| Motivation

As of December 2020, over 125 million people in the United States have accidentally shared some form of misinformation[1]. During the 2016 US election alone, there were more than 6.6 million tweets linked to conspiracy news publishers, and over 80% of the misinformation accounts active during the election are still active today[2]. This presents a major issue as individuals struggle to identify truth from falsehood. According to Statista, 220 million Americans believe that fake news causes a great deal of confusion[1], and thus there exists a significant need within modern society to minimize this confusion via the implementation of an effective, trustworthy tool.

| Product Description

Red Herring is a third-party solution aimed at tracking and combating the spread of misinformation – sometimes referred to as "red herrings" in English – with the goal of increasing trust in fact-checking on social media sites. To identify misinformation, Red Herring will pull from existing fact-checked sources provided by partner social media platforms and fact-checking organizations. The company will then apply a customized machine learning model to quickly identify posts conveying this information. After identifying these posts, Red Herring will combat the spread of this misinformation by utilizing a 3-pronged approach:

1. The Red Herring warning will be displayed on social media posts that have been determined by our machine learning model to contain misinformation (Figure 1).
2. After a flag has been issued, Red Herring reviews users who viewed the post prior to the flagging and issues an "alert" to these users that contain resources to fact-checked information provided by our partner organizations.
3. A map displaying the path of misinformation from certain sources is generated, showcasing the source and direct contacts, enabling social media platforms to gain a better understanding of where misinformation is coming from and how it can be dealt with.

Minor misinformation – such as wrong dates, geographical locations, or other trivial errors – will also be marked, but users who view these posts will not be alerted. Red Herring will include an annotation that corrects these mistakes using its machine learning algorithm.

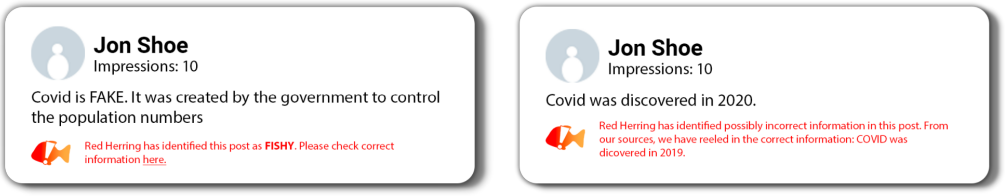

Figure 1. Red Herring Misinformation Detection In Action

| Market Research

Many reputable third-party fact-checking organizations exist online, with the most popular US organizations being Snopes[3] and PolitiFact[4]. While these sites are already in use, they serve users on only their sites, therefore limiting the scope of impact. This poses an issue for social media sites, which are hubs for creating and spreading misinformation, and are disconnected from these existing resources. A number of social media platforms, such as Twitter and Instagram, provide native fact-checking, but they do not provide misinformation tracing or information correction. Red Herring finds a niche where these two services intersect. As a trustworthy fact-checker that also operates

[1] https://www.statista.com/topics/3251/fake-news
[2] https://knightfoundation.org/articles/seven-ways-misinformation-spread-during-the-2016-election
[3] https://www.snopes.com
[4] https://www.politifact.com

on-site, users get confirmed reliable information without needing to lift a finger. Thus, the primary motivator behind the addition of Red Herring – as opposed to, for example, each company's own fact-checking software – is Red Herring's more holistic approach to misinformation identification and versatility in data reporting (i.e. generating a misinformation map). The primary disadvantage of Red Herring is that its growth is highly dependent on its adoption by far-reaching social media platforms. A lack of adoption results in a lack of data and squanders the efficacy of the technology, a concern addressed through intensive marketing.

Financial and Marketing Plans

The promotion of Red Herring is directed towards user-driven platforms such as social media sites, with the goal of being adopted as the standard for third-party fact-checking. These figures are based on an example scenario with three "waves" of adoption with social media platforms of conservative sizes. Due to the unpredictable nature of additional connections, we expect the company's growth to scale with additional customers. For example, if a large customer implements Red Herring, the cost and human resources needed for upkeep will increase and the company will grow accordingly.

During the developmental stage of the product, marketing resources will be diverted towards pitching the concept to companies at industry conferences. Red Herring seeks to build trust with users through accurate misinformation flagging and the provision of correct information. Through a heavy emphasis on promotion – with at least 20% of all profits being rerouted towards the marketing budget – Red Herring seeks to construct a steady and present reputation within the fact-checking industry.

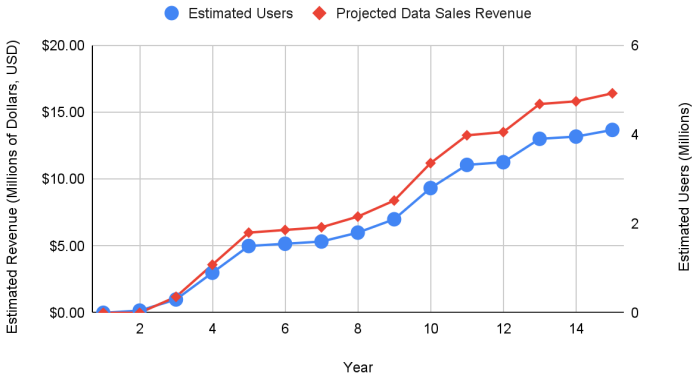

Figure 2. Estimated User and Gross Data Sales Revenue Over Time

Phase	Development	Pilot and Modification		Market Establishment						
Year	$1	$2	$3	$4	$5	$6	$7	$8	$9	$10
Income										
Quantity Venture Funds Used	$750,000	$750,000	$750,000	$650,000	$650,000	$500,000	$500,000	$500,000	$350,000	$350,000
Data Sales	$0	$0	$1,200,000	$3,600,000	$6,000,000	$6,200,000	$6,400,000	$7,200,000	$8,400,000	$11,200,000
Gross Income	$750,000	$750,000	$1,950,000	$4,250,000	$6,650,000	$6,700,000	$6,900,000	$7,700,000	$8,750,000	$11,550,000
Expenditures										
Marketing and Pitch	$100,000	$200,000	$250,000	$250,000	$850,000	$1,330,000	$1,340,000	$1,380,000	$1,540,000	$1,750,000
Software Development and Maintenance	$150,000	$300,000	$100,000	$105,000	$110,250	$115,763	$121,551	$127,628	$134,010	$140,710
Employees	$900,000	$1,700,000	$1,950,000	$2,040,000	$2,310,000	$2,875,000	$3,360,000	$3,720,000	$4,305,000	$4,375,000
Total Expenses	$1,150,000	$2,200,000	$2,300,000	$2,395,000	$3,270,250	$4,320,763	$4,821,551	$5,227,628	$5,979,010	$6,265,710
Net Income	-$400,000	-$1,450,000	-$350,000	$1,855,000	$3,379,750	$2,379,238	$2,078,449	$2,472,372	$2,770,990	$5,284,290
MISC - Venture Capital Funds Acquired	$750,000	$5,000,000								

Figure 3. Red Herring 10-Year Budget

Initially, Red Herring will tackle the cost of developing and maintaining the platform through an estimated $5.75 million ($750k seed funding + $5 million series A funding), which will be distributed over the course of the following decade. These venture capital funds will be the key source of funding during the company's product development and pilot phases (during the first two years following establishment). After this, Red Herring will profit primarily by selling the third-party fact-checking integration to social media platforms, and by providing analytic data such as misinformation spread maps to social media companies, showing the sources of the misinformation and providing an analysis of affected users. The community of users of Red Herring is estimated to grow to 4.1 million users in thirteen years after the end of the pilot phase (Figure 2). During this time, annual net revenue is projected to grow at an average rate of 27% (Figure 3), with a corresponding 26% increase in the number of employees at the company.