Usability Testing

Twitterrain: Share of Voice tasks

Twitterrain is an analytic dashboard designed to assist marketers in gaining insight of their audience's engagement in the Twitter space. The subset of tasks that I focus on is displaying the number of times a specific brand is mentioned using a particular keyword. For instance, how many times is Nike mentioned under the keyword shoes, meaning all tweets that have the word shoes mentioned in them? In marketing term, this task is called "Share of Voice" or SOV for short. It was developed after engaging with marketers to define the list of tasks. For this reason, I reached out to one of the marketers again during the prototyping phase after a static visualization is formed. Even though I observed all of the tasks the marketer has done during the usability testing, in this paper, I will focus on just SOV tasks. Unfortunately, for the second usability testing, I was not able to schedule a meeting with another marketer due to time conflict, so I went with a seasoned software developer with experience in developing full stack application. With no experience in marketing, he will bring fresh perspective as to how intuitively clear the visualization is. In addition, since he has worked with multiple UX designers and brought forth multiple applications to fruition, he can give insight as to what is feasible and what is not.

The tasks that we would like the users to achieve is to answer the following questions regarding SOV:

Given the use case that you are a Nike shoe marketer and your competitors are Adidas and Puma,
1. How many times is Nike mentioned under the keyword shoes, meaning all tweets that have the word shoes mentioned in them?
2. How many times is Adidas mentioned under the keyword shoes in the time range of 11/20/2018 - 11/25/2018?
3. What is the overall sentiment of the Nike brand?

I added a fourth task after completing the first usability testing and placed this question before the third question.

4. For the time range of 11/20/2018 - 11/25/2018, what is the rough estimate of the percentage difference between the number of tweets that have Nike and Adidas mentioned together versus the number of tweets that have Nike mentioned by itself?

Usability Testing #1: Marketer

The first usability testing is with a marketer named Robert who has six years of digital experience, experience in social listening and paid social campaigns. The static visualization that I provided for him are the ones below. The left one refers to what the user will see once he inputted the keyword shoes as well as the brands Nike, Adidas, Puma. The right one refers to to what the user will see once he specifically clicked on a particular brand Nike.
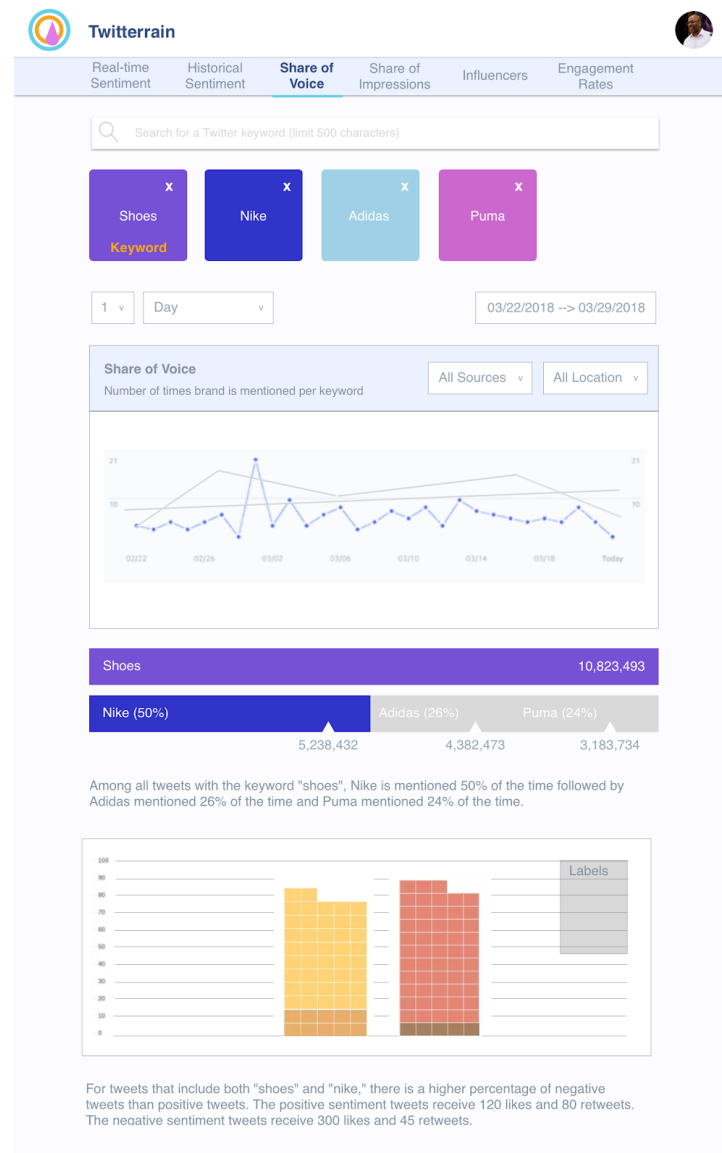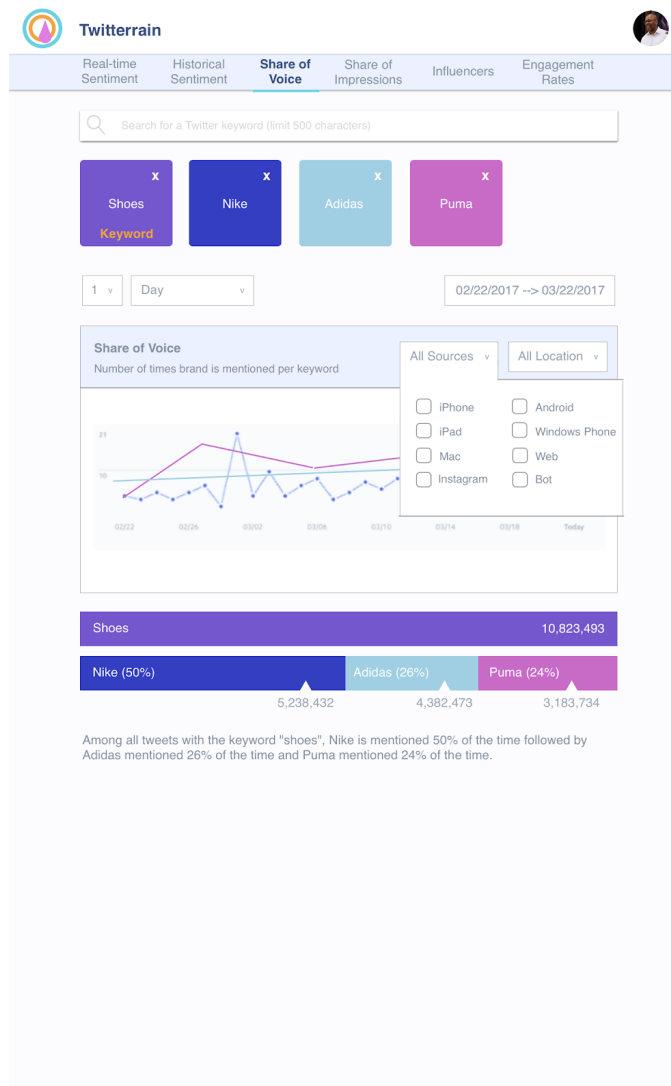
As soon as he initiated the first task, he has a perplexed look and said the bar graph is deceiving since it does not include the number of times none of the brands are mentioned using the keyword shoes. He then continued answering the question of the task with ease.

As for the second task, he was disappointed to find that we limit the time range to only 7 days. We provided a brief explanation why since he asked; it was due to Twitter limiting its free API to just 7 days, and he again continued the task with ease. He briefly mentioned it would be very helpful if there was a way to see a more detailed view of the combination that both Nike and Adidas is mentioned or Nike and Puma is mentioned together. We agree to take note, and he moved on to the third task.

On the third task, he immediately mentioned that there is no way he can tell what is positive and what is negative. It would have been better if there was an explanation as to how we defined negative, neutral and positive. Since he did not particularly trust our algorithms, he also would like to see the tweets associated with the sentiment.

Future Improvements

We took his inputs and broke down the improvements to the following categories:
1. Must have
    a. A "no mention" category where none of the brands is mentioned in the tweets
        i. Reason: We do not want to deceive the users when interpreting the visualization
    b. A more detailed view of the combination of brands mentioned in a tweet
        i. Reason: We followed up with another marketer briefly and did find the tasks to be important in their day to day tasks
    c. An explanation how we define negative, neutral and positive sentiment
        i. Reason: Without it, the user will be lost in carrying out the task. Also, it is a simple feature that will not consume much time.
2. Should have
    a. An explanation why Twitter limits the date range to just 7 days
        i. Reason: It is important to explain why we limited it, but we also know that we will implement the feature so that user will not be able to go beyond the 7 days.
3. Could have
    a. Capability to see individual tweets under the sentiment section
        i. Reason: It is a nice to have feature but without it, the user is still able to carry out his/her task.
4. Won't have

Usability Testing #2: Software Developer

After incorporating the suggestions from our first usability test, we were able to come up with the following revision. I then built a partially working copy and performed a second usability testing on a software engineer who has no experience in marketing. Our user, Nabil, also has six years experience as a full stack developer, particularly adept in productizing application in the backend. At first, I have to explain what the goal of these tasks do by defining what Share of Voice is before he begun.
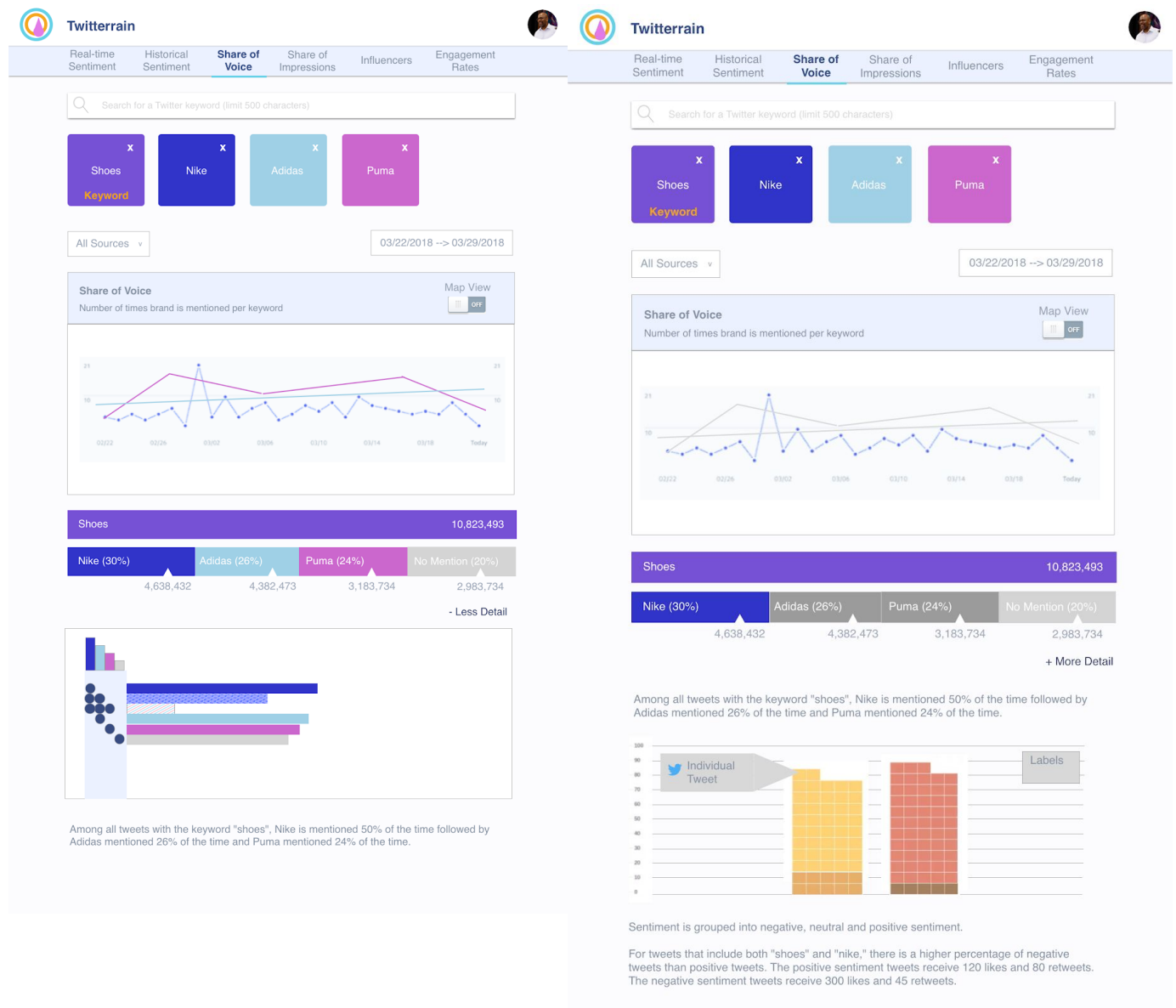
Since it was a working prototype, the first thing that he saw was:

He was quite confused, not knowing how to start the first task by asking us to repeat the prompt. After 5 minutes of not knowing where to begin and he continually asked for guidance, I typed in the keyword "shoes" into the search bar and double clicked on "shoes" to enable it as a keyword. Then I asked him to type in the brand Nike, Adidas, and Puma on top of the search bar. He said it would have been better if the first thing we type to the search bar automatically default to the keyword and potentially replace the search bar to mention "brand" for subsequent search. Later when we wanted to make one of the brands a keyword, there should be a tooltip that pops up when we hover over the brands or keywords explaining how a user needs to double click on the word to make it a keyword. He was able to carry out the task after this initial impediment.

Since the second task is similar to the first task except with the addition of using the date range, he finds this task to be of no difficulty.

As soon as he started the new third task that we added in,

3. For the time range of 11/20/2018 - 11/25/2018, what is the rough estimate of the percentage difference between the number of tweets that have Nike and Adidas mentioned together versus the number of tweets that have Nike mentioned by itself?

He missed the "+ More details" button that houses this additional visualization. With no visualization that he was able to see in his sight, he wondered if he should just added the number of tweets in Nike and number of tweets in Adidas together. Eventually he noticed the link before the explanation paragraph and mentioned it would have been better if the link was provided after the explanation paragraph. He could not perform the task so we moved on to the fourth task. Eventually after we have finished all of the tasks, we went back and provided to him what the visualization is trying to accomplish. He gave the following inputs:

1. The visualization requires more explanation than the visualization itself.

2. Removing the top bar graph and replacing the circles with the color would help better as the top bar graph does nothing if not mislead.
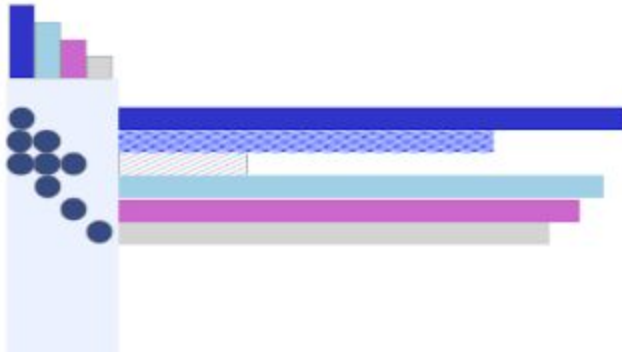
For the fourth task, he was able to execute it with little difficulty and added a quick tip that if the visualization is slow, click would be better to display the tweet than a hover.

Future Improvements

We took his inputs and broke down the improvements to the following categories:
1. Must have
   a. Default the first keyword typed in as keyword
      i. Reason: To make it intuitively easier for the user
   b. Provide explanation as to what the user needs to do to get started
      i. Reason: To make it intuitively clear for new user who just get started
   c. Place the more details button after the explanation paragraph
      i. Reason: For the user to be able to find it
   d. Remove the top bar graph and replace the circles with the associated color for the more detailed graph in addition to some explanation
      i. Reason: So users who are not as familiar with this type of visualization can make the quick decision from looking at the visualization
2. Should have
   a. Replace the search bar to mention "brand" for subsequent search
      i. Reason: It would make it more intuitively clear but the brand itself is also a keyword. More research is needed.
   b. Implement a hover feature over "shoes", "Nike", "Adidas", "Puma" that when a user double clicks on one of them, it will make it the default keyword
      i. Reason: User if he played around should discover this but it is also a good feature to have to make it intuitively clear.
3. Could have
   a. Provide an interactive walk-through of how to use the SOV dashboard similar to games

    i. Reason: It would be more intuitively clear, but it is a nice to have than a must have. Hopefully what we have implemented in the must have will address this issue.

  4. Won't have

Prioritized list of issues and changes

We will work on the improvements listed in the second usability testing as the changes made in the first usability testing are already incorporated in the second one. We will also take into consideration whether to include the hover feature to display tweets for each sentiment from the first usability testing as it is a nice to have feature.