FIN 422 - Student Managed Investment Fund
Group AI Assignment 2
Earnings Calls Analysis

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This AI assignment must be done as a group, and all group members (unless there are unusual circumstances) will receive the same grade. The assignment must be uploaded to the D2L folder by the due date listed on the course schedule. Use the following title: "FIN 422 AI Ass. 2, Group X". Upload ONLY ONE assignment per group. All prompts (including the names of the AI models used) and (unedited) completions should be included in an appendix.

AI Assignment 2: Earnings Calls Analysis
Assignment Overview
In this assignment, you will conduct a detailed analysis of quarterly earnings calls for your firm using artificial intelligence tools to enhance your understanding of management communication, financial performance, and strategic direction. (Earnings calls are quarterly conference calls where a public company's executives discuss their financial results and business performance with investors, analysts, and the media.)

1. Data Collection and Preparation
1. Obtain transcripts from the last four quarterly earnings calls for your firm from Capital IQ
2. Gather corresponding financial statements and stock price data
3. Upload these as PDF files

2. AI Analysis
a) Sentiment Analysis (10 points)
- Use AI tools to analyze management tone and sentiment throughout each call
- Compare sentiment across quarters and identify significant shifts
- Analyze sentiment specifically during Q&A sessions versus prepared remarks

b) Topic Modeling
- Identify key themes and topics discussed across earnings calls
- Track how topics evolve over time
- Analyze which topics correlate with positive or negative market reactions

c) Key Metrics Extraction
- Use AI to extract and tabulate all mentioned financial metrics
- Compare AI-extracted metrics with official financial statements
- Identify any discrepancies or areas needing human verification

3. Comparative Analysis
- Compare AI-generated insights with traditional financial analysis methods
- Analyze how management's communication style correlates with financial performance
- Evaluate the effectiveness of management in communicating company strategy
- competitors

4. Investment Recommendation
- Develop an investment analysis incorporating AI-derived insights
- Identify key risks and catalysts highlighted through the AI analysis
- Present evidence-based arguments supporting your recommendation

5. Reflection and Limitations
- Discuss the strengths and limitations of AI-based analysis
- Identify areas where human judgment was crucial
- Suggest improvements for future earnings call analyses

Submission Requirements
Submit a comprehensive written report that includes:
- Executive summary
- Detailed analysis following the components above
- Supporting charts, graphs, and visualizations
- Complete methodology section describing AI tools used
- Investment recommendation with supporting evidence