HappyBull

Usability Testing and Interviews:

A Findings Report

April 2022

Prepared by:
Austin Greenway

Contents

List of Figures

Executive Summary

This report documents the findings after conducting a series of research methods on the web application HappyBull. To begin, I will provide an overview of the HappyBull application and its place in the FinTech market. From thence, I will explain the research methods used, my main objectives for conducting this research, and the logic behind the tests. I aim to explain why the research methods used are critical for the success of the application and how the findings can help the application continue to grow while meeting the needs of its users.

Each research participant engaged in usability testing procedures as well as a follow-up interview. These research methods revealed critical insights regarding their experience with the HappyBull platform, their experience with competitor platforms, and a variety of actionable recommendations to add value to HappyBull.

Empowered by the feedback gained from our usability testing procedures and interviews, the team was able to immediately develop and implement help documentation in the form of tooltips that serve to inform the users. The key insights and emergent findings found in this report have additionally enabled the HappyBull team to construct a roadmap for future improvements, founded directly in the feedback from its user base.

Introduction

In the following paragraphs, I will provide a brief history of the HappyBull web application and outline the research methods conducted during this study.

Overview of HappyBull

Development for the HappyBull financial tool began as a hobby in 2019. Inspired by his peers making largely uninformed investment decisions, Zach Cox, the CEO and creator of HappyBull Technologies LLC, developed the website to provide an investment research platform that was robust in the information that it provided, while maintaining approachability, regardless of the investor's experience level. HappyBull seeks to provide thoroughly detailed analytics regarding stock picks on an accessible, modernized platform that caters to the modern investor.

Research Methods Explained

For the purposes of this research study, our team facilitated usability testing procedures and follow-up interviews.

Usability Testing

Usability testing was enacted to enable the research team to observe participants utilizing the features of the website. Each participant was directed to share their screen on a recorded web call and complete a series of tasks that showcased the standard functions of the HappyBull platform. Observing users utilizing the site's features served both to validate the prototype and to reveal any usability or accessibility issues that may be present. Due to the intentionally structured nature of our usability testing procedures, the HappyBull team was able to recognize multiple present features requiring immediate improvement on the platform.

Interviews

Additionally, the research team facilitated follow-up interviews. The interview questions were curated to gain insights into the users' experience, expectations, and needs from their primary investment research platform. The interview questions were structured in a funnel sequence, beginning with generalized questions, followed by more specific inquiries regarding the participants' experience with the HappyBull platform. This interview structure was chosen to make the users comfortable sharing ample information, thus promoting an efficient, open forum for gaining insights into the users' experience. Due to the intentionally structured nature of the interviews, the HappyBull team was able to develop a clear roadmap for the future development of features and functions on the platform.

Goals of the Research

Our primary goal of the research study was to gain a greater understanding of the HappyBull user and to uncover insights from user feedback regarding pain points, favorable features, and actionable additions to the platform. With this data, we sought to assemble a set of recommendations and action items to improve the present features on the platform. Additionally, the research served to develop an informed roadmap for future development of the website.

For this research, we focused on:

- The ease-of-use of the platform's current features
- Gauging user feedback on the website's layout and aesthetics
- Determining user prioritization of future website features

Through our findings, we aim to promote:

- Streamlining the complex processes within the website
- Adding features that support the vision of HappyBull and fulfill the users' needs
- A generally improved User Experience

Answering the Research Question

Participants for usability testing and the follow-up interviews were recruited via HappyBull's various social media accounts (Instagram, TikTok, Twitter). Additionally, users were recruited from a post on r/KSU (the Kennesaw State University subreddit). It was clarified within the recruitment posts that users of a variety of experience levels with investing would be accepted for participation in the research study. Additionally, users were offered a $10 Amazon gift card as well as a lifetime free account on the HappyBull platform as a reward for participation in the research study. We believe this incentive for participation served to mitigate exclusive participation from "super users" and their potentially positively biased feedback regarding the platform, thus bolstering the internal validity of the research. In totality, 14 users participated in the study.

After thorough consideration, our team selected 13 tasks that highlight the various features of the HappyBull application. The participants were informed that all tasks could be completed on the website. Additionally, the participants were informed that the tasks were constructed to test the ease-of-use of the platform, and not the users' ability to complete the tasks. Each participant was asked to use "Think Aloud Protocol" when completing the tasks, which requires the user to verbalize their thought process from start to finish of each task. Enacting this research methodology allowed the HappyBull team to gain further insights into the users' experience and the usability of the platform.

The tasks presented to the users are as follows:

1. Determine how the market is generally performing today.

2. Determine the three most active stocks of the day.

3. Create a watchlist.

4. Add two stocks to the watchlist that you have created.

5. Remove one stock from the watchlist that you have created.

6. Using the search bar, look up a stock you may be interested in. Complete the following:

7. Look at the 1y chart with moving averages.

8. Look at the 3-month chart compared to SPY.

9. Determine how many employees the company you have chosen currently has.

10. How does the company you have chosen compare to peers in terms of performance?

11. Determine the Earnings per Share for the stock you have chosen.

12. Determine the overall news sentiment for the stock that you have chosen.

13. Run a forecast to infer a probable price target for the company you have chosen.

Emergent Findings

While the usability testing procedures and interviews were intentionally designed to glean feedback on specific features and questions regarding the platform, the open and exploratory nature of these research methods also allowed for multiple unexpected findings to emerge.

News Feed Confused as Advertisements

HappyBull provides a curated news feed coupled with sentiment analysis. We believe that this news feed provides the user with a quick overview of the sentiment regarding either the market generally (on the home page) or specific stocks (on a particular stock page). The news feed denotes this sentiment with a green "thumbs-up" icon for positive news, a red "thumbs-down" icon for negative news, and the word "Neutral" for news that is not overtly positive or negative.
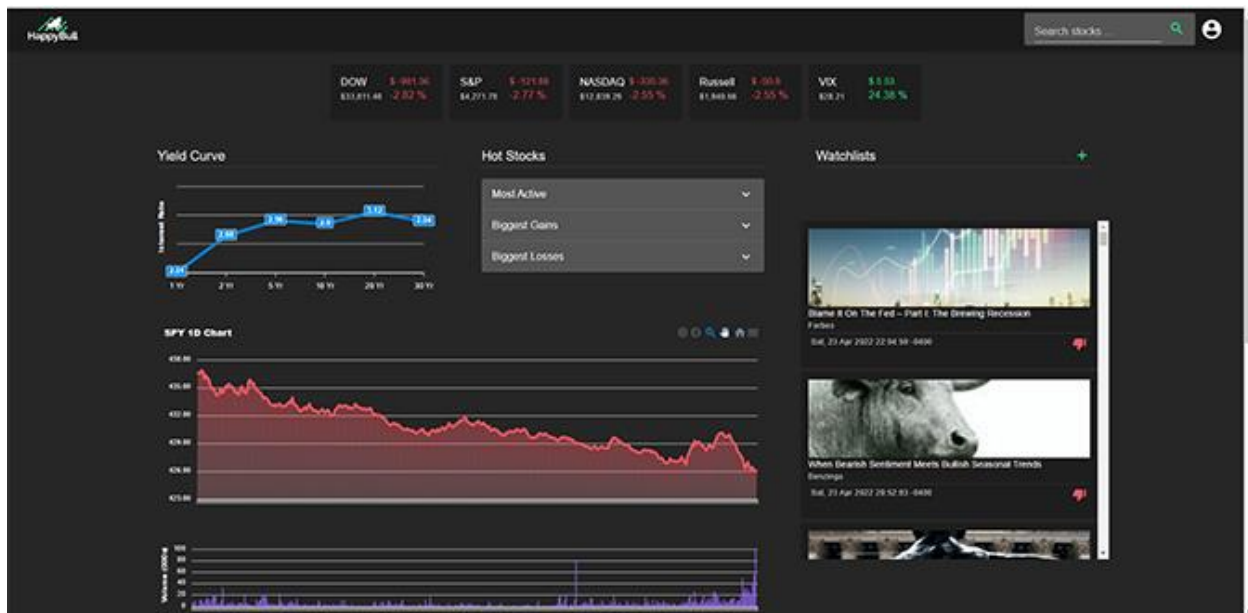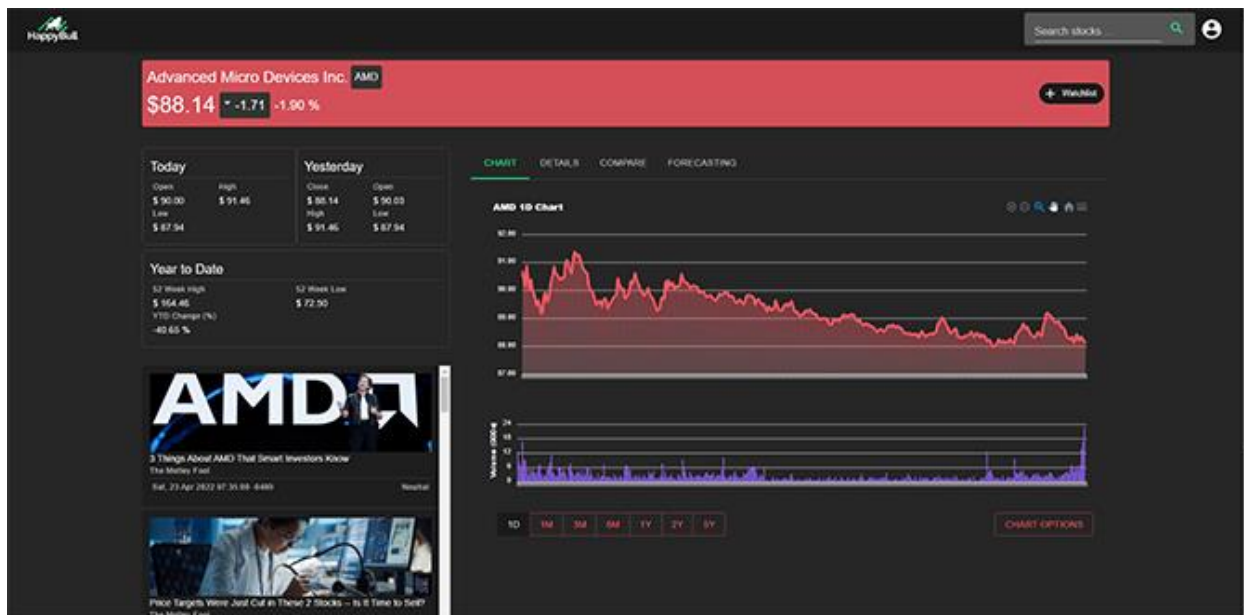

Figure 1: Homepage News Feed

Figure 2: Specific Stock News Feed

Multiple users cited that they were reluctant to engage with the news feed due to the assumption that the news feed was in fact a scroll tab of advertisements. To combat this, the development team plans to either add a title above the news feed denoting it as such or create a separate tab entirely for the news feed, both on the home page and on specific stocks as well.

Confusion Regarding "Compare to SPY" Charting Feature

As per our research participants, one of HappyBull's most useful features is the charting functionality on the platform. The charting options allow for users to view a stock's performance over a selectable array of time periods. Users may view the chart in a standard view or a candlestick view. Users may add technicals to their chart, such as moving averages, accumulation/distribution indexes, and price percentage oscillators. Additionally, users may compare a stock to the SPY percent movement over a selected period.
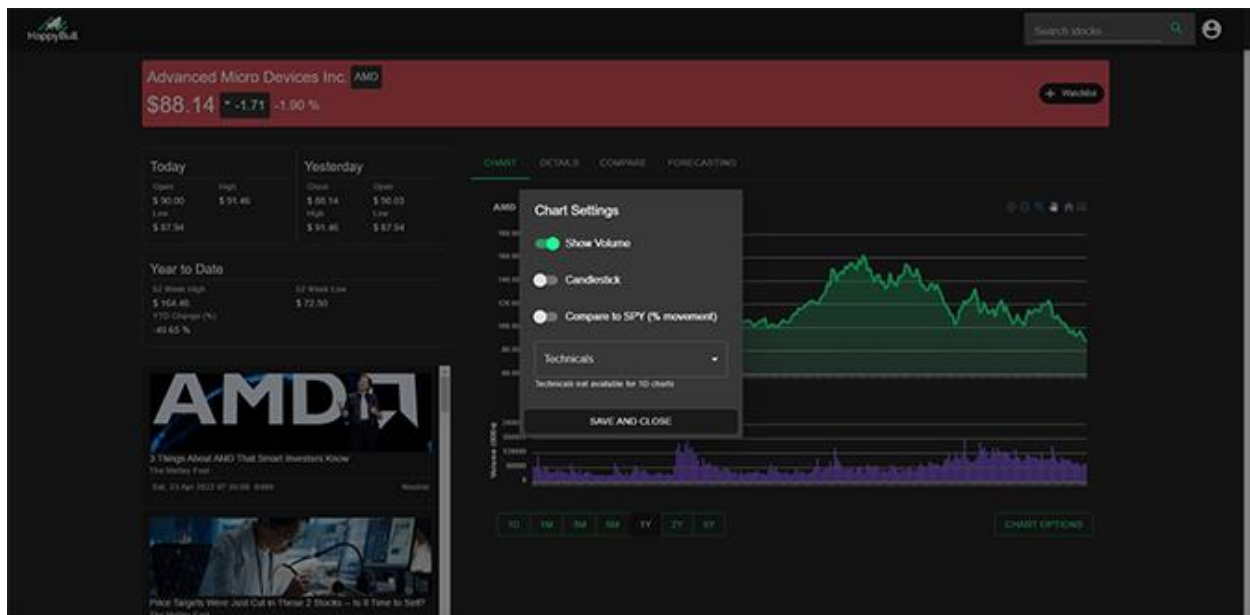
Figure 3: Standard Chart Settings

Further, users may compare a specific stock to an auto-populated group of competitors within the same sector under the "Compare" tab on the stock page.
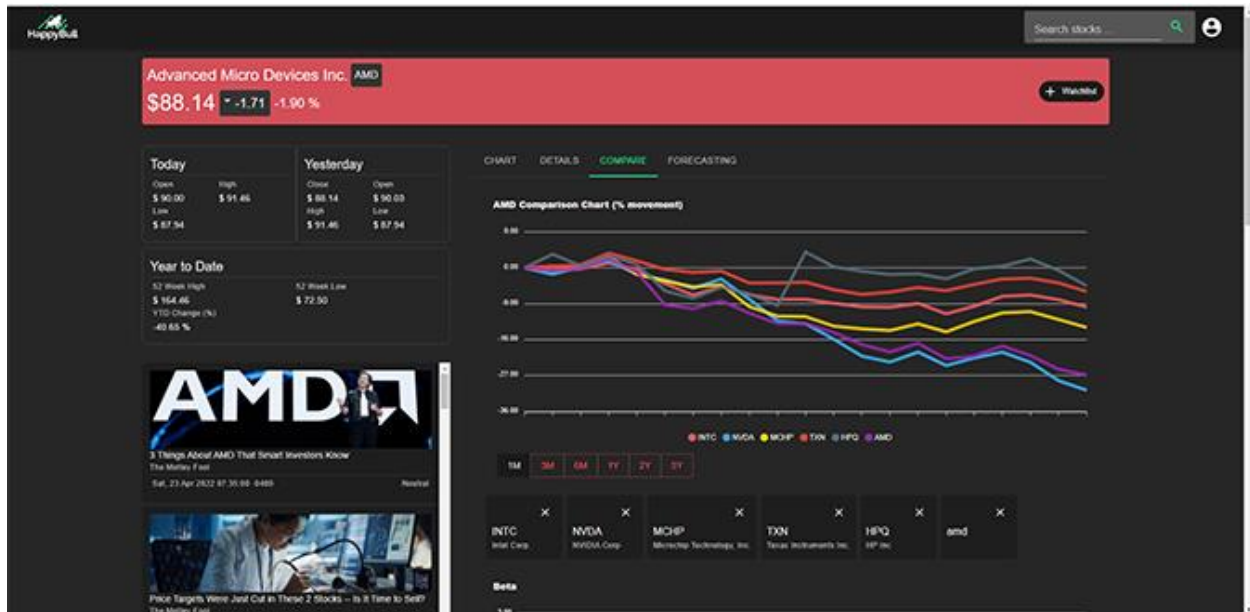
Figure 4: Comparison Chart

Research participants were tasked with determining the "3-month chart compared to SPY." Multiple participants struggled to find the "Compare to SPY" feature under "Chart Options," and instead assumed that the chart feature "Compare to SPY" would be found under the "Compare" tab, despite being presented with the chart options in the task directly preceding this one.

The HappyBull team has noted this confusion and will consider adding the "Compare to SPY" feature to the "Compare" tab.

Key Insights

The methods enacted in this research study have allowed for multiple key insights to emerge regarding the present features and future additions to the HappyBull platform.

Ease-of-Use/Difficulty Completing Tasks

When facilitating the usability testing procedures, each task was graded upon completion as "Completed without Assistance," "Completed with Assistance," or "Failed to Complete."

Task	Completed w/o Assistance (out of 14)	Completions w/ Assitance (out of 14)	Failed Attempts (out of 14)
1. Determine Market Performance	14		
2. Determine Most Active Stocks	11	3	
3. Create Watchlist	14		
4. Add Stocks to Watchlist	11	3	
5. Remove Stock from Watchlist	12	2	
6. Look up Stock	13	1	
7. 1 Year Chart with Moving Averages	9	5	
8. 3 Month Chart Compared to SPY	7	6	1
9. Determine Total Employees	11	3	
10. Locate Comparison Chart	13		1
11. Determine EPS	14		
12. Determine News Sentiment	11	3	
13. Run Forecast	12	2	

Figure 5: Task Completions

The high number of occurrences of tasks requiring assistance to complete (Tasks 7 and 8) denote a need for improved accessibility of the specific charting options. Additionally, the failure to complete Task 9 ("determine total employees of the company") suggests that the "Employees" statistic may be better placed under the "Stats" section.
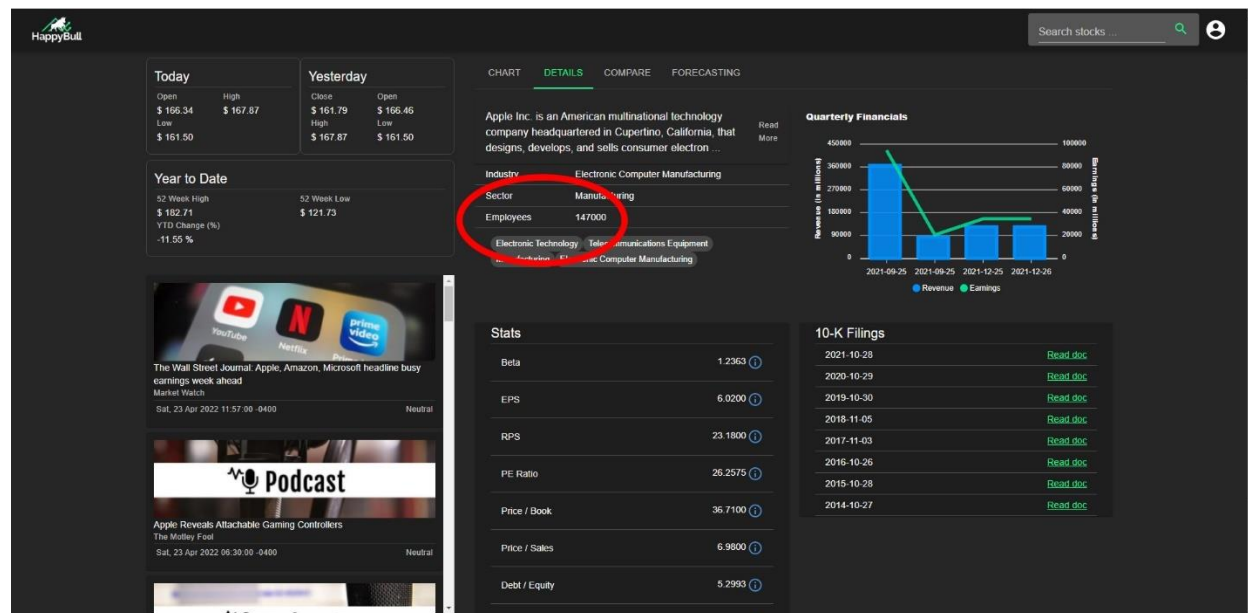

Figure 6: Employees Statistic

Watchlist Functionality

Users can create watchlists either from the homepage or on a specific stock page. Currently, stocks may be added to or removed from watchlists exclusively from the specific stock's page. Multiple users cited a desire to be able to add or remove stocks from homepage watchlist overview. The HappyBull team has taken note of this development.

Crypto Vs. Options

When presented with the question, "If we could add dashboards on one other security, should it be crypto or options?", users were split seven to seven. The HappyBull Team has taken note of this input.

Advertisements

When asked "Would advertisements significantly take away from the user experience?", we received a variety of answers. However, all users stated that they would anticipate seeing advertisements with a "Free" account, whereas they would anticipate no advertisements with a "Premium" account.

When asked where advertisements could be placed with the least disruption, the most frequently occurring answers were "on the top banner" and "in the right or left margin." Two users stated that they think placing ads periodically in the news feed would be appropriate, whereas one user stated that he vehemently opposed seeing advertisements in the news feed. The HappyBull team has taken note of this input.

Prioritization of New Features

Within the interview, users were posed with the following five potential new features to be added to the HappyBull platform:

- Customizable alerts (price movements, earnings announcements, insider transactions, etc.)
- Personal portfolio tracking (via integration)
- Politician portfolio tracking
- Personal context on investment research data
- More customization in dashboards

Users were asked to prioritize the list by ranking the top one or two features that they would most like to see added to the HappyBull website. The users' responses are displayed in the following table:

Potential New Features	Occurrences of Feature Prioritization
Customizable Alerts	12
Personal Portfolio Tracking	11
Politician Portfolio Tracking	5
Personal Context on Investment Research	2
Increased Dashboard Customization	2

Figure 7: New Features Prioritized

The responses to this question were amongst the most valuable data gathered from the research study. This feedback has directly impacted the future roadmap for new features to be added to the HappyBull platform.

Pricing Structure

When asked "What is a fair monthly subscription price for the HappyBull service (with the new features you would like to see)?", users gave a wide array of answers. One user stated they would not pay for the service, as they prioritize gathering investment information for free. Two users stated that they would be willing to pay $5 per month for the service. Eight users stated they would pay between $10-$20 per month for the service. One user stated they would pay $30 per month for the service. Three users stated they would pay $50 per month for the service.

While the HappyBull team has not yet settled on an exact monthly subscription price point, this feedback narrowed to our initial expectations and will serve to inform our decisions moving forward. With that said, the data gathered here has determined the following potential pricing structure:

A Free account may be created. This account will see advertisements and will not have access to real-time alerts. A Premium account may be created. This account will pay a monthly subscription fee. This account will not see advertisements and will have access to real-time alerts.

Additional Tooltips Required

Multiple users stated that adding more tooltips (such as the ones found on the "Details" tab under the "Stats" section) to the website would improve the accessibility of the site, particularly to the novice user. The most commonly occurring place users would like to see added tooltips was on the home page by the "Yield Curve" and "SPY 1D" charts.
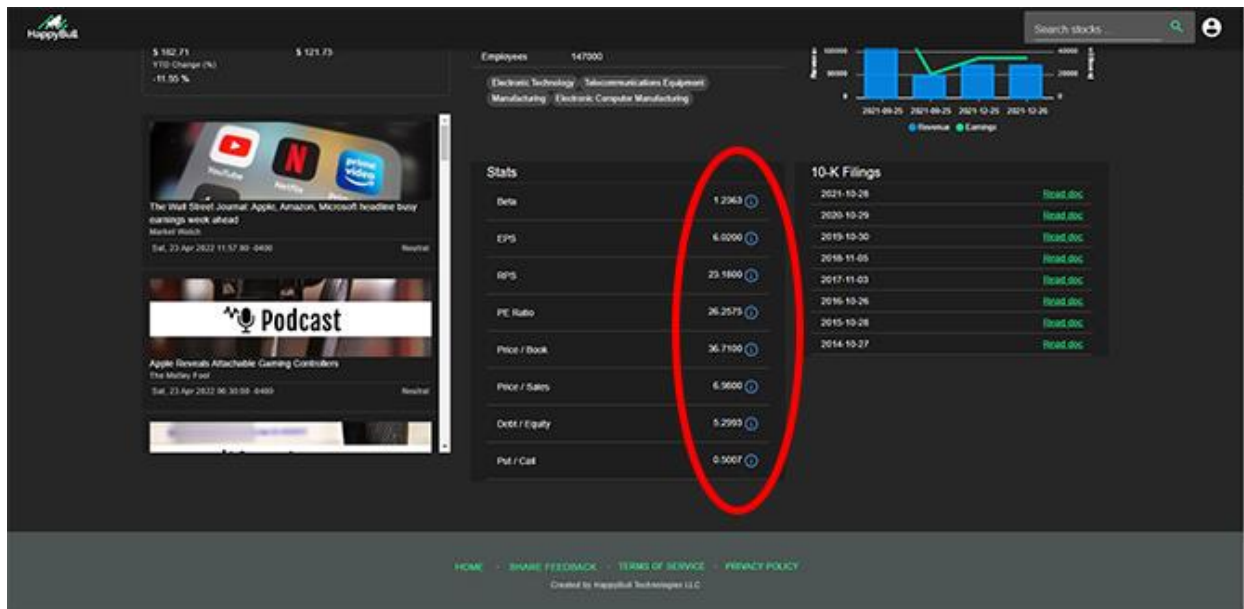

Figure 8: Tooltips on Details Tab

Competitor Sites

The interviews allowed the research team to gain insights into what competitor stock research platforms offer, and which of those features users find most and least valuable. The HappyBull team has taken note of these competitor sites and will continue to develop the platform with this feedback in mind.

Confirmation of Purpose/Accessibility

One of the most frequently occurring comments generally regarding the HappyBull website was the noted digestibility of the information on the platform. This feedback serves to corroborate the intended vision for HappyBull.

Appendix:

Below, I have included the User Tasks and Interview Questions. For further context on the documentation of testing results, please reach out to austin@happybull.io.

User Tasks

1. Determine how the market performing today.
2. Determine the three most active stocks.
3. Create a watchlist.
4. Add two stocks to watchlist.
5. Remove stock from watchlist
6. Using the search bar, look up a stock you may be interested in. Complete the following:
   a. Look at the 1y chart w/ moving averages
   b. Look at the 3-month chart compared to SPY
   c. How many employees?
   d. How does it compare to peers in terms of performance?
   e. Determine the Earning per Share.
   f. Overall news sentiment?
7. Run a forecast to determine a probable price target?

Interview Questions

- How easily were you able to use this platform?
  -
- What is your level of experience with investing?
  -
- Do you use any competitor sites such as google or yahoo finance?
  -
  - Is there anything on those sites that you find particularly good or bad?
    -
  - Did HappyBull give you a more comprehensive understanding of the stock than what you currently use for trading research?
    -
  - Was HappyBull cleaner and easier to navigate than google or yahoo finance? If not, what about the others is better
    -
- What input do you have on the layout and aesthetics of the site?
  -
- Are there any pieces of information on the platform that you did not understand? I.e. terms you weren't familiar with?
  -
  - Do the information tooltips provide value, or would another method be more effective (a video tutorial library)?
    -
  - Are there any data points that you would like to see added to the platform?
    -
  - Are there any data points you would like to see displayed differently (static vs time series, table vs chart)?
    -
- Do the forecasting tools help you think about how the stock price may move?

-
  - Are there additional types of forecasts that you would like to see incorporated?
    -
  - In what ways would you like to customize the inputs of the forecasting?
    -
  - Would it be helpful to have the ability to save your forecasts and reference that analysis later? What if you could also save/edit price targets for individual stocks
    -
- How do the charts compare to other platforms that you've used – is it more robust yet still easy to use?
  -
    - Can the layout of the chart settings be presented in a manner that is easier to use?
      -
- Is there functionality that could make the charting engine more valuable (Additional technical features, Indicators on the chart (labels)
  -

- Which of the following features would be valuable —
  - Customizable alerts (price movements, earnings announcements, insider transactions, etc.)
  - Personal Portfolio tracking (via integration)
  - Politician portfolio tracking
  - Personal context on investment research data
  - more customization in dashboards
  - If you would like to see more than one of these features, rank them in order of preference

- What is a fair monthly subscription price for the HappyBull service (with the new features you would like to see)?
  -
- Would ads significantly take away from the user experience?
  -
    - Where in the site could ads be placed with the least disruption?
      -
- If we could add dashboards on one other security, should it be crypto or options?
  -
- How likely are you to use this platform again?
  -