



[◀ Return to "AI Product Manager ND" in the classroom](#)

Create an AI Product Business Proposal

REVIEW

HISTORY

Meets Specifications

Hello,

Congratulations! You made it. Your project meets specifications and you are good to start competing in the new AI-powered world.

Please go through this review and consider handling any suggestions/recommendations, especially if you intend adding this project to your portfolio.

It was a pleasure reviewing your work.

Best wishes!

Files Submitted

The submission includes a Proposal file (a pdf) and images of the user interfaces of the proposed product.

Awesome

This submission includes the proposal file in PDF format as well as images of the main user interface.

Every section of the proposal file has been completed.

Good job!

All sections of the proposal file have been completed.

Business Goal

The proposal includes a short description of the problem the product seeks to address. The problem is described in business terms; for example, the problem might be the need to increase customer satisfaction or drive repeat customership. What is the business benefit of your proposed solution?

The proposal includes a short description of the problem the product seeks to address. The problem has been described in business terms, and the proposal includes the benefits of the proposed solution. The AQI model will be used to predict "periods of Lounge under-utilization, and

constantly improving those predictions based on actual passenger traffic."

Project Overview and Goal

What is the industry problem you are trying to solve? Why use ML/AI in solving this task? Be as specific as you can when describing how ML/AI can provide value. For example, if you're labeling images, how will this help the business?

General background: This is written from the perspective of the industry I currently work in – which is a company developing Software for Airlines. Airlines often request us to propose solutions to specific situations they are trying to address.

A large airline operates many flights out of London Heathrow and has invested a lot of money in offering excellent Lounge facilities, to passengers who fly in Business or First class.

The Lounges are open from 05:00 till 22:00 daily, and from the usage data, the airline can see that there are periods of time during which the Lounges are under-utilized.

The airline would like to find a way to monetize this unused Lounge capacity by selling discounted Lounge access to passengers travelling in Economy class, but in a way that is well thought out, and controlled so that it doesn't result in overcrowding in the Lounge. The system has to adapt to changing passenger traffic.

The goal of the project is to investigate an ML/AI solution for predicting **periods of Lounge under-utilization, and constantly improving those predictions based on actual passenger traffic.**

The predictions of the model can then be incorporated in the passenger check-in flow of the airline, so that an appropriate number of Economy passengers who are likely to be interested in purchasing discounted Lounge access are sent a real time offer soon as they check-in.

The proposal contains an argument in favor of the product that derives from impact on revenue, market share, and/or other drivers of *business* success.

Awesome

The proposal contains a strong argument in favor of the product.

Business Case

Why is this an important problem to solve? Make a case for building this product in terms of its impact on recurring revenue, market share, customer happiness and/or other drivers of business success.

Airlines across the world invest a lot of money in building and offering Lounge access to their First and Business class passengers. It is almost an unwritten expectation that Lounge access is included for First and Business class tickets.

However what is also true is that the number of First and Business class tickets sold is a fraction of the Economy class tickets sold. There is growing financial uncertainty in the world with various political events, and this is impacting the premium end of the market more. Lounges stand quite under-utilized at various times during their operating hours, and there is a cost to keep them open.

There is also a growing middle class who won't purchase an expensive Business or First class ticket, but will be more open to purchasing an ancillary service like Lounge access.

The business value for the airline here is on the following aspects, **once the Lounge utilization can be accurately predicted:**

- Sell discounted access to the Lounge to Economy class passengers, and actually monetize the under-utilized capacity of the Lounges
- Expose a new segment – the Economy travellers to the Lounges, thereby hoping to convert a few of them to purchasing a Business class ticket in the future. Or just towards them enjoying their journey more and increasing customer satisfaction – people are more relaxed getting on a flight when they are better rested in a Lounge before boarding
- Have concrete data to see the actual scale of under-utilization, and an ability to vary different parameters, for example the discounted Lounge access price or the opening hours for the Lounge, to see what really strikes a good balance for the airline.

The proposal should describe what the AI/ML model will actually do.

Well done!

| | |
|---|--|
| | Lounges, to see what really drives a good balance for the airline. |
| Application of ML/AI What precise task will you use ML/AI to accomplish? What business outcome or objective will you achieve? | ML/AI needs to be used in generation of models which consume a lot of different data given by the airline and learn the current Lounge utilization. Then when subjected to fresh data, the models need to be able to propose the level of Lounge under-utilization, and the periods of time there is likely to be under-utilization over. |

CONFIDENTIAL & RES

| | |
|--|---|
| | <u>Usage of the predictions from the model:</u> This data can then be integrated in the check-in flow for the Airline, so that soon as a person checks in, the system uses the predictions of the model to know if it should aim to offer the passenger a discounted Lounge access, and for which Lounge. The check-in flow can also be enhanced for Business and First class passengers by suggesting which of the Lounges they could use, when an Airport has more than one Lounge. |
|--|---|

Success Metrics

The success metrics measure how well the product achieves the business goal(s).

Awesome!

This meets specifications. You have provided measurable business metrics.

Suggestion!

Please consider including baselines for each of the business metrics.

Data

The proposal should include an estimate of the size of the data. The proposal should describe the categories/types of data that will be under/overrepresented in the dataset(s).

Awesome
This meets specifications.

The proposal should discuss the following considerations: buying vs. collecting data; privacy/personally identifying information (PII)/sensitivity issues; cost; ongoing data vs. one-off data dump (which would need to be refreshed).

Awesome!

Well done discussing issues that might arise as well as some possible biases.

The proposal should explain the proposed labeling scheme, and why the chosen labeling scheme was chosen. What are the strengths and weaknesses of such a labeling scheme?

Good job describing your preferred labeling scheme.

Model

The proposal should include a description of how the model will be built, and should discuss considerations such as the likelihood an external platform will satisfy the specific use case, the need for certain controls on the model, data sensitivity/security, and willingness to give an external platform access to the data.

Good job!

You described how the model will be built and this is great!

The proposal should describe how ML metrics such as accuracy, precision, recall, F1 score, etc., will be used to assess the performance of the model.

Well done

This meets specifications.

Minimum Viable Product (MVP)

The proposal should include a few sketches of main user interfaces of the product.

Nice work!

The proposal should describe a few prototypical users and their use cases.

This meets specifications.

The proposal should have a general pre-launch and post-launch plan.

Awesome!!

Great plans for pre-launch and post-launch.

Post-MVP-Deployment

The proposal should describe a plan for testing, versioning, and active learning (learning from new data).

Good job!

The proposal should mention a plan for mitigating unwanted biases.

Well done!

The proposal mentions a plan for mitigating unwanted biases.

 [DOWNLOAD PROJECT](#)

RETURN TO PATH
