

“A Study on Financial Analytics in Margin Sentiment Advisorys Private Limited”

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ABSTRACT

This article examines the role of financial analytics in modern investment advisory, using Margin Sentiment Advisorys Private Limited as a case study. The study investigates the application of data-driven techniques in enhancing investment decision-making, risk management, and client relations. Findings reveal that financial analytics significantly improves investment accuracy and efficiency but also highlight challenges in implementation and the need for continuous innovation.

INTRODUCTION

The financial services industry is undergoing a significant transformation driven by the increasing availability of data and advancements in analytical technologies. Financial analytics, which involves the use of data and quantitative methods to inform financial decision-making, has become crucial for firms seeking to provide superior advisory services. This article delves into the application of financial analytics within Margin Sentiment Advisorys Private Limited, a financial consulting company specializing in investment advice, market sentiment analysis, and risk management advisory.

Margin Sentiment Advisorys Private Limited aims to empower investors by bridging the gap between traditional investing and data-driven financial techniques. The company offers services such as investment advisory, risk assessment, and financial planning, leveraging advanced analytics to provide clients with well-researched investment advice.

OBJECTIVES AND SCOPE

- To examine how financial analytics improves investment decision-making.
- To assess the financial performance of Margin Sentiment Advisorys Private Limited.
- To determine the role played by financial analytics in risk analysis and portfolio management.
- To offer suggestions for enhancing financial analytics implementation.

LITERATURE REVIEW

A review of recent literature highlights the growing significance of financial analytics in various aspects of finance:

- **Sentiment Analysis:** Nassirtoussi et al. (2019) demonstrated the effectiveness of text mining

techniques in analyzing financial news sentiment, emphasizing its potential to improve investment decisions.

- **Big Data Analytics in Portfolio Management:** Choudhury et al. (2019) found that firms using big data analytics software experienced a significant boost in portfolio performance.
- **News Sentiment and Stock Prices:** Zhang & Skiena (2019) showed a correlation between news sentiment and stock market movements, with positive news driving up stock prices and negative news causing them to fall.
- **AI-Based Risk Models:** Sun et al. (2020) indicated that AI-based financial analysis reduced risk exposure, with deep learning models improving risk forecasting.
- **Deep Learning in Hedge Fund Forecasting:** Chakraborty & Joseph (2020) revealed the high accuracy of deep learning algorithms in predicting stock trends, enhancing hedge fund strategies.
- **Algorithmic Trading:** Goyal & Sharma (2020) found that traders using AI- based analytics achieved more profitable trades and increased processing speed.
- **Predictive Analytics in Stock Market Movement:** Patel & Shah (2020) demonstrated the accuracy of historical data in predicting stock prices, with advanced analytics helping to anticipate short-term market patterns.
- **Blockchain and Financial Analytics:** Bhardwaj & Tiwari (2021) highlighted how blockchain technology enhances financial data security and reduces fraud risk.
- **Real-Time Financial Analytics in Risk Management:** Kumar & Singh (2021) showed that real-time analytics can prevent financial losses and improve adaptation to market changes.
- **Financial Data Visualization Tools:** Mehta & Verma (2021) emphasized the role of interactive dashboards in improving the understanding of financial reports and facilitating quicker investment recommendations.

RESEARCH METHODOLOGY

This study employs a descriptive and analytical research approach, utilizing both qualitative and quantitative methods to examine the role of financial analytics in financial advisory services.

Data Collection Methods

- Primary data is collected through interviews and discussions with advisory experts, risk managers, and financial analysts, as well as surveys and questionnaires with clients and employees. Observation techniques are used to analyse real-time market reports and client investment plans.
- Secondary data is gathered from company reports and financial statements, stock market data, research papers and articles, and SEBI regulations and compliance reports.

Algorithms and Tools Used

The study identifies several key algorithms used in financial analytics:

- **Regression Analysis:** For predicting future financial trends.

- Machine Learning Models: Supervised learning (e.g., Random Forest, SVM) for financial forecasting and market classification; unsupervised learning (e.g., K-Means) for customer segmentation and risk profiling.
- Time-Series Analysis (ARIMA Model): For predicting financial trends over time.
- Sentiment Analysis (NLP): To gauge investor sentiment from text data.
- Monte Carlo Simulation: For risk estimation and financial modeling.
- Risk Assessment Models (Value at Risk): To approximate potential investment losses.

The research utilizes software and tools such as Python, R, Excel, Power BI, Tableau, and financial databases.

Sample and Study Period

A sample of 150 retail investors is surveyed over a 3-month period.

Study Hypotheses

The study is guided by the following hypotheses:

- H1: Financial analytics significantly enhances investment decision-making.
- H2: Sophisticated analytical tools positively impact the accuracy of financial forecasts and risk analysis.
- H3: Market sentiment analysis benefits the firm's portfolio management strategies.
- H4: Obstacles in the deployment of financial analytics affect its overall effectiveness.
- H5: Proper application of financial analytics improves business efficiency and customer satisfaction.

DATA ANALYSIS AND INTERPRETATION PERCENTAGE ANALYSIS

The study's findings are based on the analysis of survey data and internal company data. Key results include:

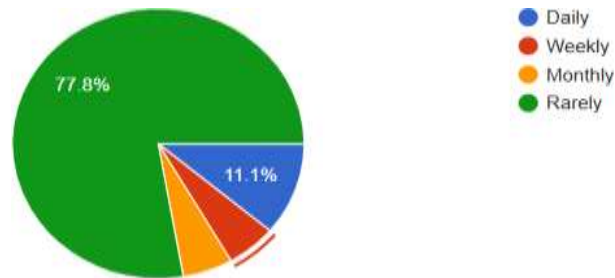
1. **Investment Frequency:** A significant majority (77.8%) of respondents invest rarely, indicating a lack of regular investment habits.
 - Only 11.1% invest daily.
 - 5.6% invest weekly, and 5.6% invest monthly.

4.1 Table shows How frequently respondents invest in financial markets.

Invest	Count	Percentage
Daily	17	11.1%
Weekly	8	5.6%

Monthly	8	5.6%
Rarely	117	77.8%
Total	150	100%

Chart 1: Investment Frequency



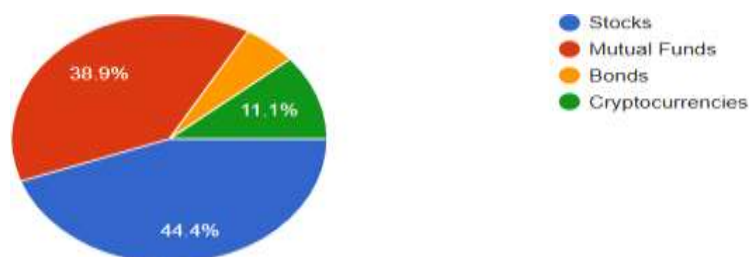
2. **Primary Investment Type:** Stocks (44.4%) and mutual funds (38.9%) are the most preferred investment types.

- Cryptocurrencies account for 11.1%.
- Bonds make up only 5.6%.

Types	Count	Percentage
Stocks	67	44.4%
Mutual Funds	58	38.9%
Bonds	8	5.6%
Cryptocurrencies	17	11.1%
Total	150	100%

Table 4.2 Table shows primary investment types.

- **Chart 2: Primary Investment Type**

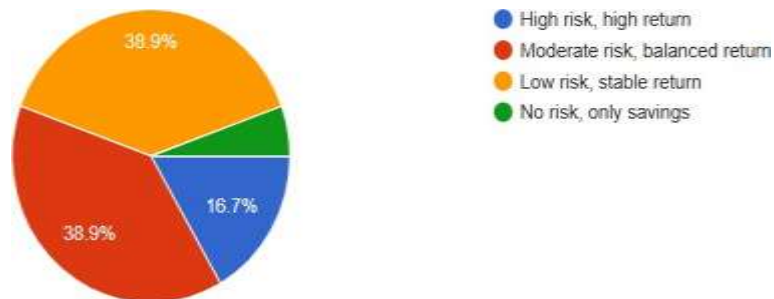


3. **Risk Preference:** A majority (38.9%) prefer moderate-risk, balanced-return investments, while another 38.9% prefer low-risk, stable-return investments.
 - 16.7% prefer high-risk, high-return investments.
 - 5.6% prefer no risk, opting only for savings.

Level of Risk	Count	Percentage
High risk, High return	25	16.7%
Moderate risk, Balanced return	58	38.9%
Low risk, Stable return	58	38.9%
No risk, Only savings	9	5.6%
Total	150	100%

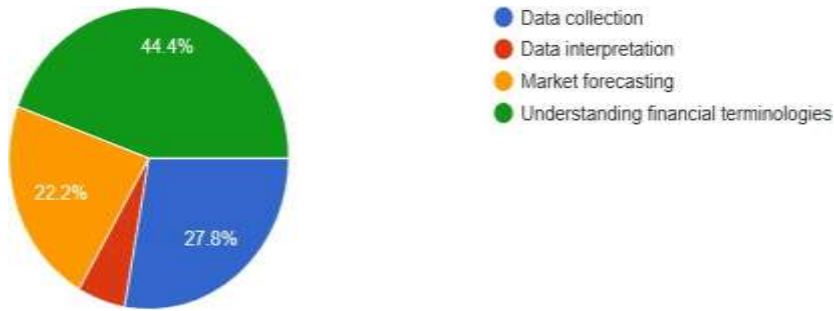
Table 4.4 Table shows level of risk respondents prefer while investing.

- **Chart 4: Risk Preference**



4. **Challenges in Financial Analytics:** Understanding financial terminologies (44.4%) and data collection (27.8%) are the most significant challenges.

- Market forecasting is a challenge for 22.2%.
- Data interpretation is a challenge for only 5.6%.
- **Chart 5: Challenges in Financial Analytics**

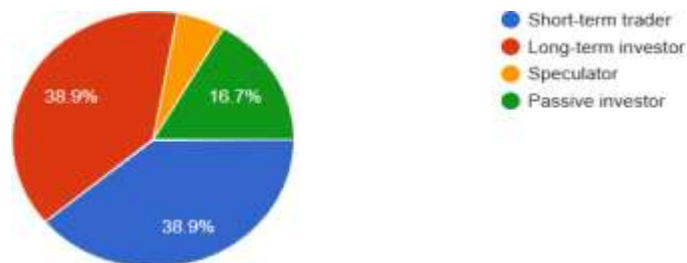


4. **Investor Type:** Short-term traders (38.9%) and long-term investors (38.9%) make up the largest groups.
- Passive investors account for 16.7%.
 - Speculators make up 5.6%.

Types	Count	Percentage
Short-term trader	58	38.9%
Long-term investor	58	38.9%
Speculator	9	5.6%
Passive investor	25	16.7%
Total	150	100%

Table 4.7 Table shows type of investor are respondents.

- **Chart 7: Investor Type**



5. **Challenges in Using Financial Analytics Tools:** Lack of knowledge (38.9%) and complexity (33.3%) are the main challenges.
- High cost is a concern for 16.7%

FINDINGS

- **Enhanced Investment Decision-Making:** Financial analytics improves the quality and precision of investment choices.
- **Live Sentiment Analysis of the Market:** The company uses market mood analysis tools to gauge investor sentiment.
- **Enhanced Risk Management:** Analytics helps in measuring and mitigating financial risks.
- **Client-Centric Financial Planning:** Analytics aids in providing personalized financial solutions.
- **Challenges to Implementation:** The company faces challenges such as limited automation, data dependency, and skill gaps.

FINDINGS OF RESEARCH

- Majority 76% of the respondents belong to the Working professional & 24% is student.
- Majority 92% of professional are Rarely invest in financial markets.
- Majority 46.2% of professional are use sometimes financial analytics tools for investment decisions.
- Majority 77% of professional accepted sentiment analysis is important in financial decision-making.
- Majority 46.2% of professional believe AI-driven financial analytics tools improve investment accuracy.
- Majority 46.2% of professional Rarely update investment strategy based on analytics.
- Majority 38.5% of Technology & 30.8% of Health care sector prefer to investment by professional.

SUGGESTIONS

- **Data Integration & Automation Improvements:** Implement automated data pipeline techniques and use APIs for real-time stock market data integration.
- **Incentivize Predictive Precision:** Train machine learning algorithms and regularly back-test models.
- **Value AI for Sentiment Analysis:** Leverage Natural Language Processing (NLP) for sentiment analysis and create real-time sentiment monitoring dashboards.
- **Incorporate Client Communication:** Deploy interactive investment and market trend tracking dashboards for clients and conduct regular webinars to train clients.
- **Strengthen Compliance Reporting:** Utilize analytics to automate compliance checking and reporting to regulators and use risk analytics models to identify potential compliance risks.
- **Upskilling Employees in Financial Analytics:** Offer in-house training in relevant software and provide ongoing learning in market trends and analytics applications.

SUMMARY

The research study focused on the use of financial analytics in decision-making, risk management, and investing within Margin Sentiment Advisories Private Limited. The study highlighted the importance of analytics technologies, predictive models, and sentiment analysis in the finance industry. It also addressed the challenges faced by the company and the impact of analytics on client services.

CONCLUSIONS

- Financial analytics is a strategic asset for Margin Sentiment Advisories, enhancing decision-making and advisory services.
- Data-driven decision-making improves outcomes, leading to better returns and risk management. There is a need for technological and skill advancement, including modernizing infrastructure and enhancing employee proficiency.
- Personalization through analytics is a key differentiator, helping to build trust and client relationships.
- Continuous innovation is crucial for staying competitive in the evolving field of financial analytics.

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