

Introduction & Motivation

"People are interested in the future, but more importantly are looking to find opportunities today they wish they can act upon, given the right information."

- InnoVest Founders



Navigating Innovation:
Beyond Promises to
Profits

"In an era saturated with many innovators making industry changing promises, discerning the true pioneers amongst the bunch can be challenging.

We believe that beyond traditional financial metrics, leaders of tomorrow WILL EXCEL by correlating actual company stock performance with real-life human impression and sentiment.

... Here at InnoVest, we firmly believe in the powerful harmony between historical market data and investor sentiment. When calibrated precisely, this synergy becomes a dynamic toolkit, empowering users with real-time, accurate market insights and trending sentiment analysis to discern the best path forward to seize the inevitable waves of technological innovation."



Unveiling Investment Potential in Innovative Sectors

Our overall objective was to create an analysis engine that fetches real-time and historical data on specifically identified innovative sectors such as: *Electric Vehicles*, *Artificial Intelligence* and *Metaverse* as the specific areas of technology that provides investors with the potential for high returns; these services are designed to capture which companies are disruptive within existing markets and poised to generate substantial future profits.

Our Rationale:

 Investing in these specific sectors have the utmost potential to outperform existing traditional industries due to their focus on disruptive technologies, new business models, and cutting-edge products and services.

Sentiment Trading Edge:

Consumers' behaviors and preferences are evolving and are increasingly inclined to adopt new technologies, efficient approaches
and innovative solutions. It is our belief that, companies who cater to these changes will gain a competitive advantage.

Data Exploration & Cleaning Up the Data



Proprietary Parameters: Unveiling Innovation with Confidence

- **Precise Historical Insight:** Leveraged one-year historical data for newer companies and trend relevance.
- Stability-Centric Focus: Prioritized stability over speculation for risk-averse investors.
- Innovator Targeting: Identified prime innovators for optimal returns in an uncertain future.
- Risk Benchmarking: Utilized Beta, Standard Deviation, and \$SPY for risk assessment and correlation.
- Enhanced Sector Variability: Chose diverse sectors with sector-specific stocks for richer insights.
- **Inclusive Stock Selection:** Bias towards Big-Cap and Post-Hype IPO companies for well-rounded analysis.
- Data Clarity and Exploration: Structured data for consistency and explored complex correlations.

Data Analysis

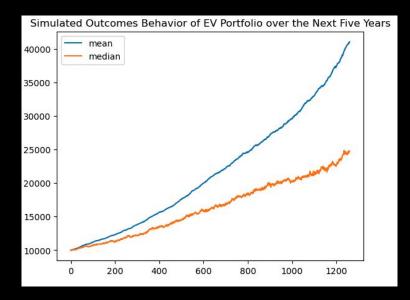
Analysis Approach Appendix

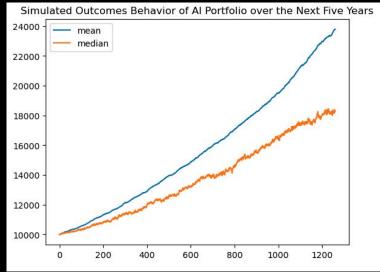
- 1. **Sentiment Data:** Analyzed different sets of market emotions for foundational insight.
- 2. **Jupyter Lab:** Transformed data using robust Jupyter Lab environment.
- Google's Insights: Tapped into Google's vast data for collective sentiment trends.
- Customized Data: Tailored sentiment data for specific insights.
- Structured Code: Simplified code for replication and understanding.
- 6. **Interactive Visuals:** Engaged Tear Sheets for intuitive data exploration.
- 7. **Portfolio Theory Tools:** Applied Efficient Frontier, Sharpe Ratio for balanced portfolios.
- Risk Evaluation: Gauged investment volatility through diverse metrics.
- 9. **Sentiment-Performance Link:** Investigated links between sentiment and stock performance.

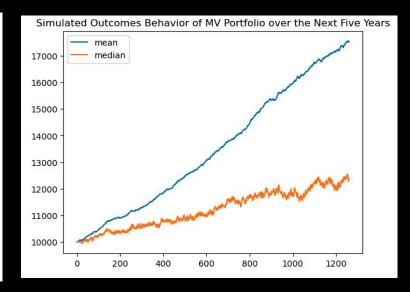
Questions Answered & Data Found

Over a 5-year period with an initial investment of \$10,000 which sector portfolio (EV,AI,MV) has the potential to bring back the greatest returns?

- Given a 95% confidence level, an initial investment of \$10,000 in the EV portfolio over the next 5 years will end within in the range of \$3347.38 and \$160257.04.
- Given a 95% confidence level, an initial investment of \$10,000 in the AI portfolio over the next 5 years will end within in the range of \$4843.78 and \$71806.25.
- Given a 95% confidence level, an initial investment of \$10,000 in the MV portfolio over the next 5 years will end within in the range of \$2489.05 and \$62829.12.



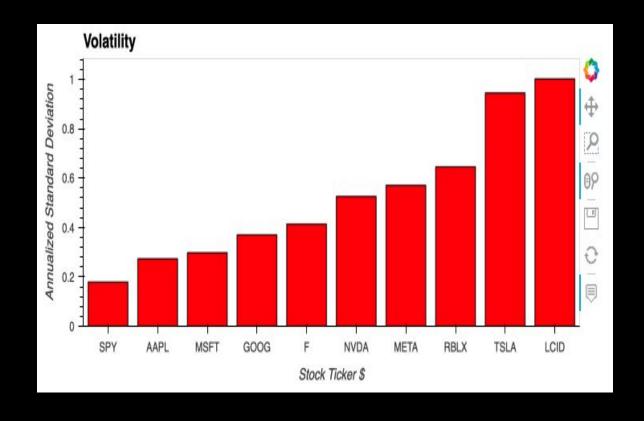




Within the Electric Vehicle, Artificial Intelligence, and Metaverse sectors what stocks were the riskiest?

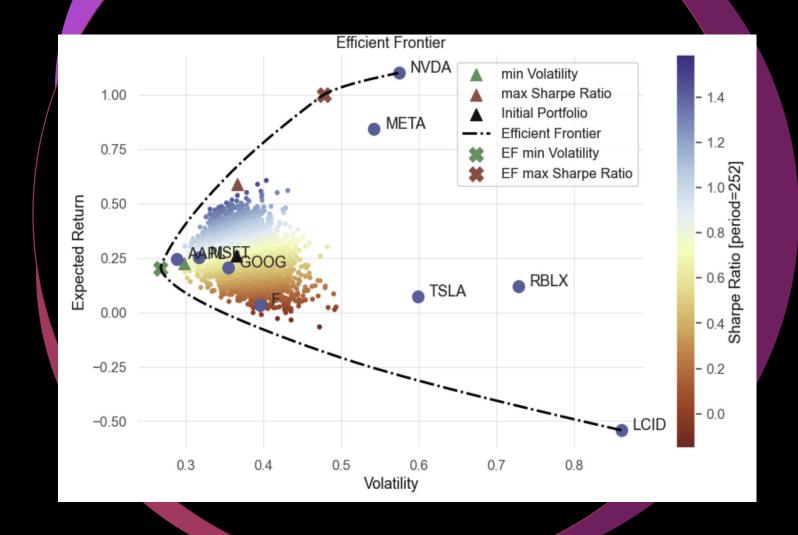
- We found that two of the three Electric Vehicles stocks that we selected, have the highest standard deviation implying most risk.
- Out of the three Artificial Intelligence stocks \$MSFT and \$GOOG, have the least Standard Deviation making them the least risky, in comparison to the Electric Vehicle stocks.
- Analyzing the Metaverse stocks, we can see that they are better suited for moderate investors who are seeking a higher return with slightly more risk.

Standard Deviation of Selected Stocks

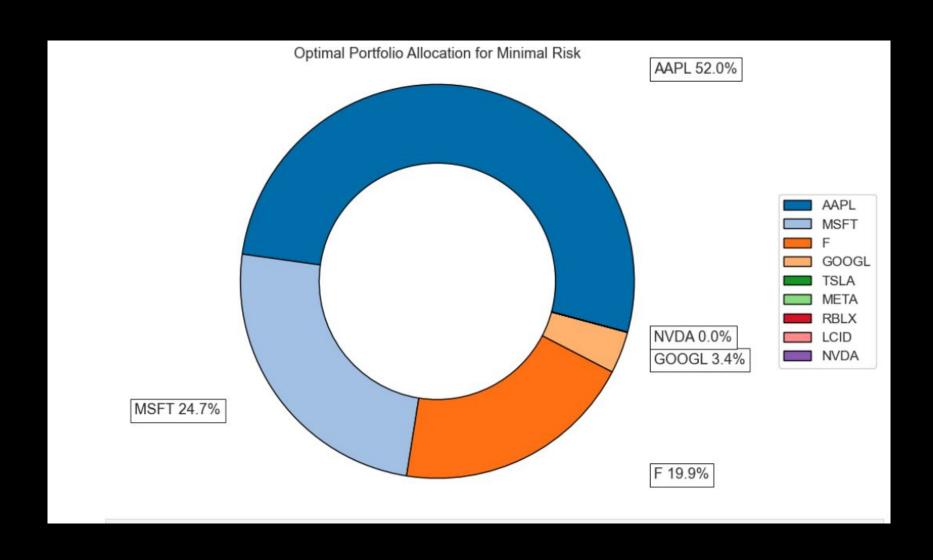


Where is the best place for investors to put their money?

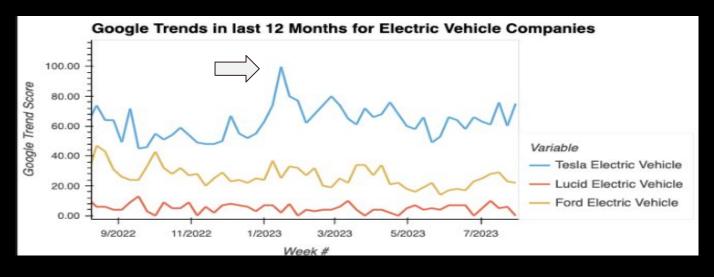
- Utilizing the 'Efficient Frontier' visualization for benchmark, \$NVDA would be the best stock to invest as it is expected to net the highest return, at relative risk, compared to the other eight stocks.
- The safest stocks to invest in for Conservative investors, with no consideration to sector, would be \$AAPL, \$MSFT, and \$GOOG; simulating positive returns with strong market stability amidst uncertainty.

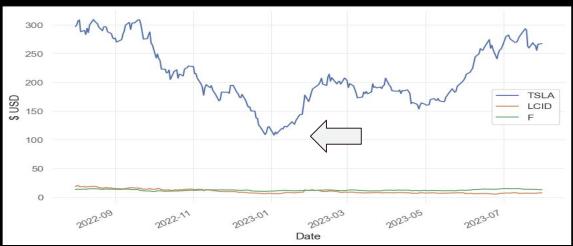


Can you build a speculative portfolio for non-speculative investors?



Does historical stock performance correlate with internet community search activity?





Conclusion

The Big Picture & News Breaking Findings

- Through our analysis we found a correlation between sentiment and stock performance; albeit at times inverse.
- Whether it's geopolitically driven or influenced by macroeconomic factor, despite evidence of correlation it is crucial to note that this correlation DOES NOT prove sentiment cause price changes.
- Investor sentiment is not the only influence on stock prices; a comple
- te view is paramount to draw accurate conclusions.



Questions?