Executive Summary Report

■ Project Overview
NewsBot2 is a project that automatically collects and interprets news articles using computer programs. The basic idea is to transform disorganized, messy news from the internet into information that can be used. The system first gathers articles from various sources. The text is then cleaned up by being divided into individual words, having unnecessary words like "the" and "and" removed, and ensuring that everything follows the same structure. Once the words have been cleaned up, the program converts them into numbers that a computer can comprehend. The system can determine the topic of the article using these numbers. To ensure that the results are reliable, the program also evaluates its performance using metrics like accuracy and F1-score.

■ Value Proposition
Understanding what's happening in the news without having to read every article yourself is made quicker and simpler with NewsBot2. News is automatically gathered, cleaned up, and the primary themes or emotions underlying the stories are identified. This saves time, lowers the possibility of overlooking crucial information, and enables people to make more informed decisions based on factual information. Researchers can more easily examine public opinion, journalists can follow breaking stories, and businesses can use it to identify trends.

■ ROI Analysis
Return on Investment (ROI) for NewsBot2 looks at how much time and money it can save compared to doing the same work manually.

1. Time Savings

A person could spend 25 to 30 hours reading and organizing 500 news articles by hand.

NewsBot2 can complete this task in a few minutes, allowing users to concentrate on decision-making rather than information sorting.

2. Better Choices

Decisions can be made sooner with quick and accurate news analysis, which may result in new opportunities or the avoidance of risks.

■ Competitive Analysis
Though it provides greater customization and flexibility, NewsBot2 competes with programs like Google News, Feedly, and Meltwater. NewsBot2 can automatically categorize articles, identify sentiment, and spot trends, in contrast to Google News, which merely arranges stories, and

Feedly, which depends on the user for the majority of its analysis. NewsBot2 offers comparable features at a lower cost than Meltwater, which is more costly and targeted at large corporations.