

**Beyond the Numbers! The Role of Equity Analyst and
Management Perspectives in Shaping Stock Returns in
Developed and Emerging Markets:
An Exploratory Study Using Semantic Text Analysis**

EFPM Dissertation

Committee Chairperson:

Rajendra K. Srivastava, Novartis Professor of Marketing, Strategy, and Innovation, ISB

Committee Members:

Shashwat Alok, Associate Professor – Finance, ISB

Sudhir Voleti Associate Professor – Marketing, ISB

Shankar Prakash, EFPM Student

shankar_prakash_efpm2018@isb.edu

Abstract

Management disclosures and equity analyst reports influence stock market views and efficiency. Our research uses semantic text analysis of quarterly management call transcripts and equity analyst reports from Dow 30 and Nifty 50 businesses to investigate the informational influence on stock price returns in developed and emerging markets.

The study investigates two key constructs: the content of these communications, known as "MINDSET," and their sentiment tone, known as "POSITIVE POLARITY". We define the MINDSET construct by categorizing phrases from these reports depending on their strategic and financial orientation. POSITIVE POLARITY is defined as the proportion of positive sentences to non-neutral ones.

In the first part, we use advanced language models to analyze the prevalence of strategic and financial orientation among managers and analysts in developed and emerging economies. Our findings show that developed markets have a higher prevalence of the strategic mindset than emerging markets. Furthermore, analysts have a stronger financial orientation than managers, regardless of the market. The statistical significance of these mindset variables in explaining stock returns emphasizes their importance and informational relevance.

In the second part, we evaluate the value relevance of management and analyst sentiments for stock prices. Both analyst's and management's sentiments help explain the cross-sectional volatility in stock returns. Consistent with the importance of expert-generated information in informationally less transparent markets, analysts' sentiment has more explanatory power for Nifty 50 enterprises than Dow 30 firms. Importantly, our findings show that both management and analyst sentiment provide complementary information for financial markets, with neither totally substituting for the other.

Focusing on the informational consequences of divergence between management and analyst perspectives, we discover that greater optimism among analysts relative to management is associated with higher future stock returns. However, financial markets discount favourable sentiments when both management and analysts express them more positively.

Overall, these findings support the informational relevance of non-financial indicators inherent in analysts and management orientation and sentiments in developed and emerging markets. These findings have important implications for business strategy, corporate communications, the role of equity analysts, and stock market investors.

Table of Contents

ABSTRACT	1
1. CHAPTER 1: PROLOGUE	4
1.1. PERSONAL MOTIVATION	4
1.2. INTRODUCTION TO THE RESEARCH TOPIC:	5
1.3. BACKGROUND AND CONTEXT:	5
1.4. RESEARCH QUESTIONS AND HYPOTHESES:	9
1.5. RESEARCH METHODOLOGY AND DATA:	11
1.6. SIGNIFICANCE AND CONTRIBUTION:	17
2. STRATEGIC MINDSETS, BUSINESS PERFORMANCE AND STOCK RETURNS ACROSS DEVELOPED AND EMERGING MARKETS	19
2.1. INTRODUCTION	19
2.2. OPERATIONALIZING THE MINDSET CONSTRUCT TO CHARACTERIZE INFORMATION	19
2.3. THEORETICAL FRAMEWORK AND HYPOTHESES	22
2.4. RESULTS AND DISCUSSION	25
3. INFORMATIONAL VALUE OF MANAGEMENT AND ANALYST SENTIMENTS ON STOCK RETURNS IN DEVELOPED AND EMERGING MARKETS	35
3.1. INTRODUCTION	35
3.2. RELATED LITERATURE	37
3.3. HYPOTHESIS	39
3.4. RESULTS AND DISCUSSION	42
4. CHAPTER 4: EPILOGUE	52
4.1. SUMMARY OF FINDINGS:	52
4.2. DISCUSSION AND INTERPRETATION:	53
4.3. KEY IMPLICATIONS	55
4.4. REFLECTION ON THE RESEARCH PROCESS:	55

4.5. CONCLUSION AND FUTURE DIRECTIONS:	56
4.6. ACKNOWLEDGMENTS:	58
APPENDICES	60
APPENDIX 1: THEME DEFINITIONS, CHATGPT PROMPTS AND SEED PHRASES	60
APPENDIX 2: SENTENCES AND SENTIMENT COUNTS	68
APPENDIX 3: DETAILED REGRESSION EXHIBITS SUPPORTING THE ANALYSIS	72
REFERENCES	96

1. Chapter 1: Prologue

1.1. Personal Motivation

Information dissemination/disclosure by company management on their strategy and business performance plays an important role in market efficiency. Similarly, equity analysts or sell side analysts, perform their roles as information intermediaries by performing an iterative combination of information interpretation and information discovery to assess valuation of stocks and make recommendations to potential investors. Finally, investors consume this information and, on their part, potentially do information interpretation and information discovery and participate in market action. This flow of information value chain contains information, insights, and distortions, and is a crucial contributor to market efficiency.

Given this context can be seen as an exercise in predicting the future based on information, analysis, and judgements about the future there can be several distortions in this information value chain. There are varying degrees of distortions could be due to conflicts of interest, vested motivations, biases and simply errors owing to the complexities involved in predicting the future.

Characteristics of past work in this area:

There are several scholarly efforts, some of them cited in this study, to understand the value of information that flows through this information value chain. There are several angles that these studies take but they may be broadly classified into those that seek to unravel the informational value in these disclosures and analysis, and those that seek to unravel the distortions. Studies in the past have significantly leveraged both structured data including financial and other attributes of companies, and unstructured data like textual articulations in various reports. When unstructured data is involved, scholars have mostly taken a lexical approach to studying the meaning based on words used in the articulation. Overall, these studies have tried to assess and qualify informational value of management and analyst articulations leveraging analysis of structured data or taking a lexical approach to studying unstructured text data.

Motivation to explore new capabilities in AI, especially large language models:

One of the key motivations of this study is examine the informational value of management and analyst articulations using a semantic approach to study text which when scaled to cover big data in the real time has a potential to significantly contribute to market efficiency by enabling rapid assimilation of information that is structure as well as unstructured.

1.2. Introduction to the Research Topic:

Researchers and practitioners in Finance and Accounting seek to comprehend the influence of information and disclosures on market efficiency through two distinct perspectives: those of company management and equity analysts. Management perspectives encompass aspects such as the quality of disclosures, managerial opportunism, obfuscation, among others. Analyst perspectives, on the other hand, delve into understanding how analysts add value and affect market efficiency. Management is expected to provide high-quality disclosures to ensure that all relevant information is reflected in market prices. Analysts contribute to market efficiency by producing forecasts, recommendations, and research based on information from management and their independent analysis.

This research aims to juxtapose the viewpoints of management and analysts in developed and emerging market contexts, by employing text sentiment analysis and scrutinizing the topics discussed within the four population groups (i.e., Management, Analysts in Developed and Emerging Markets).

1.3. Background and Context:

The literature review reveals a notable scarcity of studies that compare Management and Analyst perspectives, especially in analyzing sentiments and topics within their discussions and comparing developed and emerging markets. Given the exploratory nature of this research, our propositions chiefly derive from logical foundations. Yet, occasionally, our analysis also extends to empirically examining established frameworks and phenomena recognized within Marketing and Finance literature. This approach not only anchors our investigation in established theories when relevant but also opens avenues for new insights.

Nonetheless, it is useful to highlight significant insights from related research that inform or influence various dimensions of this study.

Related Literature on Analyst Perspectives:

This section delves into the contributions of analysts, aligning with the research's goals. Previous studies have consistently indicated that analysts' insights contribute to market efficiency by aiding investors in the accurate valuation of companies. The focal point of relevant literature is to outline how analysts add value and identify the conditions under which their contributions to market efficiency are most pronounced.

Analysts are noted for their role in enhancing market efficiency through the creation or revision of forecasts, leveraging their skills in interpreting existing information, uncovering new data, or a blend

of both. The significance of analysts' interpretative abilities, especially in making sense of unstructured or non-financial disclosures, is highly valued by investors over their capacity for discovering information.ⁱ

The examination of contexts affecting analysts' value addition reveals variability in the impact. A tendency among analysts to favour "glamour" stocks, despite the potential high costs to investors following such recommendations uncritically, has been observed. Moreover, the consensus in analysts' recommendations tends to increase returns for stocks with solid fundamentals but shows a negative association with returns on stocks with poor fundamentals, highlighting biases in analyst recommendations.ⁱⁱ

Regulatory bodies have shown interest in analyst recommendations to protect less sophisticated investors from potentially misleading advice. Studies suggest that smaller and less experienced investors are more likely to be swayed by analyst recommendations than their more sophisticated counterparts.ⁱⁱⁱ

Differences in the effectiveness of analysts across various markets have been noted, with analysts in the U.S. being particularly adept at identifying mispriced stocks compared to their G7 counterparts.^{iv}

[Related Literature on Management Perspectives:](#)

Management communicates with the investment community through various channels, including investor conferences, quarterly earnings calls, and ad-hoc press releases. Studies within finance and accounting have investigated aspects of these communications, such as linguistic complexity, managerial obfuscation, and the market's reaction to significant informational events.

Investor conferences have been linked to managerial opportunism, such as hyping stock prices to sell shares at elevated values.^v

Research has shown that managerial linguistic complexity can signal the manager's private information through their engagement with analyst questions and that complexity related to informative technical disclosures positively correlates with future earnings growth, whereas obfuscatory complexity suggests lower future earnings.^{vi}

Changes in the language and structure of financial reports have been found to significantly impact firms' future returns and operations.^{vii}

Study Objectives – Bridging Perspectives:

This study aims to bridge these perspectives, exploring the similarities and distinctions in sentiments and discussed topics. It seeks to identify unique value contributions by analysts and uncover new scenarios where analysts positively impact market efficiency. The study also compares these aspects between developed markets and emerging markets, examining their influence on companies' market capitalization changes and Stock Returns. Exhibit 1.2.A illustrates the positioning of this study.

Constructs of Interest

Management and Analyst reports generally contain structured information like financials, ratios, valuation, etc and unstructured information in the form of textual articulations. Our interest in this study is the text articulations. Within the text there are two discernible aspects, one being the topics that they discuss and the tonality of the topics they discuss. Both topics and tones in these reports carry information for the markets. We define two constructs to capture these two aspects of the unstructured information in these reports. The first is a MINDSET construct characterized by the topics of discussion and then the SENTIMENT construct characterized by the tonality of the articulations. Exhibit 1.2.B provides a clear definition of these constructs as we have defined them in this study.

Exhibit 1.2.A: Information Flow and Informational Value in Stock Markets

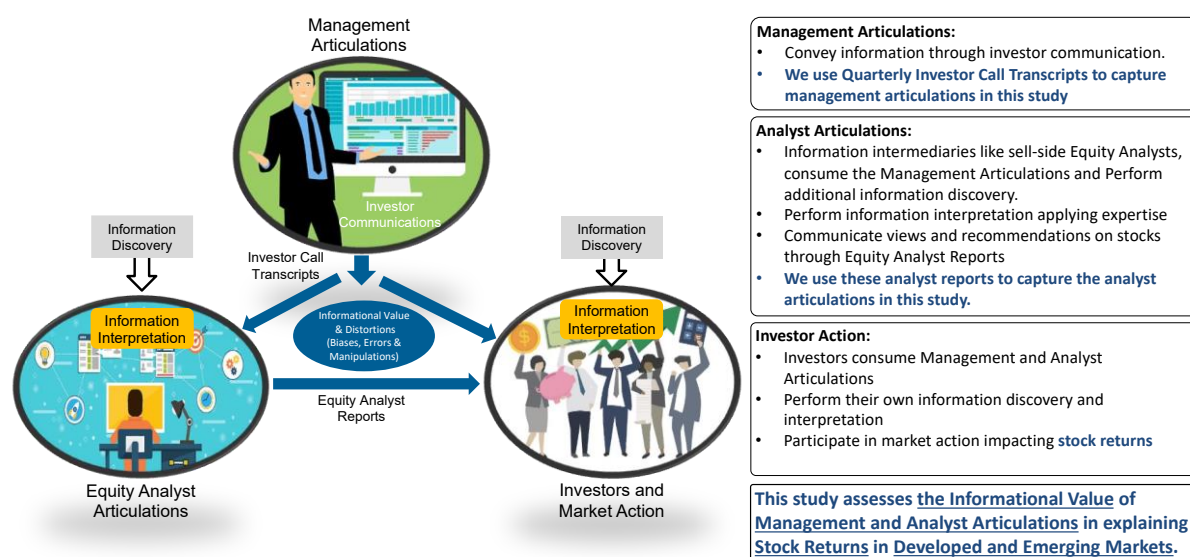
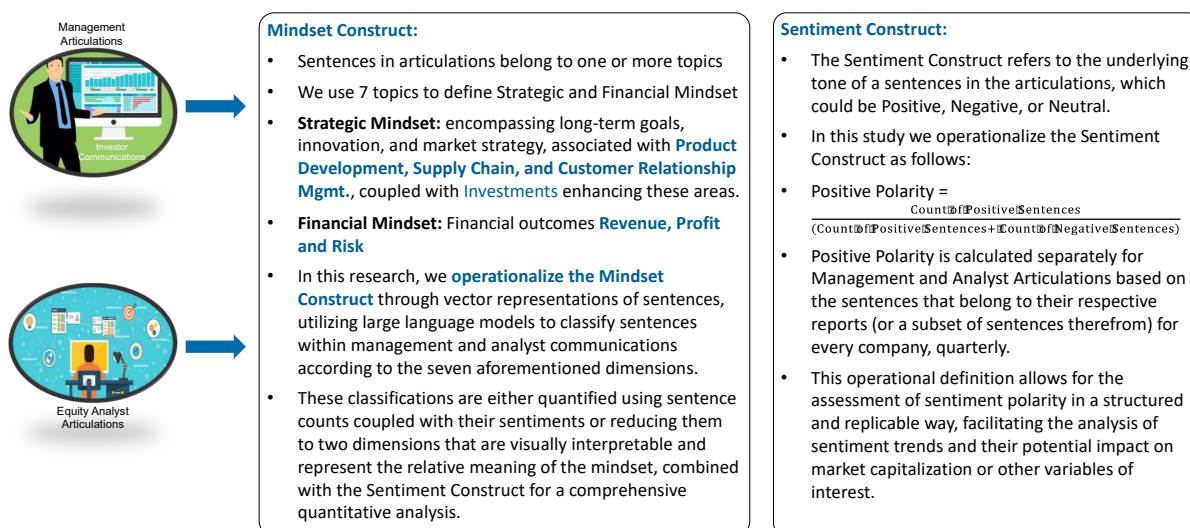


Exhibit 1.2.B: Articulations Characterized by Two Constructs: Mindset and Sentiment



1.4. Research Questions and Hypotheses:

In this section, we outline the principal research questions and the corresponding hypotheses. These research questions have been explored using relevant hypotheses in the following two chapters. Chapter 1 primarily focuses on examining the prevalence of mindsets and Chapter 2 focuses on the informational value of the sentiment construct.

Research Questions (Q) and Hypotheses (H)

Q1. How do the Analyst and Management MINDSETS differ between each other, as evident in the topics articulated in their reports, and how do these DIFFER between companies listed in Developed versus Emerging Markets?

H_{1.1} There is a significant difference in MINDSETS, which are formulated from the combined statements of Management and Analysts, between Developed Markets and Emerging Markets.

H_{1.2} MINDSETS, when generated separately from statements by Management and Analysts, show a significant difference between them, across Developed or Emerging Markets.

H_{1.3} The MINDSETS derived from the four distinct groups—Management and Analysts in both Developed and Emerging Markets—significantly influence or predict the Stock Returns of the companies they are associated with.

Q2. How do the Analyst and Management SENTIMENTS contribute to explaining STOCK RETURNS, and how do these effects differ between companies listed in Developed versus Emerging Markets?

H_(2.1) There is an association between the individual sentiments of Analysts and Management and the Stock Returns of their companies.

We propose that the sentiments expressed by Analysts and Management may have a discernible impact on Stock Returns. This hypothesis stems from the belief that sentiments reflect underlying confidence or concerns regarding a company's future, influencing investor perceptions and market behaviour.

H_(2.2) The explanatory power of Analysts' sentiments is greater than that of Management's sentiments in explaining Stock Returns.

The above hypothesis explores the possibility that Analysts' sentiments have a stronger impact on Stock Returns than Management's sentiments. Given analysts' external perspective and potential

market influence, their sentiments might offer unique insights that sway investor decisions more significantly.

H_(2.3) The statistical significance of Management's sentiments is maintained when combined with Analysts' sentiments, suggesting that Analysts' sentiments do not fully encapsulate the impact of Management's sentiments on Stock Returns.

In H_(2.3) we consider whether Management's sentiments retain their significance in the presence of Analysts' sentiments. This hypothesis tests the additive or overlapping value of sentiments from both sources, questioning if Management's views provide additional insights or are overshadowed by Analysts' analyses.

H_(2.4) The difference between Analysts' and Management's (Divergence) sentiments relates to the Stock Returns of their companies.

The above hypothesis investigates the relationship between the sentiment divergence of Analysts and Management and Stock Returns. This examines if differing views between these two groups signal market-moving insights or uncertainties that affect stock performance.

H_(2.5) The alignment of optimism between Analysts and Management (Convergence), as expressed through their sentiments, correlates with Stock Returns of their companies.

H_(2.5) posits that a convergence of optimistic sentiments between Analysts and Management correlates with positive Stock Returns. This alignment might be perceived as a strong indicator of company health and growth prospects, attracting investor interest.

H_(2.6) The level of uncertainty in the external environment affects the relationship between the sentiments of Management or Analysts and the Stock Returns of their companies.

The above hypothesis suggests that external uncertainties, such as market volatility or economic downturns, might alter how sentiments from Management or Analysts impact Stock Returns, indicating that the context of sentiment expression matters.

H_(2.7) Company growth expectations, reflected in Price-to-Book ratios, influence how Management or Analysts' sentiments relate to Stock Returns.

Through H_(2.7) we aim to understand if and how company growth expectations (as implied by P/B ratios) mediate the relationship between sentiments and Stock Returns, suggesting that future outlooks might amplify or mute the impact of sentiments.

H_(2.8) Information asymmetry, as indicated by the percentage of revenue from related parties (RPT Revenue), affects the relationship between the sentiments of Management or Analysts and the Stock Returns of their companies.

H_(2.8) examines whether information asymmetry, indicated by revenues from related parties, influences the sentiment-Stock Returns relationship. This could highlight how insider transactions and perceived transparency affect market reactions to sentiments expressed by Analysts and Management.

1.5. Research Methodology and Data:

This section outlines the sources of data, the process of data collection, and the methodology employed to derive sentiments and topics that serve as independent variables in our analysis. Additionally, it underscores the significance of the chosen methodology, which predominantly relies on sentence structure and semantic analysis, utilizing embeddings from pre-trained large language models. This approach stands in contrast to traditional word-frequency-based text mining techniques.

Data Overview:

In the methodology section of this study, we delineate the data foundation and selection criteria underpinning our analysis. Our investigation focuses on large-cap companies within the United States and India, specifically those encompassed by the Nifty 50 and Dow 30 stock market indices. For the purpose of representing large-cap companies in India, we selected firms listed in the Nifty 50. Similarly, the Dow 30 index served to represent large-cap companies in the United States. The composition of these indices as of March 31, 2021, includes 50 companies from the Nifty-50 and 30 companies from the Dow-30, defining our populations of interest.

The temporal scope of our analysis spans 20 calendar quarters, covering a period from the first quarter of 2017 (2017Q1) through to the fourth quarter of 2021 (2021Q4). This timeframe allows for a comprehensive examination of trends and patterns over successive quarters, facilitating a robust analysis of sentiment and topic evolution over time.

Our main data source consists of text data, specifically extracted from quarterly investor call transcripts and equity analyst reports (sell-side analysts) published during each quarter within the analysis period. It's important to note that the analyst reports included in this study were selected based on their availability, constituting a convenience sample. This approach did not differentiate between individual equity analysts or their affiliations, focusing instead on the content of the reports as a collective source of industry and company insights.

This methodological foundation supports our objective to construct sentiments and topics from the textual data, which are subsequently utilized as independent variables in our analysis. By examining these elements across large-cap companies in both the US and India over the defined period, we aim to uncover significant patterns and insights related to management and analyst perspectives within the context of developed and emerging market dynamics.

Exhibit 1.4.A: Data Overview

Ref. #	Aspect of Data	Description
1	Populations of Interest	Large-cap companies in the US and India
2	Samples	Nifty 50 [†] companies to represent large-cap companies in India. Dow 30 [†] companies to represent large-cap companies in the US. [†] Companies that were part of the two stock market indices Nifty-50 (50 companies) and Dow-30 (30 Companies) as on 31 st March 2021
3	Period of Analysis	Calendar Quarters: 20 Quarters (2017Q1 to 2021Q4)
4	Data Type	Text data from Quarterly Investor Call Transcripts and Equity Analyst Reports (Sell Side Analysts) published during a quarter [†] [†] Convenience sample based on availability of analyst reports. This study does not identify or distinguish between equity analysts.

Data Generation Process:

In our study, the dependent variable is defined as the year-on-year change in market capitalization at the conclusion of each quarter under analysis. The independent variables are extracted from the quarterly management call transcripts and equity analyst reports.

Understanding the mechanism through which data for independent variables is generated, and how this data subsequently affects the dependent variable, is critical for the correct interpretation of our findings. The process begins with company management sharing insights about current and anticipated company performance during quarterly calls, which equity analysts then access. These analysts enrich this information by integrating additional insights from external sources, including customer and market research, and interviews with management. This results in a comprehensive evaluation of the company's present and future performance.

Investors, in turn, digest perspectives from both management and analysts, supplementing these insights with information from a variety of other sources to make informed market decisions. These collective actions by investors directly influence financial metrics such as share price, year-on-year change in market capitalization, Price-to-Book Value (PBV), and Price-to-Earnings (P/E) ratios, among others.

Methodology Overview:

This study examines unstructured textual data from two distinct viewpoints: (1) the Management Perspective, sourced from quarterly analyst call transcripts that reflect management's views on company performance, and (2) the Analyst Perspective, obtained from equity analyst reports offering recommendations after evaluating company results. To analyze sentiments and themes at a sentence level, we apply Natural Language Processing techniques, specifically leveraging pretrained neural network models.

Key Steps:

Sentence Embeddings: Sentence vectors are produced using the pre-trained language model, based on Sentence Transformers^{viii}/Sentence-BERT. There are several pre-trained general-purpose models and the mode used for this study is MiniLM-L6-v2^{ix}. This approach allows for the multi-dimensional representation of sentence content.

Sentiment Classification: We employ FinBERT^x, a language model fine-tuned specifically for sentiment analysis within the financial sector, to categorize the sentiment of sentences in our dataset.

Topic Classification: Sentences are classified into several topics of interest using sentence embeddings. We use clustering techniques, topic modelling of clusters, and semi-supervised topic classification techniques which are drawn from established computer and data science literature.

The classified sentences, along with their corresponding sentiments identified by FinBERT, facilitate our investigation into the relationship between topic-specific sentiments and Market Capitalization.

For details of the methodology utilized, please see Exhibits 1.4.C, 1.4.D, 1.4.E.

Exhibit 1.4.C: Data Preparation and Pipeline

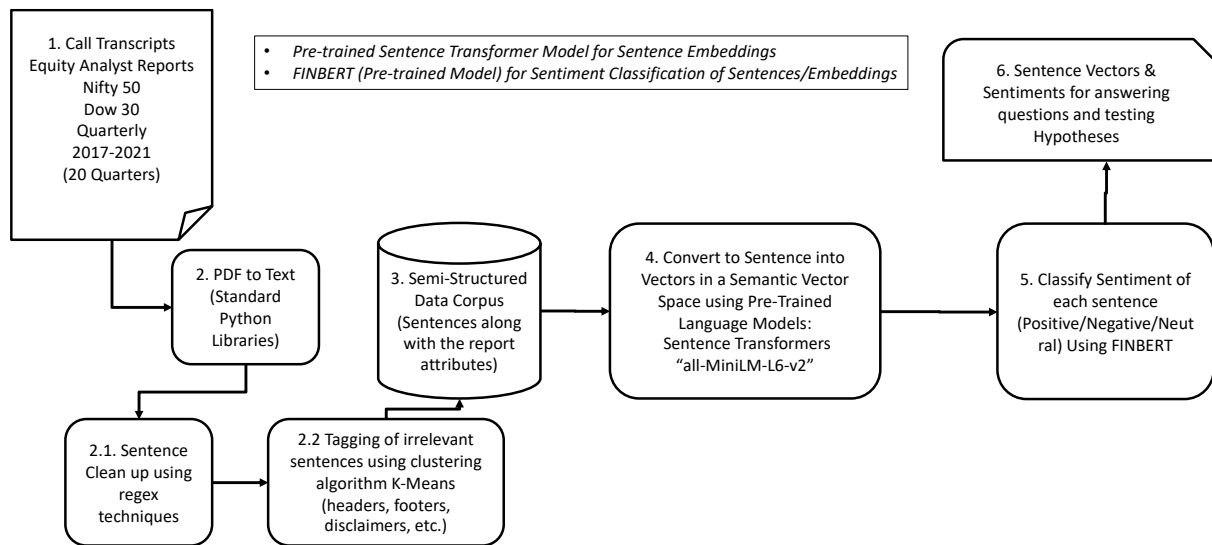


Exhibit 1.4.D: Topic Classification – Overlapping Classes: AI/ML Workflow

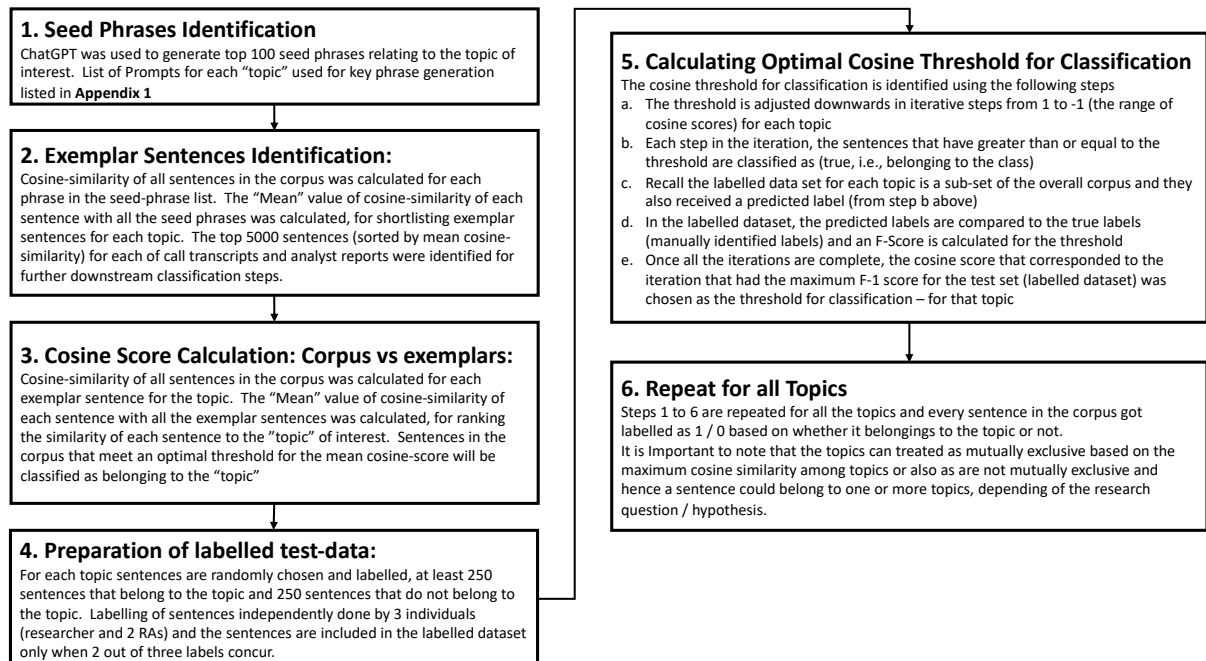
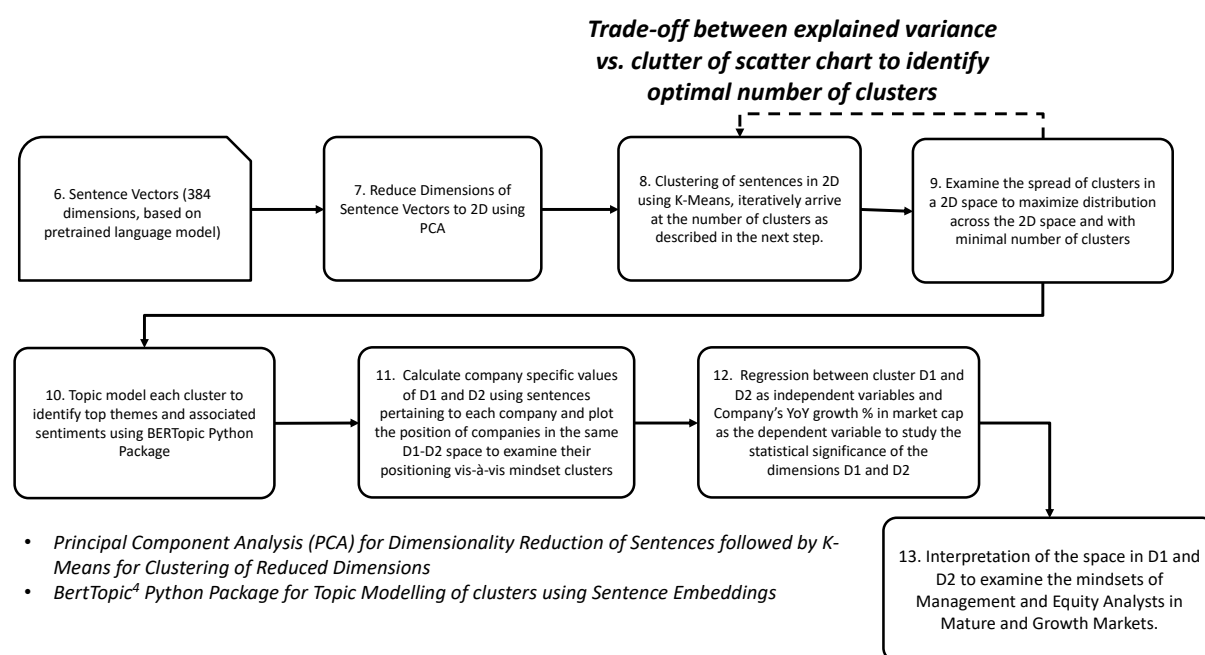


Exhibit 1.4.E: Sentence Clustering and Topic Identification



Additional Details on the Key Methodology Steps:

Sourcing for documents:

Equity analyst reports were obtained from subscription databases, while company call transcripts were sourced either directly from the respective company websites or from subscription databases. The selection of companies included in the study was determined by the list of companies that belonged to the stock market indices under consideration. Analyst reports were included in the analysis based on their availability in the subscription databases, and whenever feasible, multiple analyst reports for the same company were included in the analysis, again contingent on their availability.

Data Extraction:

Text data from PDF documents were extracted using Python's PDF reader modules and Optical Character Recognition (OCR) modules. Basic rules and practices for text extraction were applied to ensure the completeness of sentences, which involved using regular expressions for parsing. The extracted sentences were then organized and stored with associations to the respective document, period, and company identities. This indexing allowed for the retrieval of sentences with the appropriate context for subsequent processing and analysis.

Sentence Embeddings:

Sentence embeddings are vector representations of sentences created using pre-trained language models. In this study, we utilize the Sentence Transformers python framework, based on Sentence-BERT, to generate sentence embeddings for the corpus. Among the available pre-trained general-purpose models in Sentence Transformers, we employ the 'all-MiniLM-L6-v2 ' model. This model transforms each sentence into a 384-dimensional vector, resulting in semantically meaningful sentence embeddings. These embeddings, amenable to cosine-similarity comparison, enable tasks such as large-scale semantic sentence comparisons, clustering, and semantic information retrieval through search algorithms.

Corpus Cleaning:

To filter out non-informative sentences from the extracted call transcripts and analyst reports, a semantic clustering approach was applied to the sentence corpus. The Python package BERTopic was utilized for this purpose, which uses Sentence Transformers to perform semantic clustering.

After applying BERTopic, clusters of sentences were generated based on their semantic similarity. These clusters were then manually reviewed to identify and remove irrelevant ones, which typically contained pleasantries, disclaimers, and general information such as analyst names and contact details.

The remaining sentences, which were part of the relevant clusters, were retained as the relevant corpus for further analysis. This process helped to focus the analysis on the sentences that were most pertinent to the context of the study.

Sentiment Classification:

The FinBERT model is employed to identify the sentiment tone (Positive, Negative, or Neutral) of individual sentences. This model takes one or more sentences as input and provides the corresponding sentiment classification as output. It is important to note that these three sentiment classes—Positive, Negative, and Neutral—are mutually exclusive.

Topic Classification:

The research questions necessitate the categorization of sentences into broad themes, either aligned with hypotheses or grounded in existing theory. This classification allows for the examination of sentiment within these themes to address the questions and test hypotheses. Seven distinct themes have emerged from the research questions:

Financial: Growth, Profits, Risk, Investments, Strategic: Products/Offerings Management, Supply Chain Management, Customer Relationship Management.

Topic classification is done using the workflow described in exhibits 1.4.C. and 1.4.E. We use two types of classification algorithm. One for non-mutually exclusive classification which is explained in Exhibit 1.4.C. and the mutually exclusive classification of sentences using a python package called BerTopic^{xi}. These are methods used in the practice of Data Science, anchored in computer science and data science theory/literature.

Construction of Independent Variables:

Independent variables consist of two constructs derived from the text information in call transcripts and equity analyst reports as elaborated in the Data Overview section above. The first construct is Positive Polarity, a measure of positivity in each document, derived from management and analyst perspectives across various sets of sentence collections within the documents under consideration.

$$\text{Positive Polarity} = \frac{\text{Count of Positive Sentences}}{(\text{Count of Negative Sentences} + \text{Count of Positive Sentences})}$$

The second construct is the interpretation of the topics and clusters in a two-dimensional space derived by dimensionality reduction of sentence vectors using semantic topic modelling techniques described in the Topic Classification section above.

1.6. Significance and Contribution:

The insights derived from this research are poised to benefit three key groups, enhancing their decision-making capabilities, and helping them achieve their goals more effectively. These groups include company management, equity analysts, and investors. The most important contribution would be a novel approach using semantic text analysis to unravel insights and demonstrate a viable method to do so on an ongoing basis. Based on the significance of the findings we expect that this approach could enable more effective information interpretation thereby improving effectiveness in the information value chain in stock markets.

Importance for Company Management:

This study sheds light on the incremental value of textual information shared during quarterly earnings calls, which is crucial for communicating company strategies and performance, thereby aiding in the accurate valuation of stocks. It encourages companies to refine their investor communication practices meeting their objectives more effectively. Furthermore, by understanding the discrepancies between their own and analysts' perspectives, management can devise improved communication

strategies. This ensures that analysts fully comprehend the breadth of information disclosed, potentially increasing the alignment between company and analyst viewpoints. For example, identifying more effective ways to highlight overlooked information could be a strategy for ensuring analysts consider all relevant data.

Significance for Equity Analysts:

Analysts stand to gain insights into the added value of assimilating textual information from company management. This knowledge supports analysts in enhancing their forecasting accuracy, making better revisions, and ultimately improving investor returns. Understanding how their perspectives differ from those of company management can refine analysts' interpretation skills, allowing them to place greater emphasis on strategic and non-financial information, thus enriching their analyses and forecasts.

Value to Investors:

For investors, recognizing the unique contributions of both management and analyst perspectives enables a more nuanced approach to leveraging information for investment decisions. Acknowledging these differences helps investors utilize the complementary nature of these viewpoints more effectively. For instance, adopting a strategy that relies on both perspectives, rather than blindly following analyst recommendations, could lead to better-informed investment choices.

In summary, this research highlights the critical role of textual information in shaping the strategies and choices of company management, equity analysts, and investors, aiming to enhance the effectiveness of their decision-making processes and the achievement of their respective objectives.

2. Strategic Mindsets, Business Performance and Stock Returns Across Developed and Emerging Markets

2.1. Introduction

This paper delves into the differential prevalence of Strategic and Financial mindsets among Management and Analysts across Developed and Emerging Markets. By employing sophisticated language models, we aim to visualize and quantitatively assess the prominence of these mindsets. Our analysis uncovers a notably stronger presence of strategic mindsets within developed markets in contrast to emerging ones. Furthermore, our research indicates that analysts exhibit a more pronounced financial mindset when compared to management, a trend that persists across market classifications. The statistical relevance of these mindset dimensions in elucidating stock returns highlights their significant prevalence and informational value.

Building on the foundational analysis of mindset prevalence, our study extends to examine the relationship between the thematic vectors identified within the semantic space and the financial metrics pertinent to the companies in question. For instance, we investigate whether discourse on investments correlates with actual financial investments by the company, or if discussions centered on strategy are linked to observable revenue growth. Given the limited literature, our propositions are primarily grounded in logical reasoning. Where empirical evidence does not directly align with these logic-based propositions, we propose alternative hypotheses for further research and enhanced understanding.

These findings, taken together with the findings in from the next chapter on informational value of sentiments, confirm the informational value in analyst and management mindsets and sentiments in developed and emerging markets. These findings have significant implications for company strategy, corporate communications, equity analysis, and investor decisions. More importantly, the study lays the groundwork for further research utilizing semantic text analysis to enhance our understanding of the information value chain in global stock markets.

2.2. Operationalizing The Mindset Construct to Characterize Information

Management and analyst reports serve as crucial vehicles for conveying their perspectives, playing a pivotal role in enhancing market efficiency by mitigating investor information asymmetry. This, in turn, influences market dynamics and share prices. While finance literature generally categorizes this as information, from a business strategy standpoint, these communications bear significant insights regarding a company's strategic plans and execution methodologies. Conversely, the finance

perspective primarily concentrates on the financial outcomes, both historical and prospective, stemming from these strategies and executions. Our study seeks to utilize such frameworks to delineate a mindset construct, subsequently examining its prevalence within management and analyst narratives across developed and emerging markets and assessing its impact on company performance and market valuation. It's crucial to clarify that our objective transcends mere empirical validation of theory; instead, we endeavour to align empirical evidence with theoretical principles to elucidate the informational value embedded within management and analyst discussions, thereby enriching the understanding of how these narratives influence stock prices. Despite the scarcity of empirical research on this topic, numerous seminal works underscore the significance of strategic mindsets in driving company performance and enhancing shareholder value. Drawing on this literature, we have crafted a theoretically sound delineation of the two mindsets under scrutiny: a financial mindset, characterized by a focus on present and anticipated financial outcomes, and a strategic mindset, oriented towards the decisions and actions through which a company has achieved or aims to achieve its financial goals. This paper leverages an array of literature to firmly establish our mindset definitions.

Management Mindsets and Strategic Orientation

The conceptualization of management mindsets within the ambit of strategic and financial orientations necessitates a nuanced understanding of how such cognitive frameworks influence business performance and Stock Returns. This section delves into seminal theories that lay the groundwork for distinguishing between strategic and financial mindsets, ultimately guiding the selection of an appropriate construct for examining the impact of these mindsets across developed and emerging markets.

Miles and Snow's Typology (1978) provides an early foundation for understanding how firms' strategic orientations—categorized into Defender, Prospector, Analyzer, and Reactor—shape organizational behaviour and performance. This framework underscores the adaptability and strategic focus of organizations, suggesting that a firm's inclination towards strategic behaviours (e.g., innovation vs. stability) reflects the underlying mindset of its management.

Porter's Competitive Strategies (1980) further elucidates the notion of strategic orientation by delineating three generic strategies—Cost Leadership, Differentiation, and Focus—that firms can adopt to achieve competitive advantage. Porter's model emphasizes the strategic choice in positioning the firm externally in the marketplace, which is inherently tied to management's strategic mindset regarding how best to compete and create value in the industry.

Hamel and Prahalad's Core Competencies (1990) pivot the discussion towards the internal capabilities and strategic intent that drive firm performance. They argue for a focus on developing and leveraging core competencies to achieve competitive advantage, highlighting a strategic mindset centred around innovation and long-term value creation.

Building on these foundational theories, Rajendra Srivastava's work on value creation through marketing and the importance of market-based assets offers a compelling perspective for defining the MINDSET construct. Srivastava extensively explores how strategic orientations towards managing and leveraging customer relationships, brand equity, and other market-based assets can significantly impact firm performance and shareholder value^{xii}. His research suggests that a strategic mindset, characterized by a focus on value creation through marketing efforts and the strategic management of market-based assets, is pivotal in driving business success and influencing Stock Returns.

In our exploration of the dichotomy between Strategic and Financial mindsets across different market contexts, we draw significantly from the insights presented in Srivastava's work, particularly his discussions on market-facing business processes such as product management, supply chain management, and customer relationship management. These elements are integral to strategic topics concerning the planning and execution frameworks companies deploy to achieve superior financial performance. Srivastava's detailed analysis of these processes provides a robust framework for understanding how strategic decisions and actions—aimed at enhancing customer value, optimizing supply chain operations, and managing product lifecycles—serve as pivotal determinants of a company's strategic orientation.

Furthermore, Srivastava's emphasis on the outcomes targeted by these market-facing processes, notably shareholder value as characterized by growth, margins/efficiency, risk management, and investments, offers a clear lens through which to view the financial mindset. This mindset is predominantly concerned with quantifiable financial outcomes and metrics that reflect the company's performance and shareholder value creation. The strategic mindset, in contrast, is more nuanced and encapsulates the methodologies and strategic initiatives a company undertakes to drive these financial outcomes.

Thus, leveraging Srivastava's framework enables us to precisely define the two mindsets of interest. The strategic mindset is characterized by a focus on long-term value creation through market-based assets and strategic business processes. This includes how a company leverages its relationships with customers, its supply chain efficiency, and its product management capabilities to sustain and enhance its competitive position and financial performance over time. On the other hand, the financial

mindset is defined through a lens of immediate financial outcomes and shareholder value metrics such as growth rates, profit margins, risk mitigation, and capital investments.

By adopting this approach, our study aims to delineate how these two mindsets manifest among management and analysts in both developed and emerging markets, and how they subsequently impact business performance and Stock Returns. Srivastava's insights into the strategic management of market-based assets and the focus on shareholder value provide a comprehensive foundation for defining these mindsets. This not only enriches our understanding of the strategic versus financial orientations within corporate narratives but also contributes to the broader discourse on the relationship between strategic management practices and financial performance outcomes in varying market contexts.

This choice is motivated by the comprehensive understanding Srivastava offers regarding the strategic management of resources and capabilities for value creation, providing a robust framework for assessing the differential impacts of management mindsets on firm outcomes in both developed and emerging markets.

2.3. Theoretical Framework and Hypotheses

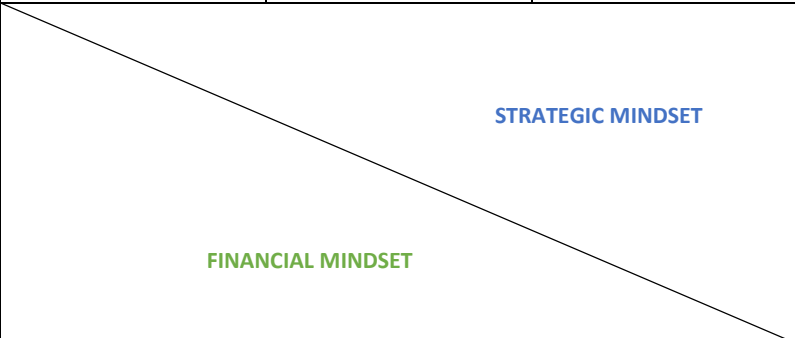
In our analysis of prevalent mindsets, we employ the framework established by Srivastava et al to define MINDSETS. While their study primarily explores the relationship between marketing activities and core business processes, we utilize these core processes as a lens for our discussions, focusing on strategic planning and execution by companies to meet their objectives. The metrics of shareholder value, in this context, serve to measure the outcomes of company actions. By applying this framework, we identify seven thematic areas for investigation within analyst reports and call transcripts. This approach enables us to quantify, visualize, and assess the prominence of specific mindsets across the four distinct groups we are studying. Hence the topics related to these constituents of the framework form the basis of our mindset definition. Exhibit 2.3.A provides an overview of the framework as it relates to our mindset definitions. Making the definitions clear is important for conceptual clarity as well as identifying semantic seeds for topic classification of sentences within reports of interest to our study. The definitions are as follows:

Product Management: This theme encompasses the strategies and practices related to developing, launching, managing, and optimizing a company's products throughout their lifecycle. It involves understanding market needs, defining product features, managing product development, and ensuring products meet customer expectations.

Supply Chain Management: This theme covers the planning, execution, and oversight of supply chain activities with the goal of creating efficiencies, reducing costs, and ensuring timely delivery of goods and services. It includes logistics, procurement, inventory management, and coordination with suppliers and distributors.

Customer Relationship Management (CRM): CRM refers to the practices, strategies, and technologies that companies use to manage and analyze customer interactions and data throughout the customer lifecycle. The goal is to improve customer service, enhance customer satisfaction, and foster customer loyalty.

Exhibit 2.3.A.: Theoretical Framework used for Characterizing Mindsets

BUSINESS PROCESSES	Product Management	Supply Chain Management	Customer Relationship Management
SHAREHOLDER VALUE			
Accelerate Cash Flows (Growth)			
Enhance Cash Flows (Margins)			
Reduce Volatility of Cash Flows (Risk)			
Investments to Support Strategy Execution			

Growth: This outcome refers to the increase in a company's size and financial performance over time, measured through metrics such as revenue growth, expansion into new markets, increase in market share, and enhancement of the customer base. It reflects the company's ability to scale its operations and improve its market position.

Margins: As an outcome, margins represent the company's profitability, expressed as the percentage difference between its revenues and the costs incurred in generating those revenues. High margins indicate efficient cost management and the company's ability to convert sales into profits effectively.

Risk: This outcome pertains to the exposure to factors that can lead to financial loss or uncertainty in achieving business goals. It includes the potential for financial loss due to market volatility, operational failures, legal liabilities, and external events affecting the company's performance and reputation.

Investments: Investments refer to the allocation of resources (e.g., capital, time, technology) towards projects or assets with the expectation of generating future benefits or returns. This theme covers

decisions related to capital expenditures, research and development, and other strategic investments aimed at fostering long-term growth and innovation.

In this paper, the argument by Srivastava, Shervani, and Fahey about multi-process excellence can indeed be seen as indirectly alluding to organizational ambidexterity. Organizational ambidexterity refers to an organization's ability to simultaneously explore new opportunities (innovation, entering new markets) while exploiting existing resources and capabilities (enhancing operational efficiencies, customer service). By advocating for excellence across multiple processes, they highlight the importance of being both innovative and efficient, which is essential for superior financial performance. This dual focus aligns with the concept of ambidexterity, where balancing and excelling in both exploratory and exploitative activities is considered critical for long-term success and shareholder value enhancement. While our current exploratory study is not designed to empirically validate the causality implied in this theory, our attempt is to uncover the existence of strategic and financial mindsets and how they are correlated with financial shareholder performance. Thus, by studying the association we strive to derive certain propositions consistent with this theory and their nuanced manifestation in developed and emerging markets.

Considering the variety of companies and sectors within our samples, we anticipate encountering firms that demonstrate excellence across multiple processes as well as those that have experienced notable increases in shareholder value. Furthermore, data from multiple credible sources have highlighted a general shortfall in investments and R&D within emerging markets, suggesting a probable divergence in the strategic orientations of firms across developed and emerging markets. For instance, in 2021, the R&D spend in the US as a percentage of GDP was around 3.4%^{xiii}, while recent report by NITI Aayog has pointed out that the R&D spend in India has been miniscule between 0.6% to 0.7% of GDP over the past two decades^{xiv}. If our theoretical premise holds true, we should observe a marked correlation between positive narratives surrounding process excellence and shareholder value enhancement across different market landscapes. Consequently, we have delineated our hypotheses as follows:

H_{1.1}: There exists a significant difference in the mindsets—which are synthesized from the collective pronouncements of Management and Analysts—between firms operating in Developed Markets versus those in Emerging Markets.

H_{1.2}: The mindsets, when isolated from statements made by Management and Analysts, reveal a significant variance between these two groups, regardless of whether the companies are situated in Developed or Emerging Markets.

H_{1.3}: The mindsets that are extracted from the four distinct categories—namely, Management and Analysts within both Developed and Emerging Markets—exert a considerable impact on, or serve as predictors of, the Stock Returns of the associated companies.

2.4. Results and Discussion

Deriving the Semantic Space from Sentence Vectors

In this segment of the dissertation, we delve into the process we employed to operationalize the mindset construct and to derive and interpret the semantic space from the non-neutral sentences (either positive sentiment or negative sentiment) found in call transcripts and equity analyst reports, which constitute our primary data units. The process begins with the transformation of these sentences into semantic vectors utilizing pre-trained Sentence Transformer models, as outlined in the methodology section. These vectors are 384-dimensional, and while each dimension lacks a precise semantic definition, they collectively possess relative meanings within a predetermined semantic space. To facilitate visualization and interpretation, we employ Principal Component Analysis (PCA) to reduce these vectors to a two-dimensional (2-D) space.

Once the sentences are represented in this 2-D space, delineated as D1 and D2, we proceed to cluster them using the K-means algorithm. The determination of the number of clusters involves an iterative process, aiming to strike a balance between capturing sufficient variance along the two dimensions and maintaining a manageable cluster count. Our adjustments lead to a configuration of 2-4 clusters within each quadrant formed by the D1-D2 axes.

Within each identified cluster, sentences are then categorized into one or more of the seven predefined topics that constitute the mindsets of interest, such as Product Management, Supply Chain Management, etc., as mentioned earlier in the dissertation. It is crucial to recognize the complexity of this classification task, given that sentences often discuss multiple topics simultaneously, rendering these categories not strictly mutually exclusive. To address this, we explore two classification approaches: one assigns sentences to a single category based on the highest cosine similarity with topic seeds, making the categories mutually exclusive; the other allows sentences to be classified into multiple categories based on a cosine similarity threshold optimized for the F-1 score, as detailed in the methodology.

Our analysis revealed that the topic vectors remained stable across quadrants, indicating that the directional association with the D1 and D2 axes was consistent regardless of the classification method employed. For the sake of simplicity in interpretation, we report our findings using the vectors from

the mutually exclusive classification method. Each cluster, therefore, has its sentences categorized into topics, with varying proportions of each topic. We calculate the occurrence percentage of a topic within a cluster and weigh it by the sentiment positivity to derive a score for each topic within the cluster. This process is repeated for each topic across all fifteen clusters.

Exhibit 2.4.A: Topic Vectors Plotted in the Semantic Space Derived from Sentences

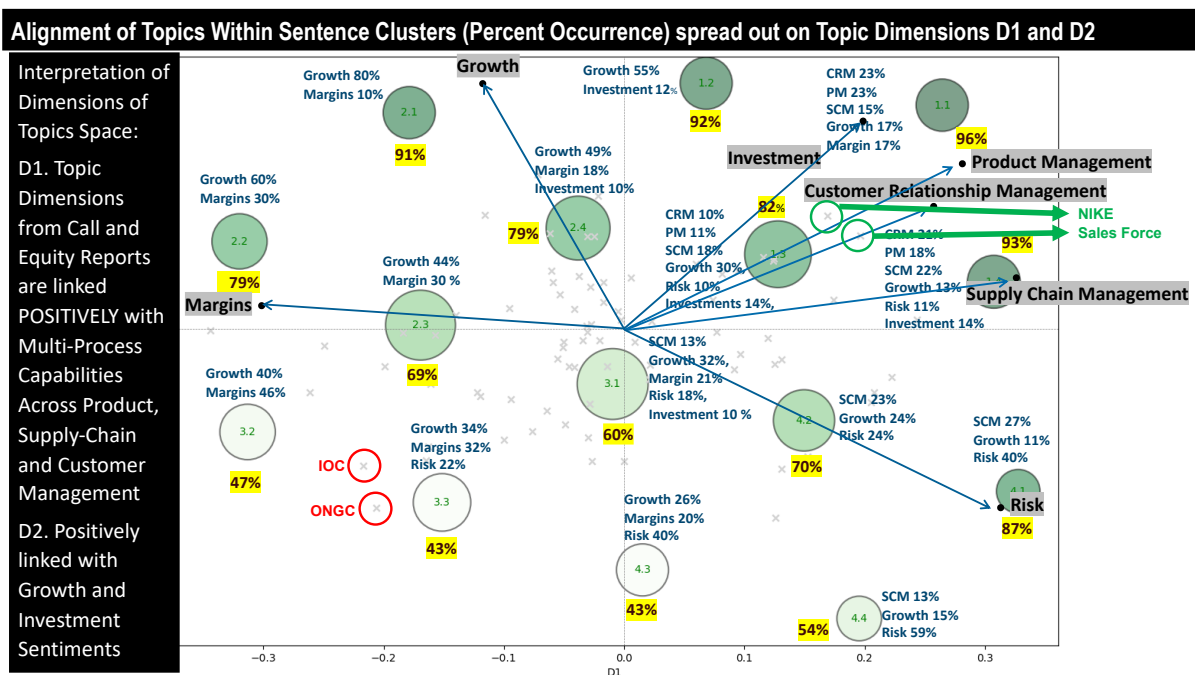
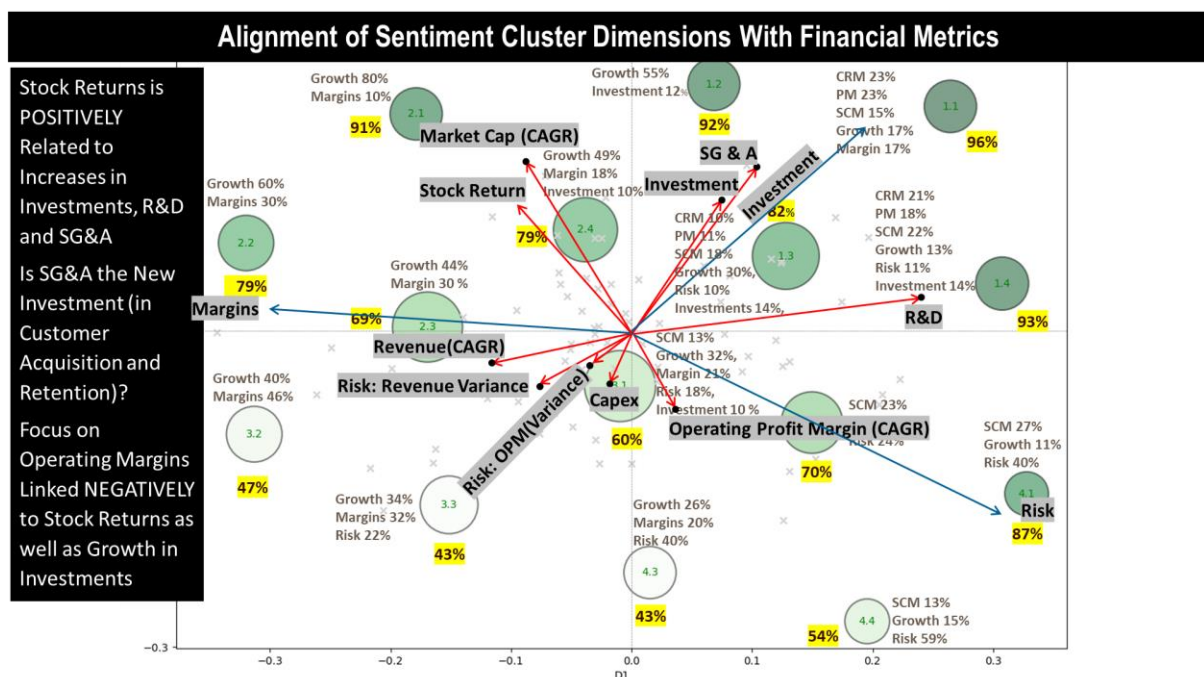


Exhibit 2.4.B: Topic Vectors Plotted in the Semantic Space Derived from Sentences



Subsequently, we examine the correlation between the D1-D2 dimensions and the topic scores for each topic across the clusters. These correlation coefficients then define the vector direction for each topic, serving as a guide for interpreting the semantic space. The outcomes of this analysis, including the semantic spaces and associated topic vectors, are presented in Exhibit 2.4.A, offering a nuanced understanding of how topics are spatially and semantically situated within the broader discussion captured in our data sources.

Plotting The Companies in the Semantic Vector Space

After assigning each sentence its D1 and D2 coordinates, we aggregate these values for sentences pertaining to each company, resulting in a distinct D1 and D2 coordinate for every company. The positions of eighty companies, drawn from the Dow 30 and Nifty 50 indexes, are marked with grey 'x's on the plot.

Interpreting the Semantic Space and the Topic Vectors

Exhibit 2.4.A illustrates the semantic space created from sentences, condensed into two dimensions. Fifteen clusters, highlighted by green circles, emerge from the application of K-Means clustering to these sentence-derived coordinates. These clusters include sentences from both call transcripts and equity reports related to Dow 30 and Nifty 50 companies. Sentences within these clusters are categorized by their closest topic and assigned a sentiment value (Positive, Negative, or Neutral), using the FinBERT tool as outlined in our methodology.

Further detail is provided within the exhibit through a breakdown of topic occurrences within each cluster. For instance, cluster 1.1, located in the northeastern area of Quadrant 1, primarily features sentences related to CRM and Product Management, each accounting for 23% of the cluster's content. A notable feature within each quadrant is the indication of positive sentiment, with cluster 1.1, for example, showing that 96% of its sentences are positively framed.

The directional vectors within this space suggest that movement along a specific direction in the D1 and D2 axes leads to clusters increasingly dominated by certain topics. This spatial arrangement allows for the semantic interpretation of the D1 and D2 dimensions. For example, clusters proximate to the concepts of Product Management, Supply Chain Management, and Customer Relationship Management are richer in sentences pertaining to these topics. Likewise, companies positioned in the upper right quadrant are inferred to have a stronger strategic orientation, based on the prevalent topics and sentiments. Moreover, the D2 axis correlates positively with themes of growth and investment, while associations with margins suggest a negative relationship with these themes.

This analysis clarifies that the D1 axis transitions from a margin-centric to a strategic focus moving left to right, and the D2 axis evolves from a focus on risk to growth moving bottom to top.

Subsequently, we map the correlations between the financial metrics of the companies and their D1 and D2 coordinates (in Exhibit 2.4.B) to visually explore the linkage between the semantic space and financial performance. This visualization aims to reveal the connection between the strategic intentions and mindsets expressed by companies and their financial outcomes. For instance, this visual analysis underscores that discussions around investment (denoted by the blue investment arrow) are positively linked with actual investments, as evidenced by the red arrows pointing towards R&D and SG&A expenses, indicating a concrete alignment between investment discourse and action. Finally, we identify a robust correlation between the vectors representing strategic mindsets and Stock Returns, aligning with the theoretical framework's hypothesis that displaying a strategic mindset through multi-process excellence has a positive impact on shareholder value.

An intriguing observation from Exhibit 2.4.B reveals a strong correlation between discussions on margins and the financial metric of Revenue CAGR. This suggests that companies within the Nifty 50, which display a financial orientation, may achieve significant growth without a corresponding emphasis on investments. This phenomenon could stem from the scaling opportunities inherent in growth markets.

The Difference in MINDSETS between Dow 30 and Nifty 50 Companies

After identifying correlations between topics and financial performance within the semantic dimensions of D1 and D2, we proceeded to analyze the spatial distribution of companies within this framework to uncover any notable disparities between the Nifty 50 and Dow 30 firms. To achieve this, we calculated the D1 and D2 values for all sentences in analyst and management reports by quarter, averaging them to determine each company's coordinates in this semantic space. These coordinates were then graphically represented, as shown in Exhibit 2.4.C. A pronounced distinction is evident in the clustering patterns of Dow 30 and Nifty 50 companies, with those from Dow 30 tending towards the positive side of the D1 axis. This suggests that, on average, discussions concerning Dow 30 companies tend to emphasize strategic topics more than financial ones. Meanwhile, no significant differences were observed along the D2 axis. Further analysis was conducted to assess the statistical significance of the mean differences between the Dow 30 and Nifty 50 groups, as detailed in Exhibit 2.4.D. The results indicate that the disparity along the D1 axis is statistically significant, whereas the differences along the D2 axis are not.

Comparison, assessing overall mindsets among Nifty 50 and Dow 30 companies:

- There's a stark contrast between the two, with **Dow 30 companies exhibiting much higher Strategic Mindset (D1) values than Nifty 50 companies**, indicating a stronger emphasis on strategic planning in Developed Markets.
- **No significant difference is detected in Growth/Performance Mindset (D2)** between the two indices, suggesting a **comparable level of growth-oriented discussions** in both Developed and Emerging Markets.

Comparison, assessing mindsets among Analysts vs. Management:

- **Management discussions** from Call Transcripts are characterized by a **more pronounced Strategic Mindset (D1) compared to Analyst Reports**, in both the markets.
- **Analyst Reports, on the other hand, tend to focus more on the financial Performance and Growth Mindset (D2)**, pointing to a greater interest in short-term financial outcomes, in both the markets.

Exhibit 2.4.C. Company Clusters: MINDSETS of Dow 30 and Nifty 50 Companies

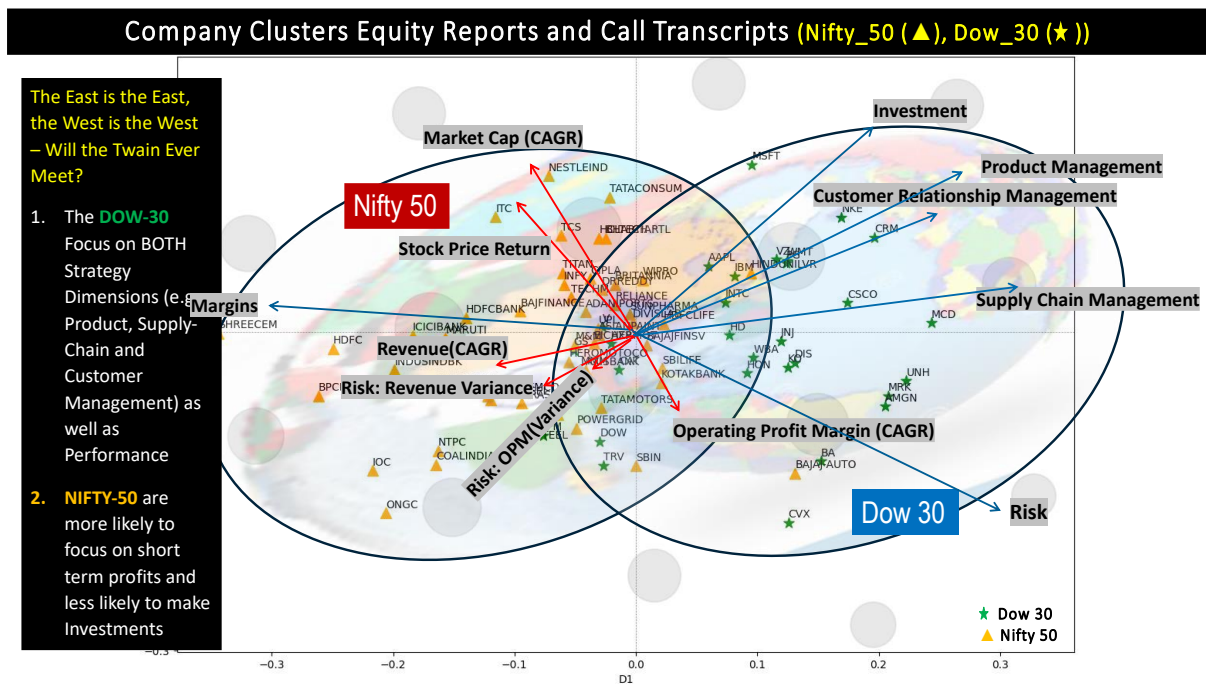
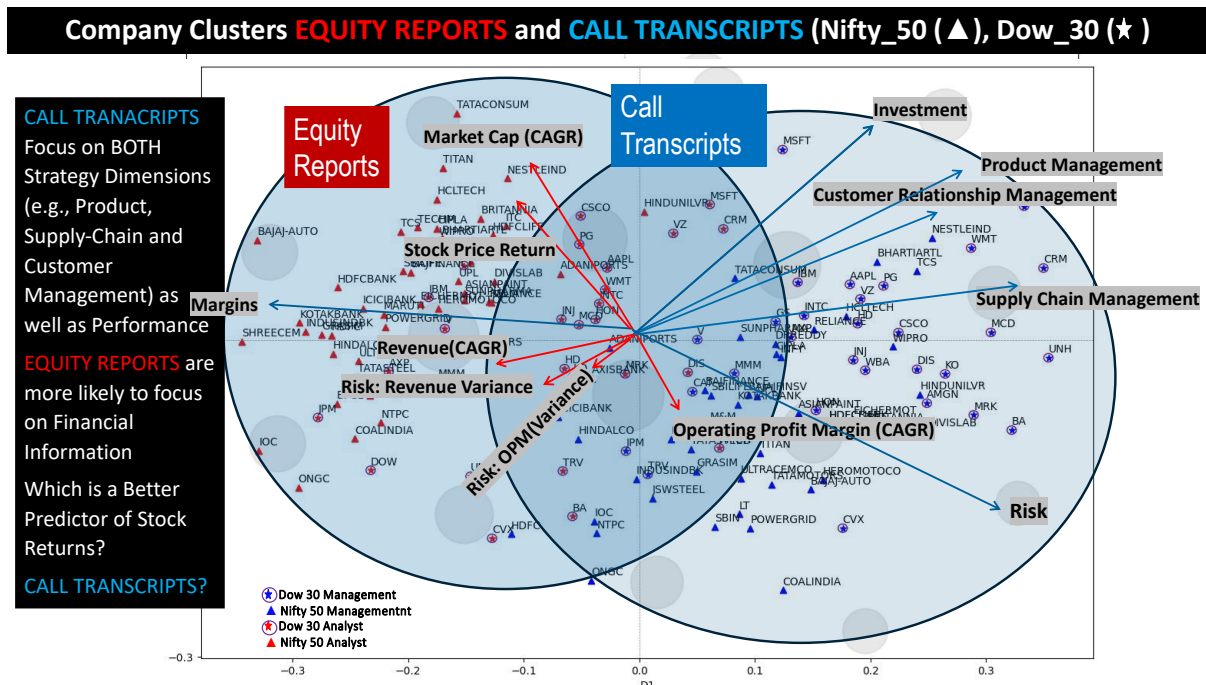


Exhibit 2.4.E. Company Clusters: MINDSETS of Management vs. Analysts



Statistical Validation of Visual Observations

Exhibit 2.4.D. Two-sample independent t-Test results for difference (Dow – Nifty)

Metric	Mean (Dow_30)	Mean (Nifty_50)	T-Statistic	P-Value	Inference
D1	0.02	-0.04	17.17	0	- Highly significant difference; Dow_30 companies have significantly higher D1 values. - Given that D1 is highly correlated with a strategic mindset, the significantly higher D1 values among Dow_30 companies suggest that strategic discussions are more prominent Dow 30 companies when compared to Nifty_50 companies.
D2	-0.00	-0.01	1.16	0.25	- For D2, the p-value is greater than 0.05, indicating no statistically significant difference in the means of D2 between the two indices. - Given that D2 is associated with a financial mindset and stock returns, lack of significant difference here implies that both Dow_30 and Nifty_50 companies exhibit a similar level of discussions regarding growth and performance orientation.

Exhibit 2.4.D. Two-sample paired t-Test results for difference in Mean (Mgmt. – Analyst)

Dow 30					
Variable	Mean (Mgmt.)	Mean (Analyst)	T-statistic	P-value	Interpretation
D1	0.10	-0.00	16.32	< 0.001	- Highly significant difference; and the <u>Call Transcripts have significantly higher D1 values when compared to Analyst Reports.</u> - This implies that <u>Management discussions exhibit a relatively higher Strategic Mindset</u> when compared to Analyst discussions.
D2	-0.04	0.00	-7.30	< 0.001	- Highly significant difference; and the <u>Call Transcripts have significantly lower D2 values when compared to Analyst Reports.</u> - This implies that <u>Analyst discussions exhibit a relatively higher Financial Mindset</u> when compared to Management discussions..

Nifty 50					
Variable	Mean (Mgmt.)	Mean (Analyst)	T-statistic	P-value	Interpretation
D1	0.04	-0.03	12.82	< 0.001	- Highly significant difference; and the <u>Call Transcripts have significantly higher D1 values</u> when compared to Analyst Reports. - This implies that <u>Management discussions exhibit a relatively higher Strategic Mindset</u> when compared to Analyst discussions.
D2	-0.09	0.03	-32.65	< 0.001	- Highly significant difference; and the <u>Call Transcripts have significantly lower D2 values</u> when compared to Analyst Reports. - This implies that <u>Analyst discussions exhibit a relatively higher Financial Mindset</u> when compared to Management discussions..

MINDSET Dimensions vs. Stock Returns

Having confirmed the difference in means, the next level of validation would come if the visually evident correlation between financial and strategic mindsets and the Stock Returns can be verified statistically. Given the visual explorations, we should expect, if there is statistical significance in the association between D1, D2 and stock returns then the explanatory power of management mindset should be higher than that of analyst mindsets. Also, the strategic mindsets of Dow 30 companies should have greater significance than management perspectives in Nifty. strategic mindset of company management should be higher than the

After the visual examination we can further breakdown the Hypothesis $H_{1.3}$ into more precise sub hypotheses as follows.

$H_{1.3}$ Mindsets that are extracted from the four distinct categories—namely, Management and Analysts within both Developed and Emerging Markets—exert a considerable impact on, or serve as predictors of, the Stock Returns of the associated companies.

$H_{1.3.A}$: There is a statistically significant association between the D1 and D2 dimensions and Stock Returns. This implies that the semantic dimensions related to management and analyst mindsets have predictive power over stock performance.

$H_{1.3.B}$: The perspectives of management, encompassing both strategic and financial topics (as captured by dimensions D1 and D2), offer a more comprehensive prediction of Stock Returns compared to analyst mindsets. This suggests that the broader-based insights from management's communications, covering a wider spectrum of topics, are more significantly linked to stock performance than the focused analyses provided by analysts.

$H_{1.3.C}$: The strategic mindsets (as measured by dimension D1) of Dow 30 companies have a more significant impact on Stock Returns than the management perspectives of Nifty 50 companies. This posits that strategic narratives within Dow 30 companies are more influential in determining stock performance compared to the equivalent narratives within Nifty 50 companies.

Statistical Validation of Mindsets vs Stock Returns

MINDSETS evident from the t-tests are also **SIGNIFICANT** in explaining **Stock Returns** among both Dow 30 and Nifty 50 companies.

Markets Perspectives	Dow 30		Nifty 50	
	D1 (Strategic)	D2 (Financial)	D1 (Strategic)	D2 (Financial)
Management (Call Transcripts)	Adj. R-Sq.: 6.2%		Adj. R-Sq.: 14.2%	
	Coeff.: 0.02 p-value: 0.02	Coeff.: 0.03 p-value: 0.10	Coeff.: 0.04 p-value: 0.10	Coeff.: 0.03 p-value: 0.02
Analysts (Equity Analyst Report)	Adj. R-Sq.: 5.0%		Adj. R-Sq.: 13.5%	
	Coeff.: -0.01 p-value: 0.34	Coeff.: 0.03 p-value: 0.02	Coeff.: 0.01 p-value: 0.49	Coeff.: 0.09 p-value: 0.00

Detailed Regressions are presented in the Appendix.

Strategic MINDSET:

- of Management is most SIGNIFICANT among Dow 30 companies
- of Management is MODERATELY SIGNIFICANT among Nifty 50 companies, lesser compared to Dow 30 companies while more significant than Analysts.
- of Analysts is NOT SIGNIFICANT among both Dow 30 and Nifty 50 companies

Financial MINDSET:

- of Analysts is SIGNIFICANT among both Dow 30 and Nifty 50 companies
- of Management is MODERATELY SIGNIFICANT among Dow 30 companies
- of Management is SIGNIFICANT among Nifty 50 companies

Explanatory Power:

- The Adj. R-Sq is higher for Management Mindsets in both Dow 30 and Nifty 50 companies confirming their higher explanatory power when compared to Analyst Mindsets.
- The higher R-Sq. in Nifty 50 companies may be attributable to greater information asymmetry in Emerging Markets, when compared to Developed Markets

Observations to Conclude the MINDSET Exploration

Analyses of Sentiments from Call Transcripts and Equity Reports Yield Stable JOINT SEMANTIC SPACE.

The TWO Dimensions of Semantic Space Can be Interpreted as:

- Linked to Multi-Process Capabilities Across Product, Supply-Chain and Customer Management
- Linked to Positive Growth and Investment Sentiments and Intents

Alignment of Sentiment Dimensions with Market Performance Metrics Suggest:

- Stock Returns and Growth in Market Capitalization are POSITIVELY Related to Increases in Investments, R&D and SG&A
- SG&A the New Investment (e.g., in SaaS Markets for Customer Acquisition and Retention)?
- Focus on Operating Margins is Linked NEGATIVELY to Stock Returns, increase in Market Cap as well as Growth in Investments

The East is the East, the West is the West – Will the Twain Ever Meet?

- DOW-30 Companies Focus on BOTH Strategy Dimensions (e.g., Product, Supply-Chain and Customer Management) as well as Performance, AND Invest for Growth and Differentiation
- NIFTY-50 are more likely to focus on short term profits and less likely to make Investments.

Are Call Transcripts or Equity Reports Better Predictors of Stock Returns?

- CALL TRANSCRIPTS Focus on BOTH Strategy Dimensions (e.g., Product, Supply-Chain and Customer Management) as well as Performance.
- EQUITY REPORTS are more likely to focus on Financial Information only.
- Since Management articulations appear more balanced, the MINDSET measures of Management are likely to have higher predictive ability than that of Analysts.

The ramifications of these results, along with the potential for further research to broaden and enrich this investigation, are discussed in the Epilogue Chapter.

3. Informational Value of Management and Analyst Sentiments on Stock returns in Developed and Emerging Markets

3.1. Introduction

The main objective of investor communications from management and reports from equity analysts is to improve market efficiency through the provision of essential information. Experts in finance and accounting are particularly interested in exploring the contribution of both management and analysts to market efficiency, with the goal of identifying their value and uncovering any biases. These efforts help investors gain a clearer insight into the advantages and drawbacks of these informational sources, leading to better-informed investment decisions.

Through investor communications, company management aims to share insights about the company's strategy, execution, and performance to secure an accurate valuation of their shares in the stock market. While the information provided by management is crucial for investors, it may be biased due to information asymmetry and other opportunistic motives. Equity analysts serve to interpret management's information critically, enriching it with additional information not apparent in management's disclosures, thus evaluating whether stocks are under-priced, fairly-priced, or overpriced. They offer stock price forecasts and investment recommendations. However, equity analysts' motivations might skew their analyses, leading to possible inaccuracies due to conflicts of interest or lack of expertise. Despite the inherent uncertainties in the reliability of content from both management and analyst perspectives, the information provided by these two sources remains crucial for investors to make informed decisions.

Communication by management and analysts is influenced by various factors like style, intent, and tone. Traditionally, studies analyzing unstructured data have predominantly utilized lexical approaches, focusing on word occurrences to grasp the subtleties of these communications. However, recent advancements in large language models and neural network technologies offer researchers powerful tools to delve deeper into the intricacies of textual data.

These advancements hold the promise of enhancing our understanding, potentially contributing to market efficiency. Thus, we have undertaken a comprehensive exploration across four distinct population groups—management and analysts in both developed and emerging markets—to investigate the informational value that can be uncovered through semantic text analysis facilitated by advancements in artificial neural networks.

A significant development stemming from large language models, such as sentence transformers, which paved the way for contemporary applications like generative text AI, is the remarkable accuracy achieved in sentiment classification. Previous approaches, whether lexical or semantic, faced limitations due to the challenges of gathering extensive data and training models for sentiment classification. An exemplar of such progress is the pre-trained sentiment classification model known as FinBERT. Leveraging the foundation of the BERT language model fine-tuned for finance and accounting domains, FinBERT has demonstrated an impressive classification accuracy of 86% and an F-1 Score of 84%, notwithstanding the diverse nature of textual data.

Furthermore, FinBERT has exhibited even more remarkable performance, achieving an accuracy of 97% and an F-1 Score of 95% in datasets where full agreement was attained among all annotators. Leveraging this cutting-edge model, we conduct sentiment classification on the sentences within our data corpus, aiming to extract valuable insights.

Our primary objective is to explore the value of the sentiments and mindsets of management and analysts, particularly their impact across developed and emerging markets. Given the sparse literature in this area, our study relies on logical reasoning for its propositions. We also aim to validate existing theories and frameworks by applying our innovative methodology, thereby seeking to substantiate the validity of our approach.

Our study is set within a comprehensive framework involving four distinct groups, with one axis highlighting the contrast between emerging and developed markets, and the other focusing on the unique contributions of management and analysts within the informational ecosystem. We have formulated logical propositions to guide our examination of the informational value present in these dynamics.

Our analysis across developed and emerging markets suggests that sentiments from analysts and management are likely to have a stronger explanatory power in emerging markets due to the prevalent higher levels of information asymmetry. Furthermore, we anticipate that the sentiments expressed by equity analysts will offer more significant insights than those from management in enhancing the informational value of communications, applicable across both market types.

The data collection period coincided with the COVID-19 pandemic, presenting a unique opportunity to study the effects of increased external uncertainty. This context allowed for an in-depth examination of how such uncertainty influences the impact of sentiments from management and analysts on stock price movements.

The Price-to-Book (P/B) ratios, reflecting company growth expectations based on prospects, allowed us to investigate their moderating effect on the informational value of sentiments. This analysis could reveal whether analysts are adept at assessing companies whose valuations are more heavily predicated on future performance.

Finally, there is also an important aspect of information asymmetry to see if analysts added value among companies who are likely to have higher information asymmetry as implied in related party transactions. All these dimensions were examined and most of the results were consistent with logical propositions or propositions from existing literature.

Our research indicates a significant relationship between sentiments and their informational value, paving the way for a thorough exploration of how mindsets and sentiments interact within the informational value chain. This could potentially enhance our understanding of its effectiveness or identify areas where it falls short.

Our study aims to integrate its findings with the broader body of existing research, which typically focuses on either management communication or analysts' information enhancement, but seldom both. By analyzing the sentiments and themes within management's quarterly call transcripts and analysts' reports, this research strives to distinguish the unique informational contributions of management and analysts, enriching our understanding of their respective roles in the information dissemination process.

3.2. Related Literature

The literature review reveals a notable scarcity of studies that compare Management and Analyst perspectives, especially in analyzing sentiments and topics within their discussions and comparing developed and emerging markets. Given the exploratory nature of this research, our propositions chiefly derive from logical foundations. Yet, occasionally, our analysis also extends to empirically examining established frameworks and phenomena recognized within Marketing and Finance literature. This approach not only anchors our investigation in established theories when relevant but also opens avenues for new insights.

Nonetheless, it is useful to highlight significant insights from related research that inform or influence various dimensions of this study.

A Pioneering Study

In the literature review of my dissertation, the foundational work of Professor Paul Tetlock on analyzing the impact of news sentiments on stock market movements is duly recognized. His notable study, "Giving Content to Investor Sentiment: The Role of Media in the Stock Market^{xv}" (2007), provides essential insights into the dynamics between media sentiment and financial markets. Tetlock's meticulous examination of news story sentiments from The Wall Street Journal, and their demonstrated influence on stock prices, offers a compelling empirical basis that enriches the field of sentiment analysis within financial research.

This body of work by Tetlock is particularly pertinent to my dissertation's endeavour to employ new large language models for sentiment classification. While the methodologies and technologies have evolved, the premise that media sentiment can significantly impact stock market behaviours remains a critical point of convergence between Tetlock's research and my own. His findings lend credibility to the broader field of sentiment analysis, reinforcing the relevance of exploring how sentiment, as captured through advanced computational techniques, can influence financial markets.

Integrating Tetlock's insights into my literature review situates my research within an established area of academic inquiry, acknowledging the role of his work in highlighting the potential of sentiment analysis in finance. It provides a measured acknowledgment of how previous research has laid the groundwork for ongoing investigations into the relationship between news sentiment and stock market performance, including those leveraging the latest advancements in AI and machine learning. Tetlock's contributions are thus recognized not only for their direct implications on understanding market sentiments but also for their role in informing and subtly guiding contemporary research directions in the field, including the exploration of new large language models for sentiment analysis.

Related Literature on Analyst Perspectives:

This section delves into the contributions of analysts, aligning with the research's goals. Previous studies have consistently indicated that analysts' insights contribute to market efficiency by aiding investors in the accurate valuation of companies. The focal point of relevant literature is to outline how analysts add value and identify the conditions under which their contributions to market efficiency are most pronounced.

Analysts are noted for their role in enhancing market efficiency through the creation or revision of forecasts, leveraging their skills in interpreting existing information, uncovering new data, or a blend of both. The significance of analysts' interpretative abilities, especially in making sense of unstructured

or non-financial disclosures, is highly valued by investors over their capacity for discovering information.^{xvi}

The examination of contexts affecting analysts' value addition reveals variability in the impact. A tendency among analysts to favour "glamour" stocks, despite the potential high costs to investors following such recommendations uncritically, has been observed. Moreover, the consensus in analysts' recommendations tends to increase returns for stocks with solid fundamentals but shows a negative association with returns on stocks with poor fundamentals, highlighting biases in analyst recommendations.^{xvii}

Regulatory bodies have shown interest in analyst recommendations to protect less sophisticated investors from potentially misleading advice. Studies suggest that smaller and less experienced investors are more likely to be swayed by analyst recommendations than their more sophisticated counterparts.^{xviii}

Differences in the effectiveness of analysts across various markets have been noted, with analysts in the U.S. being particularly adept at identifying mispriced stocks compared to their G7 counterparts.^{xix}

Related Literature on Management Perspectives:

Management communicates with the investment community through various channels, including investor conferences, quarterly earnings calls, and ad-hoc press releases. Studies within finance and accounting have investigated aspects of these communications, such as linguistic complexity, managerial obfuscation, and the market's reaction to significant informational events.

Investor conferences have been linked to managerial opportunism, such as hyping stock prices to sell shares at elevated values.^{xx}

Research has shown that managerial linguistic complexity can signal the manager's private information through their engagement with analyst questions and that complexity related to informative technical disclosures positively correlates with future earnings growth, whereas obfuscatory complexity suggests lower future earnings.^{xxi}

Changes in the language and structure of financial reports have been found to significantly impact firms' future returns and operations.^{xxii}

3.3. Hypothesis

Uncovering the informational value within financial markets is a multifaceted endeavour. Our study is scoped around specific hypotheses grounded in logic and established theories. These hypotheses are

structured to shed light on various aspects of information dissemination and its impact, guiding our inquiry into the nuanced interplay between market dynamics, sentiment analysis, and the roles of key market participants. Through this focused approach, we aim to unravel insights that can significantly contribute to our understanding of the informational value chain.

H_(2.1) There is an association between the individual sentiments of Analysts and Management and the Stock Returns of their companies.

We propose that the sentiments expressed by Analysts and Management may have a discernible impact on Stock Returns. This hypothesis stems from the belief that sentiments reflect underlying confidence or concerns regarding a company's future, influencing investor perceptions and market behaviour.

H_(2.2) The explanatory power of Analysts' sentiments is greater than that of Management's sentiments in explaining Stock Returns.

The above hypothesis explores the possibility that Analysts' sentiments have a stronger impact on Stock Returns than Management's sentiments. Given analysts' external perspective and potential market influence, their sentiments might offer unique insights that sway investor decisions more significantly.

H_(2.3) The statistical significance of Management's sentiments is maintained when combined with Analysts' sentiments, suggesting that Analysts' sentiments do not fully encapsulate the impact of Management's sentiments on Stock Returns.

In H_(2.3) we consider whether Management's sentiments retain their significance in the presence of Analysts' sentiments. This hypothesis tests the additive or overlapping value of sentiments from both sources, questioning if Management's views provide additional insights or are overshadowed by Analysts' analyses.

H_(2.4) The difference between Analysts' and Management's (Divergence) sentiments relates to the Stock Returns of their companies.

The above hypothesis investigates the relationship between the sentiment divergence of Analysts and Management and Stock Returns. This examines if differing views between these two groups signal market-moving insights or uncertainties that affect stock performance.

H_(2.5) The alignment of optimism between Analysts and Management (Convergence), as expressed through their sentiments, correlates with Stock Returns of their companies.

H_(2.5) posits that a convergence of optimistic sentiments between Analysts and Management correlates with positive Stock Returns. This alignment might be perceived as a strong indicator of company health and growth prospects, attracting investor interest.

H_(2.6) The level of uncertainty in the external environment affects the relationship between the sentiments of Management or Analysts and the Stock Returns of their companies.

The above hypothesis suggests that external uncertainties, such as market volatility or economic downturns, might alter how sentiments from Management or Analysts impact Stock Returns, indicating that the context of sentiment expression matters.

H_(2.7) Company growth expectations, reflected in Price-to-Book ratios, influence how Management or Analysts' sentiments relate to Stock Returns.

Through H_(2.7) we aim to understand if and how company growth expectations (as implied by P/B ratios) mediate the relationship between sentiments and Stock Returns, suggesting that future outlooks might amplify or mute the impact of sentiments.

H_(2.8) Information asymmetry, as indicated by the percentage of revenue from related parties (RPT Revenue), affects the relationship between the sentiments of Management or Analysts and the Stock Returns of their companies.

H_(2.8) examines whether information asymmetry, indicated by revenues from related parties, influences the sentiment-Stock Returns relationship. This could highlight how insider transactions and perceived transparency affect market reactions to sentiments expressed by Analysts and Management.

3.4. Results and Discussion

We explore the hypothesis by using sentiment analysis as the predictor for Stock Returns, focusing initially on determining the value of sentiment data in explaining variations in stock prices. This initial analysis aims to validate the predictive power of sentiment measures on stock market performance.

Exhibit 3.5.A.: Summary of Regressions related to Hypothesis $H_{(2.1)}$, $H_{(2.2)}$, $H_{(2.3)}$

(Detailed regressions are included in the appendices.)

Markets Perspectives	Dow 30	Nifty 50
Management (Call Transcripts)	Adj. R-Sq. 12.1%	Adj. R-Sq. 20.1%
	Coeff: 0.06; p-value: 0.00	Coeff: 0.13; p-value: 0.00
Equity Analysts (Analyst Report)	Adj. R-Sq. 14.8%	Adj. R-Sq. 25.2%
	Coeff: 0.07; p-value: 0.00	Coeff: 0.18; p-value: 0.00
Management + Analysts	Adj. R-Sq. 17.7%	Adj. R-Sq. 28%
	Mgmt.: Coeff: 0.03; p-value: 0.01 Analyst: Coeff: 0.06; p-value: 0.00	Mgmt.: Coeff: 0.06; p-value: 0.00 Analyst: Coeff: 0.16; p-value: 0.00

The analysis reveals that sentiments expressed in Management Call Transcripts have a measurable impact on Stock Returns, with the effect being more pronounced in the Nifty 50 market (Adj. R-Sq. 20.1%, Coeff: 0.13, p-value: 0.00) compared to the Dow 30 (Adj. R-Sq. 12.1%, Coeff: 0.06, p-value: 0.00). This suggests that investors in emerging markets like those represented by the Nifty 50 may place greater emphasis on management sentiments, possibly due to a higher reliance on such communications in environments where information asymmetry is more significant. This underscores the importance of management's narrative and its potential influence on investor behaviour and market performance.

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Investors should pay closer attention to management and analyst sentiments, especially in emerging markets where these factors have a stronger correlation with stock returns. Management could focus on clearer communication of strategic insights and positive outlooks to influence market perceptions positively. Analysts might refine their analysis to incorporate management sentiments more effectively, recognizing their impact on stock performance. Additionally, all parties could benefit from a deeper understanding of the nuances in different markets, tailoring their strategies to leverage the varying degrees of sensitivity to management's narrative.

The second regression results show that equity analysts' sentiments have a stronger predictive power on Stock Returns in the Nifty 50 (Adj. R-Sq. 25.2%, Coeff: 0.18, p-value: 0.00) compared to the Dow 30 (Adj. R-Sq. 14.8%, Coeff: 0.07, p-value: 0.00). This indicates that in emerging markets, analyst sentiments significantly influence stock prices, potentially due to greater market sensitivities or lesser information availability. Investors should closely monitor analyst reports, particularly in emerging markets. Analysts could play a pivotal role in market movements, emphasizing the need for accurate and thorough analysis. Management teams in both markets should consider the impact of analysts' sentiments, actively engaging and communicating to influence perceptions positively.

When combining the sentiments of Management and Analysts for both the Dow 30 and Nifty 50 markets, the results show a nuanced influence on Stock Returns. For the Dow, Management's influence is more modest (Coeff: 0.03, p-value: 0.01) compared to Analysts (Coeff: 0.06, p-value: 0.00). In contrast, the Nifty 50 shows a stronger effect from both, with Management's influence doubling (Coeff: 0.06, p-value: 0.00) and Analysts' impact being even more pronounced (Coeff: 0.16, p-value: 0.00). This suggests a synergistic effect, where combining insights from both Management and Analysts provides a fuller picture of a company's potential, especially in emerging markets where this combined perspective significantly impacts stock returns.

Given the results, investors might benefit from paying close attention to both management and analyst sentiments, especially in emerging markets like the Nifty 50, where their combined impact is more pronounced. Management should strive for clear and positive communication, understanding its significant influence on stock prices. Analysts, aware of their substantial impact, should provide accurate and insightful analyses. This integrated approach to interpreting sentiments could guide investment strategies, corporate communication policies, and analytical methodologies, optimizing stakeholder engagement and investment decision-making in varying market conditions.

Management and Analyst Sentiments: Key Drivers of Stock Returns Across Both Developed and Emerging Markets, with Heightened Impact in Emerging Markets.

Significant Sentiments: The p-values indicate that the sentiments from both management and analysts are significant predictors of stock returns. The consistency of these results across markets emphasizes the robustness of sentiments as informative variables.

Management vs. Analyst Influence: Analyst sentiment appears to have a stronger influence on stock returns compared to management sentiment in both markets, as indicated by higher coefficients and higher adjusted R-squared values in the individual models, implying that analysts add value by interpreting information from management communication. 🔄

Combined Influence: 🔄 The persistence of management sentiments' significance in the combined regression implies indicates that analyst sentiments do not completely encompass the informational value of management sentiments.

Market Maturity and Informational Value: The Nifty 50, representing an emerging market, shows a higher sensitivity to both management and analyst sentiments than the Dow 30, as reflected by the larger coefficients and higher adjusted R-squared values. This may be due to the greater information asymmetry in emerging markets, making the insights from these sentiments more valuable to investors.

Exhibit 3.5.B.: Summary of Regressions related to Hypothesis H_(2.4)

(Detailed regressions are included in the appendices.)

Markets Predictors	Dow 30	Nifty 50
Sentiment Divergence	Adj. R-Sq. 7.5%	Adj. R-Sq. 15.1%
	Coeff: 0.04; p-value: 0.00	Coeff: 0.09; p-value: 0.00

The regression results show that the difference in sentiment between analysts (er_positive_polarity) and management (ct_positive_polarity) significantly impacts Stock Returns in both the Dow 30 and Nifty 50 markets, with a p-value of 0.00 indicating strong statistical significance in both cases.

For the Dow 30, a unit increase in the difference where analysts' sentiment is more positive than management's is associated with an increase of 0.04 units in Stock Returns. This suggests that investors might interpret a larger positive sentiment from analysts compared to management as a sign of undervalued stock potential, prompting positive movements in Stock Returns.

In the Nifty 50, the impact is more pronounced, with a unit increase in sentiment difference corresponding to an increase of 0.09 units in Stock Returns. The higher coefficient in the Nifty 50 suggests that this market may be more sensitive to analyst sentiment, perhaps due to a higher reliance on analyst reports when making investment decisions, or it could be indicative of a market that is more responsive to new information. This may also indicate the value added by analysts owing to information discovery and information interpretations as they might have access to a wider range of information and data points than what management communicates, allowing them to form a more positive outlook that, when recognized by the market, leads to increased Stock Returns.

Exhibit 3.5.C.: Summary of Regressions related to Hypothesis H_(2.5)

(Detailed regressions are included in the appendices.)

Markets Predictors	Dow 30	Nifty 50
Convergent Optimism	Adj. R-Sq. 18.6%	Adj. R-Sq. 29.9%
	ct_positive_polarity Coeff: 0.12; p-value: 0.01 er_positive_polarity Coeff: 0.25; p-value: 0.01 Interaction: ct-X-er Coeff: -0.23; p-value: 0.03	ct_positive_polarity Coeff: 0.03; p-value: 0.66 er_positive_polarity Coeff: 0.11; p-value: 0.15 Interaction: ct-X-er Coeff: 0.08; p-value: 0.51

The regression analysis for the Dow 30 indicates that both management and analyst sentiments individually have a significant positive impact on Stock Returns. Specifically, a one-unit increase in management sentiment is associated with a 12% increase in Stock Returns, while a one-unit increase in analyst sentiment corresponds to a 25% increase. However, when examining the interaction of these sentiments, the model reveals that their convergence—convergent optimism—has a significant negative effect, with a one-unit increase in the interaction term leading to a 23% decrease in Stock Returns. This suggests that while positive sentiment from either party alone is beneficial to Stock Returns, the market might perceive simultaneous high optimism from both parties as overconfidence, potentially leading to a negative adjustment in stock prices.

In the Nifty 50 market, the individual sentiments of management and analysts do not show a significant impact on Stock Returns, as indicated by the non-significant coefficients and high p-values. Furthermore, their interaction also lacks statistical significance, suggesting that the combined sentiment does not influence Stock Returns in this market. This could mean that other factors, perhaps beyond sentiment, play a more substantial role in driving stock prices in the Nifty 50 market.

Informational value OF sentiments in the context of external uncertainty

Exhibit 3.5.D.: Summary of Regressions related to Hypothesis H_(2.6)

(Detailed regressions are included in the appendices.)

Markets Predictors	Dow 30	Nifty 50
Management Sentiment & Uncertainty	Adj. R-Sq. 23.5%	Adj. R-Sq. 26.3%
	ct_positive_polarity Coeff: -0.01; p-value: 0.56 uncertainty_index Coeff: -0.28; p-value: 0.00 Intr.: ct-X-uncertainty Coeff: 0.20; p-value: 0.00	ct_positive_polarity Coeff: 0.14; p-value: 0.00 uncertainty_index Coeff: -0.04; p-value: 0.60 Intr.: ct-X-uncertainty Coeff: -0.08; p-value: 0.33
Analyst Sentiment & Uncertainty	Adj. R-Sq. 25.6%	Adj. R-Sq. 30.2%
	er_positive_polarity Coeff: -0.03; p-value: 0.12 uncertainty_index Coeff: -0.14; p-value: 0.04 Intr.: er-X-uncertainty Coeff: 0.07; p-value: 0.28	er_positive_polarity Coeff: 0.28; p-value: 0.00 uncertainty_index Coeff: 0.11; p-value: 0.15 Intr.: er-X-uncertainty Coeff: -0.21; p-value: 0.01

For the Dow 30, the adjusted R-squared values suggest that models including management sentiment and uncertainty, and analyst sentiment and uncertainty, can explain 23.5% and 25.6% of the variance in the dependent variable, respectively. Management sentiment on its own does not have a statistically significant relationship with the outcome variable, as indicated by the negative coefficient and a p-value of 0.56. However, the uncertainty index has a significant negative impact, with a coefficient of -0.28, suggesting that increased uncertainty is associated with lower values of the dependent variable. Interestingly, the interaction term between management sentiment and uncertainty shows a positive significant relationship, implying that the negative effects of uncertainty on the outcome variable are mitigated when combined with positive management sentiment.

The interaction term between analyst sentiment and uncertainty in the Dow 30 is not statistically significant, which suggests that the combined effect of analyst sentiment and external uncertainty does not have a discernible impact on the dependent variable.

Turning to the Nifty 50, the models for management sentiment and uncertainty, and analyst sentiment and uncertainty explain a slightly larger portion of the variance in the dependent variable, with adjusted R-squared values at 26.3% and 30.2%, respectively. Here, management sentiment has a positive significant relationship with the dependent variable, as reflected by a coefficient of 0.14 and a p-value of 0.00. This indicates that positive management sentiment is associated with an increase in the dependent variable's value. However, the interaction term between management sentiment and uncertainty is not significant, suggesting that in the Nifty 50 market, the mitigating effect of management sentiment on the negative impact of uncertainty is not evident.

Analyst sentiment in the Nifty 50 shows a significant positive coefficient, meaning it has a strong and positive association with the dependent variable. However, the uncertainty index on its own is not significantly related to the outcome. In contrast to the Dow 30, the interaction term between analyst sentiment and uncertainty is significant with a negative coefficient, indicating that in the presence of uncertainty, the positive impact of analyst sentiment on the dependent variable is diminished.

Overall Influence of Uncertainty:

Dow 30 Management Sentiments: In developed markets, characterized by relatively lesser information symmetry, management's positive sentiments have significant informational value during times of external uncertainty.

Nifty 50 Management Sentiments: In emerging markets, where information asymmetry is more pronounced, management's optimism consistently influences stock returns, indicating a steady reliance on internal cues from company leadership for investment decision-making.

Nifty 50 Analyst Sentiments: Significantly influences share prices, indicating high trust in analyst evaluations. Yet, a negative interaction with uncertainty highlights a reduced impact during uncertain times, suggesting increased investor caution.

Dow 30 Analyst Sentiments: Shows a moderate effect on share prices, lessened further during uncertain times, possibly because investors in developed markets access a wider array of information, thus diluting the impact of analysts' opinions.

The primacy of Management Sentiments across both markets highlights the premium placed on direct insights from company leadership, particularly in navigating uncertainty. This doesn't diminish the value of analyst insights but suggests that their impact may be more subject to the prevailing conditions of external uncertainty.

Informational value in the context of growth expectations implicit in P/B ratios

Exhibit 3.5.E.: Summary of Regressions related to Hypothesis H (2.7)

(Detailed regressions are included in the appendices.)

Markets Predictors	Dow 30	Nifty 50
	Adj. R-Sq. 23.5%	Adj. R-Sq. 26.3%
Management Sentiment & PBV	ct_positive_polarity Coeff: 0.06; p-value: 0.00 PBV Coeff: 0.00; p-value: 0.93 Interaction: ct-X-PBV Coeff: -0.00; p-value: 0.95	ct_positive_polarity Coeff: 0.17; p-value: 0.00 PBV Coeff: 0.21; p-value: 0.01 Interaction: ct-X-PBV Coeff: -0.18; p-value: 0.01
	Adj. R-Sq. 25.6%	Adj. R-Sq. 30.2%
Analyst Sentiment & PBV	er_positive_polarity Coeff: 0.07; p-value: 0.00 PBV Coeff: -0.06; p-value: 0.08 Interaction: er-X-PBV Coeff: 0.07; p-value: 0.05	er_positive_polarity Coeff: 0.19; p-value: 0.00 PBV Coeff: 0.11; p-value: 0.09 Interaction: er-X-PBV Coeff: -0.11; p-value: 0.10

Dow 30 Management Sentiment:

Management sentiment has a small but statistically significant positive effect on the dependent variable, with an increase in sentiment linked to a 0.06 unit increase in the outcome. The P/B ratio itself does not have a significant impact on the dependent variable, suggesting that the market may

not be using it as a reliable indicator for growth expectations in the valuation of companies. The interaction term between management sentiment and P/B ratio is not significant, indicating that the relationship between management sentiment and the dependent variable does not vary with changes in the P/B ratio.

Nifty 50 Management Sentiment:

Management sentiment has a more substantial positive effect with a coefficient of 0.17, indicating a stronger relationship with the dependent variable in this market. The P/B ratio is significant, suggesting that the market is considering it when setting growth expectations, with a coefficient of 0.21. The interaction term between management sentiment and P/B ratio is negative and significant, which could mean that higher management optimism has less of an impact on the dependent variable at higher P/B values or that when growth expectations are high (as indicated by a high P/B ratio), the additional positive sentiment provided by management does not further enhance the dependent variable.

Dow 30 Analyst Sentiment:

Analyst sentiment has a statistically significant positive effect on the dependent variable, like management sentiment. The P/B ratio has a negative coefficient, although not statistically significant, hinting at a possible inverse relationship with the dependent variable, where higher growth expectations might be associated with lower outcomes, due to overvaluation concerns. The interaction term is positive and significant, suggesting that when analyst sentiment is combined with the P/B ratio, it positively influences the dependent variable. This could imply that positive analyst sentiment may amplify the positive effects of growth expectations on the dependent variable.

Contrasting Dynamics: PBV's Role in Amplifying vs. Diluting Sentiment's Influence in Emerging and Mature Markets

Dow 30: Management Sentiment

Management sentiment significantly enhances Dow 30 share prices, with no PBV interaction effect, indicating its direct informational value. This suggests mature market investor's view management's positive outlook as a reliable performance predictor, due to lower information asymmetry in well-regulated environments.

Nifty 50: Management Sentiment

Positive management sentiment boosts Nifty 50 share prices less at higher PBV levels, showing valuation sensitivity. This might reflect emerging market investors' response to information asymmetry, where they are cautious of management optimism at high valuations, seeking clearer growth indicators.

Dow 30: Analyst Sentiment

Analyst sentiment positively correlates with higher share prices, especially at higher PBV, suggesting reinforced confidence in analyst evaluations at elevated valuations. This could indicate lower information asymmetry in the Dow 30, where investors might see analyst positivity as additional validation of a company's valuation.

Nifty 50: Analyst Sentiment

Positive analyst sentiment consistently impacts Nifty 50 share prices across PBV levels, showing its steady informational value. This stability may indicate a strategic reliance on external analyses to mitigate information asymmetry in emerging markets, guiding investment decisions across various valuation levels.

4. Chapter 4: Epilogue

4.1. Summary of Findings:

This dissertation delves into the informational value of management and analyst articulations in stock markets, distinguishing between developed and emerging markets through a nuanced exploration of strategic and financial mindsets, as well as the sentiments conveyed in corporate communications. The research employs advanced natural language processing techniques to analyze quarterly investor call transcripts and equity analyst reports, operationalizing mindset, and sentiment constructs to quantitatively assess their impact on stock returns.

A pivotal aspect of the study is the examination of the prevalence of strategic and financial mindsets within management and analyst communications. By classifying sentences into seven dimensions—encompassing long-term goals, innovation, market strategy, and financial outcomes—the research quantifies these orientations and their relationship to stock performance. Findings reveal that management articulations, with their blend of strategic and financial considerations, possess a higher explanatory power for stock returns than analysts' communications. This suggests that the strategic and financial mindsets, particularly those oriented towards investments in R&D and SG&A, are positively associated with stock returns and market capitalization growth. Notably, the research uncovers a divergence in mindset focus between developed and emerging markets, with the latter exhibiting a pronounced short-term profit orientation.

Building on the analysis of mindsets, the dissertation further explores the informational value of sentiments expressed by management and analysts. The study operationalizes sentiment through the positive polarity of sentences, revealing significant predictors of stock returns across both market contexts. Analyst sentiments emerge as having a stronger influence on stock returns, underscoring the value added by analysts in interpreting management communications. However, the persistent significance of management sentiments indicates that analyst sentiments do not fully capture the informational value inherent in management articulations.

The research also uncovers the nuanced roles of sentiment divergence and convergent optimism. In developed markets, such as the Dow 30, a significant negative impact of convergent optimism points to market skepticism towards unanimous positive sentiment, suggesting a sophisticated investor response to overly optimistic articulations. Conversely, in emerging markets like the Nifty 50, sentiment divergence highlights the market's attentiveness to differences in optimism levels between analysts and management.

Furthermore, the dissertation examines the influence of external uncertainty, revealing the primacy of management sentiment in conveying significant informational value, especially in times of heightened uncertainty. This effect is particularly pronounced in developed markets, emphasizing the reliance on direct insights from company leadership.

Lastly, the interplay between sentiments and the Price-to-Book (P/B) value ratio offers contrasting insights into how sentiment influences stock prices in relation to growth expectations. The findings suggest that in developed markets, management sentiment directly enhances share prices, while in emerging markets, the influence of positive management sentiment on share prices diminishes at higher P/B levels, indicating investor caution.

This dissertation contributes to the literature by providing empirical evidence on the differential impacts of management and analyst sentiments and mindsets on stock returns. It offers novel insights into the strategic and financial orientations communicated by firms and how these are valued differently by investors in developed versus emerging markets.

4.2. Discussion and Interpretation:

The findings of this dissertation provide a nuanced understanding of the informational value embedded in management and analyst articulations within stock markets, highlighting the differential impacts of strategic and financial mindsets, as well as sentiments on stock returns across developed and emerging markets. These results offer significant contributions to the existing body of knowledge on corporate communication's role in investor decision-making and market dynamics.

Relation to Research Questions and Hypotheses

The study's exploration into the prevalence and impact of strategic and financial mindsets responds to the initial research question regarding how these mindsets differ between management and analysts and their variance between developed and emerging markets. The finding that management articulations have a higher explanatory power for stock returns than analysts underscore the critical role of corporate leadership in shaping investor perceptions and market valuations, particularly through strategic orientations that emphasize investments in R&D and SG&A. This supports the hypothesis that strategic mindsets, which encompass long-term goals and innovation, are more closely associated with positive stock performance than purely financial mindsets.

Furthermore, the significant role of analyst and management sentiments in explaining stock returns, with an enhanced impact in emerging markets, addresses the second research question on the contribution of sentiments to stock performance. The stronger influence of analyst sentiments over

management sentiments in affecting stock returns aligns with the hypothesis that analysts play a crucial role in interpreting and adding value to the information provided by management, a finding that has profound implications for the understanding of information intermediaries in financial markets.

Implications for Theory, Practice, and Future Research

Theoretically, this dissertation enriches the marketing and finance literature by integrating concepts of strategic and financial mindsets with the informational value of sentiments, offering a comprehensive framework for analyzing corporate communications' impact on stock markets. It underscores the importance of considering both content and tone in corporate and analyst communications, extending the understanding of how different market participants interpret and act upon these articulations.

Practically, the findings suggest that companies should strategically manage their communications to highlight both their long-term strategic orientations and immediate financial outcomes. Analysts, on the other hand, should consider the balance between management's strategic and financial narratives when formulating their recommendations.

For future research, this study opens several avenues for investigation. One such area is the exploration of how specific strategic topics within management articulations influence investor behaviour and stock performance. Additionally, the role of cultural and regulatory differences in shaping the informational value of corporate communications across markets warrants further exploration.

Limitations and Areas for Further Investigation

This study, while comprehensive, is not without limitations. The reliance on text data from investor call transcripts and analyst reports may overlook non-verbal cues and other forms of corporate communication that could influence investor perceptions. Furthermore, the study's focus on large-cap companies in the Dow 30 and Nifty 50 may limit the generalizability of the findings to smaller firms or those in other indices.

Future research could address these limitations by incorporating a broader array of communication forms and considering a wider range of companies. Additionally, longitudinal studies examining the evolution of strategic and financial mindsets and their market impacts over time could provide deeper insights into the dynamic nature of corporate communication and investor responses.

In conclusion, this dissertation contributes significantly to the understanding of the informational value of management and analyst articulations in stock markets, highlighting the complex interplay between content, sentiment, and market dynamics. By shedding light on the nuances of corporate communication, this research not only advances academic discourse but also offers practical insights for corporate leaders, analysts, and investors navigating the intricacies of global financial markets.

4.3. Key Implications

Corporate Communications	1. Ensure a balance between strategic insights and financial details in messaging. 2. Value sentiment divergence as an indicator of healthy market dialogue and be mindful of the skepticism driven by convergent optimism. 3. Employ semantic text analysis to tailor communication strategies to market preference.
Equity Analysts	1. Integrate strategic and financial analysis for a well-rounded view. 2. Utilize semantic text analysis to deepen insights into management communications. 3. Value sentiment divergence as evidence of analytical objectivity and independence. 4. Be particularly wary of convergent optimism, recognizing it as a potential red flag for skeptical investor perception.
Investor Decision Making	1. Apply a balanced approach when interpreting management narratives alongside financial performance. 2. View sentiment divergence positively as an indicator of market insight and analyst independence. 3. Undertake independent evaluations to identify sentiment convergence or divergence, especially being cautious of convergent optimism.

4.4. Reflection on the Research Process:

Conducting this research has been an enriching journey, filled with both challenges and rewarding discoveries. One of the most gratifying aspects was uncovering the vast informational value hidden within unstructured data. Delving into the nuances of management and analyst articulations to uncover strategic and financial mindsets illuminated significant—and at times intuitive—differences between the Dow 30 and Nifty 50 indices. This process not only validated the initial hypotheses but also provided unexpected insights into market dynamics and investor behaviour.

Challenges, Obstacles, and Surprises

The path to these discoveries was not without its obstacles. One of the foremost challenges encountered was the data collection process. Transforming PDF documents into analyzable text data proved to be both challenging and time-consuming, particularly when faced with PDFs that contained images rather than text, necessitating the use of optical character recognition (OCR) in addition to text extraction algorithms.

Another significant hurdle was the computational capacity required to generate embeddings and perform subsequent classifications. The sheer volume and complexity of the data required

sophisticated computational tools and techniques. This challenge was so pronounced that it necessitated the acquisition of dedicated high-performance hardware to manage the workload effectively. Despite these hurdles, developing a scalable pipeline for data analysis became a rewarding outcome, paving the way for future research to build upon this groundwork.

Evolution of Understanding

The research process was also a journey of evolving understanding. Initially, the challenge was to navigate between inductive discovery, which sought to unearth constructs directly from the data without preconceived notions, and a more deductive approach that leveraged existing frameworks to guide the analysis. The turning point came with the operationalization of mindset constructs based on established frameworks, which led to the emergence of topic vectors that significantly enhanced the analysis's depth and relevance.

Operationalizing sentiment presented its own set of challenges. Initially, including neutral sentences in the analysis muddled the waters, obscuring the statistical significance of sentiments and their relation to stock returns. It was only after refining the approach to exclude neutral sentiments that both the topics and sentiments achieved statistical significance, underscoring the importance of methodological precision in data analysis.

This journey through the research process has been a profound learning experience, offering valuable lessons for scaling and applying the developed methods to studies in adjacent fields or different domains. The ability to extract, analyze, and interpret unstructured text data has vast potential, not just in finance and marketing but across various sectors where unstructured data is abundant but underutilized. This research underscores the power of combining advanced analytical techniques with insightful theoretical frameworks to unlock new understandings of complex phenomena.

4.5. Conclusion and Future Directions:

This dissertation has uncovered the nuanced ways in which management and analyst articulations impact stock returns, through a detailed examination of strategic and financial mindsets and the sentiment constructs within corporate communications. The study reveals the significant informational value that these articulations carry in the financial markets, emphasizing the differential impacts observed between developed and emerging markets, particularly within the contexts of the Dow 30 and Nifty 50 indices.

Main Conclusions

The findings underscore that both management and analyst sentiments significantly drive stock returns, with analyst sentiments showing a stronger influence, suggesting their critical role in adding value through information interpretation. Additionally, the research highlights the importance of strategic and financial mindsets in management communications, which have a higher explanatory power for stock returns than the analysts' articulations. The divergent impacts of sentiment and mindset between the Dow 30 and Nifty 50 further elucidate the complexity of global financial markets, revealing how investor behaviours and market dynamics can vary across different contexts.

Potential Avenues for Future Research

Several areas warrant further investigation to build upon the insights gained from this study:

Cross-Sector Analysis: Exploring the informational value of management and analyst articulations across different industries could provide deeper insights into sector-specific dynamics and investor responses.

Longitudinal Studies: Examining how the impact of sentiments and mindsets on stock returns evolves over time could offer valuable perspectives on the changing nature of corporate communication and market reactions.

Cultural and Regulatory Influences: Investigating how cultural differences and regulatory environments shape the interpretation and impact of corporate articulations could enhance understanding of global market behaviours.

Technological Advancements in Data Analysis: Future research could leverage emerging technologies and methodologies for analyzing unstructured data to uncover additional insights into the complex relationships between corporate communications and financial outcomes.

Final Reflections and Significance

This research contributes significantly to the fields of finance and marketing by providing a comprehensive analysis of the informational value embedded in corporate communications. It bridges theoretical concepts with practical implications, shedding light on the strategic importance of effectively managing and interpreting management and analyst articulations. By elucidating the nuanced relationships between management sentiments, analyst sentiments, strategic and financial

mindsets, and stock returns, this dissertation enriches our understanding of market dynamics and investor behaviour.

The findings not only offer a foundation for future academic inquiry but also provide valuable insights for practitioners, including corporate leaders, analysts, and investors, about the strategic dissemination and interpretation of information in financial markets. As the landscape of corporate communication continues to evolve, the insights derived from this study will remain relevant for understanding the intricate interplay between corporate articulations and market perceptions, highlighting the enduring significance of this research in navigating the complexities of the global financial ecosystem.

4.6. Acknowledgments:

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Appendices

Appendix 1: Theme Definitions, ChatGPT Prompts and Seed Phrases

Theme Definitions for Topic Classification:

Product Management: This theme encompasses the strategies and practices related to developing, launching, managing, and optimizing a company's products throughout their lifecycle. It involves understanding market needs, defining product features, managing product development, and ensuring products meet customer expectations.

Supply Chain Management: This theme covers the planning, execution, and oversight of supply chain activities with the goal of creating efficiencies, reducing costs, and ensuring timely delivery of goods and services. It includes logistics, procurement, inventory management, and coordination with suppliers and distributors.

Customer Relationship Management (CRM): CRM refers to the practices, strategies, and technologies that companies use to manage and analyze customer interactions and data throughout the customer lifecycle. The goal is to improve customer service, enhance customer satisfaction, and foster customer loyalty.

Growth: This outcome refers to the increase in a company's size and financial performance over time, measured through metrics such as revenue growth, expansion into new markets, increase in market share, and enhancement of the customer base. It reflects the company's ability to scale its operations and improve its market position.

Margins: As an outcome, margins represent the company's profitability, expressed as the percentage difference between its revenues and the costs incurred in generating those revenues. High margins indicate efficient cost management and the company's ability to convert sales into profits effectively.

Risk: This outcome pertains to the exposure to factors that can lead to financial loss or uncertainty in achieving business goals. It includes the potential for financial loss due to market volatility, operational failures, legal liabilities, and external events affecting the company's performance and reputation.

Investments: Investments refer to the allocation of resources (e.g., capital, time, technology) towards projects or assets with the expectation of generating future benefits or returns. This theme covers decisions related to capital expenditures, research and development, and other strategic investments aimed at fostering long-term growth and innovation.

Chat GPT Seed Phrases to Guide Sematic Topic Classification:

Product Management	
1. Flagship products continue to dominate the market.	53. Our approach to offerings innovation is comprehensive.
2. Significant growth observed in cloud-based solutions.	54. Strategic offerings management has optimized product life cycles.
3. AI offerings have been enhanced to drive customer engagement.	55. Introduction of premium offerings has elevated brand value.
4. Our digital offerings portfolio expanded with innovative services.	56. Record growth in premium offerings showcases our competitive edge.
5. Incremental growth in our products and services spectrum.	57. Refined premium pricing models have maximized profitability.
6. Our line of business has seen remarkable diversification.	58. Implementing strategic price increases across key product lines.
7. Record-breaking performance in new product introductions.	59. Expansion in product categories through strategic acquisitions.
8. Launches this quarter have set new benchmarks.	60. Our product engineering prowess is unmatched in the industry.
9. Segmentation of offerings has improved market penetration.	61. Dedication to product innovation fuels our R&D efforts.
10. Innovative strategies deployed in offerings management.	62. Product lines are managed with a focus on market needs.
11. Our premium offerings have surpassed market expectations.	63. Segmented product strategies have enhanced market penetration.
12. Unprecedented growth in premium product lines.	64. Targeted product volume increases to meet demand surges.
13. Adjustments in premium pricing have optimized profits.	65. Tailoring solution offerings for market-specific challenges.
14. Strategic price increases implemented across select segments.	66. Flagship product upgrades underscore our commitment to excellence.
15. Expansion in product categories to cover untapped markets.	67. Expanding our cloud offerings to drive digital transformation.
16. Our product engineering has led to groundbreaking technologies.	68. AI integrations have elevated our product functionalities.
17. Investment in product innovation has yielded significant returns.	69. Pioneering digital offerings through strategic partnerships.
18. Comprehensive management of diverse product lines.	70. Product and service synergies drive our growth narrative.
19. Targeted expansion in product segments to capture market share.	71. Broadening our lines of business through innovation.
20. Introduction of high-volume products to increase market presence.	72. Capitalizing on new product growth opportunities in emerging markets.
21. Solution offerings tailored to meet specific industry needs.	73. Launch events have generated unprecedented industry buzz.
22. Strategic enhancements in flagship product features.	74. Offering segments are refined to enhance customer experience.
23. Growth trajectory bolstered by cloud services expansion.	75. Driving market innovation through unique offerings.
24. AI-driven offerings have revolutionized customer interactions.	76. Mastering offerings management to streamline operations.
25. Digital transformation initiatives have tripled our offerings.	77. Premium offerings have redefined luxury in our sector.
26. Sustained growth achieved through innovative product and service combinations.	78. Achieving record growth through targeted premium offerings.
27. Diversification across lines of business shields against market volatility.	79. Premium pricing adjustments reflect the value of innovation.
28. Rapid scaling of new product initiatives to capture emerging trends.	80. Price increases are strategically deployed for market alignment.
29. Product launches have significantly contributed to this quarter's success.	81. Extending our product categories to encompass emerging technologies.
30. Differentiation of offering segments to cater to niche markets.	82. Leading in product engineering through continuous improvement.
31. Redefining market standards through offerings innovation.	83. Our product innovation is guided by customer insights.
32. Excellence in offerings management has improved client satisfaction.	84. Efficient product management secures our market leadership.
33. Launch of premium offerings has opened new revenue streams.	85. Enhancing product segments through technology integration.
34. Record performance due to strategic premium offerings expansion.	86. Strategically increasing product volumes to leverage economies of scale.
35. Optimization of premium pricing strategies to enhance margins.	87. Developing solution offerings that address critical industry needs.
36. Selective price increases have been effective in managing costs.	88. Our flagship products set the standard for quality.
37. Broadening of product categories to increase customer base.	89. Cloud offerings are central to our technology strategy.
38. Innovations in product engineering have set industry benchmarks.	90. Incorporating AI to deliver superior product performance.
39. Our commitment to product innovation is unwavering.	91. Expanding digital offerings to capture online market segments.
40. Streamlined product management processes have improved efficiency.	92. Harmonizing product and service offerings for comprehensive solutions.
41. Focused development in specific product segments.	93. Line of business expansion supports our diversified strategy.
42. Strategic product volume growth to achieve market leadership.	94. Launching new products to capitalize on market trends.
43. Customized solution offerings have strengthened client relationships.	95. Revolutionizing markets with innovative product launches.
44. Enhanced flagship products have solidified our market position.	96. Offering segments are strategically aligned with consumer preferences.
45. Cloud offerings expansion is a testament to our growth strategy.	97. Innovations in offerings propel us ahead of competitors.
46. Leveraging AI to introduce unmatched product capabilities.	98. Efficient offerings management enhances product portfolio coherence.
47. Our digital offerings are at the forefront of technology.	99. Premium offerings strategy targets high-value customer segments.
48. Achieving sustainable growth through product-service integration.	100. Leveraging premium pricing for brand positioning and profitability.
49. Line of business diversification supports strategic flexibility.	101. 'Pharma products development'
50. New product growth is a pillar of our success strategy.	102. clinical results of drugs product development
51. Innovative product launches have captured global attention.	103. pharma products development R & D
52. Segmenting offerings to better address market demands.	

Supply Chain Management	
1. Enhancing employee capabilities through targeted training programs. 2. Fostering employee engagement to drive operational excellence. 3. Implementing advanced employee training for supply chain innovation. 4. Deepening supplier engagement to secure supply chain resilience. 5. Maximizing capacity utilization to meet increasing demand. 6. Integrating contract employees to flexibly scale operations. 7. Balancing demand-supply dynamics through predictive analytics. 8. Addressing demand-supply mismatches with strategic planning. 9. Adopting digital supply chains for improved visibility and efficiency. 10. Expanding our distribution reach through strategic network optimization. 11. Optimizing distribution networks to reduce delivery times. 12. Achieving economy of scale in manufacturing operations. 13. Modernizing factories and plants with smart technologies. 14. Leveraging global sourcing to diversify supply base. 15. Incorporating graduate hires into our innovation-focused teams. 16. Strategic hiring practices to strengthen supply chain expertise. 17. Initiatives to improve resilience against supply chain disruptions. 18. Advanced inventory management systems to minimize stockouts. 19. Navigating logistics challenges with agile response strategies. 20. Enhancing logistics management through technology integration. 21. Streamlining manufacturing processes for greater efficiency. 22. Addressing manufacturing challenges with flexible production strategies. 23. Welcoming new hires with specialized supply chain training. 24. Mitigating operational challenges through continuous improvement. 25. Driving operational efficiency with lean management principles. 26. Commitment to operational excellence across all facilities. 27. Developing a services supply chain to complement product offerings. 28. Building strategic resilience to anticipate market changes. 29. Collaborating with sub-contractors for enhanced supply flexibility. 30. Fostering supply chain innovation through partnerships and R&D. 31. Identifying and resolving supply chain issues with proactive measures. 32. Comprehensive supply chain management to ensure end-to-end efficiency. 33. Enhancing supply chain resilience through diversification and risk management. 34. Optimizing warehouses for faster order fulfillment. 35. Implementing strategic agility to navigate market volatilities. 36. Cultivating supply chain agility to respond to consumer demands. 37. Reinforcing HR policies to support supply chain goals. 38. Leveraging AI in digital supply chains for predictive insights. 39. Establishing robust distribution networks to serve global markets. 40. Securing economy of scale benefits through volume purchasing. 41. Investing in state-of-the-art factories and plants for competitive advantage. 42. Adopting global sourcing strategies to enhance material quality and cost-efficiency. 43. Focusing on graduate hires to infuse new perspectives in supply chain management. 44. Hiring practices aligned with strategic supply chain objectives. 45. Programs designed to improve resilience in supply chain operations. 46. Revolutionizing inventory management with IoT-enabled tracking systems. 47. Overcoming logistics challenges through innovative route optimization. 48. Elevating logistics management with integrated software solutions. 49. Pioneering manufacturing technologies for sustainable production. 50. Solving manufacturing challenges with adaptable manufacturing systems.	51. Onboarding new hires into a culture of continuous supply chain innovation. 52. Addressing operational challenges with strategic resource allocation. 53. Achieving operational efficiency through workflow automation. 54. Upholding operational excellence as a core company value. 55. Expanding the services supply chain to meet evolving client needs. 56. Strengthening strategic resilience in the face of supply chain threats. 57. Utilizing sub-contractors to increase production capacity on demand. 58. Innovating within the supply chain to stay ahead of market trends. 59. Proactively managing supply chain issues through a dedicated task force. 60. Strategic supply chain management for seamless global operations. 61. Developing supply chain resilience as a competitive advantage. 62. Strategically located warehouses to minimize transit times. 63. Adapting to market changes with strategic agility in supply chain planning. 64. Promoting supply chain agility through flexible sourcing strategies. 65. HR's role in supporting supply chain innovation and talent development. 66. Customizing digital supply chains for industry-specific needs. 67. Leveraging distribution networks to optimize supply chain flow. 68. Achieving sustainable growth through economy of scale efficiencies. 69. Upgrading factories with automation for enhanced productivity. 70. Global sourcing for cost-effective supply chain solutions. 71. Integrating graduate hires into supply chain innovation projects. 72. Strategic hiring to enhance supply chain capabilities and resilience. 73. Implementing cutting-edge technologies to improve resilience in the supply chain. 74. Revolutionizing inventory management with artificial intelligence. 75. Addressing logistics challenges with real-time tracking systems. 76. Pursuing excellence in logistics management for end-to-end optimization. 77. Embracing modern manufacturing methods for higher quality and efficiency. 78. Overcoming manufacturing challenges with flexible production lines. 79. Integrating new hires into our supply chain strategy execution. 80. Tackling operational challenges with data-driven decision-making. 81. Streamlining operations for peak operational efficiency. 82. Achieving operational excellence through quality management systems. 83. Building a resilient services supply chain for uninterrupted service delivery. 84. Ensuring strategic resilience in supply chain planning and execution. 85. Empowering sub-contractors with technology for better collaboration. 86. Leading supply chain innovation with sustainable practices. 87. Quick resolution of supply chain issues through agile methodologies. 88. Mastering supply chain management for operational excellence. 89. Cultivating a culture of supply chain resilience among employees. 90. Strategically designed warehouses for efficient inventory management. 91. Embedding strategic agility in supply chain operations for competitive advantage. 92. Enhancing supply chain agility with cross-functional teams. 93. Leveraging HR to build a skilled supply chain workforce. 94. Digitally transforming supply chains for enhanced transparency and control. 95. Optimizing global distribution networks for efficient product flow. 96. Scaling economy of scale to drive down costs and increase profitability. 97. Automating factories for increased operational efficiency and safety. 98. Expanding global sourcing to ensure supply chain stability and diversity. 99. Developing graduate hires into future supply chain leaders. 100. Recruitment strategies aligned with strategic supply chain growth initiatives.

Customer Relationship Management	
- Strategic account management to maximize client satisfaction and revenue. - Initiatives aimed at adding new customers to our portfolio. - Successful client acquisition through targeted marketing campaigns. - Innovating in brand management to enhance customer perception. - Expanding our customer base through strategic client acquisition efforts. - Achieving customer delight through exceptional service and product offerings. - Enhancing customer engagement through interactive platforms and feedback mechanisms. - Implementing a customer engagement model tailored to individual needs. - Elevating the customer experience across all touchpoints. - Maintaining a strong customer focus in product development and support. - Cultivating customer intimacy to understand and meet their evolving needs. - Integrating customer preferences into our product and service design. - Strengthening customer relationships through personalized interactions. - Implementing programs designed to improve customer retention rates. - Conducting comprehensive customer surveys to gather actionable insights. - Deepening customer understanding to better cater to their demands. - Leveraging digital platforms for enhanced customer engagement. - Engaging with existing and new customers to build loyalty and trust. - Focusing on long-term customer value creation and sustainability. - Forming marketing alliances to extend our reach and enhance customer relationships. - Utilizing omni-channel strategies to provide a seamless customer experience. - Delivering personalized customer service to meet individual needs effectively. - Boosting social media engagement with customers for real-time interaction. - Increasing the stickiness of customers through loyalty programs and incentives. - Refining account management strategies to better serve key clients. - Exploring new avenues for adding customers in untapped markets. - Optimizing our approach to client acquisition in competitive sectors. - Reinforcing brand management with a focus on customer values and expectations. - Strategies for client acquisition in emerging markets. - Prioritizing customer delight in our service delivery model. - Innovating our approach to customer engagement to foster deeper connections. - Adapting our customer engagement model for the digital age. - Consistently improving the customer experience through feedback and iteration. - Embedding a customer focus in our corporate culture. - Developing closer customer intimacy through personalized communication. - Aligning product offerings with customer preferences for higher satisfaction. - Building and maintaining strong customer relationships through quality service. - Executing strategies to enhance customer retention and loyalty. - Leveraging customer surveys to inform strategic decisions. - Fostering a deeper customer understanding to anticipate future needs. - Advancing digital customer engagement through technology investments. - Broadening our engagement with both existing and new customers. - Maximizing long-term customer value through strategic partnerships. - Harnessing the power of marketing alliances to improve customer experiences. - Implementing omni-channel approaches to meet customers where they are. - Customizing customer service to reflect individual preferences and history. - Engaging customers on social media to strengthen community and loyalty. - Enhancing customer stickiness with value-added services. - Optimizing account management processes for efficiency and effectiveness. - Strategies for continuously adding new customers across segments.	- Tactics for effective client acquisition in a digital marketplace. - Upgrading brand management techniques for the modern consumer. - Driving client acquisition with data-driven marketing strategies. - Setting new standards for customer delight in our industry. - Revolutionizing customer engagement with innovative technologies. - Developing a holistic customer engagement model for comprehensive support. - Redesigning the customer experience journey for greater satisfaction. - Instilling a customer focus throughout our organizational structure. - Elevating customer intimacy with advanced analytics and segmentation. - Tailoring offerings to match customer preferences and feedback. - Enhancing the depth of customer relationships with proactive outreach. - Focusing on strategies to boost customer retention and minimize churn. - Gathering and applying insights from customer surveys to improve service. - Enhancing customer understanding through direct communication and engagement. - Pioneering in digital customer engagement for a competitive edge. - Strengthening ties with both existing and new customers via targeted campaigns. - Investing in long-term customer value through quality and innovation. - Leveraging marketing alliances for broader customer reach and engagement. - Mastering omni-channel retailing for a unified customer experience. - Delivering exceptional personalized customer service across all platforms. - Expanding our social media engagement strategy to connect with more customers. - Implementing tactics to increase the stickiness of customers through engagement. - Refining account management to better understand and meet client needs. - Developing strategies to continuously add to our customer base. - Enhancing our client acquisition framework to accelerate growth. - Innovating in brand management for deeper customer connections. - Amplifying efforts in client acquisition to expand market share. - Striving for customer delight in every interaction and transaction. - Redefining customer engagement for the digital era. - Creating a customer engagement model that drives loyalty and satisfaction. - Transforming the customer experience through innovation and personalization. - Emphasizing a customer focus in all business decisions and strategies. - Building customer intimacy to forge lasting relationships. - Aligning our offerings with evolving customer preferences. - Committing to excellence in customer relationship management. - Elevating customer retention strategies through targeted programs. - Utilizing customer surveys to fine-tune our offerings and services. - Advancing our understanding of customer needs through in-depth analysis. - Driving forward digital customer engagement with cutting-edge solutions. - Nurturing relationships with both existing and new customers for growth. - Valuing long-term customer value as a cornerstone of our strategy. - Exploring new marketing alliances to enhance customer connections. - Adopting an omni-channel strategy to provide consistent customer experiences. - Ensuring personalized customer service remains a top priority. - Elevating our social media engagement to build community and brand loyalty. - Developing strategies to enhance customer stickiness and repeat business. - Streamlining account management for better efficiency and customer satisfaction. - Pursuing innovative ways to add new customers to our community. - Enhancing client acquisition techniques for a competitive edge. - Reimagining brand management to resonate with today's consumers.

Growth	
1. Account growth outpaces industry average, signalling strong customer retention. 2. Effective cross-sell strategies boosting our overall revenue. 3. Achieved significant deal closure rate improvement this quarter. 4. Digital portfolio growth accelerates as we invest in new technologies. 5. Recording double-digit growth for the fifth consecutive quarter. 6. Observing a fall in demand in traditionally strong markets. 7. Geographic expansion driving revenue increases across new regions. 8. Sustained growth trajectory aligns with our long-term strategic goals. 9. Growth forecast positive, exceeding initial market expectations. 10. Facing growth headwinds due to unexpected market conditions. 11. Growth surprise continues, outperforming analyst predictions. 12. Entering high growth phase fuelled by product innovation. 13. Experiencing a lack of momentum in certain key segments. 14. Market expansion initiatives successfully entering new territories. 15. Market share growth evidencing competitive advantage and customer preference. 16. Order growth reflects increasing demand for our flagship products. 17. Strengthening order pipeline suggests robust future revenue potential. 18. Per store sales outperforming industry benchmarks significantly. 19. Facing a reduction in sales in specific product categories. 20. Addressing revenue decline with aggressive marketing and sales strategies. 21. Achieving consistent revenue growth across all business units. 22. Mitigating sales decline through strategic product realignments. 23. Experiencing unprecedented sales growth thanks to market diversification. 24. Segment growth is good, indicating potential for further investment. 25. Sequential decline in topline revenue calling for strategic review. 26. Sequential growth demonstrates our resilience and strategic adaptability. 27. Maintaining single-digit growth amidst challenging market conditions. 28. Focusing on strategic growth areas including digital transformation. 29. Leveraging up-sell opportunities to maximize customer lifetime value. 30. Volume growth driven by expanding into untapped markets. 31. Increasing wallet share among existing customers through personalized offerings. 32. YoY decline in topline, prompting a reassessment of current strategies. 33. Experiencing YoY growth in topline, reflecting successful execution of growth strategies. 34. Enhanced account management practices leading to notable account growth. 35. Cross-sell initiatives significantly enhancing customer value proposition. 36. Marked increase in deal closure rates post-strategy optimization. 37. Accelerating digital portfolio growth through strategic acquisitions. 38. Evidencing double-digit growth across key product lines. 39. Strategic actions taken to address fall in demand for legacy products. 40. Successful geographic expansion contributing to a diversified revenue stream. 41. Maintaining a strong growth outlook amidst economic uncertainties. 42. Navigating through growth headwinds with focused strategic initiatives. 43. Continuing to deliver growth surprises, underscoring operational excellence. 44. Transitioning into a high growth phase through innovation and market expansion. 45. Implementing measures to counteract lack of momentum in sales. 46. Aggressive market expansion strategy pays off, with significant entry into new markets. 47. Achieving market share growth through competitive pricing and superior quality. 48. Sustained order growth reflecting strong market demand. 49. Robust order pipeline setting the stage for future revenue acceleration. 50. Per store sales metrics indicating efficient operations and customer satisfaction. 51. Tackling reduction in sales with new product launches and market entries. 52. Implementing corrective strategies to reverse revenue decline trends.	53. Consistently achieving revenue growth, underscoring effective strategy execution. 54. Addressing sales decline in specific segments with targeted promotions. 55. Recording impressive sales growth, driven by strategic initiatives. 56. Good segment growth highlighting areas for further resource allocation. 57. Analyzing causes behind sequential decline in topline for strategic adjustments. 58. Showcasing sequential growth as evidence of successful turnaround strategies. 59. Achieving single-digit growth, solidifying market position amidst competition. 60. Identifying strategic growth opportunities in emerging technologies. 61. Capitalizing on up-sell strategies to enhance average revenue per user. 62. Notable volume growth attributed to expanded market reach and product range. 63. Focusing on increasing wallet share through comprehensive service offerings. 64. Addressing YoY decline in topline with a renewed focus on core markets. 65. Reporting YoY growth in topline, signalling strong market performance. 66. Strategies for account growth focusing on deepening customer relationships. 67. Cross-sell efforts leading to significant enhancements in customer lifecycle value. 68. Improved deal closure efficiency reflecting enhancements in sales processes. 69. Digital portfolio growth underpins our strategy for technological leadership. 70. Sustaining double-digit growth through continuous innovation and market adaptation. 71. Developing contingency plans to mitigate fall in demand impacts. 72. Geographic expansion strategy yielding positive results in revenue growth. 73. Positive growth forecast reaffirming confidence in strategic direction. 74. Overcoming growth headwinds through diversification and innovation. 75. Consistent growth surprises reinforcing our market leadership position. 76. Investing in high growth areas to capitalize on emerging trends. 77. Addressing lack of momentum with aggressive market penetration strategies. 78. Expanding market presence through targeted expansion efforts. 79. Driving market share growth via strategic partnerships and alliances. 80. Leveraging order growth to fuel investment in R&D and innovation. 81. Building a strong order pipeline through customer-centric strategies. 82. Outperforming per store sales expectations through operational efficiencies. 83. Initiating measures to counteract sales reduction in key segments. 84. Reversing revenue decline through strategic pivots and realignment. 85. Capitalizing on consistent revenue growth to fund expansion initiatives. 86. Combating sales decline with innovative products and marketing strategies. 87. Highlighting sales growth as a testament to successful market strategies. 88. Identifying segment growth opportunities for targeted investments. 89. Addressing sequential decline topline with a comprehensive strategic review. 90. Demonstrating sequential growth as a sign of resilience and adaptability. 91. Targeting single-digit growth in mature markets through efficiency improvements. 92. Focusing on strategic growth initiatives to drive long-term value. 93. Maximizing up-sell opportunities through tailored customer engagement. 94. Achieving volume growth by expanding into new demographic segments. 95. Enhancing wallet share through strategic customer experience improvements. 96. Mitigating YoY decline in topline with aggressive recovery strategies. 97. Showcasing YoY growth in topline as evidence of effective strategy and execution. 98. Investing in capacity to ensure readiness for market fluctuations. 99. Exploring new product investments as a driver for growth. 100. Leveraging patenting strategies to secure a competitive advantage in technology.

Margins	
1. Navigating commodity prices to manage input cost volatility.	51. Optimizing workforce utilization to align with production needs.
2. Experiencing cost pressure across multiple supply chains.	52. Minimizing bench time through effective project management and staffing.
3. Achieving EBIT growth via operational efficiencies and revenue expansion.	53. Enhancing capacity utilization to drive economic scale benefits.
4. Sustaining EBITDA growth through strategic investments and cost control.	54. Mitigating excess capacity challenges through market expansion.
5. Managing input costs effectively to protect profit margins.	55. Focused redeployment of resources towards high-potential opportunities.
6. Addressing margin headwinds with pricing strategies and cost management.	56. Leading operational turnaround initiatives to achieve cost savings.
7. Margins surprised positively, reflecting successful cost-saving initiatives.	57. Driving efficiency through lean manufacturing and waste reduction.
8. Continuous improvement in margins through operational excellence.	58. Adapting to commodity price volatility with flexible sourcing strategies.
9. Recording PBT growth by focusing on high-margin products.	59. EBIT growth strategy centred around product innovation and market penetration.
10. Emphasizing profit before growth to ensure sustainable financial health.	60. EBITDA growth underpinned by cost efficiencies and operational leverage.
11. Boosting profitability through process automation and digital transformation.	61. Rationalizing input costs through strategic supplier negotiations.
12. Enhancing profits by expanding into new markets and segments.	62. Margin improvement strategies include product mix optimization and value engineering.
13. Addressing sequential decline in bottomline with cost reduction measures.	63. Achieving unexpected margins uplift through supply chain resilience.
14. Analyzing YoY decline in bottomline to realign business strategies.	64. PBT growth leveraged by expanding into less saturated markets.
15. Maximizing utilization rates to drive operational efficiency.	65. Cultivating profitability through customer retention and upselling strategies.
16. Reducing excess capacity through strategic divestitures and shutdowns.	66. Accelerating profits via strategic partnerships and joint ventures.
17. Improving capacity utilization across manufacturing facilities.	67. Tackling sequential decline in bottomline with a robust recovery strategy.
18. Redeployment of resources to high-growth areas for better returns.	68. Counteracting YoY bottomline decline by exploring new revenue channels.
19. Achieving operational turnaround through stringent cost control measures.	69. Improving equipment and plant utilization for operational effectiveness.
20. Streamlining operations to improve efficiency and reduce operating costs.	70. Addressing excess capacity by diversifying product lines.
21. Leveraging technology to minimize input cost increases.	71. Tightening capacity utilization standards to meet production efficiency goals.
22. Implementing advanced analytics to forecast and manage commodity price fluctuations.	72. Effective redeployment of resources to strengthen competitive positioning.
23. Enhancing EBIT growth through portfolio optimization and strategic acquisitions.	73. Orchestrating an operational turnaround to regain market leadership.
24. Driving EBITDA growth with a focus on scalable business models.	74. Streamlining business processes for enhanced efficiency and lower costs.
25. Strategic input cost management to maintain competitive pricing.	75. Strategically navigating cost pressure to maintain market competitiveness.
26. Overcoming margin headwinds by enhancing product and service value.	76. Capitalizing on EBIT growth through efficient resource allocation.
27. Margins significantly improved due to aggressive cost optimization.	77. Fostering EBITDA growth with a continuous focus on cost containment.
28. Focusing on PBT growth as a key indicator of financial strength.	78. Proactively managing input costs amidst fluctuating market conditions.
29. Prioritizing profitability to fuel reinvestment and strategic initiatives.	79. Countering margin headwinds with dynamic pricing models.
30. Expanding profits through innovation and customer-centric strategies.	80. Surpassing margins expectations through operational and financial discipline.
31. Implementing measures to counter sequential decline in bottomline profitability.	81. Concentrating on PBT growth to ensure robust financial health.
32. Reversing YoY decline in bottomline through diversified revenue streams.	82. Maximizing profitability through strategic market expansion and product development.
33. Optimizing utilization to reduce overhead and improve margins.	83. Growing profits by focusing on high-efficiency operational models.
34. Addressing bench time by reallocating staff to strategic projects.	84. Recovering from sequential bottomline decline through cost rationalization.
35. Increasing capacity utilization to meet growing customer demand.	85. Challenging YoY bottomline decline with aggressive market positioning.
36. Strategically managing excess capacity to align with market conditions.	86. Enhancing labour and capital utilization to optimize production costs.
37. Redeploying resources to focus on core competencies and efficiency.	87. Reducing bench time by improving workforce planning and flexibility.
38. Executing an operational turnaround to restore profitability and growth.	88. Maximizing capacity utilization in response to market demand shifts.
39. Leveraging automation to reduce input costs and enhance efficiency.	89. Rationalizing excess capacity to align with strategic business objectives.
40. Cost pressure alleviation through innovative procurement strategies.	90. Strategic redeployment of resources to fuel innovation and growth.
41. Securing EBIT growth in a competitive landscape through differentiation.	91. Driving an operational turnaround with a focus on core strengths.
42. Maintaining EBITDA growth momentum by leveraging operational synergies.	92. Leveraging technology for cost savings and operational efficiency gains.
43. Tactical management of input costs to safeguard margin integrity.	93. Balancing commodity price challenges with strategic cost management practices.
44. Navigating through margin headwinds with adaptive business models.	94. Securing sustainable EBIT growth through market diversification.
45. Unexpected margins improvement indicating successful strategic adjustments.	95. Sustaining EBITDA growth by focusing on high-margin activities.
46. Targeting PBT growth through financial discipline and operational efficiency.	96. Strategizing to manage input costs without compromising on quality.
47. Reinforcing profitability through strategic cost management and revenue optimization.	97. Overcoming margin headwinds with efficiency improvements and cost savings.
48. Elevating profits by leveraging market trends and consumer insights.	98. Margins benefit from comprehensive cost control and optimization measures.
49. Strategies to address sequential bottomline decline through fiscal prudence.	99. Focusing on PBT growth as a metric of financial success.
50. Mitigating YoY bottomline decline with a rigorous performance improvement plan.	100. Prioritizing profitability through continuous improvement and innovation initiatives.

Risk	
1. Strengthening audit compliance through enhanced internal controls.	51. Addressing reputational risk through transparent communication.
2. Identifying operational risk early through predictive analytics.	52. Mitigating talent acquisition risks in competitive labour markets.
3. Navigating challenges and uncertainties with agile business strategies.	53. Securing access to critical raw materials amidst market fluctuations.
4. Ensuring compliance with evolving international standards.	54. Analyzing the potential for regulatory backlash in new initiatives.
5. Assessing COVID-19 impact and recovery plans for business continuity.	55. Preparing for industry-specific risks with targeted strategies.
6. Hedging against currency fluctuations to protect profit margins.	56. Maintaining flexibility in capital allocation to address sudden changes.
7. Implementing diversification strategies to minimize market risk.	57. Leveraging AI for predictive risk analysis and management.
8. Focusing on the durability of earnings despite economic volatilities.	58. Enhancing product safety standards to prevent liability risks.
9. Prioritizing health & safety to mitigate workplace-related risks.	59. Staying ahead of technological disruptions to mitigate business risks.
10. Adapting to market conditions with flexible operational models.	60. Implementing employee training to reduce operational errors.
11. Expanding market diversification to reduce dependency on single markets.	61. Adapting to currency exchange risks in international operations.
12. Leveraging pandemic and vaccination insights for risk mitigation.	62. Assessing the impact of social movements on brand perception.
13. Assessing political risks in international expansion plans.	63. Ensuring compliance with anti-money laundering regulations.
14. Enhancing product diversification to cater to a broader customer base.	64. Strategically managing interest rate risk in financial operations.
15. Maintaining regulatory compliance amidst changing legal landscapes.	65. Employing scenario planning to prepare for future uncertainties.
16. Identifying regulatory risks in emerging markets.	66. Incorporating risk considerations in strategic planning sessions.
17. Developing comprehensive risk mitigation frameworks.	67. Optimizing inventory management to reduce stock-related risks.
18. Planning for seasonal and quarterly variations in demand.	68. Monitoring changes in consumer protection laws globally.
19. Evaluating sustainability of growth in competitive environments.	69. Engaging with policymakers to anticipate regulatory shifts.
20. Navigating visa and regulatory challenges in global operations.	70. Utilizing digital platforms to enhance risk communication.
21. Mitigating volatility through strategic financial planning.	71. Investing in renewable energy to mitigate environmental risks.
22. Building resilience against supply chain disruptions.	72. Enhancing customer engagement to build brand loyalty and reduce market risk.
23. Adopting advanced cybersecurity measures to protect data integrity.	73. Assessing the risk of technological obsolescence.
24. Forecasting and preparing for environmental risks.	74. Preparing for the risks associated with digital transformation.
25. Cultivating a risk-aware culture across the organization.	75. Analyzing the financial impact of health pandemics on operations.
26. Engaging in strategic alliances to spread operational risk.	76. Implementing measures to reduce the risk of fraud and corruption.
27. Implementing robust compliance training programs for employees.	77. Developing a robust framework for managing third-party risks.
28. Continuously monitoring geopolitical developments for potential impacts.	78. Anticipating shifts in global trade policies to adjust strategies.
29. Leveraging technology to improve risk management processes.	79. Enhancing the firm's risk management capabilities through training.
30. Ensuring business continuity through comprehensive disaster recovery plans.	80. Assessing the operational risks of remote work models.
31. Utilizing insurance strategically to cover unforeseen losses.	81. Planning for the discontinuation of critical third-party services.
32. Adapting business models in response to regulatory changes.	82. Investigating the implications of blockchain technology on business operations.
33. Conducting regular risk assessments to identify new vulnerabilities.	83. Preparing for the introduction of new competition laws.
34. Establishing contingency plans for critical business operations.	84. Mitigating risks associated with mergers and acquisitions.
35. Monitoring liquidity risk to ensure financial stability.	85. Ensuring the security of mobile and remote banking services.
36. Balancing innovation with risk management in product development.	86. Strategizing to overcome barriers in cross-border e-commerce.
37. Investing in employee health and wellness as a risk management strategy.	87. Maintaining ethical standards to prevent compliance violations.
38. Enhancing customer data privacy to comply with global regulations.	88. Assessing the viability of long-term contracts in volatile markets.
39. Analyzing competitive risks for strategic positioning.	89. Implementing sustainability practices to mitigate regulatory and societal risks.
40. Implementing global standards for environmental and social governance.	90. Optimizing product recall processes to minimize financial and reputational damage.
41. Addressing risks associated with intellectual property rights.	91. Conducting due diligence to mitigate risks in international expansions.
42. Planning for long-term demographic shifts and market demand.	92. Enhancing data analytics to identify and address emerging risks.
43. Optimizing supply chains for resilience against geopolitical tensions.	93. Developing flexible work arrangements to address health and safety concerns.
44. Assessing the impact of climate change on operational facilities.	94. Assessing the risks of new payment technologies in the fintech space.
45. Mitigating financial risks through diversified investment portfolios.	95. Preparing for changes in consumer tax regulations.
46. Developing strategies to navigate tariff and trade barriers.	96. Mitigating the risk of supply chain monopolies.
47. Strengthening governance structures to oversee risk management.	97. Evaluating the impact of political instability on foreign investments.
48. Anticipating consumer behaviour changes to mitigate market risks.	98. Implementing strategic currency exchange mechanisms to manage financial risk.
49. Preparing for potential cyber-attacks with proactive security measures.	99. Planning for the impact of global warming on business locations.
50. Ensuring durable supply chains through strategic partnerships.	100. Adopting a multi-faceted approach to risk management to cover all bases.

Investments	
1. Strategically increasing our digital investments to drive innovation. 2. Focusing our digital strategy on emerging market opportunities. 3. Significant investment in AI to leverage artificial intelligence capabilities. 4. Expanding our invest in cloud technologies for operational efficiency. 5. Committing resources to invest in digital technologies across platforms. 6. Prioritizing invests in digital transformation to stay ahead in the market. 7. Allocating capex towards technology upgrades and infrastructure improvements. 8. Optimizing capital allocation to support growth and shareholder value. 9. Increasing our capital expenditure in strategic business areas. 10. Investing in capacity expansion to meet future demand. 11. Launching new product investments to diversify our portfolio. 12. Enhancing our patenting process to protect innovative solutions. 13. Securing patents as a foundation for future technology leadership. 14. Elevating our R&D spend to fuel product and service innovation. 15. Investing in research and invention to create market-disruptive technologies. 16. Boosting research investments to explore new business avenues. 17. Scaling up advertising spend to increase brand visibility. 18. Investing in branding expenses to strengthen market position. 19. Earmarking funds for customer acquisition expenses to drive growth. 20. Elevating marketing expenses to capture a larger market share. 21. Managing sales, general, and administrative expenses for operational efficiency. 22. Refining our SG&A strategy to support scalable growth. 23. Doubling down on digital investments to secure a competitive edge. 24. Developing a comprehensive digital strategy to guide our technological initiatives. 25. Leveraging AI investments to transform customer experiences. 26. Accelerating invest in cloud services to enhance data management. 27. Focusing on digital technologies to improve customer engagement. 28. Embarking on digital transformation investments to revolutionize our operations. 29. Dedicating a portion of capex to sustainable energy solutions. 30. Strategic capital allocation towards international expansion efforts. 31. Planning capital expenditure with a focus on long-term ROI. 32. Investing in capacity to support our aggressive growth plans. 33. New product investments aimed at tapping into emerging trends. 34. Strengthening our patenting efforts to secure intellectual property. 35. Increasing patents to safeguard our technological advancements. 36. Boosting R&D spend to maintain our lead in innovation. 37. Channelling resources into research and invention for future technologies. 38. Ramping up research investments in key strategic areas. 39. Allocating advertising spend to target high-growth markets. 40. Investing in branding expenses to cultivate customer loyalty. 41. Strategically increasing customer acquisition expenses to enter new markets. 42. Maximizing marketing expenses for product launch campaigns. 43. Optimizing sales, general, and administrative expenses for efficiency. 44. Refocusing SG&A expenditures to support strategic initiatives. 45. Investing heavily in digital investments to reshape the industry landscape. 46. Crafting a digital strategy that aligns with our vision for growth. 47. Deploying AI investments to automate processes and enhance analytics. 48. Expanding our cloud infrastructure through targeted investments. 49. Pioneering in digital technologies for a seamless customer journey. 50. Driving invests in digital transformation for a future-ready business model.	51. Allocating capex for the development of next-generation products. 52. Prudent capital allocation to fuel our expansion and innovation. 53. Strategic capital expenditure in high-return projects. 54. Broadening our capacity investment to support new business lines. 55. Channelling resources into new product investments for market leadership. 56. Focusing on patenting as a key component of our innovation strategy. 57. Securing patents to protect and commercialize our inventions. 58. Increasing R&D spend to pioneer in uncharted territories. 59. Prioritizing research and invention to stay at the forefront of technology. 60. Enhancing research investments to support our long-term strategic goals. 61. Boosting advertising spend to solidify our brand in competitive markets. 62. Elevating branding expenses to differentiate our offerings. 63. Raising customer acquisition expenses to build a robust customer base. 64. Investing in marketing expenses to support new product launches. 65. Streamlining sales, general, and administrative expenses for better allocation. 66. Adjusting SG&A to align with our strategic growth plans. 67. Reinforcing our commitment to digital investments for a digital-first future. 68. Orchestrating a digital strategy that leverages technology for growth. 69. Investing in AI to harness the power of artificial intelligence for business insights. 70. Advancing our invest in cloud computing for scalable solutions. 71. Emphasizing digital technologies to enhance operational agility. 72. Undertaking digital transformation investments to redefine industry standards. 73. Targeting capex towards innovation labs and research centres. 74. Fine-tuning capital allocation for maximum impact and value creation. 75. Planning capital expenditure with an eye on future market dynamics. 76. Expanding invest in capacity to pre-emptively address market demands. 77. Diversifying our portfolio through new product investments. 78. Protecting our innovations through aggressive patenting strategies. 79. Acquiring patents to fortify our technological moat. 80. Elevating R&D spend to capture new opportunities in emerging technologies. 81. Focusing on research and invention as the cornerstone of our growth. 82. Amplifying research investments to explore next-gen solutions. 83. Increasing advertising spend to communicate our value proposition. 84. Investing in branding expenses to build a globally recognized brand. 85. Allocating funds for customer acquisition expenses to drive market penetration. 86. Enhancing marketing expenses for comprehensive campaign coverage. 87. Efficient management of sales, general, and administrative expenses. 88. Refining our SG&A approach to support business scalability. 89. Deepening our digital investments to create differentiated customer experiences. 90. Designing a digital strategy that integrates with our business model seamlessly. 91. Maximizing AI investments to lead in innovation and efficiency. 92. Prioritizing investments in cloud solutions for a robust IT infrastructure. 93. Investing in digital technologies to foster a culture of innovation. 94. Accelerating digital transformation investments to unlock new business models. 95. Allocating capex for advanced manufacturing and production technologies. 96. Ensuring capital allocation decisions are aligned with strategic priorities. 97. Focused capital expenditure on cutting-edge research and development. 98. Investing in capacity to ensure readiness for market fluctuations. 99. Exploring new product investments as a driver for growth. 100. Leveraging patenting strategies to secure a competitive advantage in technology.

Appendix 2: Sentences and Sentiment Counts

index_group	report_type	Positive	Negative	Neutral	Total
Dow_30	call_transcript	91,129	22,080	1,35,437	2,48,646
	equity_report	45,234	27,523	55,982	1,28,739
Nifty_50	call_transcript	75,190	32,472	2,39,947	3,47,609
	equity_report	1,01,818	41,360	93,995	2,37,173
		3,13,371	1,23,435	5,25,361	9,62,167

ticker_symbol	Call Transcripts				Analyst Reports			
	Positive	Negative	Neutral	Total	Positive	Negative	Neutral	Total
AAPL	2,962	489	3,594	7,045	2,818	2,029	3,845	8,692
AMGN	2,591	524	4,317	7,432	660	338	1,510	2,508
AXP	2,721	630	4,020	7,371	1,666	917	1,941	4,524
BA	3,618	803	6,509	10,930	1,696	1,874	4,231	7,801
CAT	2,828	1,322	4,066	8,216	1,243	831	1,186	3,260
CRM	3,695	324	4,817	8,836	3,401	1,569	4,598	9,568
CSCO	2,828	713	4,290	7,831	498	290	450	1,238
CVX	2,279	746	5,697	8,722	373	230	701	1,304
DIS	2,059	589	3,897	6,545	1,892	1,370	2,424	5,686
DOW	1,474	602	2,477	4,553	748	633	1,940	3,321
GS	3,254	854	6,021	10,129	2,555	1,811	5,021	9,387
HD	3,562	1,253	7,798	12,613	2,499	1,300	2,005	5,804
HON	2,610	721	2,976	6,307	1,136	443	1,331	2,910
IBM	3,910	774	4,593	9,277	593	402	496	1,491
INTC	2,663	579	2,817	6,059	1,569	494	1,240	3,303
JNJ	3,861	947	4,678	9,486	1,188	504	1,035	2,727
JPM	2,514	1,202	5,850	9,566	744	444	918	2,106
KO	3,068	772	4,736	8,576	1,799	1,145	2,308	5,252
MCD	3,065	682	4,079	7,826	549	223	828	1,600
MMM	2,881	1,115	4,703	8,699	2,103	1,882	1,971	5,956
MRK	2,511	392	3,783	6,686	898	175	733	1,806
MSFT	3,698	462	3,977	8,137	2,322	1,098	3,106	6,526
NKE	4,144	421	3,275	7,840	1,369	958	1,299	3,626
PG	3,958	1,099	4,633	9,690	1,678	843	1,340	3,861
TRV	2,655	924	4,780	8,359	1,792	1,236	1,579	4,607
UNH	3,272	363	4,823	8,458	836	457	666	1,959
V	3,018	747	4,645	8,410	1,426	658	1,551	3,635
VZ	2,539	512	3,783	6,834	1,487	1,179	1,495	4,161
WBA	3,464	1,006	5,328	9,798	884	836	1,179	2,899
WMT	3,427	513	4,475	8,415	2,812	1,354	3,055	7,221
	91,129	22,080	1,35,437	2,48,646	45,234	27,523	55,982	1,28,739

ticker_symbol	Call Transcripts				Analyst Reports			
	Positive	Negative	Neutral	Total	Positive	Negative	Neutral	Total
ADANI PORTS	1,267	316	4,154	5,737	722	203	1,026	1,951
ASIAN PAINT	1,555	787	4,423	6,765	2,235	1,040	1,642	4,917
AXIS BANK	4,963	1,902	14,188	21,053				
BAJAJ-AUTO	1,516	992	6,355	8,863	62	32	52	146
BAJAJ FINSV	2,073	870	6,101	9,044	937	290	565	1,792
BAJ FINANCE	1,251	536	5,065	6,852	2,065	588	1,787	4,440
BHARTIARTL	1,886	571	5,162	7,619	2,825	1,064	2,778	6,667
BPCL					1,188	761	1,999	3,948
BRITANNIA	1,368	626	4,350	6,344	2,705	867	2,459	6,031
CIPLA	1,782	690	5,754	8,226	1,882	916	2,112	4,910
COAL INDIA	447	378	2,710	3,535	1,877	1,050	2,229	5,156
DIVISLAB	399	150	1,570	2,119	778	351	974	2,103
DRREDDY	1,590	662	5,919	8,171	1,804	981	2,413	5,198
EICHER MOT	1,602	731	4,841	7,174	2,258	1,050	2,202	5,510
GRASIM	1,355	834	5,421	7,610	1,111	625	1,140	2,876
HCLTECH	2,739	713	5,549	9,001	3,690	1,295	2,513	7,498
HDFC	190	108	821	1,119	1,825	601	1,855	4,281
HDFC BANK	1,542	496	5,197	7,235	3,882	1,242	3,628	8,752
HDFC LIFE	1,542	496	5,196	7,234	1,558	363	1,343	3,264
HEROMOTOCO	1,550	667	5,499	7,716	2,754	1,240	2,581	6,575
HINDALCO	2,055	1,049	6,055	9,159	2,369	859	2,209	5,437
HINDUNILVR	3,276	998	7,035	11,309	5,605	1,348	4,209	11,162
ICICI BANK	1,584	805	5,249	7,638	3,703	1,205	3,521	8,429
INDUSINDBK	1,637	831	6,740	9,208	4,002	1,386	3,677	9,065
INFY	2,522	679	3,922	7,123	3,815	1,693	3,061	8,569
IOC	518	452	4,314	5,284	905	635	1,290	2,830
ITC					3,138	1,219	2,185	6,542
JSWSTEEL	1,283	798	5,464	7,545	1,133	605	1,493	3,231
KOTAK BANK	2,289	876	5,965	9,130	462	181	340	983
LT	1,778	1,094	6,331	9,203	2,578	1,041	2,459	6,078
M&M	1,664	824	3,947	6,435	2,441	1,108	2,530	6,079
MARUTI	709	666	3,651	5,026	2,535	1,430	2,546	6,511
NESTLE IND	343	110	846	1,299	2,689	783	1,838	5,310
NTPC	468	363	4,708	5,539	1,156	575	1,758	3,489
ONGC	488	557	3,696	4,741	1,107	818	1,620	3,545
POWERGRID	298	200	3,364	3,862	292	130	461	883
RELIANCE	961	175	962	2,098	1,203	493	1,206	2,902
SBILIFE	1,925	660	7,231	9,816	391	74	376	841
SBIN	1,311	741	7,254	9,306	601	270	670	1,541
SHREECEM					394	197	344	935

ticker_symbol	Call Transcripts				Analyst Reports			
	Positive	Negative	Neutral	Total	Positive	Negative	Neutral	Total
SUNPHARMA	1,492	867	7,026	9,385	850	636	1,301	2,787
TATACONSUM	2,060	577	4,501	7,138	1,584	439	1,557	3,580
TATAMOTORS	2,885	1,627	7,714	12,226	3,053	1,757	2,926	7,736
TATASTEEL	1,750	868	8,060	10,678	2,380	1,094	2,675	6,149
TCS	2,484	610	3,582	6,676	4,495	1,929	2,785	9,209
TECHM	1,812	662	4,684	7,158	2,984	1,136	1,878	5,998
TITAN	1,821	939	6,250	9,010	3,224	935	2,117	6,276
ULTRACEMCO	1,410	778	5,950	8,138	2,948	870	2,530	6,348
UPL	1,475	453	3,050	4,978	1,476	562	1,338	3,376
WIPRO	2,275	688	4,121	7,084	2,147	1,393	1,797	5,337
	75,190	32,472	2,39,947	3,47,609	1,01,818	41,360	93,995	2,37,173

Appendix 3: Detailed Regression Exhibits Supporting the Analysis

Significance of the MINDSET dimensions D1 and D2 in explaining Stock Returns

Dow 30: Management Mindsets (ct: Call Transcripts)

Outcome	Dow_30 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	ct_D1 (Mgmt.)	0.02	0.02	0.009	13.3%
Predictor(s)	ct_D2 (Mgmt.)	0.03	0.10	0.012	16.6%
Control(s)	MARKETCAP	0.04	0.01	0.032	46.2%
Control(s)	Net Margin	0.03	0.00	0.017	23.9%
Total				0.069	100.0%
Adj. R-Sq.				0.062	

OLS Regression Results

Dep. Variable:	Dow_30 share_price_%_4Q	R-squared:	0.069			
Model:	OLS	Adj. R-squared:	0.062			
Method:	Least Squares	F-statistic:	294.8			
Date:	Sun, 24 Mar 2024	Prob (F-statistic):	4.95e-23			
Time:	07:40:14	Log-Likelihood:	64.651			
No. Observations:	554	AIC:	-119.3			
Df Residuals:	549	BIC:	-97.72			
Df Model:	4					
Covariance Type:	cluster					
=====						
	coef	std err	z	P> z	[0.025	0.975]
const	3.253e-19	2.93e-18	0.111	0.912	-5.42e-18	6.07e-18
ct_D1	0.0229	0.010	2.350	0.019	0.004	0.042
ct_D2	0.0270	0.016	1.659	0.097	-0.005	0.059
MARKETCAP	0.0392	0.015	2.597	0.009	0.010	0.069
Net Margin	0.0290	0.001	25.458	0.000	0.027	0.031
=====						
Omnibus:	25.888	Durbin-Watson:	0.993			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	45.217			
Skew:	0.322	Prob(JB):	1.52e-10			
Kurtosis:	4.242	Cond. No.	1.25			

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Dow 30: Analyst Mindsets (er: Equity Reports)

Outcome	Dow_30 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	er_D1 (Analyst)	-0.01	0.34	0.001	1.6%
Predictor(s)	er_D2 (Analyst)	0.03	0.02	0.011	18.2%
Control(s)	MARKETCAP	0.04	0.01	0.029	50.2%
Control(s)	Net Margin	0.03	0.00	0.017	30.0%
			Total	0.058	100.0%
			Adj. R-Sq.	0.05	

OLS Regression Results

```

=====
Dep. Variable:      Dow_30 share_price_%_4Q      R-squared:                0.058
Model:              OLS                        Adj. R-squared:           0.050
Method:             Least Squares              F-statistic:              134.7
Date:               Sun, 24 Mar 2024            Prob (F-statistic):       2.74e-18
Time:               07:35:25                   Log-Likelihood:           51.697
No. Observations:   497                       AIC:                     -93.39
Df Residuals:       492                       BIC:                     -72.35
Df Model:           4
Covariance Type:    cluster
=====

```

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=====
              coef      std err          z      P>|z|      [0.025      0.975]
-----
const      -2.126e-18    3.4e-18    -0.625    0.532    -8.8e-18    4.54e-18
er_D1       -0.0090      0.009    -0.959    0.337    -0.027      0.009
er_D2        0.0253      0.011     2.344    0.019     0.004      0.046
MARKETCAP    0.0396      0.014     2.788    0.005     0.012      0.067
Net Margin   0.0289      0.001    22.767    0.000     0.026      0.031
=====

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=====
Omnibus:                 33.573    Durbin-Watson:              1.002
Prob(Omnibus):            0.000    Jarque-Bera (JB):           66.432
Skew:                     0.407    Prob(JB):                   3.75e-15
Kurtosis:                  4.595    Cond. No.                    1.16
=====

```

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Nifty 50: Management Mindsets (ct: Call Transcripts)

Outcome	Nifty_50 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	ct_D1 (Mgmt.)	0.04	0.10	0.012	8.4%
Predictor(s)	ct_D2 (Mgmt.)	0.05	0.04	0.013	8.5%
Control(s)	MARKETCAP	0.16	0.00	0.119	81.3%
Control(s)	Net Margin	0.01	0.61	0.003	1.8%
			Total	0.147	100.0%
			Adj R-Sq.	0.142	

OLS Regression Results

Dep. Variable:	Nifty_50 share_price_%_4Q	R-squared:	0.147			
Model:	OLS	Adj. R-squared:	0.142			
Method:	Least Squares	F-statistic:	3.950			
Date:	Sun, 24 Mar 2024	Prob (F-statistic):	0.00785			
Time:	07:12:18	Log-Likelihood:	-415.87			
No. Observations:	705	AIC:	841.7			
Df Residuals:	700	BIC:	864.5			
Df Model:	4					
Covariance Type:	cluster					
=====						
	coef	std err	z	P> z	[0.025	0.975]
=====						
const	1.621e-18	5.54e-18	0.292	0.770	-9.25e-18	1.25e-17
ct_D1	0.0407	0.025	1.662	0.097	-0.007	0.089
ct_D2	0.0515	0.024	2.110	0.035	0.004	0.099
MARKETCAP	0.1598	0.052	3.077	0.002	0.058	0.262
Net Margin	0.0134	0.026	0.504	0.614	-0.039	0.065
=====						
Omnibus:		269.718	Durbin-Watson:			0.855
Prob(Omnibus):		0.000	Jarque-Bera (JB):			1459.665
Skew:		1.639	Prob(JB):			0.00
Kurtosis:		9.240	Cond. No.			1.23

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Nifty 50: Analyst Mindsets (er: Equity Reports)

Outcome	Nifty_50 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	er_D1 (Analyst)	0.01	0.49	0.004	2.8%
Predictor(s)	er_D2 (Analyst)	0.09	0.00	0.056	40.3%
Control(s)	MARKETCAP	0.11	0.01	0.077	55.5%
Control(s)	Net Margin	0.01	0.57	0.002	1.3%
			Total	0.138	100.0%
			Adj. R-Sq.	0.135	

OLS Regression Results

Dep. Variable:	Nifty_50 share_price_%_4Q	R-squared:	0.139			
Model:	OLS	Adj. R-squared:	0.135			
Method:	Least Squares	F-statistic:	8.342			
Date:	Sun, 24 Mar 2024	Prob (F-statistic):	3.60e-05			
Time:	07:29:10	Log-Likelihood:	-436.71			
No. Observations:	860	AIC:	883.4			
Df Residuals:	855	BIC:	907.2			
Df Model:	4					
Covariance Type:	cluster					
=====						
	coef	std err	z	P> z	[0.025	0.975]
=====						
const	7.047e-18	4.11e-18	1.713	0.087	-1.02e-18	1.51e-17
er_D1	0.0110	0.016	0.689	0.491	-0.020	0.042
er_D2	0.0907	0.018	5.015	0.000	0.055	0.126
MARKETCAP	0.1112	0.043	2.615	0.009	0.028	0.195
Net Margin	0.0116	0.021	0.561	0.575	-0.029	0.052
=====						
Omnibus:	352.651	Durbin-Watson:	0.843			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	2424.427			
Skew:	1.712	Prob(JB):	0.00			
Kurtosis:	10.479	Cond. No.	1.39			
=====						

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Explanatory Power of Management Sentiments:

Outcome	Dow_30 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	ct_positive_polarity	0.06	0.00	0.079	62.9%
Control(s)	MARKETCAP	0.04	0.01	0.033	26.2%
Control(s)	Net Margin	0.02	0.00	0.014	10.9%
Total				0.126	100.0%
Adj. R-Sq.				0.121	

OLS Regression Results

Dep. Variable:	Dow_30 share_price_%_4Q	R-squared:	0.126			
Model:	OLS	Adj. R-squared:	0.121			
Method:	Least Squares	F-statistic:	461.0			
Date:	Sun, 24 Mar 2024	Prob (F-statistic):	1.48e-24			
Time:	16:31:55	Log-Likelihood:	82.112			
No. Observations:	554	AIC:	-156.2			
Df Residuals:	550	BIC:	-139.0			
Df Model:	3					
Covariance Type:	cluster					
	coef	std err	z	P> z	[0.025	0.975]
const	3.253e-19	1.02e-17	0.032	0.975	-1.97e-17	2.04e-17
ct_positive_polarity	0.0622	0.014	4.370	0.000	0.034	0.090
MARKETCAP	0.0405	0.015	2.701	0.007	0.011	0.070
Net Margin	0.0236	0.001	26.899	0.000	0.022	0.025
Omnibus:	29.983	Durbin-Watson:	1.105			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	49.808			
Skew:	0.389	Prob(JB):	1.53e-11			
Kurtosis:	4.246	Cond. No.	1.07			

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Outcome	Nifty_50 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	ct_positive_polarity	0.13	0.00	0.099	48.7%
Control(s)	MARKETCAP	0.14	0.00	0.102	50.3%
Control(s)	Net Margin	0.01	0.69	0.002	1.0%
			Total	0.203	100.0%
			Adj. R-Sq.	0.201	

OLS Regression Results

Dep. Variable:	Nifty_50 share_price_%_4Q	R-squared:	0.204			
Model:	OLS	Adj. R-squared:	0.201			
Method:	Least Squares	F-statistic:	23.35			
Date:	Sun, 24 Mar 2024	Prob (F-statistic):	2.89e-09			
Time:	17:03:00	Log-Likelihood:	-391.37			
No. Observations:	705	AIC:	790.7			
Df Residuals:	701	BIC:	809.0			
Df Model:	3					
Covariance Type:	cluster					
	coef	std err	z	P> z	[0.025	0.975]
const	1.621e-18	1.21e-17	0.134	0.894	-2.22e-17	2.54e-17
ct_positive_polarity	0.1333	0.019	7.054	0.000	0.096	0.170
MARKETCAP	0.1361	0.048	2.857	0.004	0.043	0.230
Net Margin	0.0090	0.022	0.402	0.688	-0.035	0.053
Omnibus:	266.320	Durbin-Watson:	0.967			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	1424.205			
Skew:	1.620	Prob(JB):	5.47e-310			
Kurtosis:	9.164	Cond. No.	1.31			

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Explanatory Power of Analyst Sentiments:

Outcome	Dow_30 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	er_positive_polarity	0.07	0.00	0.114	74.2%
Control(s)	MARKETCAP	0.03	0.01	0.025	16.4%
Control(s)	Net Margin	0.02	0.00	0.014	9.4%
			Total	0.153	100.0%
			Adj. R-Sq.	0.148	

OLS Regression Results

Dep. Variable:	Dow_30 share_price_%_4Q	R-squared:	0.154			
Model:	OLS	Adj. R-squared:	0.148			
Method:	Least Squares	F-statistic:	195.6			
Date:	Sun, 24 Mar 2024	Prob (F-statistic):	2.47e-19			
Time:	16:42:14	Log-Likelihood:	78.315			
No. Observations:	497	AIC:	-148.6			
Df Residuals:	493	BIC:	-131.8			
Df Model:	3					
Covariance Type:	cluster					
	coef	std err	z	P> z	[0.025	0.975]
const	-2.126e-18	6.48e-18	-0.328	0.743	-1.48e-17	1.06e-17
er_positive_polarity	0.0744	0.018	4.247	0.000	0.040	0.109
MARKETCAP	0.0341	0.012	2.788	0.005	0.010	0.058
Net Margin	0.0237	0.002	14.248	0.000	0.020	0.027
Omnibus:	24.564	Durbin-Watson:	1.176			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	42.258			
Skew:	0.339	Prob(JB):	6.66e-10			
Kurtosis:	4.257	Cond. No.	1.09			

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Outcome	Nifty_50 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	er_positive_polarity	0.18	0.00	0.184	73.0%
Control(s)	MARKETCAP	0.09	0.00	0.067	26.4%
Control(s)	Net Margin	0.01	0.74	0.001	0.5%
			Total	0.252	100.0%
			Adj. R-Sq.	0.25	

OLS Regression Results

Dep. Variable:	Nifty_50 share_price_%_4Q	R-squared:	0.253			
Model:	OLS	Adj. R-squared:	0.250			
Method:	Least Squares	F-statistic:	36.01			
Date:	Sun, 24 Mar 2024	Prob (F-statistic):	3.09e-12			
Time:	17:04:06	Log-Likelihood:	-375.96			
No. Observations:	860	AIC:	759.9			
Df Residuals:	856	BIC:	779.0			
Df Model:	3					
Covariance Type:	cluster					
	coef	std err	z	P> z	[0.025	0.975]
const	7.047e-18	9.61e-18	0.733	0.463	-1.18e-17	2.59e-17
er_positive_polarity	0.1776	0.019	9.244	0.000	0.140	0.215
MARKETCAP	0.0901	0.031	2.894	0.004	0.029	0.151
Net Margin	0.0057	0.017	0.331	0.741	-0.028	0.039
Omnibus:	351.910	Durbin-Watson:	1.042			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	2398.055			
Skew:	1.711	Prob(JB):	0.00			
Kurtosis:	10.431	Cond. No.	1.29			

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Outcome	Dow_30 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	ct_positive_polarity	0.03	0.01	0.046	25.4%
Predictor(s)	er_positive_polarity	0.06	0.00	0.097	53.4%
Control(s)	MARKETCAP	0.04	0.01	0.026	14.1%
Control(s)	Net Margin	0.02	0.00	0.013	7.1%
			Total	0.182	100.0%
			Adj. R-Sq.	0.177	

OLS Regression Results

Dep. Variable:	Dow_30 share_price_%_4Q	R-squared:	0.184			
Model:	OLS	Adj. R-squared:	0.177			
Method:	Least Squares	F-statistic:	367.9			
Date:	Sun, 24 Mar 2024	Prob (F-statistic):	2.15e-24			
Time:	16:55:43	Log-Likelihood:	78.517			
No. Observations:	476	AIC:	-147.0			
Df Residuals:	471	BIC:	-126.2			
Df Model:	4					
Covariance Type:	cluster					
=====						
	coef	std err	z	P> z	[0.025	0.975]

const	6.505e-19	6.68e-18	0.097	0.922	-1.24e-17	1.37e-17
ct_positive_polarity	0.0332	0.013	2.510	0.012	0.007	0.059
er_positive_polarity	0.0647	0.014	4.476	0.000	0.036	0.093
MARKETCAP	0.0353	0.013	2.730	0.006	0.010	0.061
Net Margin	0.0222	0.002	14.543	0.000	0.019	0.025
=====						
Omnibus:	23.772	Durbin-Watson:	1.230			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	40.153			
Skew:	0.346	Prob(JB):	1.91e-09			
Kurtosis:	4.243	Cond. No.	1.63			
=====						

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Outcome	Nifty_50 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	ct_positive_polarity	0.06	0.00	0.062	22.9%
Predictor(s)	er_positive_polarity	0.16	0.00	0.141	51.9%
Control(s)	MARKETCAP	0.10	0.02	0.068	24.9%
Control(s)	Net Margin	-0.00	0.99	0.001	0.3%
			Total	0.272	100.0%
			Adj. R-Sq.	0.28	

OLS Regression Results

Dep. Variable:	Nifty_50 share_price_%_4Q	R-squared:	0.284			
Model:	OLS	Adj. R-squared:	0.280			
Method:	Least Squares	F-statistic:	27.28			
Date:	Sun, 24 Mar 2024	Prob (F-statistic):	2.03e-11			
Time:	16:47:56	Log-Likelihood:	-322.07			
No. Observations:	617	AIC:	654.1			
Df Residuals:	612	BIC:	676.3			
Df Model:	4					
Covariance Type:	cluster					
=====						
	coef	std err	z	P> z	[0.025	0.975]

const	5.705e-18	1.14e-17	0.501	0.617	-1.66e-17	2.8e-17
ct_positive_polarity	0.0636	0.019	3.438	0.001	0.027	0.100
er_positive_polarity	0.1642	0.025	6.563	0.000	0.115	0.213
MARKETCAP	0.0998	0.041	2.407	0.016	0.019	0.181
Net Margin	-0.0003	0.020	-0.016	0.988	-0.039	0.038
=====						
Omnibus:	243.879	Durbin-Watson:	1.097			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	1307.450			
Skew:	1.688	Prob(JB):	1.23e-284			
Kurtosis:	9.281	Cond. No.	2.02			
=====						

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Impact of Sentiment Divergence and Convergent Optimism

Dow 30: Sentiment Divergence

Outcome	Dow_30 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	er_sentiment_divergence	0.04	0.00	0.037	46.5%
Control(s)	MARKETCAP	0.04	0.01	0.026	32.2%
Control(s)	Net Margin	0.03	0.00	0.017	21.3%
Total				0.08	100.0%
Adj. R-Sq.				0.075	

OLS Regression Results						
Dep. Variable:	Dow_30 share_price_%_4Q	R-squared:	0.080			
Model:	OLS	Adj. R-squared:	0.075			
Method:	Least Squares	F-statistic:	171.3			
Date:	Mon, 25 Mar 2024	Prob (F-statistic):	1.52e-18			
Time:	15:13:10	Log-Likelihood:	50.232			
No. Observations:	476	AIC:	-92.46			
Df Residuals:	472	BIC:	-75.80			
Df Model:	3					
Covariance Type:	cluster					
	coef	std err	z	P> z	[0.025	0.975]
const	6.505e-19	2.94e-18	0.221	0.825	-5.11e-18	6.42e-18
er_sentiment_divergence	0.0426	0.011	3.763	0.000	0.020	0.065
MARKETCAP	0.0353	0.013	2.716	0.007	0.010	0.061
Net Margin	0.0287	0.002	18.776	0.000	0.026	0.032
Omnibus:	29.671	Durbin-Watson:	1.058			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	57.190			
Skew:	0.381	Prob(JB):	3.81e-13			
Kurtosis:	4.518	Cond. No.	1.06			
Notes:						
[1] Standard Errors are robust to cluster correlation (cluster)						

Nifty 50: Sentiment Divergence

Outcome	Nifty_50 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	er_sentiment_divergence	0.09	0.00	0.044	28.4%
Control(s)	MARKETCAP	0.15	0.00	0.109	70.3%
Control(s)	Net Margin	0.01	0.73	0.002	1.3%
			Total	0.154	100.0%
			Adj. R-Sq.	0.151	

OLS Regression Results						
Dep. Variable:	Nifty_50 share_price_%_4Q	R-squared:	0.155			
Model:	OLS	Adj. R-squared:	0.151			
Method:	Least Squares	F-statistic:	10.18			
Date:	Mon, 25 Mar 2024	Prob (F-statistic):	3.26e-05			
Time:	15:11:17	Log-Likelihood:	-373.48			
No. Observations:	617	AIC:	755.0			
Df Residuals:	613	BIC:	772.7			
Df Model:	3					
Covariance Type:	cluster					
	coef	std err	z	P> z	[0.025	0.975]
const	5.705e-18	6.54e-18	0.873	0.383	-7.11e-18	1.85e-17
er_sentiment_divergence	0.0881	0.022	3.928	0.000	0.044	0.132
MARKETCAP	0.1523	0.051	2.962	0.003	0.052	0.253
Net Margin	0.0096	0.028	0.343	0.732	-0.045	0.065
Omnibus:	247.640	Durbin-Watson:	0.876			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	1274.217			
Skew:	1.736	Prob(JB):	2.03e-277			
Kurtosis:	9.125	Cond. No.	1.22			
Notes:						
[1] Standard Errors are robust to cluster correlation (cluster)						

Dow 30: Convergent Optimism

Outcome	Dow_30 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	ct_positive_polarity	0.12	0.01	0.028	16.5%
Predictor(s)	er_positive_polarity	0.25	0.01	0.054	31.5%
Interaction(s)	ct-X-er_positive_polarity	-0.23	0.03	0.053	30.8%
Control(s)	MARKETCAP	0.04	0.01	0.025	14.5%
Control(s)	Net Margin	0.02	0.00	0.011	6.6%
			Total	0.173	100.0%
			Adj. R-Sq.	0.186	

OLS Regression Results					
Dep. Variable:	Dow_30 share_price_%_4Q	R-squared:	0.195		
Model:	OLS	Adj. R-squared:	0.186		
Method:	Least Squares	F-statistic:	292.8		
Date:	Mon, 25 Mar 2024	Prob (F-statistic):	6.95e-24		
Time:	15:17:54	Log-Likelihood:	81.855		
No. Observations:	476	AIC:	-151.7		
Df Residuals:	470	BIC:	-126.7		
Df Model:	5				
Covariance Type:	cluster				
	coef	std err	z	P> z	
const	6.505e-19	2.94e-17	0.022	0.982	
ct_positive_polarity	0.1168	0.043	2.738	0.006	
er_positive_polarity	0.2480	0.092	2.694	0.007	
ct_positive_polarity-X-er_positive_polarity	-0.2339	0.107	-2.195	0.028	
MARKETCAP	0.0352	0.013	2.706	0.007	
Net Margin	0.0210	0.002	11.945	0.000	
Omnibus:	23.289	Durbin-Watson:	1.243		
Prob(Omnibus):	0.000	Jarque-Bera (JB):	36.159		
Skew:	0.369	Prob(JB):	1.41e-08		
Kurtosis:	4.131	Cond. No.	19.9		
Notes:					
[1] Standard Errors are robust to cluster correlation (cluster)					

Nifty 50: Convergent Optimism

Outcome	Nifty_50 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	ct_positive_polarity	0.03	0.66	0.032	13.8%
Predictor(s)	er_positive_polarity	0.11	0.15	0.073	31.0%
Interaction(s)	ct_positive_polarity-X-er_positive_polarity	0.08	0.51	0.077	32.9%
Control(s)	MARKETCAP	0.10	0.02	0.052	22.1%
Control(s)	Net Margin	0.00	0.99	0.001	0.2%
			Total	0.234	100.0%
			Adj. R-Sq.	0.279	

OLS Regression Results					
Dep. Variable:	Nifty_50 share_price_%_4Q	R-squared:	0.285		
Model:	OLS	Adj. R-squared:	0.279		
Method:	Least Squares	F-statistic:	22.70		
Date:	Mon, 25 Mar 2024	Prob (F-statistic):	3.47e-11		
Time:	15:21:27	Log-Likelihood:	-321.87		
No. Observations:	617	AIC:	655.7		
Df Residuals:	611	BIC:	682.3		
Df Model:	5				
Covariance Type:	cluster				
		coef	std err	z	P> z
const		5.705e-18	7.89e-18	0.723	0.469
ct_positive_polarity		0.0253	0.057	0.439	0.660
er_positive_polarity		0.1144	0.080	1.431	0.153
ct_positive_polarity-X-er_positive_polarity		0.0791	0.121	0.654	0.513
MARKETCAP		0.0981	0.042	2.364	0.018
Net Margin		0.0001	0.020	0.006	0.995
Omnibus:	243.784	Durbin-Watson:	1.096		
Prob(Omnibus):	0.000	Jarque-Bera (JB):	1305.992		
Skew:	1.688	Prob(JB):	2.56e-284		
Kurtosis:	9.277	Cond. No.	16.1		
Notes:					
[1] Standard Errors are robust to cluster correlation (cluster)					

Informational Value in the context of External Uncertainty

Dow 30:

Outcome	Dow_30 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	ct_positive_polarity	-0.01	0.56	0.049	19.5%
Predictor(s)	uncertainty_index	-0.28	0.00	0.093	37.0%
Interaction(s)	ct-X-uncertainty_index	0.20	0.00	0.062	24.5%
Control(s)	MARKETCAP	0.04	0.00	0.039	15.7%
Control(s)	Net Margin	0.02	0.00	0.008	3.4%
			Total	0.251	100.0%
			Adj. R-Sq.	0.235	

OLS Regression Results

Dep. Variable:	Dow_30 share_price_%_4Q	R-squared:	0.242		
Model:	OLS	Adj. R-squared:	0.235		
Method:	Least Squares	F-statistic:	257.9		
Date:	Mon, 25 Mar 2024	Prob (F-statistic):	4.18e-23		
Time:	04:47:25	Log-Likelihood:	121.40		
No. Observations:	554	AIC:	-230.8		
Df Residuals:	548	BIC:	-204.9		
Df Model:	5				
Covariance Type:	cluster				
=====					
	coef	std err	z	P> z	[0.025
const	3.253e-19	1.02e-17	0.032	0.975	-1.97e-17
ct_positive_polarity	-0.0118	0.020	-0.582	0.561	-0.051
uncertainty_index	-0.2838	0.068	-4.182	0.000	-0.417
ct_positive_polarity-X-uncertainty_index	0.2028	0.063	3.232	0.001	0.080
MARKETCAP	0.0444	0.014	3.098	0.002	0.016
Net Margin	0.0168	0.002	10.515	0.000	0.014
=====					
Omnibus:	39.849	Durbin-Watson:	0.882		
Prob(Omnibus):	0.000	Jarque-Bera (JB):	68.034		
Skew:	0.490	Prob(JB):	1.68e-15		
Kurtosis:	4.410	Cond. No.	18.1		

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Outcome	Dow_30 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	er_positive_polarity	0.03	0.12	0.093	31.2%
Predictor(s)	uncertainty_index	-0.14	0.04	0.113	37.9%
Interaction(s)	er-X-uncertainty_index	0.07	0.28	0.053	17.8%
Control(s)	MARKETCAP	0.04	0.00	0.03	10.1%
Control(s)	Net Margin	0.01	0.00	0.009	3.0%
			Total	0.297	100.0%
			Adj. R-Sq.	0.256	

OLS Regression Results

Dep. Variable:	Dow_30 share_price_%_4Q	R-squared:	0.263
Model:	OLS	Adj. R-squared:	0.256
Method:	Least Squares	F-statistic:	149.1
Date:	Mon, 25 Mar 2024	Prob (F-statistic):	9.22e-20
Time:	04:57:12	Log-Likelihood:	112.88
No. Observations:	497	AIC:	-213.8
Df Residuals:	491	BIC:	-188.5
Df Model:	5		
Covariance Type:	cluster		

	coef	std err	z	P> z	[0.025
const	-2.126e-18	5.51e-18	-0.386	0.699	-1.29e-17
er_positive_polarity	0.0347	0.022	1.557	0.119	-0.009
uncertainty_index	-0.1364	0.066	-2.074	0.038	-0.265
er_positive_polarity-X-uncertainty_index	0.0658	0.062	1.070	0.285	-0.055
MARKETCAP	0.0386	0.012	3.211	0.001	0.015
Net Margin	0.0141	0.003	4.143	0.000	0.007

Omnibus:	32.321	Durbin-Watson:	0.955
Prob(Omnibus):	0.000	Jarque-Bera (JB):	54.084
Skew:	0.449	Prob(JB):	1.80e-12
Kurtosis:	4.344	Cond. No.	9.48

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Nifty 50

Outcome	Nifty_50 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	ct_positive_polarity	0.14	0.00	0.073	26.7%
Predictor(s)	uncertainty_index	-0.04	0.60	0.077	28.1%
Interaction(s)	ct-X-uncertainty_index	-0.08	0.33	0.038	14.1%
Control(s)	MARKETCAP	0.12	0.01	0.083	30.5%
Control(s)	Net Margin	0.01	0.76	0.001	0.5%
			Total	0.273	100.0%
			Adj. R-Sq.	0.263	

OLS Regression Results

Dep. Variable:	Nifty_50 share_price_%_4Q	R-squared:	0.268
Model:	OLS	Adj. R-squared:	0.263
Method:	Least Squares	F-statistic:	25.64
Date:	Mon, 25 Mar 2024	Prob (F-statistic):	3.84e-12
Time:	04:26:16	Log-Likelihood:	-361.68
No. Observations:	705	AIC:	735.4
Df Residuals:	699	BIC:	762.7
Df Model:	5		
Covariance Type:	cluster		

	coef	std err	z	P> z	[0.025
const	1.621e-18	1.42e-17	0.115	0.909	-2.61e-17
ct_positive_polarity	0.1376	0.047	2.903	0.004	0.045
uncertainty_index	-0.0431	0.083	-0.519	0.604	-0.206
ct_positive_polarity-X-uncertainty_index	-0.0813	0.083	-0.976	0.329	-0.245
MARKETCAP	0.1218	0.043	2.802	0.005	0.037
Net Margin	0.0067	0.022	0.310	0.757	-0.036

Omnibus:	250.845	Durbin-Watson:	0.950
Prob(Omnibus):	0.000	Jarque-Bera (JB):	1279.412
Skew:	1.528	Prob(JB):	1.51e-278
Kurtosis:	8.849	Cond. No.	11.7

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Outcome	Nifty_50 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	er_positive_polarity	0.28	0.00	0.145	43.9%
Predictor(s)	uncertainty_index	0.11	0.15	0.089	26.9%
Interaction(s)	er-X-uncertainty_index	-0.21	0.01	0.041	12.4%
Control(s)	MARKETCAP	0.08	0.01	0.054	16.5%
Control(s)	Net Margin	0.01	0.59	0.001	0.4%
			Total	0.331	100.0%
			Adj. R-Sq.	0.302	

OLS Regression Results

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Dep. Variable:    Nifty_50 share_price_%_4Q    R-squared:                0.306
Model:            OLS                          Adj. R-squared:            0.302
Method:           Least Squares                F-statistic:               25.92
Date:             Mon, 25 Mar 2024              Prob (F-statistic):       1.84e-12
Time:             05:23:51                     Log-Likelihood:           -344.36
No. Observations: 860                         AIC:                      700.7
Df Residuals:     854                         BIC:                      729.3
Df Model:         5
Covariance Type:  cluster
=====

```

	coef	std err	z	P> z	[0.025
const	7.047e-18	1.52e-17	0.464	0.643	-2.27e-17
er_positive_polarity	0.2816	0.058	4.844	0.000	0.168
uncertainty_index	0.1098	0.077	1.426	0.154	-0.041
er_positive_polarity-X-uncertainty_index	-0.2136	0.085	-2.517	0.012	-0.380
MARKETCAP	0.0814	0.029	2.826	0.005	0.025
Net Margin	0.0095	0.018	0.538	0.590	-0.025
=====					
Omnibus:	327.213	Durbin-Watson:		1.006	
Prob(Omnibus):	0.000	Jarque-Bera (JB):		2050.119	
Skew:	1.597	Prob(JB):		0.00	
Kurtosis:	9.856	Cond. No.		11.3	
=====					

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Informational Value in the context of P/B Ratios

Dow 30:

Outcome	Dow_30 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	ct_positive_polarity	0.06	0.00	0.078	62.1%
Predictor(s)	PBV	0.00	0.93	0.001	0.4%
Interaction(s)	ct_positive_polarity-X-PBV	-0.00	0.95	0.001	0.4%
Control(s)	MARKETCAP	0.04	0.01	0.033	26.0%
Control(s)	Net Margin	0.02	0.00	0.014	11.0%
			Total	0.125	100.0%
			Adj. R-Sq.	0.118	

OLS Regression Results						
Dep. Variable:	Dow_30 share_price_%_4Q	R-squared:	0.126			
Model:	OLS	Adj. R-squared:	0.118			
Method:	Least Squares	F-statistic:	378.5			
Date:	Mon, 25 Mar 2024	Prob (F-statistic):	1.80e-25			
Time:	18:38:03	Log-Likelihood:	83.587			
No. Observations:	553	AIC:	-155.2			
Df Residuals:	547	BIC:	-129.3			
Df Model:	5					
Covariance Type:	cluster					
	coef	std err	z	P> z	[0.025	0.975]
const	-6.219e-19	9.76e-18	-0.064	0.949	-1.98e-17	1.85e-17
ct_positive_polarity	0.0619	0.014	4.306	0.000	0.034	0.090
PBV	0.0041	0.046	0.090	0.929	-0.086	0.095
ct_positive_polarity-X-PBV	-0.0033	0.048	-0.068	0.946	-0.097	0.091
MARKETCAP	0.0404	0.015	2.694	0.007	0.011	0.070
Net Margin	0.0236	0.001	27.158	0.000	0.022	0.025
Omnibus:	28.932	Durbin-Watson:	1.103			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	49.366			
Skew:	0.368	Prob(JB):	1.91e-11			
Kurtosis:	4.265	Cond. No.	16.6			

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Outcome	Dow_30 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	er_positive_polarity	0.07	0.00	0.111	72.2%
Predictor(s)	PBV	-0.06	0.08	0.002	1.0%
Interaction(s)	er_positive_polarity-X-PBV	0.07	0.05	0.002	1.2%
Control(s)	MARKETCAP	0.03	0.01	0.025	16.2%
Control(s)	Net Margin	0.02	0.00	0.014	9.4%
			Total	0.154	100.0%
			Adj. R-Sq.	0.145	

OLS Regression Results					
Dep. Variable:	Dow_30 share_price_%_4Q	R-squared:	0.154		
Model:	OLS	Adj. R-squared:	0.145		
Method:	Least Squares	F-statistic:	155.1		
Date:	Tue, 26 Mar 2024	Prob (F-statistic):	5.32e-20		
Time:	06:15:59	Log-Likelihood:	79.740		
No. Observations:	496	AIC:	-147.5		
Df Residuals:	490	BIC:	-122.2		
Df Model:	5				
Covariance Type:	cluster				
	coef	std err	z	P> z	[0.025
const	1.084e-19	5.53e-18	0.020	0.984	-1.07e-17
er_positive_polarity	0.0732	0.017	4.209	0.000	0.039
PBV	-0.0643	0.037	-1.742	0.082	-0.137
er_positive_polarity-X-PBV	0.0650	0.033	1.974	0.048	0.000
MARKETCAP	0.0342	0.012	2.750	0.006	0.010
Net Margin	0.0237	0.002	14.313	0.000	0.020
Omnibus:	24.001	Durbin-Watson:	1.172		
Prob(Omnibus):	0.000	Jarque-Bera (JB):	43.238		
Skew:	0.315	Prob(JB):	4.08e-10		
Kurtosis:	4.302	Cond. No.	25.6		
Notes:					
[1] Standard Errors are robust to cluster correlation (cluster)					

Nifty 50:

Outcome	Nifty_50 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	ct_positive_polarity	0.17	0.00	0.09	43.9%
Predictor(s)	PBV	0.21	0.01	0.015	7.0%
Interaction(s)	ct_positive_polarity-X-PBV	-0.18	0.01	0.014	6.7%
Control(s)	MARKETCAP	0.13	0.00	0.086	41.7%
Control(s)	Net Margin	0.00	0.90	0.001	0.7%
			Total	0.206	100.0%
			Adj. R-Sq.	0.219	

OLS Regression Results						
Dep. Variable:	Nifty_50 share_price_%_4Q	R-squared:	0.224			
Model:	OLS	Adj. R-squared:	0.219			
Method:	Least Squares	F-statistic:	20.77			
Date:	Mon, 25 Mar 2024	Prob (F-statistic):	1.06e-10			
Time:	18:27:47	Log-Likelihood:	-382.33			
No. Observations:	705	AIC:	776.7			
Df Residuals:	699	BIC:	804.0			
Df Model:	5					
Covariance Type:	cluster					
	coef	std err	z	P> z	[0.025	0.975]
const	1.621e-18	1.51e-17	0.108	0.914	-2.79e-17	3.12e-17
ct_positive_polarity	0.1684	0.025	6.691	0.000	0.119	0.218
PBV	0.2051	0.080	2.566	0.010	0.048	0.362
ct_positive_polarity-X-PBV	-0.1822	0.070	-2.599	0.009	-0.320	-0.045
MARKETCAP	0.1294	0.045	2.870	0.004	0.041	0.218
Net Margin	0.0027	0.022	0.120	0.904	-0.041	0.046
Omnibus:	265.940	Durbin-Watson:	0.977			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	1437.035			
Skew:	1.613	Prob(JB):	0.00			
Kurtosis:	9.206	Cond. No.	6.88			
Notes:						
[1] Standard Errors are robust to cluster correlation (cluster)						

Outcome	Nifty_50 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	er_positive_polarity	0.19	0.00	0.171	67.2%
Predictor(s)	PBV	0.11	0.09	0.009	3.5%
Interaction(s)	er_positive_polarity-X-PBV	-0.11	0.10	0.013	5.0%
Control(s)	MARKETCAP	0.09	0.01	0.061	23.8%
Control(s)	Net Margin	0.00	0.77	0.001	0.5%
			Total	0.255	100.0%
			Adj. R-Sq.	0.252	

OLS Regression Results						
Dep. Variable:	Nifty_50 share_price_%_4Q	R-squared:	0.256			
Model:	OLS	Adj. R-squared:	0.252			
Method:	Least Squares	F-statistic:	25.08			
Date:	Mon, 25 Mar 2024	Prob (F-statistic):	3.20e-12			
Time:	18:34:19	Log-Likelihood:	-374.06			
No. Observations:	860	AIC:	760.1			
Df Residuals:	854	BIC:	788.7			
Df Model:	5					
Covariance Type:	cluster					
	coef	std err	z	P> z	[0.025	0.975]
const	7.047e-18	1.17e-17	0.602	0.547	-1.59e-17	3e-17
er_positive_polarity	0.1919	0.024	7.926	0.000	0.144	0.239
PBV	0.1115	0.066	1.690	0.091	-0.018	0.241
er_positive_polarity-X-PBV	-0.1066	0.064	-1.657	0.097	-0.233	0.019
MARKETCAP	0.0876	0.031	2.833	0.005	0.027	0.148
Net Margin	0.0049	0.017	0.294	0.769	-0.028	0.038
Omnibus:	347.014	Durbin-Watson:	1.046			
Prob(Omnibus):	0.000	Jarque-Bera (JB):	2323.049			
Skew:	1.688	Prob(JB):	0.00			
Kurtosis:	10.309	Cond. No.	9.48			
Notes:						
[1] Standard Errors are robust to cluster correlation (cluster)						

Informational Value in the Context of Information Asymmetry implied in Related Party Revenue

This was not tested for Dow 30 companies due to paucity of data at the time of this analysis.

Nifty 50:

Outcome	Nifty_50 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	ct_positive_polarity	0.13	0.00	0.088	42.7%
Predictor(s)	rpt_rev_pct	-0.01	0.81	0.004	2.1%
Interaction(s)	ct-X-rpt_rev_pct	0.02	0.60	0.012	5.7%
Control(s)	MARKETCAP	0.14	0.00	0.1	48.6%
Control(s)	Net Margin	0.01	0.70	0.002	0.9%
			Total	0.206	100.0%
			Adj. R-Sq.	0.199	

OLS Regression Results

Dep. Variable:	Nifty_50 share_price_%_4Q	R-squared:	0.205
Model:	OLS	Adj. R-squared:	0.199
Method:	Least Squares	F-statistic:	13.76
Date:	Mon, 25 Mar 2024	Prob (F-statistic):	3.66e-08
Time:	07:18:40	Log-Likelihood:	-391.05
No. Observations:	705	AIC:	794.1
Df Residuals:	699	BIC:	821.5
Df Model:	5		
Covariance Type:	cluster		

	coef	std err	z	P> z	[0.025
const	1.621e-18	1.16e-17	0.140	0.889	-2.11e-17
ct_positive_polarity	0.1267	0.023	5.475	0.000	0.081
rpt_rev_pct	-0.0100	0.041	-0.243	0.808	-0.091
ct_positive_polarity-X-rpt_rev_pct	0.0206	0.039	0.522	0.601	-0.057
MARKETCAP	0.1364	0.047	2.898	0.004	0.044
Net Margin	0.0086	0.022	0.383	0.701	-0.035

Omnibus:	267.312	Durbin-Watson:	0.970
Prob(Omnibus):	0.000	Jarque-Bera (JB):	1445.010
Skew:	1.622	Prob(JB):	0.00
Kurtosis:	9.218	Cond. No.	3.46

Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

Outcome	Nifty_50 share_price_%_4Q				
Variable Type	Variable	Coefficient	P-value	Variance Explained	% Explained Variance
Predictor(s)	er_positive_polarity	0.18	0.00	0.167	64.7%
Predictor(s)	rpt_rev_pct	-0.00	0.96	0.01	3.9%
Interaction(s)	er-X-rpt_rev_pct	-0.01	0.64	0.017	6.5%
Control(s)	MARKETCAP	0.09	0.00	0.063	24.5%
Control(s)	Net Margin	0.01	0.73	0.001	0.5%
			Total	0.258	100.0%
			Adj. R-Sq.	0.249	

OLS Regression Results

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Dep. Variable:    Nifty_50 share_price_%_4Q    R-squared:        0.254
Model:            OLS                          Adj. R-squared:    0.249
Method:           Least Squares                F-statistic:       21.80
Date:             Mon, 25 Mar 2024              Prob (F-statistic): 3.16e-11
Time:             07:23:50                     Log-Likelihood:    -375.46
No. Observations: 860                          AIC:               762.9
Df Residuals:     854                          BIC:               791.5
Df Model:         5
Covariance Type:  cluster
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               coef      std err          z      P>|z|      [0.025
-----+-----+-----+-----+-----+-----
const                7.047e-18    1.1e-17      0.643      0.520    -1.44e-17
er_positive_polarity    0.1815      0.023      7.996      0.000      0.137
rpt_rev_pct           -0.0012      0.023     -0.051      0.960     -0.046
er_positive_polarity-X-rpt_rev_pct -0.0127      0.027     -0.474      0.636     -0.065
MARKETCAP              0.0916      0.030      3.007      0.003      0.032
Net Margin             0.0060      0.017      0.349      0.727     -0.028
=====
Omnibus:            352.249    Durbin-Watson:      1.038
Prob(Omnibus):      0.000    Jarque-Bera (JB):    2384.340
Skew:               1.715    Prob(JB):            0.00
Kurtosis:           10.401    Cond. No.            3.27
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Notes:

[1] Standard Errors are robust to cluster correlation (cluster)

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