



Featuring Recipes Manually?

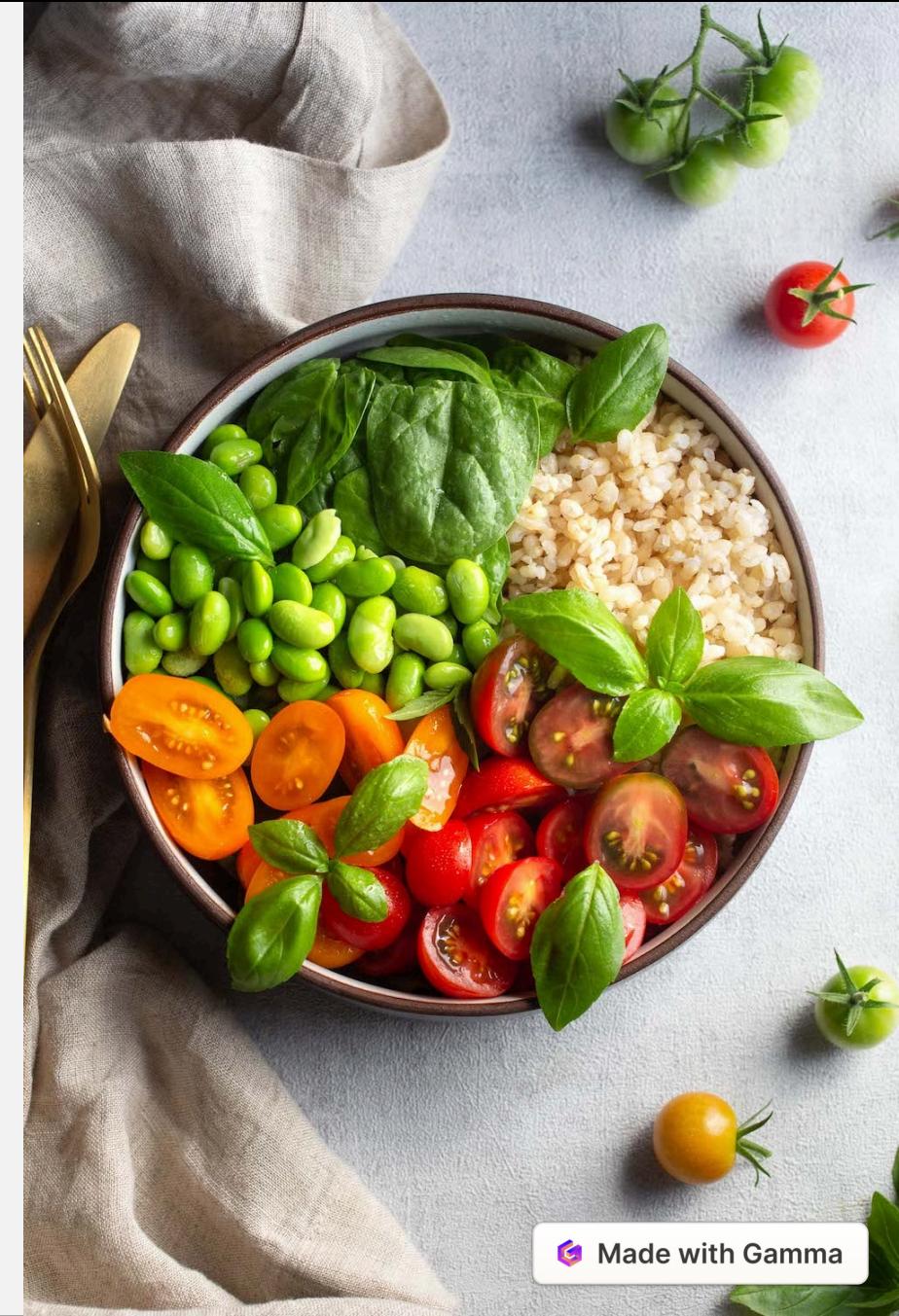
What if there's a better way to predict recipe's that are more likely to get popular on our website?



by Muhammad Salman Rashid

Problem Statement

- **Goal:** Identify and promote recipes that will likely attract high traffic.
- **Challenge:** Currently there is no automated system that picks recipes.
- **Impact:** Improving user engagement, traffic and ultimately subscriptions on our website.



Data Overview

- Description:** Recipe data with features like category, nutritional content, and traffic history.
- Key Data Points:** Recipe number, calories, carbs, sugars, proteins, categories, servings, and traffic (high/low).

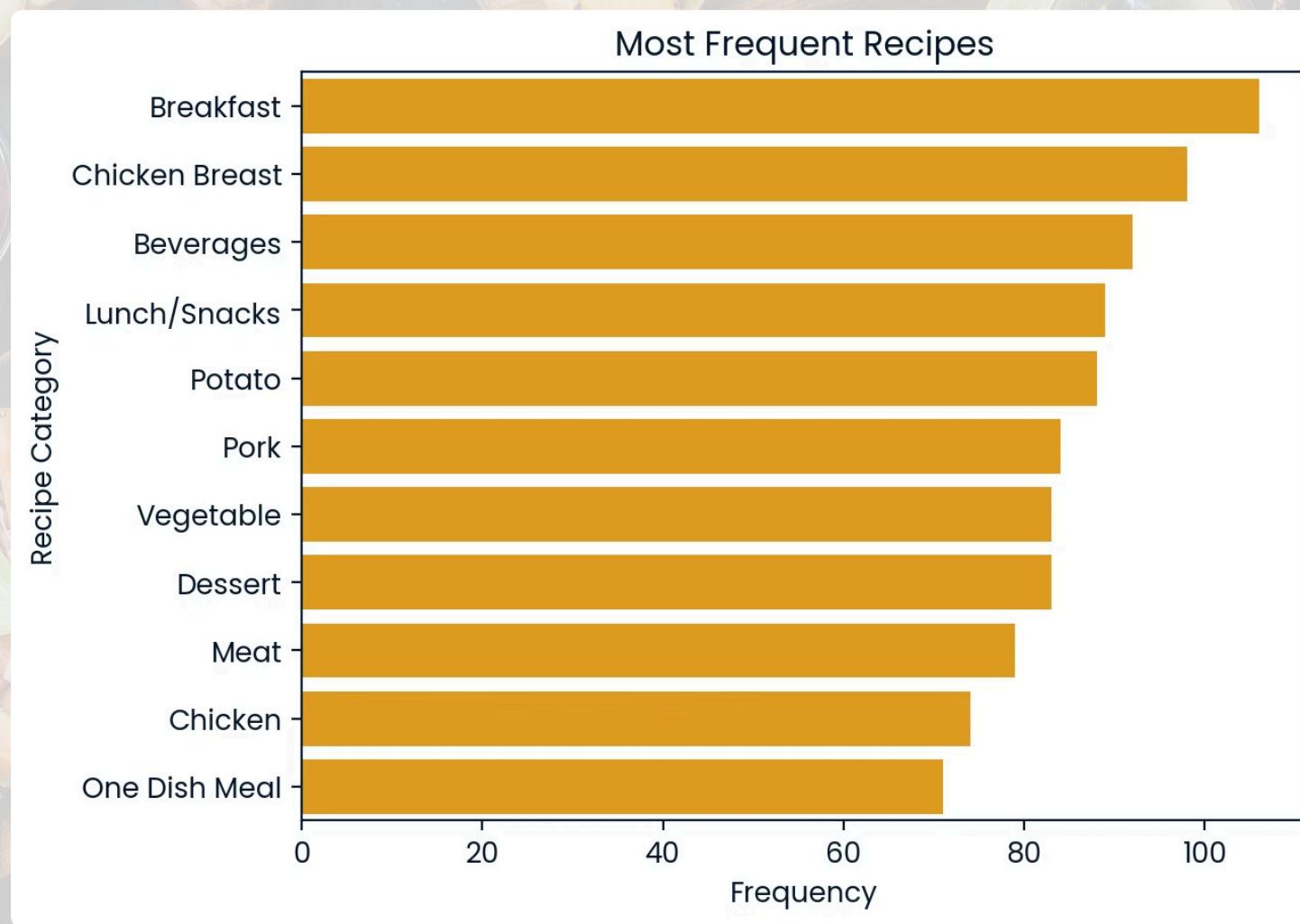
Column Name	Details
recipe	Numeric, unique identifier of recipe
calories	Numeric, number of calories
carbohydrate	Numeric, amount of carbohydrates in grams
sugar	Numeric, amount of sugar in grams
protein	Numeric, amount of protein in grams
category	Character, type of recipe. Recipes are listed in one of ten possible groupings ('Lunch/Snacks', 'Beverages', 'Potato', 'Vegetable', 'Meat', 'Chicken', 'Pork', 'Dessert', 'Breakfast', 'One Dish Meal').
servings	Numeric, number of servings for the recipe
high_traffic	Character, if the traffic to the site was high when this recipe was shown, this is marked with "High".



Key Insights

Are We Cooking Up the Right Recipes?

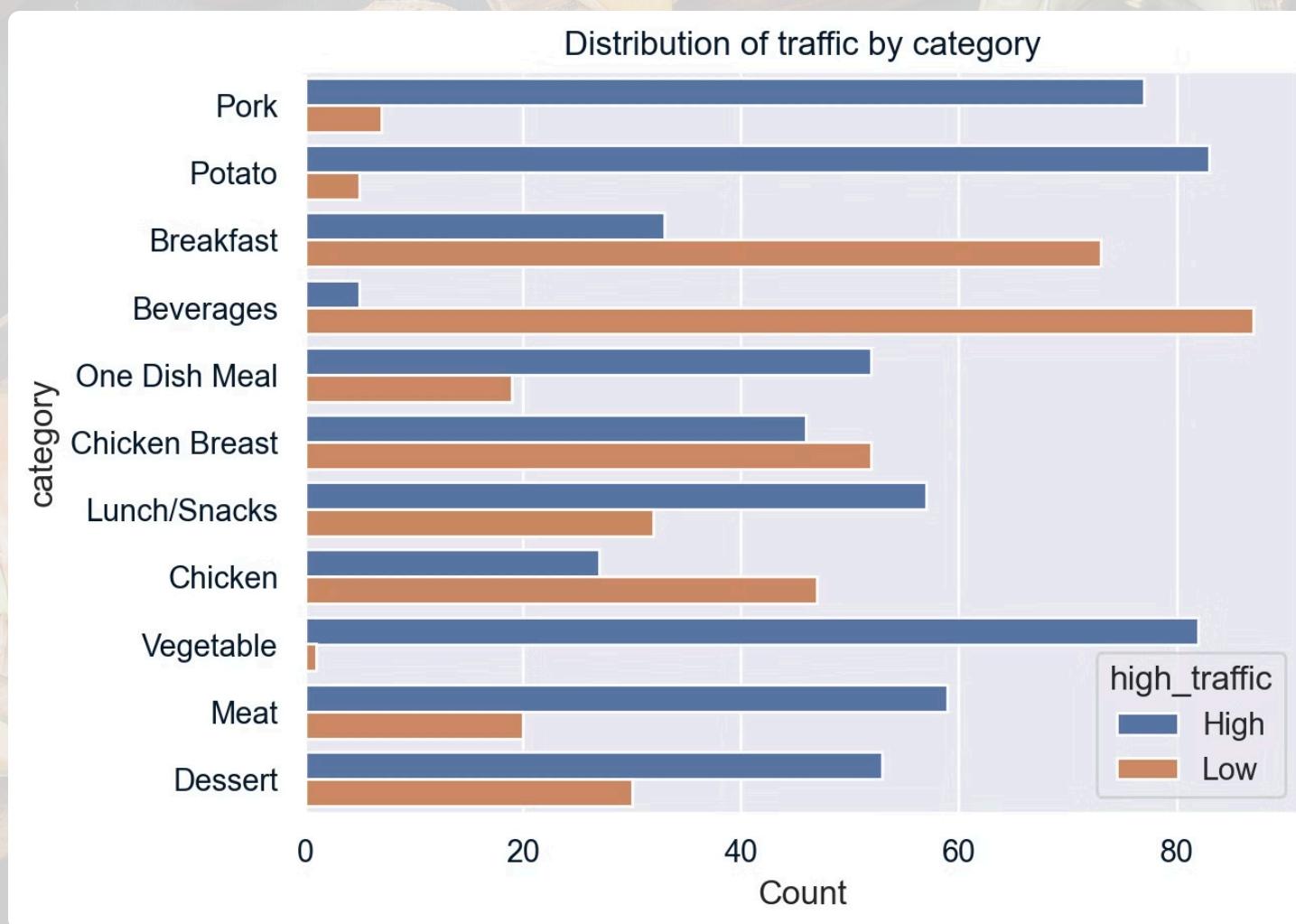
There's a disconnect between the recipes we're promoting and what our visitors are actually interested in.



Key Insights

Visitors love these Recipes!!!

Vegetable, potato, and pork recipes are our most popular, while chicken, breakfast, and beverage recipes attract the least traffic.





Recipe of the Solution

- **Method:** Logistic regression to predict high vs. low traffic recipes.
- **Result:** Achieved 76% accuracy in test predictions.

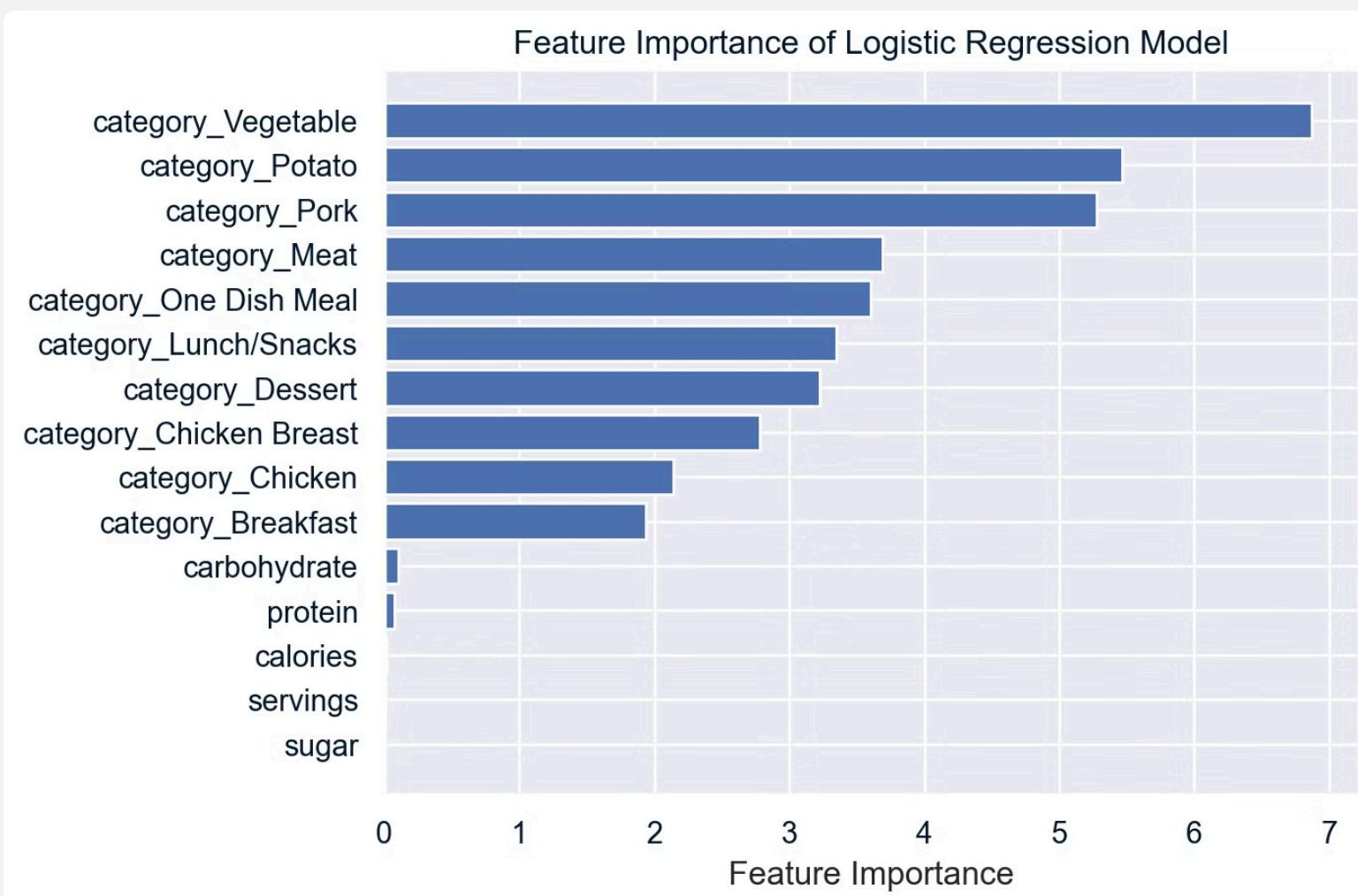




Recipe Categories

The Traffic Drivers

- Our model indicates that recipe category is a key factor influencing popularity.
- Vegetable, potato, and pork recipes consistently outperform others, while chicken, breakfast, and beverage categories have little impact on driving the traffic.
- While the nutritional content such as calories, servings, protein, sugar and carbohydrate did not contribute in determining the high traffic recipes.



High-Traffic Recipe Rate Metric

Definition

- **High-Traffic Recipe Rate:** Percentage of recipes classified as high-traffic.

Usage & Monitoring

- **Frequency:** Monitor monthly to track shifts in traffic trends.
- **Threshold:** Aim for a consistent rate above **60.61%** (based on initial analysis).

Importance

- **Content Strategy:** Helps identify which recipes resonate with users.
- **User Engagement:** Directly correlates with the platform's popularity and growth.





Final Recommendations

Categories to Prioritize:

- Focus on high-traffic categories (Vegetable, Potato & Pork)

Continuous Model Evaluation:

- Review the "High Traffic Recipe Rate" (baseline: 60.61%) monthly. To improve this metric, prioritize posting recipes from the recommended categories.

A close-up photograph of a meal consisting of white rice, corn on the cob, beans, and a green vegetable.

Thank You!