



Purdue HCDD Project Proposal
Spring 2017
Version 5: 2/27/17

theScore

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MEET THE TEAM



ALAINA CREAGER

Project Lead and a determined UX student, Alaina Creager, has aspirations to inspire the world of design. She has recently accepted a summer intern opportunity with the Garmin International UX design team and is looking to further her design experience. To learn more about her visit alainacreager.com. Alaina can be reached at acreage@purdue.edu.



NICHOLAS GOULD

Senior CGT student at Purdue University. Highly motivated to make rich web experiences. Worked with Purdue Bands & Orchestras & the Purdue Office of Marketing & Media, and the Roxy 5 Theater, LLC. You can learn more about Nick at nickgould.us or contact him at gouldn@purdue.edu.



JOSEPH HOGGATT

Joseph Hoggatt is a student in Purdue Polytechnic's Human Centered Design and Development program. He assisted in designing a scouting app for his high school's FIRST robotics team. In his spare time, he occasionally takes on Graphic design work from friends and family, and works with new design tools to search for better ways of conveying what he can see in his mind. Joseph can be contacted by email at jhoggatt@purdue.edu.



ELIZABETH FINLEY

Elizabeth Finley is a student in Purdue University's undergraduate Human Centered Design and Development program. She is a dedicated student who is well versed in various Adobe programs. She aspires to create products that both meet user needs and appeal to users aesthetically. Elizabeth can be contacted through email, finley14@purdue.edu.



JOHN ANDRONOWSKI

John Andronowski is our Company Sponsor this semester for the Human Centered Design and Development Experience Studio. He has been with theScore Inc. for two years as a designer and will be our primary contact from the large sports multimedia company.

PROJECT OVERVIEW

Problem Statement

“theScore needs to understand why users are not sharing content and develop a strategy to increase the use of its application.”

Design Goals

Currently theScore's users open their app about 98 times a month, which breaks down to about three times a day. However, their users only share content from theScore about once a day. theScore sees sharing as a great marketing tool, and they want to increase sharing to once per app open. We have reason to believe that the problem may not just be the UI, but rather psychological. This is a theory we will have to look into in our research and testing phases.

Design Plan

This semester our design team will be devoting our efforts to discovering the causes of the above stated problem. We plan to use a combination of primary and secondary research methods, as well as multiple forms of usability testing to further educate any proposed design changes to theScore's mobile applications. [A detailed analysis of this plan can be found under the methodology section of this proposal.](#)

TIMELINE

Below is a tentative timeline of potential start and end dates for the various milestones of our methodology.

Weeks 3-7: Jan 25 – March 10

Research

(analogous documentation, up/downstream, sharing, misc.)

Weeks 8-11: March 13 – April 7

Analysis & Ideation

(sketching, testing, prototype)

Weeks 12-14: April 10 – April 28

Design

(testing, iterations, final)

Week 15: May 1 – May 5

Final Presentation

METHODOLOGY

Research

Primary

We hope to reach out to users of theScore application and analogous sharing sites to gain user perspective and see what their motivations are regarding sharing through social media as well as other mediums.

Secondary

Our secondary research efforts will be focused around reading and interacting with articles, studies, and other external information obtained through online citations and websites.

Testing

Once we have gathered accurate data regarding our problem area and have began ideation and creation we will begin to test our ideas and developments. Due to the variety in testing methods and the unknowns of where our designs and ideals may lead, we are certain that usability testing will be performed, but are leaving other methods to be determined.

Deliverables

For deliverables of this project we plan to turn over a full documentation of our efforts in research and testing as well as design recommendations, and, at the very least, a high fidelity prototype that visualizes findings.



STATISTICS, iOS

1.3 **shares** per user per day

63% of users open the **share modal and cancel/close** it without sharing.

29% of shares are over **SMS**, text messaging.

5% of shares from theScore are to **Facebook**

3% of shares are to **external applications**

Research

RESEARCH TOPICS

Below is a list of potential research areas that may be targeted during the entirety of this project.

Research Topics

Primary

- Social Media Habits of Target Users
- Psychology of Sharing

Secondary

- User Base (Gender: Male, Age:18-35, sport fan)
- Competitors (ESPN, CBS, Bleacher Report, Yahoo)
- Analogous Sharing Sites
- Marketing & Advertising
- Content vs. User Interface
- App Transition/Growth Over Time
- Social Media

Competitive Analysis of Mobile Sharing

Competitive Analysis: theScore

The image displays five screenshots of theScore app's iOS interface, illustrating its social sharing and posting features.

Top Left Screenshot: Shows the main feed screen with a news item about NBA players. A blue box highlights a comment from "Hawks' Prince, Heat's Johnson fined \$25K for altercation". Below it is another comment about Super Bowl LI.

Top Middle Screenshot: Shows the feed screen with a news item about NBA players. A red circle highlights the Facebook share icon, and an orange circle highlights the Twitter share icon. A blue arrow points from the highlighted comment in the first screenshot to this screen.

Top Right Screenshot: Shows the sharing menu. It includes options for AirDrop (Nick, Megan, Meena, Rhea's iPhone), messaging (Message, Twitter, Facebook, Slack), and other sharing options (Copy, Add to Reading List, More). A pink circle highlights the AirDrop section.

Bottom Left Screenshot: Shows the Facebook posting screen for the news item. It includes fields for account selection, location, and a message input field.

Bottom Right Screenshot: Shows the Twitter posting screen for the news item. It includes fields for account selection, location, and a message input field. A yellow circle highlights the message input field, which contains the text "Hawks' Prince, Heat's Johnson fined \$25K for altercation (via http://thesco.re/theScore_App)".

Competitive Analysis: ESPN

Julio Is Unlike Anything We've Ever Seen
ATLANTA — Start with the sheet of paper he signed before the season arrived four days after Julio Jones' nine-catch, 180-yard, two-touchdown bludgeoning of the Packers. He was... bleacherreport.com

Hawks' Prince, Heat's Johnson fined \$25K for altercation <http://www.thescore.com/news/1224089> (via http://thescore.re/theScore_App)

How crazy will the scoring get at Super Bowl LI? via @ESPN App

GABRIEL

How crazy will the scoring get at Super Bowl LI?
es.pn

5:19 PM 48% Verizon EF i Elizabeth

5:04 PM 55% Verizon ESPN SCORES NEWS GABRIEL NFL How crazy will the scoring get at Super Bowl LI? An ability to get off to a fast start was a hallmark for the Patriots and Falcons this season. The first quarter of Super Bowl LI could be exciting. 9m • Vaughn McClure and Mike Reiss TONIGHT NBA LAKERS VS BOSTON CELTICS 8PM/ET 10:30PM/ET

Message Twitter Facebook Slack

Copy Add to Reading List Open in Safari More Cancel

Cancel Facebook Post

Alaina Creager Posting to Facebook, Friends

Say something ...

High-scoring offenses turn up competition for Falcons, Patriots in Super Bowl es.pn

5:06 PM 55% Verizon ESPN

Cancel Twitter Post

How crazy will the scoring get at Super Bowl LI? - via @ESPN App

52 Account acreagerux >

Location None >

An ability to get off to a fast start was a hallmark for the Patriots and Falcons this season. The first quarter of Super Bowl LI could be exciting.

11m • Vaughn McClure and Mike Reiss

App Apple Apply

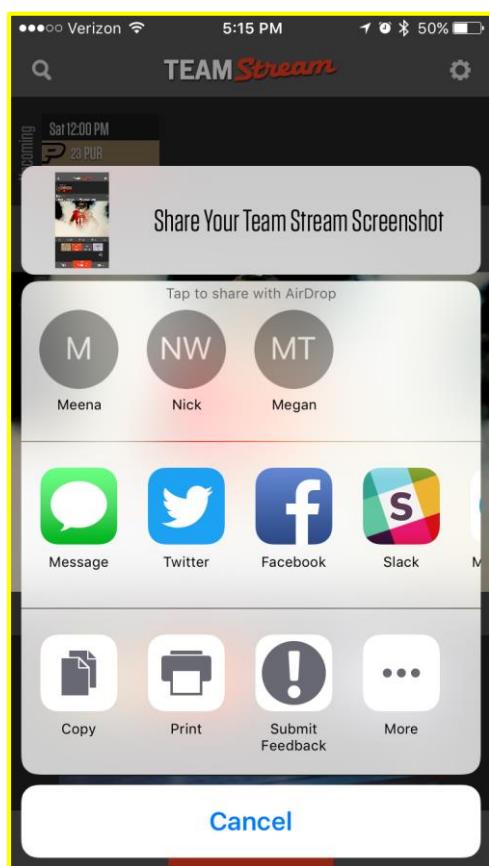
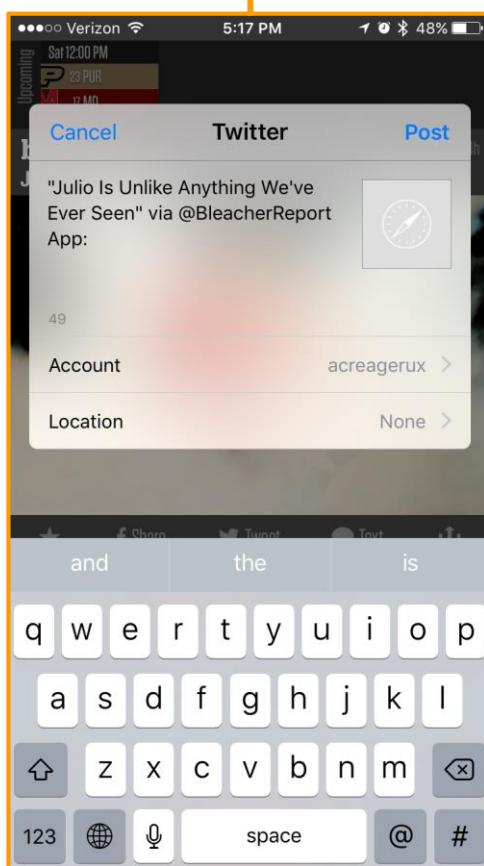
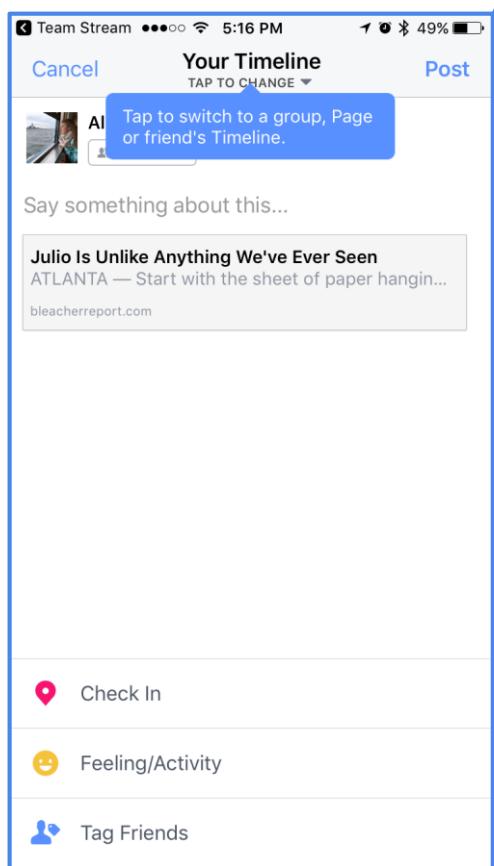
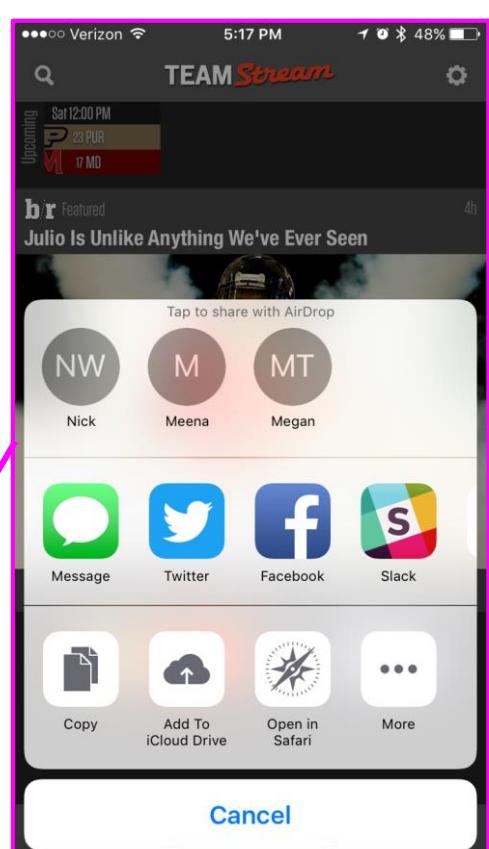
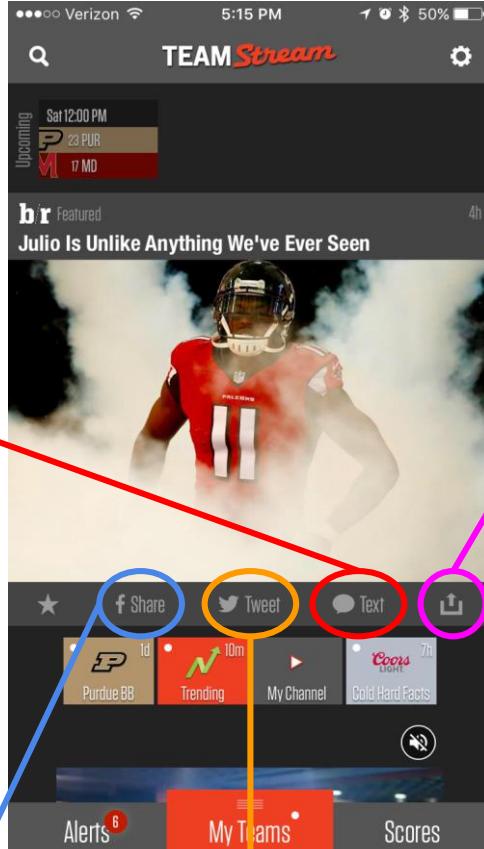
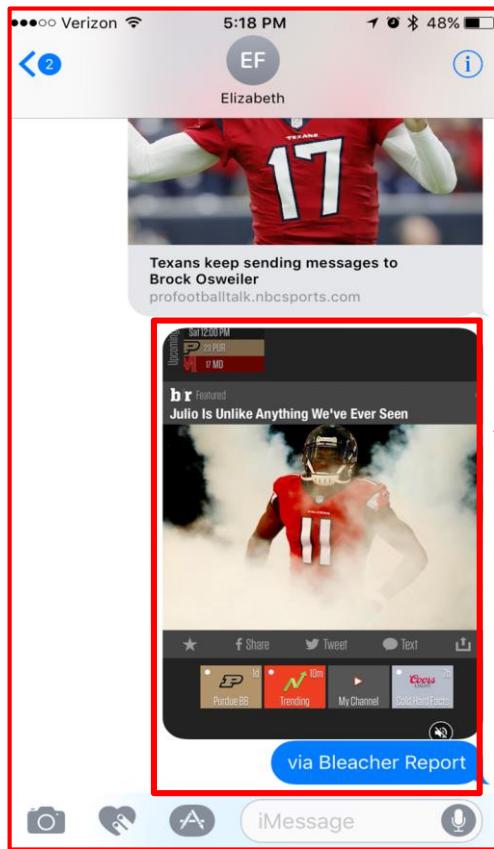
q w e r t y u i o p
a s d f g h j k l
z x c v b n m
123 space @ #

Competitive Analysis: CBS Sports

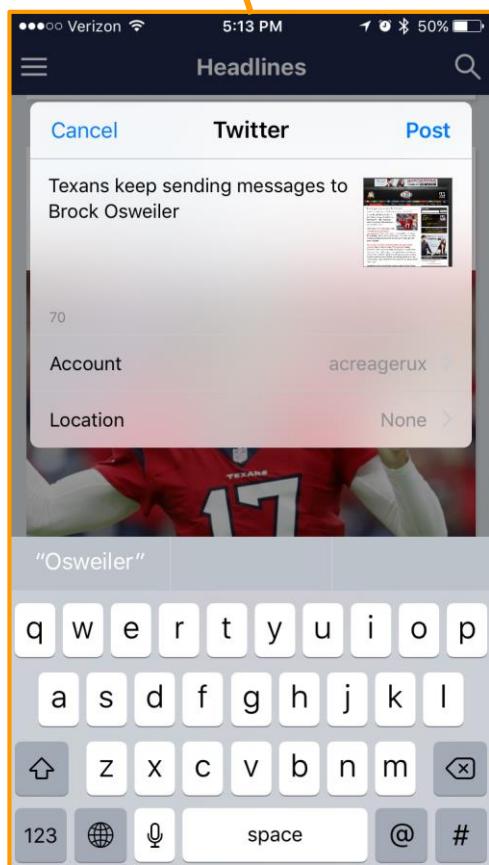
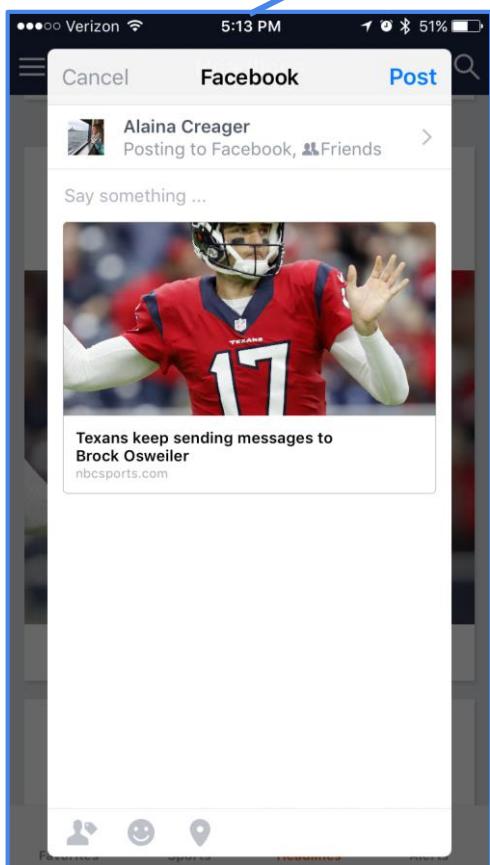
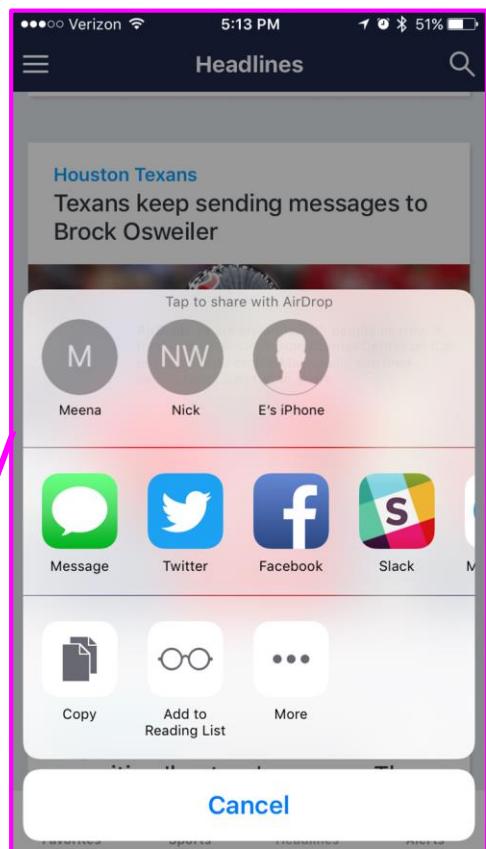
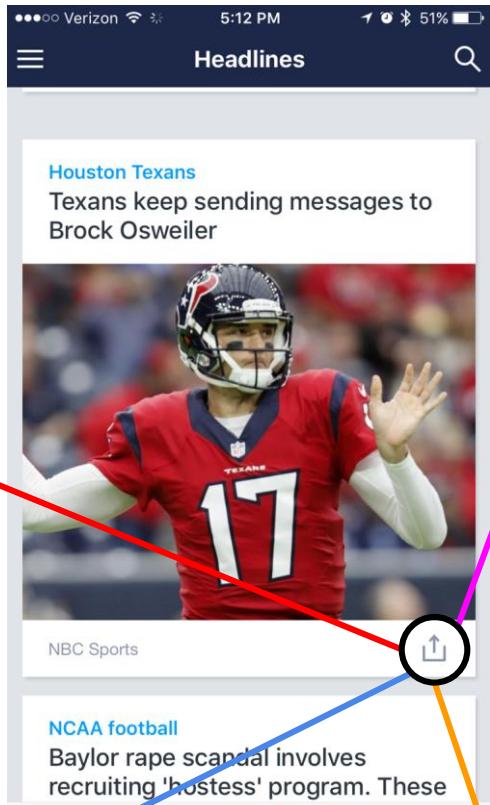
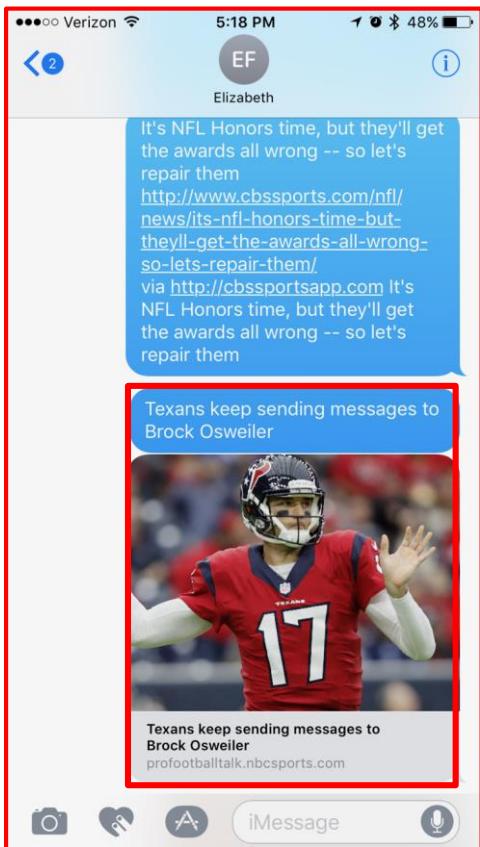
The image displays five screenshots from the CBS Sports mobile application, highlighting its social sharing and connectivity features.

- Screenshot 1:** Shows a news item from Elizabeth's feed. A red box highlights the URL "http://www.cbssportsapp.com". Below it, another red box highlights the text "It's NFL Honors time, but they'll get the awards all wrong -- so let's repair them".
- Screenshot 2:** A video player showing "Reiter's NFL Honors" with a play button. A blue arrow points from the text in Screenshot 1 to this screen.
- Screenshot 3:** The same video player screen, with a pink box highlighting the "Tap to share with AirDrop" button at the top right.
- Screenshot 4:** A sharing menu with options: Message (green icon), Twitter (blue bird icon), Facebook (blue 'f' icon), Slack (multicolored icon), Copy (document icon), Add to Reading List (spectacles icon), Open in Safari (document icon), and More (three dots icon). A blue arrow points from the video screen to this menu.
- Screenshot 5:** Two posting screens. The left one is for Facebook, showing Alaina Creager posting to her friends. The right one is for Twitter, showing Bill Reiter posting. Both screens show the same text: "It's NFL Honors time, but they'll get the awards all wrong -- so let's repair them". A yellow box highlights the text in the Twitter post.

Competitive Analysis: Bleacher Report



Competitive Analysis: Yahoo! Sports



ANALYSIS

Sharing Interface

Feed

Of the 5 applications that we analyzed all 5 utilize an information feed based article system. All of these interfaces lead to articles regarding sports news, reports, videos, and announcements. These articles are either written by the company or are filtered into the application from other sources. Every interface except for CBS Sports allows for action from the feed screen. On the CBS interface a user must first open the article and then a signifier for sharing is displayed.

The naming of this interface differs but can be seen below:

theScore: "Feed"

ESPN: "News"

CBS Sports: "News"

Bleacher Report: "My Teams"

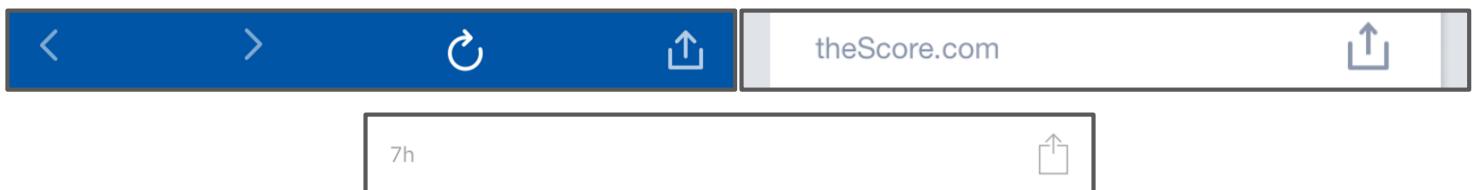
Yahoo Sports: "Headlines"

Sharing Icons

Below are screenshots from each interface that display the sharing functionalities available in each application.



Bleacher Report and theScore utilize social media icons in addition to the export feature which we go into more detail about in further documentation.



The rest of the apps utilize only the action icon. Some do not even include the icon on the feed page, but instead once an article has been open.

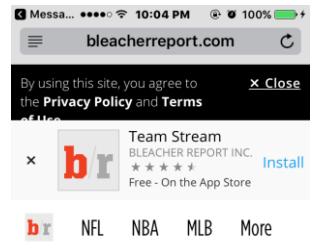
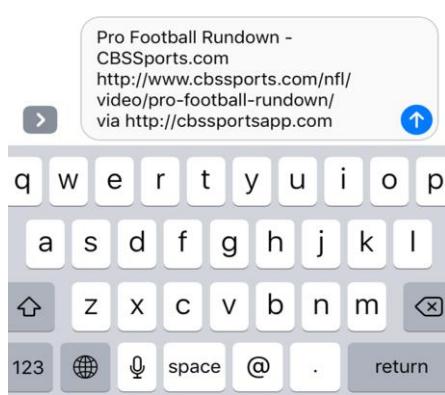
ANALYSIS

Messaging

Generated Messages

All 5 applications began their automatically generated SMS/text messages with the headline and/or tagline of the article the user wishes to share, followed by a link taking the message recipient directly to the shared article. The messages all give some description of the content being shared and give the recipient the option to view the mobile webpage for the article or, if the recipient has the app, it will open up within the application.

Of the 5 messages only theScore and Bleacher Report included a second link to that would directly take the user to the App Store page for the application (as seen on the right with theScore.)



Links

All of 5 applications message links will open the article within the phone's web browser if the recipient does not have the application (as seen on the right.) If the user has the application it will open the article within the regular application interface.

Baylor vs. Kansas:
Live Score,
Highlights and
Reaction



ANALYSIS

Messaging

theScore

When you receive an SMS message sharing a Score article (as seen on the right) the message does not include a generated image and has just the link to the article and the link to app store theScore download page.

Report: Mets agree to 1-year, \$3M deal with Fernando Salas (via http://thesco.re/theScore_App) <http://www.thescore.com/news/1224030>

ESPN

When you receive an SMS message sharing an ESPN message it includes both a headline text, which contains the article headline and source, and a separate message that is a linked image to the new article (seen on the right.)

How crazy will the scoring get at Super Bowl LI? via @ESPN App



How crazy will the scoring get at Super Bowl LI?
es.pn

CBS

When you receive an SMS message sharing a CBS article you receive an almost clickbait like headline followed by a long link to the article. Then a link to the app download page is inserted. A repeat of the the headline is placed after the long link (seen on right). Overall, it appears scammy and not visually appealing or intriguing.

Why one college basketball coach keeps fighting to spread autism awareness
<http://www.cbssports.com/college-basketball/news/how-one-college-basketball-coach-keeps-fighting-to-spread-autism-awareness/>
via <http://cbssportsapp.com> Why one college basketball coach keeps fighting to spread autism awareness

ANALYSIS

Messaging

Yahoo Sports

When you receive an SMS message sharing a Yahoo article (seen on right) it is identical to the SMS messaging style of ESPN. A message contains a headline, followed by a message with the article link under a generated image.

SUPER BOWL 51: Our official predictions for who will win Sunday's big game



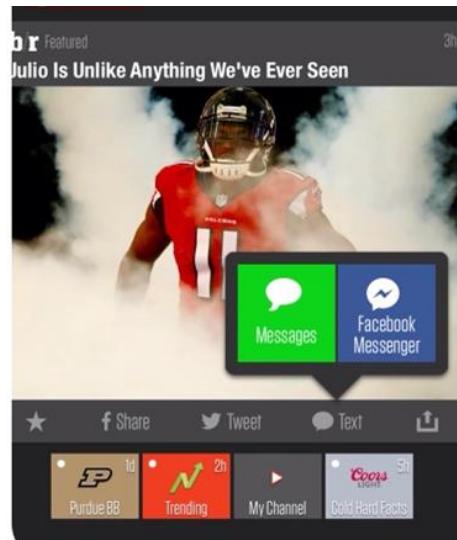
SUPER BOWL 51: Our official predictions for who will win Sunday's big game
finance.yahoo.com

Bleacher Report

Bleacher Report has a basic messaging style (seen on bottom left) that is just the headline and the article link with another link to the app store page for Bleacher Report. Within the app when a user selects the "Text" option two options appear for messaging (seen below.) The two options are as follows: traditional texting and facebook messenger.

"Julio Is Unlike Anything We've Ever Seen" via <http://TeamStre.am> by Bleacher Report

<http://bleacherreport.com/articles/2690681-more-than-just-dominant-julio-jones-is-unlikeanything-the-nfl-has-seen-before>

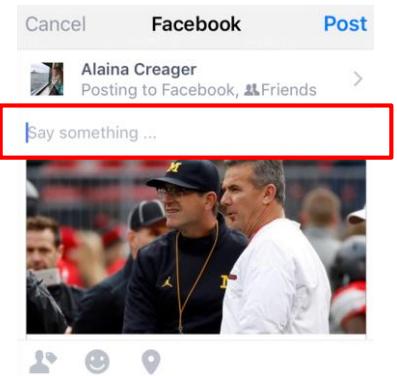


ANALYSIS

Facebook

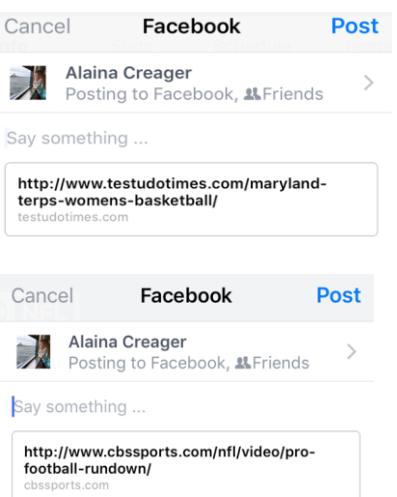
Generated Messages

For all five applications the Facebook posting option will generate a standard news article link to share to Facebook (as seen on the right.) All of the apps will allow you to compose your own message/caption to accompany the shared article (also seen on the right, highlighted in red.)



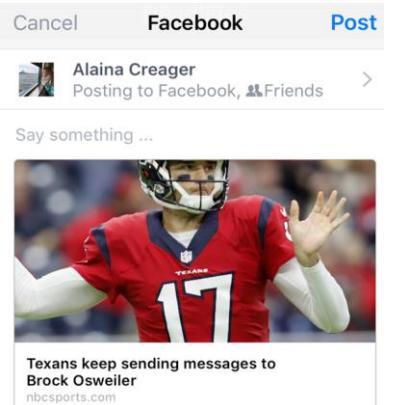
Images

Of the five applications only two, Yahoo Sports and CBS, do not include the article image above the generated article links (seen on right.) The rest of the applications include an image above the newslink (as seen in the top right image.) It is possible that Yahoo does not include an image because most of their posts are outsourced and owned by other sport news websites/writers.



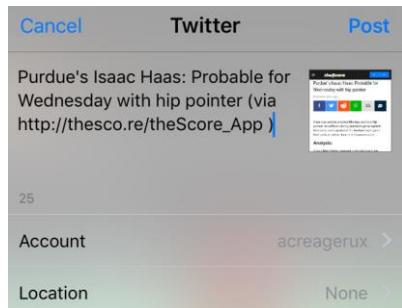
Interface Difference

Bleacher Report prompts you open the actual FB application or mobile site in order to share. Other applications allow you to simply share from within the app (as seen on right), no opening Safari or having to open and use the FB app.



ANALYSIS

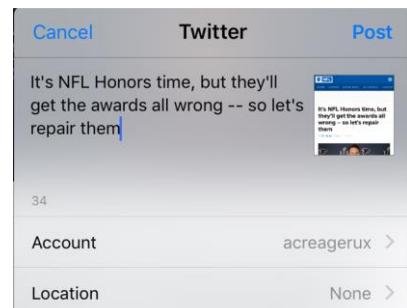
Twitter



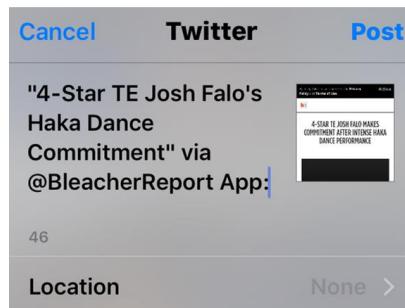
theScore



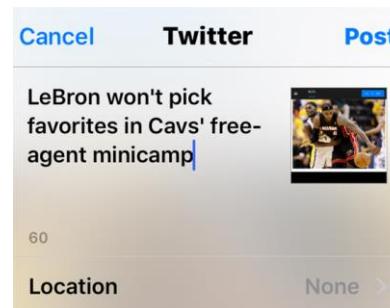
ESPN



CBS Sports



Bleacher Report



Yahoo Sports

Automated Messages

All of the current applications utilize an automated message when users share to Twitter. These messages contain an article title or overview, and provide links to either the app's twitter profile or the application download location within their site. Yahoo Sports is the only violator when it comes to referencing their company. We believe that this probably has something to do with credentials as they do not publish their own content. Additionally, all apps provide an image with the tweet.

We find it especially interesting that theScore chooses to link their application download location versus their Twitter profile. We believe that this is an attempt to gain marketing and awareness of their application to users.

Character Count

When it comes to character count theScore utilizes the most and CBS sports utilizes the least having not automated content with Twitter sharing. We plan on looking into this as a contributing factor to Twitter sharing and how this social media platform is typically used by our demographic.

ANALYSIS

IOS Share Sheet

- Not just for sharing, but for sending data to many 3rd party apps^[1]
- Most results are not facts/stats about the share sheet, but tutorials on how to use it; many users likely don't know how to use it effectively (speculation on my part)

Pregenerated Share Posts

- Be sure to add personal touch (I take this as don't substitute for the users' personal "flair".)^[2]
- Interviewing friends (all in the given target demographic, but small sample size) suggests that many find the auto-suggested messages that accompany the links annoying; they want the link and nothing else.

Misc. Reading

<https://www.shoutmeloud.com/how-to-motivate-readers-to-share-articles.html> - about blog articles, but may still be relevant

<http://www.socialmediaexaminer.com/> - General social media marketing website

<http://www.howtogeek.com/232489/how-to-customize-the-ios-sharing-menu/> - [1]

<https://blog.hootsuite.com/social-media-automation/> - [2]

Competitive Research Takeaways

Article Sharing

Deeper Research Areas

IOS Share Sheet | Pre Generated Messages | A/B Testing on UI | Screenshot Sharing

Summary of Findings

After analyzing all of our findings from theScore as well as competing applications, we found a great deal of differences between the interfaces and processes regarding sharing.

- When sharing articles to Twitter, theScore chooses to not include their twitter handle but instead use a link to download the application from the App Store. In comparison, ESPN and Bleacher Report include links to their twitter profiles.
- Both theScore and Bleacher Report utilize multiple social media icons as indicators to specific social sharing instances. In comparison, all other applications utilize the action icon as their main sharing method.
- When sharing articles to messaging services, there are no link previews for the article. We have reason to believe that having previews improves the perceived authenticity of the message and the accompanying link, something we plan on confirming in our user research. In our initial research we found that the required code to create these previews is a paragraph of metadata tags that can be easily implemented into theScore's mobile and desktop platforms.
- Screenshotting is another sharing opportunity that we came across. As a group, we discussed how we utilize screenshotting as a primary way of sharing. It just so happens that Bleacher Report addresses how to share screenshots; this is a strategy that no other sports app we analyzed accomplishes. The application reacts to screenshotting and automatically loads the share sheet in IOS when prompted, promoting itself along with the shared screenshot..

LINK PREVIEWS

iMessage

Open Graph and Twitter Metadata

Most applications use the universal [Open Graph metadata tags](#) to specify the elements of link previews for messaging and social media applications. These tags include various data, including titles, descriptions, and image. Twitter, specifically, does not use the open graph tags, but instead uses their own tags of very similar style.

```
63 <!-- base tags -->
64 <meta name="twitter:app:name:iphone" content="theScore App">
65 <meta name="twitter:app:id:iphone" content="285692706">
66 <meta name="twitter:app:name:ipad" content="theScore App">
67 <meta name="twitter:app:id:ipad" content="285692706">
68 <meta name="twitter:app:name:googleplay" content="theScore App">
69 <meta name="twitter:app:id:googleplay" content="com.fivemobile.thescore">
70 <meta name="twitter:card" content="summary_large_image">
71 <meta name="twitter:site" content="@theScore">
72
73 <!-- extended tags -->
74 <meta property="og:title" content="NBA 2K17 Super Bowl simulation: Patriots vs. Falcons"><meta name="twitter:title" content="NBA 2K17 Super Bowl simulation: Patriots vs. Falcons">
75 <meta name="twitter:description" content="The New England Patriots and Atlanta Falcons will square off Sunday in Super Bowl LI, but what if they were to battle on the court for the title of World Champion? We decided to find out. ">
76 <meta property="og:image" content="https://d13csgd2kn0ewr.cloudfront.net/uploads/image/file/227361/cropped_unnamed.jpg?ts=1486156312"><meta name="twitter:image" content="https://d13csgd2kn0ewr.cloudfront.net/uploads/image/file/227361/cropped_unnamed.jpg?ts=1486156312">
77 <meta property="og:image:secure_url" content="https://d13csgd2kn0ewr.cloudfront.net/uploads/image/file/227361/cropped_unnamed.jpg?ts=1486156312">
78 <meta property="og:image:type" content="image/jpeg">
79 <meta property="og:image:width" content="1280">
80 <meta property="og:image:height" content="966">
81 <meta property="og:url" content="http://www.thescore.com/nfl/news/1224084-nba-2k17-super-bowl-simulation-patriots-vs-falcons"><meta name="twitter:url" content="http://www.thescore.com/nfl/news/1224084-nba-2k17-super-bowl-simulation-patriots-vs-falcons">
82 <meta property="og:type" content="article">
83 <meta name="twitter:app:url:iphone" content="thescore:///news/1224084-nba-2k17-super-bowl-simulation-patriots-vs-falcons">
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85 <meta name="twitter:app:url:googleplay" content="thescore:///news/1224084-nba-2k17-super-bowl-simulation-patriots-vs-falcons">
86
87 <!-- App Links Tags -->
88 <meta property="al:android:url" content="thescore:///news/1224084-nba-2k17-super-bowl-simulation-patriots-vs-falcons">
89 <meta property="al:ios:url" content="thescore:///news/1224084-nba-2k17-super-bowl-simulation-patriots-vs-falcons">
90 <meta property="al:ios:app_store_id" content="285692706">
91 <meta property="al:android:package" content="com.fivemobile.thescore">
92 <meta property="al:android:app_name" content="theScore App">
93 <meta property="al:ios:app_name" content="theScore App">
```

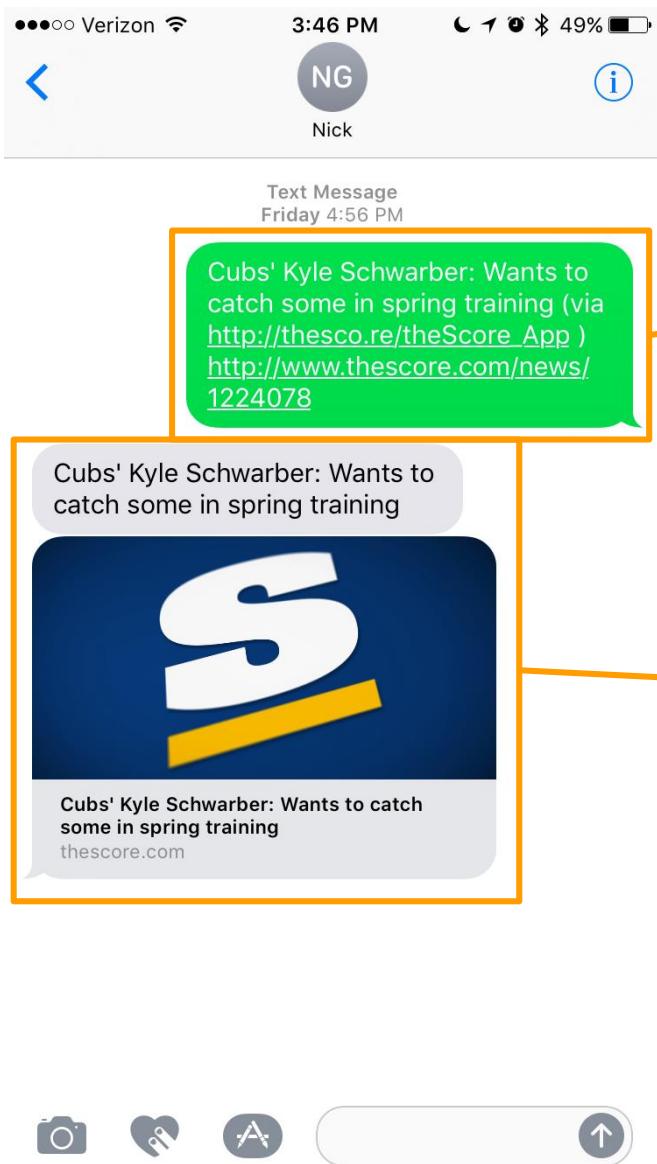
Upon viewing the source of theScore, however, we found that they are already including the open graph and Twitter tags, which brings into question why the link previews do not display in iMessage.

After researching why this would happen, we found an [article](#) from tatango, a mobile messaging software company, that explained that iMessage will not use these tags to create a link preview if multiple links are in the message. When sharing from theScore to iMessage, the app does just this; it includes a link for the article as well as a link to theScore app in the App Store.

LINK PREVIEWS

Simulation

Visual Representation



When sharing an article, theScore automatically inserts a link to their app in the App Store, as well as a link to the article. When doing so, no image preview appears.

When only using one link in the message, iMessage is able to show an image preview, creating a more authentic presentation of the link.

From our observations, this experience differs from app to app. Facebook Messenger, for instance, will show a preview when multiple links are in the message. It will choose the first link to show a preview of.

Secondary Research

PSYCH OF SHARING FINDINGS

1. For millennials, which covers most of our target audience, there is no significant difference in social media use across genders.³
2. Men censor their content more in order to prevent disagreement and dislikes from friends.⁵
3. Users with more politically and age diverse friends censor less, in general.⁵
4. People censor more when their audience is harder to define, and people censor more when the relevance of the communication “space” is narrower.⁵
5. For both genders, people will typically only post to strengthen relationships among friends, ie: they won't post to just cause arguments or to make themselves stand out among the ranks.⁵
6. Specifically to sports brands, women have higher loyalty to specific brands than men; the same also goes for specific social networks.¹
7. Those with access to mobile data, so all of theScore's users, are more likely to use facebook and twitter over any other social network. The hypothesis for this is good mobile design of their native apps.³
8. Five motivating factors for contribution online: purposive value (exchange of information), self-discovery (acquiring knowledge), entertainment, enhancing social status and maintaining relationships.^{2, 4}
9. Receiving feedback from friends on a post, perhaps similarly to receiving a gift, creates indebtedness and calls for reciprocation.⁴

Robert Cialdini - *Influence: The Psychology of Persuasion*

1. No social reciprocation = being disliked socially as a “moocher.”
2. Rule of reciprocity is very strong, usually overpowers any dislike of a person.
3. Reciprocity rule can lead to unequal exchanges of information (favor is not returned with another favor.)
4. People who act in a certain way towards us deserve to be treated in the same way.
5. Your attitude towards somethings can be influenced by brief, multiple past experiences.

PSYCH OF SHARING SOURCES

1. An Integrated Approach to Sports Branding: Examining the Influence of Social Media on Brand Outcomes. Watkins, Brandi ; International Journal of Integrated Marketing Communications, 2014, Vol.6 (2), p.30-41
2. CHANGES IN ENGAGEMENT BEFORE AND AFTER POSTING TO FACEBOOK. NIR GRINBERG ; P. ALEX DOW ; LADA A. ADAMIC ; MOR NAAMAN JACOBS INSTITUTE, CORNELL TECH, FACEBOOK INC, 2016
3. GENDER AND MOBILE ACCESS METHOD DIFFERENCES OF MILLENNIALS IN SOCIAL MEDIA EVALUATION AND USAGE: AN EMPIRICAL TEST. JEEN-SU LIM ; KEE-SOOK LIM ; HEINRICHSH, JOHN H. ; Marketing Management Journal, 2014, Vol.24 (2), p.124-136
4. MODELING SELF-DISCLOSURE IN SOCIAL NETWORKING SITES. YI-CHIA WANG ; MOIRA BURK ; ROBERT KRAUT. FACEBOOK INC, CARNEGIE MELLON UNIVERSITY, 2016
5. SELF-CENSORSHIP ON FACEBOOK. SAUVIK DAUS ; ADAM KRAMER. AAAI CONFERENCE ON WEBLOGS AND SOCIAL MEDIA, 2013
6. Cialdini, R. B. (2007). *Influence: The psychology of persuasion*. New York: Collins.

Testing

Testing Variables

TESTING VARIABLES

Compilation Based on Potential Variables

Our Plan

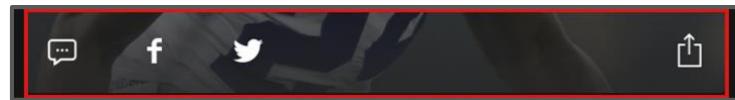
During our literature review we came across a Study conducted at Facebook in 2013. This study looked into how users share and what their motivations are. We looked into how this was carried out and have determined the different variables that may be affecting the sharing of sports articles on theScore's application.

Variables: Color | Images | Titling/Wording | Icons | Demo

In an effort to test each of these variables we would ideally like to create different Adobe Mockups that feature isolated changes to the above variables and do usability testing with users to see if these changes create a more active user.

We can perform this by creating our own mockups for in person testing with sports application users.

CALL TO ACTION



theScore's application currently utilizes **4 white icons** as call to action buttons. These buttons lead users to social media as well as the share screen on IOS. One variable that may be halting sharing capability could potentially be the design of these icons. We plan to eliminate this variable by analyzing the design through preference testing.



In the image above you can see different styles of call to action buttons that utilize color, shape, and size to differentiate design. These are a few ways in which we may be able to draw more attention to the icons and see exactly what attracts/stands out to the users. Below are the icons that we will be using during our testing to see what users are looking for to perform these sharing options.

Our testing protocol for this variable can be found on the next page.

COLORBLINDNESS

#0079FF	#FBB130	#151515	#242424	#1B1B1B	#888888	#0079FF	#FBB130	#151515	#242424	#1B1B1B	#888888	#0079FF	#FBB130	#151515	#242424	#1B1B1B	#888888
Primary	Follow	Background	App	Base	Secondary	Primary	Follow	Background	App	Base	Secondary	Primary	Follow	Background	App	Base	Secondary

Blue Weak

Green Weak

Red Weak

#0079FF	#FBB130	#151515	#242424	#1B1B1B	#888888	#0079FF	#FBB130	#151515	#242424	#1B1B1B	#888888	#0079FF	#FBB130	#151515	#242424	#1B1B1B	#888888
Primary	Follow	Background	App	Base	Secondary	Primary	Follow	Background	App	Base	Secondary	Primary	Follow	Background	App	Base	Secondary

Blue Blind

Green Blind

Red Blind

#0079FF	#FBB130	#151515	#242424	#1B1B1B	#888888	#0079FF	#FBB130	#151515	#242424	#1B1B1B	#888888
Primary	Follow	Background	App	Base	Secondary	Primary	Follow	Background	App	Base	Secondary

Blue Cone
Monochromacy

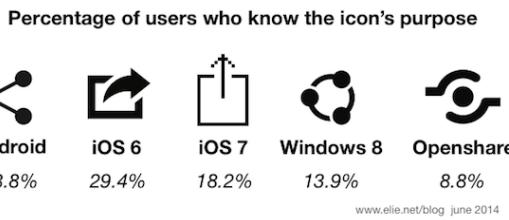
Monochromacy

1 in 12 men are some form of colorblind. We wondered if this may have an effect of user's visibility of the app and the share buttons.

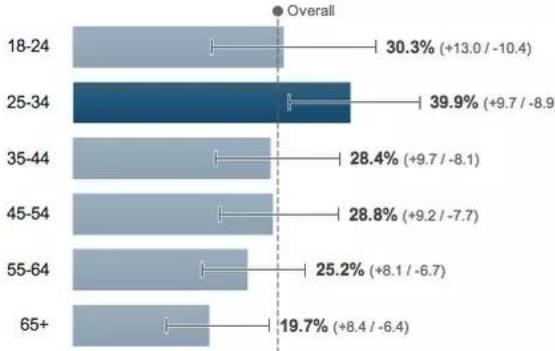
As shown to the left, the colors of theScore are visible to most forms of colorblindness, with the exception of blue weak/blind/Cone Monochromacy and Monochromacy.

We recommend keeping this color scheme the same for maximum accessibility.

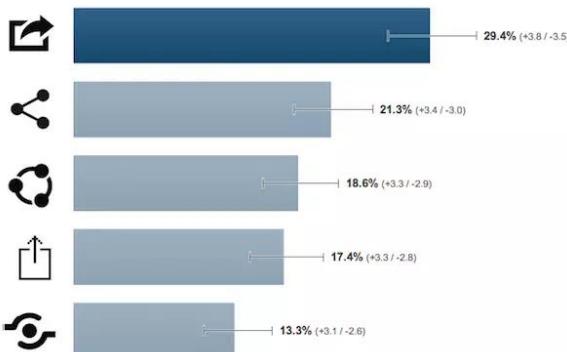
ICONS



Ages of those who understood the purpose of the iOS 7 share icon



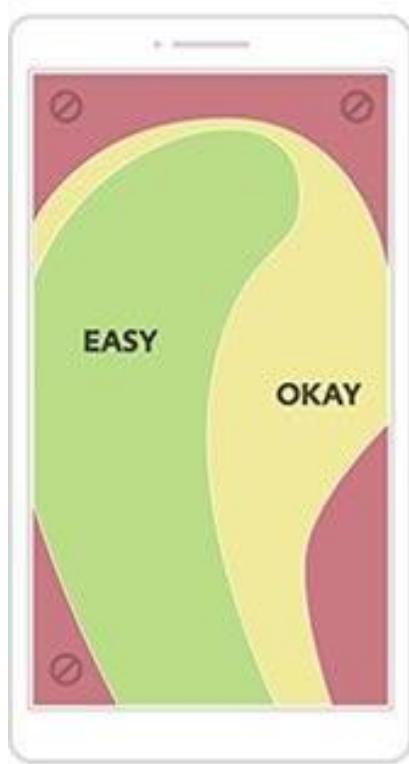
Given a choice, what icon would you use as a share icon?



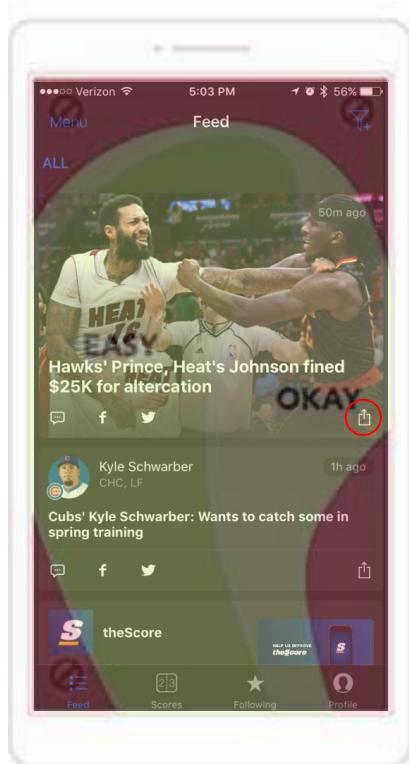
Iconography is an essential part to any UI design. Currently theScore uses the Apple share sheet action button, as per the iOS design language. However, this icon may have too much ambiguity to it due to its large toolbox of uses. As shown in the top graphic to the left, users find the current icon more confusing than both the Android share icon and the previous iOS icon.

We plan to conduct a three-phase usability test to assess both the current status of the icon and how it can be improved. Our first phase will have the users perform a word association with multiple share icons. Afterwards, they will rank a small selection of icons by conciseness of message (i.e.: These icons all mean “share”. Can you rank them based upon how well they illustrate the word “share”?). Finally, we plan to show the users a selection of mockups of theScore’s iOS app that use a variety of these share icons, and ask them to tell us which one they are more inclined to click “share” on. Through this, we hope to learn what icons best illustrate the message of “share” and which icons users are more inclined to use.

PLACEMENT



Currently, theScore's share icon is placed on the far right of the screen. As shown by the mobile hotzone illustration to the left, this could cause an issue for users. The share button falls in the "okay" region of the screen, however it could succumb to downfalls in this region, such as being covered up by users' thumbs when scrolling, or requiring awkward thumb movement to press.



We plan to test this placement by conducting a two-phase usability test. The first phase will consist of video recording a user scrolling through theScore's iOS app and having them trying to share specific articles to social media. The second phase will be an interview with the user to discuss their experiences to learn about any difficulties they had.

TESTING RATIONALE

We performed interviews and had users go through a task demo with the current theScore application. This was performed in an effort to understand usability of the sharing functionality within the application, the mental model/expectations of the user, and develop statistics on how users utilize the application for sharing.

Through this process we hope to find:

- Time on Task for Sharing
- Minimum Amount of Interaction Necessary to Successfully Share
- User Task Flow for Sharing
- Understanding of User Motivation
- User Sharing Tendencies

Interview

INTERVIEW QUESTIONS

1. Do you use a sports app? Which one(s)?
2. How often do you use the applications?
3. Why do you use the applications?
 - a. Track teams?
 - b. View scores?
 - c. Check game times?
 - d. Stay up-to-date?

1. Are you an active user of social media?
2. Which applications do you use most often?
3. Why do you use social media?
4. What do you share most often?

1. Do you ever share content from your sports application(s)?
 - a. Possible walkthrough??
2. Why would you share a sports article? Can you list specific reasons or give examples?
3. How often do you share sports articles?
 - a. Who do you share them to?
 - b. What service do you use? SMS, Facebook Messenger, Facebook, Twitter, etc.

Demo

DEMO PROTOCOL

4 Sports Application Users | Male | Ages 20 - 24 | IOS Users

Environment Notes

Record with GoPro, observers taking notes

Protocol

1. Without leaving the current screen, familiarize yourself with the app
 1. Think-out-loud protocol
2. Please find an article you think is interesting.
 1. Why that article?
3. Please share it to your preferred social media
 1. How would you interact with the post screen?
 2. Would you make any changes before you tapped “post”?
 3. Repeat with messaging, email, and GroupMe
4. Recap
 1. Frustrations?
 2. Confusions?

User 1: Demo Task Analysis

Male | 21 | College Senior | iPhone 6

Sports Applications



ESPN Use: 1-2 times/day | **Fantasy Football Use:** 1-2 times/week during the NFL season

Social Media Applications



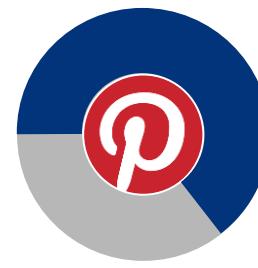
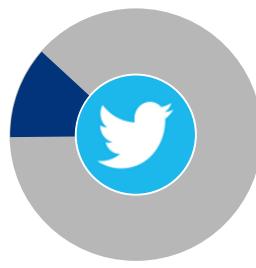
Most Used: Twitter **Interval:** Daily

Content Focus: Sports & Humor - "Funny Vines"

Purpose for use: Stay up to date with friends & current events

Time On Task

Time on task for articles shared to the following applications:

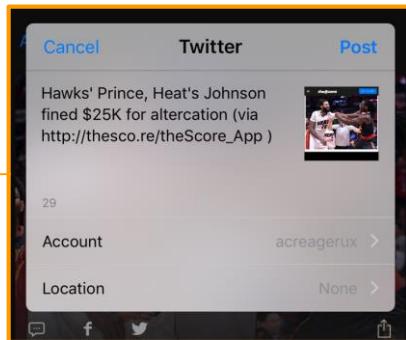
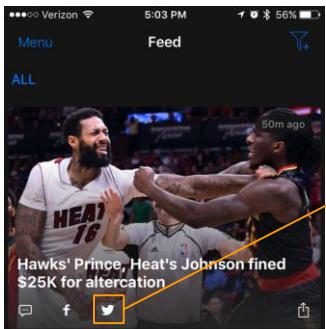


User 1: Demo Task Flow

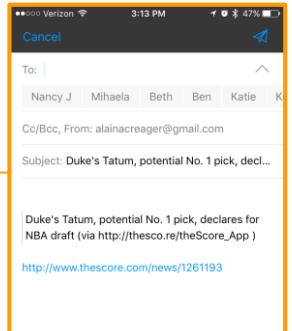
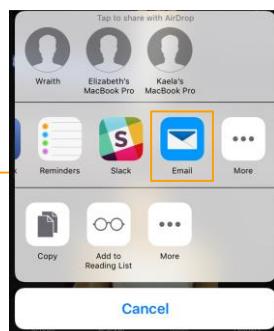
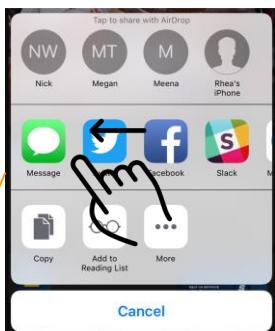
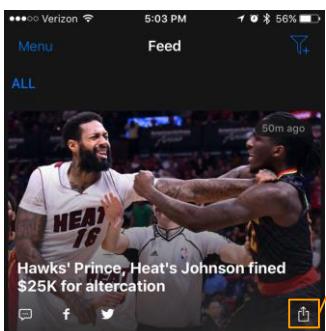
Male | 21 | College Senior | iPhone 6



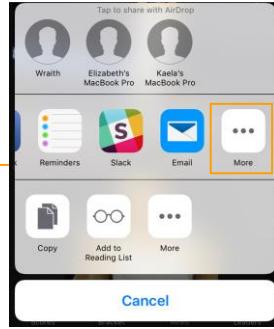
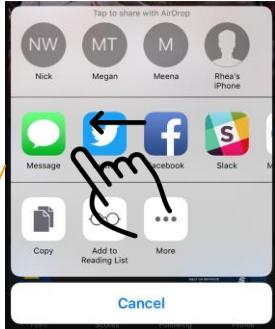
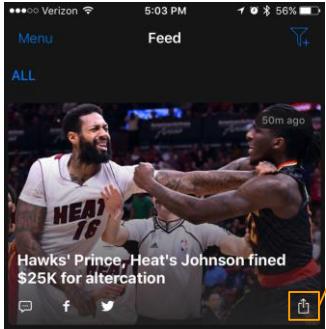
Twitter User Task Flow



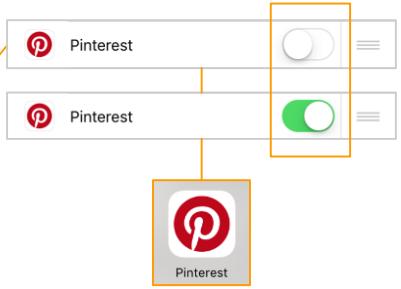
Email User Task Flow



Pinterest User Task Flow



Export button - more - turn on- tap icon



User 2: Demo Task Analysis

Male | 21 | College Senior | iPhone 6

Sports Applications



Fantasy Football Use: 3-4 times/week during the NFL season

Social Media Applications



Most Used: Facebook **Interval:** Daily

Content Focus: Feel Good/Impactful Stories

Purpose for use: Connect with friends and share information

Time On Task

Time on task for articles shared to the following applications:



30 sec



14 sec



28 sec

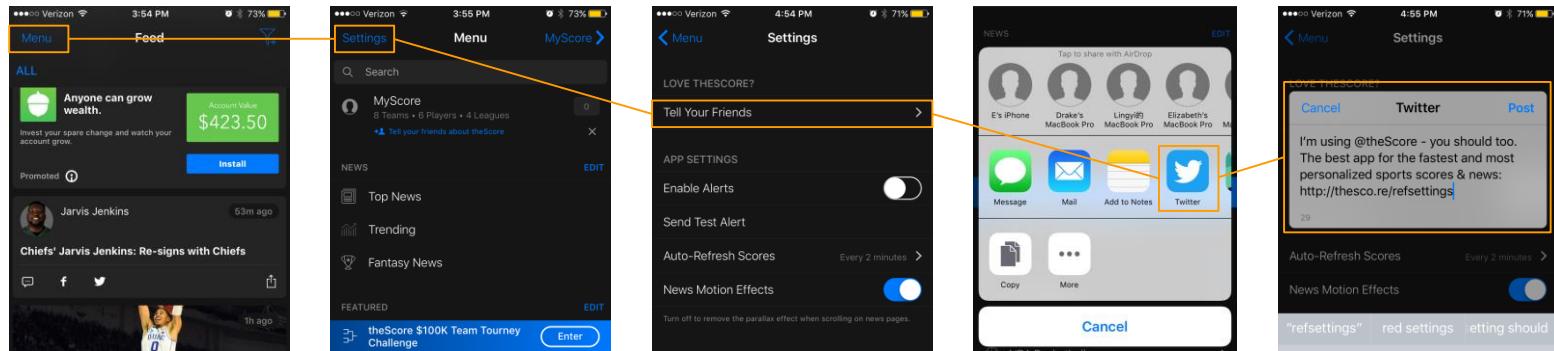


User 2: Demo Task Flow

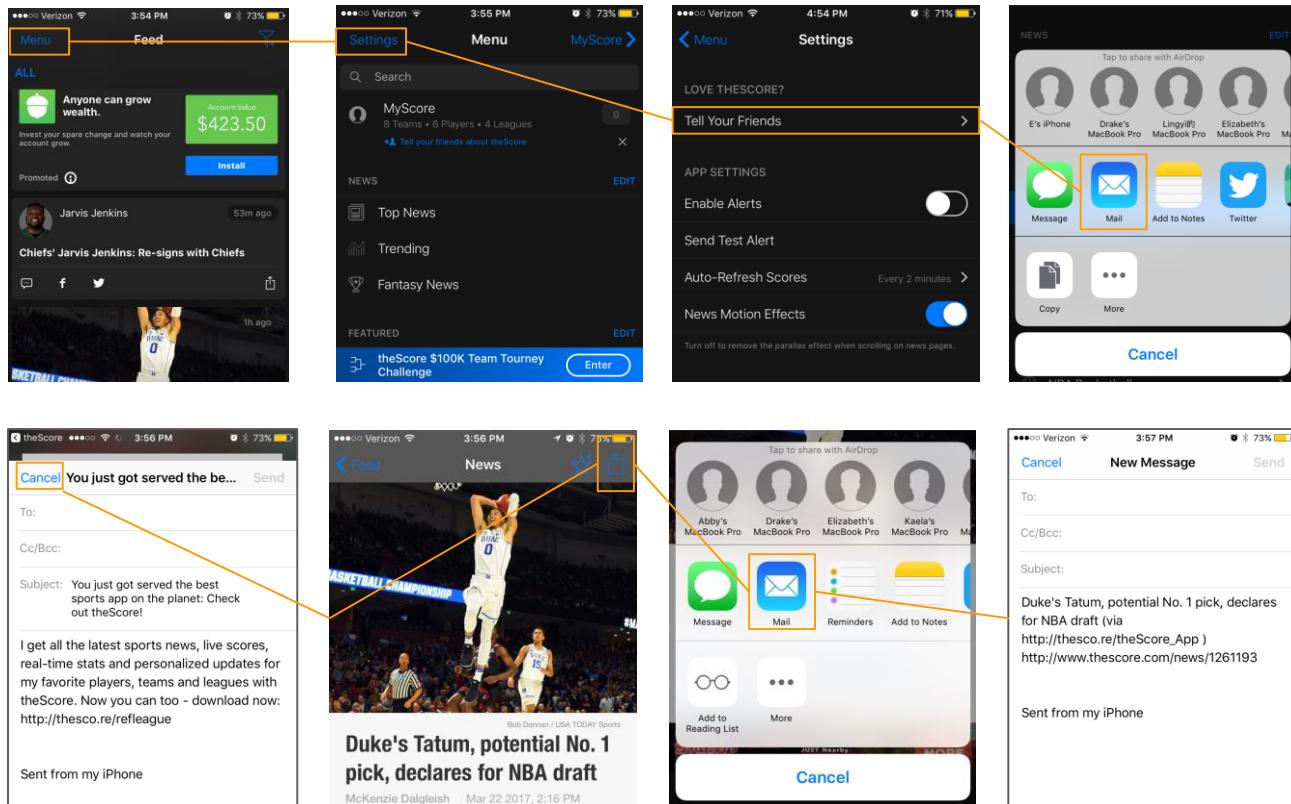
Male | 21 | College Senior | iPhone 6



Twitter User Task Flow



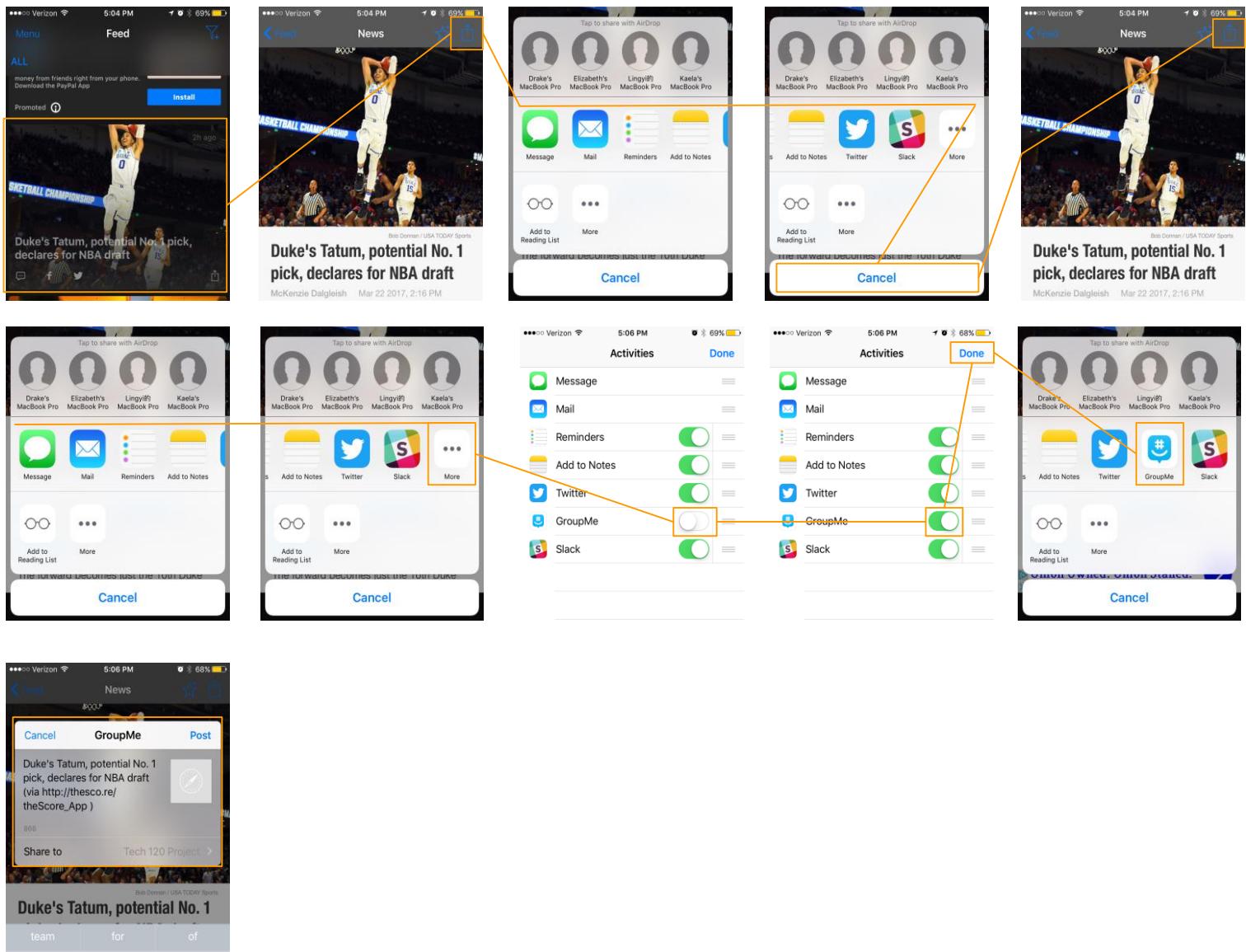
Email User Task Flow



User 2: Demo Task Flow

Male | 21 | College Senior | iPhone 6

GroupMe User Task Flow



User 3: Demo Task Analysis

Male | 23 | College Graduate | iPhone 4S

Sports Applications



NHL Hockey Use: 1-2 times/week during the NFL season

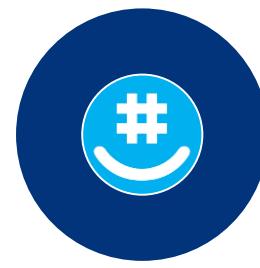
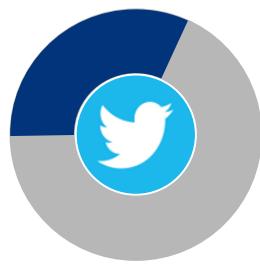
Social Media Applications



Most Used: Instagram **Interval:** Daily
Content Focus: Keep in touch with friends & Share information
Purpose for use: Share event details & Post pictures

Time On Task

Time on task for articles shared to the following applications:

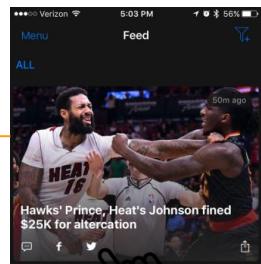
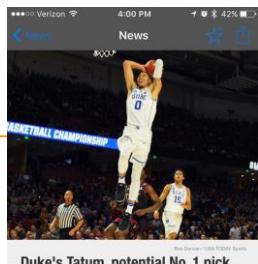
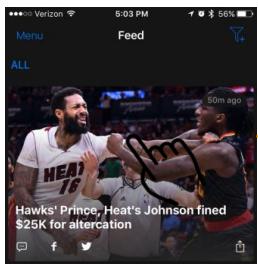


User 3: Demo Task Flow

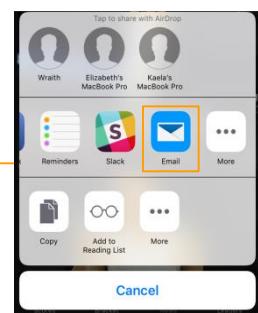
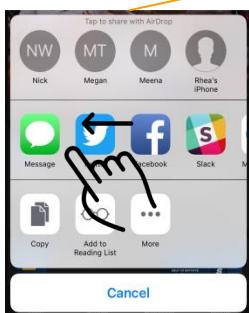
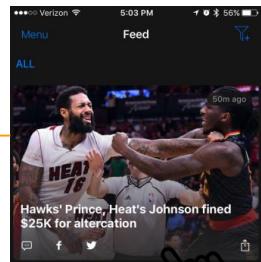
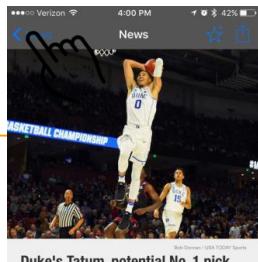
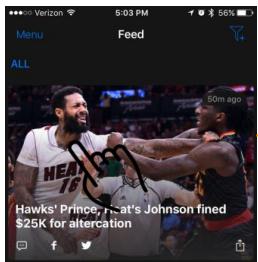
Male | 21 | College Senior | iPhone 6



Twitter User Task Flow

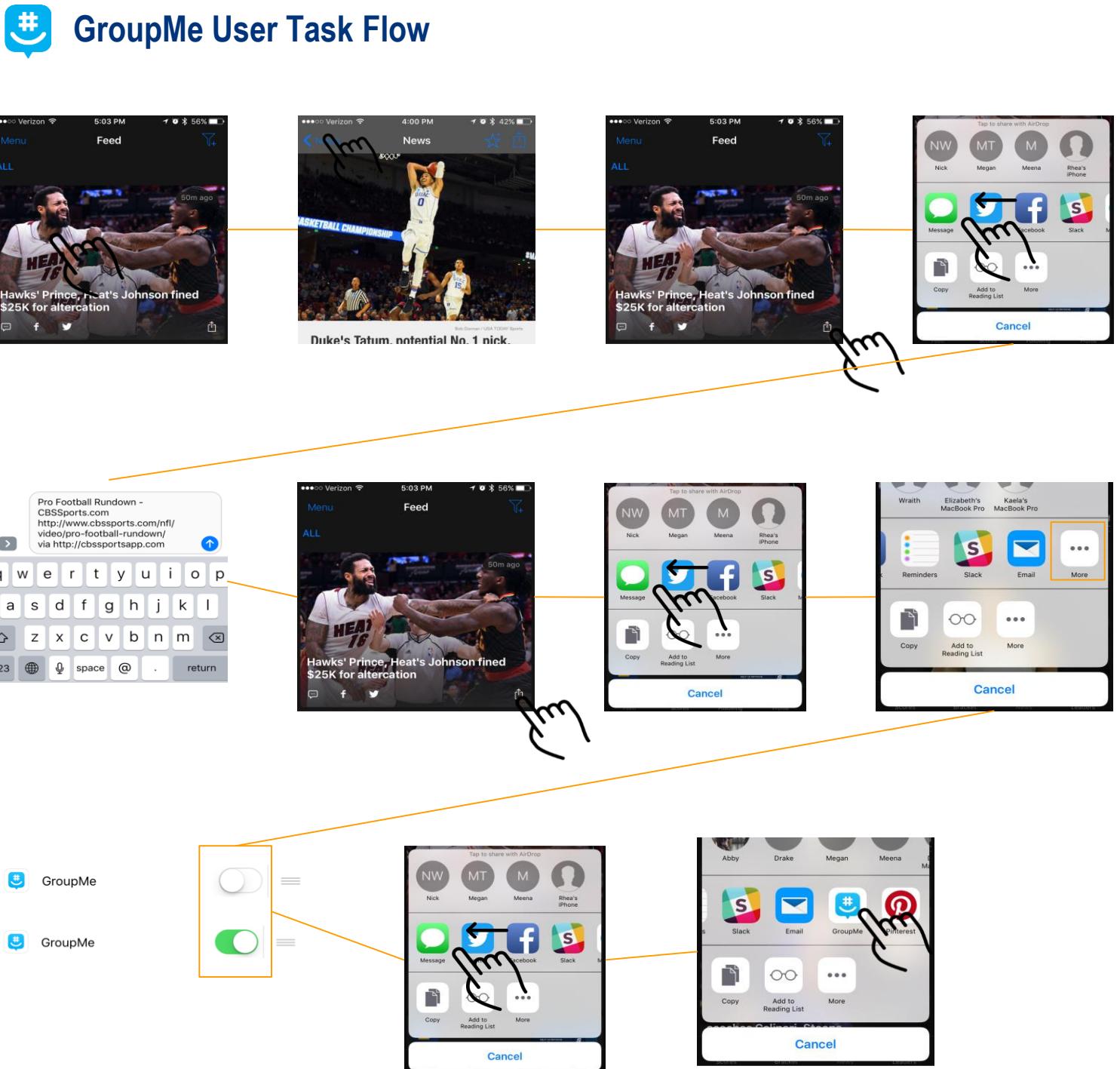


Email User Task Flow



User 3: Demo Task Flow

Male | 21 | College Senior | iPhone 6



User 4: Demo Task Analysis

Male | 18 | College Sophomore | iPhone 7

Sports Applications



ESPN | BTN | FOX Sports Use: Multiple Times a day

Social Media Applications



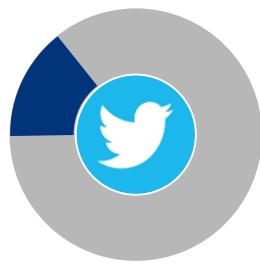
Most Used: Twitter **Interval:** Daily

Content Focus: Sports information and updates

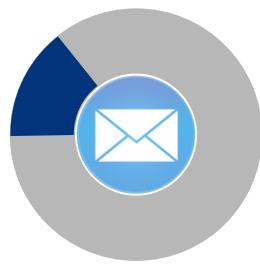
Purpose for use: Keep up with the News & Sports Scores

Time On Task

Time on task for articles shared to the following applications:



4 sec



4 sec



13 sec

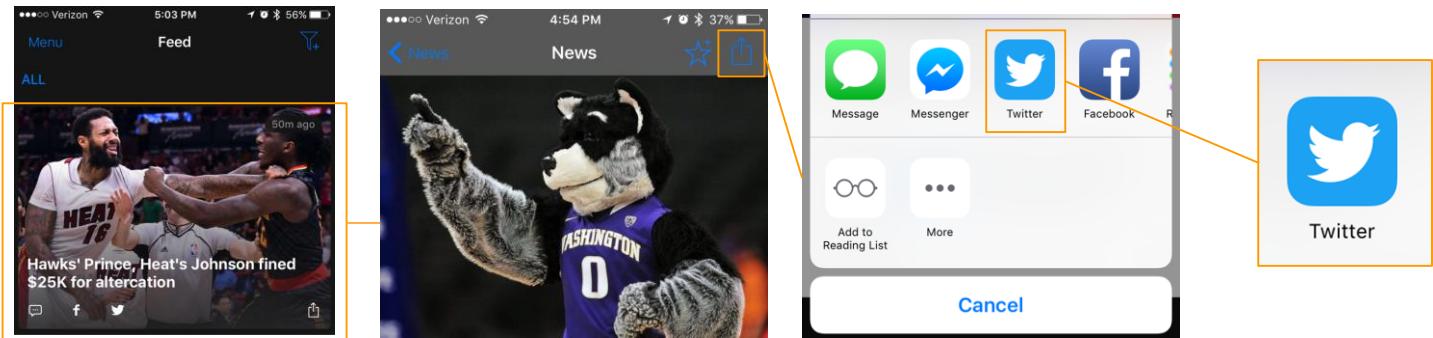


User 4: Demo Task Flow

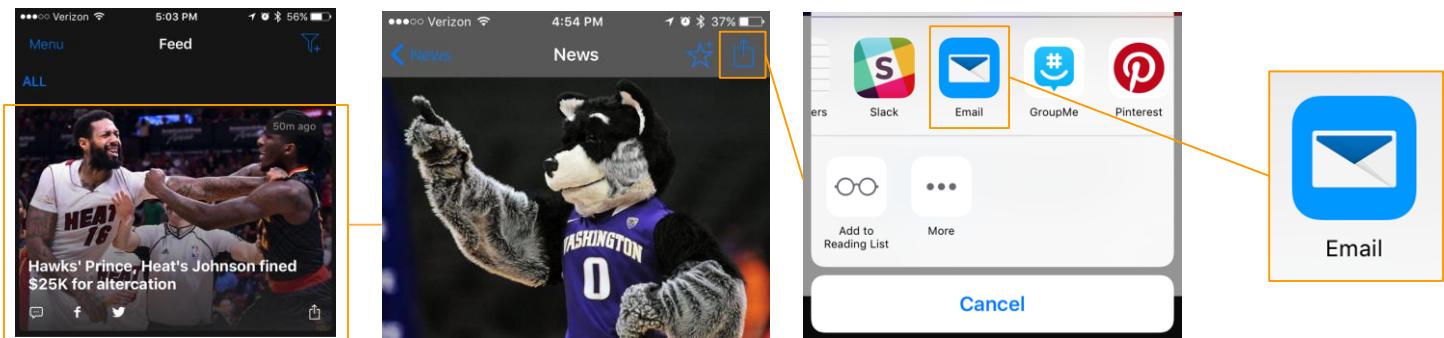
Male | 18 | College Sophomore | iPhone 6



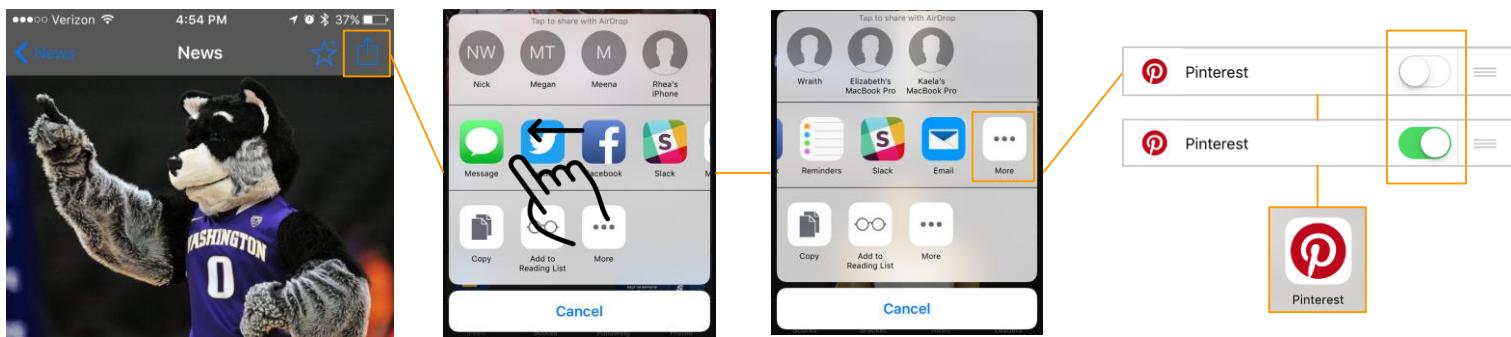
Twitter User Task Flow



Email User Task Flow

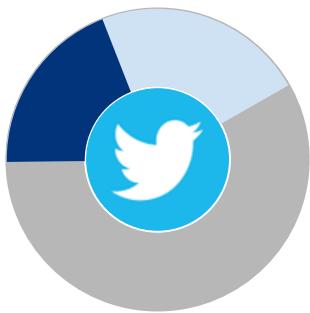


GroupMe User Task Flow



DEMO TASK SUMMARY

Average Time On Task & Required Clicks



11.75 sec

Sharing to Twitter

There are multiple ways in which users can share article information to Twitter. The simplest interaction is performed by clicking the Twitter icon from theScore's "News" page. Working through this task flow it would take the user **2 button clicks** to perform a successful share. However, if users disregarded this icon they would have to go through the iOS ShareSheet to successfully discover the application, that may be turned off in the prompted screen and could require up to **6 button clicks** to share.



10.75 sec

Sharing to Email

There are 2 ways to share theScore's articles via email. Both require using the iOS ShareSheet. The first option would require a total of **2 button clicks**. The user would click the iOS export icon on theScore "News" page, prior to entering the article and would select email from the iOS ShareSheet. The second option would require a total of **3 button clicks**. The user would click to open the article from the "News" feed, would click the export icon in the upper right corner of the article, and would click to select email from the iOS ShareSheet.



22.75 sec

Sharing to Pinterest/GroupMe

Both of these applications were turned off in the iOS ShareSheet. This presented a problem for many users as it required them to open the ShareSheet navigate to the "more" option, turn the application on, go back to the ShareSheet, locate the corresponding icon, and then share the article. This process requires the user a minimum of **7 button clicks** and **maximum of 12** to perform a successful share.

30 sec.

A/B Testing

A/B TESTING RATIONALE

We performed A/B Testing between theScore application and ESPN's application. ESPN is a the most well known sports application and a company that theScore has frequently compared themselves to. This testing was performed in an effort to understand the major differences between the applications and the user preferences that correlated with them.

Through this process we hope to find:

- Comparative Aesthetic
- User's First Impression
- Visual Stimulation
- Comparative Sharing Preference

A/B TESTING PROTOCOL

Environment Notes

Record with GoPro | Observers taking notes | Provide iPhone to participant with apps

Protocol

Participants Chosen randomly, half start with theScore, half start with ESPN

ESPN - News Feed Interface

open application but do not interact

1. Before you touch anything:
 1. What attracts your attention on the page?
 2. Is there anything you want to tap on right away?
2. Feel free to scroll through this page, describe your thoughts about what you see out loud as you scroll.
3. Are there any articles that look interesting to you or grab your attention? Why?
 1. Would you share this article?
 - i. Where?
 - ii. Why?
 2. Can you share that article to Twitter?
 3. Continue to post screen:
 - i. What are your thoughts about this post?
 - ii. Would you post this as-is, or would you change it?
 - iii. Do you have any thoughts about apps pre-generating post text?
4. If not already in the article, please open the article
 - i. Can you share that article to Facebook?
 1. What are your thoughts about this post?
 2. Would you post this as-is, or would you change it?
 - ii. Can you share that article to GroupMe?
 - iii. Continue to post screen:
 1. What are your thoughts about this post?
 2. Would you post this as-is, or would you change it?
 3. Do you have any thoughts about apps pre-generating post text? Do you like/dislike it?
4. Is there anything you liked/disliked about this app? What were your impressions about it?

A/B TESTING PROTOCOL

Environment Notes

Record with GoPro | Observers taking notes | Provide iPhone to participant with apps

Protocol

Participants Chosen randomly, half start with theScore, half start with ESPN

theScore - News Feed Interface

1. Before you touch anything:
 1. What attracts your attention on the page?
 2. Is there anything you want to tap on right away?
2. Feel free to scroll through this page, describe your thoughts about what you see out loud as you scroll.
3. Is there any articles that look interesting to you or grabbed your attention? Why?
 1. Would you share this article?
 - i. Where?
 - ii. Why?
 2. Can you share that article from this screen?
 - i. If yes:
 1. Can you share that article to Twitter?
 2. Continue to post screen:
 - a. What are your thoughts about this post?
 - b. Would you post this as-is, or would you change it?
 - c. Do you have any thoughts about apps pre-generating post text?
 3. If not already in the article, please open the article
 - i. Can you share that article to Facebook?
 1. What are your thoughts about this post?
 2. Would you post this as-is, or would you change it?
 - ii. Can you share that article to GroupMe?
 - iii. Continue to post screen:
 1. What are your thoughts about this post?
 2. Would you post this as-is, or would you change it?
 3. Do you have any thoughts about apps pre-generating post text? Do you like/dislike it?
 4. Is there anything you liked/disliked about this app? What were your impressions about it?

A/B TESTING FINDINGS

A/B Testing Finding Rationale

This test was conducted to find the major user preferences between the existing ESPN and theScore applications. On the next few pages you will find our results from this test. Each number (1-4) is representative of a contestant that participated. Their opinions regarding these applications have been synthesized from videos with audio from their interactions with the systems.

As follows on the next few pages you will see results for:

- ESPN
- theScore
- Preferences between the applications

A/B TESTING FINDINGS



Where is the User's Attention First Focused

1. Video Playing at the Top of the Application
2. Video Playing at the Top of the Application
3. Video Playing at the Top of the Application
4. Could not determine from the audio

What Did the User Initially Want to Interact with

1. Nothing Drew Attention for Clicking
2. Video at the Top of the Application
3. Video Playing at the Top of the Application
4. An Article about Purdue

What were the Users Preferences on Sharing

1. User believed the process was “simple”
2. User believed the process was “easy”
3. “It was just one more button to push, so it’s a little harder, but I’d still like it to be pretty easy”
4. User believed the process was “easy”

What were the Users Thoughts on the Application

1. Application was clean and easy to understand
2. Liked cleaner layout and video options
3. “It looks pretty similar. I think it’s pretty much the same.”
4. Liked how you could easily swipe between scores and news

A/B TESTING FINDINGS



Where is the User's Attention First Focused

1. Top Article Title
2. Top Article Title
3. Star Icon: "it's a different color, that contrasts with everything else"
4. Could not determine from the audio

What Did the User Initially Want to Interact with

1. Scores icon at the Bottom of the Interface
2. Star icon in Top Right Corner
3. Search Bar
4. Could not determine from the audio

What were the Users Preferences on Sharing

1. User Believed that the Process is Efficient
2. Found it to be Easy, Liked Personalization of Social Media Posts
3. "It was pretty easy just 'cause that's the first thing that I would..."
4. Thought it was Easier, but also Faster than ESPN because of the SMS/Facebook/Twitter Quick Buttons

What were the Users Thoughts on the Application

1. User felt that the Task Flows of the Application were very Similar to ESPN, but Content Differed
2. User thought it was "Pretty Good", but the Advertisements are Placed too Frequently and are Annoying and could also use some videos.
3. "It would get across the point of why I would post it to Twitter"
4. User thought it was more Aesthetically Pleasing than ESPN, but the Dark Colors were Taken as a Negative Feel Compared to the White & Light Gray of ESPN.

A/B TESTING FINDINGS

User Preferences for Each Application



SEPARATION | HEADLINES | VIDEO

- The user really enjoyed how different sports were separated into separate cards with titling and icons and thought that this aided the ease of understanding for the application.
- The user liked the Top Headlines section and the video options within the ESPN app.
- User was very happy with the detail. It provided the first paragraph, an image, and the initial part of the article, as opposed to theScore where there is an image with the article title.



DEPTH | ACCESSIBILITY | SHARING

- The user felt that the content provided by theScore was more in depth, in terms of titling and article copy, than that of the information that was interacted with on the espn app.
- The user found the sharing options on theScore easy to access (from within articles) and liked the text light layout of the feed. However, user found the in-feed ads to be annoying and placed too often.
- The user considered sharing on theScore to be easier since the buttons are easily accessible.

Call to Action

Testing

CALL TO ACTION RATIONALE

We performed research to find, specifically regarding call to action buttons, what colors and shapes most attracted users' gazes and clicks/taps. This was done with the goal of learning how to increase the attention garnered by theScore's app's share buttons, preventing users from 'filtering out' the buttons from their app viewing experience. We performed interviews, showing the participants the different shapes and colors in a multivariate or A/B arrangement and had users discuss what about their chosen preferences they found compelling.

Through this process we hope to find:

- Preferred icon shapes
- Preferred icon colors
- Reasons for user's' preferences
- Any other useful data offered up by participants during discussion

CALL TO ACTION: PROTOCOL

“Entrance Script....We will be asking for your opinion on our designs. Please be vocal throughout this process and let us know of any thoughts, feelings, or emotions that you encounter through this time.”

Questions

1. *(show share icons)* Could you arrange these buttons in order from most familiar to least familiar?
 2. *(Show various icons, all meant to mean “share”, a text field under each one)* Could you assign each of these buttons an action word that you think best describes its function?
 3. *(show button in multiple colors)* Which one would you be most prone to click?
 4. *(show multiples of the same article with varying export button sizes)* Please share an article? Could you please describe your decision making process?
 5. *(show multiples of the same article with varying export button colors)* Please share an article? Could you please describe your decision making process?
 6. *(show multiple links, different lengths, formats, etc.)* Which of these do you prefer?
-

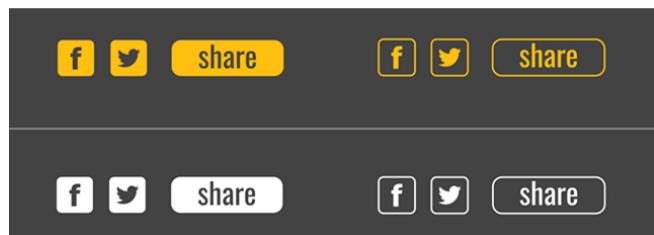
“Exit Script....Thank you for your participation in this evaluation. Your thoughts and opinions are a huge determining factor in our designs and we really value your time and effort. Thank you!”

CALL TO ACTION: TESTING

4 users | Male | Ages 19 - 21

For the testing of button preference and familiarity we created a slideshow that paired off different potential buttons based on shape, fill style, and color, controlling for one variable at a time. This slideshow was used for A/B testing and in some cases multivariate testing to determine which aspects users found most compelling in a call to action button. We also collected audio of each test to collect any insight that may not have been captured by the main test.

Below are two example test slides, one testing for button shape among solid white buttons, the other testing colors, showing both solid and outline buttons in the rounded rectangle shape.



During the test, only one user chose anything other than the round-cornered rectangle for the “share” button, choosing the circle-sided rectangle instead. The Facebook “f” icon was unanimously preferred in the round-cornered square, and the Twitter icon was preferred in the same shape, but with two users preferring it in the circle when filled only. For the “share” button, the filled button was preferred 10/12 times. For the Facebook “f” icon, it received an exact 6/6 split. The Twitter icon was also favored as a filled button in 9/12 cases. We tested the white & blue color scheme for the text buttons only, testing against the default white. With border-and-text-only buttons, no user preferred the blue text version. However, with white-filled buttons, the testers were split evenly on preference. The results suggest that, of the button shapes provided, the round-cornered rectangle or square was the most preferable, as some of our prior reading had detailed. Among the tested users, a filled shape was preferable to a mere outline and, tested against colors from the Score’s style guide, the favored color scheme was that of a white “share” button with blue text alongside twitter and facebook icons in their respective company colors,



To the left is the preferred button shape, fill style, and color scheme.

CALL TO ACTION: IN CONTEXT RATIONALE

To get a better sense of how the app's context would affect users' button preference, we ran similar tests, this time presenting the buttons on a mock article in the same style as theScore's articles. We had already ruled out certain unpopular colors, so we focused on two variations of our brand-centric color scheme as well as plain white.

Through this process we hope to find:

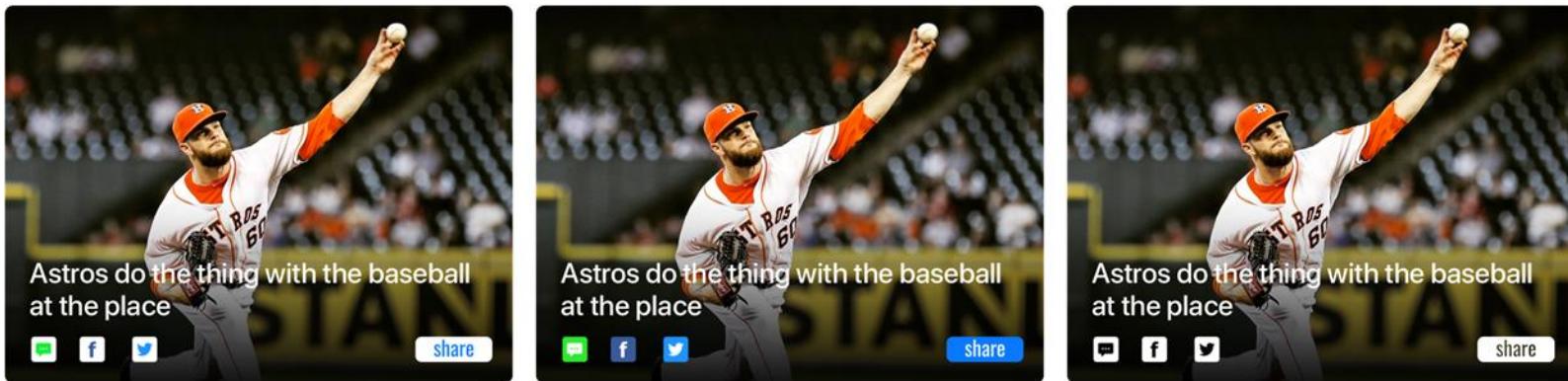
- Any difference caused by the different context
- Preferred icon colors
- Reasons for user's' preferences
- Any other useful data offered up by participants during discussion

CTA: IN CONTEXT

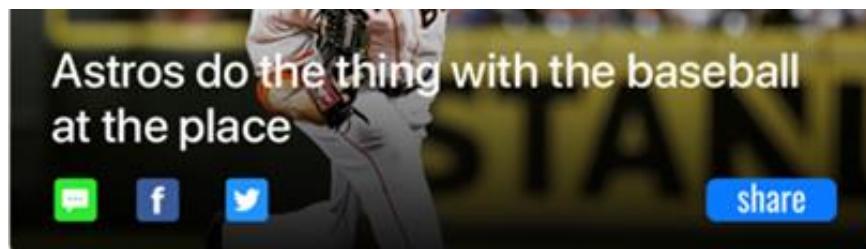
5 users | Male | Ages 19 - 20

After our first iteration of Call To Action button tests and settling on the shape of a round-cornered square/rectangle, we decided to refine the color scheme to match the social media brands' colors more exactly and to see how the background of an article preview image affected user preference. The color schemes were put through multivariate testing with five (5) participants, each asked to think aloud about their reasoning for making their choice.

Below are the three test slides, testing for button color among solid white buttons and two variants of the brand color scheme, one an inverted version of the other.



During the test, only one user chose anything other than the colored round-cornered rectangle with the white icon for their preferred button color layout, choosing the white round-cornered rectangle with the colored icon instead. Two participants mentioned that, because they were used to the official Facebook and Twitter icons, with their colored backgrounds and white images, they found the icon with a white square and a colored image to be visually conflicting and unpleasant. All participants forwarded high contrast with the darker background as an aspect they valued. When participants mentioned which color scheme earned "second place", they were evenly split between finding all-white either pleasantly unified or boring in comparison to the other options.



To the left is the overall preferred button color scheme of the test participants, when compared in a group of three, as shown above..

CTA TESTING SUMMARY

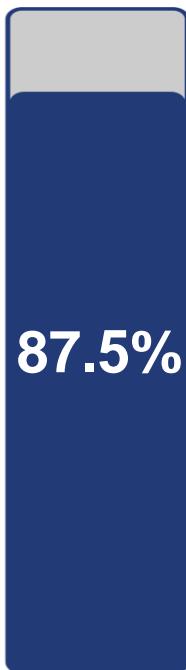
Methodology

Two rounds of multivariant testing of shape, one with filled shapes (shown), the other with outlines only. Each round tested once with a total of four users.

Demographics: College Males, aged 19-21, then 19-20

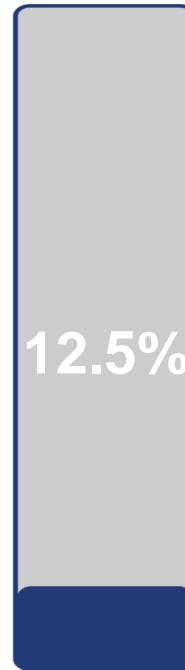
Takeaways

When discussing CTA button shape, participants repeatedly mentioned some notable keywords in relation to each button shape, shown below.



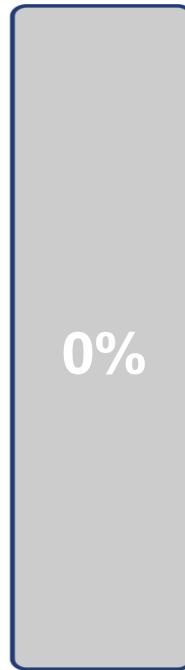
share

Users felt this was
“Welcoming”, “Smooth”,
& “Comfortable”



share

"Felt similar to the round
cornered rectangle, but
to a lesser degree"



share

Users felt this was
“Sharp” & “Harsh”

CTA TESTING SUMMARY

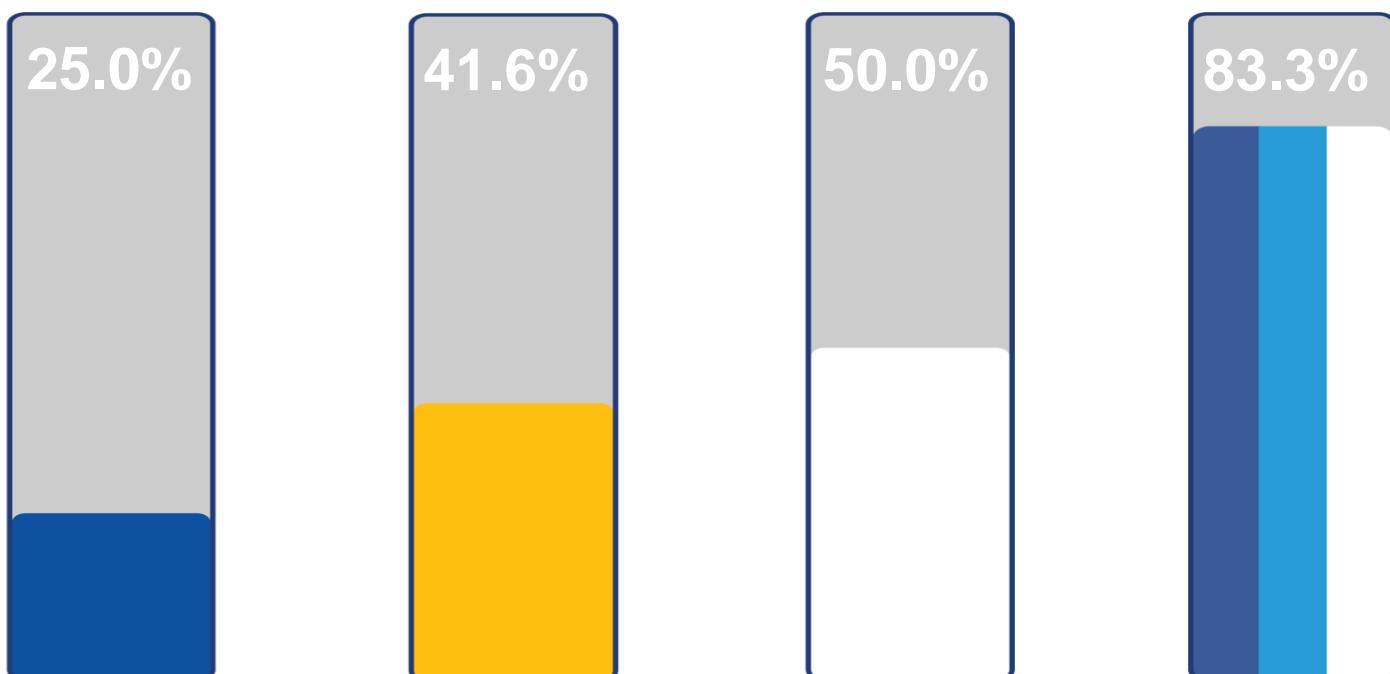
Methodology

Two rounds of multivariate testing of shape, one with filled shapes (shown), the other with outlines only. Each round tested once with a total of four users.

Demographics: College Males, aged 19-21, then 19-20

Takeaways

When discussing CTA button shape, participants repeatedly mentioned some notable keywords in relation to each button shape, shown below.



Users felt this was
“**Welcoming**”, “**Smooth**”,
& “**Comfortable**”

“**Felt similar to the round
cornered rectangle, but
to a lesser degree**”

Users felt this was
“**Sharp**” & “**Harsh**”

Icon Preference Testing

ICON PREFERENCE RATIONALE

We performed surveys and had users rank icons by preference and understandability/clarity of message. We felt it was important to test icon preference and understandability because theScore users cancel shares 66% of the time after clicking the iOS export icon. We wanted to see if this could be related to a lack of understanding of the iOS export icon.

Through this process we hope to find:

- User icon preferences.
- Current icon understandability.

ICON PREFERENCE TEST

30 Sports Fans | Male | Ages 18 - 35

For the testing of icon preference we created a Qualtrics survey that had users rank (1 through 5) their understanding and familiarity with 5 different share icons (seen below.) Users had the survey link emailed to them and were able to fill it out at anytime they pleased.

Results



63% of the 30 users ranked the simple "share" as the most understandable icon.



43% of the 30 users ranked the newer iOS as the second most understandable icon.

Analysis

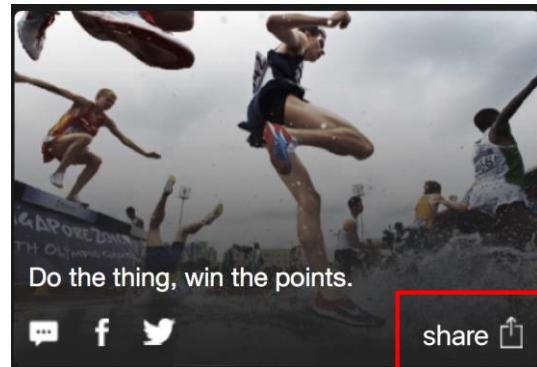
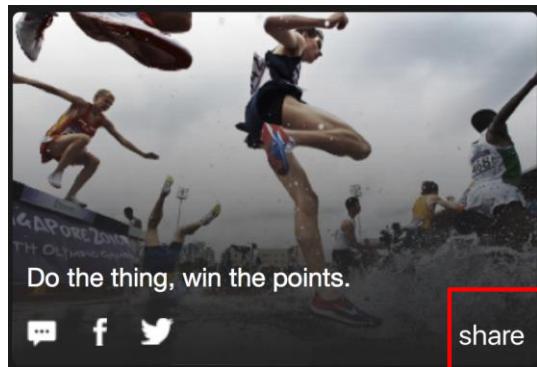
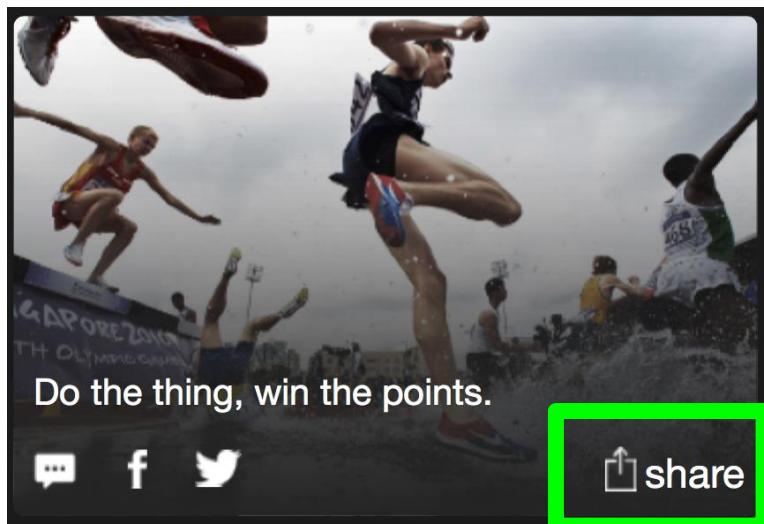
The results of this survey suggest that a share icon may not necessarily be the most effective way to communicate with users. Test results indicate that simply using the word share can be effective, as it is a highly recognized and understood word, with an obvious function behind it.

IPT: IN CONTEXT

6 sports Fans | Male | Ages 18 - 35

For further testing of icon preference we took the two most well recognized icons from our past round of icon preference testing, the new iOS icon and “share”, and combined them to see if having the export icon next to the “share” icon would have any impact on preference.

Participants were shown the 4 articles seen below (in random order) and asked to rank them, based off the lower right corner icon, according to how direct and clear the message was. 1, being most direct. 4, being least direct.



Results

67% of people tested preferred having the word “share” with the export iOS icon to the left of it (highlighted in bold orange). Reasons given were “I like seeing text” and that they like having that extra context to reaffirm their understanding of the icon.

IPT TESTING SUMMARY

Methodology

We completed two rounds of preference testing in which users ranked icons by understandability/clarity of purpose. For our first round we did icon understandability with a survey in which users ranked their understanding of 5 share icons. For the second round we did in-person/ in-context icon combination preference testing using different combinations and solo uses of the “share” icon and the iOS export icon.

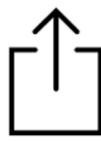
Takeaways

When discussing icon understandability and clarity we found that people like icons that clearly state their purpose and are familiar to them.



share

Users ranked this as the very **best understood icon** out of the five shown to them.



Users ranked this as the **second best understood icon** out of the five.



Users ranked this as the **best understood icon combination** out of four.

Image Testing

IMAGE WEIGHT PROTOCOL

When scrolling through theScore app we found that most images were fairly similar; they were center weighted action shots of games and players. We wanted to test if adding a variety of image weights would make a difference in user interaction with articles.

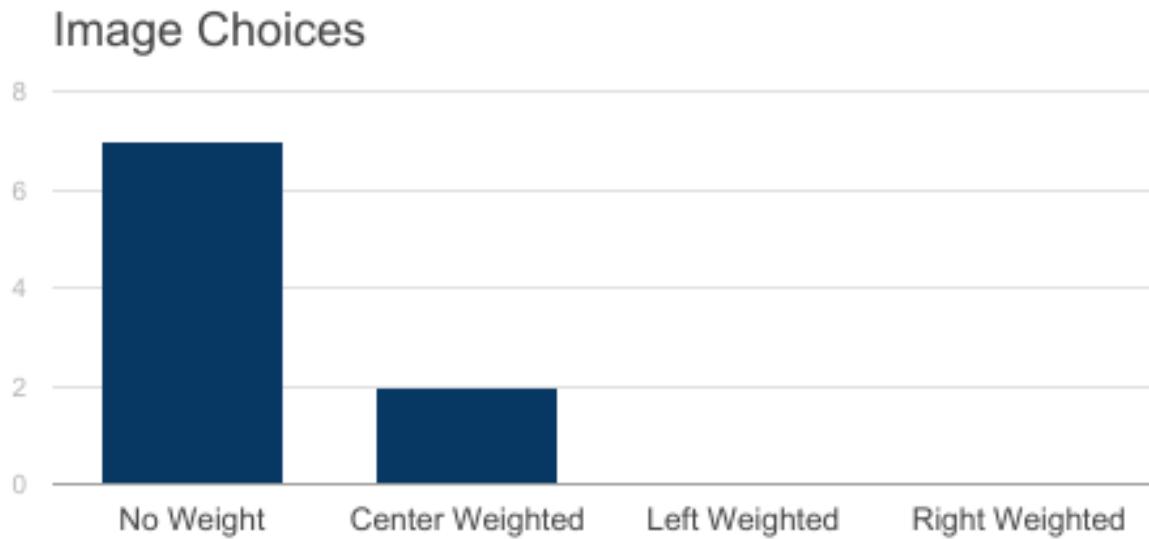
PROTOCOL

1. Users were presented with a slideshow of four images of the same sport. Each image was shown full screen on a laptop for five seconds before the next image was presented. Out of the four images, one was center weighted, one left weighted, one right weighted, and the last had no weight. There were multiple versions of each slideshow so that there was randomization in the order of the images that were presented to the users.
2. After seeing each image the user was shown a blank slide for five seconds as well. This was so that the users would not choose an image because it was the last one they had been shown. They had a chance to forget details of the image; something that would have happened with the previous images in the slideshow simply because of the order of the images in the slideshow.
3. Lastly, user were shown a screen with a grid of the four images and asked which image attracted their attention the most.
4. This was repeated for two more sports, resulting in a total of three slideshows.

USERS

There were three users, all of which identified as male and whose ages were 23, 23, and 22.

IMAGE WEIGHT RESULTS



ANALYSIS

Users tended to choose images that had no weight to them. Although far behind, center weighted images came in second. Images that had no weight were wide shots with no clear focal point. Users tended to like these images for a variety of reasons: some users said that what was attractive was the quality of the image, how clear and sharp it was, others said they liked these images for the atmosphere they captured. One image of a baseball field got the response: "I've lived in Chicago my whole life; I've always gone down to Wrigley field and this image reminds me of that." Users also talked about how the wide shots captured a lot going on, the amount of action across the players and crowd attracted their curiosity.

Users also emphasized that, in their own opinions, **the content of the image (the player, the team, etc.) draws their attention more than the layout or quality of the image.**

Title Testing

ARTICLE TITLE PROTOCOL

We wanted to test if specific article titles or genres would perform better than others when it came to sharing. We developed a three-phase test to test five different article topics: player news, league news, scores/game stats, sports culture, and player stories.

PROTOCOL

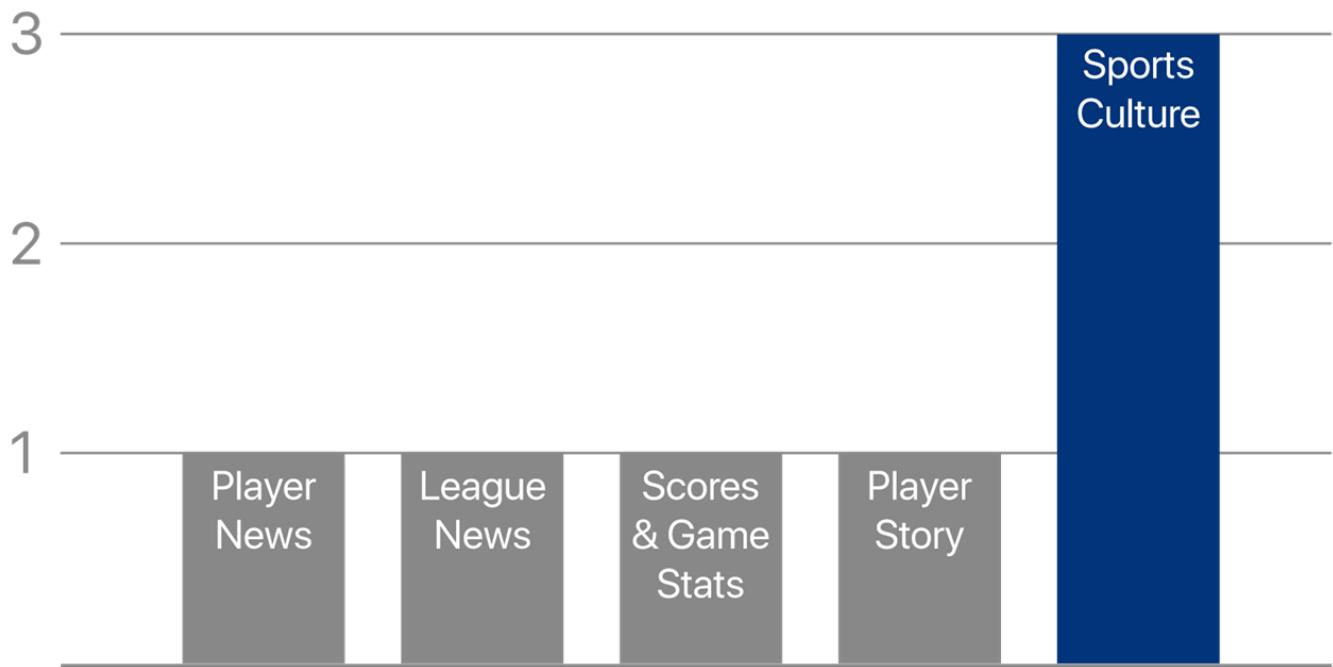
1. Users were given a list of five article titles about stories in a single sports league; MLB, NHL, and NBA were the leagues chosen. Each article was from one of the five topics listed above. The order of topics was randomized for each phase. Each user was asked, if they were to share an article from this list, which one would they share and where would they share it to.
2. This was repeated for each league, resulting in three phases: one for MLB, one for NHL, and one for NBA.

USERS

There were three users, all of which identified as male and whose ages were 23, 23, and 22.

ARTICLE TITLE RESULTS

Topics of Shared Articles



ANALYSIS

By the numbers, the users showed a preference to articles about sports culture by a small margin. In person, the users tended to say that they preferred articles about sports culture and player stories (players rise to fame, what are the best sports movies, etc.). These users also did not identify as “die-hard” fans, but rather more casual sports fans. This may have had an effect on their preference of culture and editorials over stats and scores.

The users were also asked where they would share their article choices to. The users unanimously chose Facebook as their medium of choice for sharing. Their reasoning was that it was the social media site they used the most, so they would default to it.

Design

Personas



Jake Wells | 20 | College Student

“I felt like it needs to be like certain articles for a sport.”

Heavy User | Informative Fan

Jake is a sophomore in college who appreciates on hand ways to stay up to date on the latest sports news. He is a true sports application aficionado and enjoys checking his sport apps multiple times everyday, so he can know scores in current games. With so many applications to focus on, Jake values clean layouts that he can easily scroll through and scan. He loves to focus on his favorite team, the Cubs. Sharing on social media for Jake is sparse and often limited to just a few occasional retweets on Twitter. However, if a big game has been won or he finds a good Cubs article he might post it. He especially likes articles that are not common place and have humorous content. It is important to Jake to stay up to date on sports, but it is not terribly important to him to share articles he finds interesting with his social media friends.



Brian Smith | 21 | College Student

"I have a buddy who's a fan of the knicks and I have a little rivalry with him since I'm a clipper fan"

Moderate User | Localized Fan

Brian is your average college socialite always looking for ways to stay in the loop with friends and the news. Brian is both a student and college athlete who lives across the country from his home town. One way in which he has been able to keep a close connection with his friends and family back home is through his use of social media and sports applications. All of his buddies from high school are still loyal to his rival team and Brian isn't afraid to rub it in when his team beats them. He usually turns to Twitter as his go to method of sharing and, as a busy student and athlete, loves the quick insights and visuals that the platform has to offer. To Brian staying up to date and being able to poke fun at his friends is an important part of his interactions online.



Dylan Reid | 22 | College Student

“Nothing really interests me unless I really care about the teams”

Light User | Loyal Fan

Dylan stays up to date with friends and family by bonding over sports teams and games. Much of his family is located in different areas of the country because he is away at school. He utilizes sports apps to keep him informed and able to continue the sports bond that he has with people close to him. As a student he doesn't have a large amount of time to spend searching for sports information and is thankful for the simplicity and spread of information that his sports apps provide him. Dylan isn't always prone to share information about sports. He likes to keep his shared information about things that he is directly involved in and to help promote the activities and organizations that he plays a leadership role in.

USER REQUIREMENTS

Our users need sharing to be

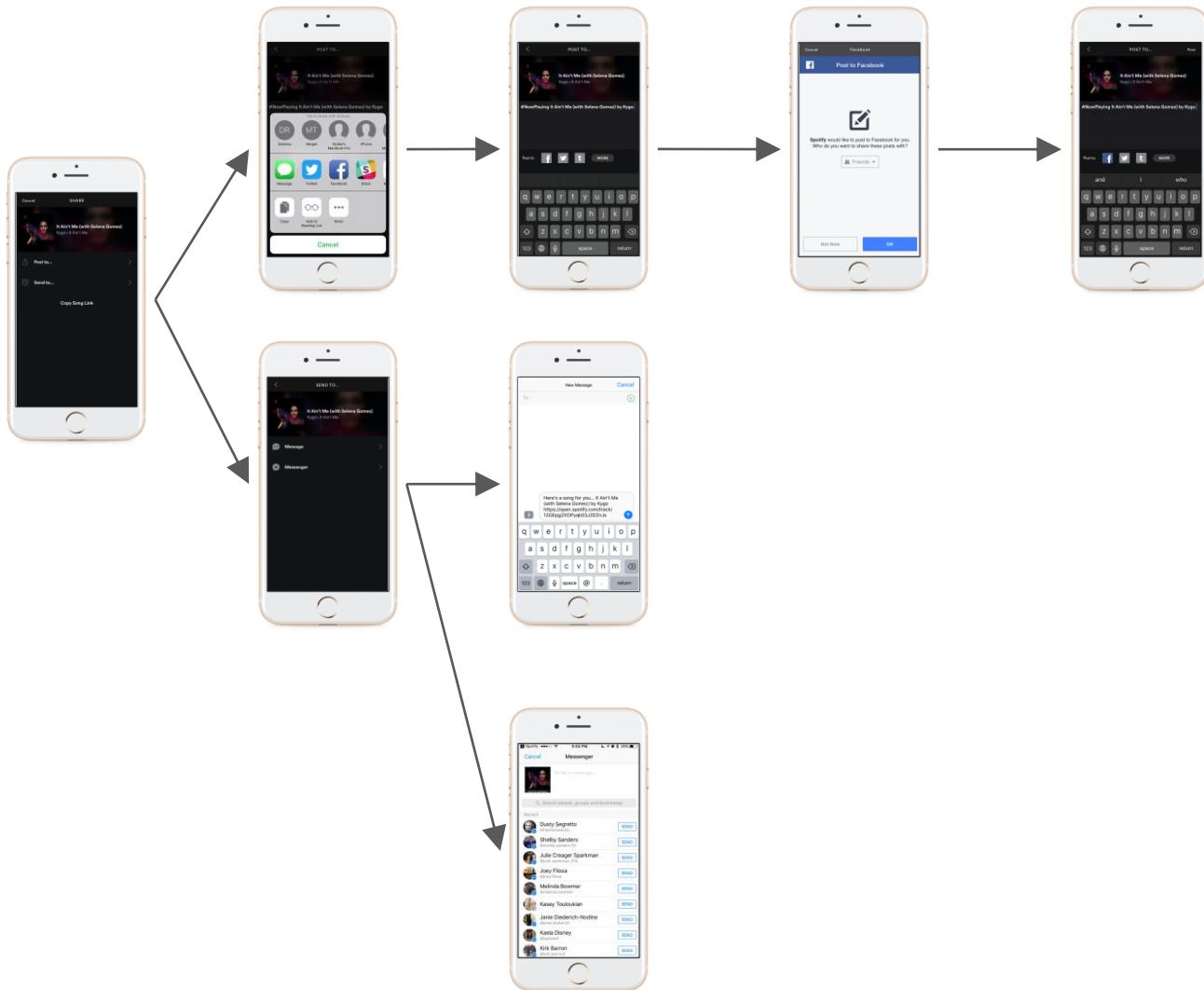
- Quick
- Intuitive
- Compelling
- Attractive

This can be accomplished by

- Minimizing the use of the share sheet
- Icon + Word
- Branded colors
- Rounded rectangles
- Microinteractions
- Animation/Movement
- Dynamic options

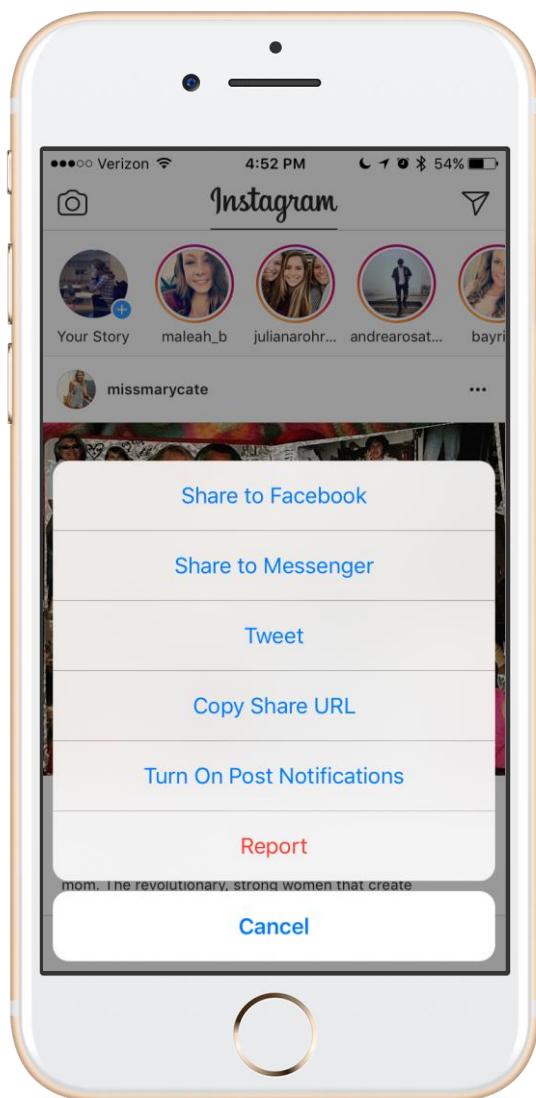
REVISITING COMPETITIVE ANALYSIS

After learning the users had a lot of trouble using and navigating the share sheet, we revisited how other apps share without using the share sheet. One such app that stood out was Spotify's guided share process



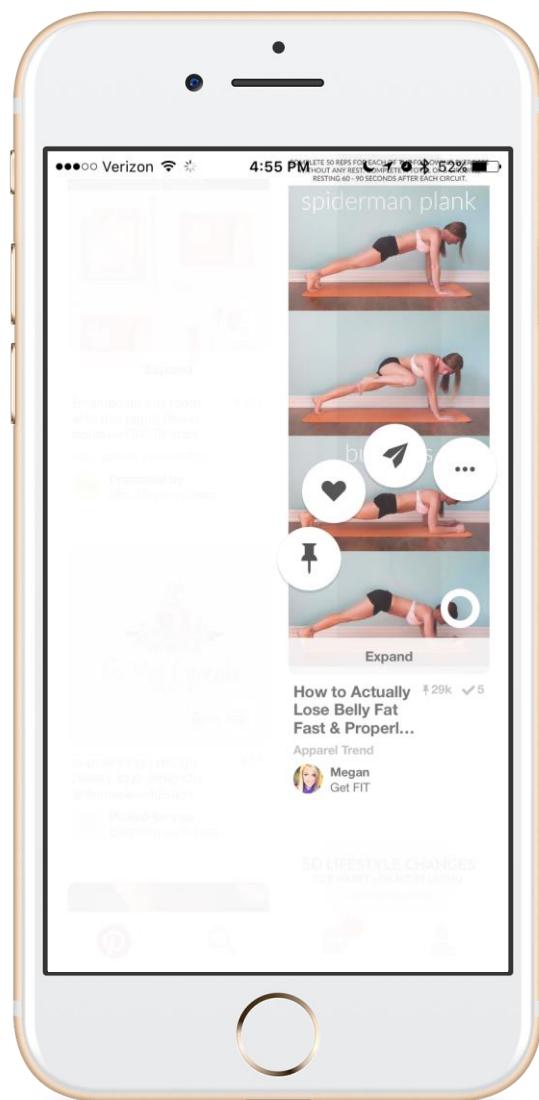
REVISITING COMPETITIVE ANALYSIS

Instagram uses an action sheet for sharing rather than the share sheet. While this restricts sharing options, the simple list of the action sheet could provide less confusion to users.



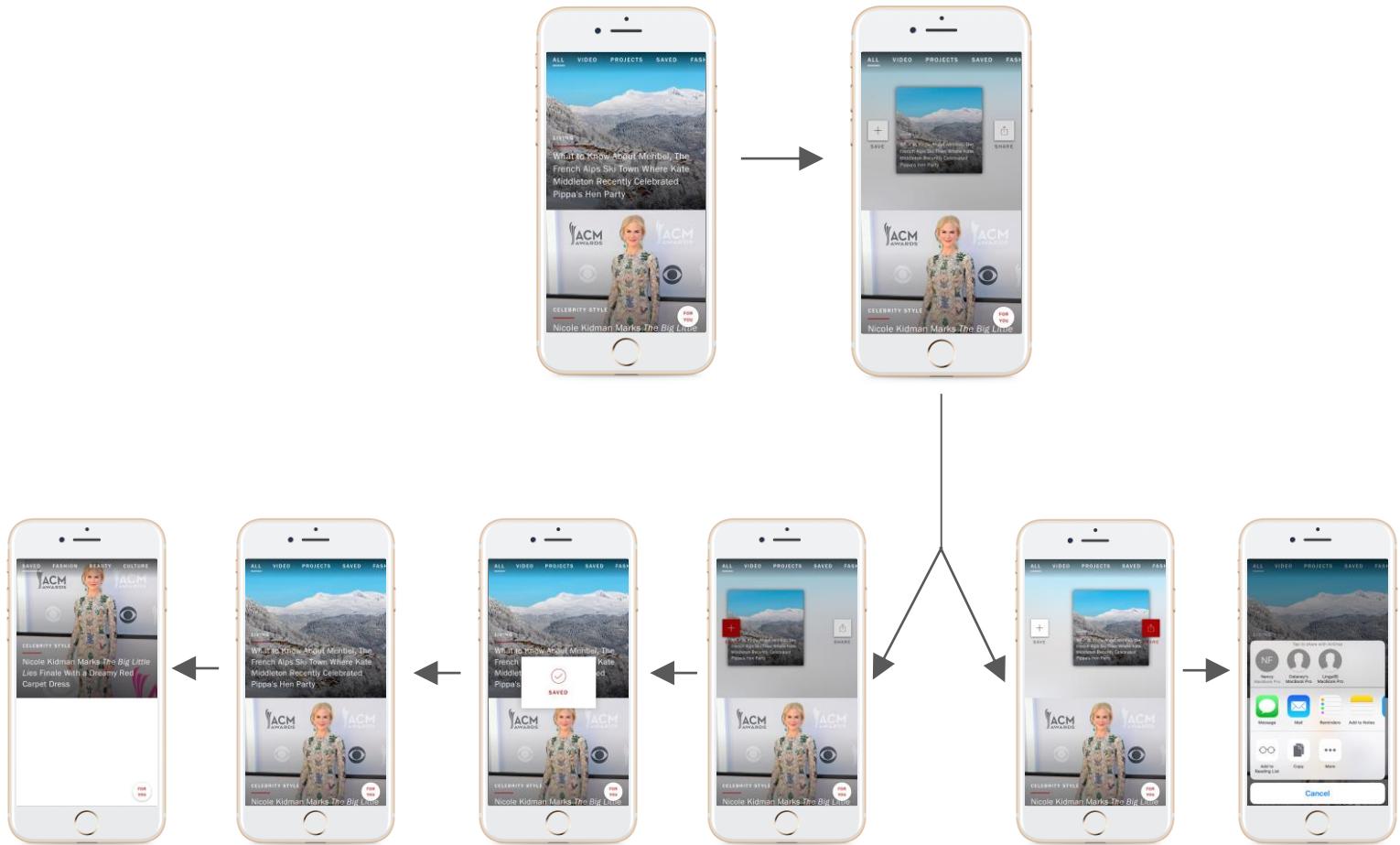
REVISITING COMPETITIVE ANALYSIS

Pinterest uses a unique sharing action: if the user taps and holds on a post, a radial list appears with different sharing options. Similar to Instagram's action sheet, this presents limited sharing options, but with a simple and intuitive interface.



REVISITING COMPETITIVE ANALYSIS

Vogue uses a drag and drop system to allow users to either save articles (left option) or export them to share via the Share Sheet. This is a minimalist approach to share icons that is highly in line with Vogue's elegant, effortless image.



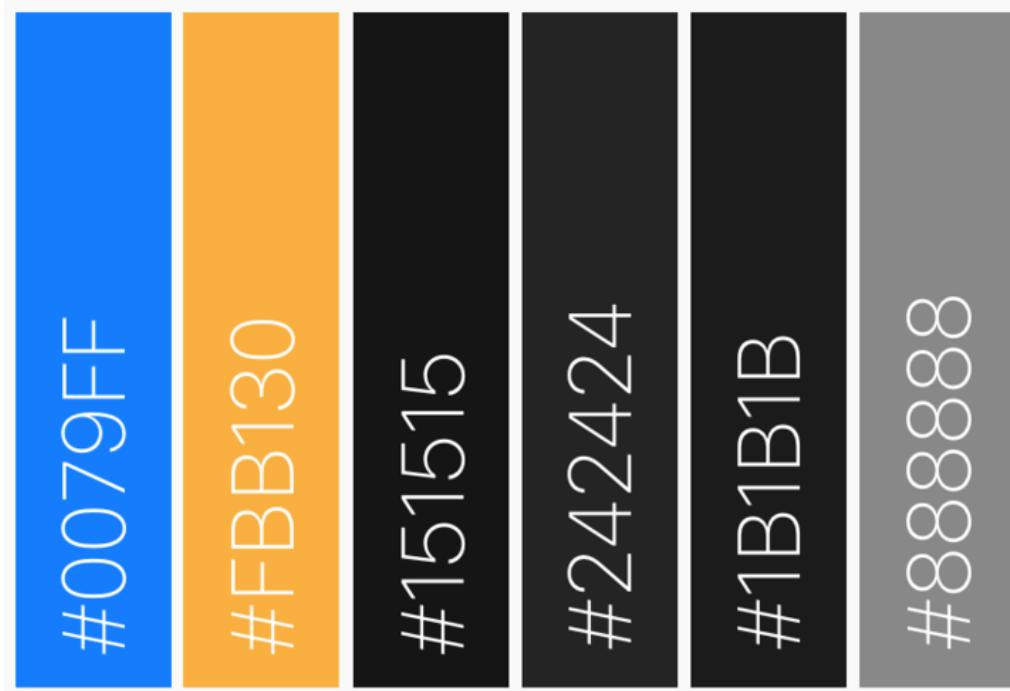
COMPANY STYLE GUIDE

San Francisco

The system font for iOS, OS X, and watchOS.

SF

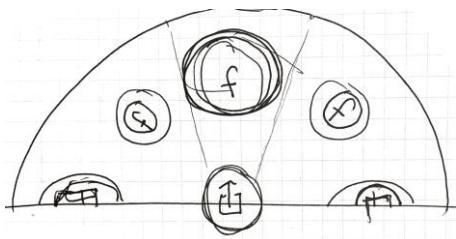
www.sanfranciscofont.ru



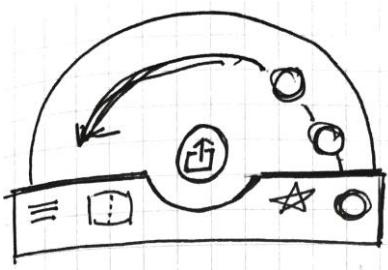
Primary	Follow	Background	App	Base	Secondary
C0/M0/Y0/K0 R255/G255/B255	C0/M0/Y0/K0 R255/G255/B255	C0/M0/Y0/K0 R255/G255/B255	C0/M0/Y0/K0 R255/G255/B255	C0/M0/Y0/K0 R255/G255/B255	C0/M0/Y0/K0 R255/G255/B255

SKETCHING

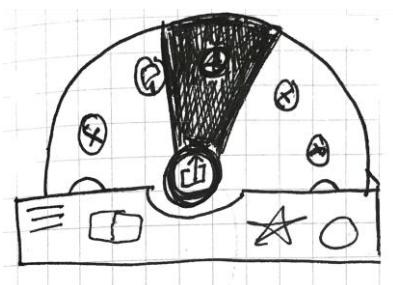
After considering our research findings, we moved on to sketching different design concepts. The sketches below are representations for these concepts.



We took a new perspective on in-article sharing. The interaction to the left shows a unique version of how



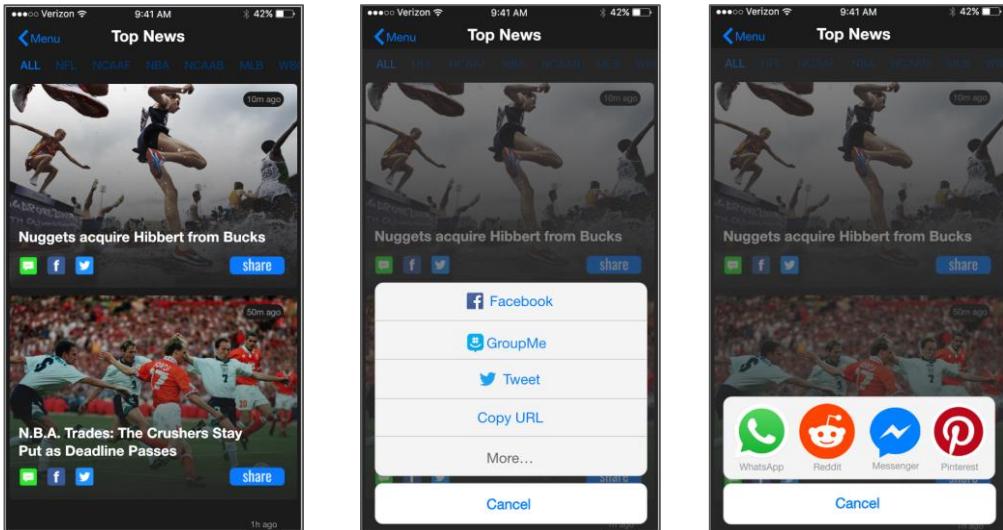
We want icons to wheel in from one side upon openings, both to provide eye-catching movement and to show that the wheel is something that can be spun/rotated. We think it would be beneficial to have the presented icons be loaded with the most-used ones being the most prominent.



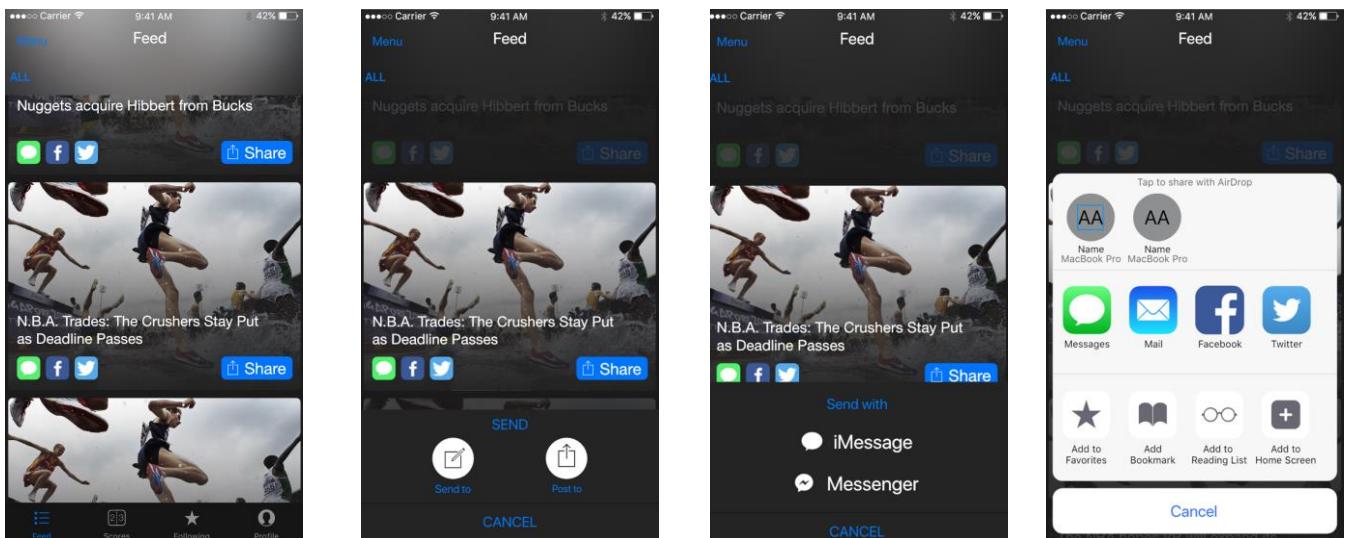
We want the center icon to be enlarged and made opaque so users can easily determine which icon is presently selectable.

PROTOTYPING

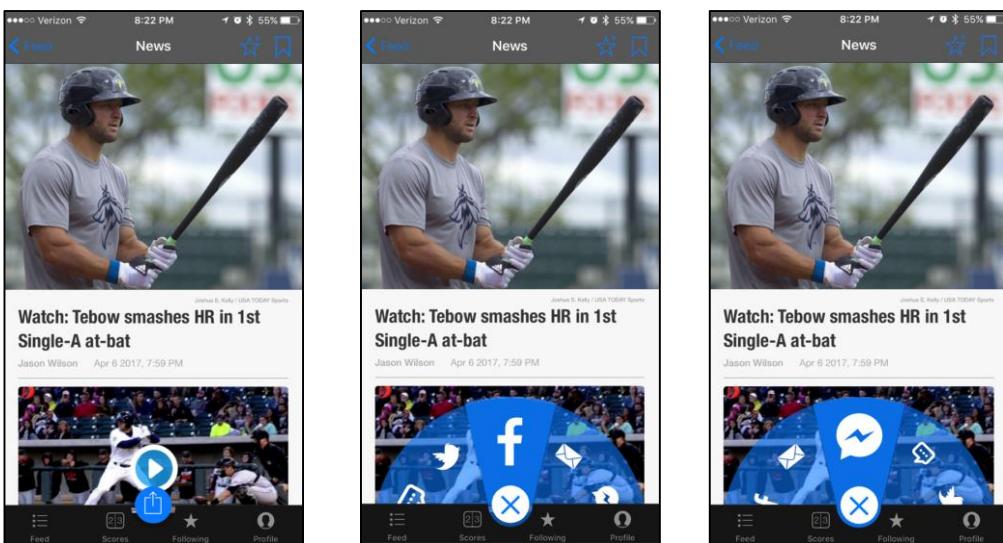
Action Sheet



Guided Sharing



Wheel Sharing



A/B Prototype Testing

A/B TASK FLOW RATIONALE

We performed A/B Testing between sharing task flows differentiating between either Public/Private or Wording Use. This testing was performed in an effort to understand the major differences between the task flows and the user preferences correlated with them.

Through this process we hope to find:

- Comparative Aesthetic
- Users' Impression of Efficiency
- Ease of use
- Comparative Sharing Preference

A/B TASK FLOW PROTOCOL

Environment Notes

Record with iPhone | Observers taking notes | Provide iPhone to participant with apps

Protocol

Participants Chosen randomly, half of the participants start with the prototype created by Elizabeth, hereon out to be referred to as “Lizzy”, half start with the prototype created by Nick.

“ ” - script

() - Instructions for observers/plan for interaction

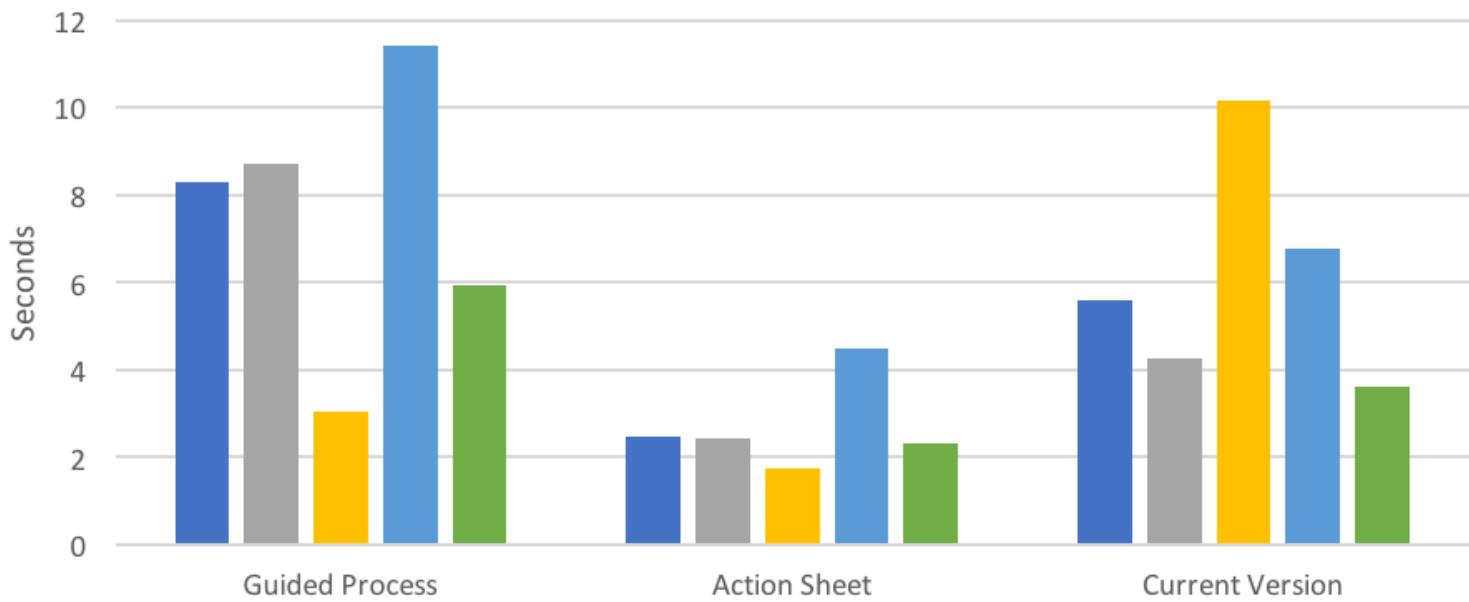
theScore - News Feed Interface

open application but do not interact

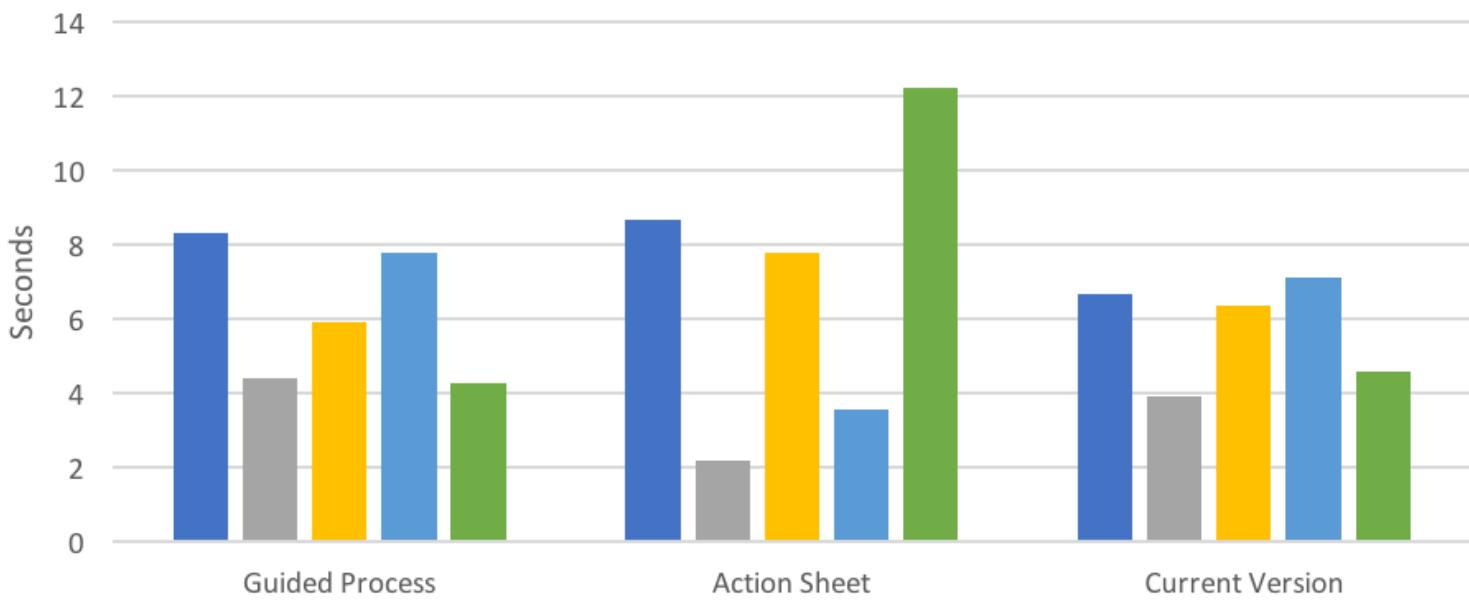
1. “Please share the top article to Facebook.”
2. “Please share the same article to Messenger.”
3. (Switch to second prototype)
4. “Please share the top article to Facebook.”
5. “Please share the same article to Messenger.”
6. “Which do you prefer and why?”
7. (Repeat for a total of two tests, the final test being between the preferred sharing function and the original theScore sharing function.)

RESULTS

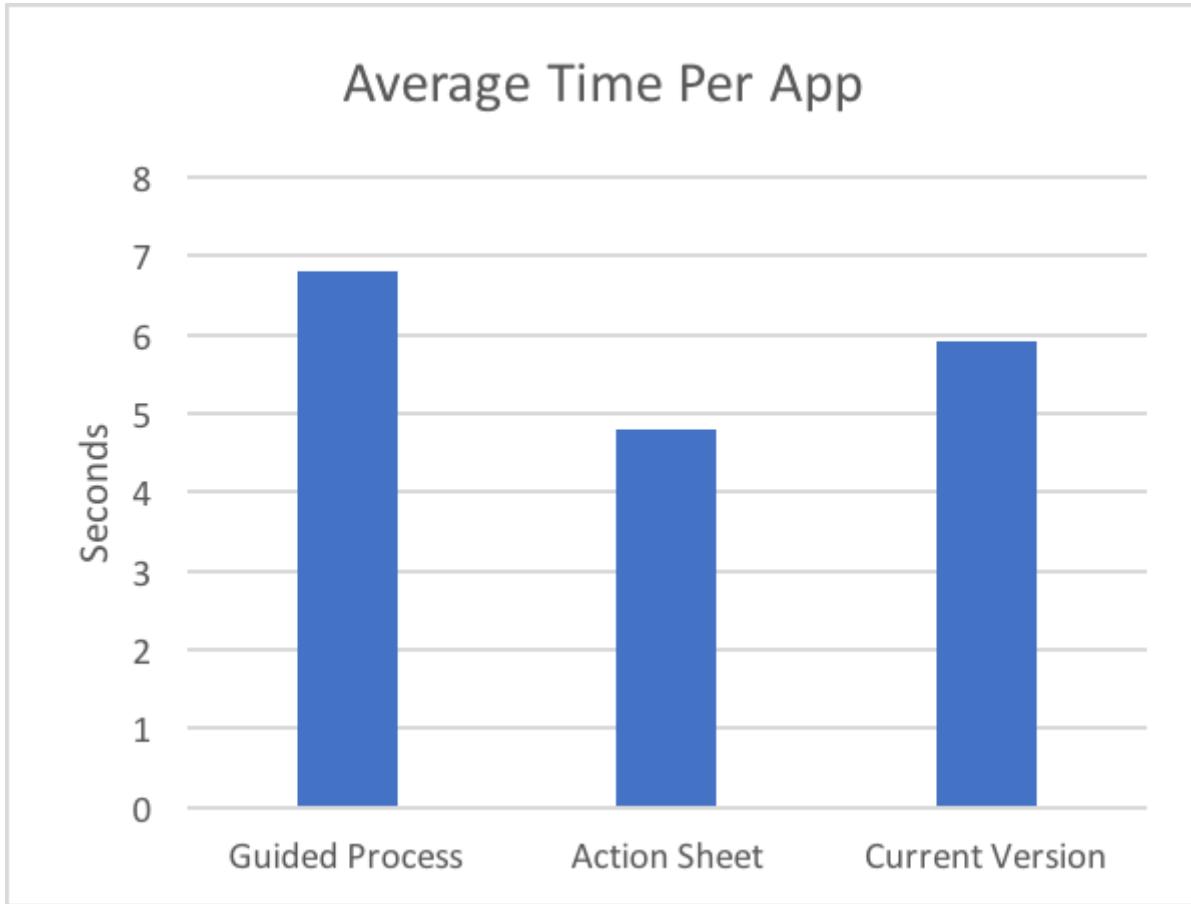
Share to Facebook TOT



Share to Messenger TOT



RESULTS



We found that the Action Sheet had significant less time on task, however it was not the preferred version. Users said they were used to and familiar with the share sheet, however they prefered the interface of the guided process, and believed that after they got used to it they would enjoy using it more.

In-Article Concept Testing

CONCEPT TEST

RATIONALE

We performed a preference test and time on task analysis with users to determine their opinion on what a new in application sharing process might look like. Our wheel sharing interface takes a new spin on sharing and avoids the use of the iOS Sharesheet.

Through this process we wanted to discover:

- If users understood the interaction
- If users enjoyed the new interaction
- If users would want to use the wheel interface
- If sharing through the wheel was easier/saved time

CONCEPT TEST PROTOCOL

Environment Notes

Record with iPhone | Observers taking notes | Provide iPhone to participant with interfaces

Protocol

Participants Chosen randomly, half of the participants start with the prototype created by team, half start with the original score application.

“ “ - script

() - Instructions for observers/plan for interaction

theScore - News Feed Interface

(open interface for user)

1. “Please share the article to Facebook.”

(Switch to second interface)

1. “Please share the article to Facebook.”

(Switch back to first interface)

1. “Please share the article to Facebook Messenger.”

(Switch to second interface)

1. “Please share the article to Facebook Messenger.”

(Take away iPhone)

1. “Which do you prefer and why?”

** Many tests required us to explain a few minor missing functionalities in the created prototype**

CONCEPT TEST RESULTS

Male | 20 | Design Student | theScore User

Current theScore Interface



7 sec



10 sec

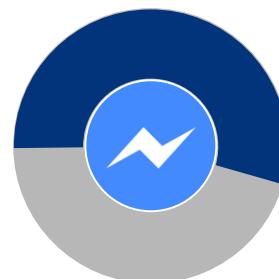
10 sec.

New Prototype Design



5 sec

8 seconds spent looking in
the corner for icon



6 sec

9 seconds of was spent
attempting to scroll

User Thoughts:

"After I open [The Wheel] my first instinct is that it looks good, but it's uncommon, like I'm familiar with the other [ShareSheet], whereas with this one I have to learn, although it is very easy to learn. "

CONCEPT TEST RESULTS

Female | 18 | Design Student

Current theScore Interface



6 sec



9 sec



New Prototype Design



7 sec



11 sec

6 seconds were spent
attempting to scroll

User Thoughts:

I like the wheel better. It's more clear that I can share it. It's more direct, where I wouldn't think to share with the other because it's hidden in the corner. The other [wheel] is kind of promoting me to share, with the button and the color and the fact that it's in the center."

CONCEPT TEST RESULTS

Female | 19 | Design Student

Current theScore Interface



7 sec



6 sec



New Prototype Design



7 sec



10 sec

6 seconds were spent
attempting to scroll

User Thoughts:

"I like that this [wheel] is obvious you could see that you could share it. I expected to be able to spin the wheel. In this one[original], there weren't a lot of buttons so it was easy to find a specific button and this is something I was familiar with and this is something I do a lot [share to messenger through the share sheet]."

CONCEPT TEST RESULTS

Male | 20 | Design Student | theScore User

FB Current:

Given: 0 sec Opened: 2 sec Posted: 5 seconds

FB Wheel:

Given: 14 sec Opened: 18 sec Posted: 21 seconds

****14-18 was looking in top right for button as first interface declared

FB Messenger Current:

Given: 29 sec Opened: 30 sec Posted: 43 seconds

****30-40 spent in the more sheet as user scrolled past the messenger icon in the sharesheet

FB Messenger Wheel:

Given: 47 sec Opened: 48 sec Posted: 54 seconds

****48-52 was attempted scrolling

User Thoughts:

"I would say that this [wheel] is not as natural compared to having your button in the corner, because my eyes don't naturally default towards the center of the screen. I originally wanted to click on this [replacement icon in the corner]. "

COMPILED RESULTS

5 Users: 3 Female | 2 Male | College Design Students

Current theScore Interface



3.25 sec



6.5 sec

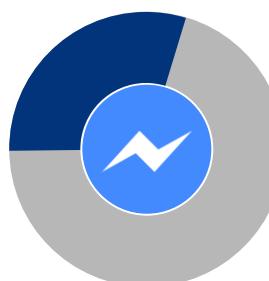


New Prototype Design



3.2 sec

8 seconds spent looking in
the corner for icon



2.75 sec

9 seconds of was spent
attempting to scroll

User Thoughts:

- New wheel design is unique
- New wheel design is different from the typical sharing sheet in many ways
 - Button location threw users off only when they started with the test with the original interface
 - Some users were concerned with having to learn the new format, but with no instruction instantly understood the scrolling affordance, and could share in the same time frame, without any onboarding.
 - It is more distinct and obvious than the action icon is currently. (Color, location,)

Design Recommendations

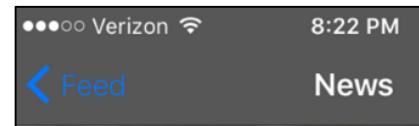
DESIGN RECOMMENDATIONS

Call to Action: We recommend that call to action buttons take the shape of rectangles, with rounded corners. We also recommend that the share buttons take on the brand color of the social media outlet to which they share.



share

Color: After analysing and testing the current Score color scheme, we believe that said color scheme is appropriate for the color blind as it is a large portion of the user group. Banner menus in the app where blue text or icons are displayed on a black or dark gray background were found to be of too low of contrast for most users.



Icon Choice: We recommend that you use the “share” icon with the export icon on the left of it. In preference testing the “share” was the most preferred icon and during prototype testing people appreciated the clarity of the “share”, with one user pointing out that people might not know that the export icon means share



DESIGN RECOMMENDATIONS

PROTOTYPES

1. **Guided Process:** For sharing from a feed interface we recommend using a guided process interface similar to what we designed and tested earlier. While time-on-task increased, the majority of users preferred the guided process and thought it was a more enjoyable sharing experience
2. **Wheel:** We recommend utilizing the wheel sharing prototype as a new method for sharing content when a user is within article. We found that this decreased time spent on sharing and was well reciprocated by the users.
3. **Testing:** We recommend testing the two prototypes to determine which has the most enjoyable sharing experience. Due to the contrasting styles of sharing between the prototypes, we recommend using a Likert system to asses how hard the users believe sharing will be (Ex.: On a scale of 1-5, how hard do you think sharing an article will be?), and then again after they've gone through the experience to judge how hard and enjoyable it actually was. This is explained in more detail on the next page.

NEW TESTING PROTOCOL

Test each user with one of two application pairs:

guided process & current version of theScore app, or spinning wheel & current version of theScore app.

Before the task, ask the user to answer the following question on a scale from 1-10:

How hard do you think it will be to share an article?

Task: Please find an article and share it to the Facebook (interchangeable with any other app with sharing functionality) (do this with each application)

Once the user has finished the task for each application, ask them to answer the following question on a scale from 1-10: How hard was it to share an article?

For final results each user should have a score for how hard they thought the task would be, and two scores for how hard the task actually was. This should provide a quantifiable score for how difficult the task was for each application. The users' interactions with the apps can also be recorded to observe any issues the users have.

SUMMARY

This semester we plan to research and analyze elements that could be affecting the shareability of theScore's content. Based upon our research we will develop a functional prototype that we can test with users, and then refine based upon the feedback and results that we receive. Finally, we plan to have a fully tested prototype as well as quantitative supporting data to deliver to our sponsor, John Andronowski, at theScore, where they can take action upon our findings and designs as they see fit.