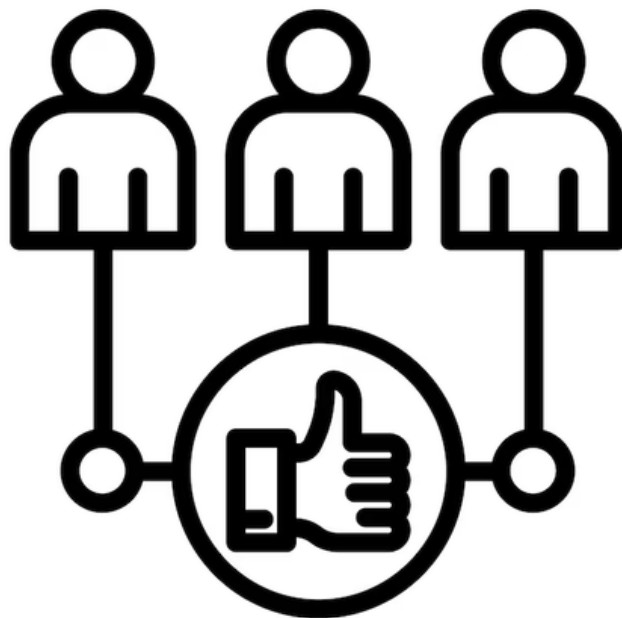# STAKEHOLDER DELIVERY REVIEW

Boyan Apostolov

28.04.2025

TABLE OF CONTENTS:

1. Demonstration Plan and Description

2. Feedback Report (in APA style)

3. Conclusion

1. Demonstration Plan and Description

1.1 Purpose

The **goal** of the demonstration was to **present** the Flight Prediction Model developed during the semester to a **relevant stakeholder**. The purpose was to **validate** the model's practical usability and **understandability** by **non-AI users.**

1.2 Audience

- **Stakeholder:** Kalina Bacheva
- **Profile:** Frequent traveler, student, target user for cheap flight prediction models

1.3 Demonstration script

The demonstration was conducted on **April 25, 2025**. It was structured as follows:

- **Introduction**: Briefly explained the project's goal — **predicting the optimal time to buy a flight ticket**.
- **Model Walkthrough**: Presented the **dataset features** (departure/arrival airports, days before departure, holiaay indicators).
- **User Interaction**:
- The stakeholder entered a **departure airport**, **arrival airport**, and a **departure date**.

- The model **processed the input** and **predicted** that the cheapest buying day would be **45 days before departure.**
- **Explainability**: Explained **how the model makes decisions** based on data patterns and correlations.
- **Monitoring**:
  - Stakeholder's **reactions** were **noted**.
  - A **Google Form questionnaire** was completed **after** the **demonstration**.
- **Screenshots** were **taken** during the session (see end).

1.4 Inferencing Prototype

The model was accessible though a simple **Web Page**, where the stakeholder could **input** variables and **see** the predicted **output**

1.5 Data Collection Method

Stakeholder feedback was collected via a structured **Google Form**, containing both **closed** and **open questions**

2. Feedback Report (*in APA style*)

2.1 Stakeholder Identity

Kalina Bacheva is a frequent traveler who **regularly searches** for affordable flights across Europe. She represents the intended **end-user profile**: individuals looking to **optimize their flight booking timing.**

2.2 Method Of feedback Collection

Feedback was gathered during and after the demonstration - **Google Form survey** containing the following types of questions:

- **Scale ratings** on model **usability** and **clarity**.
- O**pen-ended questions** about desired **features** and **understanding of the model**

2.3 Summary of Stakeholder Feedback

Quantitative Results:

- **Ease of use**: 5/5
- **Understanding of model output**: 4/5
- **Interest in using the model in the future**: 4/5

Text Results:

- "*The model is easy to use and intuitive. I appreciated seeing immediate predictions after inputting my travel plans*"
- "*An improvement would be for the page to calculate the exact day instead of saying (60 days before)*"

2.4 Transparency and Explainable AI

During the demonstration, **explainable AI principles** were emphasized:

- The **stakeholder correctly repeated back** the logic behind the model **after it was explained**.
- <u>Example</u>: She **described** the **prediction process** as "*analyzing previous flight price trends and holidays to find the day with the historically lowest prices* using *tree models or something*"

This **confirms** that the **model's inner workings** were **sufficiently transparent** and **understandable**

2.5 Technological Impact Assessment

Based on the **TIC-tool categories** relevant to this project:
- **Economic Impact**:
  - Stakeholder noted that the **model could help users save significant amounts of money** by identifying **optimal buying times**.
- **Societal Impact**:
  - Stakeholder mentioned that **making such a tool** public could make travel **more affordable** for a broader range of people, **promoting mobility**.

Appendix A: Demonstration Pictures

Appendix B: Feedback Questionnaire (Google Form)
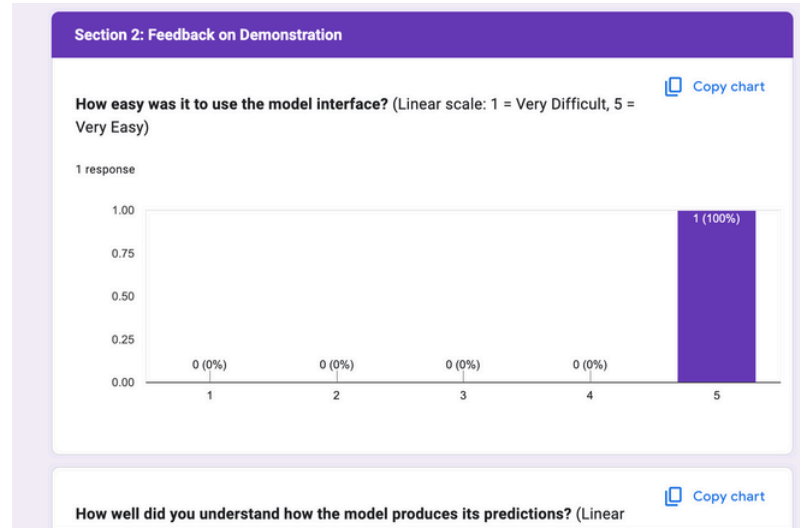
3. Conclusion

The delivery phase **confirmed** that the **model** is **understandable** and **useful** to the **target audience**. The stakeholder **found the interaction intuitive**, **understood the methodology**, and gave **constructive feedback** for future **improvements**.

Potential positive impacts on the **economic** and **societal** levels were **recognized**.

This satisfies the **requirements** for **learning outcomes 3 (Explainable AI)** and **4 (Professional Standard)** according to the **IBM Foundational Methodology and APA standards**