



Hurricane Top Card + Info Hub | Research Report Q3' 2021

1. Summary

1.1. Delighters

1.2. Frustrations

1.3. Show Reel

2. Actionable Insights

3. Delighters

- 3.1. 100% of users found the most value in map because they can track the dates when and where the hurricane will hit near their location
- 3.2. 100% of users liked the option to track past and current hurricanes because they may happen consecutively during the hurricane season
- 3.3. 50% of users found local resources helped them plan ahead for evacuation preparedness
- 3.4. 30% of users found tabs enable them to get to each section quickly

4. Frustrations

- 4.1. 30% of users found Hurricane Top Card blue color scheme is subdued and did not communicate a sense of urgency
- 4.2. 50% of users expect more context from Hurricane Top Card e.g. location, precipitation, wind speed
- 4.3. 60% of users expect map to provide warnings, rain radar, estimated time and category scale along the the trajectory path
- 4.4. 50% of users found the news section irrelevant because it isn't local news.
- 4.5. 30% of users did not find Tweets helpful and preferred more hurricane related information
- 4.6. 20% of users expect to see live updates to track the latest development of the current hurricane

5. Appendix

5.1. Overview

5.2. Research goals

5.3. Primary research questions

5.4. Study Methodology

5.5. Participants' Profiles

1. Summary

10 participants from Florida we spoke with perceived Hurricane Top Card + Info Hub as "helpful" and "informational" due to the following reasons:

1.1. Delighters

- 100% found the most value in map because they can track the dates when and where the hurricane will hit near their location
- 100% of users liked the option to track past and current hurricanes because they may happen consecutively during the hurricane season
- 50% found local resources helped them plan ahead for evacuation preparedness
- 30% found tabs enable them to get to each section quickly

1.2. Frustrations

While participants understand the purpose of Hurricane Info Hub, they do not find the information local enough to keep them better informed due to the following reasons:

- 30% found Hurricane Top Card blue color scheme is subdued and did not communicate a sense of urgency
- 50% expect more context from Hurricane Top Card e.g. location, precipitation, wind speed
- 60% expect map to provide rain radar, time and category scale along the the trajectory path
- 50% found the news section irrelevant because it did not show news around their local area.
- 30% of users did not find Tweets helpful and preferred more hurricane related information
- 20% expect to see live updates to track the latest development of the current hurricane

1.3. Show Reel

Showreel is a compilation of selected video clips to provide direct exposure to the participants' feedback. Best viewed alongside with the full report.

https://s3-us-west-2.amazonaws.com/secure.notion-static.com/6e8e25f4-59b5-4b18-8696-51423da17f16/showReel_TP6_Hurricane_Hub.mp4

2. Actionable Insights

Based on the summary, we have identified the following insights to address. We plan to prioritize with product manager and engineering team for continuous improvement.

List of actionable insights

| Aa No. | ☰ Insights | ☰ Recommendations | ☰ Prioritization (PM + Engineering) | ☰ JIRA ticket/Notion |
|---------------------|--|---|-------------------------------------|----------------------|
| 3.3 | 50% found local resources helped them plan ahead for evacuation preparedness | Work with @Afra Wang to identify how to develop local resources e.g. county vs city level. Applicable for all disasters (Wildfires/Hurricanes/Winter Storms) | | |
| 4.1 | 30% found Hurricane Top Card blue color scheme is subdued and did not communicate a sense of urgency | Consider using a consistent color scheme for tropical cyclones based on the Saffir–Simpson scale. https://en.wikipedia.org/wiki/Template:Storm_colour | | |
| 4.2 | 50% expect more context from Hurricane Top Card e.g. location, precipitation, wind speed | Work with backend engineer to identify National Weather Service or Accuweather severe weather real-time alerts to display on the Top Card. | | |
| 4.3 | 60% expect map to provide rain radar, time and category scale along the the trajectory path | Display alerts, category scale. precipitation, estimated date and time hurricane will hit. | | |
| 4.4 | 50% found the news section irrelevant because it did not show news around their local area. | 1. Pull city or county level news which will affect users'. Allow users to filter different counties to display news. 2. Cap news feed at a maximum of 5 news line items and display a Show more news link to display the last 5 Switch tweets into a carousel. | | |

| Aa No. | ☰ Insights | ☰ Recommendations | ☰ Prioritization (PM + Engineering) | ☰ JIRA ticket/Notion |
|-----------|---|--|--|-------------------------|
| 4.5 | 30% of users did not find Tweets helpful and preferred more hurricane related information | Display tweets as the last section. Consider a carousel to swipe through instead of incessant scrolling. | | |
| 4.6 | 20% expect to see live updates to track the latest development of the current hurricane | Add the latest live update status on page banner. | | |

3. Delighters

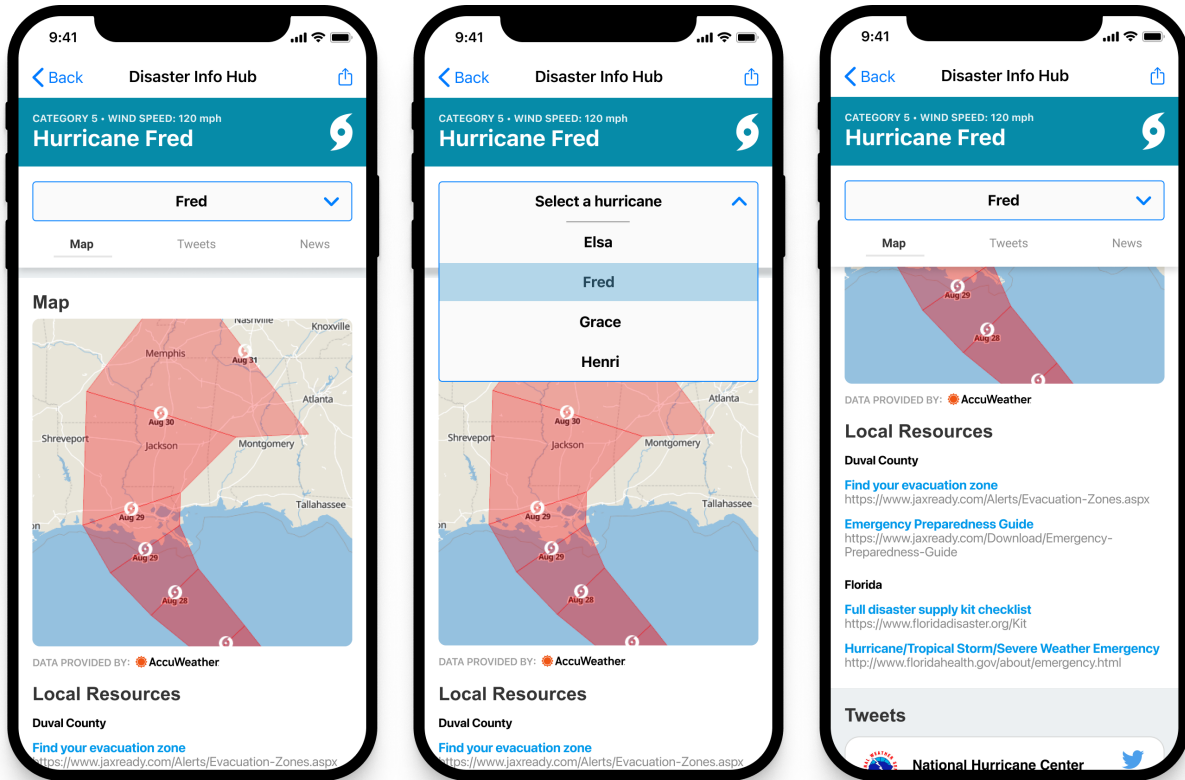
3.1. 100% of users found the most value in map because they can track the dates when and where the hurricane will hit near their location

On the info hub page, 100% of users would look at the category scale and wind speed on the page banner (high-level) to set their expectation while looking at the map (details) in tandem. Both provided them a summary of the severity of the hurricane. They mentioned they would zoom into the map to view dates along the trajectory path to understand whether the hurricane affects where they live.

"I would say the most helpful information to me would be the category right here, the wind speed, and the map to show it's track. Category and wind speed are two very important things of a hurricane. To know what to expect. To know whether it's going to be a bad hurricane. Moderate or a light where you don't have to put up shutters. You need to know how to prepare based on its strengths. Anything you have to clear out from your backyard based on the wind. And the map shows its track so you can see if your area is in, it's pretty easy to track or not." - P1 (Female, 22yo)

"Lastly, I liked the amount of information that was given within the "hurricane" section. I did not expect to see information about local resources such as checklists and guides." P2 (Female, 40yo)

"It has a wind speed, which is great because Category 5 to me, I'm not, you know, like I don't really know what that for sure entails." - P6 (Male, 35yo)



3.2. 100% of users liked the option to track past and current hurricanes because they may happen consecutively during the hurricane season

When asked to describe how would they track past and current hurricanes, 100% of users mentioned they focused on the trajectory path to inform them where and when. They said past and current hurricanes may hit on the same areas and they would like to be know how to prep ahead for evacuation.

"You need to be able to be prepared for multiple storms. I mean, that's just the reality of hurricane season for much of us. So at any given time, you need to be able to check a couple, you know, especially recently you know, I think this, I mean, I don't remember every single named storm there was a bunch in a row, but these all sound, i mean I'm pretty sure these hall from this year, so as you can see at different points, it may have been multiple that you need to track. And so I'm having the struck down feels very important. Um, otherwise, if I would come here. How do I flip between Fred and in Henri, you know, or Grace." - P3 (Male, 36yo)

"I love the fact that you can select the hurricane that you're looking at. Because then while hurricane season this not only one but the several going at the same time, there's usually one behind the other or maybe sometimes 2 at the time. So this is really good." - P5 (Female, 44yo)

3.3. 50% of users found local resources helped them plan ahead for evacuation preparedness

Users were delighted to see local resources targeted at their county level. They found having access to a list of nearby evacuation zones is important during state of emergency. They mentioned having guides and checklist to assist them during hurricane season is helpful and essential. 1 user expect to see emergency phone numbers listed to offer assistance.

"Finding your evacuation zone. I think that's probably more useful because you know that all that will be specific to you. Um, you know, and, and, and learning what, you know, what area or what kind of impact your specific location might, might have in terms of flooding, wind damage, etc. So I think, you know, find your evacuation zone and emergency preparedness guide is probably the most useful information because that's probably specific to you know, most specific to your specific location." - P7 (Male, 32yo)

"Probably some phone numbers that I can call and case of the hurricane. Stuff like that. You know, um, oh, something is happening. I don't know local, you know, local phone numbers like radio stations or hurricane relief shelters, stuff like that. And another one in

this situation would also be a map showing shelters near me. It will show my location and, and all the shelters that are around my location. That would also be pretty useful." - P8 (Female, 27yo)

3.4. 30% of users found tabs enable them to get to each section quickly

Users found tabs reduced incessant scrolling. They recommended to prune down the number of news articles to 5 and provide a Show more link if users want to see more articles. They sounded annoyed having to scroll a lot to get to the news or scroll back up to the map.

"A lot of the tweet feeds are great and even some of the top news, but I wouldn't show 123, okay, 3 tweets, it's perfect. So I'm going to say 3 at most and then the opportunity to see more which you have. And then for the news was that 12345. There's a lot. I would actually do something similar just to limit the scrolling unless I wanted to. I would probably have the top 4 or 5, and then you know, the ability to see more if I click something similar to see more tweet, see more news." P6 (Male, 35yo)

4. Frustrations

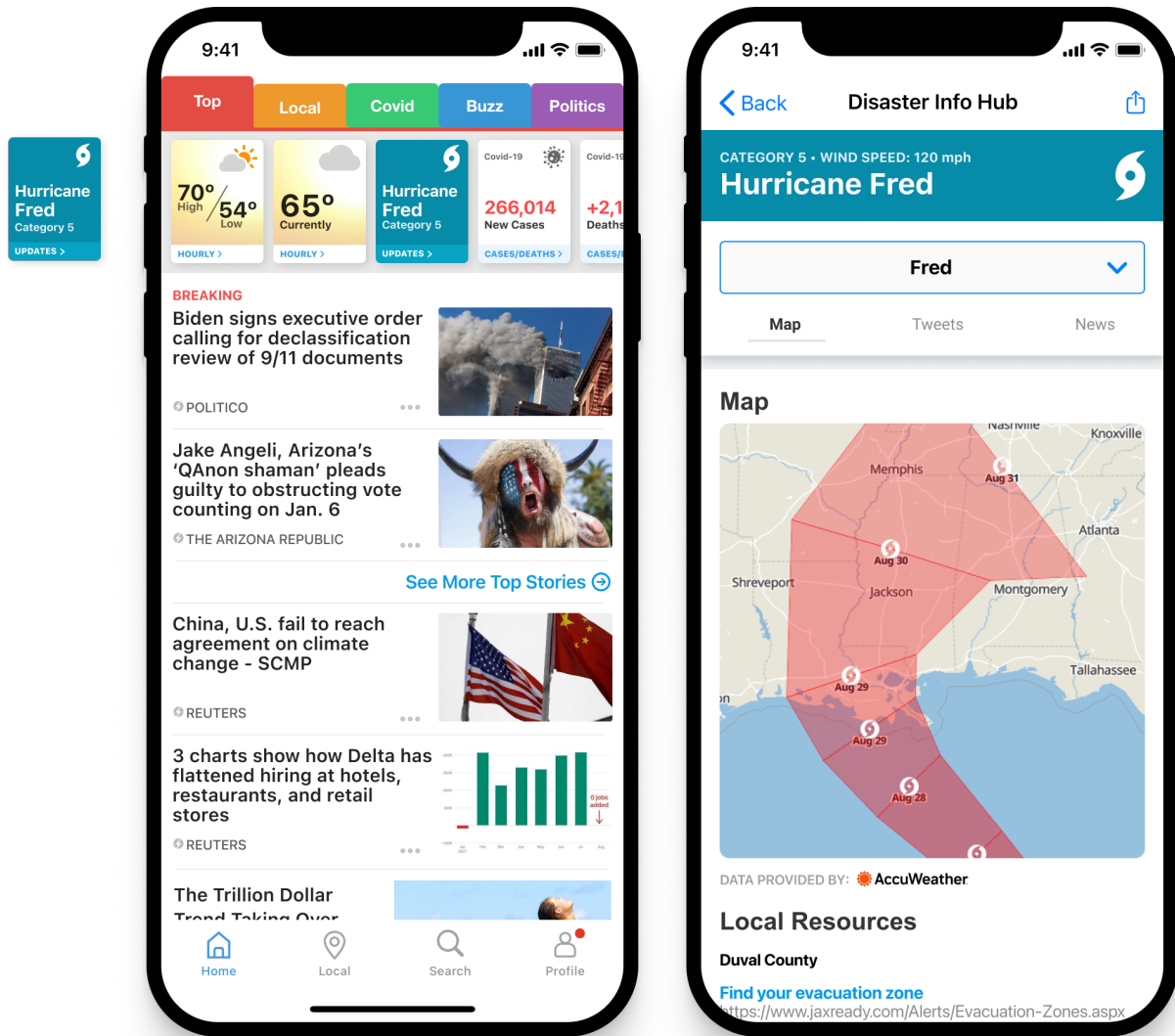
4.1. 30% of users found Hurricane Top Card blue color scheme is subdued and did not communicate a sense of urgency

Users regarded red as a color of danger which accurately display Category 5 as a sense of emergency. They found the blue color scheme subdued and calm which does not arrest their attention.

"The only thing that I would probably change about the card is changing the color. Maybe making it in red because I feel like hurricane and especially because it's a category 5 that's like bang on. So me. So I feel like the color of the card would be the only thing that I would change about it." - P2 (Female, 40yo)

"I would immediately move the hurricane block on the main page down and have it in white letters with a red background and have the map image there as well it doesn't stand out at all currently and having it as I recommend will make it stand out and create a sense of urgency." P6 (Male, 35yo)

"If there were to be red or something similar to red orange, i would be more alarmed and more panicky. So that's how I feel." - P8 (Female, 27yo)



4.2. 50% of users expect more context from Hurricane Top Card e.g. location, precipitation, wind speed

While users understand the size constraints of the Top Card is unable to include more critical information, they mentioned having the hurricane name and category scale did not provide enough context. They were unable to tell if the hurricane is currently happening in their local area or not. They felt having the category scale without wind speed did not provide a full picture how severe the hurricane gets. They expect to see rainfall information which is closely related during hurricane season.

"Maybe you can um also put the it's current on location on there." - P4 (Male, 25yo)

"So I feel about the information display, it doesn't really say much of the then hurricane Fred, category 5, there's no like a picture of a path or anything. So I guess that could be another opportunity because you know, hurricanes are not year round. So to have almost like a bigger image, like the projected path or something where it's on, it's literally the same size as that, the Biden, like that entire little block would make it more noticeable because to me it's just like, okay, cool, is there, it must not be a threat because it's not even under breaking." - P6 (Male, 35yo)

"Um I guess it is kind of vague. You can say like I would maybe add like the when speed zoom there and like the, the rain fall maybe I don't know if that's like a thing and whether I can see like the chance of precipitation. Maybe I don't know. But I feel like it's pretty vague on the description of it." - P9 (Female, 21yo)

4.3. 60% of users expect map to provide warnings, rain radar, estimated time and category scale along the the trajectory path

Users expect more detailed information on the map based on their experience visiting other weather forecast sites e.g. National Hurricane Center (NHC). They expect to see when and where the rain hits, estimated time the hurricane hits, category scale and evacuation zones in real-time. 1 user mentioned he would like to see animation of the hurricane moving along the trajectory path.

"Put that estimated um severity of the hurricane on the map as we move along the trajectory so maybe the information should be there." "Um why? Because you know, I want to know if I need to take um any measures to protect myself or my family. And that depends on the severity and trajectory of the hurricane." - P4 (Male, 25yo)

"So it would be nice if I could see, for example, on the map with a toggle between the original like projected path and the current path. And even if it had like, if it was more like interactive or animated, if it was animated in like real time and showing like the rain radar on it, I would like to see the actual like rain radar on it with how many inches of rain it's supposed to hit are supposed to hit certain areas and also one that shows like the wind speeds that's projected and then the project didn't actually happen one. So that way, I know I just think that for those reasons it would help with accuracy." - P6 (Male, 35yo)

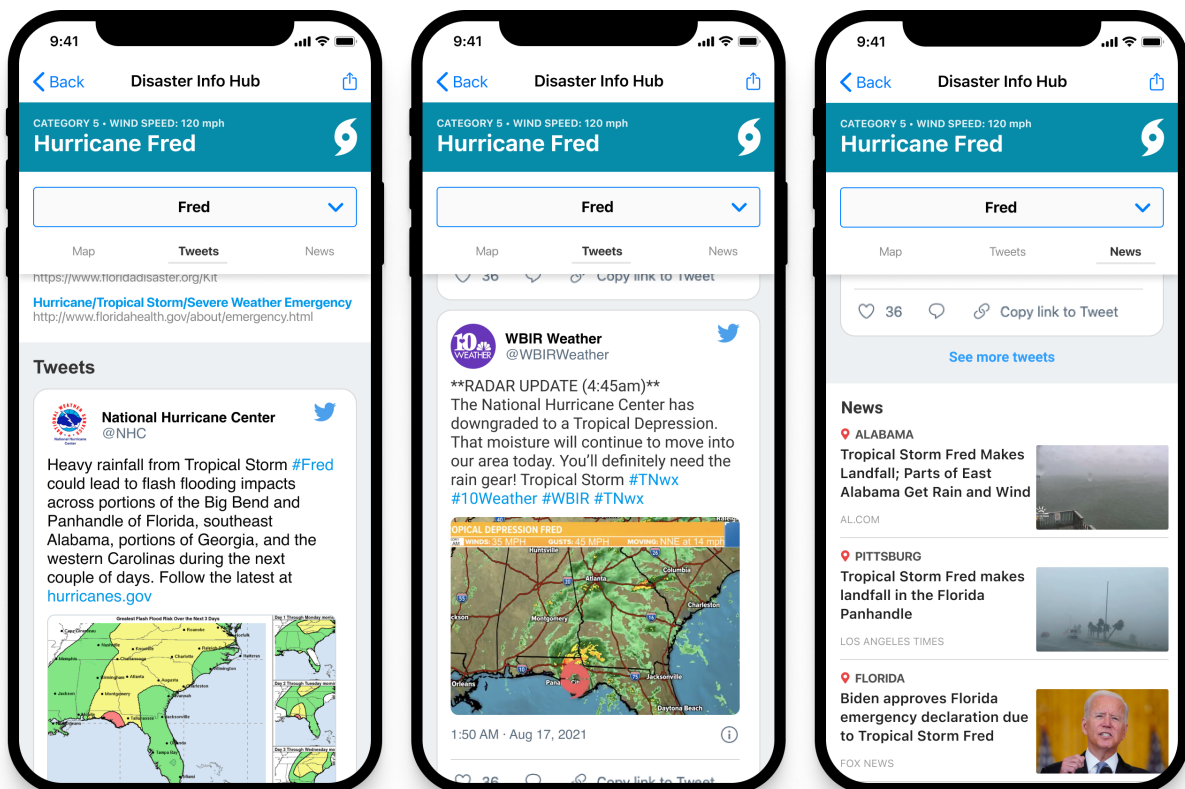
4.4. 50% of users found the news section irrelevant because it isn't local news.

Users expect to receive hurricane related news from their state or county. They perceived local news as live updates to track the latest hurricane season. 1 user preferred the option to watch videos which featured interviews with the locals.

"I would like to have local news. Local news and a little tab. That's right here with a little videos that you can click on and see the latest in local news regarding the storm." - P5 (Female, 44yo)

"I would say it is probably the least relevant least helpful to me because it's not necessarily tailored to um, the local information that I'm or that I would be most concerned about." - P7 (Male, 32yo)

"Um Probably the rest like other news because you know, I tap on the hurricane card to view information about hurricanes, not to look at other news stories." - P8 (Female, 27yo)



4.5. 30% of users did not find Tweets helpful and preferred more hurricane related information

Users preferred to see more hurricane related information. They would prioritize local news than tweets. They found the tweets took up a lot of real estate which they have to scroll incessantly to read. They expect to receive tweets from trusted sources only.

"I probably wouldn't use that section too much. I would probably mostly use the map and the news because those are the two information sources I use mainly to find out about hurricanes and the tweets they're not, not helpful again, like they're from certified people." - P1 (Female, 22yo)

"But like how is that relevant to me? Is it because somebody got 36 likes and so the aggregator picked it up, or is it, is it because there's an actual attempt to include tweets from people who are on the ground and maybe members of the public not news. So that's kind of an interesting, I wonder, you know, what the point of that is probably the least helpful." - P3 (Male, 36yo)

4.6. 20% of users expect to see live updates to track the latest development of the current hurricane

Users expect to see live updates to keep themselves informed. 1 user recommended a live updates tab which she can track on a daily basis.

"I would kind of just want to see like a real time or live update like in certain hours of the day or if like a certain news outlet, whether places certain updates like certain times of the day. Like I know some do like 4am, 6am or something like that. I would kind of want that option there." - P10 (Female, 23yo)

5. Appendix

5.1. Overview

On September 2021, using a [Figma prototype](#) we conducted a evaluative research study with **10** users (or 100% of users) in the age range of 21yo-44yo on [usertesting.com](#) to understand the perceived value of Hurricane Disaster Top Cards and Info Hubs brings. This document describes insights as well as "users" frustrations identified through direct observation of interacting with Top Cards and Info Hubs. They provided us with greater understanding of SmartNews user, as well as identify opportunities to continuously improve the user experience.

5.2. Research goals

- Understand users' perceived value of Hurricane Top Card + Disaster Info Hub
- Identify the type of map information which adds value to users
- Describe users' insights and frustrations
- Identify areas of the design that are not intuitively discoverable or may slow down the effectiveness of users in completing their task(s)
- Provide directional feedback to address usability issues and pain points with cross functional team

5.3. Primary research questions

5.3.1. Hurricane Top Card (aka TC)

- How do users feel about the severe weather alerts display on TC e.g. Category 5?
- How do users find out more information about the TC?
- What do users expect after they tap on the TC?
- What are the points of frustration?

5.3.2. Disaster Info Hub

- How do user browse the hub?
- How do user feel about using the navigation tabs?
- What information is the most helpful to them?
- What information is the least helpful to them?

- What other information is do they expect to see?
- What are the points of frustration?

5.3.3. Map

- How do user feel about using the map?
- What is user's perceived value of the map?
- What information is the most helpful to them?
- What information is the least helpful to them?
- What other information is do they expect to see?
- What are the points of frustration?

5.4. Study Methodology

A remote research study was held using usertesting.com. We test with 10 customers. Each customer's session lasted 20mins and requested them to interact with a prototype through a browser on their laptop using touchpad or mouse.

First, each participant will answer a set of questions, which aim to evaluate their understanding and/or experiences with browsing news sites and/or apps.

Next, we asked participants to complete a series of tasks by interacting with the test prototype which we observe their behavior and capture feedback on the experience.

5.5. Participants' Profiles

10 participants

| <u>Aa</u> Criteria | ☰ P1 | ☰ P2 | ☰ P3 | ☰ P4 | ☰ P5 | ☰ P6 | ☰ P7 | ☰ P8 | ☰ P9 | ☰ P10 |
|--------------------------|-----------------------------------|--|---|--|--------------------------------|-----------------------------|--|---------------------|-------------------------|--|
| <u>Gender</u> | Female | Female | Male | Male | Female | Male | Male | Female | Female | Female |
| <u>Age</u> | 23 | 40 | 36 | 25 | 44 | 35 | 32 | 27 | 21 | 23 |
| <u>Income</u> | - | \$80,000 - \$99,999 | \$80,000 - \$99,999 | Less than \$19,999 | \$125,000 - \$149,999 | \$100,000 - \$124,999 | \$40,000 - \$59,999 | \$40,000 - \$59,999 | \$20,000 - \$39,999 | |
| <u>Employment status</u> | Full time student | Employed full-time | Employed full-time | Employed full-time | Employed full-time | Employed full-time | Employed full-time | Employed part-time | Employed full-time | Full time student |
| <u>Job function</u> | - | Healthcare services | Legal | Education | Operations | Consulting | Business dev | Sales | Product management | - |
| <u>Industry</u> | - | Military | Government | Education | Retail | Food & Beverages | Insurance | Airlines/ Aviation | Apparel & Fashion | - |
| <u>State</u> | FL | FL | FL | FL | FL | FL | FL | FL | FL | FL |
| <u>Social networks</u> | Facebook, Twitter, Pinterest | Facebook, Twitter, LinkedIn, Pinterest | Facebook, Twitter, LinkedIn, Pinterest | Facebook, Twitter | Twitter, Pinterest | Facebook, Twitter, LinkedIn | Facebook, Twitter, LinkedIn | Facebook, Twitter | Facebook, Pinterest | Facebook, Twitter, LinkedIn, Pinterest |
| <u>Web browsers</u> | Chrome, Internet explorer, Safari | Chrome, Firefox, Safari | Chrome, Firefox, Internet explorer, Safari, Opera, Edge | Chrome, Firefox, Internet explorer, Safari | Chrome, Firefox, Safari, Opera | Chrome, Firefox, Safari | Chrome, Firefox, Internet explorer, Safari | Chrome, Safari | Chrome, Firefox, Safari | Chrome, Firefox, Internet explorer, Safari |

| Aa Criteria | ☰ P1 | ☰ P2 | ☰ P3 | ☰ P4 | ☰ P5 | ☰ P6 | ☰ P7 | ☰ P8 | ☰ P9 | ☰ P10 |
|----------------|--|---|--|---|---|--|---|--|---|---|
| <u>Devices</u> | Mac, iPhone, iPad, Home Game Console, Smart TV (with built-in apps), Windows | Mac, iPhone, Home Game Console, Smart TV (with built-in apps), Windows, Streaming TV box (Roku, Apple TV, etc.) | Mac, Windows, iPhone, iPad, Smart TV (with built-in apps), Streaming TV box (Roku, Apple TV, etc.) | Mac, Windows, iPhone, Smart TV (with built-in apps) | Mac, Windows, iPhone, iPad, Smart TV (with built-in apps) | Mac, Windows, iPhone, Smart TV (with built-in apps), Home Game Console | Windows, Handheld Game Console, Home Game Console, iPhone, Smart TV (with built-in apps), Streaming TV box (Roku, Apple TV, etc.) | Mac, iPhone, Home Game Console, Smart TV (with built-in apps), Streaming TV box (Roku, Apple TV, etc.) | Mac, Windows, iPhone, Smart TV (with built-in apps), Android Tablet, Home Game Console, Streaming TV box (Roku, Apple TV, etc.) | Mac, iPhone, iPad, Home Game Console, Smart TV (with built-in apps) |