Good afternoon,

I am here today to present the results of our data analysis project for Tasty Bytes, where we aimed to predict which recipes would lead to high traffic on the website.

As you all know, the company relies on subscriptions, and more traffic means more subscriptions, so predicting which recipes will attract high traffic is crucial for company to success of the business.

Firstly, we collected data on various recipe features, like recipe category, Nutritional values like calories carbohydrate sugar, protein, and number of servings.

we used a machine learning model Linear Support Vector Classifier also called LinearSVC to predict high traffic recipes with an accuracy of 81%. I believe that this is a significant improvement over the previous models of we had tired like Logistic Regression and Decision Tree.

To achieve this, we analysed a range of features like recipe category, number of servings and nutritional values.

Based on our analysis of Tasty Bytes' recipe traffic data, we have developed a LinearSVC model with an accuracy of 81%. This means that our model can predict with 81% certainty which recipes will result in high traffic to the website.

Our confusion matrix shows that out of the 190 recipes analyzed, 58 were correctly classified as low traffic recipes and 95 were correctly classified as high traffic recipes.

Looking at our classification report, we can see that the precision and recall scores for high traffic recipes are relatively high at 0.83 and 0.85, respectively. This indicates that our model is doing a good job of identifying high traffic recipes.

However, our precision and recall scores **for low traffic recipes** are not as strong, the precision and a recall score of High Traffic recipe.

This means that there is room for improvement in identifying low traffic recipes.

In terms of recommendations, we suggest deploying this machine learning model into production as soon as possible to predict the high traffic recipes.

This will help the Product Manager in building their confidence to generate more traffic to the rest of the website. We also recommend that the company collects more data, such as time to make, cost per serving, ingredients, site duration time (how long users were at the recipe page), income links (from what sites users came to the recipe page), and combinations of recipes (like what recipes users visited at the same session with the current recipe).

To conclude, we believe that our project has addressed the company's problem of predicting which recipes will lead to high traffic, and our LinearSVC model achieved an accuracy rate of 81%. We recommend deploying the model in production and collecting more data to improve the accuracy even further.

Overall, we are confident that our model will help Tasty Bytes increase website traffic and subscriptions, ultimately leading to increased revenue for the company.