# Sentiment Contribution Analysis Report

## Executive Summary

This report analyzes the contribution of Reddit sentiment analysis to trading performance. Incorporating sentiment data resulted in a 0.55% (increase) in total return, which represents a 25.42% improvement over the base strategy. The Sharpe ratio improved by 0.13 points, and maximum drawdown was increased by 0.18%.

## Performance Comparison

|  |  |  |
| --- | --- | --- |
| Metric | Base Strategy | With Sentiment |
| Total Return | -2.16% | -1.61% |
| Annualized Return | -2.16% | -1.61% |
| Sharpe Ratio | -0.57 | -0.45 |
| Max Drawdown | -3.47% | -3.29% |
| Win Rate | 3.17% | 2.38% |
| Number of Trades | 14 | 11 |

## Sentiment-Driven Trades

The sentiment analysis influenced 1 trading decisions:

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Action | Price | Sentiment |
| 2024-08-01 | Sell | $218.36 | -0.9302 |

## Market Period Analysis

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Period | Date Range | Base Return | With Sentiment | Difference | Avg. Sentiment |
| Period 1 | 2024-01-02 to 2024-04-02 | -2.86% | -2.86% | 0.00% | nan |
| Period 2 | 2024-04-03 to 2024-07-02 | 0.51% | 0.51% | 0.00% | nan |
| Period 3 | 2024-07-03 to 2024-10-01 | -0.56% | 0.00% | 0.56% | -0.9080 |
| Period 4 | 2024-10-02 to 2024-12-31 | 0.76% | 0.76% | 0.00% | 0.6222 |

## Key Insights

Sentiment analysis provided the greatest improvement during Period 3 (2024-07-03 to 2024-10-01), with a 0.56% increase in returns.

The average sentiment during this period was -0.9080

Sentiment analysis performed worst during Period 1, with a 0.00% impact on returns.

The strategy with sentiment achieved 25.42% higher returns than the base strategy without sentiment.