



Bachelor Project MIX 250

Further development of an existing research tool

# Wolftech Feeds



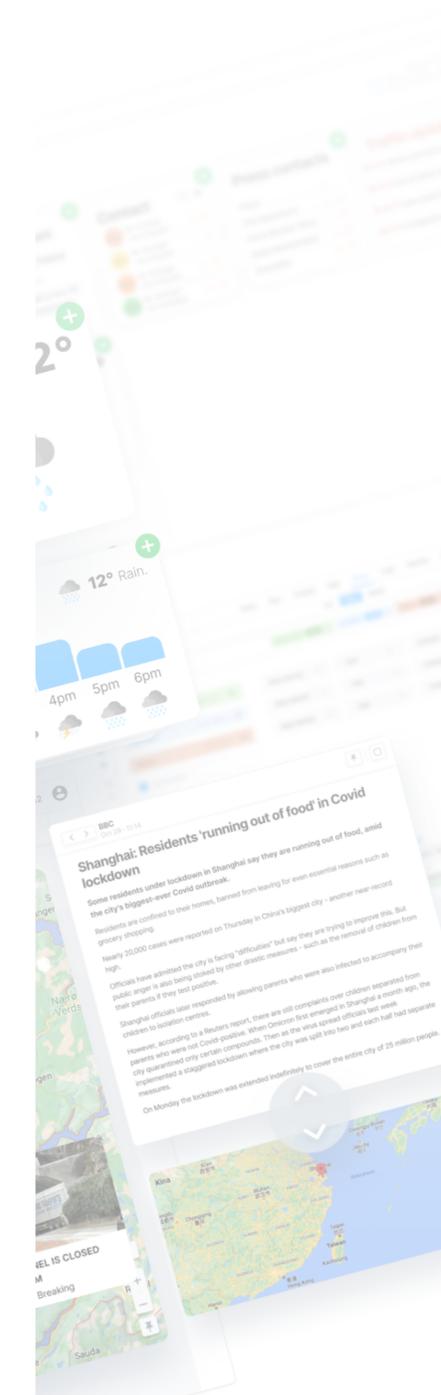
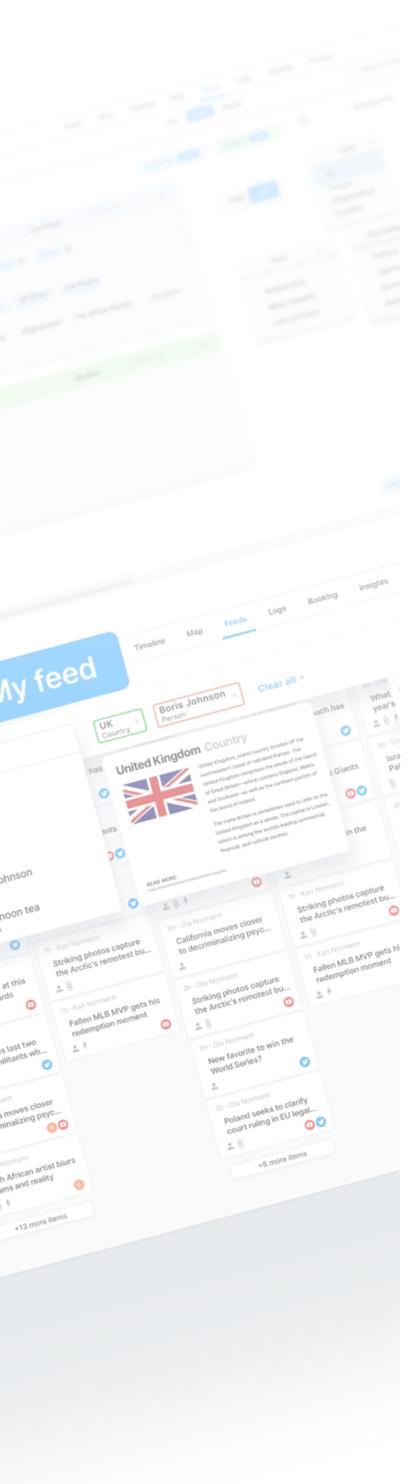
Bachelor in Media and Interaction Design  
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# Introduction

Imagine having a million tabs open and trying to maintain an overview of all the information you need. You forget where you read that one brilliant thing and have no idea how to get back to it. This is the reality for a lot of journalists. Journalists have a lot of manual work, tight schedules, and work with different tools.

This semester, we cooperated with Wolftech to enhance their existing product, which helps journalists effectively carry out their work. This report will introduce Wolftech, our challenge, the design sprint, and our final solution.



## The company

Wolftech Broadcast Solutions was founded in 2011 in cooperation with TV 2 Norway. They provide a management system to improve workflow when planning and publishing for media production.

## Their solutions

### LIVE

newsroom control system for broadcasting

### News

story-centric workflow management system

### Production

planning tool that simplifies long-form productions

## About

-  13 000 daily users
-  90+ countries
-  23 employees

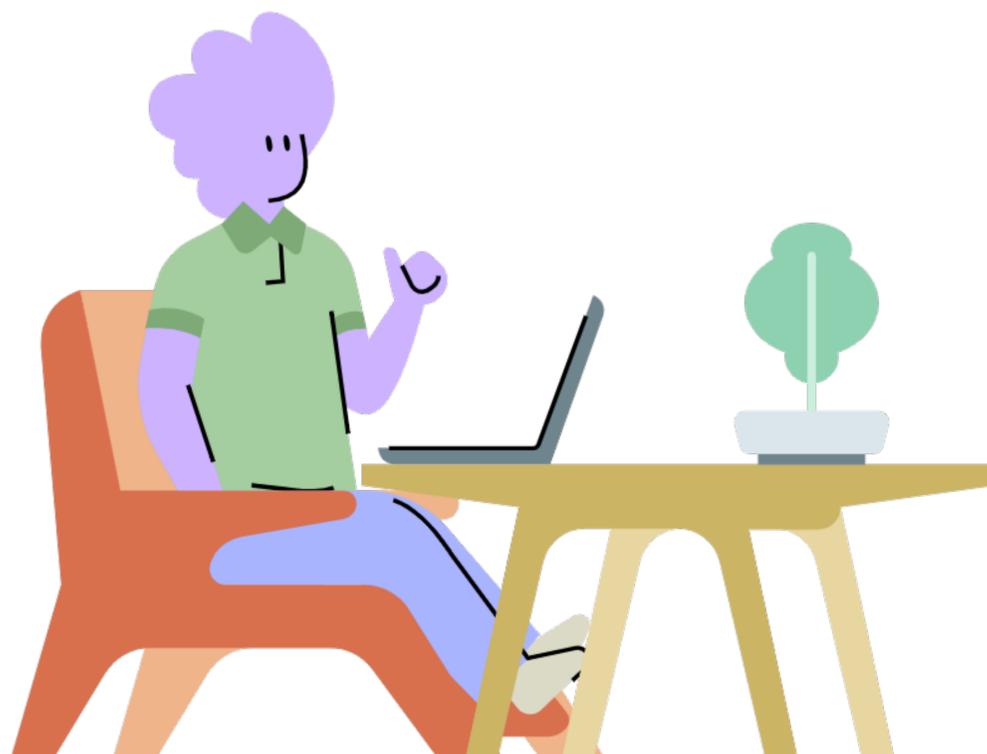
## The Feeds

Our collaboration focused on the News solution. Wolftech News is a story-centric planning tool for news production. Inside News, we looked closer at the Feeds section. Feeds gathers news stories from different sources to one place. The module is based on topic and user preferences and can be integrated with external sources, such as social media or official news feed sources.

## The challenge

# How can we improve an existing solution in an established news production platform?

Wolftech described Feeds as a tool in its early stage and has not given it much attention yet. Our challenge, provided by Wolftech, was to look at how journalists do research and how the Feeds tool can make the research process easier and more efficient.

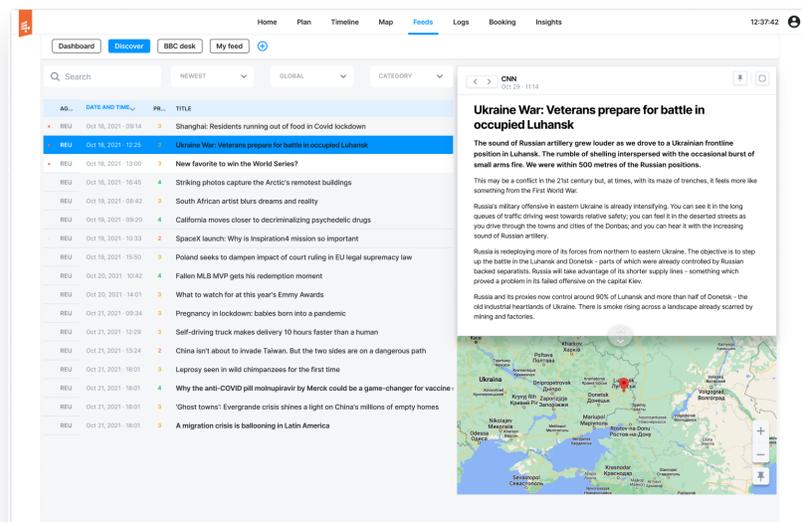
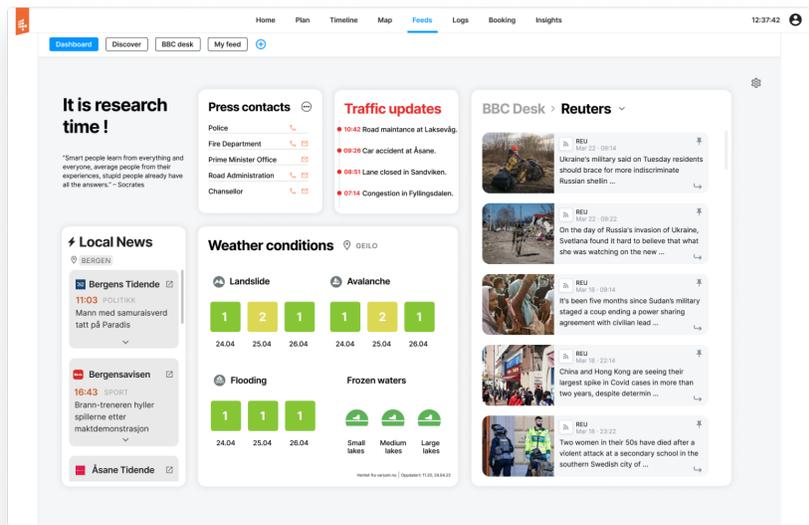


# Our solution

Our team developed three designs to help make the research process more efficient and interactive.

## 1. Dashboard

A module-based design lets the user customize their personal dashboard with a selection of widgets. Content, size, and position are entirely based on user preference.

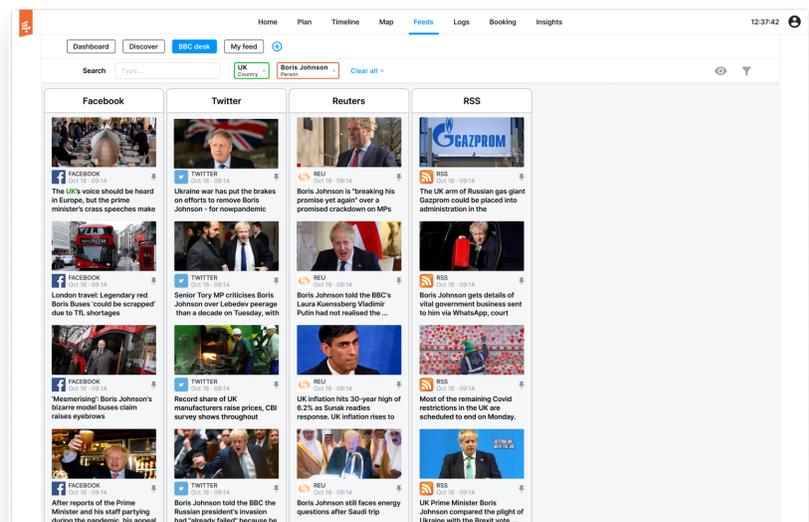


## 2. Discover

Filter news stories based on user preference and display them on a map. The user can further explore the map and find other stories in the same area.

## 3. Keyword search

- The integrated search component lets users specify the contents displayed in the Feeds columns.
- Sort information by top stories, newest, oldest, or alphabetically.
- Users can edit the column characteristics and visibility.



# User research

In this phase, we tried to understand the journalistic work and grasp their main challenges and motivations. We conducted expert interviews with five participants with experience in the field of journalism, through the video conference tool Zoom.

Get to know our 5 participants:



**Dagbladet +**

**Social Issue Journalist**

Lively, social and kind



**TV2**

**Sports Journalist**

Talkative, critical and hardworking



**NRK**

**Economic journalists**

Happy, patient and curious



**NRK**

**Politics Journalist**

Analytical, curious, impatient



**Agderposten**

**Politics Journalist**

Analytical, curious, impatient

## Main Findings

### Daily work

- Get an overview of all tasks and the progression of their work
- Find background information of specific topics quickly
- Ensure highly qualified and authentic news to audiences as soon as possible

### Needs

- Need an easier way to find reliable information on chosen topics
- Collect all research tools into one system

### Frustrations

- It is time-consuming going through different sources to find relevant news material and inspiration
- It can be hard to keep track of interviewees and organize contact information
- Maintaining overview of important information is demanding when it is spread across several different platforms

# Design Sprint

We used the Google Design Sprint in collaboration with our contact person, the CEO, and a UX designer from Wolftech. The Design Sprint helped us validate ideas and solve significant challenges by prototyping and testing ideas in a short amount of time. Our target group was journalists actively using the Wolftech News tool.

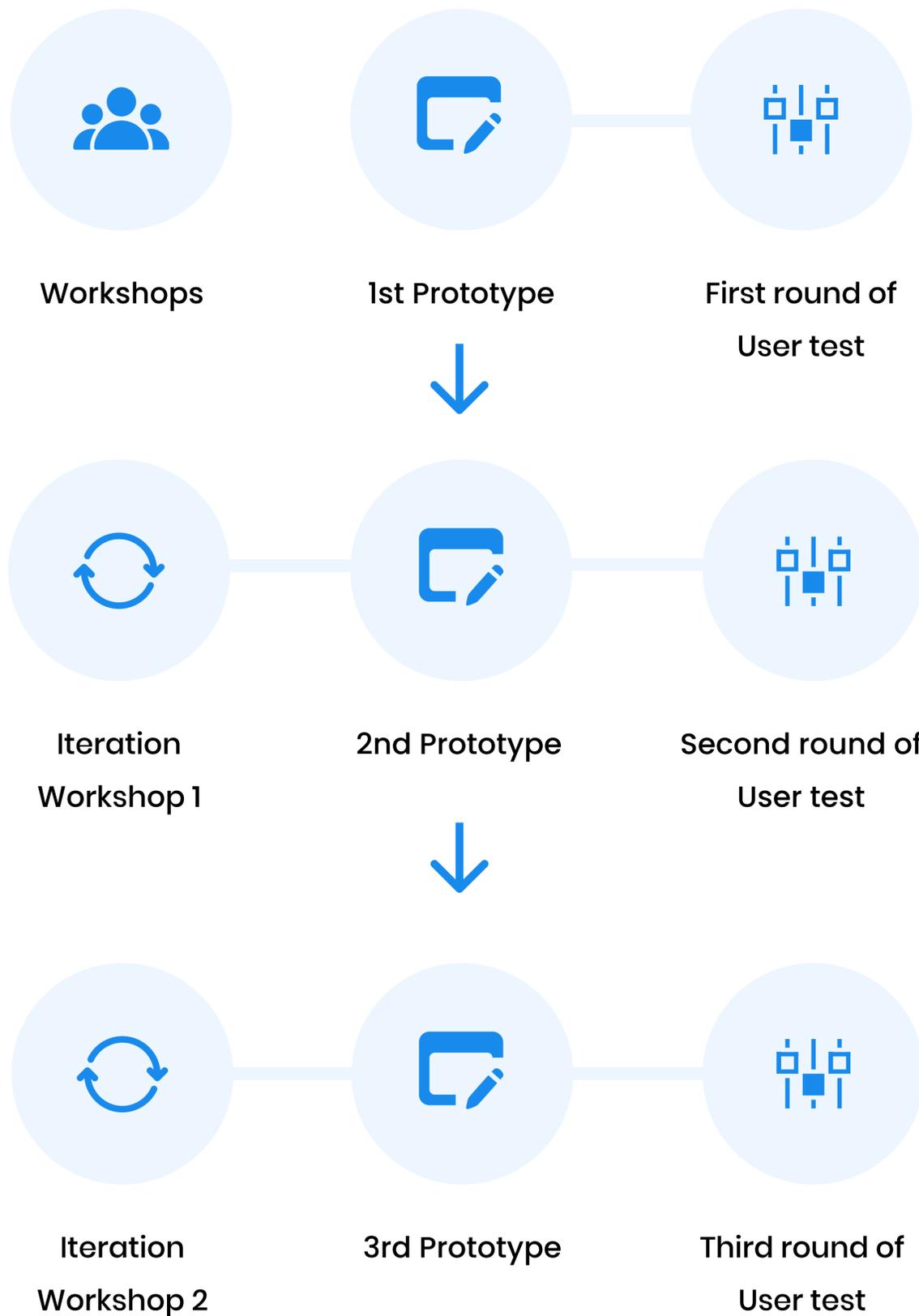
Our group and the participants from Wolftech could not be in the same place simultaneously. Therefore, we conducted the Sprint online. We used the communication tool Zoom and the digital whiteboard Miro.



Miro



zoom.us



# Alignment workshop

The goal of the first sprint workshop was to explore the problem space and align on the different challenges that we might face. First, we created a high-level map to get an overview of how journalists work and how this process is intertwined with the Wolftech product. We then made How Might We's (HMWs) and voted for our common goals.

HMW make it easier to know where the best resources are

HMW make it easier for journalists to get in contact with sources

HMW make it easier to find content that is interesting for the story

In the next part of the workshop, we formed a Two Year Goal and three Sprint Questions. The Two Year Goal was based on how the product should look like in two years, and the Sprint Questions were the obstacles that might prevent us from achieving this.

## Two Year Goal

In 2 years, we will delight users with how intuitive our tool is and how easy it is for them to complete their daily tasks.

## Sprint Questions

- Can we improve research routines when everyone does research differently?
- Can we make an interface that is fun to use?
- Can we create a tool that could leverage the right external sources and always give the journalists the information they need?

The last part of the workshop included the exercise Lightning Demos to find and get inspired by other similar solutions and how they solved problems similar to ours. These solutions were presented shortly with titles, screenshots, and what we liked about them, thereby the name Lightning Demos.

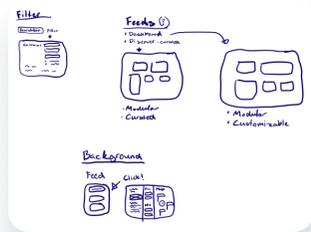
# Solution workshop

The goal of the solution workshop was to find inspiration from other similar solutions and then visualise ideas for our product. We brought in the Lighting Demos from the last workshop and voted for the best concepts. With some new ideas in mind, we went through four exercises:



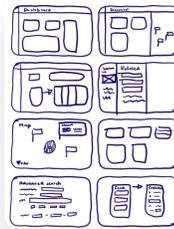
## 1. Taking notes

Individual notes to solve the Sprint Questions



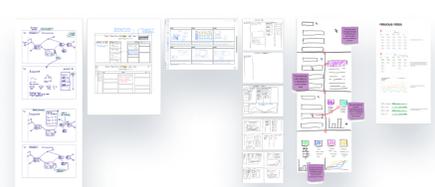
## 2. Doodling

Time to visualise the notes taken previously



## 3. Crazy 8's

Coming up with eight sketches in 8 minutes

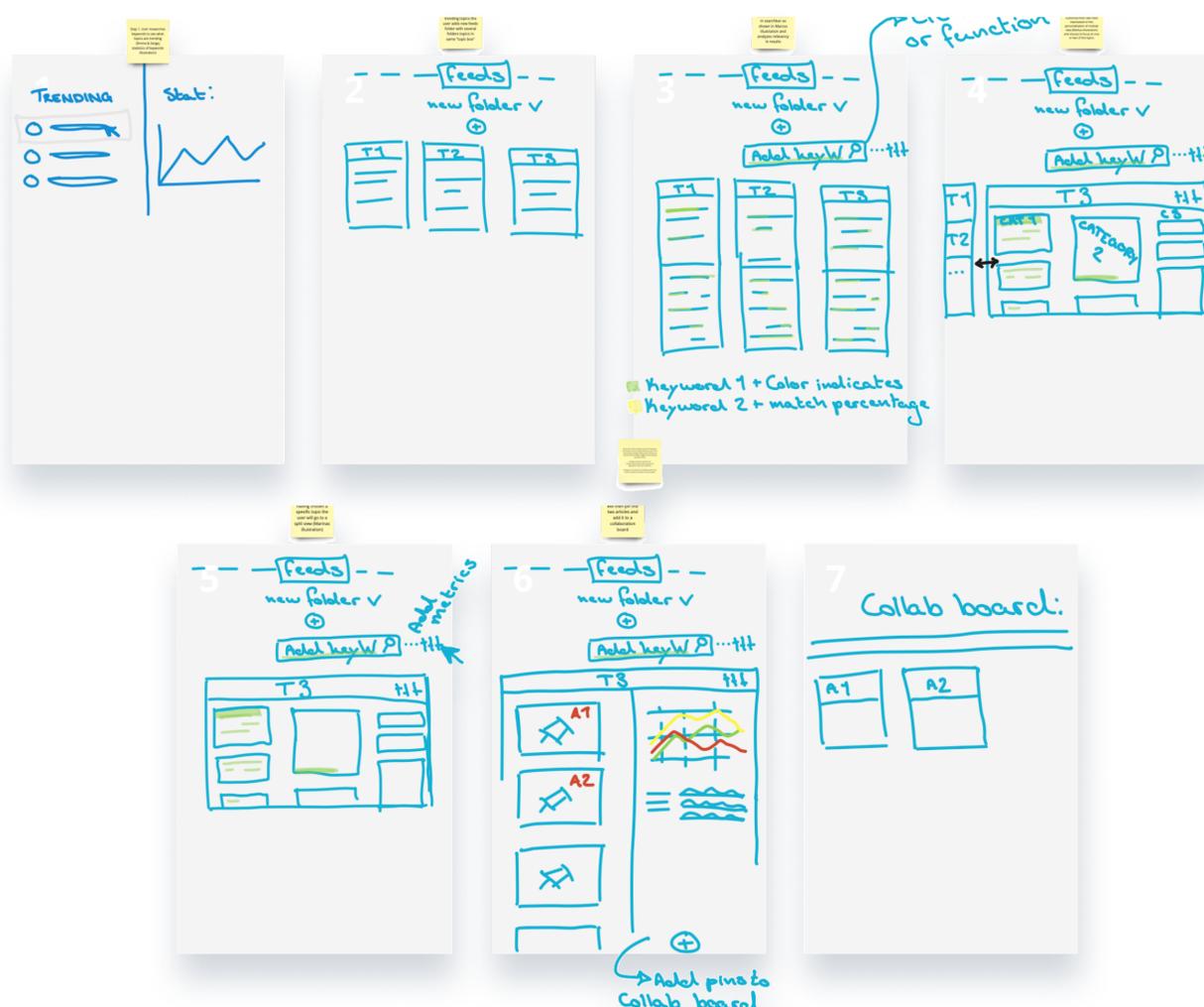


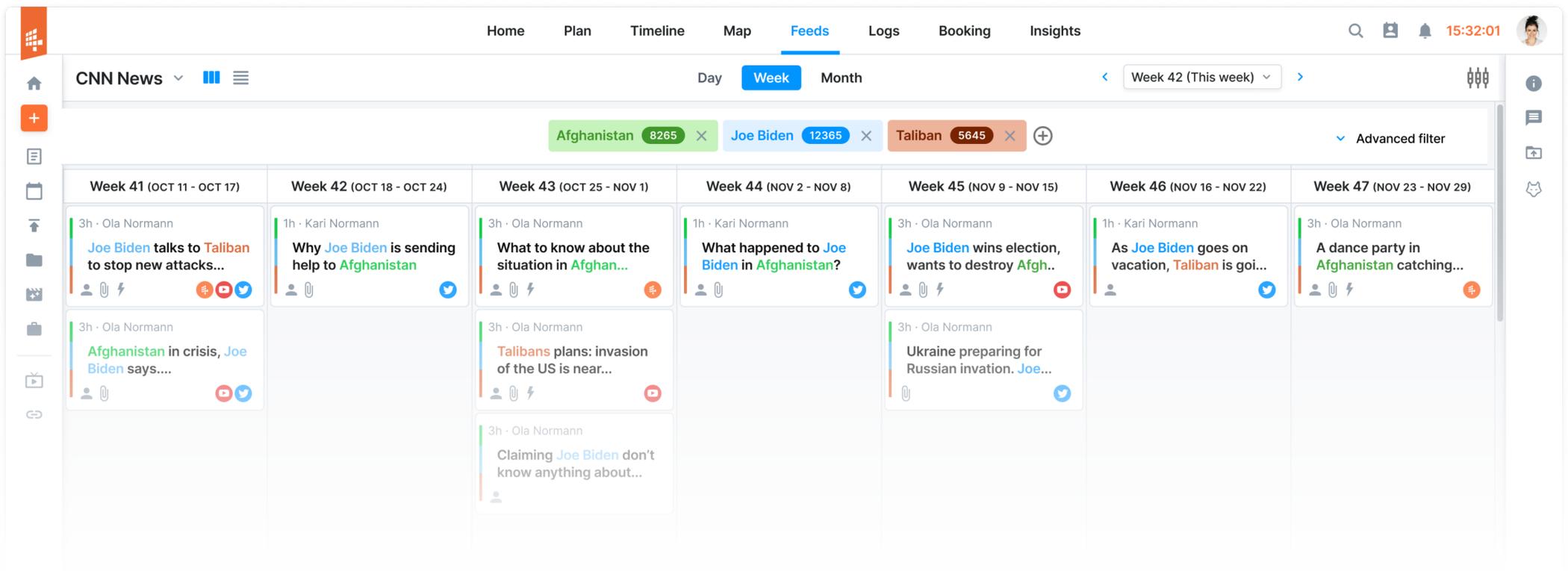
## 4. Solution sketches

Coherent sketches based on the ideas from the previous exercise

# Decision workshop

The goal of this workshop was to decide which solution sketch to bring further. Each participant assisted in making one storyboard as a base for the prototype development. Storyboards are used to imagine the finished prototype, and to be able to spot problems and points of confusion before putting resources into building a prototype (Knapp, Zeratsky & Kowitz, 2016, s. 149).





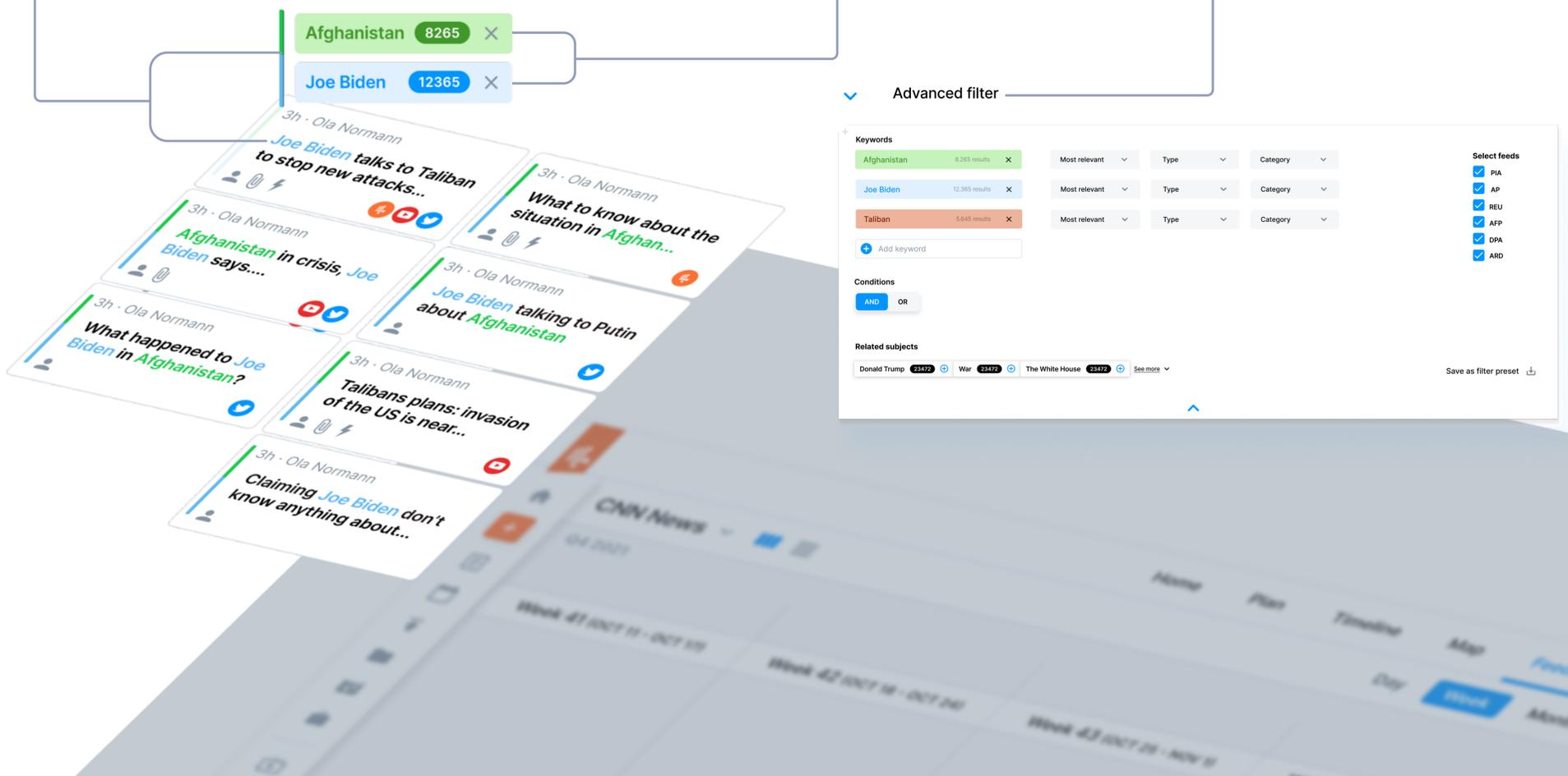
# First prototype

The first prototype was based on the storyboard to complement the existing Feed function in WolfTech News. We started by making a list of five ideas to prototype and assigned one to each group member to make a draft. In the end, we voted on which idea to take further.

Relevancy bar to indicate if the article contain a keyword. The keywords were highlighted in the article text.

Colour coded keywords to filter the Feed page and give the user more accurate information.

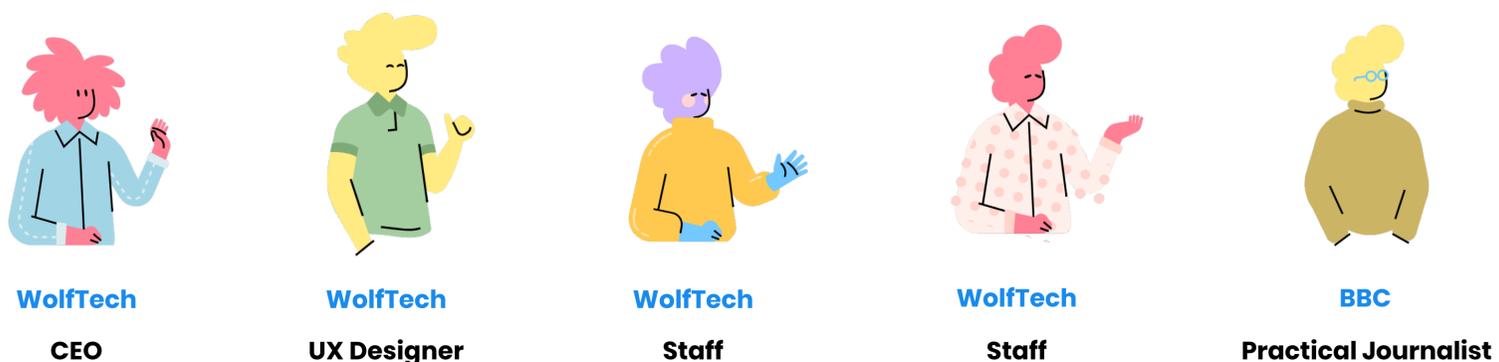
Advanced filter to determine keywords conditions, select which feeds to apply filter, sort and display related subjects.



# First user test

In the first user test, our goal was to test the viability of the keyword search and advanced filter feature with our target group. Since most Wolftech customers are international news agencies, we conducted the user tests over Zoom. The screen sharing feature in Zoom allowed us to observe the user as they interacted with the prototype. However, due to the hectic nature of the journalism field, getting hold of participants in the desired target group was close to impossible. Therefore, we had to settle with participants outside our target group in the user testing.

Get to know our 5 participants:



## Affinity map

We created an Affinity map to sort and prioritise the feedback from the user tests.



## Main Findings

### Feeds

- The setup of Feeds was confusing as there was no context
- A question regarding who should be in charge of a curated feed and if a curated feed is a pitfall
- The use of colour indication was not clear to everyone

### Advanced Filter

- Our filter function was compared to Google Search
- Getting background information easier would be helpful
- The prototype contained elements and buttons without functionality that caused confusion

### General

- Usually, one search word is enough to provide the journalists with enough information
- Confusion regarding the terms "Keyword" and "Filter" compared to the standardised "Search"

### Article

- Articles should display similar content or other content to explore and compare.

# Iteration workshop

In the iteration workshop, we reviewed the results from the user tests and decided on which direction to go. We took a step back and brought back the drafts from earlier.

## Finding a target group

First, we had an exercise for defining the target group. The Wolftech staff had to prioritise the types of journalists by spending money from an imaginary limited budget.



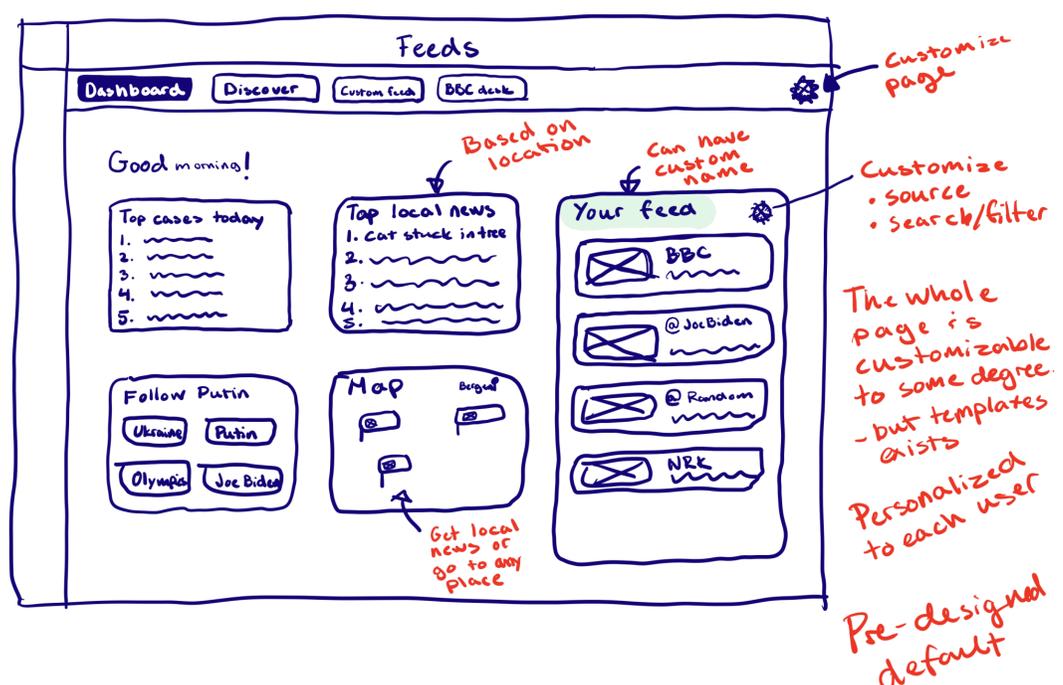
- Can we validate that the system makes journalists job easier?
- Can we validate that the interface is intuitive from the get go?
- Can we validate that the journalist in which context, they need which kind functions?

## Sprint questions

With a more precise target group, we came up with three additional Sprint questions to focus on in this workshop.

## Solution sketch

The solution sketch focused on the personalisation and journalists' individual needs.

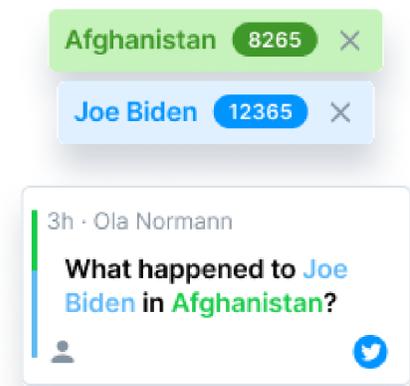


# From the first to the second prototype

After the first iteration of user tests, we understood that the idea was too narrow with only the keywords, search, and an advanced filter. The main reason was that our participants were unfamiliar with the rest of the WolfTech system.

## Colour coding

Most of our participants understood and liked the correlation between the coloured coded keywords and the article display with the relevancy bar. However, the correlation was confusing. Some also found the colour coding distracting due to the amount of colour, or did not understand the meaning of the colours.



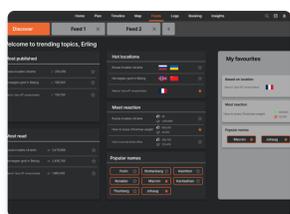
## Match keywords

Match all keywords

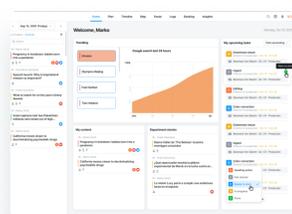


Our participants consisted of primarily technical people and one journalist. In the advanced filter, you had the opportunity to match the keywords, so the articles displayed only showed articles containing both of the keywords. With little developer experience, the journalist struggled to understand this concept of and/or.

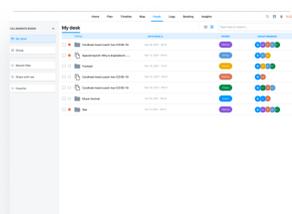
Taking the feedback mentioned into consideration, we decided to take one step back. We revisited the five ideas from the beginning to determine if there was anything we could add to the second prototype.



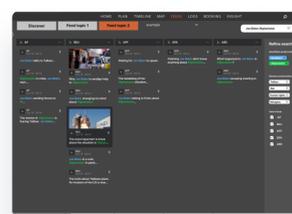
Dashboard



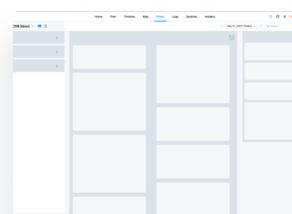
Statistics



Collaboration



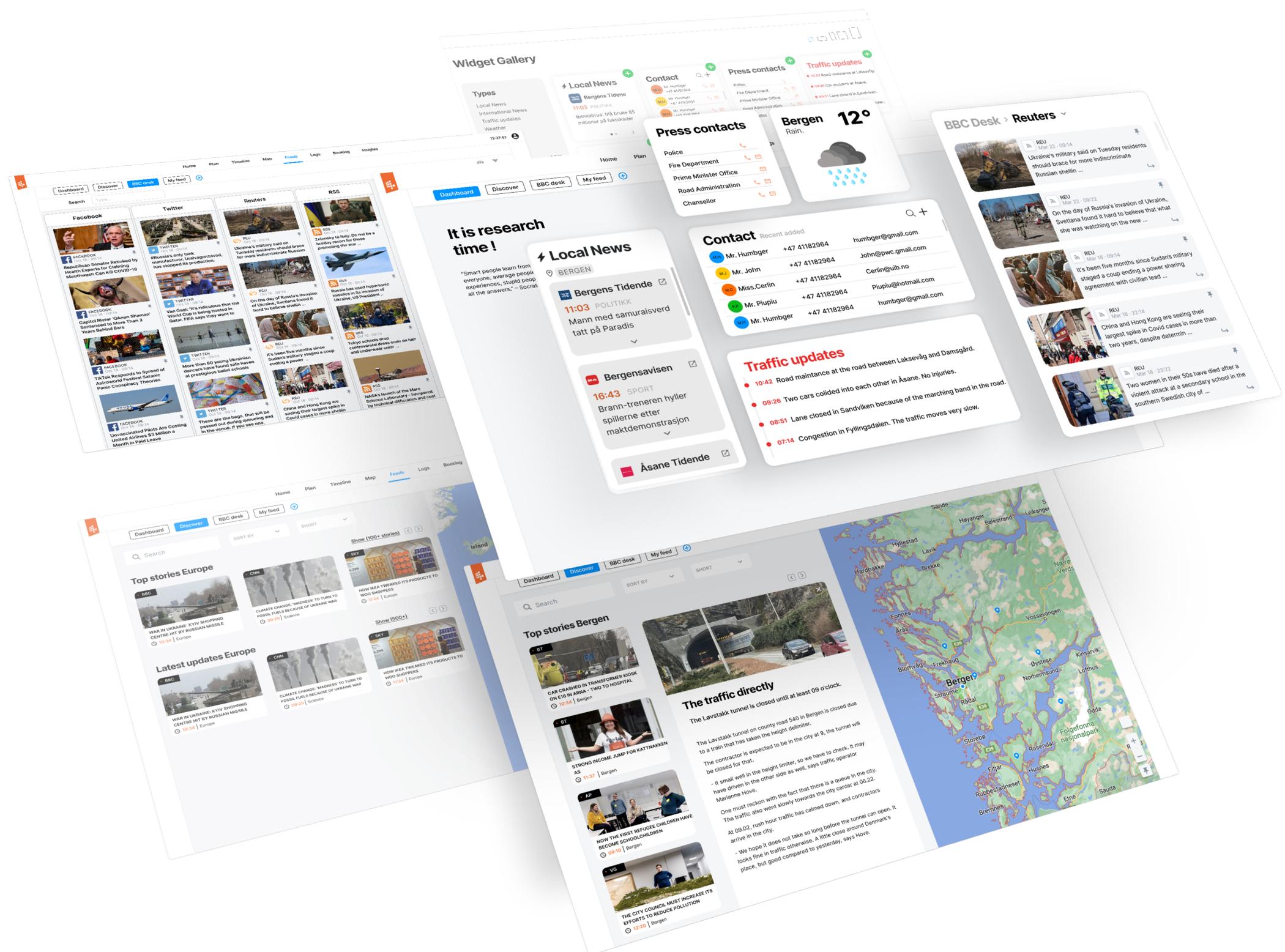
Keywords



Personalization

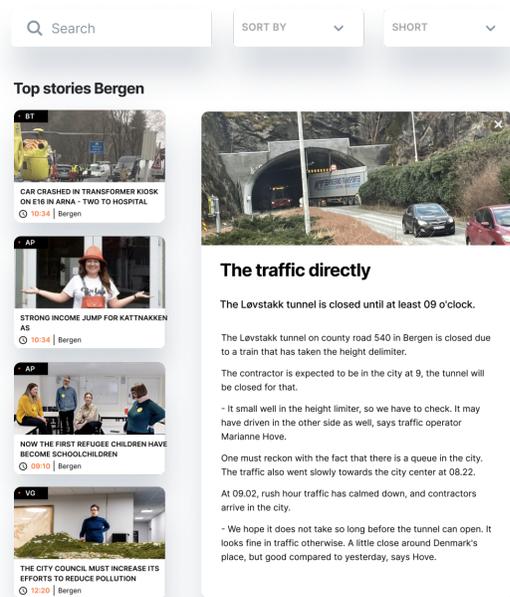
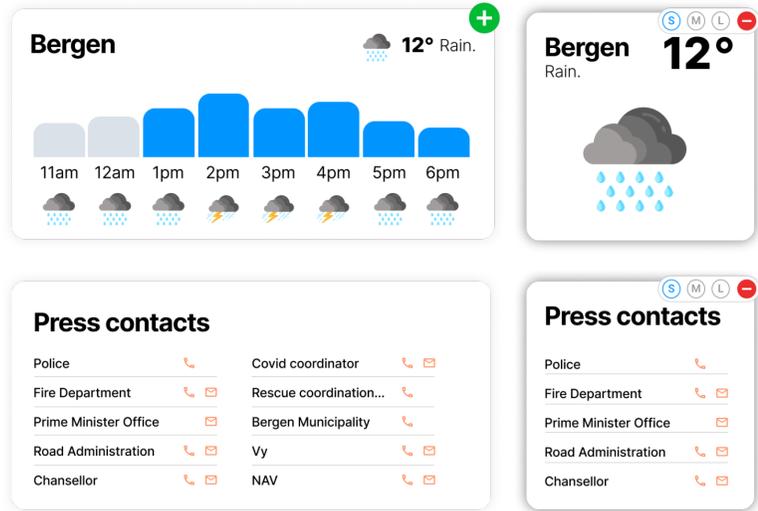
# Second prototype

In developing the second prototype, our primary focus was on creating a dashboard containing all the information a journalist needs at a quick glance. We decided to try to implement new solutions instead of improving upon existing ones. This solution opened up a lot of new possibilities. The user can navigate between a Dashboard with widgets, a Discover page, a pre-designed curated Feeds page, and a personal Feed page.



## Dashboard

The Dashboard is the landing page for the Feed section consisting of a set of information boxes known as widgets. The users set up their own Dashboard page by selecting from a collection of different widgets in the widget gallery. By activating the editing feature, users can decide the size and position of the widget boxes.

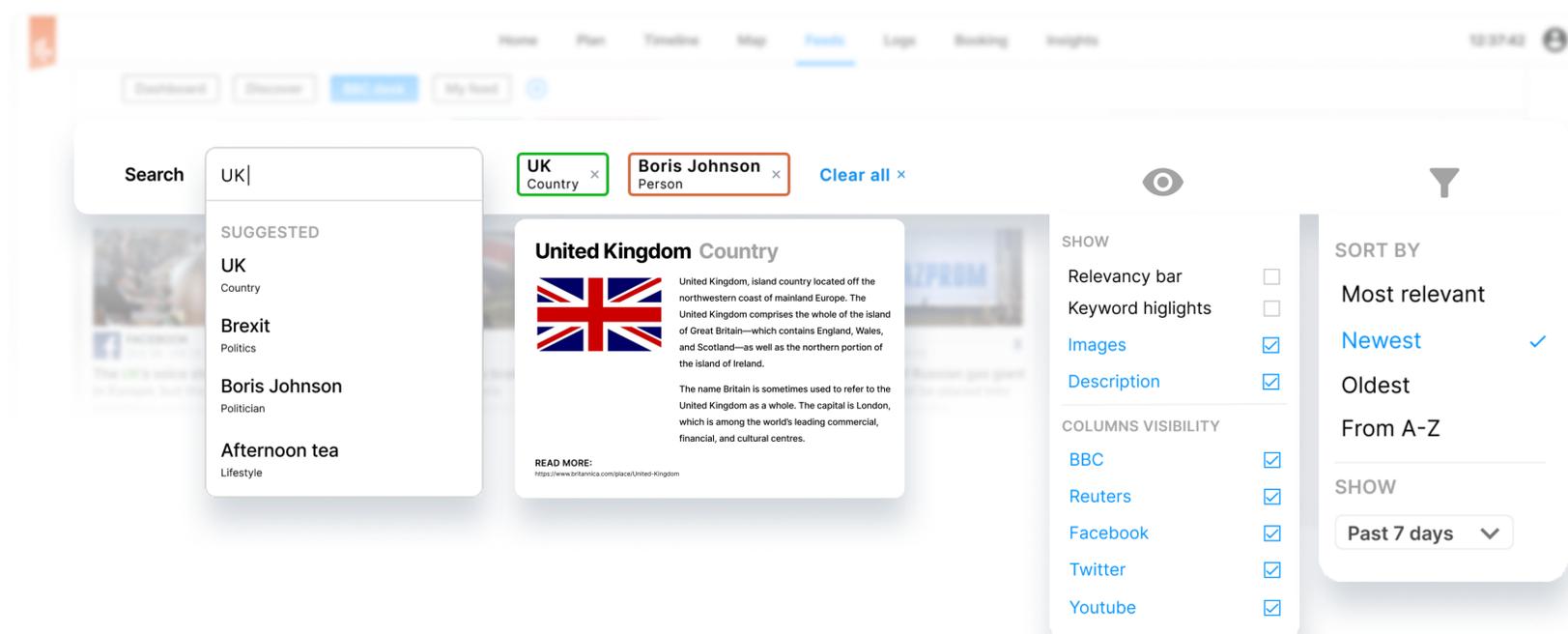


## Discover

The discover page makes it possible for the users to explore news stories based on the location of the article subject by interacting with the map. The stories shown correspond with what parts of the map the user is viewing. News stories are displayed as pins on the map. A preview of the article will appear by hovering over the pins, and clicking on it will open the article.

## Keyword search

The Feeds page is quite similar to the previous version. The prototype now contains two Feeds pages; one desk feed set up by the editorial staff and one personal feed the users create themselves. Users can still add keywords to specify information displayed in the feed columns through the search function in the top bar. Keywords are displayed in the top bar and can easily be removed by pressing the x- or clear all button. In addition, the user can now; hover over keywords to get background information on the specific keyword, customise the view from the eye icon dropdown menu, and sort articles by selecting the funnel icon.



# Second User test

The goal of the second user test was to observe how our new concepts; Dashboard, Discover, and Keyword search were perceived by the target group. We expected to run most of the user tests with active users of the WolfTech system. Our Wolftech contact was responsible for the recruitment. Unfortunately, out of our three participants, only the SWR journalist was an active user. Even though we got valuable insights and feedback it is hard to ensure a precise conclusion.

Get to know our 3 participants:



**SWR**  
TV Journalist



**BBC**  
Practical journalist



**WolfTech**  
Staff

## Main Findings

### Dashboard

- The concept of a customizable Dashboard was well received by the participants
- Having the same widgets displayed on the dashboard and in the widget gallery caused confusion
- Concerns regarding the distinction between Wolftechs general homepage and Dashboard as a landing page for Feeds, users feel that the two concepts are too similar

### BBC Desk

- Scepticism regarding curated Feeds
- The keyword filtering got a lot of good feedback, the new design was perceived as more helpful than the previous version
- The keywords still caused confusion as the colour coding did not give sufficient feedback on whether the keyword was active or not, or whether there was any correlation between the keywords
- They find an AI and entity-based search innovative and useful

### Discover

- The current article preview took too much space, and a limited amount of information displayed
- The size of the map felt unnecessarily big
- The current design made it feel as there were too many steps to access an article

### My Feed

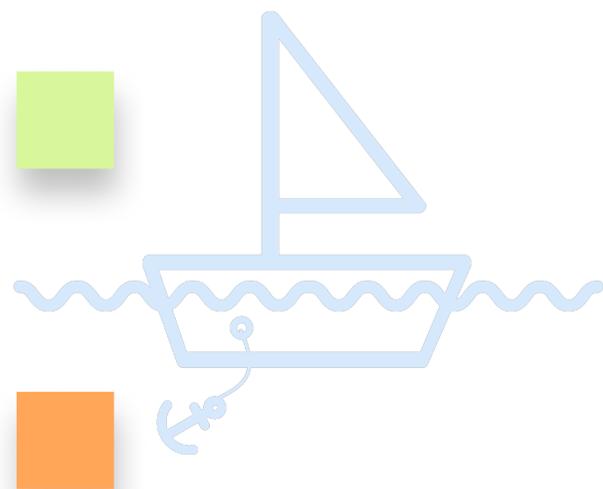
- The users did not get a feeling that they made their own personal feed
- Users did not understand the difference between curated and personal feed

# Second iteration workshop

While we got positive feedback on the design and its direction, our main struggle was still to get the right participants to test our prototype. Therefore, the goal of this iteration workshop was to decide which part of our prototype needed further focus and try to find a way that we could reach the users from our target group. To accomplish our goals we designed our own iteration workshop tailored to our needs.

## Organising feedback

To analyze the feedback from the user test, we used the sailboat exercise. Every participant wrote down user test feedback on sticky notes. Positive- and negative feedback was divided into two groups and organised based on topic. This exercise gave us a visual way of identifying where the main issues were located.



## Voting on further focus

The next exercise was designed to determine which concept would be the main focus moving forward. Every participant had one vote and had to decide between Dashboard, Discover, BBC Desk, or My Feed. As a result of this exercise, we decided to focus on the Discover concept.

## Ideas to implement

To figure out how to improve upon the current Discover concept, every participant had eight minutes to produce at least eight suggestions. When the eight minutes were up, everyone pitched their ideas and placed them on a board. Each participant was then given five stickers to place on the ideas they liked best. The ideas with the most votes would be our primary focus in the development of the third prototype.

## Candidates for user tests

In the last exercise, we intended to create specific ways in which Wolftech could get in touch with the users from our target group. The exercise was supposed to prepare for the next user test. However, our contact person had specific ways of reaching out and claimed there is no reason to run this exercise, as there are no good alternative ways.

## Third user test

With high expectations of reaching journalists from our target group, we prepared for the last round of user tests. However, once again, getting hold of the desired candidates was not possible. Regardless, we decided to run two user tests with journalists from NRK and TV2 for the purpose of our own learning.

Get to know our 2 participants:



**NRK**  
Local Journalist



**TV2**  
Journalist

## Main Findings

### Positive Feedback

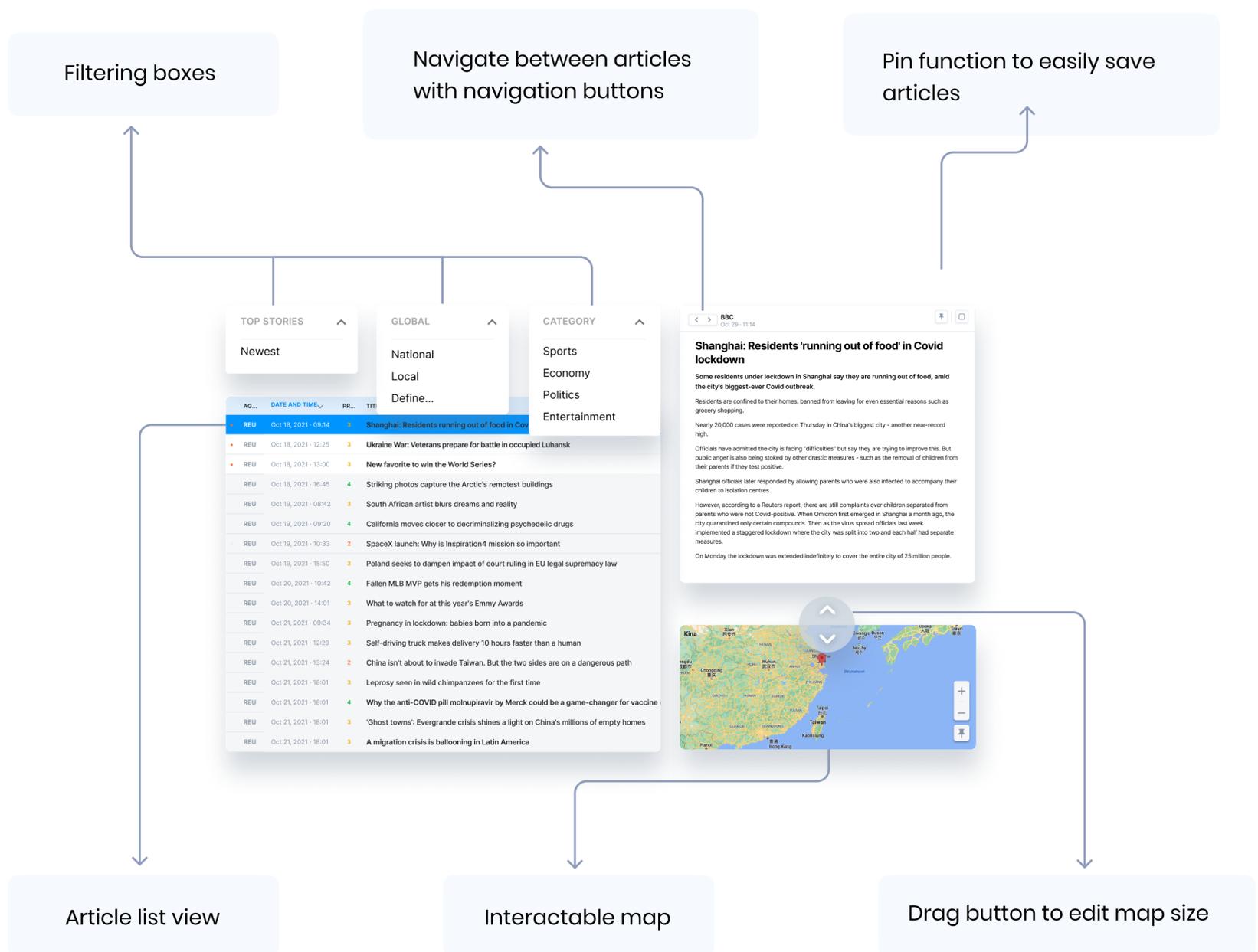
- Widgets with different size options are practical
- A large selection of widgets is great for meeting the individual needs
- The Discover page makes sense and looks good.
- Intuitive Dashboard setup
- For journalists using the tool Tweetdeck, the Feed tool feels intuitive

### Further improvements

- The Dashboard settings button might be difficult to spot as it is small
- Newest stories should be selected by default, not top stories
- The eye and funnel icons could be more visible
- The categorization filter could be more detailed

# Third prototype

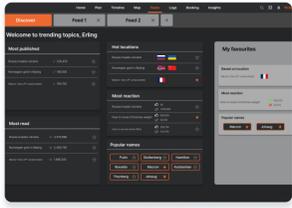
As a result of the second iteration workshop, our main focus in the development of the third prototype was the Discover page. Based on the feedback from the second user test we added a button to edit the map size. By dragging the button up and down the user can change the size of the map based on personal preference. In order to display more information on the screen, we changed the article view from box- to list view. Lastly, we adjusted the search bar and filtering boxes. The users can now choose between the newest- and top stories, and select which locations and categories they are interested in viewing.



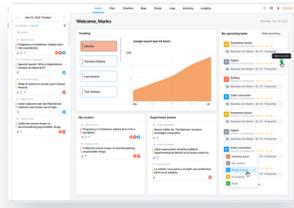
In addition to the discover page, we added new widgets to the gallery and made it possible for the users to add the contact widget to the dashboard. The columns in My Feed were removed from the initial view and a feature to create new columns was added. This ensures that users with no prior experience with the Wolftech system gain insight into how the Feeds function today.

# Evolution of our Prototype

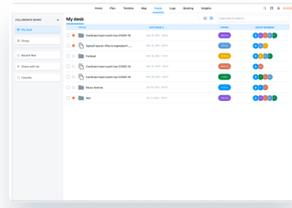
## Five different ideas



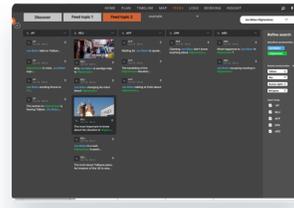
Dashboard



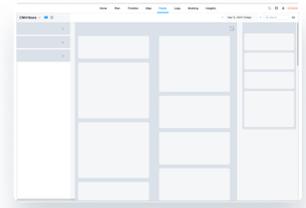
Statistics



Collaboration

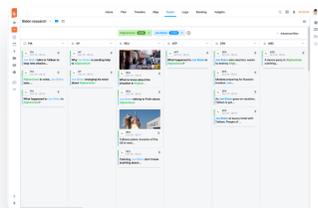


Keywords

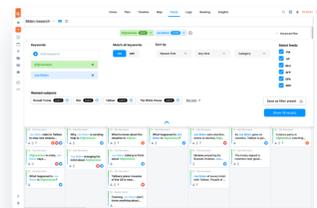


Personalisation

## First Prototype

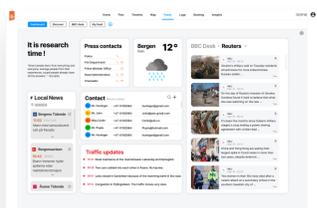


Keywords

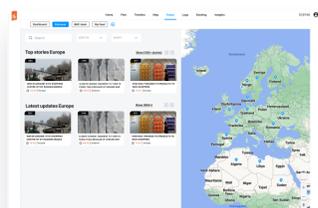


Advanced filter

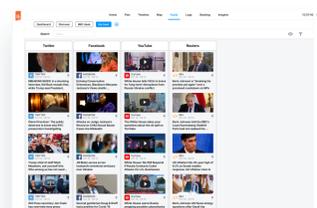
## Second Prototype



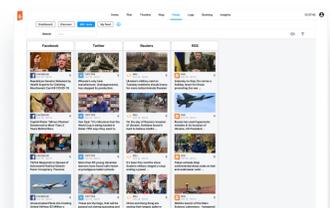
Dashboard



Discover

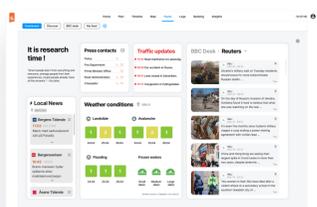


My feed

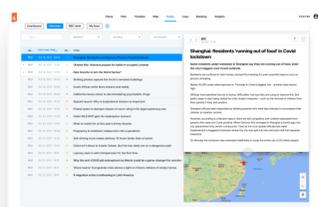


BBC Desk

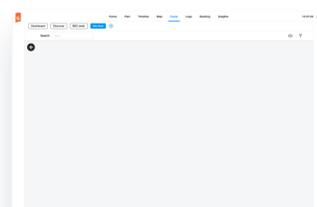
## Final Prototype



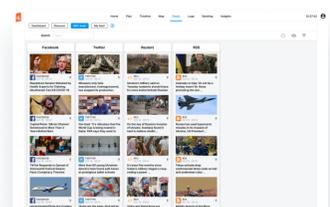
Dashboard



Discover



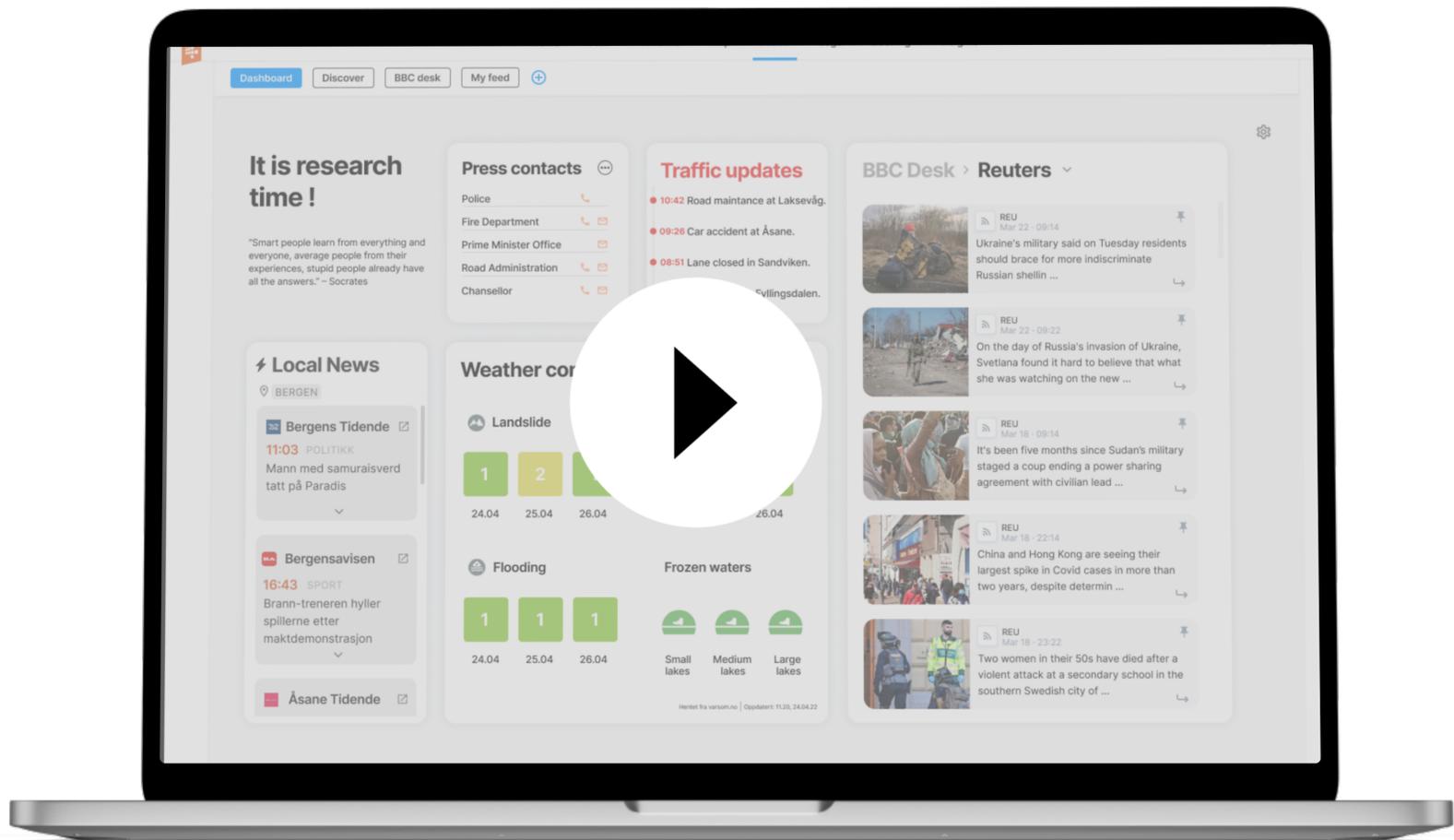
My Feed



BBC Desk

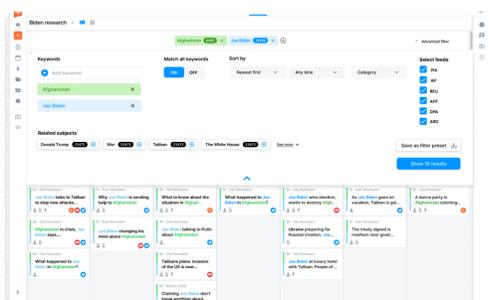
# Final Prototype

Welcome to the brand new Feeds functions in the WolfTech News tool. You can watch a video of our walkthrough of the most important features in the Prototype by [clicking here](#) or copying this link to the browser: <https://youtu.be/APfuDuMJdfM>



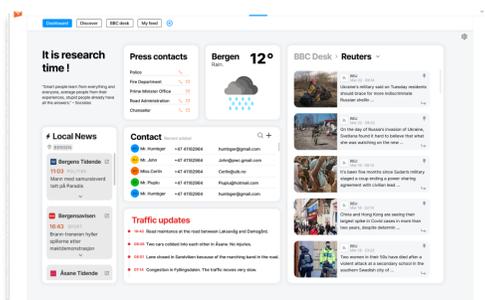
You can also take a look at the different stages of our prototype in Figma.

1st Prototype



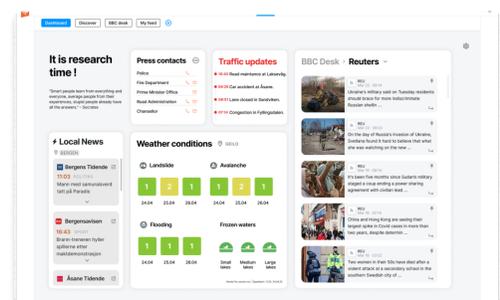
[Click here](#)

2nd Prototype



[Click here](#)

3rd Prototype



[Click here](#)

# Further development

## Test active users

First and foremost, it's important to state that most of the data collected from the research phase and user tests is based on feedback from users with little to no prior experience with the Wolftech system. This means that the feedback we have gotten to this point isn't fully viable, and we cannot be certain whether the new features will be perceived as useful assets to Wolftech's current users.



## Expand widget gallery

Secondly, we would recommend going forward with an ethnographic approach. As the dashboard has been well received, the next steps will be exploring what kind of widgets should be added to the widget gallery. Through expert interviews and observation, the Wolftech team could develop a gallery of widgets that suits every journalist using their system.



## Personalisation

In addition to the features we decided to move forward with during the first iteration, there are a few other concepts we would recommend the Wolftech team to take another look at. One of these is the Feeds personalisation feature. This concept lets the user personalise the visual aspects of the columns on the Feeds page.



## Develop Discover concept

We would further recommend working on the Discover part of the feeds. Based on the user tests, there seems to be an interest in the concept, but it is still in its early stages, and the functionality of the prototype is too limited.



## Workflow

Lastly, we'd like to see how we could incorporate the new features in the Feeds page into the overall workflow of a journalist with as little friction as possible. Our ambition is to make the transition from research to writing seamless. One way of doing this is by introducing a multitasking feature that would allow the user to start writing from the Feeds page. The writing function would be easily accessible in all parts of the Feed. When clicking the button, the screen would split into two parts. The left side will continue as a compacted Feeds screen, while the right side will open a blank file for note-taking and writing.

# Learnings

We had a great experience working with Wolftech and communicated well from the beginning. Still, we stumbled upon some challenges during this project.

## 💡 Improve an established product

Designing within an already existing tool instead of developing a new product has been a valuable experience. We learned to take charge of our own project, whilst adapting to the already existing solutions. Furthermore, implementing new features into an established wireframe caused problems. The users often focused on insignificant parts of the prototype instead of the features we wanted to test.

## 💡 Different workflows

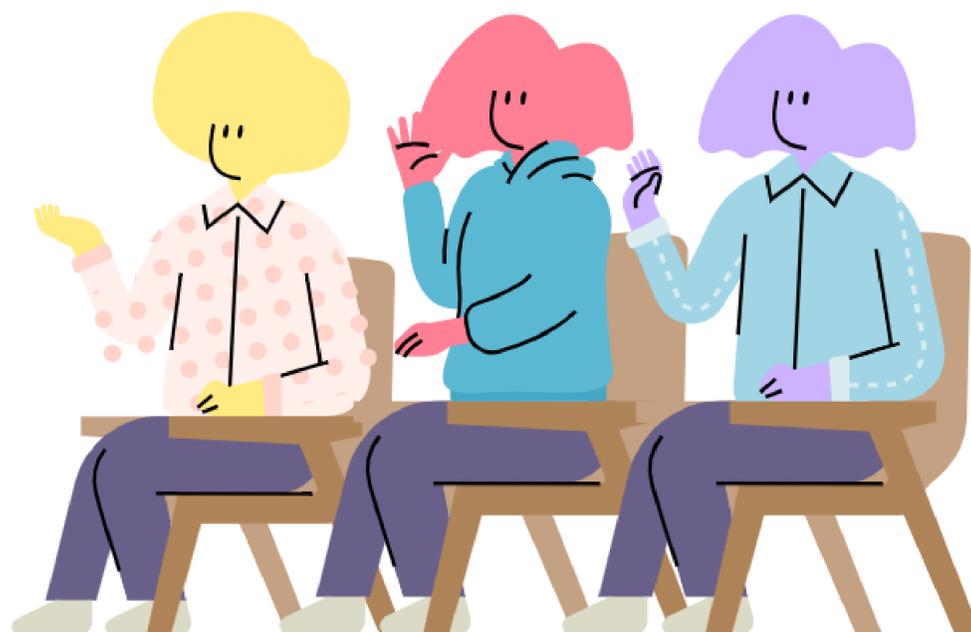
We discovered that journalists needed different elements in their workflow. This is the reason why we ended up with a solution to be customised to fit each journalist's needs.

## 💡 Digital Design Sprint

Digital Design Sprints are intense, in order to prevent screen fatigue, the workshops should be limited to three hours. This means that, what is normally done in six hours, had to be done in half the time. Still, running the sprint online has also been helpful as more of the Wolftech team could join digitally.

## 💡 Our friends, Zoom, Figma & Miro

Zoom, Figma and Miro have been crucial assets, as members of our group have been living in different parts of the country. These programs have facilitated our collaboration, with minimal issues, this entire semester. As a result of this, every group member has gained a lot experience in online collaboration and in using these tools.



# Bibliography

Knapp, J., Zeratsky, J. & Kowitz, B. (2016). Sprint: How to solve big problems and test new ideas in just five days. Transworld Publishers Lts.

## Links

First prototype:

<https://tinyurl.com/firstprototype>

Second prototype:

<https://tinyurl.com/secondprototype>

Third prototype:

<https://tinyurl.com/thefinalprototype>

Prototype walkthrough video:

<https://youtu.be/APfuDuMJdfM>

