

FIN 470 – Financial Analysis in Excel Group Al Assignment 1 Financial Statements and Analysis Tools

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 470 AI Ass. 1, 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 1: Financial Statements and Analysis Tools Assignment Overview

In this assignment, you will conduct a comprehensive financial analysis of your group firm using tools. This hands-on project will develop your skills in financial analysis while introducing you to Al-assisted financial research and analysis methods.

1. Data Collection and Organization

- 1. Download your firm's financial statements for the past three fiscal years from the SEC's <u>Edgar</u> as an Excel spreadsheet.
- 2. Separate and save the relevant worksheets as separate PDF files.

2. Traditional Financial Analysis

Use AI to calculate the following ratios:

- 1. Liquidity Ratios:
 - Current Ratio
 - Quick Ratio
 - Cash Ratio
- 2. Profitability Ratios:
 - Gross Margin
 - Operating Margin
 - Net Profit Margin
 - Return on Assets (ROA)
 - Return on Equity (ROE)
- 3. Efficiency Ratios:
 - Asset Turnover
 - Inventory Turnover

- Receivables Turnover
- 4. Solvency Ratios:
 - Debt-to-Equity Ratio
 - Interest Coverage Ratio
 - Debt-to-Assets Ratio

3. Extended Analysis

- 1. Trend Analysis
 - Use AI to analyze trends in the calculated ratios
 - Ask AI to identify potential reasons for significant changes
 - Compare AI insights with your own analysis
- 2. Competitive Analysis
 - Prompt AI to compare your firm's ratios with three key competitors
 - Ask AI to explain industry-specific factors affecting the ratios
 - Evaluate the AI's analysis against industry reports
- 3. Risk Assessment
 - Use AI to identify potential financial risks
 - Ask AI to suggest risk mitigation strategies
 - Analyze the quality of AI-generated risk insights

Part 4: Final Report

- 1. Executive Summary
 - Overview of key findings
 - Summary of ratio analysis
 - Summary of extended analysis
 - Summary of the accuracy of AI results
 - Recommendations based on combined analysis
- 2. Visualization
 - Create, using AI, at least three different types of charts/graphs
 - Include trend analysis visualizations
- 3. Documentation
 - List of AI prompts used and their effectiveness
 - Methodology explanation
 - Limitations and assumptions
 - References and data sources
- 4. Submission Requirements
 - Submit the final report in D2L as a Word document.

Notes:

- 1. Start with organizing your data meticulously
- 2. Document all AI prompts and responses

- 3. Verify AI-generated insights with traditional sources
- 4. Focus on clear, actionable insights
- Use appropriate visualizations for different types of data
 Maintain professional formatting throughout

Academic Integrity Guidelines

- Clearly cite all data sourcesDocument all AI tools and prompts used
- Distinguish between Al-generated insights and personal analysis
 Follow course guidelines for Al use in assignments