

Financial Report Analysis Assistant

This PowerPoint presentation explains the objective of the project which is to streamline the analysis of financial reports coupled with an AI-based solution that extracts data and answers questions from financial PDFs. It also describes the features of the project including automated PDF table extraction, interactive Q&A, data visualization, and a user-friendly interface. Additionally, the presentation highlights the SWOT analysis, the use of the project, and future directions for enhancing the AI model and data visualization capabilities.



Team Members

- Osama Ghaffar
- Siddharth Agrawal
- Jean-Baptiste
- Homan Mirgolbabaee
- Dhawal



Introduction

Platform: Streamlit application integrated with OpenAI's GPT model.

Objective: Streamline the analysis of financial reports.

Solution: Use AI to extract data and answer questions from financial PDFs.





- Manual analysis of financial reports is timeconsuming and error-prone.
- Difficulty in extracting and interpreting financial data from PDFs.
- Lack of an interactive tool for querying financial data in realtime.





Features of the Project -Automated PDF Table Extraction

• Extract tables from PDF reports using pdfplumber.





Interactive Q&A

 Ask questions about financial data and get Alpowered responses.

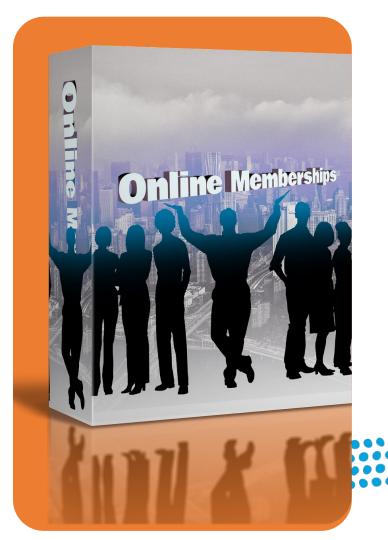




Data Visualization

• Visualize extracted financial metrics over multiple years.





User-friendly Interface

 Simple and intuitive Streamlit interface for uploading files and interacting with the data.

Project Workflow

Upload PDF: Users upload a PDF financial report.

Extract Tables: Tables are extracted and converted into a DataFrame.

Ask Questions: Users ask questions about the financial data.

Get Answers: Al provides detailed answers based on the data.

Visualize Data: Extracted financial data is visualized for better understanding.

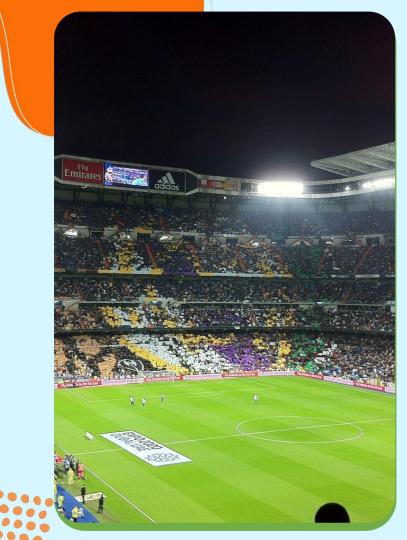
SWOT Analysis

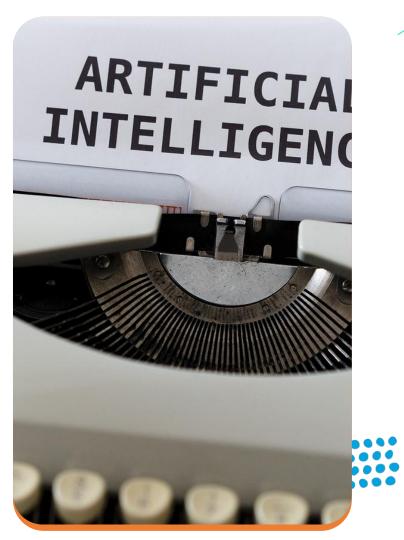
- Strengths:
- Automated data extraction reduces manual effort.
- - Al-powered insights enhance data interpretation.
- Real-time interaction with financial data.
- Weaknesses:
- - Dependence on the accuracy of AI model responses.
- - Limited to the financial data format in PDFs.
- Opportunities:
- - Expansion to support other types of financial documents.
- - Integration with more advanced AI models.
- - Collaboration with financial institutions for tailored solutions.
- Threats:
- Data privacy and security concerns.
- - Rapid advancements in competing technologies.



Use of the Project - Financial Analysts

 Quickly analyze financial reports and extract key metrics.





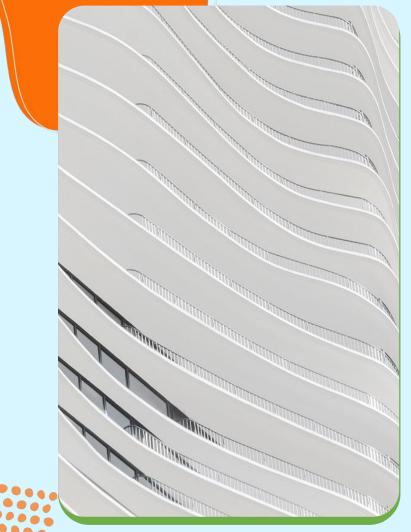
Use of the Project - Business Managers

 Make informed decisions based on realtime financial insights.



Use of the Project - Investors

Evaluate company performance through automated data extraction and analysis.





Use of the Project - Educational Purposes

 Teach students how to analyze financial data using modern tools and technologies.



Conclusion

- Future Directions: Enhance the AI model, support more document formats, and improve data visualization capabilities.
- Innovation: Combining AI with financial data analysis for better efficiency and accuracy.

Impact: Simplifies and accelerates the process of financial data analysis.

Thank you for your time 😊