Predicting High-Traffic Recipes

Supporting Smarter Homepage Curation with Data

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Why This Matters

- The homepage recipe is a high-stakes decision
- Right choice = +40% traffic boost
- But right now, it's picked manually
- Can we predict which recipes will perform well?

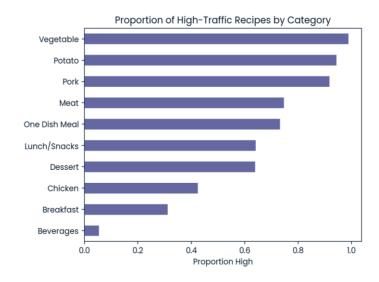
Our Goal

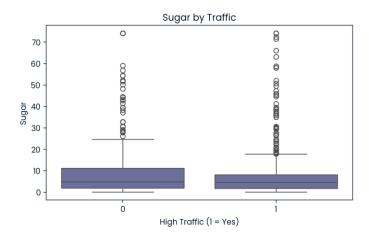
- Predict if a recipe will drive high traffic
- > Be right at least 80% of the time
- Help you choose with confidence
- Avoid recommending poor-performing recipes

What We Looked At

- > 947 past recipes
- Tracked what happened when each was featured
- Considered:
 - Recipe type (Dessert, Meat, Vegetable)
 - Nutritional info (calories, sugar, etc.)
 - Servings

	recipe	calories	carbohydrate	sugar	protein	category	servings	high_traffic
0	1					Pork	6	High
1	2	35.48	38.56	0.66	0.92	Potato	4	High
2	3	914.28	42.68	3.09	2.88	Breakfast	1	null
3	4	97.03	30.56	38.63	0.02	Beverages	4	High
4	5	27.05	1.85	0.8	0.53	Beverages	4	null
5	6	691.15	3.46	1.65	53.93	One Dish Meal	2	High
6	7	183.94	47.95	9.75	46.71	Chicken Breast	4	null
7	8	299.14	3.17	0.4	32.4	Lunch/Snacks	4	null
8	9	538.52	3.78	3.37	3.79	Pork	6	High
9	10	248.28	48.54	3.99	113.85	Chicken	2	null
10	11	170.12	17.63	4.1	0.91	Beverages	1	null
11	12	155.8	8.27	9.78	11.55	Breakfast	6	null





What We Found

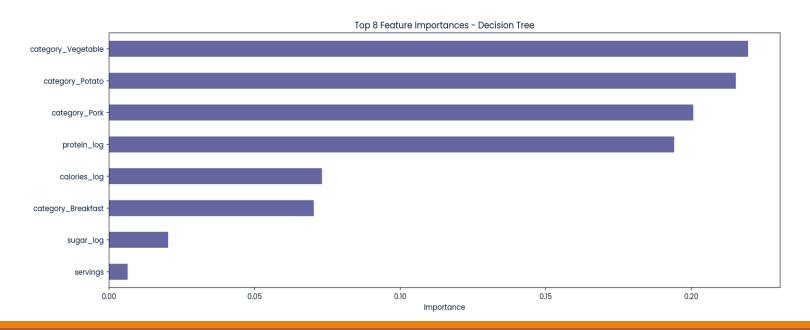
- Category really matters
 - Vegetable, Potato, Pork recipes did great
 - Beverages... not so much
- High-traffic recipes tend to have:
 - Slightly higher calories and carbs
 - Fewer sugary items

How We Approached It

- Built and tested two models:
 - Logistic Regression simple, reliable
 - Decision Tree rule-based, intuitive
- Goal: find a model that predicts high-traffic recipes with confidence

How They Performed

Model	% Right (When It Predicts High)		
Logistic Model	85% 🔽		
Decision Tree	98.6% 🗹 🗹		



What To Watch

- Recommend tracking: Precision@High (% of predicted "High" recipes that actually perform well)
- > Right now: **98.6**%
- > Set a floor: retrain if it drops below **75**%

What We Recommend

- Deploy Decision Tree for homepage picks
- Monitor precision weekly with a simple dashboard
- > Enrich model over time with:
 - Ratings
 - Prep time
 - Seasonality
 - Complexity

Final Thought

- "Good models make good decisions easy."
- > This model ensures high-confidence insights for homepage curation.
- Ready to assist with deployment and ongoing optimization.