



DEMONSTRATION PLAN

Abstract

Demonstration Plan for ASR Nederland Analyst Consensus Prediction Tool

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Overview of the project

Purpose: We want to use financial data to predict the analyst consensus for asr Nederland to gain a direction for investing

Technology Stack: The project utilizes Python with libraries such as Matplotlib, Seaborn, Pandas, NumPy, etc.

Demonstration objectives

Main Goals: Predict future analyst consensus for asr nederland

Target Audience: The primary audience for this demonstration is our stakeholder.

Preparations for the demonstration

Setup Requirements: The stakeholder needs time to take in the frontend and look through the options. Afterwards we can explain the model to them using our notebook. In the future we will make a separate document, due to time constraints that is not possible at this moment.

When the explanation is finished the stakeholder may use the front end to get a prediction.

Walkthrough of the application

Introduction to the Interface

When the stakeholder opens the application, they are greeted with a straightforward interface consisting of multiple input fields. Below is a screenshot of the application with the prediction and filled out fields.

Predict Analyst Consensus

Return On Equity (%):

OCI:

Combined Ratio P&C and Disability (%):

Outstanding Shares (Weighted Average):

Open:

Adj Close:

Volume:

Prediction Result

Prediction: Predicted Analyst Consensus: Buy

Prediction Process

- **Making a Prediction:** After filling in the input fields, users click the 'Predict' button. This action triggers the AI model to process the input data.
- **Output Display:** Once the 'Predict' button is pressed, the application processes the inputs through the AI model. The model then generates predictions the analyst consensus
- **Result Interpretation:** The output appears on the screen, showing the predicted analyst consensus

Evaluation and Question and Answer Session

Evaluation Process

Model Performance Review: Begin the evaluation by summarizing the performance metrics of the AI model, such as mean squared error. Explain how these metrics translate into the effectiveness of the model in predicting the analyst consensus

Discussion of Results: Discuss the implications of the model's predictions. This could include how accurate the predictions were compared or potential bias in the model

Question and Answer Session

Collecting Questions:

Inform the stakeholder that they can ask questions regarding the model, its implementation, or its results. Encourage them to think about questions during the demonstration so that they can be addressed in this session.

Answering Questions:

Allocate time to answer the questions collected. Be prepared to address technical aspects of the model, data handling, prediction accuracy, and potential real-world applications.

Documentation of Q&A:

Record the questions and your answers. This documentation will be useful for refining the model, preparing for future demonstrations, and enhancing understanding of the audience's concerns and interests.

Feedback Integration:

After the demonstration, review the questions and answers in the last part of phase 4, to identify common themes or concerns. Use this feedback to make improvements to the model or to plan for additional features or updates in future iterations.

Q&A iteration zero

No Q&A done for iteration zero. Talked with stakeholder and showed him current notebook. His comment is: It looks complex and after your explanation from what you did i can see that the data from asr is important. i am curious for the front end maybe then it will become clearer

Q&A iteration 1

The answers are paraphrased

From stakeholder to me

You talked about bias, what did you mean with this again?

The data I can use is very small because I needed to get everything together into one dataset. This means that in the data I have used the analyst consensus always says that you should buy or hold. This means that the model does not know with what data it should sell.

How confident are you in the predictions I am seeing on the website?

I am absolutely not sure about the current predictions due to the bias I talked about and the small dataset

From me to stakeholder

Do you understand from my explanation how the model works?

Yes and seeing the correlation graph between everything in the data also helped. I also like the graph actual against the predicted value

What do you think of paid data sources?

I understand that it would make everything easier. If I knew you would have the time to keep working then it would depend in the price but I know that soon you will not have time left for this. And it would also depend on your opinion.

What do you think of the front end?

It looks very basic but It seems to do what it should do. If you would continue then I of course would like something better

Did you understand the conclusion I wrote?

Yes but I am still not sure what the new standard exactly means but I do understand why it is difficult to get the right data