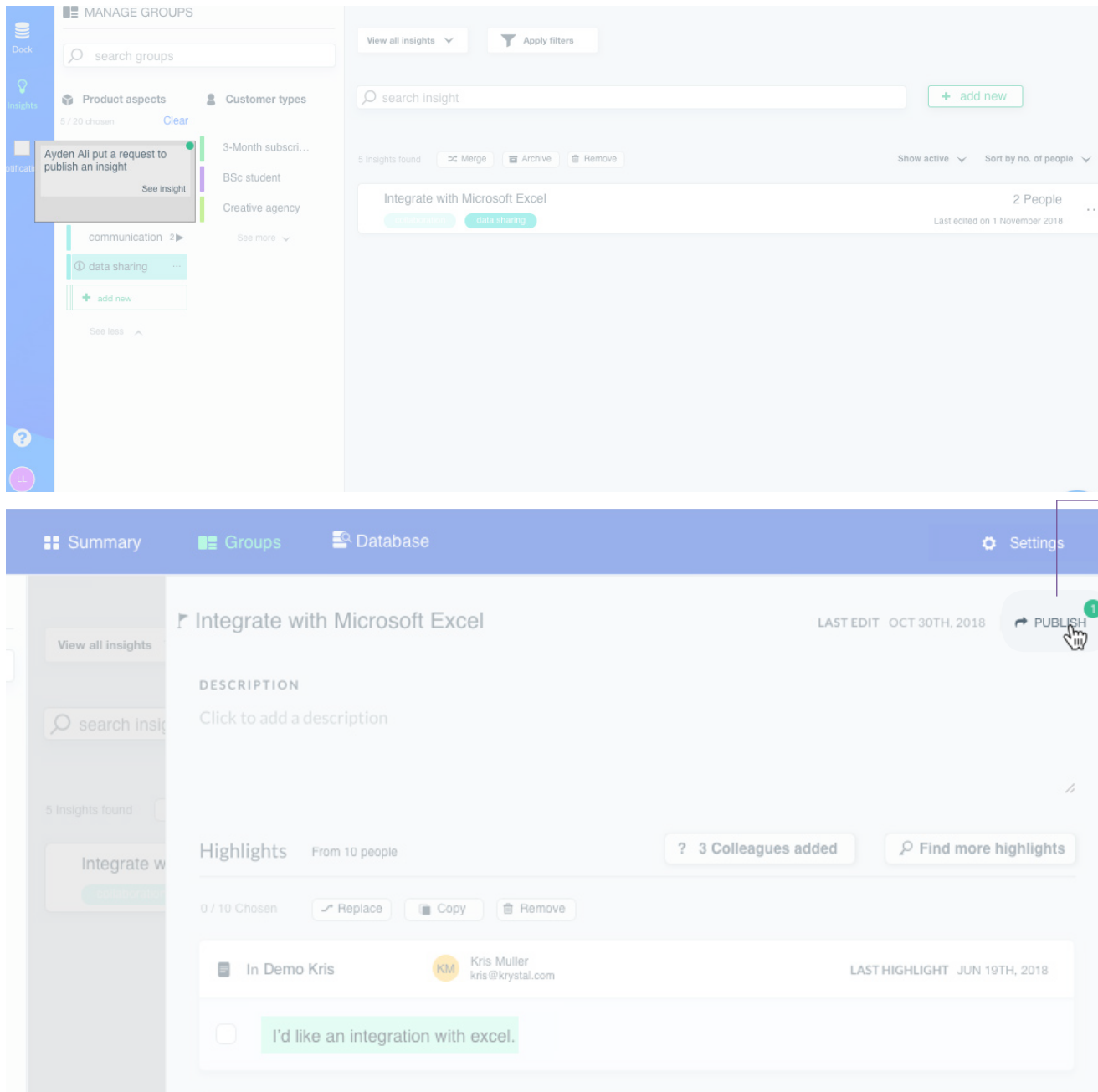
If the insight is requested to be published, the analysis lead can open the insight's details and publish it to be shared with customers.

These customers are automatically added based on the feedback conversations from which related highlights are made.

By clicking on this button, the insight can be shared with (automatically) added customers.

There is a green notification mark on the button; it shows how many colleagues requested the publication of the insight.

Figure 12d: Concept idea 1 - sharing updates via e-mail.

Your feedback is analyzed!

You gave us this feedback

"I'm used to working with Excel sheets. I use to analyze research data, before putting the results in my paper."

This insight was made from your feedback

Integrate with Microsoft Excel.

This insight was generated based on feedback from 30 other customers.
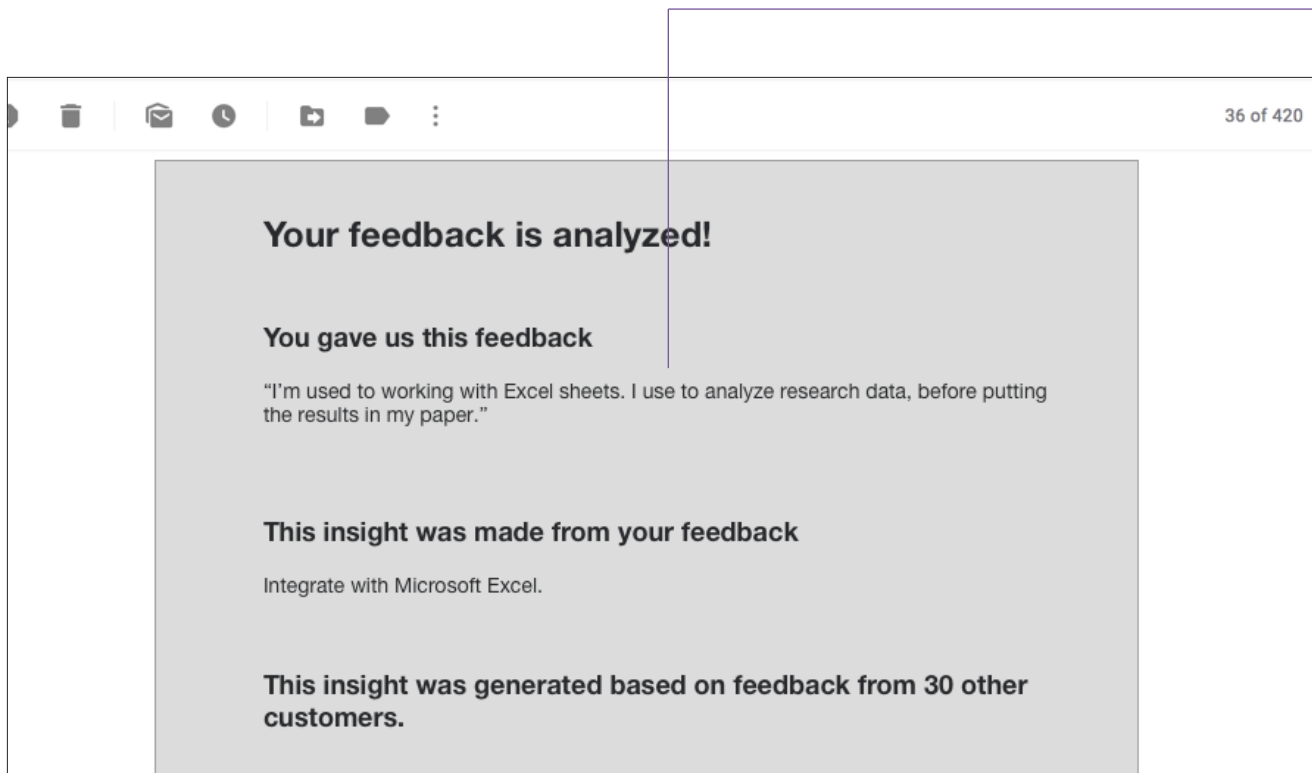
When published, insights are converted into e-mails, that get sent to customers added to it.

The e-mail contains the insight generated and the exact feedback that the respective customers gave.

It also shows how many other customers gave related feedback.

Figure 12e: Concept idea 1 - sharing updates via e-mail.

Feedback on this concept idea:

The experiences to design for (see Design scope, How?) are all supported. The content of the messages is sufficient to evoke engagement into and awareness of the analysis process. To be specific, the part of notifying customers about the identified number of occurrences among the analyzed customer population was expected to be highly relevant.

However, e-mails seem to be 'outdated' as a form of communication. Especially among internal teams, communication often occurs via Slack. Considering the overall use of e-mails, it often is used for less direct communication on a semi-formal level. This takes away the desired engagement of both customers and internal teams into the analysis process.

The feedback is translated to the Harris-profile that is shown by figure 13.

Experiences	-3	-2	-1	0	1	2	3
CS							
Being heard				■			
Being engaged				■			
Comprehension of feedback translation				■	■		
Customers							
Being heard				■			
Being engaged				■			
Comprehension of feedback translation				■	■		
Analysis lead							
Awareness of CS involvement				■			
Awareness of the difference of customers vs internal				■	■		
Awareness of the ability to reach out				■			
Feasibility				■	■		

Figure 13: Feedback on concept idea 1.

Concept idea 2: share updates via Intercom (2-way integration)
This concept idea revolves around a 2-way Intercom integration in Shipright. This means that data can be exported and imported, from and into both Shipright and Intercom; the current integration is 1-way, as data (= Intercom chat-conversations, can only be exported from Intercom and imported into Shipright, not the other way around.

More about this concept idea is shown and described by the figures of 14. These are to be seen on this page and the following ones.

Right after the analysis lead has made a highlight from a conversation (in Shipright), related customers to that conversation gets updated. The update appears in the respective SaaS product (the one delivered by the company of the analysis lead).
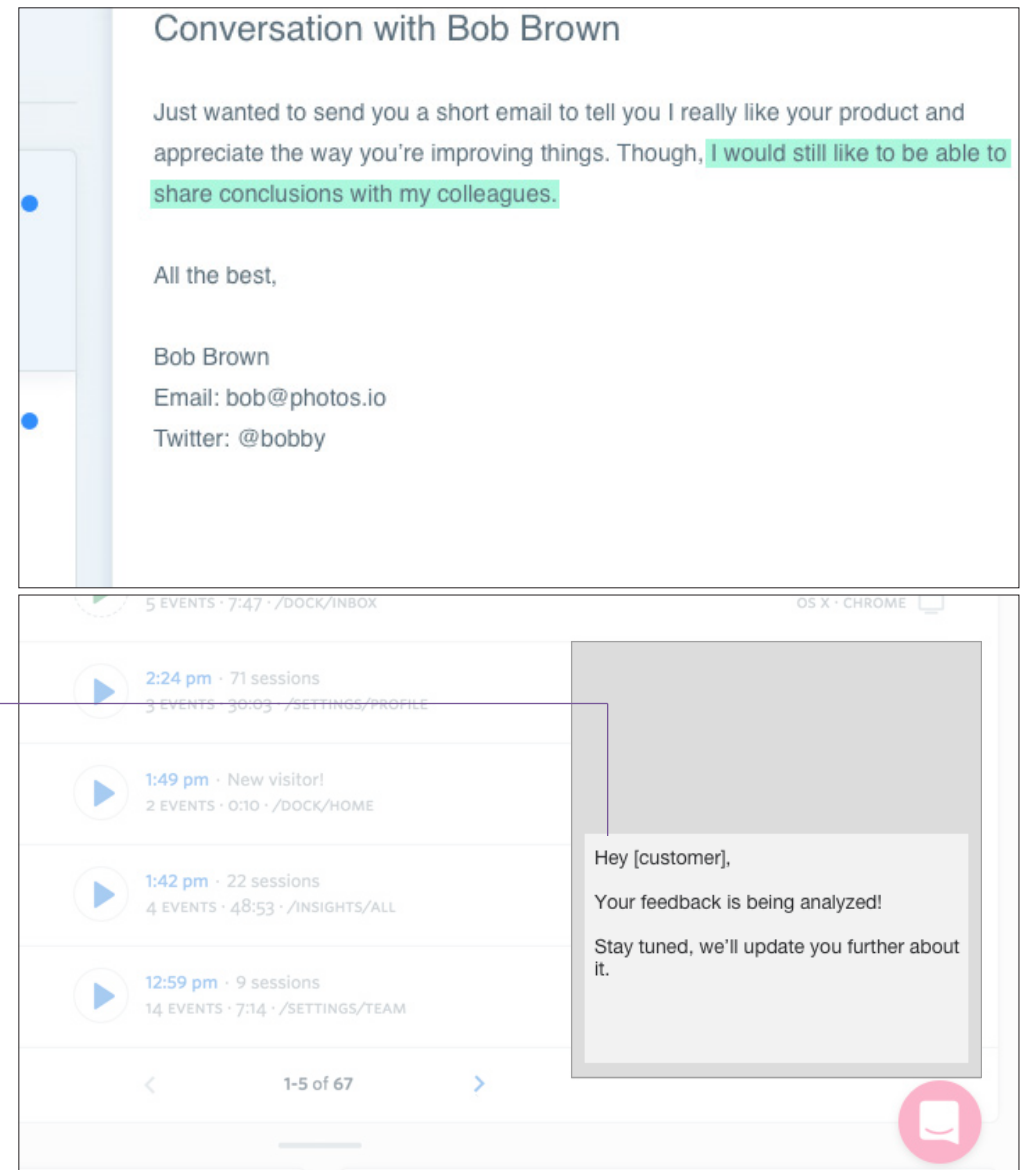
Figure 14a: Concept idea 2 - sharing updates via Intercom (2 way integration).
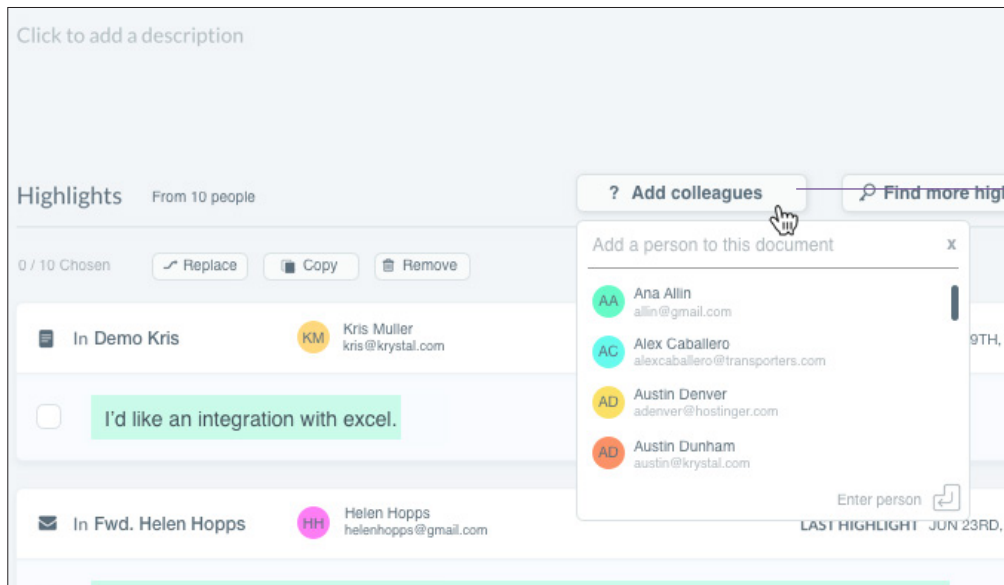
The analysis can add CS-colleagues to the insight, after opening its details in the Insights section.

The insight gets sent as an Intercom note, in the exact customer conversations the highlight(s) was taken from. The analysis does this by using the 'share' -button in Insight details.
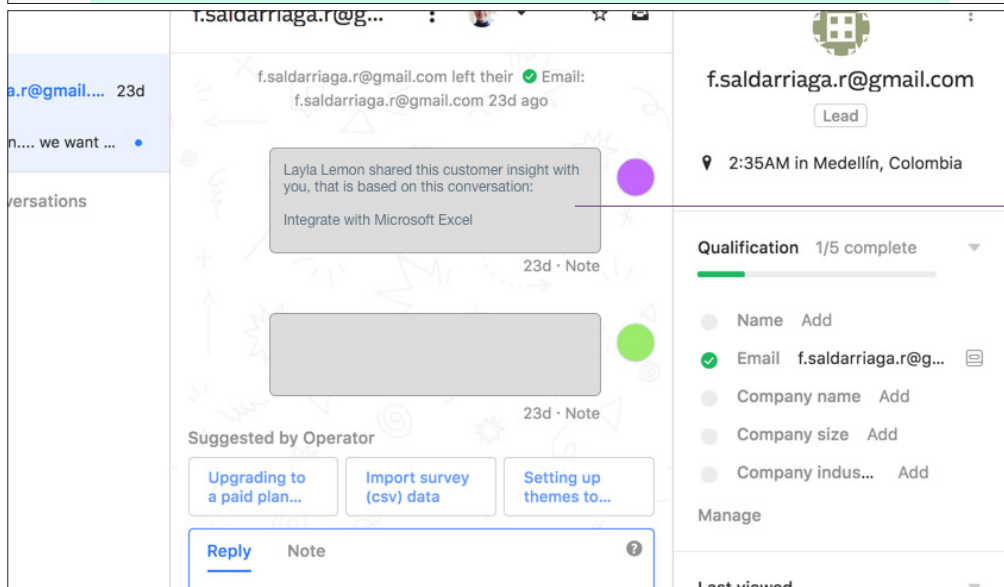
Figure 14b: Concept idea 2 - sharing updates via Intercom (2 way integration).
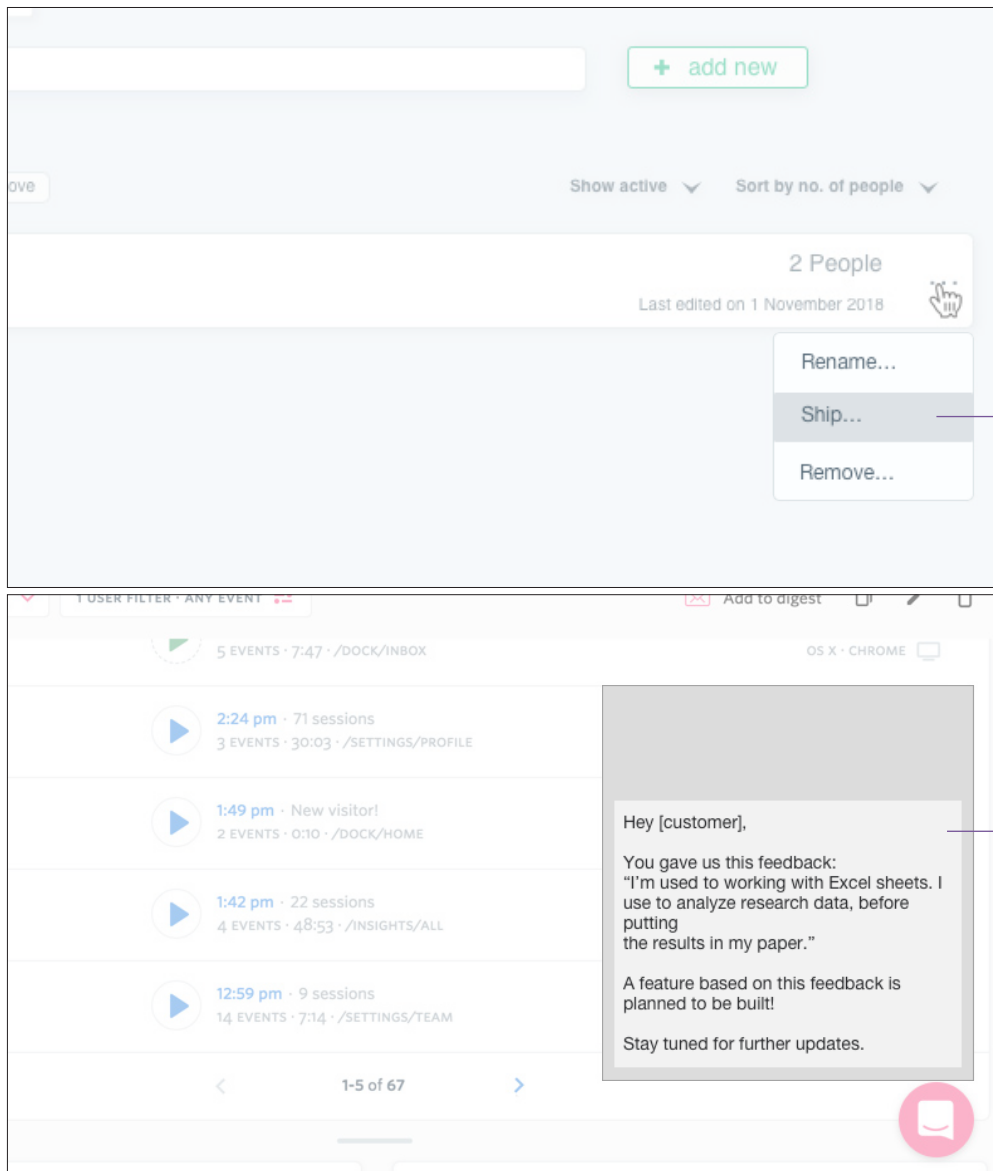
Insights can be related to tickets in the backlog. By 'shipping' insights, you show that related backlog tickets are transferred to delivery. This is also a way to clean up the insight's repository.

Customers receive an Intercom message about this.

(Note: added CS colleagues also get updated by the means of Intercom notes, as shown in the previous figure.)

Figure 14c: Concept idea 2 - sharing updates via Intercom (2 way integration).

Feedback on this concept idea:

The experiences to design for (see Design scope, How?) are all supported. The content of the messages is sufficient to evoke engagement into and awareness of the analysis process. This concept is especially strong in providing context for internal teams about shared insights, as they can easily retrieve it from the Intercom chats where updates get sent to (as notes, thus not visible for customers). Also, it provides great engagement with customers as updates via Intercom messages are expected to come through as personalized. On top of that, the concept fits best within the current business model of the company.

However, it still needs to be specified when customers need to be updated. This is an important issue for the concept, as there might be a prolonged duration of time in between the moments when conversations with customers get imported and when the first highlights from the conversations are made.

The feedback is translated to the Harris-profile that is shown in figure 15.

Experiences	-3	-2	-1	0	1	2	3
CS							
Being heard				■			
Being engaged				■	■	■	
Comprehension of feedback translation				■	■	■	■
Customers							
Being heard				■	■		
Being engaged				■	■		
Comprehension of feedback translation							
Analysis lead							
Awareness of CS involvement				■	■	■	
Awareness of the difference of customers vs internal				■	■		
Awareness of the ability to reach out				■			
Feasibility				■			

Figure 15: Feedback on concept idea 2.

Concept idea 3: share updates via a blog post and threads
This concept idea revolves around an online blog article for SaaS companies, that describe what their product is for. Created insights can be shared with colleagues and customers by importing them as 'threads' for this blog article.

More about this concept idea is shown and described by the figures of 16. These are to be seen on this page and the following ones.

Similar to concept idea 1, related CS colleagues can be added manually and the insight can be shared by clicking on a 'publish' button in the particular insight's details.

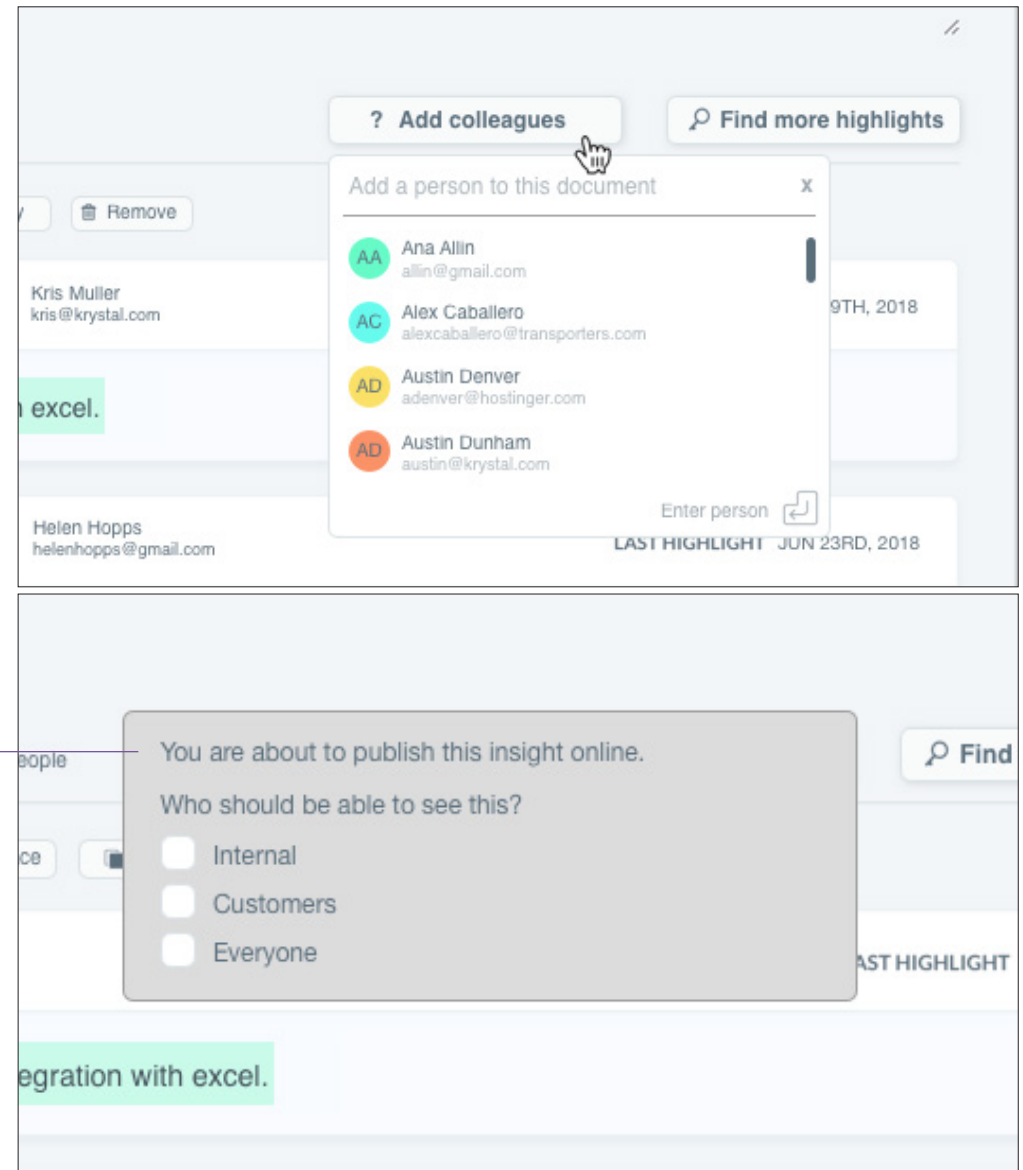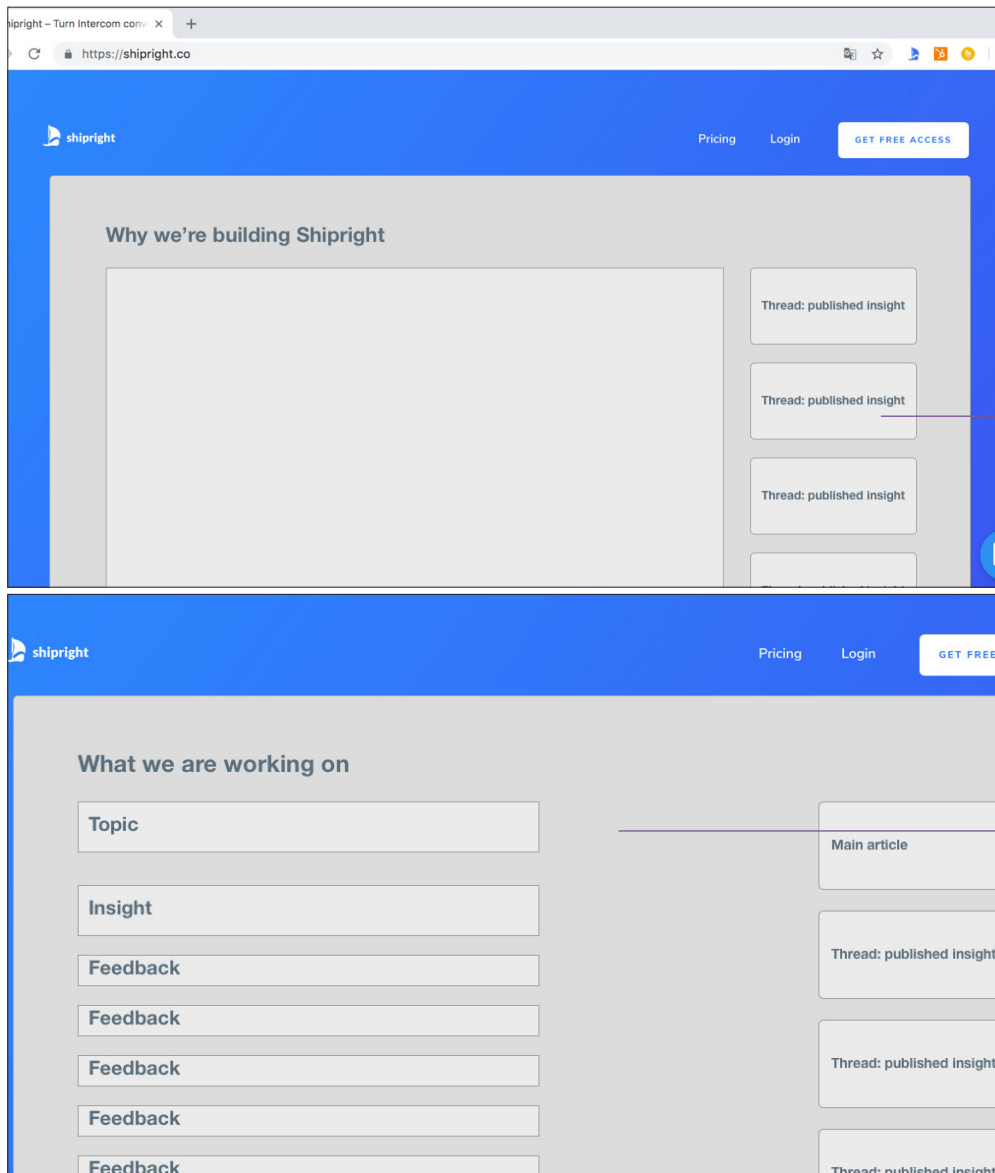When clicking on that button, a message pops up, that asks to whom the insight should become visible.

Figure 16a: Concept idea 3 - sharing updates via a blog post and thread.

Shipright provides the company an online platform for its blog. In that blog, the company shows what their product is about. Published insights appear as threads to the company's blog.

Note: in figure 15b, Shipright is used as an example for a SaaS company with a blog article; this company is meant to be one of the company clients of Shipright.

Published insights appear as threads of the blog article

The thread provides context to those it is shared with. This is done by showing the topic of the research, the insight that is created, and the highlights that are relevant for the insight.

(Note: it is still to be decided how the topic should be given), so the whole thread can be created instantly)

Figure 16b: Concept idea 3 - sharing updates via a blog post and thread.
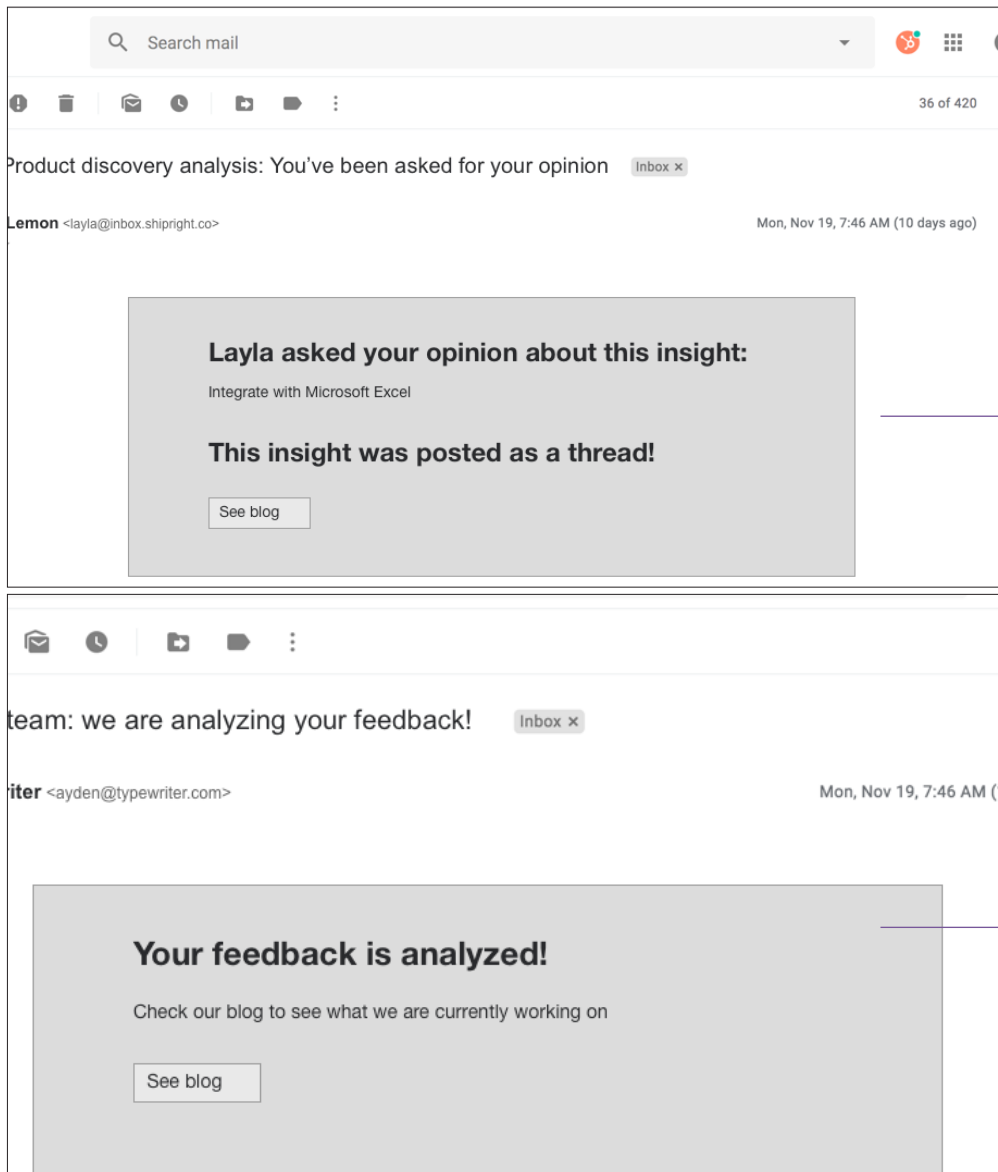
Colleagues and customers, who are chosen to view the insight, receive an e-mail with a link to the respective blog-thread.

Figure 16c: Concept idea 3 - sharing updates via a blog post and thread.

Feedback on this concept idea:

The experiences to design for (see Design scope, How?) are all supported. The content of the messages is sufficient to evoke engagement into and awareness of the analysis process. This concept was perceived as the most unique, compared to the others and is strong regarding customer engagement. The reason for that is because it shows customers a good connection between what the product is for, what current goals are and how their feedback contributes to these goals.

However, it is inferior to the other concepts in terms of feasibility. The added feature to add a topic of research and managing access per stakeholders made the concept more complex to be realized, compared to the other two.

The feedback is translated to the Harris-profile that is shown by figure 17.

Experiences	-3	-2	-1	0	1	2	3
CS							
Being heard				■			
Being engaged				■			
Comprehension of feedback translation				■	■	■	
Customers							
Being heard				■	■	■	
Being engaged				■	■	■	
Comprehension of feedback translation				■	■	■	■
Analysis lead							
Awareness of CS involvement				■			
Awareness of the difference of customers vs internal				■	■	■	
Awareness of the ability to reach out				■			
Feasibility			■	■			

Figure 17: Feedback on concept idea 3.

1 Share updates via e-mail

Experiences	-3	-2	-1	0	1	2	3
CS							
Being heard				■			
Being engaged				■			
Comprehension of feedback translation				■	■		
Customers							
Being heard				■			
Being engaged				■			
Comprehension of feedback translation				■			
Analysis lead							
Awareness of CS involvement				■			
Awareness of the difference of customers vs internal				■	■		
Awareness of the ability to reach out				■			
Feasibility				■			

Conclusion

From internal feedback it became clear that concept 2 is preferred. This concept provides the best balance of feasibility and achievement of the experiences to design for. Furthermore, it fits better in the current business model of Grible, which is to focus on Intercom using companies.

Though, certain elements of the other concepts may be considered to be implemented in concept improvements. Firstly, it was found that notifying customers about the total amount of occurrences among the analyzed customer population, was seen as relevant. This element of the first concept gives customers more context about analysis and is expected to increase comprehension of feedback translation. The same goes for the story telling elements of the third concept. Although feasibility will become more complex, providing customers and internal teams the topic of research, in combination of insights and specific feedback, is expected to increase comprehension of feedback translation and engagement into the process.

2 Share updates via Intercom (2-way integration)

Experiences	-3	-2	-1	0	1	2	3
CS							
Being heard				■			
Being engaged				■	■		
Comprehension of feedback translation				■	■	■	
Customers							
Being heard				■			
Being engaged				■			
Comprehension of feedback translation				■			
Analysis lead							
Awareness of CS involvement				■	■	■	
Awareness of the difference of customers vs internal				■	■		
Awareness of the ability to reach out				■			
Feasibility				■			

3 Share updates via a blog post and threads

Experiences	-3	-2	-1	0	1	2	3
CS							
Being heard			■				
Being engaged			■				
Comprehension of feedback translation			■	■	■		
Customers							
Being heard			■	■			
Being engaged			■	■			
Comprehension of feedback translation			■	■	■	■	
Analysis lead							
Awareness of CS involvement			■				
Awareness of the difference of customers vs internal			■	■	■		
Awareness of the ability to reach out			■				
Feasibility		■	■				

Figure 18: Summary of the internal feedback given to the concept ideas.

Overall, additional feedback

- All concepts are feasible and support the specified experiences to design for sufficiently.

- Adding CS agents can be automated. Shipright currently stores the names of agents and customers in imported conversations. For sharing purposes (of insights) the analysis lead would not have to manually add these names.

- For customers the following moments of being updated are assumed to be of relevance:
  - When their feedback is highlighted
  - When insights from their feedback is enriched with feedback from other customers and taken under consideration to ship for delivery
  - When features / functionalities based on these insights are transferred for delivery
  - When these features / functionalities are built

- For CS it is assumed that they need to be updated whenever something is done with feedback, and insights derived from that feedback.

- During the upcoming user tests, it would be relevant to find out when exactly customers and support want to be updated. In the case of support, this is expected to be different for the head of support and support agents. Also, it needs to be found out when exactly the analysis leads would like to update both customers and CS.

- When updating customers, it is indeed important to notify them about what exactly their feedback is, that is analyzed. Though, there will be a duration of time in between the moment that their feedback came through and the moment that it gets analyzed. Also, it may take some time before it gets analyzed further, after the first steps of analysis is done. Because of that it is also necessary to notify them when they gave the exact feedback.

- From an earlier interview, it became clear that there is a need to engage customers by enabling them to point out the importance of their feedback (see Appendix XXI).

Appendix XXV: Third Design Challenge – User Test Procedure and Materials

The concept, as described in chapter 5 of the main report, are turned into a testable InVision prototype. Besides this prototype, other materials were used as well. These additional materials will be shown in this Appendix, alongside the procedure that was applied.

Steps and procedure

0. The participant opens the Lookback-link that he / she has received via e-mail. He / she then gets connected with me (the moderator) via Lookback; I would be ready to open up the connection at the time that we would have had agreed on.

1. The participant gets a general introduction of the topic of the user test: a concept that enables analysis leaders to update CS and customers about feedback analysis.

2. The participant opens the InVision-links (to see the prototype) and gets an introduction about Shipright.

3. The participant gets the introduction about the test.

4. The participant opens the first Typeform-link and answers the first set of questions: name, company, and participant ID.

5. The participant follows the scenario and tasks given by me and go through the concept-prototype. He / she will get the context of use explained as well, throughout this step.

6. After completing all tasks, the participant answers three rating questions in Typeform (a second Typeform-link will be provided). He / she explains each one of the answers while doing so.

7. At the end, the participant gets asked about some additional open questions.

These overall steps and procedure are applied to the three types of participants: representatives of analysis leaders, CS staff, and customers. Although, for each type different scenario and tasks are used, that come with the different prototypes for each.

General introduction
Welcome to this user test! In this session you'll get to see a concept that enables analysis lead to update CS and customers about product development, which you'll see as an InVision prototype. For this session to go smoothly, it is required for you to enable your microphone and, if possible, your camera. Lookback will also enable your screen to be visible for me, so I can guide you throughout the session.

For analysis-lead-participants
Introduction to the user test
A couple of things to before we start. I'll give you the scenario and task list for this session. At some points you will be asked to share your opinion based on what you'll have seen up to that point.

At certain points, you'll also be asked to open certain links of visualizations, which are embedded below. At the end of the test, you'll be asked to fill in a short questionnaire. You are required to use the participant code that is given to you, when filling it in. While doing so, it's important that you explain each one of your choices per question. The link to the questionnaire is also embedded below.

When you are finished with the questionnaire, I'll ask you a couple of open questions. This will conclude the session.

General task list
1. Please follow along the explanations and tasks I'll give you.

2. See the first update for support staff and customers here [link to the first additional InVision screens]

3. See the second update for support staff and customers here [link to the second additional InVision screens]

4. See the update for important support staff [link to the third additional InVision screens]

5. See the feature-for-delivery update for support staff and customers here [link to the fourth additional InVision screens]

6.   See the feature-release update for support staff and customers here [link to the fifth additional InVision screens]

7.   Please fill in these three rating questions [link to the Typeform-questionnaire analysis lead] and explain your answers while doing that.

Scenario and detailed tasks
With Shipright you can import Intercom chat conversations and analyze them afterwards. You can highlight interesting pieces of chat conversations and make up insights out of them, about your customers.

[The participant views the first screen of the main prototype: last step of insight creation]

-    Supposed that you are Grey Lemon, researcher at FullStory, and are using Shipright to analyze customers' feedback data. You have just made up an insight from one of your customers' feedback, during analysis. You have highlighted the specific piece of text and have made up the insight: 'Need to share conclusions with colleagues.'

    Click 'Save insight'. After you've saved the insight, the support staff and customers who made the chat conversation will receive an update. View the link at point 2 in your task list.

[The participant views the first updates for customers and colleagues, given in the first additional InVision-link]

-    Look closely at the content of both updates. Your colleagues, support people in this case, will see these updates appearing as notes in the respective Intercom chat conversations. Customers will not be able to see them.

    Your customers will see this as an Intercom message. As you can see, customers are enabled to rate the insights that are created as either 'Not relevant', 'Good to know', or 'Very important'.

-    Now, close this window and go back to the main prototype.

[The participant gets back to the main prototype]

-    On the far left of the screen, click 'Insights'.

[The participant gets to the Insights section]

    Now you find yourself in the Insights section of Shipright. Here, all the insights you have created get stored before analyzed further. Click on the insight you've just made, that is placed on top of the list.

[The participant views the insight's details]

-    Great. Now, you are viewing details about the insight. As you can see, all highlighted pieces of texts from customers can be reviewed. These highlights are made from imported Intercom conversations between customers and support agents. Their names are stored and automatically added to the insight when it is created, as I've mentioned earlier.

    If you click on the button '15 people added', you'll get to review the support agents and customers added to the insight. See if you can do that. After that, you can close the list.

-    Right above that button the status of the insight is set as 'in storage'. Do you see that?

    This insight includes highlights coming from feedback from 10 customers. This is already one third of your company's total number of customers. Therefore, you would like to change its status to 'Under consideration'.

    If you click on 'in storage' you'll get different options for the insight status. Then you can set its status on 'Under consideration'.

[The participant views the next screen, with a pop-up message appearing]

-    A pop-up message just appeared. It says that, added colleagues and customers to the insight will receive updates about this change in status. This will happen for each edit of the insight's status. Click 'OK'.

    Now, go to your task list and open the link given in point 3.

[The participant views the second updates for customers and colleagues, given in the second additional InVision-link]

- These are the updates received by support staff and customers. They are made aware that the insight is put under consideration and are shown the number of other customers who mentioned related things. Look closely at the content of both updates.

  Let's get back to the prototype.

[The participant closes the second additional InVision screen and gets back to the main prototype]

- Now review the list of added colleagues and mark Amanda Haynes as an important colleague. These colleagues will receive a slightly different Intercom note. View the link given in point 4 of your task list.

  [The participant views the update for important colleagues, given in the third additional InVision-link]

  If you want to engage certain colleagues in the analysis, for instance the Head of Support, you can mark them as important. These colleagues will get to see more than just the status updates of insights, and the update they receive will let them know that their opinions are needed.

[The participant closes this additional screen and gets back to the main prototype]

- 3 Weeks have passed, and you have decided on a new functionality to be built based on the insight. I would like you to click on the same insight and change its status to 'Ready for delivery'.

- Afterwards, I want you to click on the text field to add a functionality that is based on the insight.

  When setting the status of the insight as 'Ready for delivery', you can add the exact feature/function that is set to be built, that was derived from the insight. Supposed, your product team has decided to build a WhatsApp integration to fulfill this need to share conclusions with

colleagues. You have added the functionality WhatsApp integration to this status update.

  Added customers and support staff will be given updates about this status edit. In your task list, open the link given in point 5 and look closely at the content of both updates. Notice that customers will not be able to rate features that are already decided to be built.

[The participant views the third updates for customers and colleagues, given in the fourth additional InVision-link]

- The last update customers and CS get, concerns the release of features/ functionalities. Go to your task list and view the link given in point 6.

[The participant views the fourth updates for customers and colleagues, given in the fifth additional InVision-link]

- You have just seen the concept. Now, I would like you to fill in a short form. Open the link given in the last point of your task list for that.

[The participant answers the Typeform-questions and explains his / her answers while doing so]

- Great! To wrap up this session I would like you to answer a few open questions.

[The participant answers additional open questions]
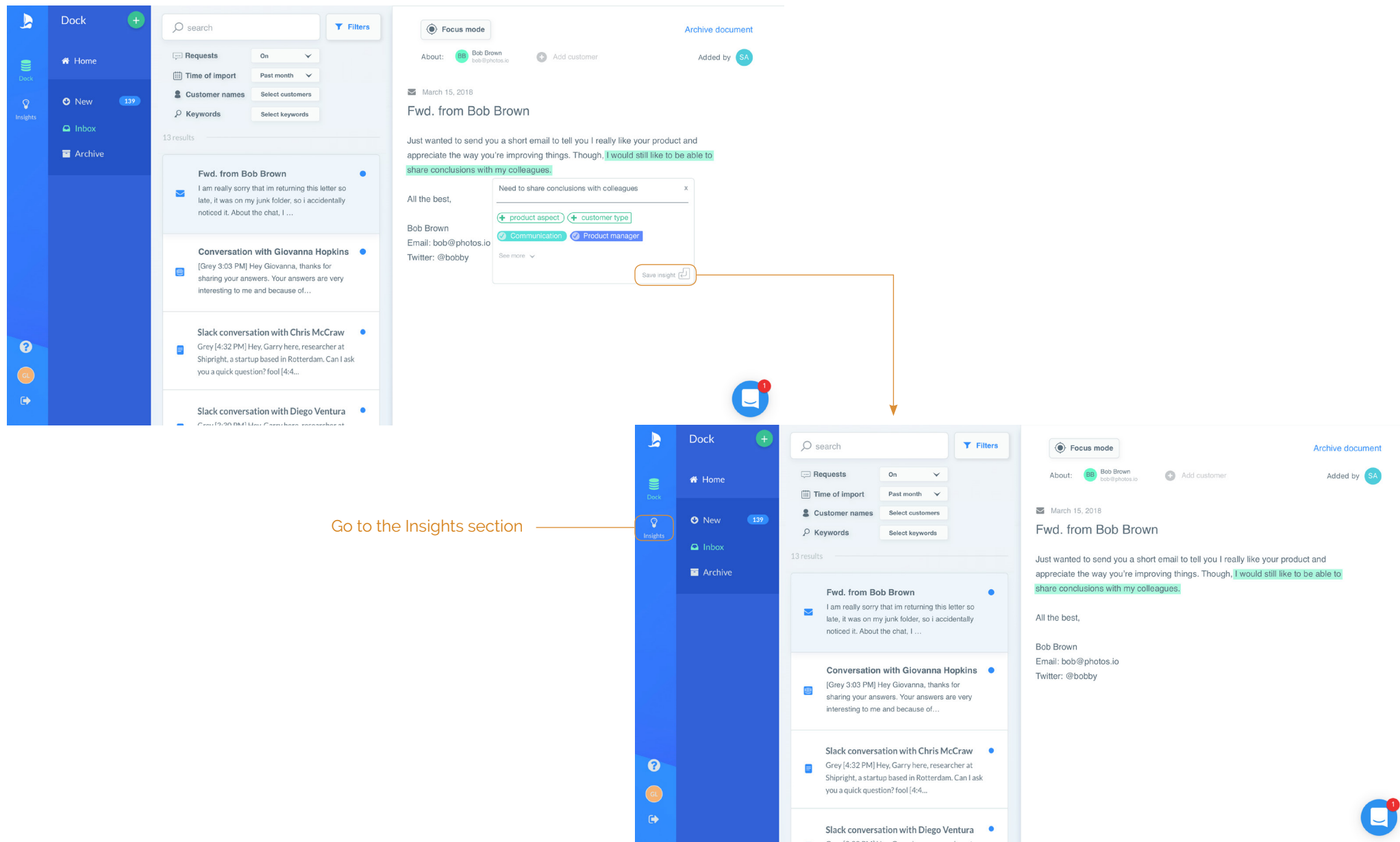
Prototype-screens

Figure 19a: Screens of the main prototype for the user test of design challenge 3, for analysis-lead participants. The orange boxes refer to the clickable hotspots in the screen.
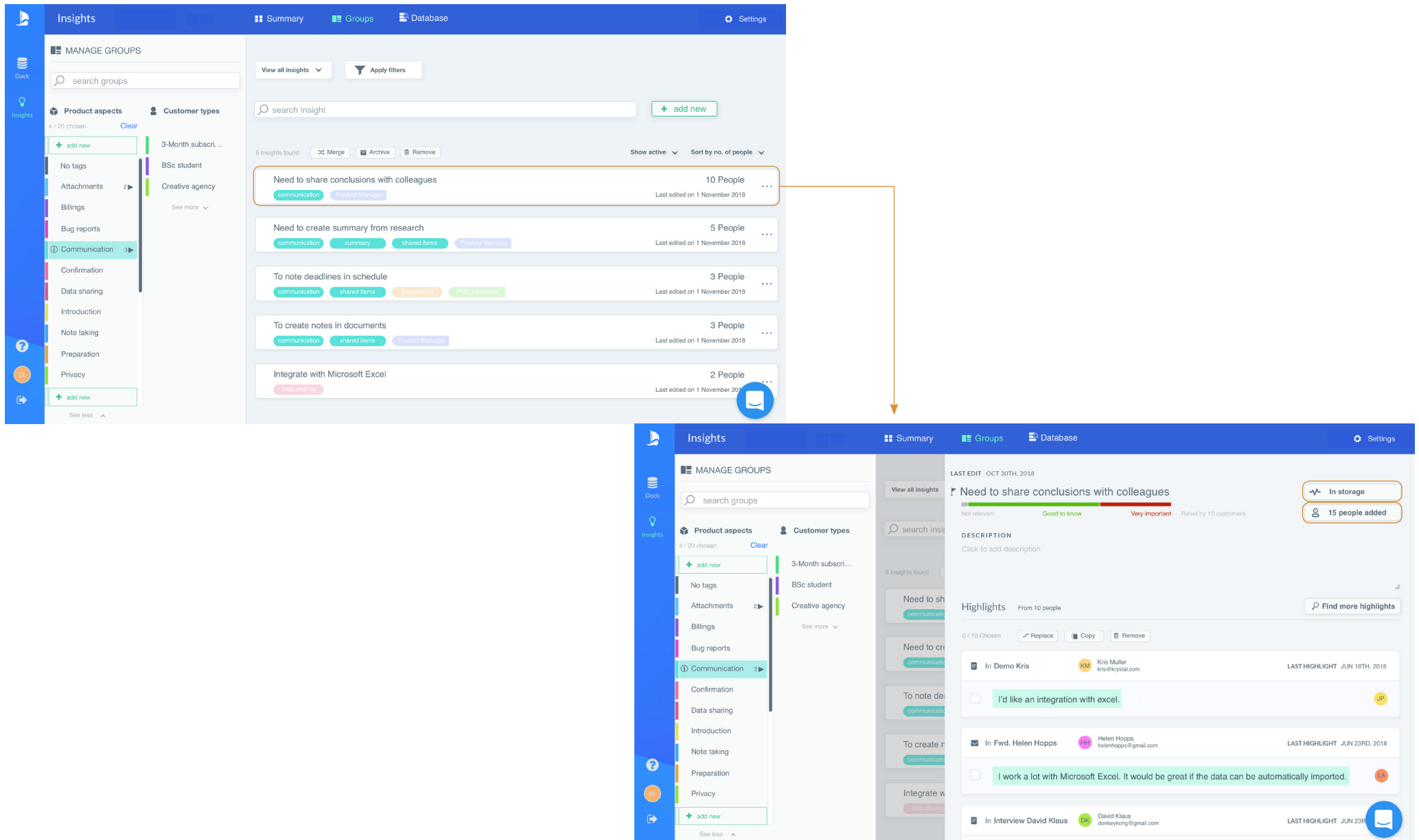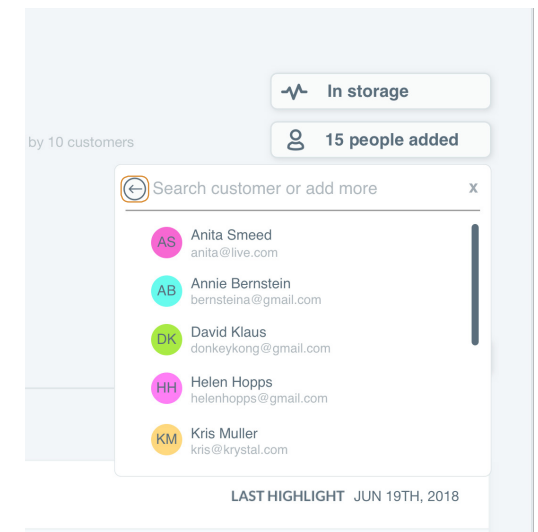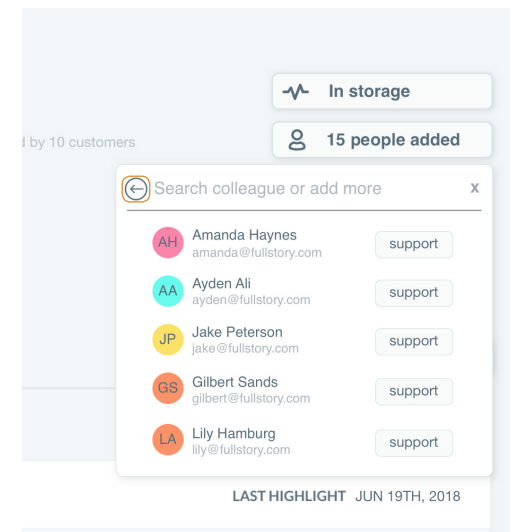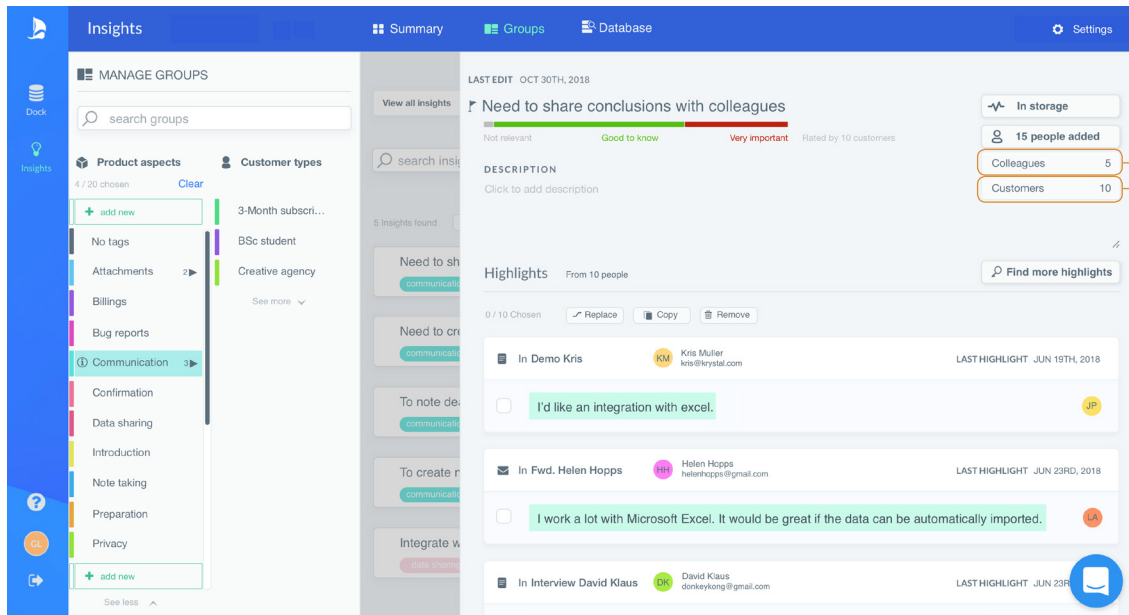
Figure 19b: Screens of the main prototype for the user test of design challenge 3, for analysis-lead participants. The orange boxes refer to the clickable hotspots in the screen.
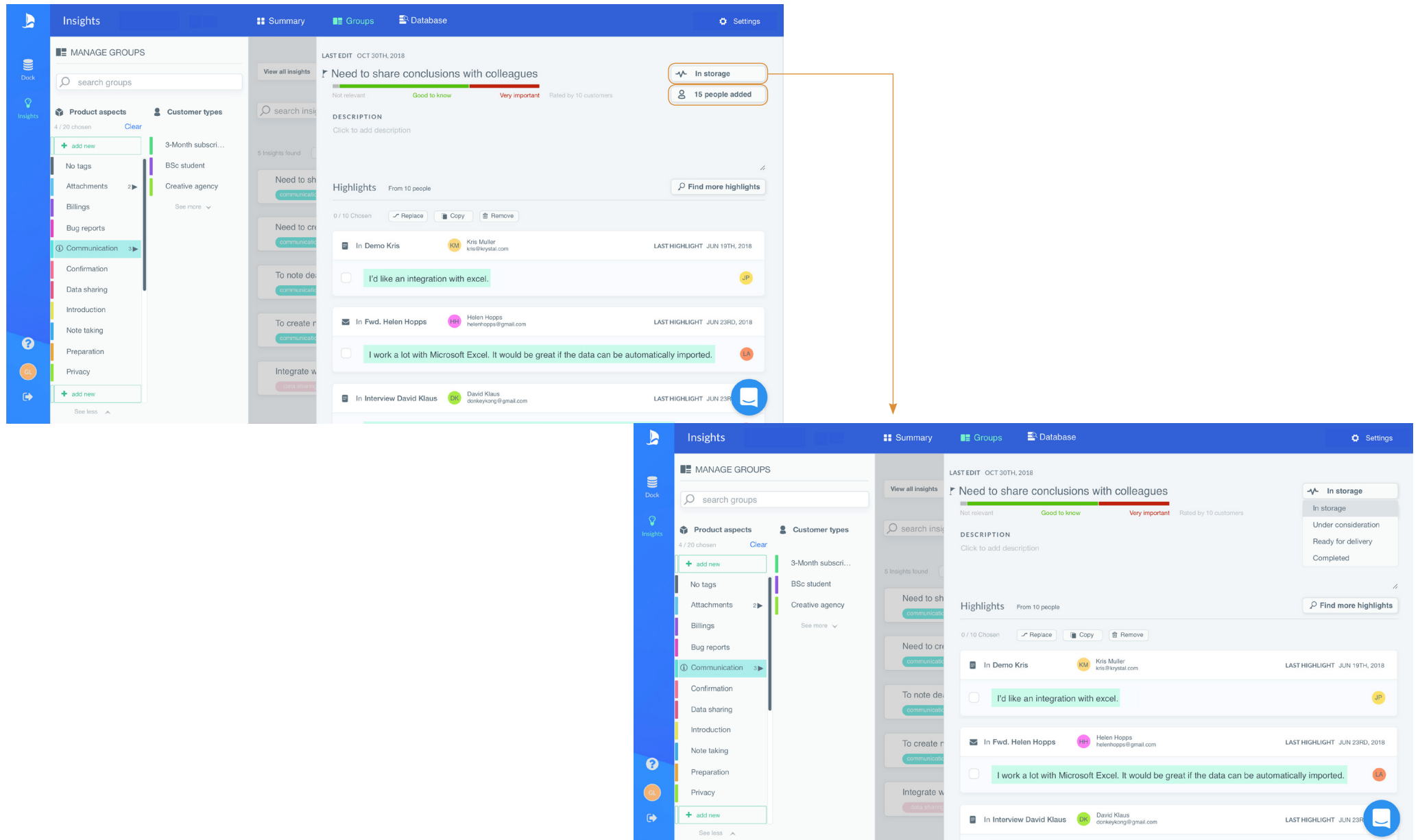
Figure 19c: Screens of the main prototype for the user test of design challenge 3, for analysis-lead participants. The orange boxes refer to the clickable hotspots in the screen.

Figure 19d: Screens of the main prototype for the user test of design challenge 3, for analysis-lead participants. The orange boxes refer to the clickable hotspots in the screen.
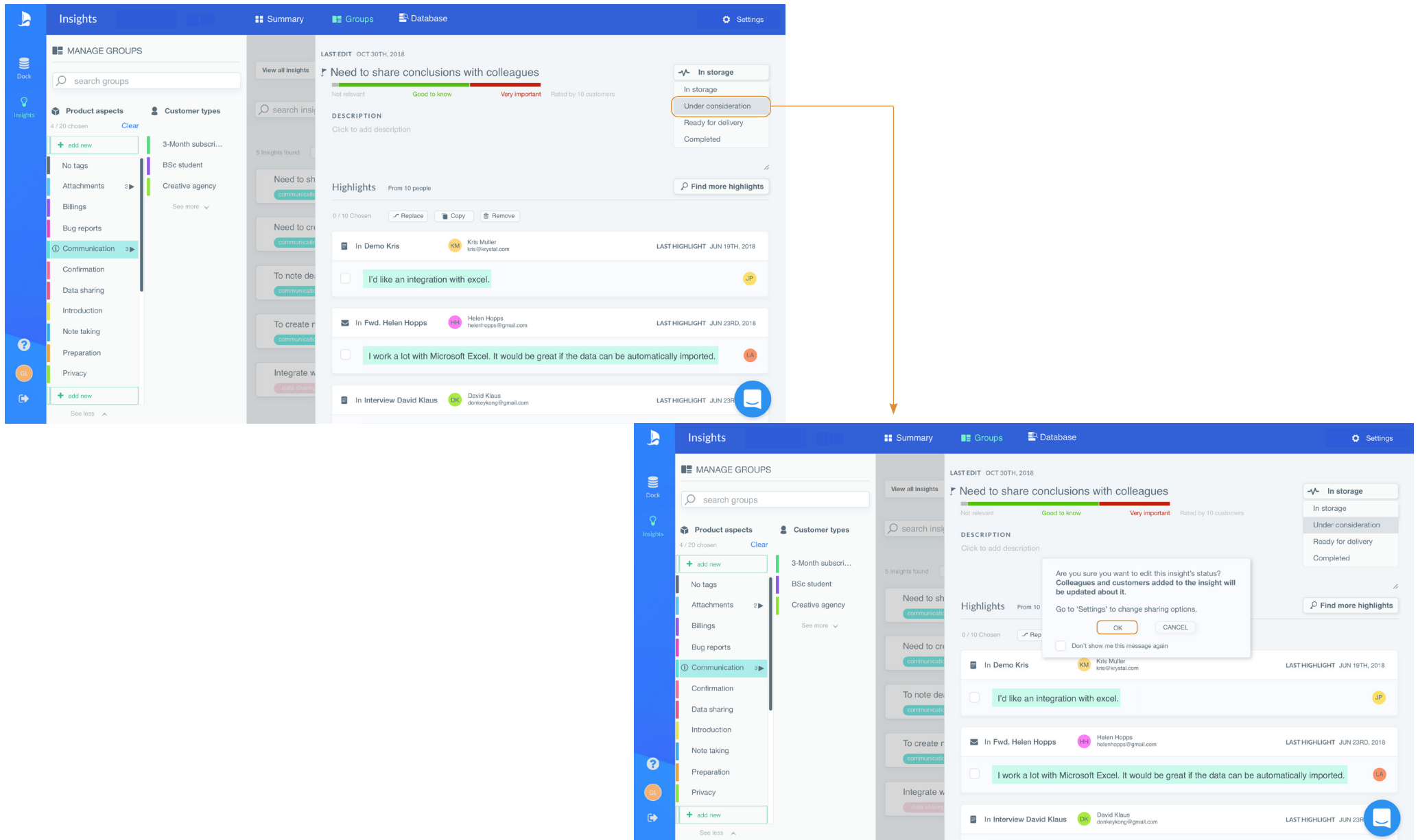
Figure 19e: Screens of the main prototype for the user test of design challenge 3, for analysis-lead participants. The orange boxes refer to the clickable hotspots in the screen.
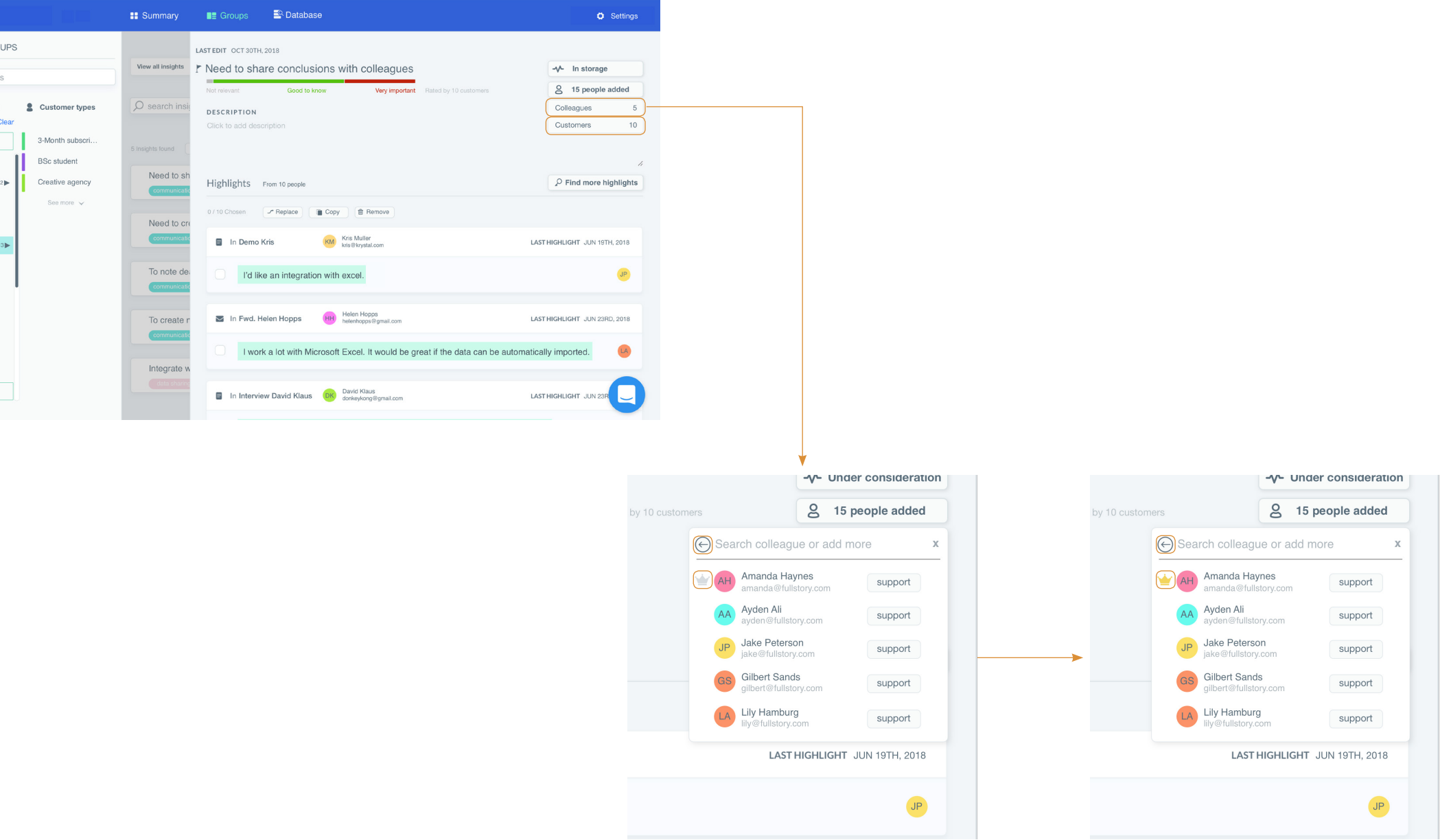
Figure 19f: Screens of the main prototype for the user test of design challenge 3, for analysis-lead participants. The orange boxes refer to the clickable hotspots in the screen.

Figure 19g: Screens of the main prototype for the user test of design challenge 3, for analysis-lead participants. The orange boxes refer to the clickable hotspots in the screen.

Figure 19h: Screens of the main prototype for the user test of design challenge 3, for analysis-lead participants. The orange boxes refer to the clickable hotspots in the screen.
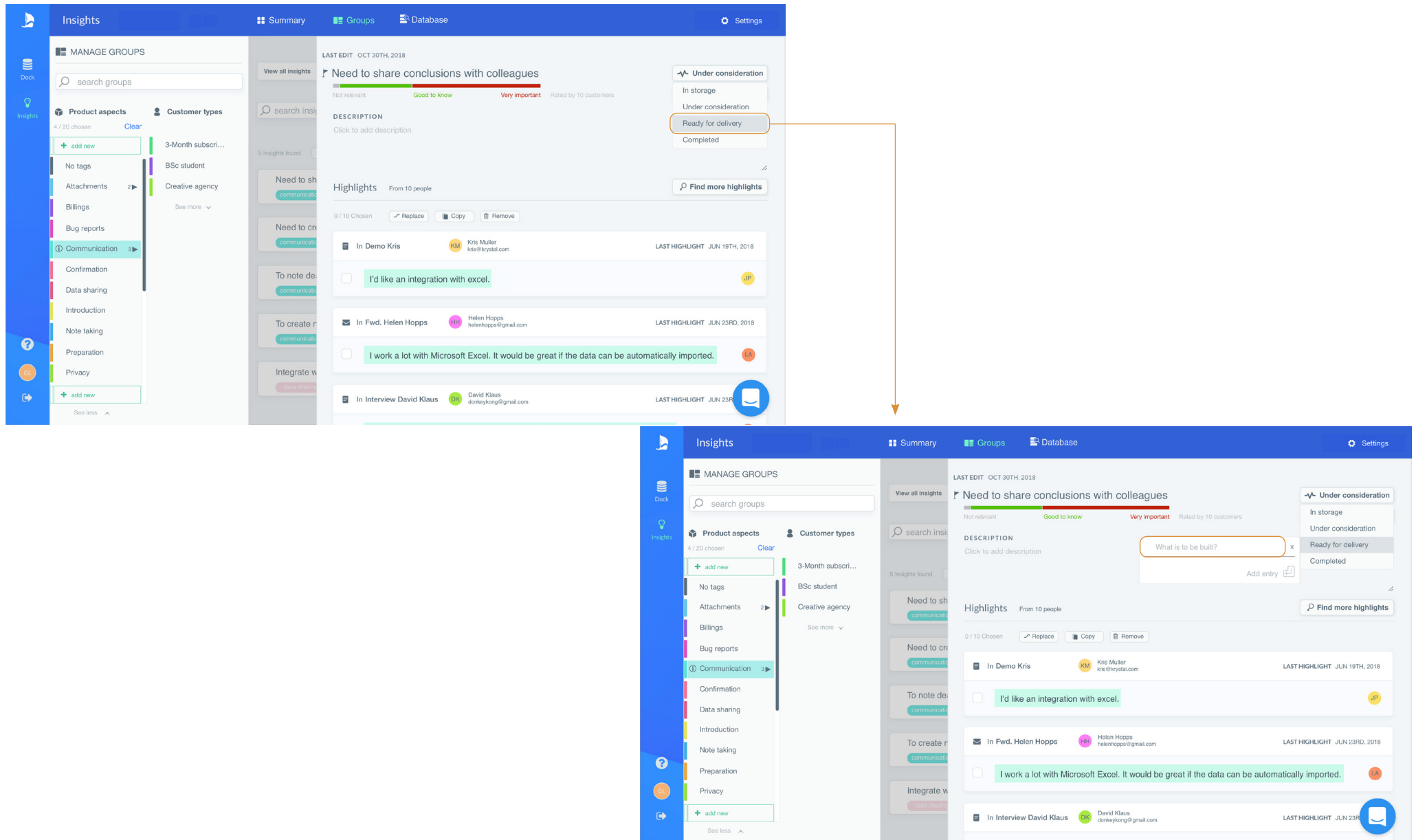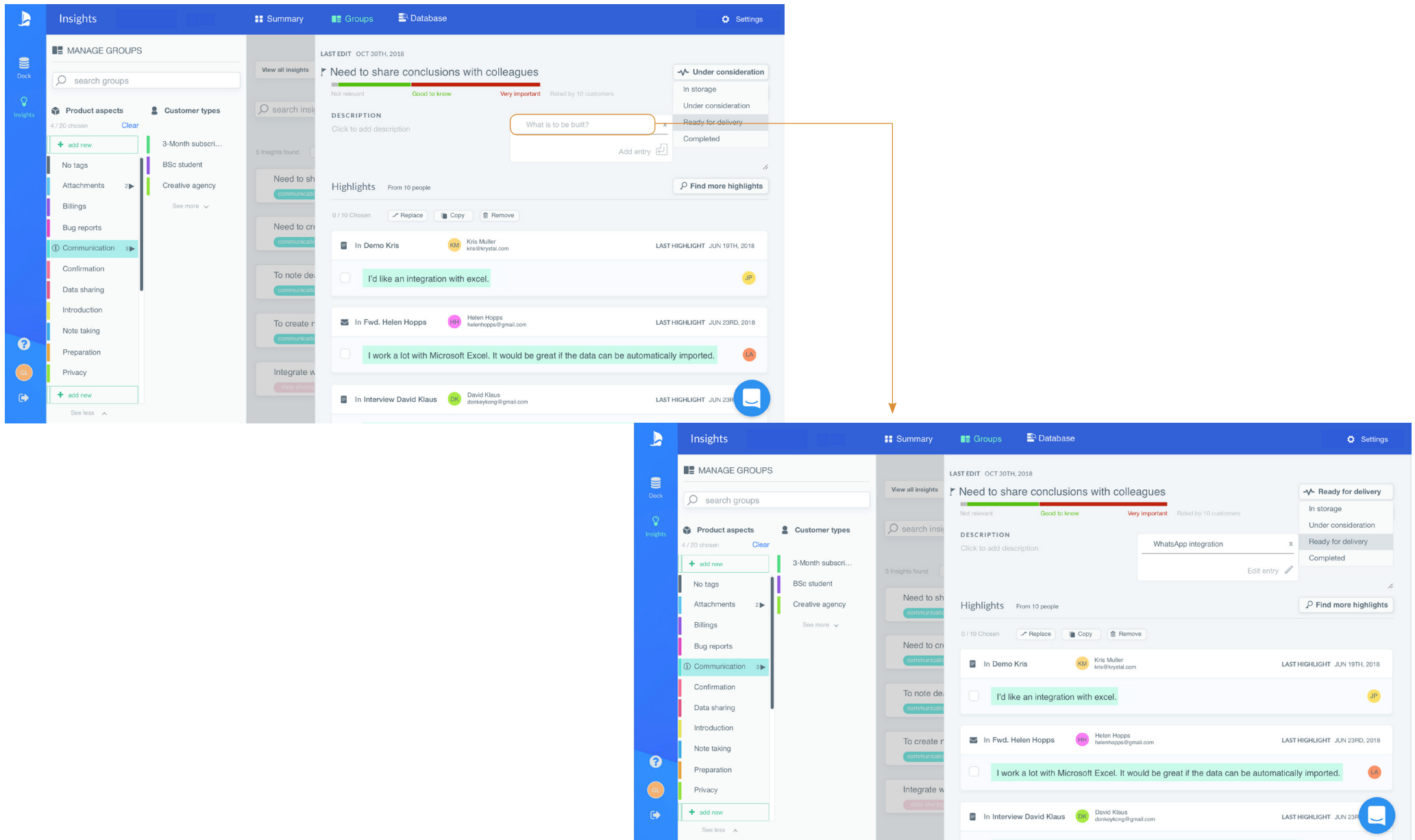
Figure 20a: Additional screens of the prototype for the user test (design challenge 3), for analysis-lead participants.

Figure 20b: Additional screens of the prototype for the user test (design challenge 3), for analysis-lead participants.
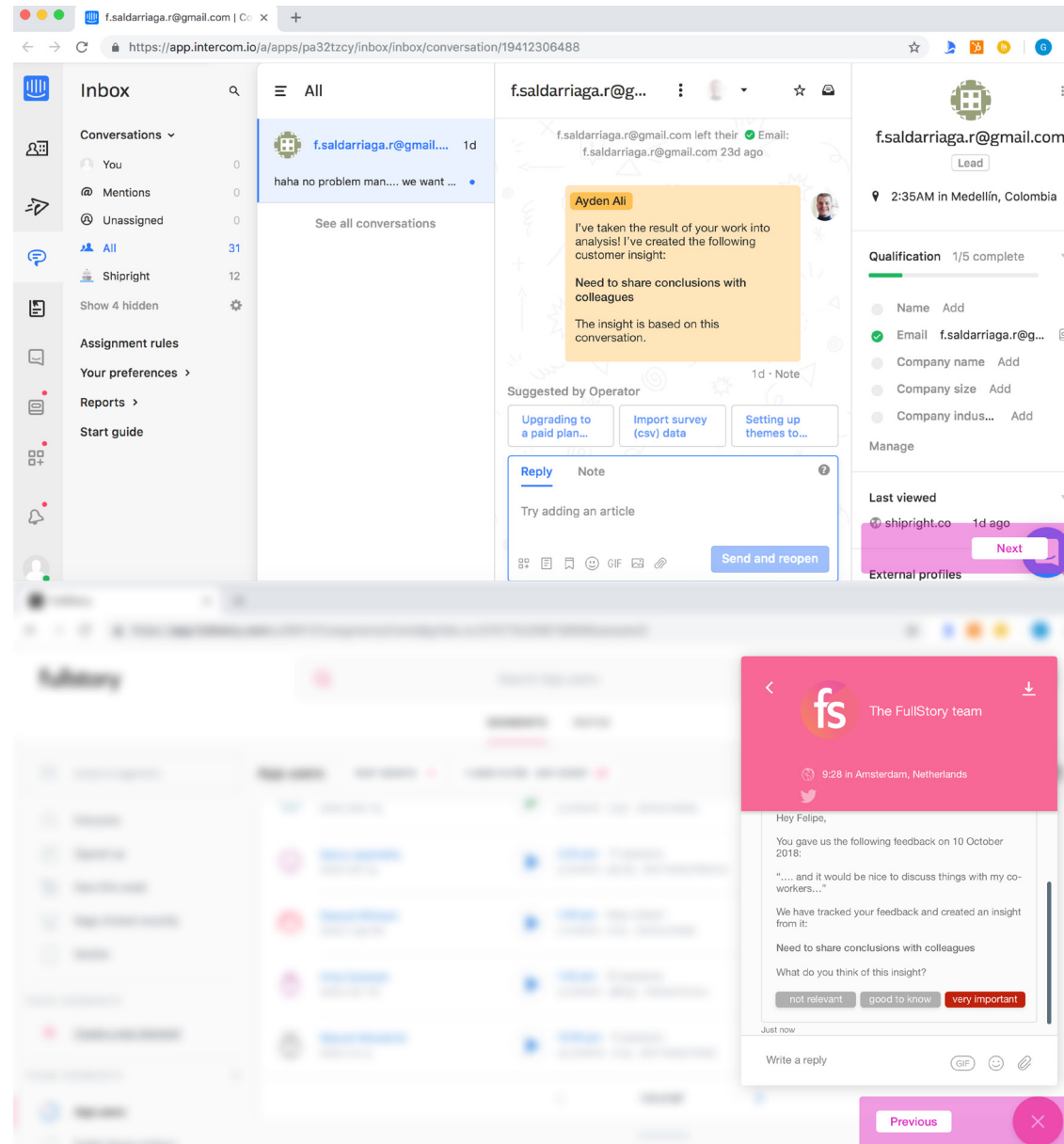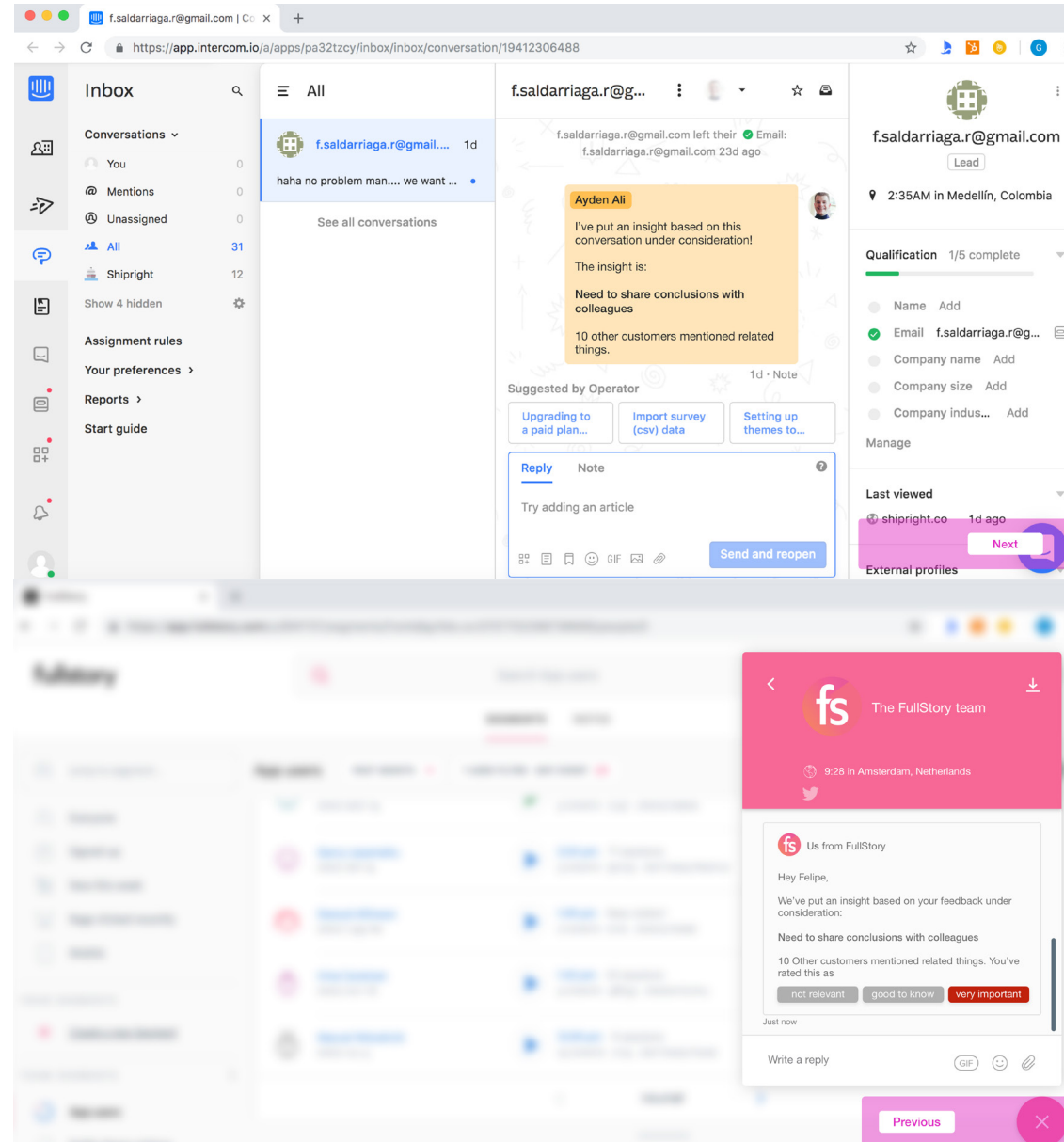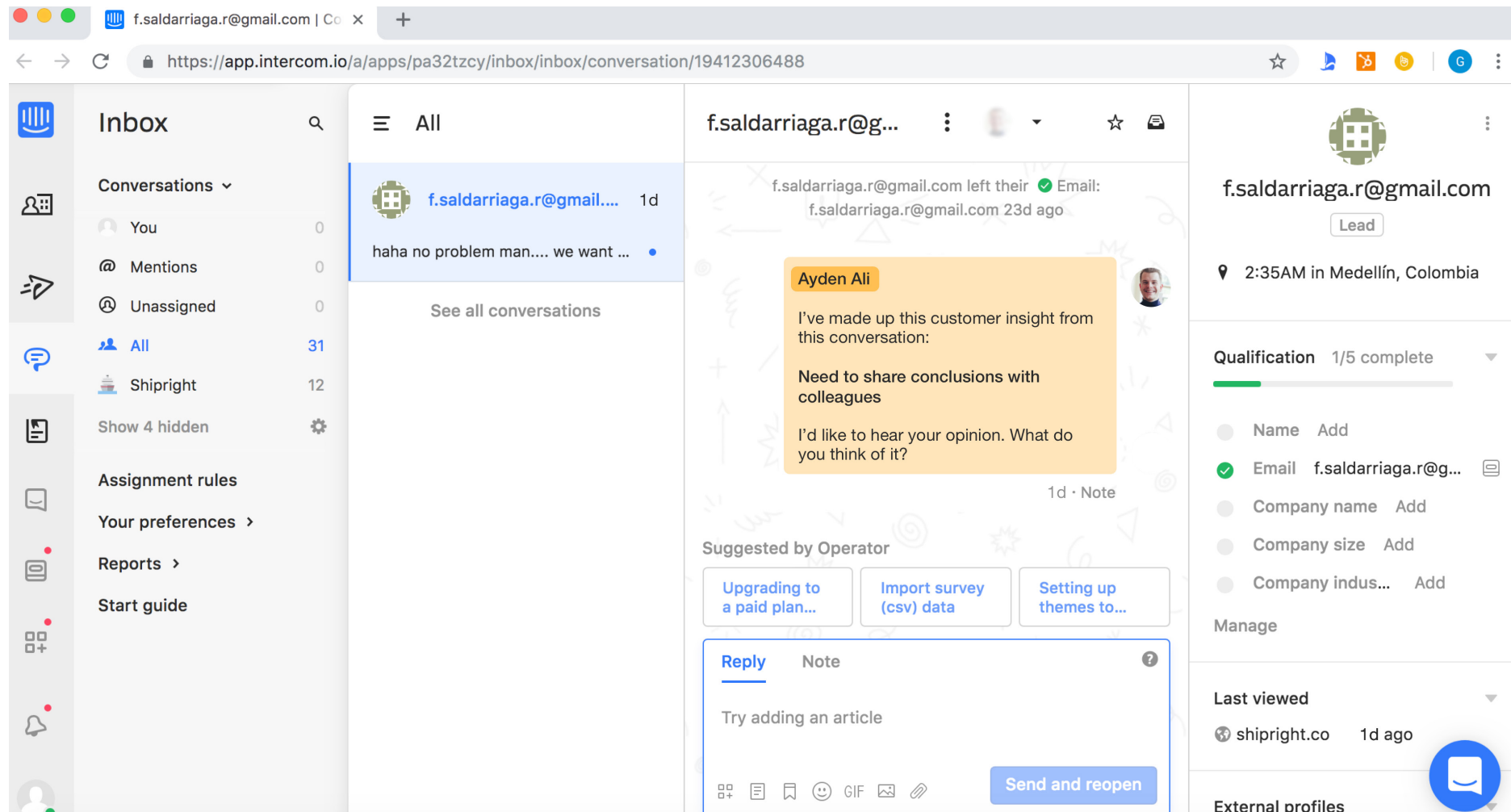
Figure 20c: Additional screens of the prototype for the user test (design challenge 3), for analysis-lead participants.
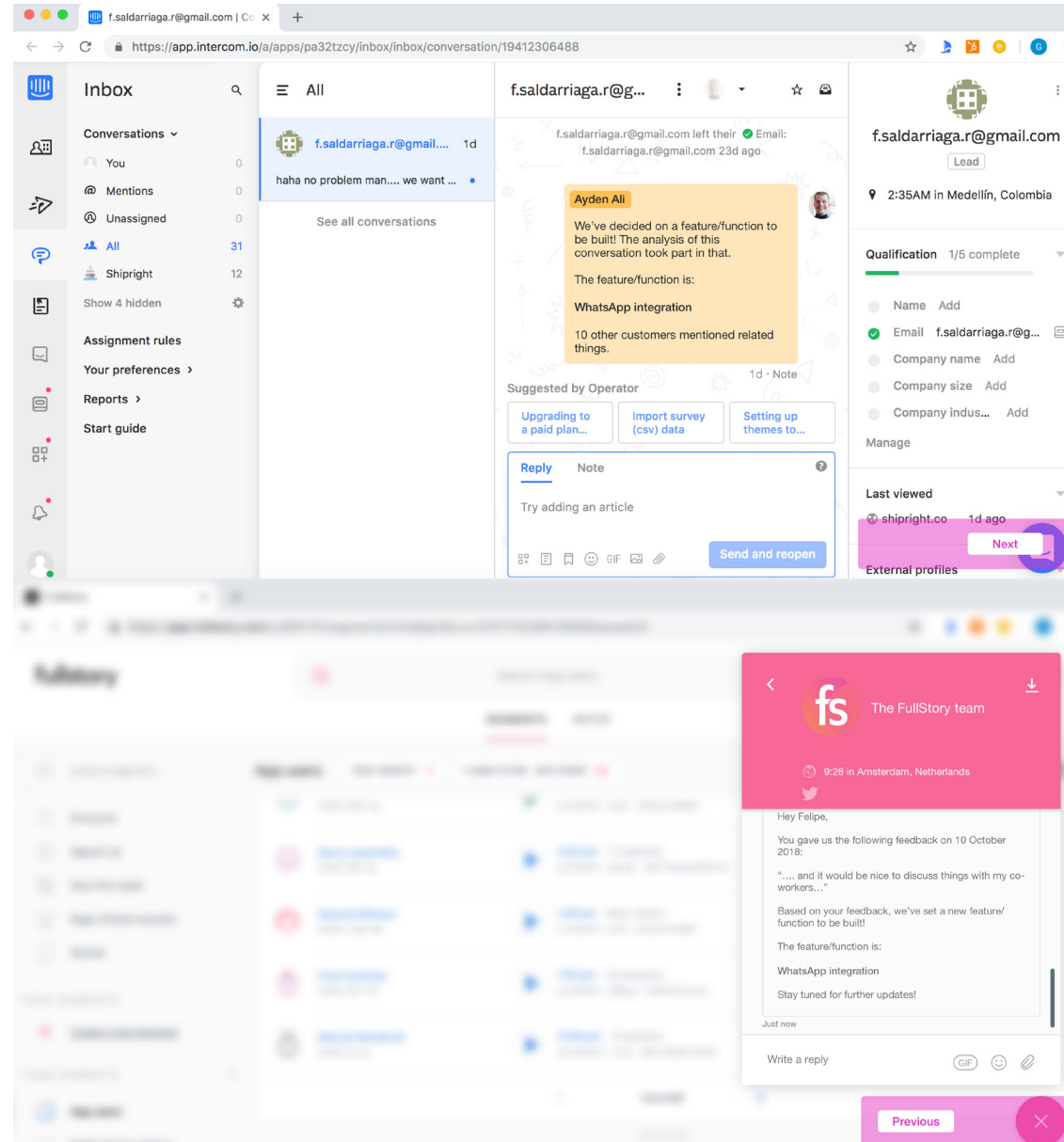
Figure 20d: Additional screens of the prototype for the user test (design challenge 3), for analysis-lead participants.
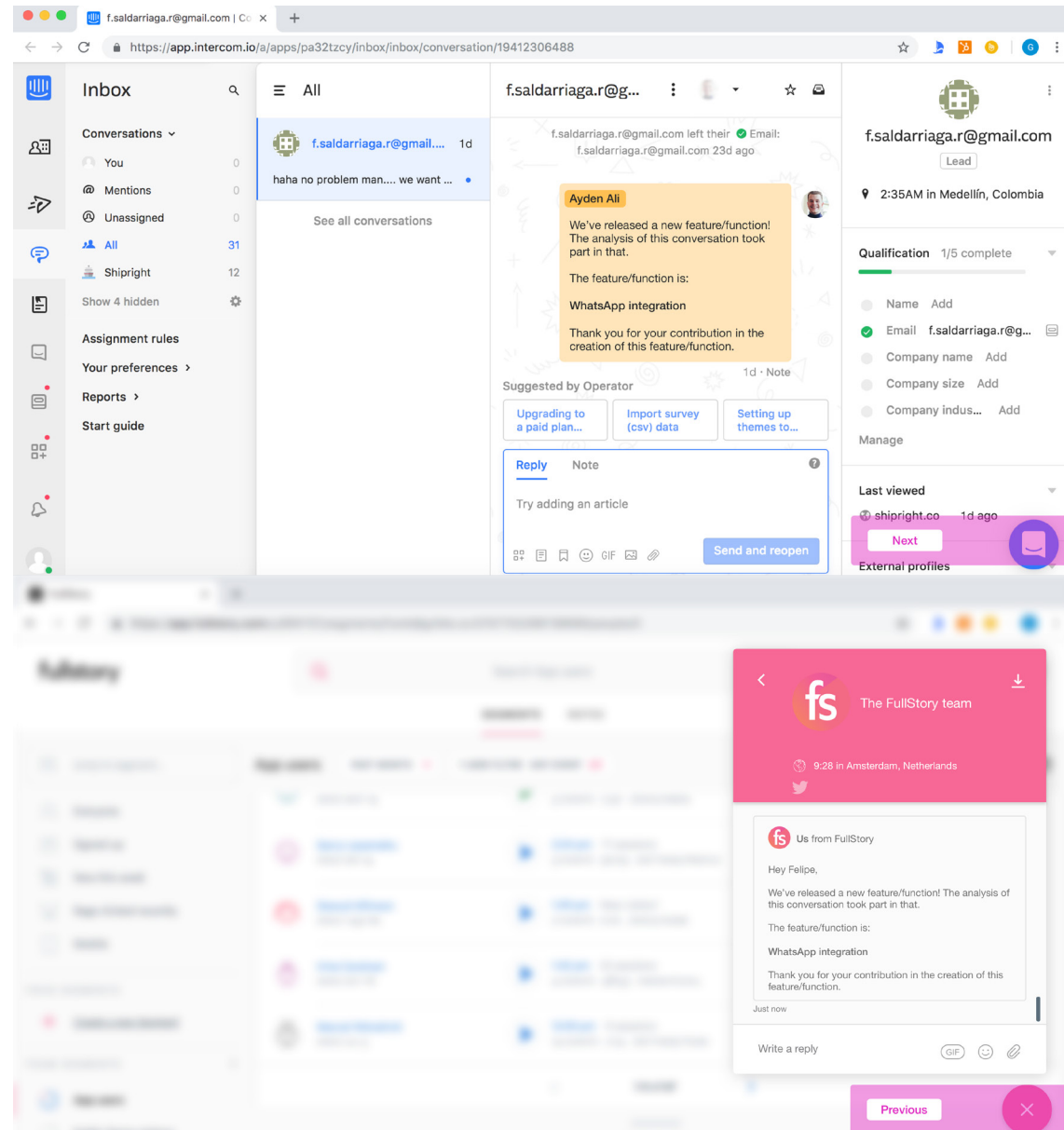
Figure 20e: Additional screens of the prototype for the user test (design challenge 3), for analysis-lead participants.

Typeform questions

1.   What is your job title?

2.   What is your company's website?

3.   How would you describe your company?
More than 1 selection possible

- (Mobile) Apps
- SaaS (= Software as a Service)
- Agency / Consultancy
- Government organization
- Small-/Medium-sized business
- Multinational enterprise

4.   What is the participant code that you receive for this test?

"Based on what you have seen from the concept"

5.   You were aware of the involvement of CS and customers, in analysis

           1   2   3   4   5   6   7
I wasn't aware   *I was fully aware*

6.   You were aware of the difference between CS teams and customers

           1   2   3   4   5   6   7
I wasn't aware   *I was fully aware*

7.   You felt able to reach out to CS and customers

           1   2   3   4   5   6   7
Not at all   *I definitely did*

Open questions

-      Overall, what did you think about the extent of engagement for both CS and customers?

-      In your opinion, when should customers and CS people be best updated about the analysis process?

-      Do you have any remarks left?

For CS-participants
Introduction to the user test
A couple of things to before we start. I'll give you the scenario and task list for this session. While going through the concept, you are encouraged to share any remarks about the things you see.

At the end of the test, you'll be asked to fill in a short questionnaire. You are required to use the participant code that is given to you, when filling it in. While doing so, it's important that you explain each one of your choices per question. The link to the questionnaire is also embedded below.

When you are finished with the questionnaire, I'll ask you a couple of open questions. This will conclude the session.

General task list
1.   Please follow along the explanations and tasks I'll give you.

2.   Please fill in these three rating questions [link to Typeform-questionnaire CS] and explain your answers while doing that.

3.   Finish the session by answering a few open questions.

4.   Thanks for participation!

Scenario and detailed tasks
Suppose you are Ayden Ali, a support staff in FullStory. Your company uses Intercom to interact with customers and as a support staff you are using it on a daily basis.

The PM in your company has analyzed one of your conversations with a customer and created an insight from it. While talking to customers, you receive a note in the Intercom conversation.

[The participant views the first update]

-    You go to see the note and see the following. Take a good look at what is written in it.

-    When you're done, click on the 'next' button.

[The participant views the second update]

Two weeks have passed, and you receive a new message. It shows that the insight is put under consideration. Take a good look at what is written.

-    Click on the 'next' button when you're ready.

[The participant views the third update]

Another two weeks have passed, and you receive another update. Take a good look at what is written.

That message updates you about a functionality set to be built, that is based on the analysis of the conversation.

-    If you feel ready, click on the 'next' button. Four weeks have passed now, since the you've read the previous update. You receive a new update. Read it carefully.

[The participant views the fourth update]

This is the last status update you will see about the insight and functionality. It shows that the functionality is released.

-    Click on the 'next' button, when you're ready.

[The participant views the update for important colleagues]

In some cases, the PM in your company might want to have more of your opinion on an insight. In that case you will see this update.

The PM has marked you as an important colleague for the insight and you will receive more updates than just the four mentioned above. Examples of such updates are feedback copied to other insights, insight grouped with other insights, and insight name changed.

-        Now, you've seen the entire concept. Go to your task list and open the
         link given in point 2.

[The participant answers the Typeform-questions and explains his / her answers
while doing that]

-        Great! To wrap up this session I would like you to answer a few open
questions.

Prototype-screens

Figure 21a: Screens of the main prototype for the user test of design challenge 3, for CS participants.

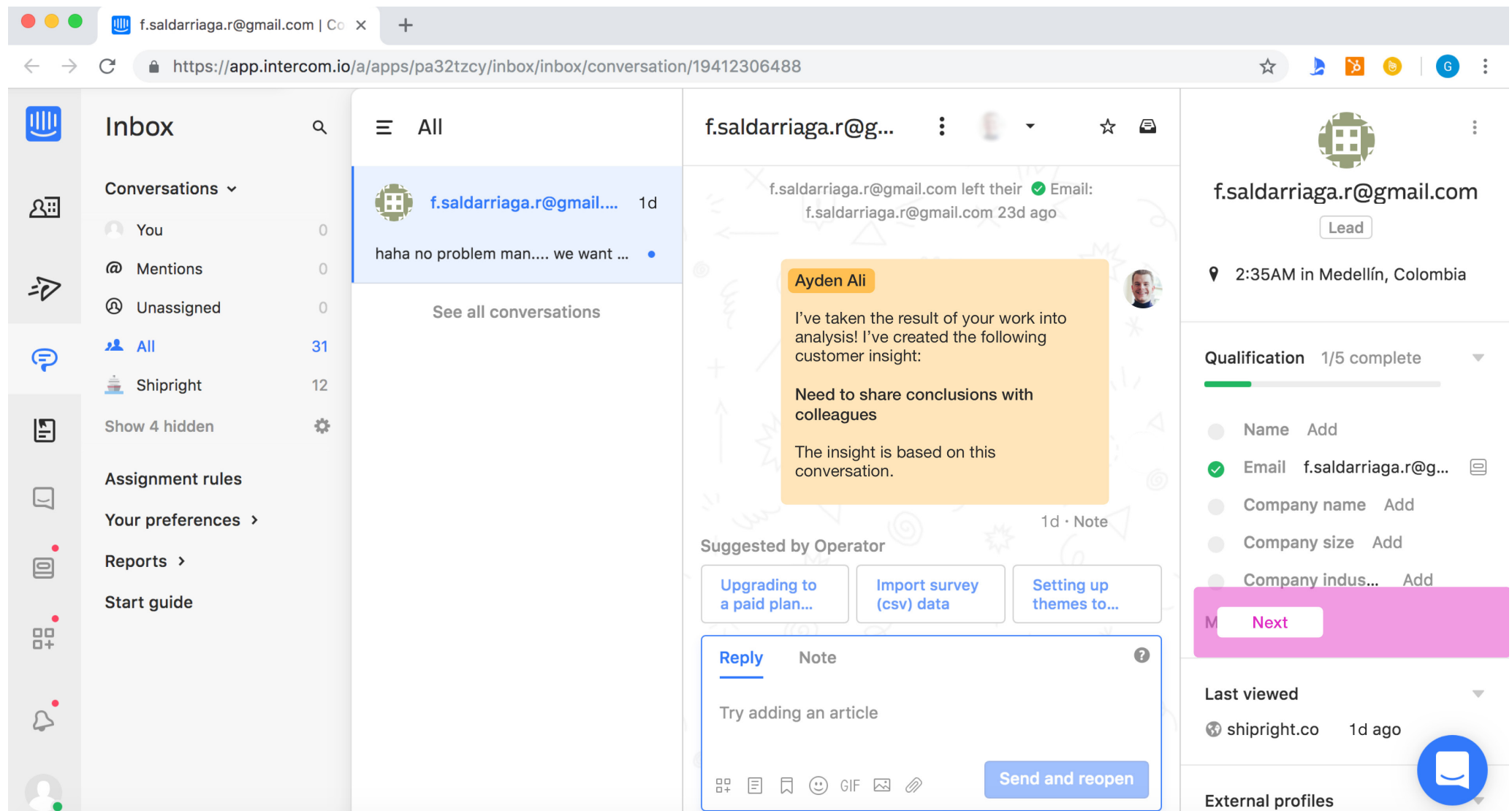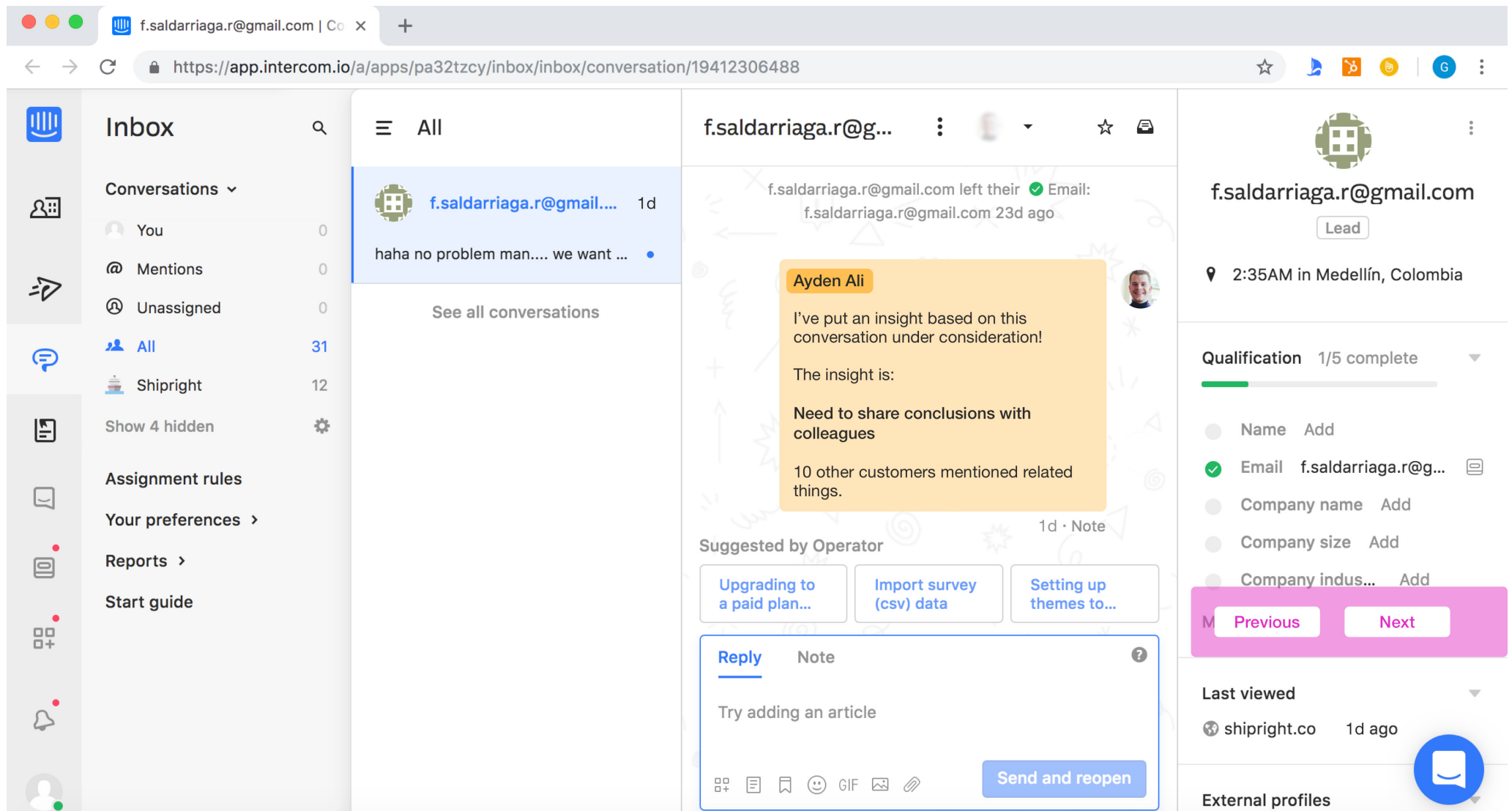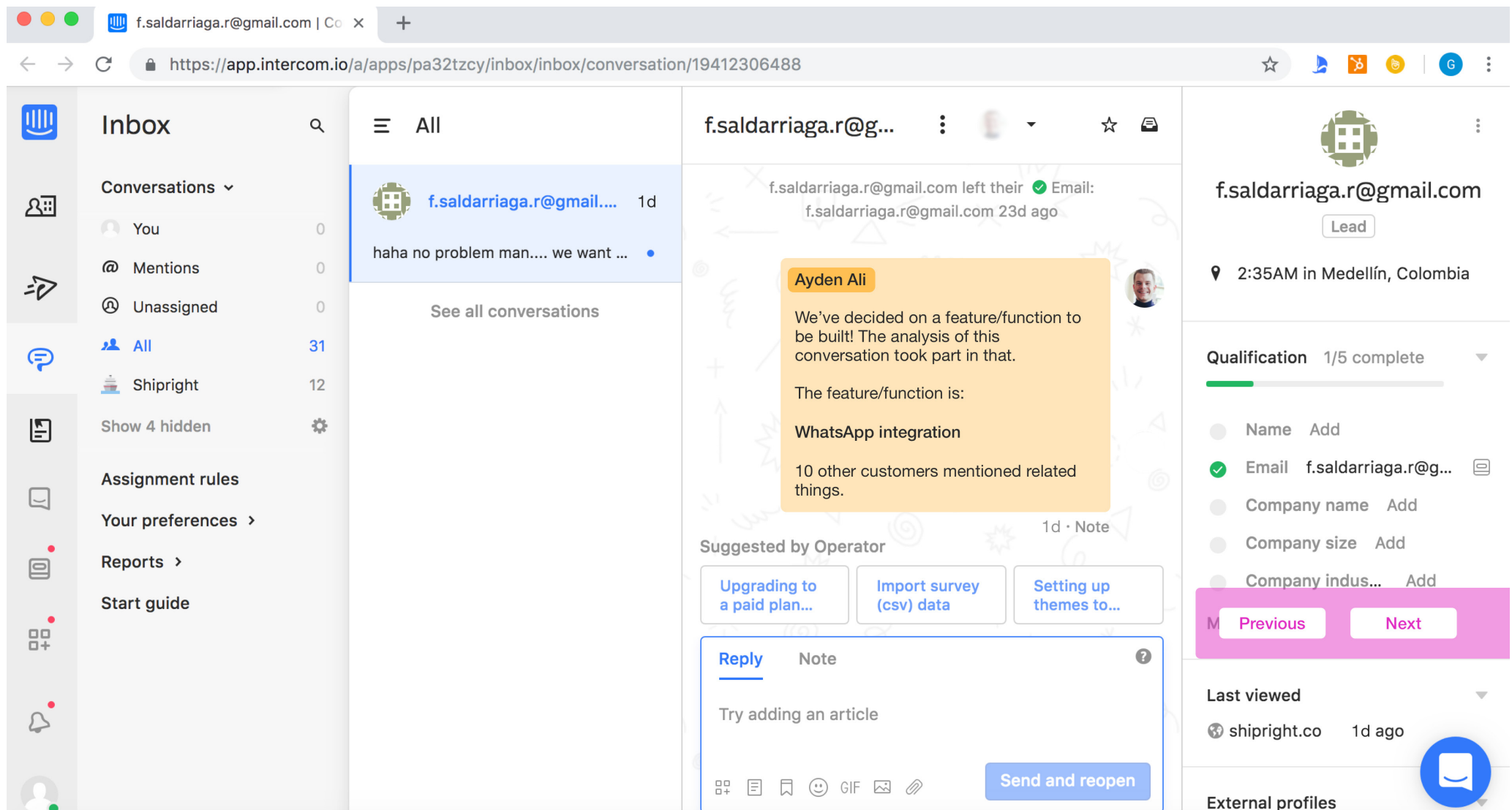Figure 21b: Screens of the main prototype for the user test of design challenge 3, for CS participants.

Figure 21c: Screens of the main prototype for the user test of design challenge 3, for CS participants.
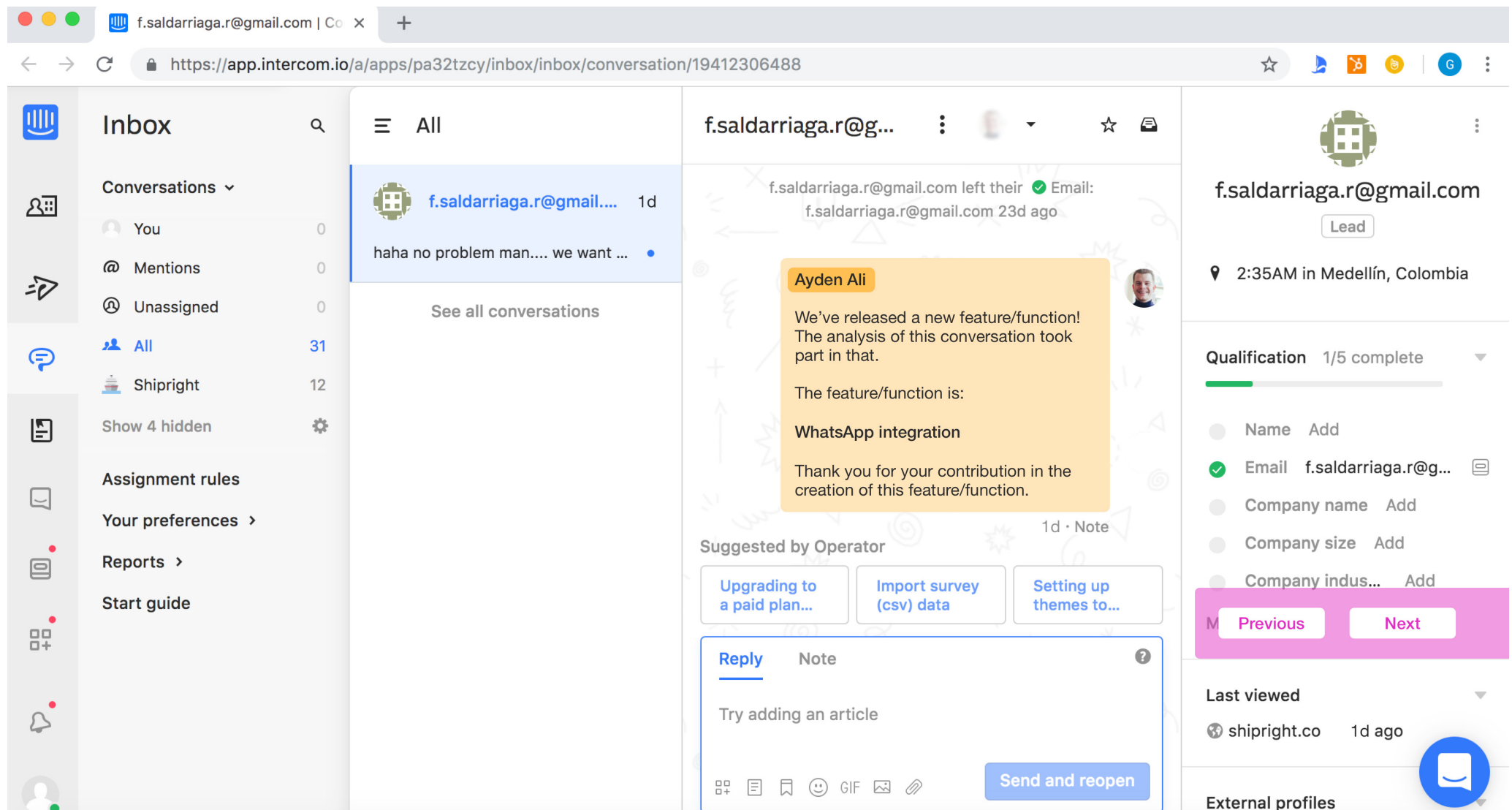
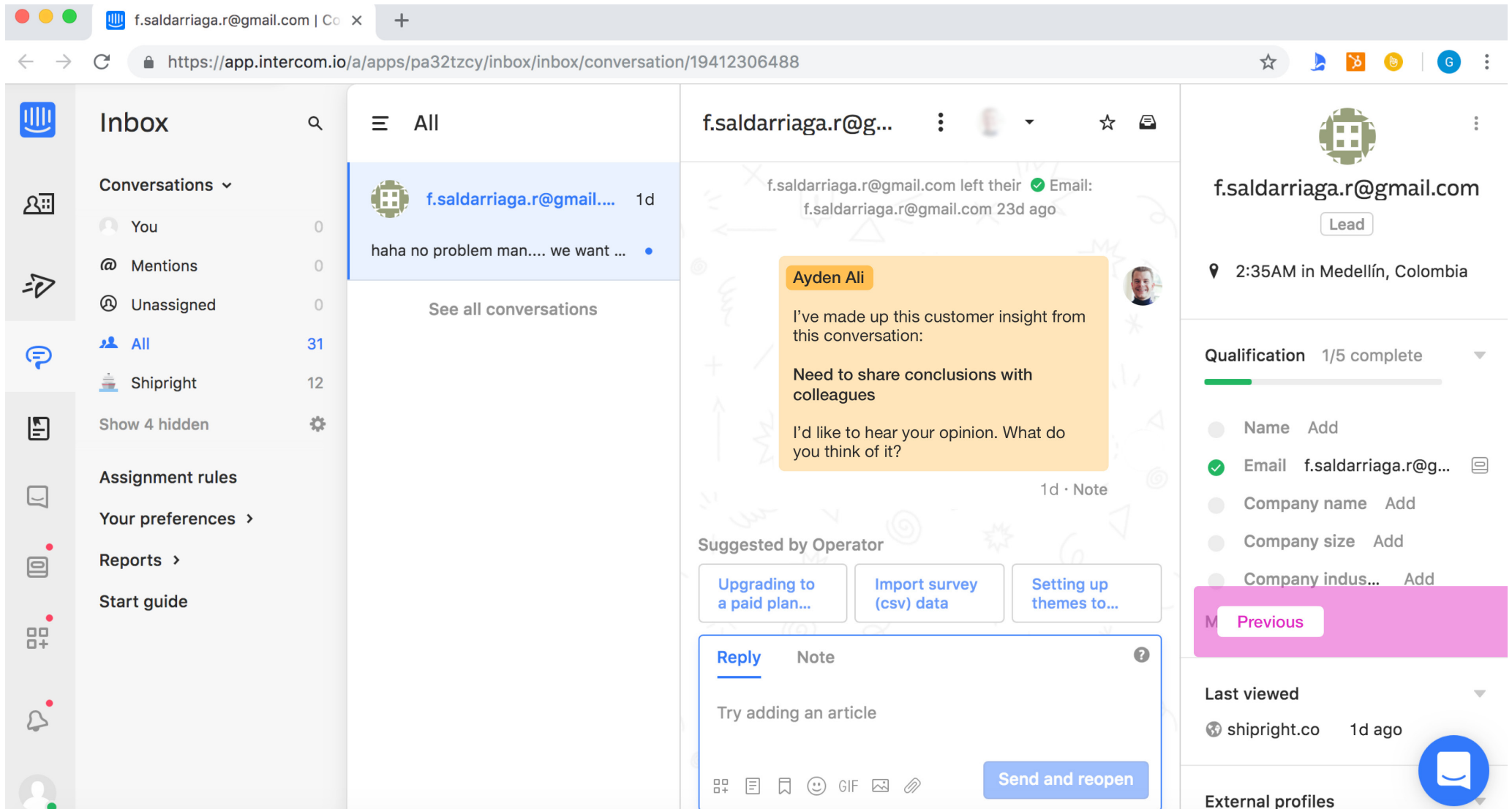Figure 21d: Screens of the main prototype for the user test of design challenge 3, for CS participants.

Figure 21e: Screens of the main prototype for the user test of design challenge 3, for CS participants.

Typeform questions

1. What is your occupation?

2. What SaaS-products are you using?

3. What is the participant code that you receive for this test?

"Based on what you have seen from the concept"

4. You felt sufficiently engaged in the analysis process

		1	2	3	4	5	6	7

    No, not at all   *Yes, definitely*

5. You felt that you have contributed to product development

		1	2	3	4	5	6	7

    No, not at all   *Yes, definitely*

6. You might understand how the customer insight was made up from the feedback you gave.

		1	2	3	4	5	6	7

    No, I wouldn't   *Yes, I would*

Open questions

-   Overall, how did you feel about receiving the updates?

-   When would you like to be updated about analysis and product development?

-   Are there things you would like to see in the updates that were not included?

-   Do you have any other remarks?

For customer-participants

Certain materials for these participants were the same, as used for the user tests with CS-participants. These are the following:

-   Introduction to the user test
-   General task list (with different links to the questionnaire and prototype)
-   Typeform questions
-   Open questions

Scenario and detailed tasks

Suppose you are a user of FullStory, a digital tool to track SaaS customers' behavior of product use. In this case FullStory uses Intercom to interact with its customers in the app via chat.

Through the Intercom chat, you spoke with Ayden Ali, a support agent from FullStory. In that chat conversation, you mentioned that you would like to use FullStory to discuss findings with colleagues. This conversation took place two months ago, on 10 October.

[The participant views the first update]

-   It is now December and while using FullStory at work, you receive this message. Take a good look at what is written in there.

-   As you can see, the message shows that an insight was derived from the feedback you gave about FullStory. It also asks you to rate the insight. You can rate it as 'very important'.

-   A 'next' button just appeared on the screen, below the Intercom message. Click on it.

[The participant views the second update]

-   Two weeks have passed, and you receive a new message. Take a good look at what is written.

    It shows that the insight is put under consideration and how you rated it previously. You've changed your mind about that and decide to rerate it

as 'good to know'.

- Click on the 'next' button that has appeared.

[The participant views the third update]

- Another two weeks have passed, and you receive another update. Take a good look at what is written.

  That message updates you about a functionality set to be built, that is based on your feedback.

- Again, click on the 'next' button that has appeared.

[The participant views the fourth update]

- Four weeks have passed now, since you've read the previous update. You receive a new update. Read the Intercom message carefully.

  This is the last status update you will see about the insight and functionality. It shows that the functionality is released.

- Now, you've seen the entire concept. Go to your task list and open the link given in point 2.

[The participant answers the Typeform-questions and explains his / her answers while doing that]

- Great! To wrap up this session I would like you to answer a few open questions.

Prototype-screens

Figure 21a: Screens of the main prototype for the user test of design challenge 3, for customer-participants.
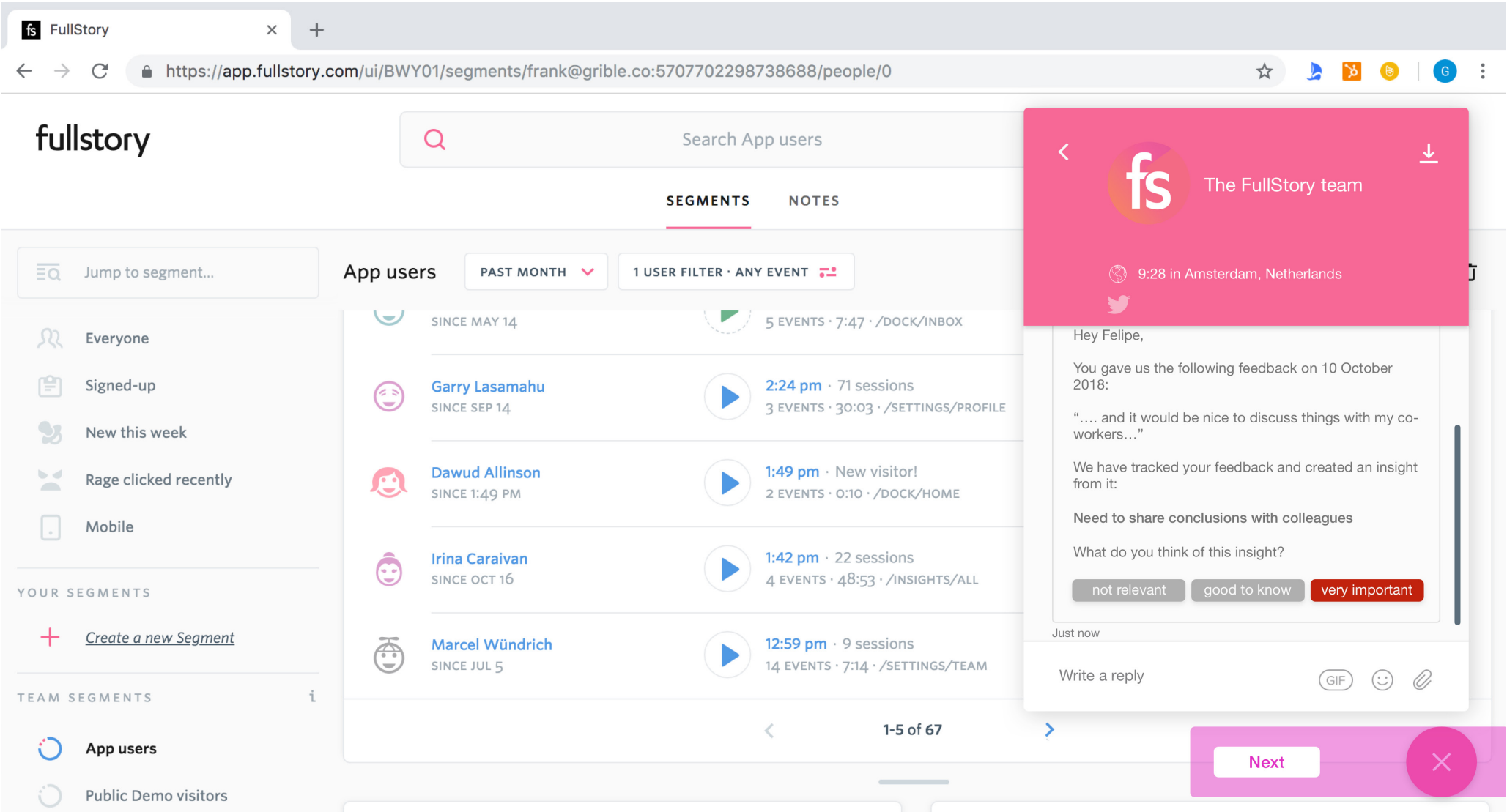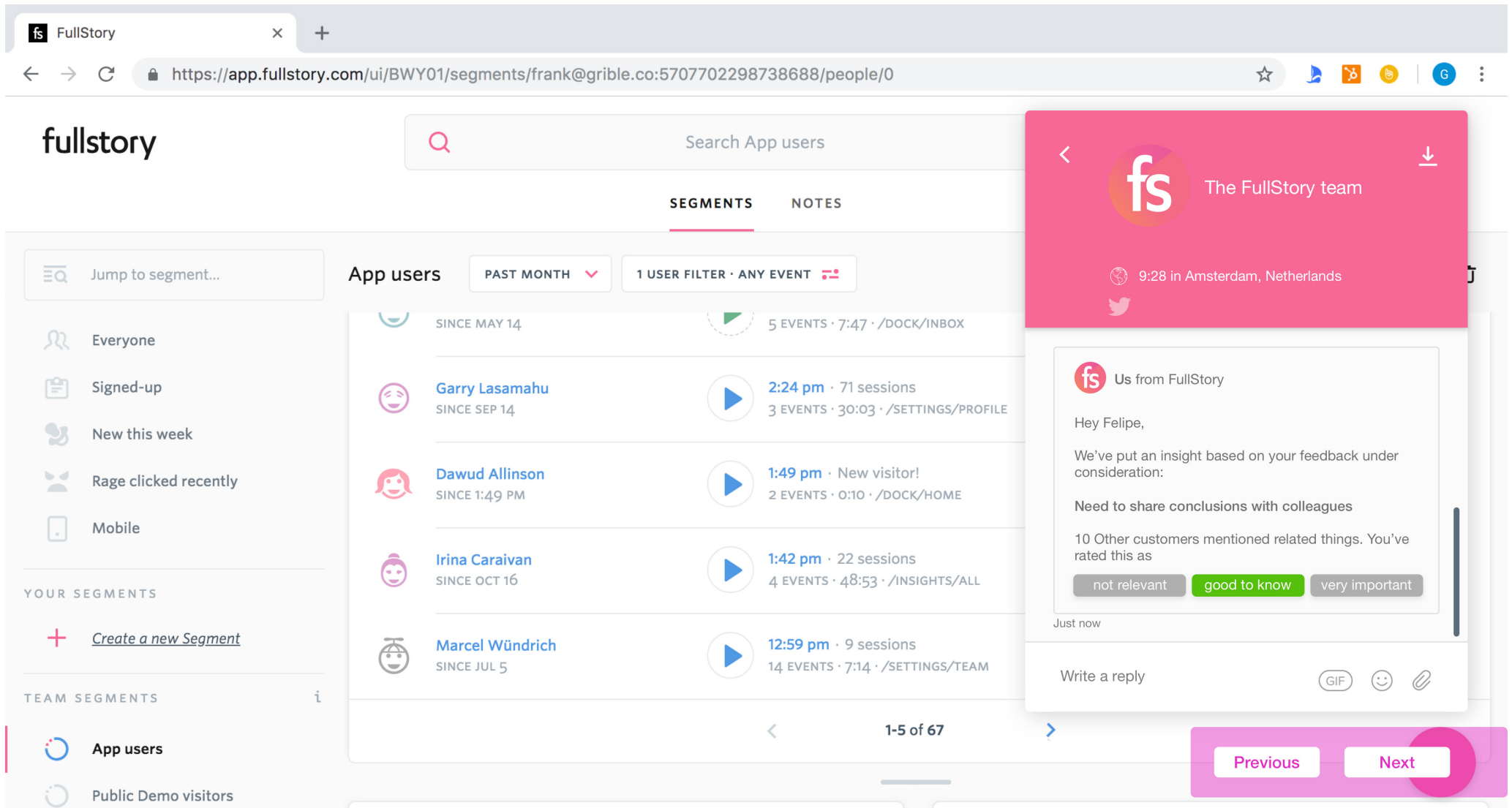
Figure 21b: Screens of the main prototype for the user test of design challenge 3, for customer-participants.

Figure 21c: Screens of the main prototype for the user test of design challenge 3, for customer-participants.

Figure 21d: Screens of the main prototype for the user test of design challenge 3, for customer-participants.

Appendix XXVI: Third Design Challenge – User Test Results

Analysis-lead-participant (1x)

Results from ratings

You were aware of the involvement of CS and customers, in analysis
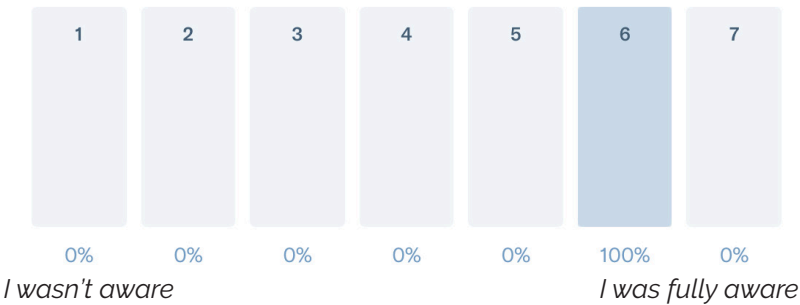
1	2	3	4	5	6	7
0%	0%	0%	0%	0%	100%	0%

I wasn't aware ... *I was fully aware*

You felt able to reach out to CS and customers

1	2	3	4	5	6	7
0%	0%	0%	0%	100%	0%	0%

Not at all ... *I definitely did*

You were aware of the difference between CS teams and customers

1	2	3	4	5	6	7
0%	0%	0%	0%	0%	0%	100%

I wasn't aware ... *I was fully aware*
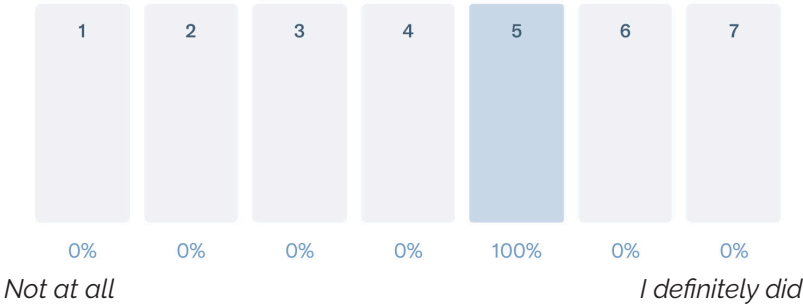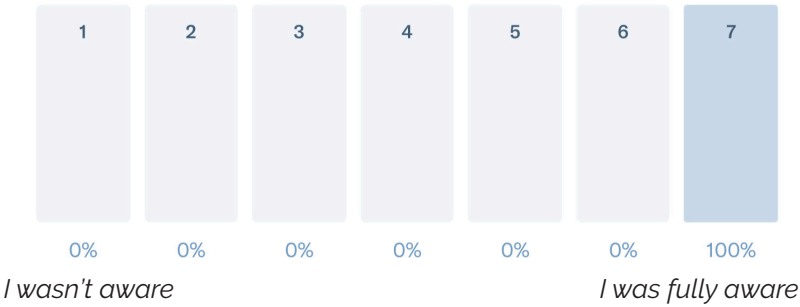
Collected insights
To be aware of the involvement of CS and customers, in analysis
- This was rated with 6/7
- CS needs to be informed about this function (updating customers and colleagues about the analysis process), in early phases of implementation in companies.
- Marking customers as important was a verified need.
- The fact that support staff and customers get updated, right after insight creation, needed more clarification.

To be aware of the difference between CS teams and customers
- This was rated with 7/7
- The difference between customers and colleagues was clear, and it was clear that colleagues were of the support department.

To be aware of the ability to reach out to CS and customers
- This was rated with 5/7
- Good engagement of CS in analysis.
- Direct communication between analysis leads and added colleagues should be supported. Currently the communication is expected to occur in Intercom conversations (with customers), as notes (visible for internal people in that conversation, but not for the customers). This was however not made clear enough.
- The need to engage customers in analysis was verified.

Usability issues
- Initials of support staff per highlight were good, but the respective names should be fully written. Otherwise, colleagues' initials can get confused with customers' initials.
- It was clear that the format for the updates were automated.
- The texts accompanying the rating bars need more presence.
- The insight status needs to be made clearer of its meaning; it was clearly visible, however.
- The 'save insight' button needs more presence.

CS-participants (2x)

Results from ratings

You felt sufficiently engaged in the analysis process
  Average score: 6
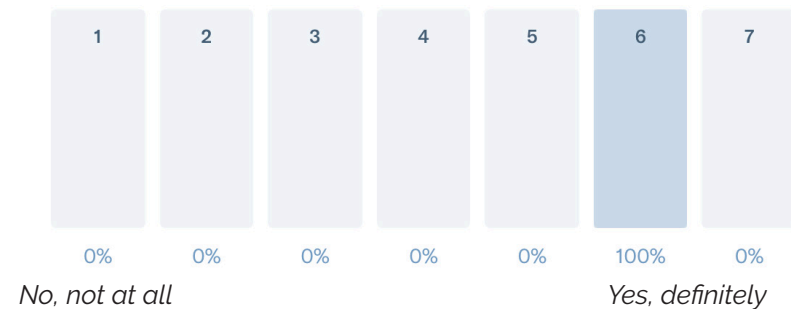
1	2	3	4	5	6	7
0%	0%	0%	0%	0%	100%	0%

No, not at all   *Yes, definitely*

You felt that you have contributed to product development
  Average score: 6

1	2	3	4	5	6	7
0%	0%	0%	0%	50%	0%	50%

No, not at all   *Yes, definitely*

You might understand how the customer insight was made up from the feedback you gave.

Average score: 6.5

1	2	3	4	5	6	7
0%	0%	0%	0%	0%	50%	50%

No, I wouldn't   *Yes, I would*
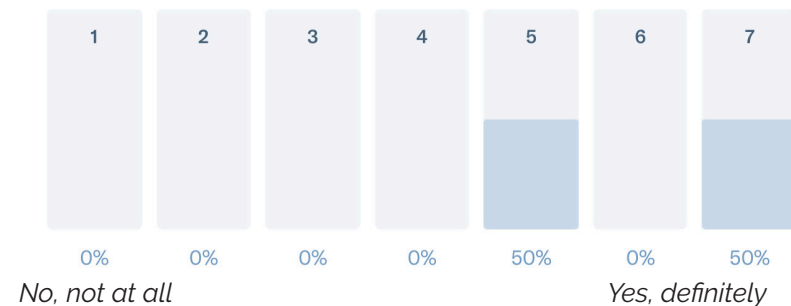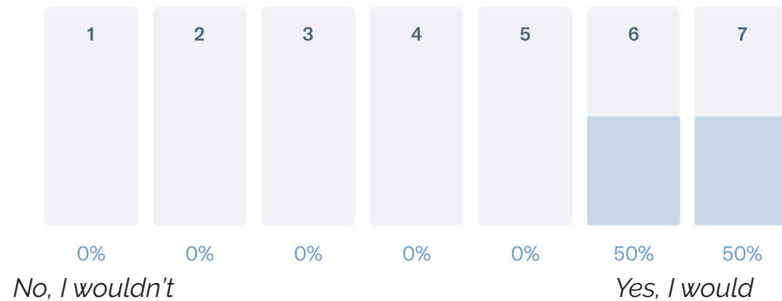
Colected insights
To feel heard
-        The need of CS to feel heard is satisfied. This became apparent by the positive ratings on contribution to analysis, 7/7 and 5/7.
         "It makes me feel good, receiving this update." (participating CS-agent)

-        Though, one participant would like to be able to give ideas for solutions (for instance, new features). For her it would also be important to see what would happen to those ideas she shared in further steps of the analysis.

To feel involved in the analysis process
-        Engagement in analysis was rated with 6/7 by both participants

-        Contribution to analysis was rated with 7/7 and 5/7

-        "Good engagement of CS in analysis." (participating former CS-manager)

-        Marking customers as important, so they can see more of what happens with insights, was a verified need.

-        Support staff should be able to give input regarding insights and features/functions. Hereby, it is important for them to see how their input is used in analysis.

-        With familiarity with the use of Intercom, it can be clearly understood that support staff are enabled to reply to incoming updates.

-        Support agents only need to be engaged if it helps them to get information that they need to communicate towards customers.

-        Also, other than these updates by itself, CS would have to be informed about this function (updating customers and colleagues about the analysis process), in early phases of implementation in companies. They had to be made aware of this, so receiving the updates as notes in Intercom chats would not have come as a surprise.

To understand the translation of feedback into insights
-        This was rated with 7/7 and 6/7

-        The format of the update was clear in conveying this. Also, it was assumed, as he was already familiar with the use of Intercom, that he could review the entire conversation he received the update in.

-        It is important to see history of updates, so everything could be connected to each other.

Customer-participants (3x)

Results from ratings

You felt sufficiently engaged in the analysis process
Average score: 5.3

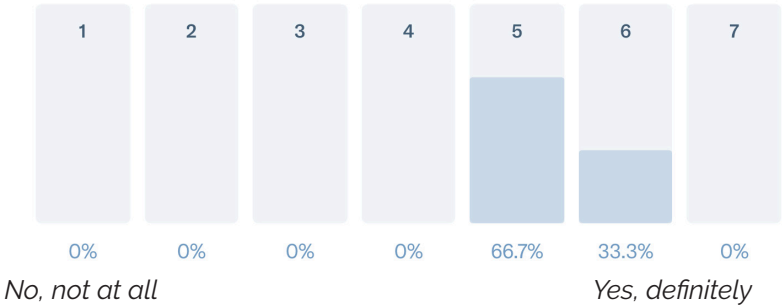| 1	2	3	4	5	6	7
0%	0%	0%	0%	66.7%	33.3%	0%

No, not at all　　　　　　　　　　*Yes, definitely*

You might understand how the customer insight was made up from the feedback you gave.
Average score: 6

1	2	3	4	5	6	7
0%	0%	0%	33.3%	0%	0%	66.7%

No, I wouldn't　　　　　　　　　　*Yes, I would*

You felt that you have contributed to product development
Average score: 5.3

1	2	3	4	5	6	7
0%	0%	0%	0%	66.7%	33.3%	0%

No, not at all　　　　　　　　　　*Yes, definitely*
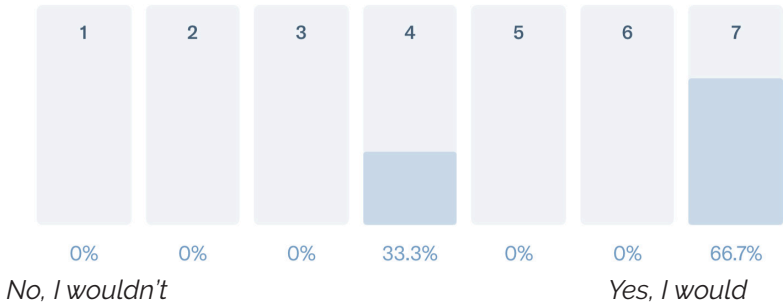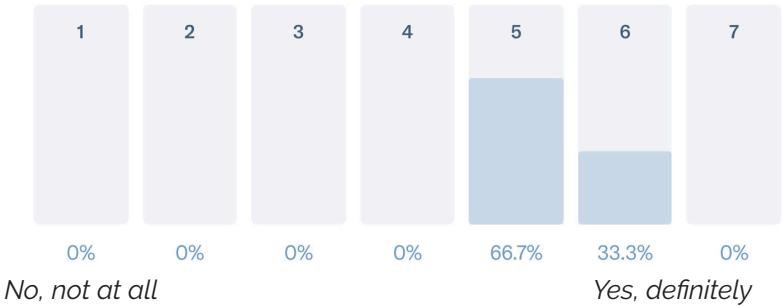
Colected insights

To feel heard
- Engagement in analysis: 2 participants rated this with 5/7, while 1 participant with 6/7.

- Contribution to product development: 2 participants rated this with 5/7, while 1 participant with 6/7.

- Based on the rating scores on engagement in and contribution to analysis, this need was satisfied, but needed improvements. This partly correlated with the identified improvements for engagement in the analysis process. The other part had to do with the following:

    - to share complaints anonymously
    - Added customers want to hear each other's opinion with respect to insights and features/functions

To feel involved in the analysis process
- Engagement in analysis: 2 participants rated this with 5/7, while 1 participant with 6/7.

- Contribution to product development: 2 participants rated this with 5/7, while 1 participant with 6/7.

- Customers want to verify a function/feature in relation to the respective customer insight as well. Just verifying the insight created from their feedback was good, but not enough.

- One participant wanted to get a sense of completion of an insight; an insight is completed once a feature/function is decided based on it and released to be used).

To understand the translation of feedback into insights
- 2 out of 3 participants rated this with 7/7, while 1 participant with 4/7.

- One participant would like to be informed about reasons why certain features/functions are chosen to satisfy certain insights.

Additional findings
- Customers should be given detailed information, once a new feature/function is released.

Appendix XXVII: Personal Reflection on Project

Looking back at the entire project and the way I approached the problem definition, several things were important to be mentioned. Most of these things were things that should have had been done differently, but some were things that were experienced positively and considered to be applied in later projects. This part of the report describes my reflection on the project. Initially, the reflection on the overall project will be described. Following on that, the reflection regarding my approach on each one of the design challenges will be described.

The overall project
Overall time scheduling
The first topic of reflection had to do with time scheduling, regarding activities during sprints and project documentation. For the latter, more time should have had been reserved. In sprints, the focus was put strongly in making prototypes and all materials around them (user test preparations and materials, questionnaires, interview questions, etc.). Although I was already aware of this, I strongly underestimated the intensity of the workload and reserved too little time for the documentation. Because of that, I was struggling continuously in documenting the results and progress. Looking back at the project, documentation throughout sprints should had been done immediately after each decision moment and 1-2 full days per week should had been reserved for that.

Documentation of exploration
Specifically, about the documentation of the exploration phase, I should have had put the results in a concise format, earlier in the project. One problem that I noticed, was that I tend to spend a lot of time in retrieving gathered information from the exploration phase to take into conclusions / decisions. This was caused because the results were not put in a concise format before the draft of the report needed to be made; I only put the results of exploration concisely, for documentation purposes. Supposed I would have had this done before the start of sprints (following up on the exploration phase), I could have had been more efficient in applying the gathered information in the respective research and design work.

The design scopes
Then, I should have had further narrowed down the design scopes, especially regarding the first two design challenges. I ended up doing more work than necessary and this caused the quality of certain elements to be highly compromised. More explanation about this will be described later in this reflection, per design challenge.

Creative sessions
Supposed that the design scopes were narrowed down further, I would have had needed less time for prototyping. This would have had made more of the scheduled time available for ideation (and conceptualization). In order to come up with more innovative concept solutions, I could have had organized creative sessions with some of the interviewees (this will be further explained later in this chapter, for the first design challenge) and / or other IDE students for ideation purposes. This would have had been especially relevant for the first and second design challenge, as the resulted concepts (see the first two sub-chapters of '6. Proposed Concept') could have had become more original as solutions.

Regarding to the above-mentioned application of creative / ideation sessions with interviewees. I could have had been creative with the setup. To conduct user tests and interviews, I used Lookback and Skype. Reflecting back, I could have had included this media to set up such sessions remotely, in such a way that it would fit in the reserved time for the discovery sprints.

Remote user testing with Lookback
More about Lookback specifically, in combination with InVision prototypes, it was very useful in conducting and analyzing moderated user tests. Positive things I experienced with this medium: sessions get recorded on video (and audio) automatically; recordings could be studied right after the sessions; notes of important findings could be made and would have been related to the exact moments in the session.

Though, it came with several limitations of control for the moderator. Firstly, it could be a challenge for the moderator to guide participants towards certain steps of the test, participants would be in a different place. Because of that, more attention needed to be put into making the concept self-explanatory regarding the steps to be taken by participants in the session. Secondly, this method came with several unprecedented problems for the moderator. Some examples for this: the Wi-Fi that suddenly gets down, slow processing power of participants' computer (= testing device) causing the prototype to be tested slow to be downloaded, and small screen size of participants' viewing device that causes some elements of the prototype not to be visible at once. Thirdly, this method was highly focused on conducting user tests of SaaS-prototypes. In that case, it was very useful. Though, with the (example) limitations mentioned above, it should only be applied if in-person (non-remote) tests were not possible.

Recruitment

Recruitment (for interviews and tests) is an important topic to reflect on, as I experienced it as a big problem throughout the project. Setting up and executing the recruitment was very time-consuming and the results never met my expectations (not enough participants, not the right type of participants, etc.) These things are inevitable in a start-up environment (Grible is a startup company), but reflecting back, there are a few things that I could have done to compromise on them.

To keep in touch with people interviewed

To begin with, I should have had tried harder to keep in touch with interviewees, in order to include them in following user tests. Prior to the start of the project, I was already warned about the struggles of recruitment among start-up companies. With this warning, I already was planning to gather a number of interviewees early in the project, remain in touch with them, and include them in later user tests. Though, I became too focused on the design-related work and put less effort than intended into this.

To have done this better, I firstly could have shared interim results, very concretely, to provide engagement with those who are interviewed. They would then be notified of the progress of the project on a weekly / monthly basis.

Another possibility was to have created a social media / online group for all people that were interviewed and agreed for further engagement in the project. This would have made recruiting for following up tests and feedback sessions easier and less time-consuming. With this, multiple people whom I would have had direct contact with, could have been approached quickly. They would have been expected to be more likely to (positively) reply to requests (= participation in tests) than members of external online communities; For most user tests in this project, members of specific Slack communities were approached; the replies were mostly negative than they were positive.

Chat interviews

About interviews with external parties, specifically, one approach that I would apply was to do them via chat. This was applied during my last sprints, with respect to tackling the third design challenge. It was very useful, as I was able to document results and progress of previous sprints, in between chat conversations. Results were easy to store as they were already put in text format. This made them considerably easier to be analyzed too.

An important disadvantage of this approach, however, was that the interviews tend to take a lot of time to be carried out. When questions were asked, it often took a considerable amount of time before participants would have had replied. It, sometimes, even took days before I would have had received answers to my questions.

Another disadvantage was that interviewees tend to, simply, stopped sending back replies. This happened in just a few of the chat-conversations I had, though, I felt it was important to be mentioned. This might have had to do with some of the mistakes I have had made (see below). Also, I had the assumption that in chat-conversations, interviewees might tend to feel freer to deliberately quit responding. This might have had been caused by the lack of confrontation, which would have not been the case regarding Skype-interviews or regular in-person interviews; both interviewer and interviewee(s) would see each other face-to-face and this would increase the confrontation between both, creating a pressure for the interviewee to stick with the interview until it would have been finished.

One thing that I could have had done better with this: not to ask too many questions at once. Because the conversations were done via chat, replies were not always sent immediately. To increase time efficiency, I would had asked three to five questions at once to interviewees. This might have had caused the interviewees to feel overwhelmed. It also caused their answers to be too extensive, in some cases. On the other hand, some interviewees were not answering all of the questions asked. To apply this approach better in the future, a slightly more amount of time should be reserved to carry out the interviews. This would allow me to send out one or two questions at a time, resulting in interviewees' answers to be more directly related on the questions. This also would allow me to dive deeper into certain answers, more easily.

First design challenge
Fixation on one idea
Reflecting back on my approach regarding the first challenge, I could have had used the most interesting ideas to come up with concept alternatives deviating from the subset-concept. For that design challenge, I did create a concept alternative. This, however, was more of an iteration to the subset-concept that was already created (see Appendix X [concept original and alternative + insights gained from feedback sessions design challenge 1]). The reason for that was because I became too fixated on that one idea of a subset concept.

Creative session
To have come to a more innovative concept solution, I could have had organized a creative session with some of the people I have had interviewed, for ideation purposes. The iterations done before the creation of the concept described in chapter 3, included feedback sessions with two Shipright users based in the Netherlands. I got the chance to interview them in their office and gain feedback on the concept iterations. Looking back to the project, I could have had used this opportunity to organize a creative session with them. The interview itself, proved to be resulting in relevant insights for this design challenge and the second. But, an organized creative session with these users might have had resulted in deeper findings about the context.

A creative session could have also had been done with these participants, for later ideation phases. From these participants, important insights for the first and second design challenges were gained. Because of that, it made sense that further engagement of these Shipright users were relevant. Including them in one or more ideation sessions might have resulted in a higher quantity of ideas, that might have led towards a more innovative concept solution.

'Quick fixes' on concept
Also, due to the mistakes I made with recruiting (see 'Recruitment' of this chapter) I only had a limited amount of time for conceptualization. Though, supposed that these mistakes were not made, I could have put more effort into creating the testable concept (see 'Concept' in chapter 3). I tried to apply the findings gained from previous iterations see Appendix X [concept original and alternative + insights gained from feedback sessions design challenge 1]. Although, I ended up applying 'quick fixes' to the concept and the result was still too similar to the previous concepts created in previous iterations. This was caused, because I only had very limited amount of time to spend on concept improvement. If I have

had spent more time on thinking about applications of the findings gained from previous iterations, some of the insights collected from the user test with the described concept (as described in chapter 3) could have had been anticipated.

An important step was overlooked
Furthermore, it should have had been decided first, which sets of filters users would have had found relevant. As Appendix X [concept original and alternative + insights gained from feedback sessions design challenge 1] described, the conceptualization started with creating a new Home screen for the Dock section, which would contain filter-subsets of 'New documents', 'Potential feature requests', 'Customers with most feedback', an 'Companies with most feedback'. The decision for these types of filter-subsets was based on an earlier ideation.

However, making the decision itself was a research topic on its own. In the previous chapter, on page xx, possible RQs are given for this topic.

Second design challenge
Lack of concrete definition of the scope
This design challenge was narrowed down to a sufficient extent, but it was not defined concretely enough. This was not done until I started evaluating the concept to be prototyped for the user test. Because of that, I lost focus throughout conceptualization and user testing. I ended spending too much time on the details around the concept as described in 'Concept' of chapter 4. For the same reason, the prototyping of the concept took too much time.

Sensitizing to give context
For the user tests of this challenge's concept, I tried to include some of these details, in order to provide context for participants. I did that by including a presentation about the context, in which these details were presented (they were only viewed by participants and not tested). In hindsight, this could have been done better.

One alternative way that I thought of, was to include this context presentation in sensitizing tasks for participants prior to the test sessions. As the context were about the essence of Shipright, these sensitizing tasks could have had been tasks related to highlighting and insight creation of feedback data. This would have had prepared participants for the sessions and provided them with the intended context to be communicated.

Sensitizing before tests, could also be applied to show the original design, so participants could compare it with the concept after the tests. With this, the workflow would have to be prototyped and shared to users. The different steps of the workflow could be divided into small tasks, to be completed within a couple of minutes. As the test would revolve around the new concept, after the test sessions, these participants would then have had gained enough knowledge to make a comparison between the original design and the concept solution. This would have been highly relevant, with respect for the specified scope of design (see 'Design Scope', 'How?' in chapter 4), as the concept solution was intended to be a redesign of the original. As mentioned in '7. Further Research', no good comparison between the original design and concept was done yet. Applying this approach of sensitizing participants for the user test, would have had minimized this lack of comparison.

Third design challenge
Successful chat-interviews
While working on the third design challenge, I tried to avoid the mistakes I made previously. For recruitment purposes, I started with approaching the targeted audience via Slack-chat-conversations. I went to interview a number of people, in order to gain more knowledge related to the design challenge. I used the opportunity to also recruit a sample of the target group for later user tests. This proved to be a very useful approach. But, as I have mentioned previously in this chapter, (see 'Recruitment' on page Xx) this approach came with certain advantages and disadvantages. I also made a number of mistakes that might have decreased the quality of information gained.

Lack of variation in concept ideas
Moreover, I made sure that the scope of design was sufficiently narrowed down. This enabled me to spend more time for ideation and conceptualization and I managed to create three different concept ideas that were evaluated internally. Reflecting back, however, I believed that each one of these concept ideas contained too much of the same elements (see Appendix X [concept ideas design challenge 3]). This was something that I intentionally did, though proved to be not the best approach in hindsight. This was to be seen in the internal feedback from the company mentor (see Appendix X [internal feedback on concept ideas]), as it seemed easy for him to point out a preference. This might not have had been the case if each one of the concept ideas did not share any similar parts with each other.

Another reason why it was easy for him to point out a preference, was because the chosen concept was the only one that made use of Intercom to facilitate CS and customer engagement. As described in 'Design Scope' of chapter 5, Shipright's business model was shifted towards Intercom using companies. Because the concept idea (see 'Concept Ideas and Internal Feedback' in chapter 5, on page Xx and Appendix X [concept ideas design challenge 3]) was the only one which was in line with this new business model, it was easy for the company mentor to point out a preference.

Looking back on my approach, I could have had included Intercom as the channel for updates in the design scope from the start. The scope was sufficiently narrowed down enabling me to include more work in the design process. This however, could still be narrowed down further, that might have had led to an improved quality of the proposed concept. I already stated in '5. Third Design

Challenge', 'Design Scope' (see page xx) that analysis leaders, CS-staff, and customers of Intercom using SaaS companies were included to be updated about feedback analysis; though, I left the exact channels for the updates to be sent out still open to ideate about. For these channels, I could have had specified Intercom for the design scope. If this was the case, three different concept ideas, all evenly in line with the new business model, could have been created. Adding on that, the internal feedback might not have shown such a clear preference of the better concept idea, in combination with richer findings/assumptions regarding the specified scope. Eventually this might have resulted in a concept focused more in depth on integrating Intercom in the collaborative workflow.

I went too quick from scope definition, to ideation and conceptualization
As described in 'Concept' in chapter 5, the concept included four different update moments for CS and customers: 'In storage', 'Under consideration', 'Ready for delivery', and 'Completed'. The latter two were not part of the earlier specified design scope, but still were taken in the conceptual solution. The reason for that was, because internal feedback and the competitor analysis showed the relevance of these two update moments.

Reflecting back, these were to be left out from the concept completely. Eventually this was done for the proposed concept (see the last sub-chapter of '6. Proposed Concept'). But, if done earlier for the concept to be tested, the user test sessions could have had been given even more focus on the conceptual relevance regarding the translation of feedback into insights. This would have been especially relevant for the SaaS customers that were tested with, as the translation of insights into product features was an important theme of their feedback (see Appendix X [user test results third design challenge]). If done differently as described, their feedback might have been more focused on customer feedback translation into insights, and deeper knowledge regarding that might have been revealed.

This was caused because I did not take the time to thoroughly evaluate the respective findings (internal feedback and competitor analysis). As I wanted to keep up with the scheduled plans, I purposely moved from scope definition to ideation and conceptualization, as fast as possible. In hindsight, I could have drafted the scope and ask the internal team of Grible what they thought about it. This should then be ideally done before ideation, but at least before conceptualization.