



The New York Times

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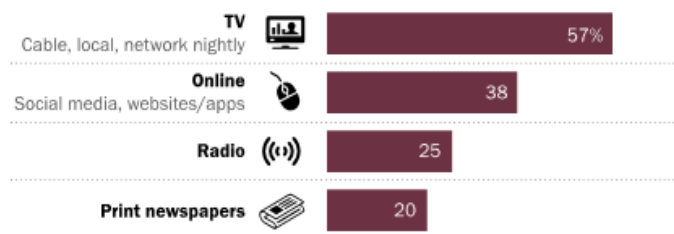
1. Overview

With the rise of use of technology, humans have trusted technology to give them what they require with just one click. In 1980's or 1990's not far back, man would first wake up and try to get in contact with the outside world through the newspaper. Think about what we do now, each of us wake up and check our phones first thing in the morning. Let's look at where people get news from? About 4 in ten Americans often tend to get news online. The following image explains what mediums are used to get news.

Fig 1.1 Stats for mediums used by Americans to get their news.

About four-in-ten Americans often get news online

% of U.S. adults who often get news on each platform



% of each age group who often get news on each platform

	18-29	30-49	50-64	65+
TV	27%	45%	72%	85%
Online	50	49	29	20
Radio	14	27	29	24
Print newspapers	5	10	23	48

Note: Just 1% said they never got news on any platform (not shown).

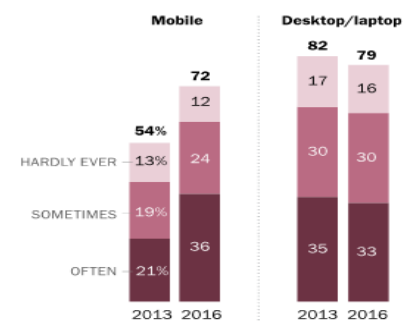
Source: Survey conducted Jan. 12-Feb. 8, 2016.

"The Modern News Consumer"

PEW RESEARCH CENTER

Rapid growth since 2013 in portion using mobile to get news; desktop/laptop usage holds steady

% of U.S. adults who ever get news on ...



Among people who get news on both, more prefer mobile

66% get news from both mobile and desktop/laptop

Of those ...

56% Prefer mobile

42% Prefer desktop/laptop

Source: Survey conducted Jan. 12-Feb. 8, 2016.

"The Modern News Consumer"

PEW RESEARCH CENTER

Fig 1.2 Stats for use on mobile vs desktops

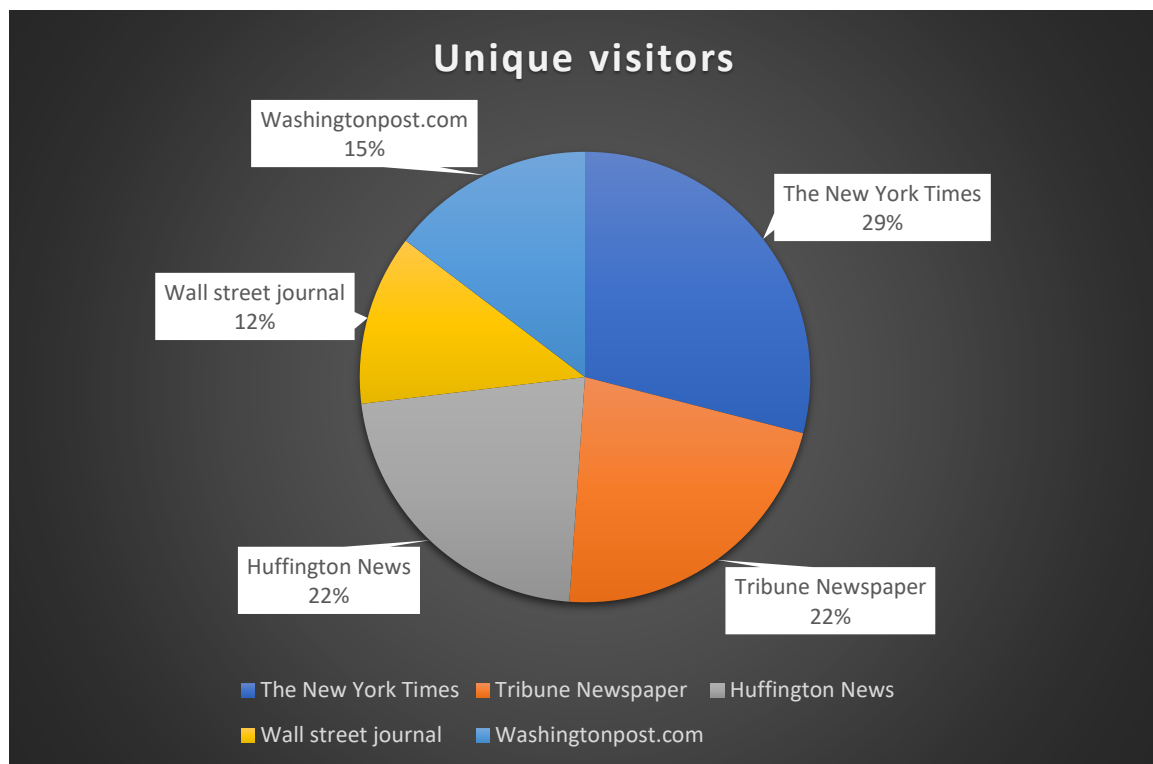


Fig 1.3 Unique visitors for news agencies in the US

The above picture speaks about the unique visitors with different newspapers within the United States. NY Times has the highest number of unique visitors. Considering the images, showing the rise of mobile apps for usage of news NY Times and other newspaper come up with mobile app so that users can get news just within few clicks.

Our project topic is **Enhancing NY Times iOS App**. Firstly, let's get to know more about **What exactly is the NY times?** NY times is the American daily newspaper. It has won 122 Pulitzer Prize compared to any other newspaper. It is currently ranked 18th in the world by circulation. The paper's motto is – "All the News That's Fit to Print" appears in the upper left-hand corner of the front page. In 2008, *The New York Times* created an app for the iPhone and iPod Touch which allowed users to download articles to their mobile device enabling them to read the paper even when they were unable to receive a signal. 2009 was the year the circulation of the NY times declined.

Why we decided to choose the mobile app? iPhone is currently used by 85.8 million users in the United States. The iOS app is rated 1.6/5 on the App Store. Analyzing a couple of reviews, we figured that people are not happy with how the app renders, i.e. the UX of the app.

What a disAPPOINTment! It is very difficult to identify which articles are from today's paper and which come from recent days. As newspaper people they should understand that yesterday's paper is, well, from yesterday. I wish they would try out some apps from German newspapers,

Fig 1.4 Review 1

Funny how a media organization like the NYT, which should be improving our access to News and the discussion with fellow readers, has made it more difficult with its fall 2017 update for iPad. They've junked-up the UI with big photos, perhaps trying to appeal to a less engaged reader, or merely one that isn't as interested in reading the news as they are about quickly seeing it. Tip for you NYT:

Fig 1.5 Review 2

Installed the new app with no problem but I'm really disappointed in the turn the design has taken. I don't need super large photos that make scrolling to find the text a nightmare. C'mon, we're educated NYTimes readers, not first graders who need picture books.

Fig 1.6 Review 3

2. Strategy Plane

Starting from the most bottom plane, the strategy plane is made up of two parts mainly the Product Objectives and User Needs. Each of these sections have further subsections which are explained further in the report. *We addressed what we wanted and what our users wanted.*

This way we defined Product Objectives and User Needs.

2.1 Product Objectives: The question we asked as a group was *What do we want to get out of this product?*

2.1.1 Business Goals: *To provide same content as the newspaper on a mobile device to increase subscriptions.*

2.1.2 Brand Identity: *Deliver same experience as newspaper to that on the mobile device and reinstate the motto "All the News That's Fit to Print"*

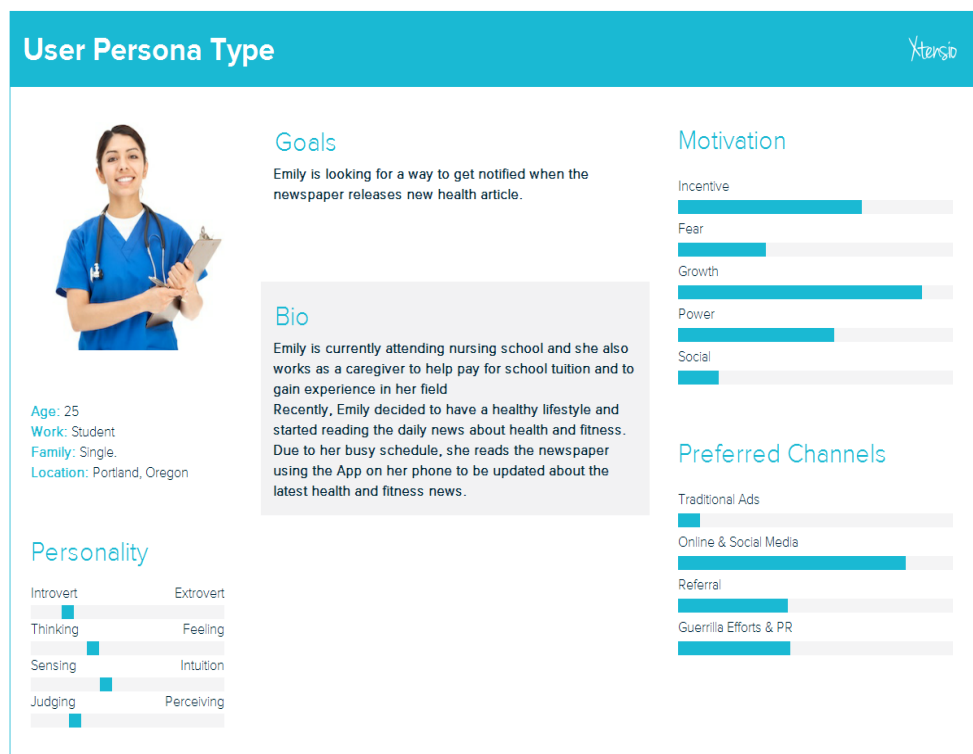
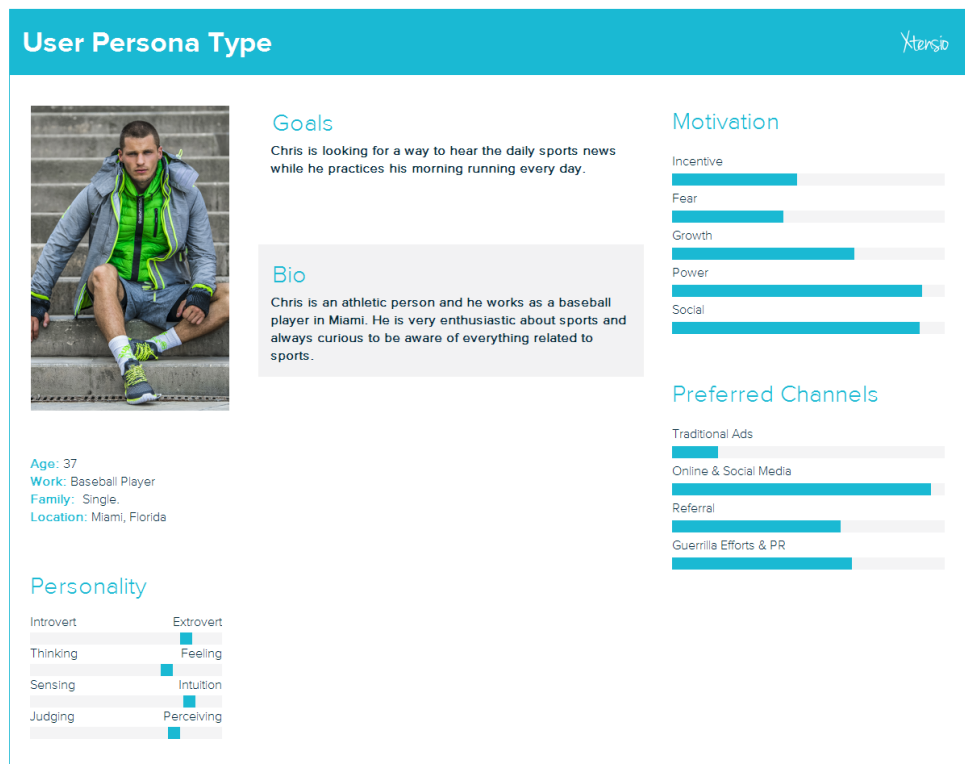
2.1.3 Success Metrics: *Higher Ratings and Complimentary Reviews on the App Store.*

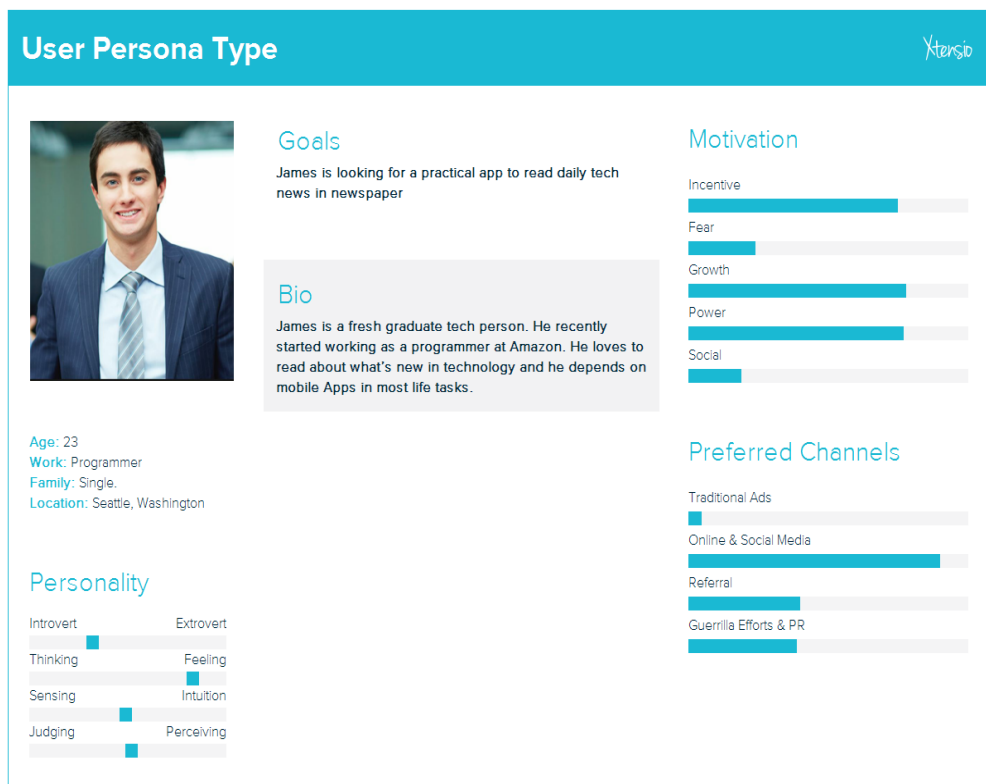
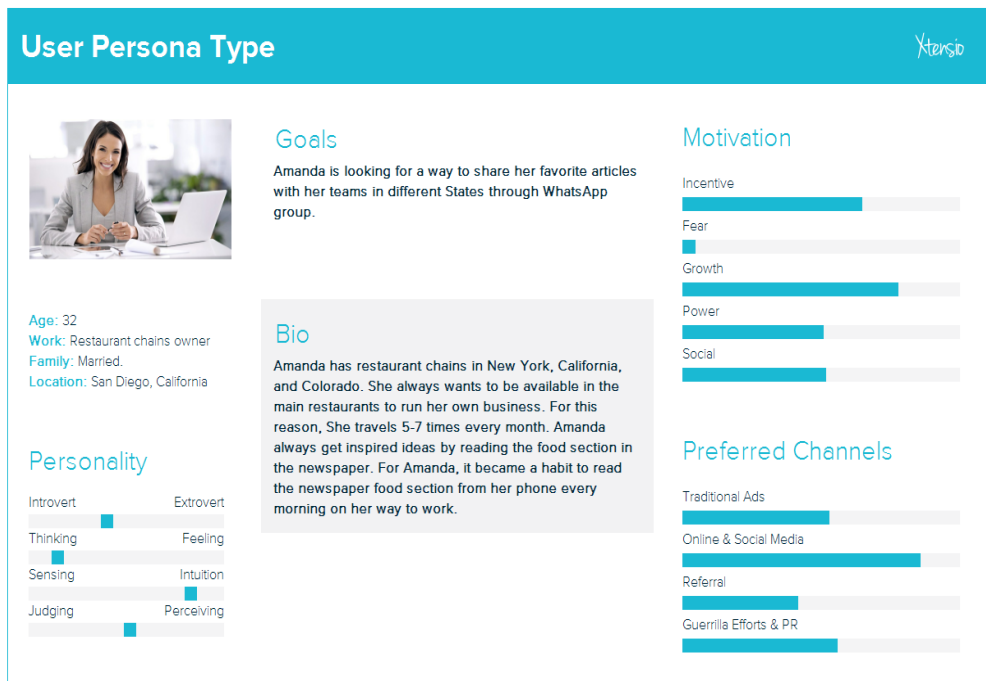
2.2 User Needs: The question we explicitly asked was *What do our users want out of this product.*

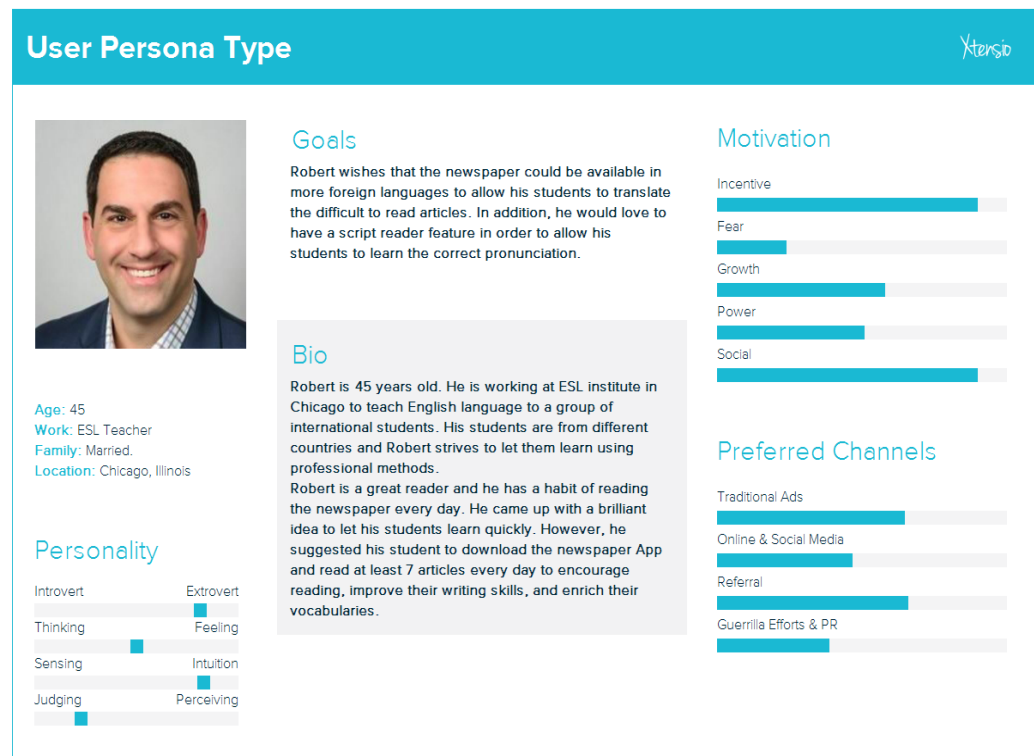
2.2.1 User Segmentation: Through this subsection, we tried to understand *Who are users are? How well verse they were with technology? What was their attitude to reading news on a digital platform versus that on a newspaper? Were the readers just using the app for a gist of the important news or where they looking to get a more detailed perspective?* Answering and Debating about these questions, helped us narrow down our segments. Our segments are as follows: Age, Occupation and Time to read news.

2.2.2 Usability and User Research: For this method, we went ahead and *read the reviews provided by people on the App Store.* Analyzing these reviews, helped us understand better what we would need to include in our design.

2.2.3 Creating Personas: We created a total of five personas to help us not get lost in the process of design and statistics, but give our design a more user perspective.







2.3 Learning

Through this plane, we learned to think from the business perspective, understand the measures for success as well as what kind of users will be using the app, we created a story around our users and analyzed feedback to further understand what our user needs look like.

3. Scope Plane

After figuring out what we want and what our users want, we then moved out to understanding how to fulfill our strategic objectives. One may ask, why is it important to define the scope? For something that is still in air, we need to understand what we can achieve now and later. Defining what we need, helps us achieve our goals better. It also gives a shared area to each person on the team to understand what we are building and what we are not.

3.1 Functional Specification

- To provide the latest news available to the users.
- To provide a downloadable PDF version of the print edition to read online/offline with proper navigation and zoom features.
- To have easy navigation and search functionalities.
- To provide association of related news.
- To provide audible version of either article or newspaper.
- To provide night mode for article headlines.
- To provide larger text feature.
- To provide custom section news which can be added to the main menu.

3.2 Content Requirements

- Users should have real time news and updates delivered through notifications.
- Users should be able to save articles to be read later or offline.
- Users should be able to share articles through other social media applications.
- Users should be able to follow authors of news articles and get notification when author publishes a new article
- Users should be able to comment on articles.
- User should be able to see news for past dates using a calendar.

3.3 Learning

This section helped us define what we want to build for our users and which of that is feasible to provide.

4. Structure Plane

This plane focuses on what the user experiences. The plane is divided into information architecture and interaction design.

4.1 **Interaction Design:** Interaction design is how intuitive the system is with the user. It is the feeling for the user that the user is in complete control.

4.1.1 **Error Handling:** We have tried to design our system to be minimize the number of errors when users are dealing with it.

- Prevention - Our system allows the user to confirm on the selection before proceeding.

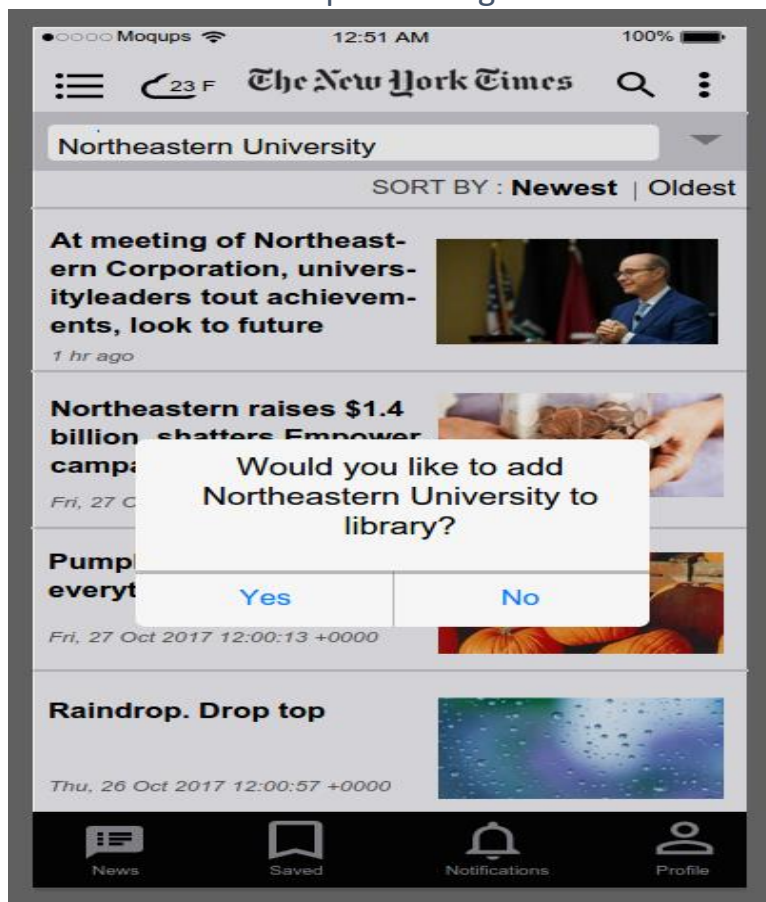


Fig 4.1 Adding Northeastern University to Custom News

- Correction – Auto correct provided while searching.

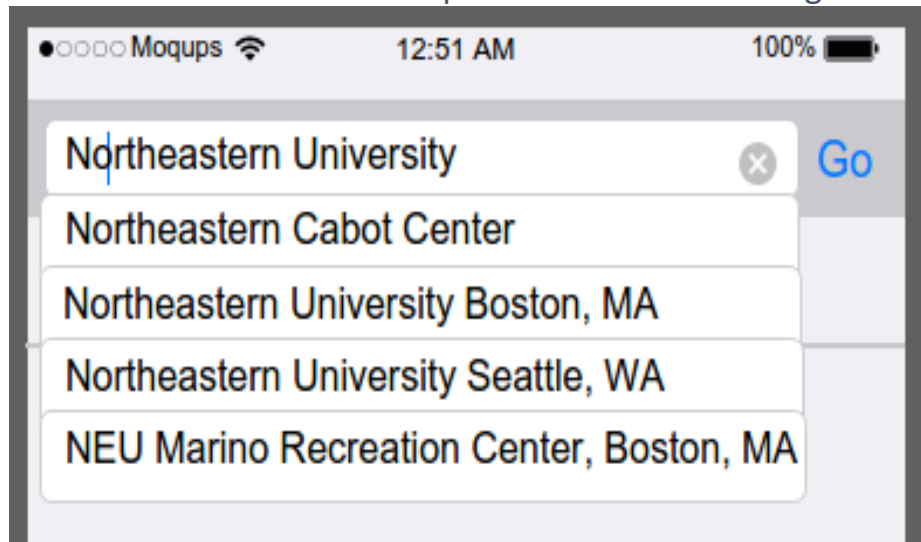


Fig 4.2 Auto correct while searching

- Recovery – To be able to delete a custom added section

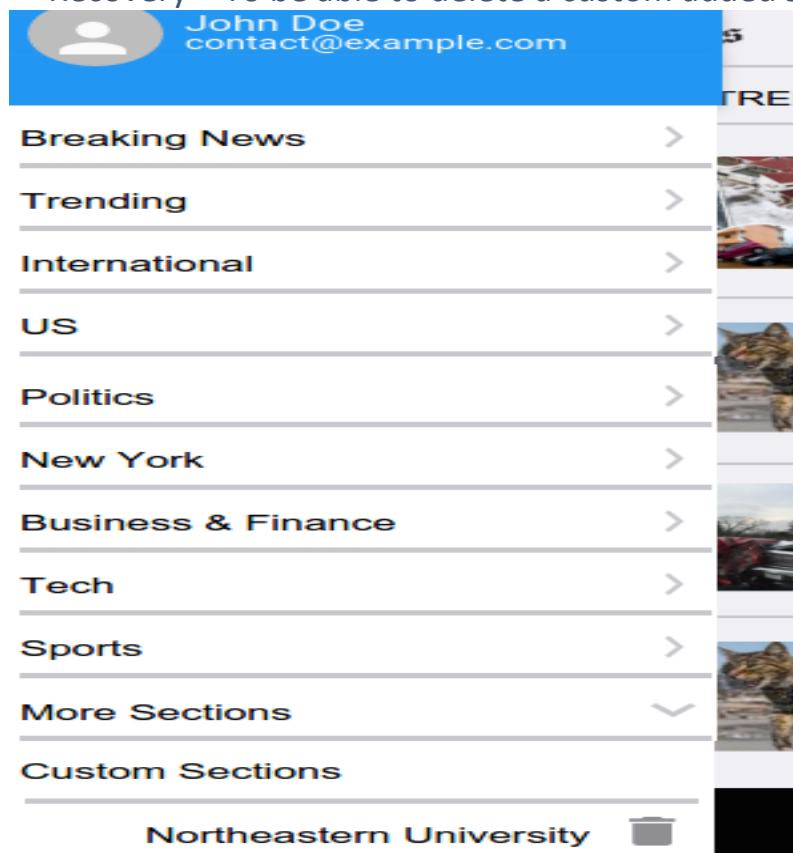


Fig 4.3 Delete functionality for custom news

4.2 **Information Architecture:** For us, Information Architecture seemed like a high-level presentation of how to categorize the information on the

website. The problems we faced were, getting confused between features and information to be included in our Information Architecture.

4.2.1 Structuring Content: We tried both the top down and bottom up approach. We wanted to make sure we didn't include too much when at the top most level, but tried to achieve a balance by using both methods.

Let's look at our scribbling and discussion on the white board. As a team I think, this was one of the fun activities we did as we debated on the process and tried both approaches.

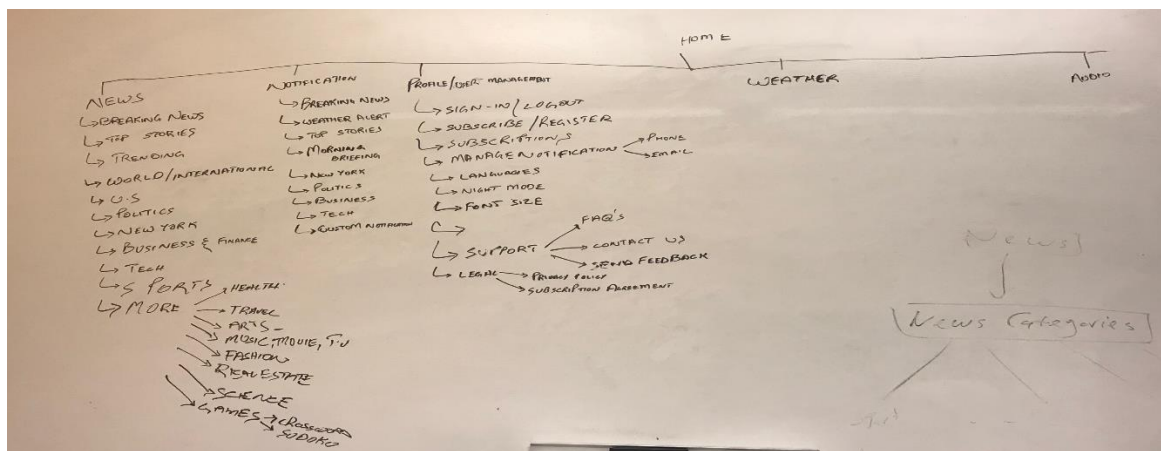


Fig 4.3 Initial scribbling of the Information Architecture

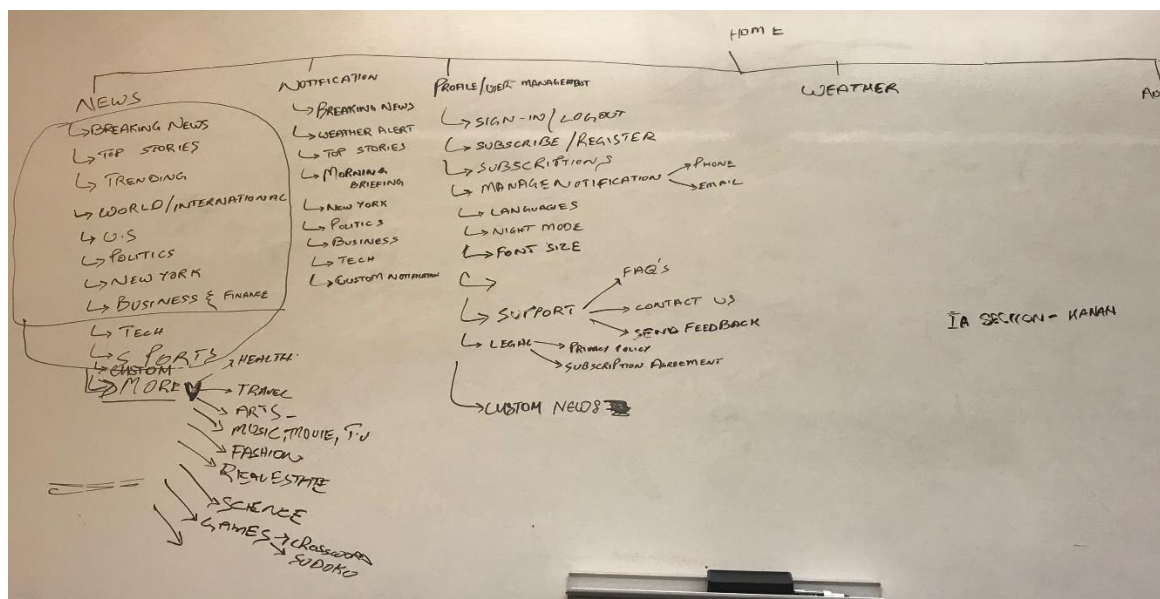


Fig 4.4 Final grouping and scribbling of the Information Architecture

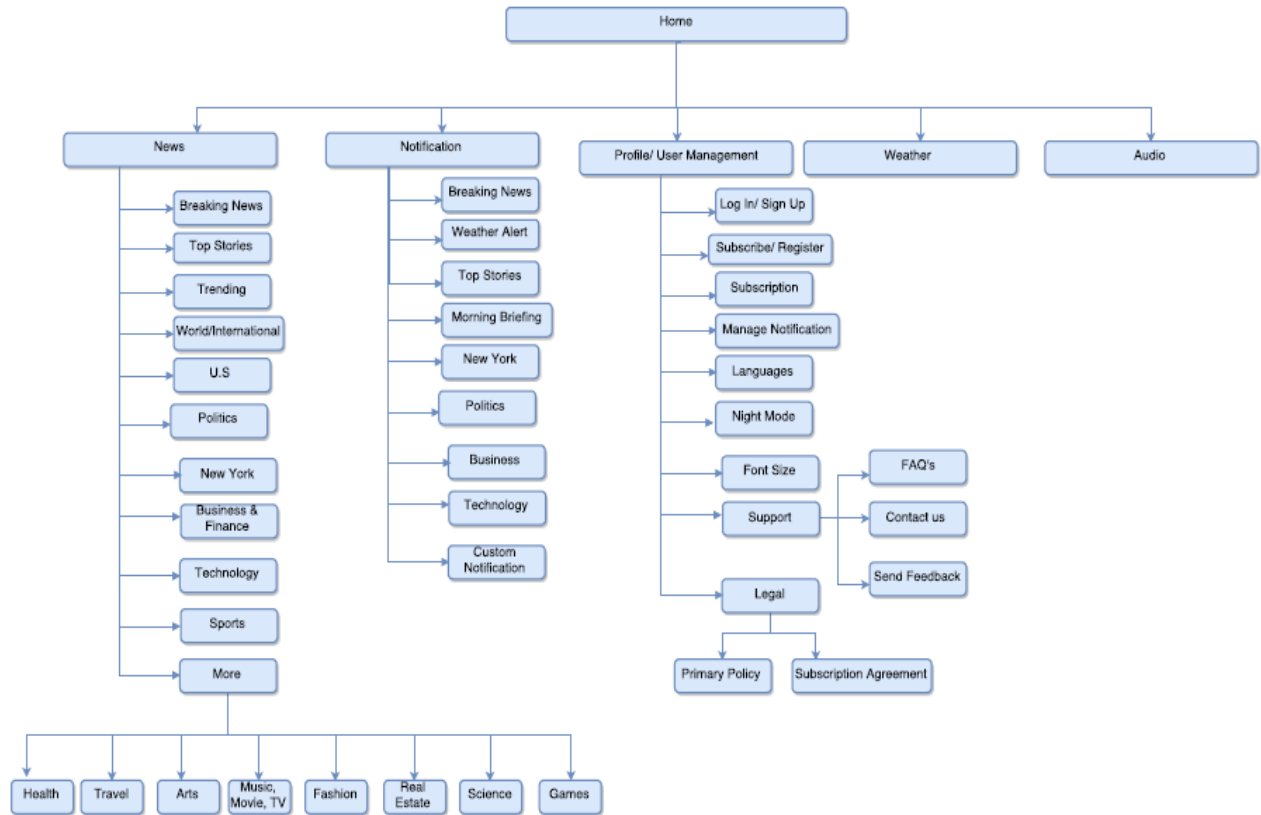


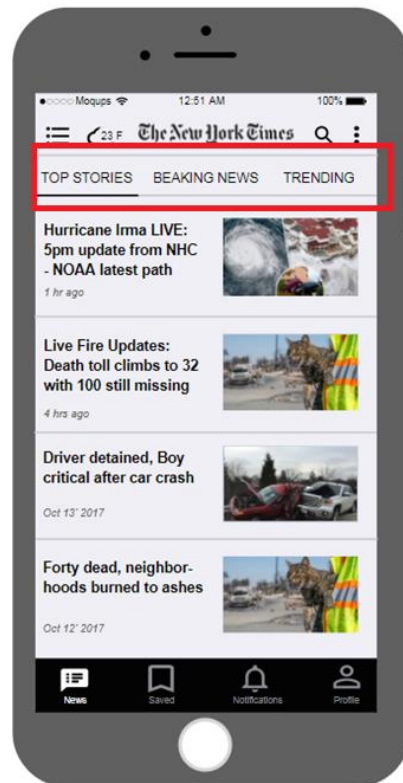
Fig 4.5 Final Presentation of Information Architecture

5. Improvements

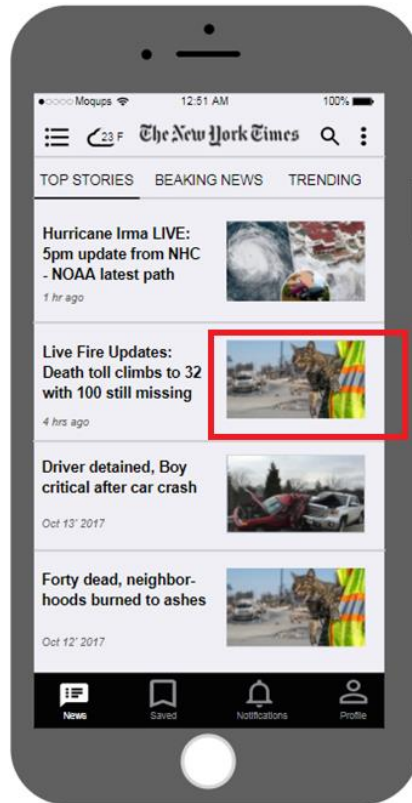
5.1 Wireframes

As per the feedback given by the users and enhancing the user experience, we made following improvements in the design of NY Times iOS app.

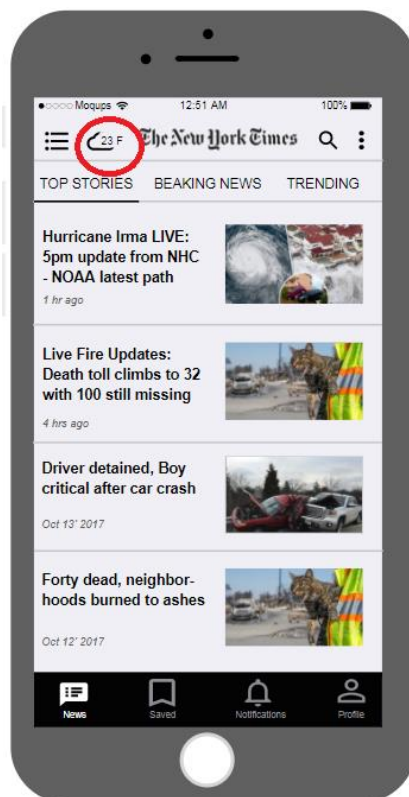
1. Horizontally scrollable navigation bar



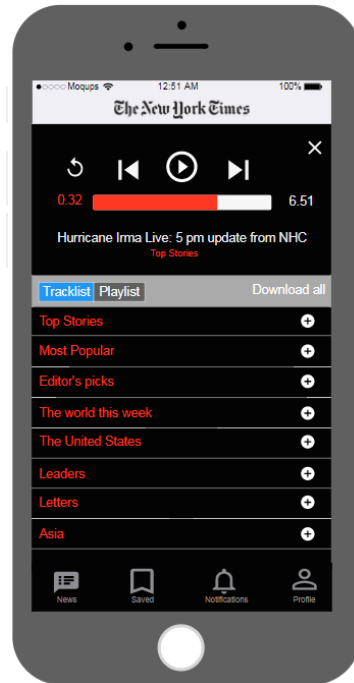
2. Resized and consistent image size



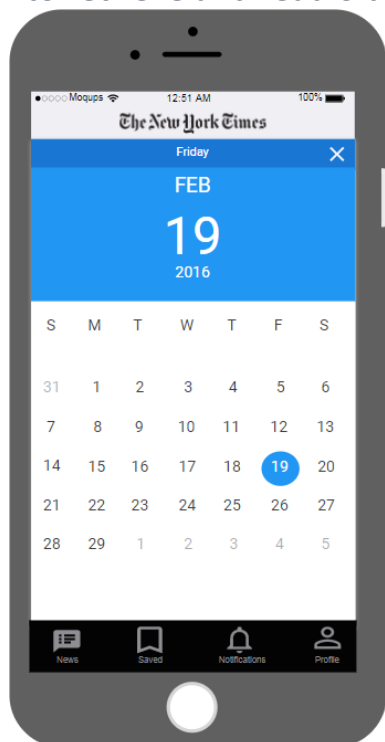
3. Weather updates



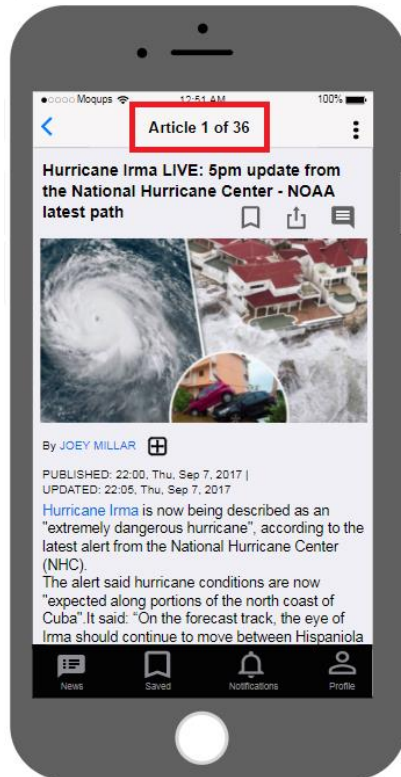
4. Audio feature



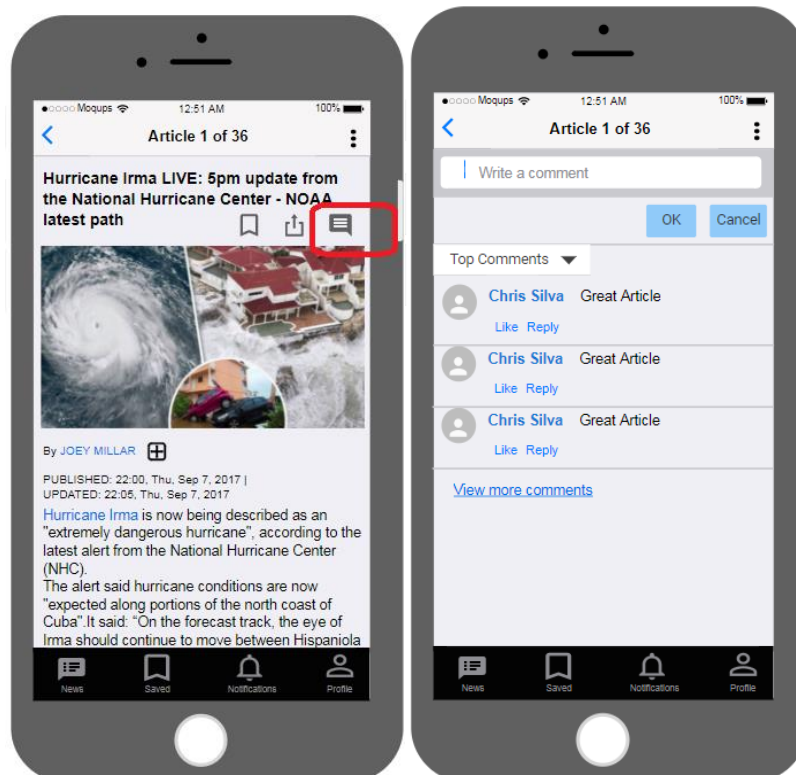
5. A calendar to retrieve and read older archived news



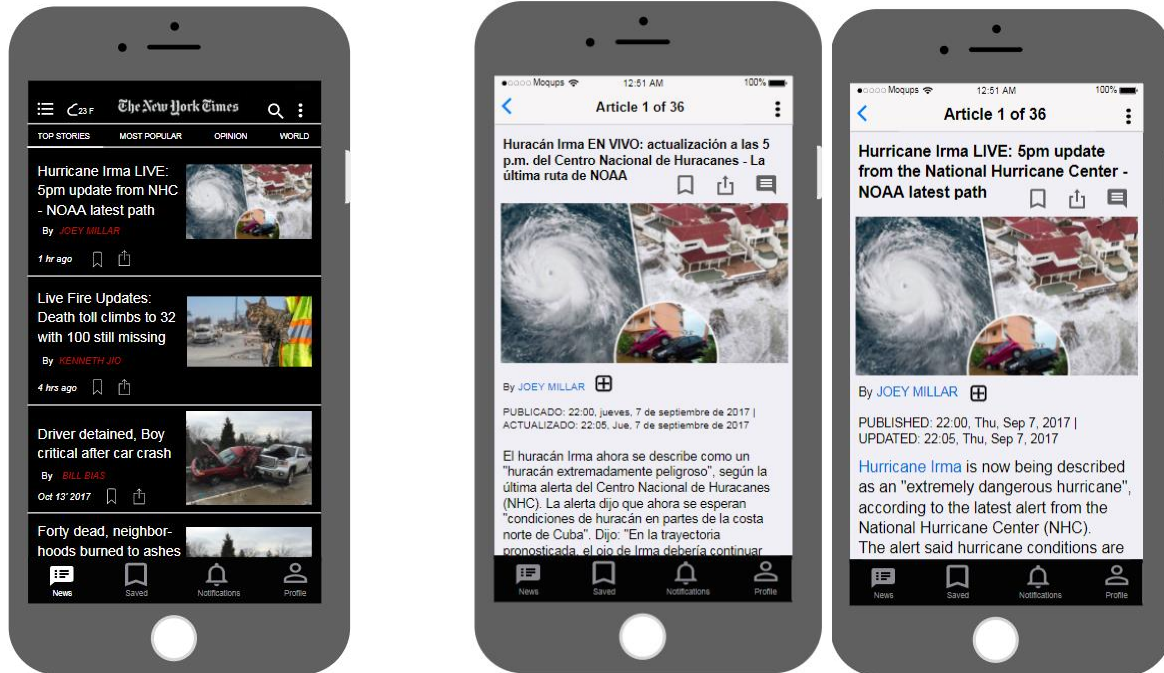
6. Sequencing of articles to avoid confusion



7. Comment feature to add comments to the articles



8. Easy navigation to different sections
9. Ability to add new customized section
10. Easy switch to night mode



11. Easily updatable language and font size

5.2 Feedback session

We also conducted a short feedback session of our iOS mobile design, to understand whether the experience was satisfactory or not and we got the following feedback from the users



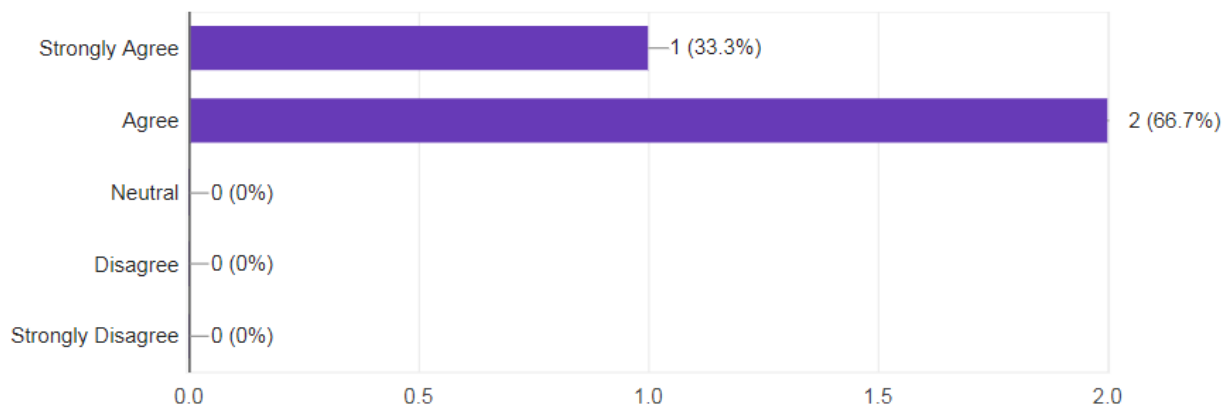
Very good UI Liked the ability to change the font size and listen to the audio version of the article rather than reading	Great UI Liked the Audio feature Liked the Ease of navigation	Maintain consistency of fonts Restructure User profile Good Categorization	Prioritize Make it contextual Make it Easy to see what I must do next
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5.3 Survey

You often read news from the app?

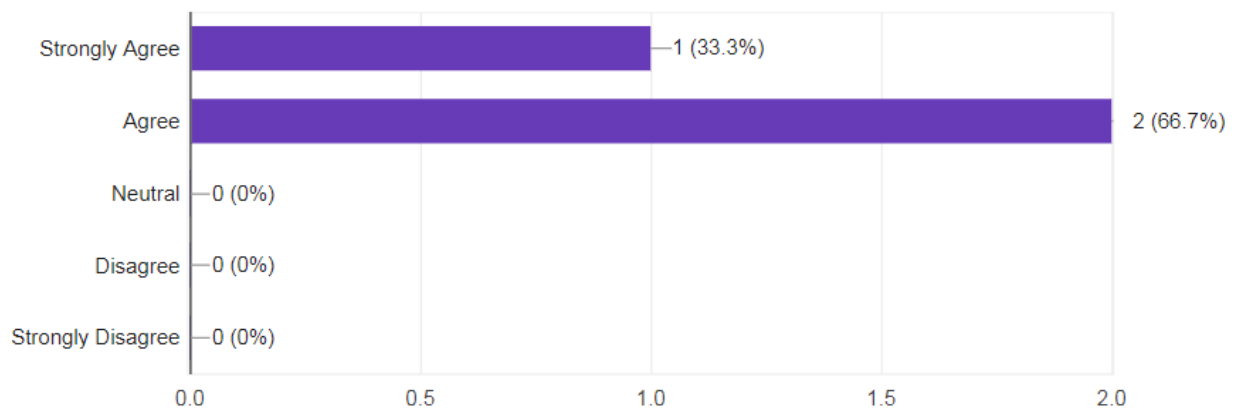


3 responses



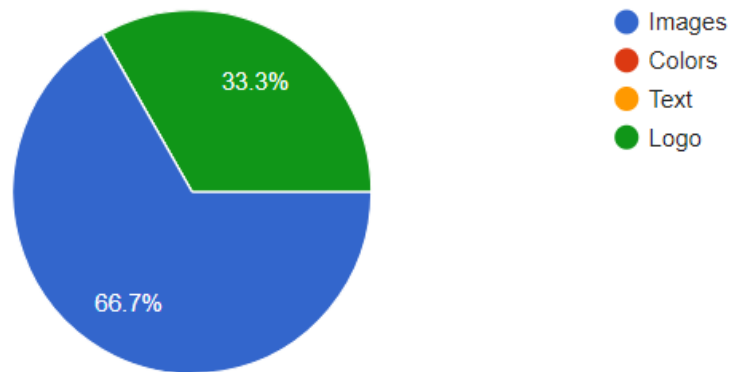
You are satisfied with the content of the news ?

3 responses



What is the most eye catching aspect of the news article?

3 responses



What features you cannot live without?

3 responses

Audio, bookmarks
Night mode, audio, bookmarking
Categorization of content

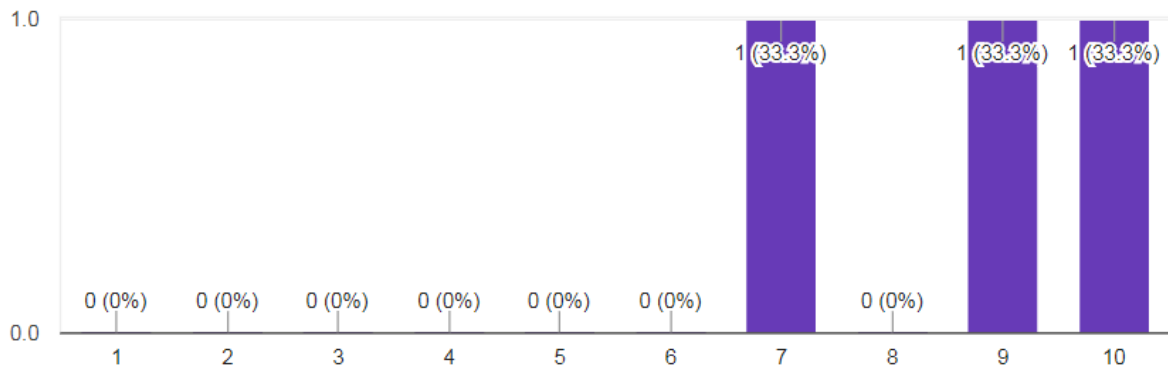
If you could change one thing about the product?

3 responses

Nightmode not necessary
Option to change the font type
Less content on one page

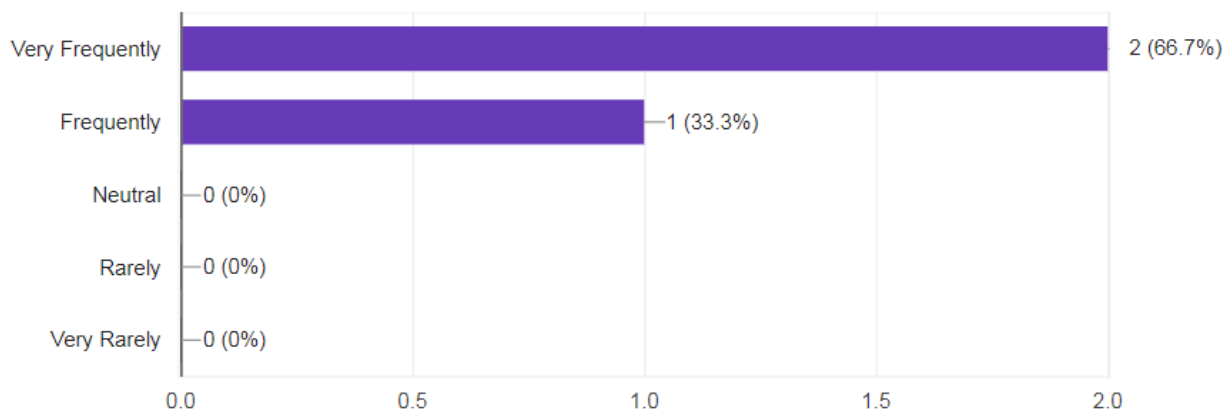
On a scale 1-10 with 1 being the lowest and 10 being the highest, how would you rate the app in terms of usability and ease of use ?

3 responses



Given this app, how frequently do you see yourself using it ?

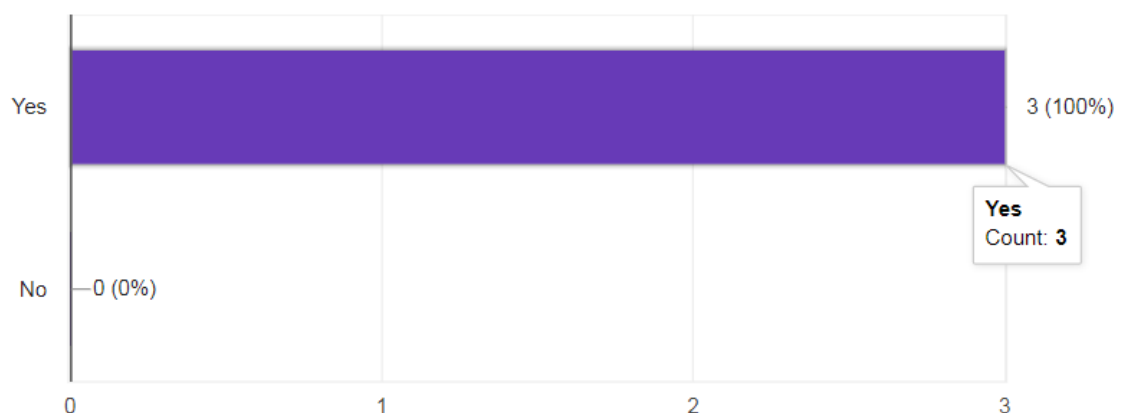
3 responses



Would you recommend this app to a friend ?



3 responses



5.4 Learning

Considering the feedback and survey, we improved our design further considering following aspects

- We updated and made the font size and icon size consistent on all pages
- We tried to make it simple by prioritizing what features users use frequently and kept only those features handy on the screen, while not so used frequently ones are kept hidden in other options
- We re-categorized the menu, to keep only important ones visible upfront and other in More sections

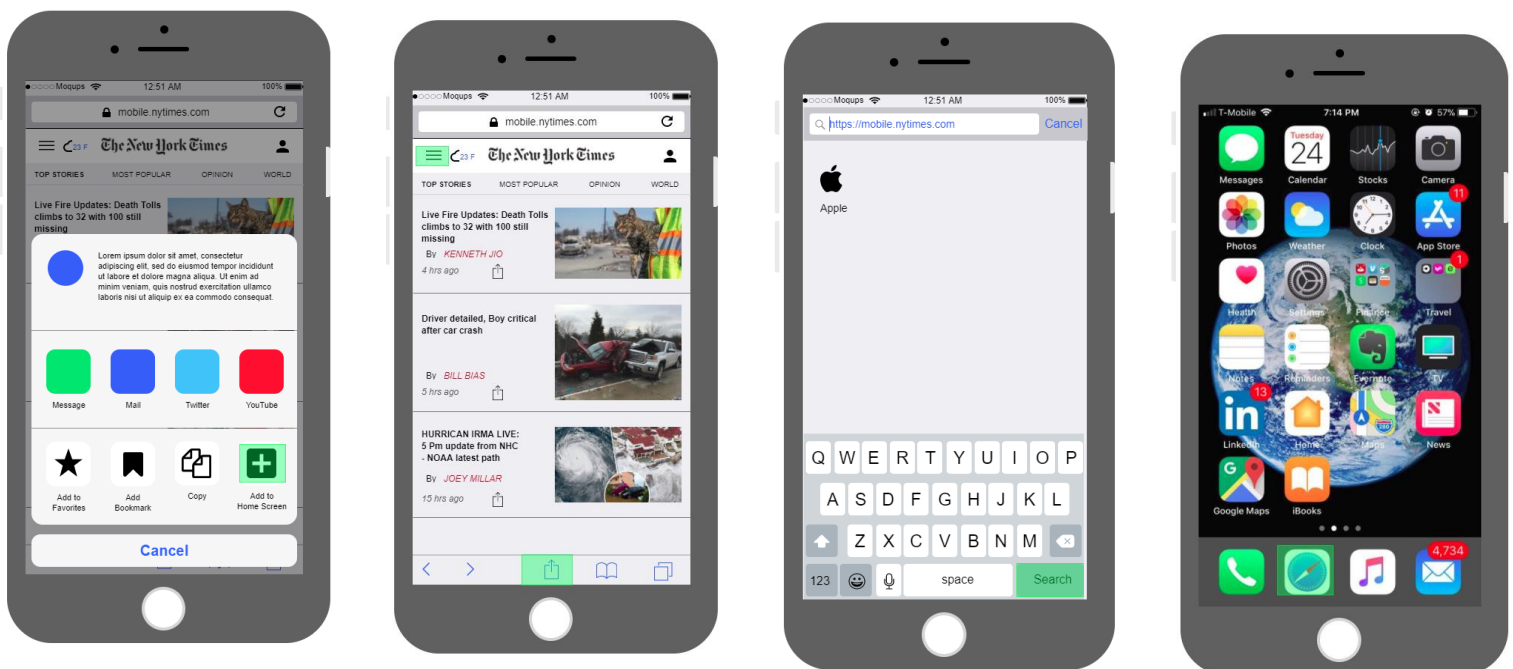
6. Progressive Web App

Progressive Web Apps uses modern web capabilities to deliver an app-like user experience.

It can be installed and live on the user's home screen, without the need for an app store.

6.1 Features

- Progressive - Works for every user, regardless of browser choice because it's built with progressive enhancement as a core tenet.
- Responsive - Fits any form factor: desktop, mobile, tablet, or whatever is next.
- Reliable - Load instantly even in uncertain network conditions.
- Fast - Respond quickly to user interactions with silky smooth animations and no janky scrolling.
- Engaging - Feel like a natural app on the device, with an immersive user experience.



7. Moon Shots

- **3D Experience:** For all news, the user can have 3D video experience of the scene
- **Augmented Reality:** By pulling graphics out of computer screen and integrating them into real-world environments.