



Forkasting

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Problem Statement



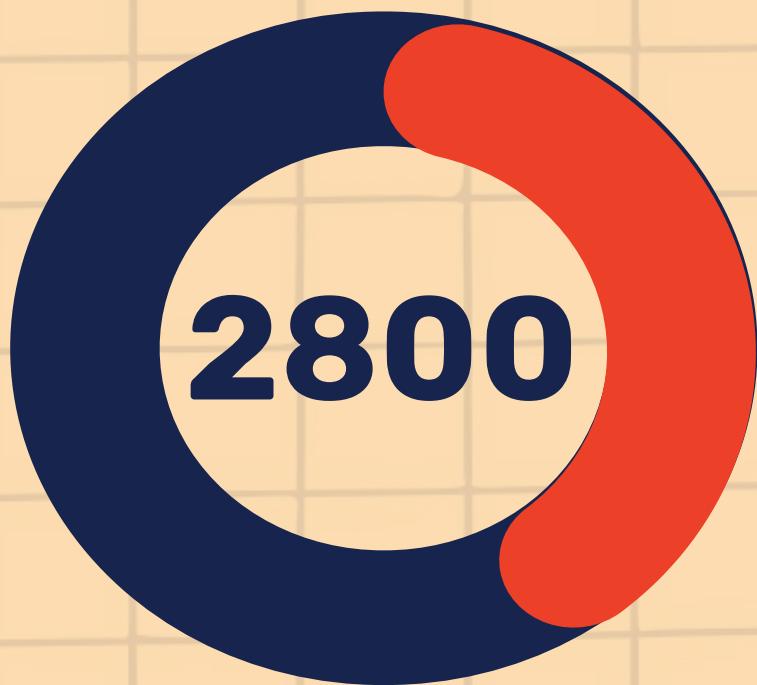
What factors, such as sentiment toward food, service, ambience, or price level, most strongly drive high ratings in different neighborhoods?

What neighborhoods in Austin have unmet consumer demand and market whitespace opportunities?

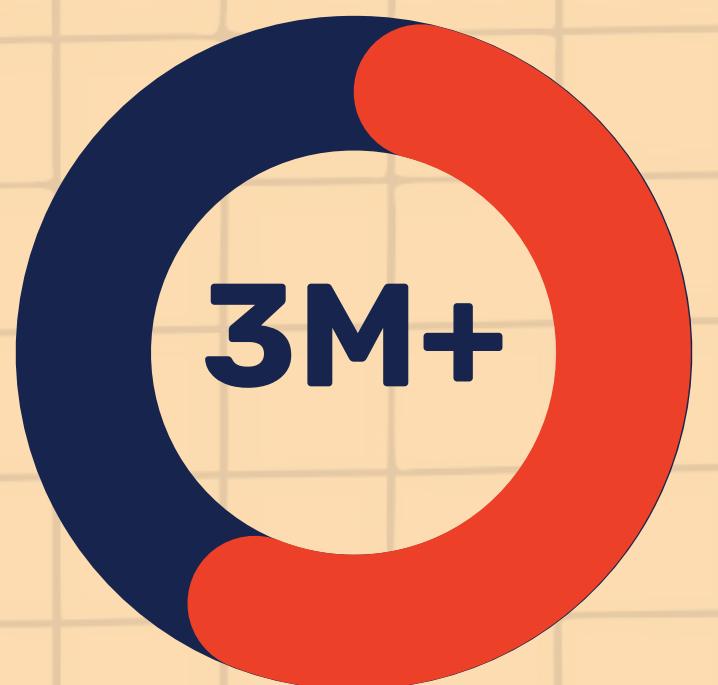


Austin Food Dataset

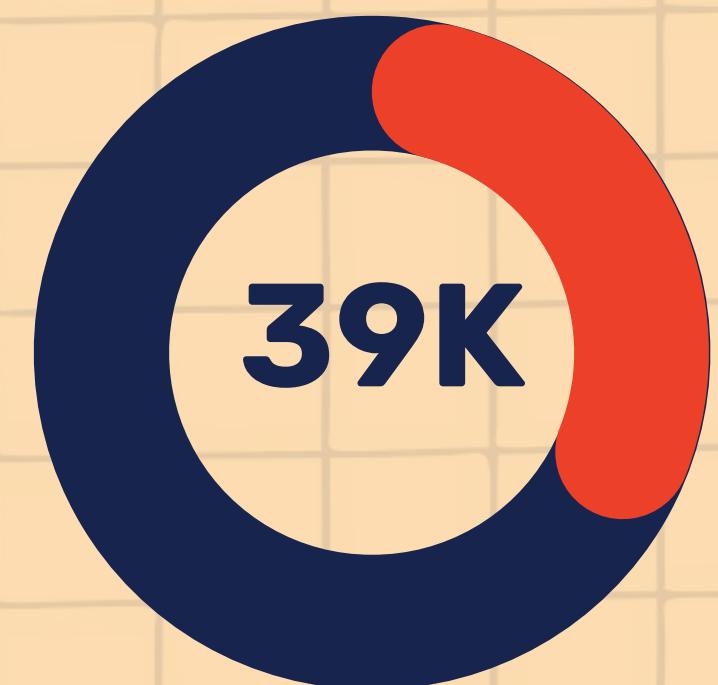
**from Google Places API



Total Restaurants



Total Reviews



Total Images

Where is Supply > Demand?

Many Austin ZIPs have great restaurants, but *are some cuisines underrepresented?*



Group by Zip & Cuisine

Calculate:

- Average Rating
- Total Reviews → **Demand**
- Venue Count → **Supply**

Compute Z-Score

Measure how that cuisine performs **relative to other cuisines in the same area**

Define “whitespace”

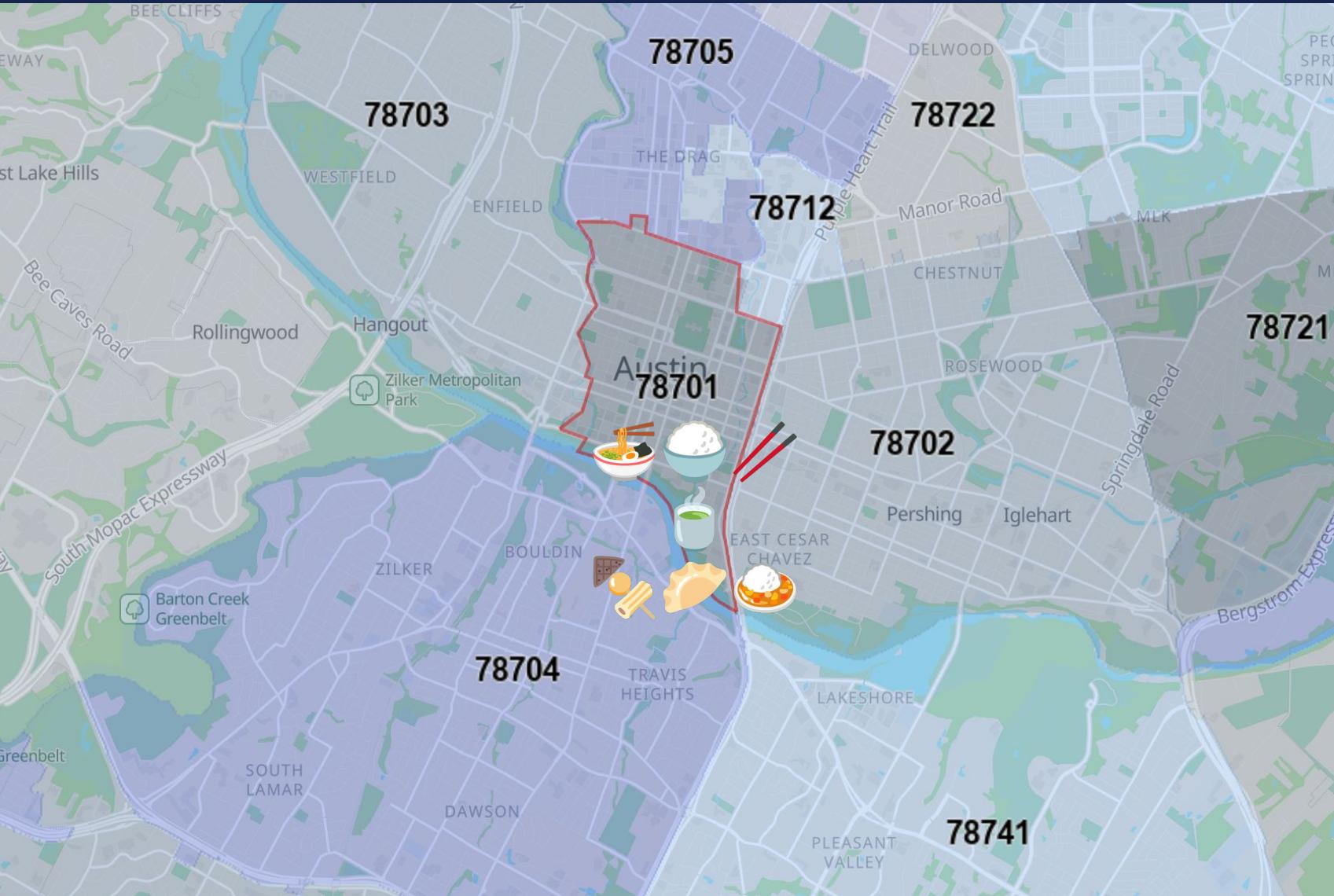
- **High Demand**
- **Low Supply**
- **High Rating**

Top Whitespace Opportunities by Zip

Zipcode	Cuisine	Supply	Demand	Average Rating	Z-Score	Neighborhoods in Zip
78745	Korean	2	7531	4.90	2.252	Bluff Springs, Cherry Creek, Dawson, Dessau Estates,..
78753	Cafe	2	3591	4.75	1.731	Crossing At Parmer Lane, Dallas, Georgian Acres, Gracy Woods,..
78701	Other Southeast Asian	1	1844	4.60	1.665	Bouldin Creek, Central Austin, East Cesar Chavez, Old West Austin,..
78759	Latin	2	13900	4.85	1.636	Gateway, Jollyville, McNeil, North Burnet, Northwest Hills,..
78757	Cafe	2	3034	4.75	1.593	Allandale, Brentwood, Crestview, North Shoal Creek, Wooten,..
78726	Mediterranean	2	2077	4.80	1.212	Anderson Mill, Four Points, Oaks, Plaza Volente
78748	Indian	2	1843	4.70	1.170	Cherry Creek, Hillcrest, Manchaca, Manchaca Commercial Park,..
78738	Indian	1	3765	4.50	1.095	Bee Cave, Hill Country Galleria, The Estates Center, The Galleria,..
78704	Latin	2	2286	4.60	1.075	Barton Hills, Bouldin Creek, Dawson, Galindo, Zilker,..



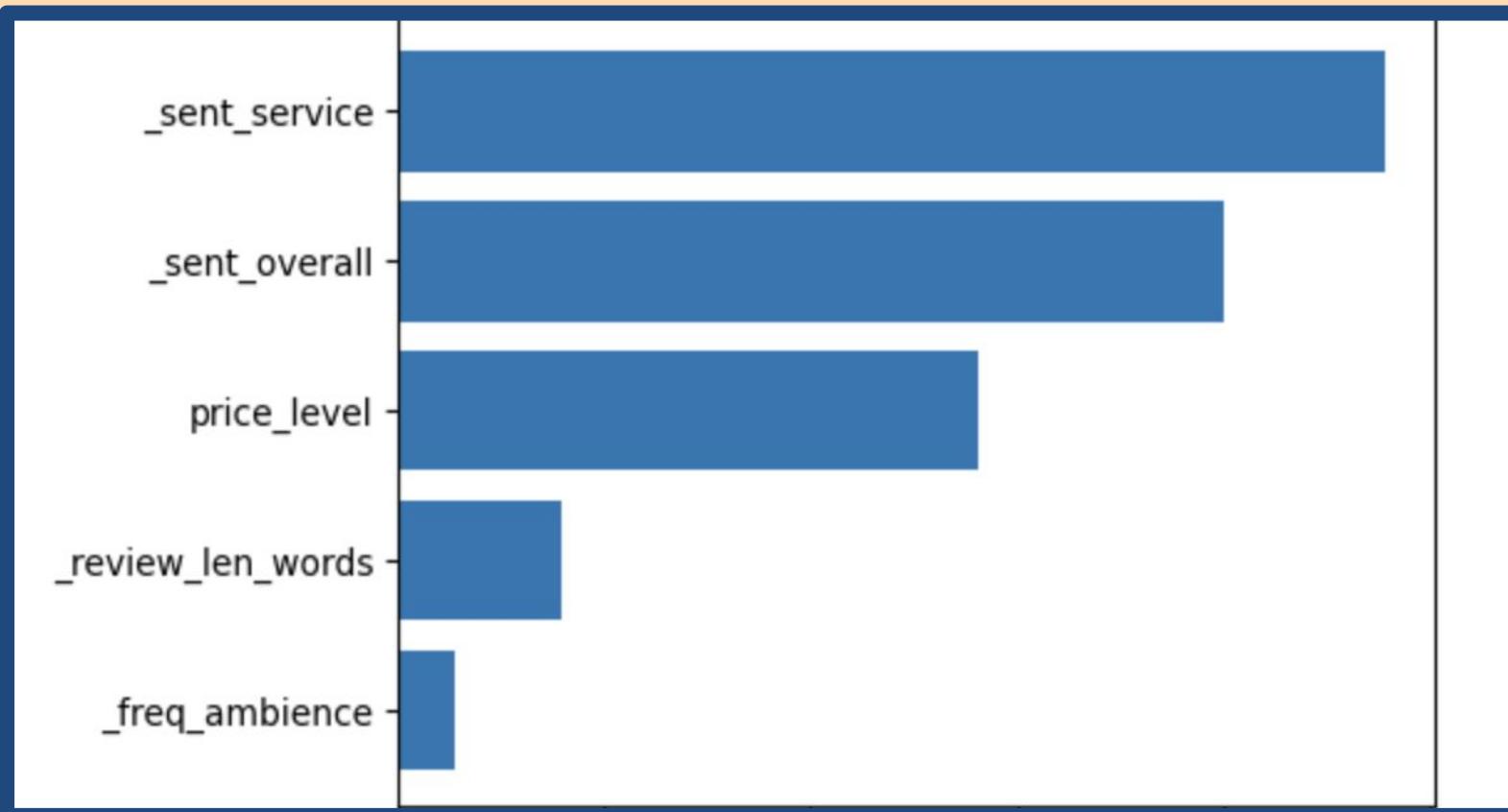
- **Emerging Niches: Korean, Latin, and Café**
concepts overperform in diverse ZIPs.
 - 78745
 - 78704
 - 78757



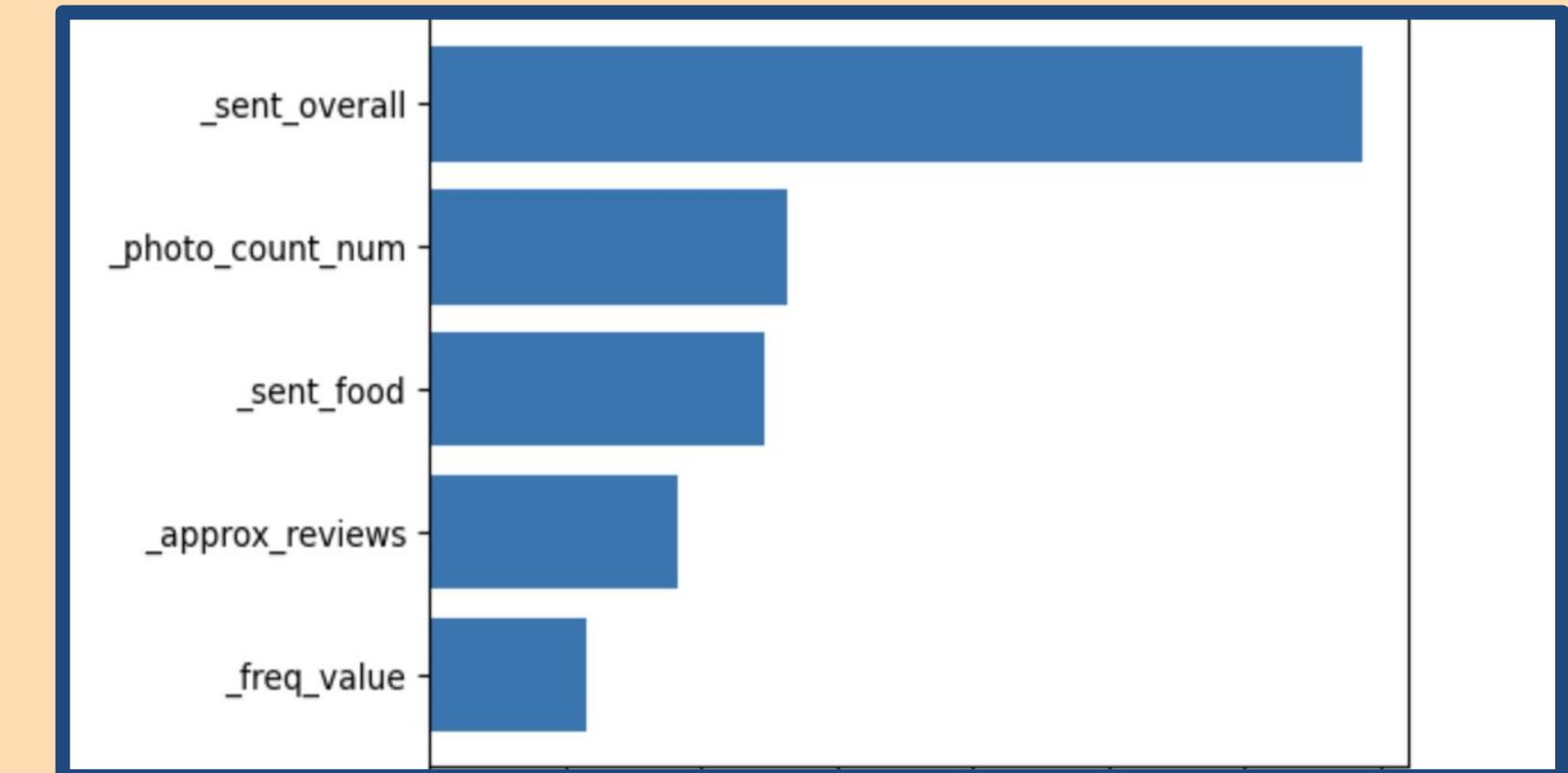
- **Upscale Gaps:** Downtown (78701) lacks variety beyond American and Mexican.
→ Opportunity for fusion/Asian entrants!
- Use ZIP-level + neighborhood overlap to **guide new openings.**

ZIP-Level Drivers of Success

Top Predictors of Ratings - ZIP 78745



Top Predictors of Ratings - ZIP 78701





<i>Zip</i>	<i>Findings</i>	<i>Model Insights</i>	<i>Strategic Takeaway</i>
78745	Korean Cuisine Whitespace (high rating, low supply)	Service Tone, Overall Sentiment, Value Perception	Korean concept emphasizing Hospitality, Warmth, and Comfort Food
78701	Fusion Asian Whitespace (downtown variety gap)	Photo Engagement, Overall Sentiment, Food Quality	Asian or Fusion Concept with Modern Decor/Insta-Ready Presentation

Cuisine and Zip Takeaways

Mexican Cuisine Whitespace

Hotspots

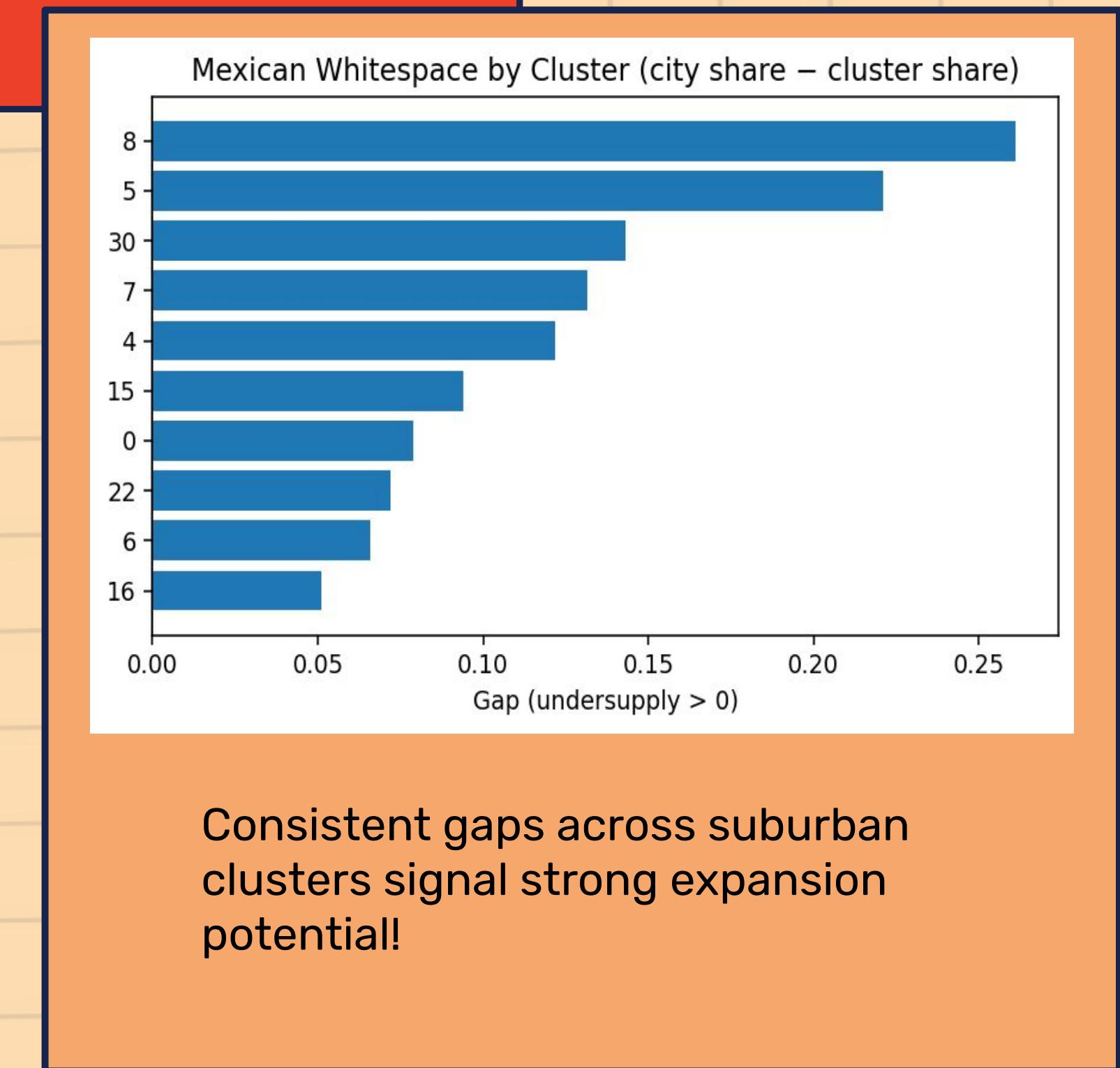
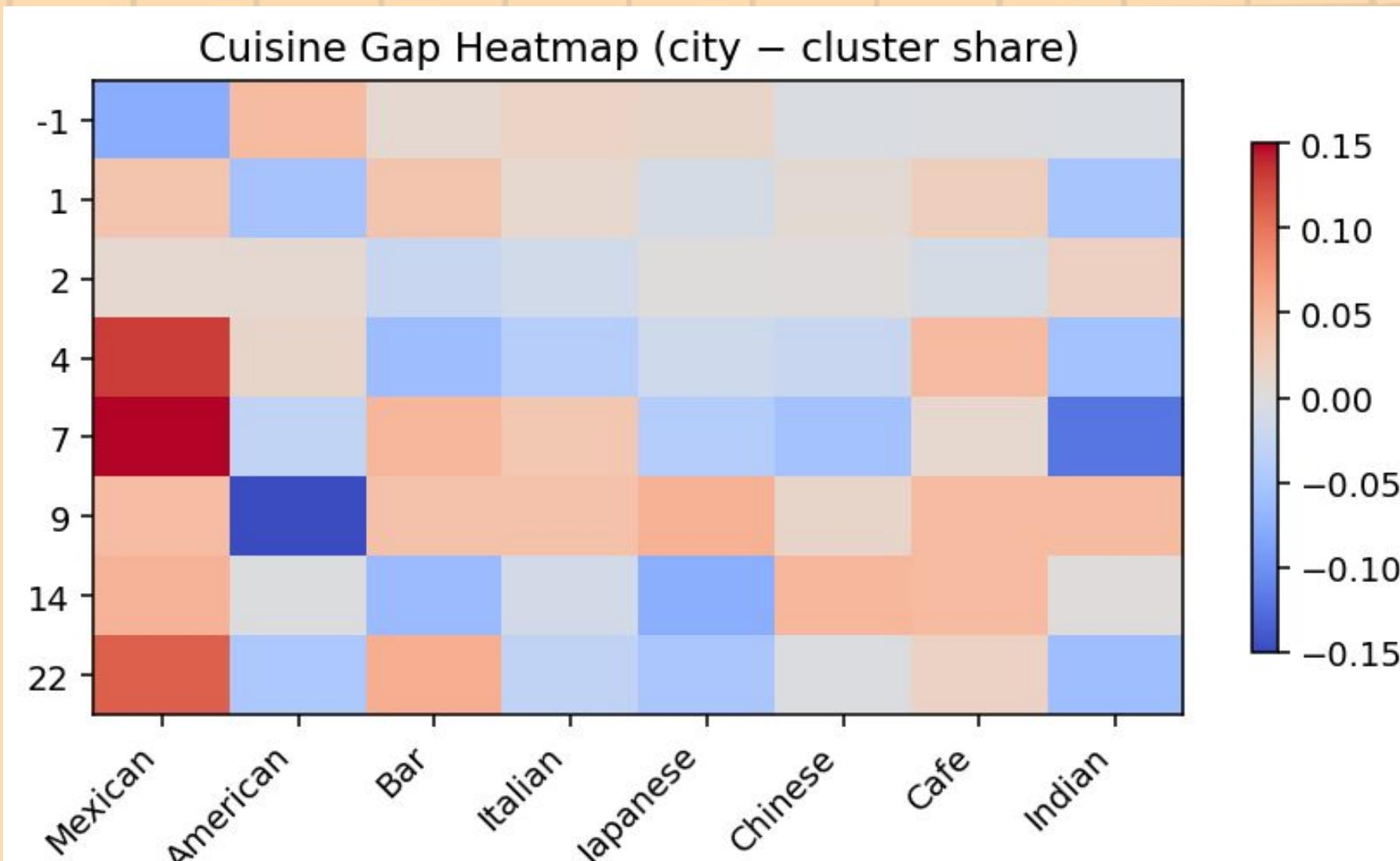
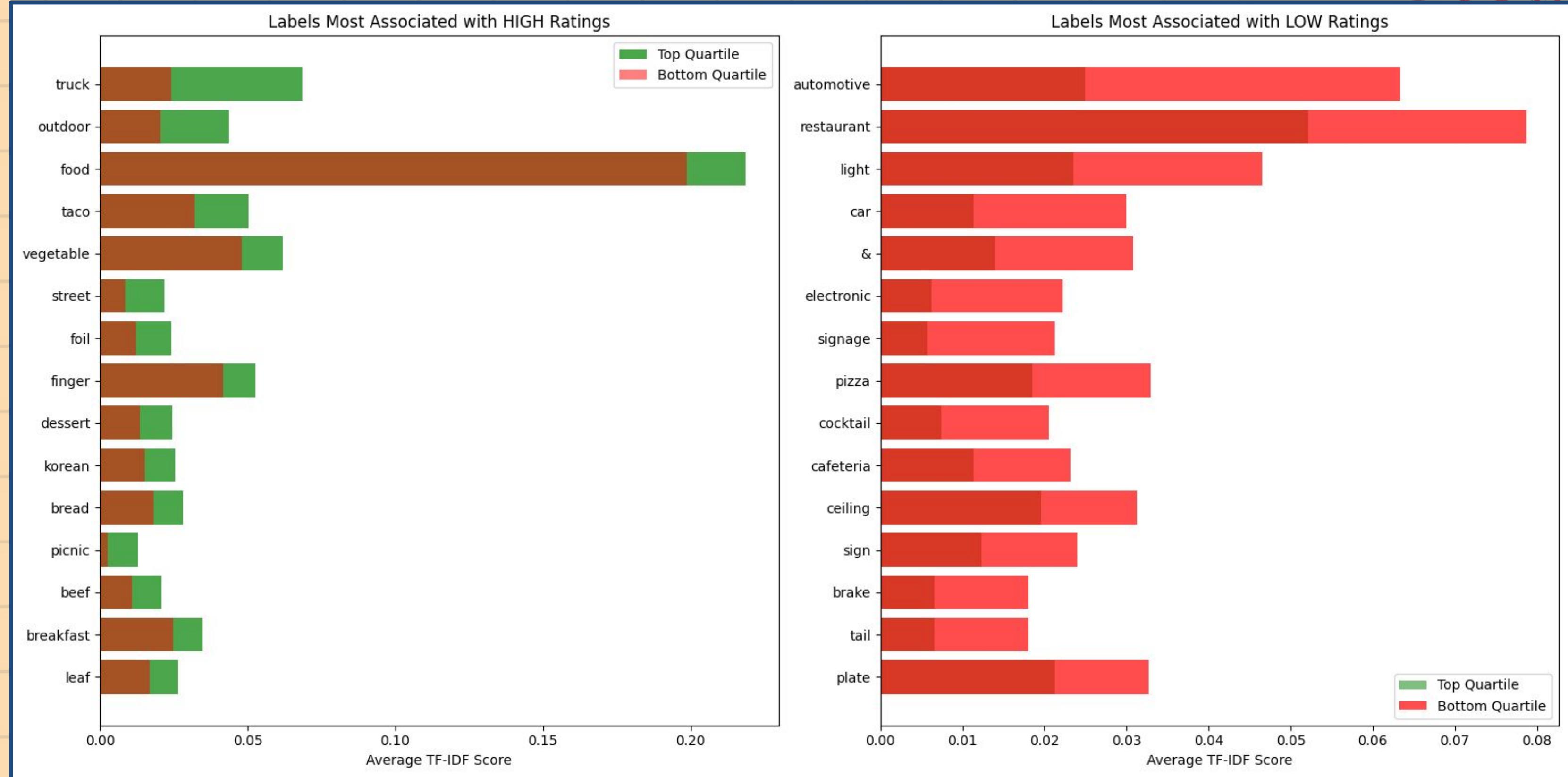


Image Label Analysis

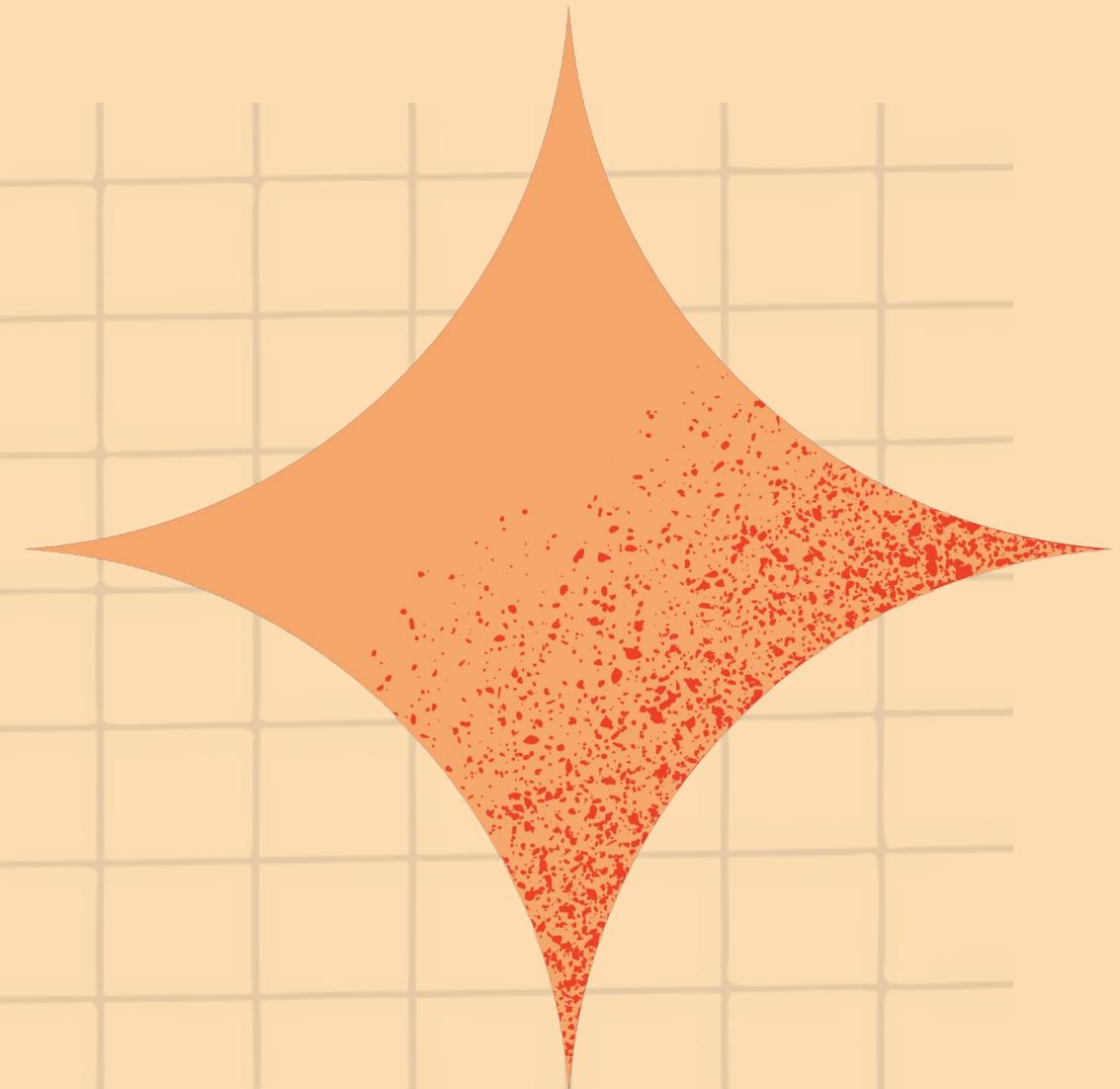


<i>label</i>	<i>count_bottom</i>	<i>count_top</i>	<i>prob_bottom</i>	<i>prob_top</i>	<i>lift</i>
tv dinner	1	13	0.00157	0.018651	11.880918
red meat	1	12	0.00157	0.017217	10.967001
milkshake	1	10	0.00157	0.014347	9.139168
gelato	1	9	0.00157	0.012912	8.225251
brochette	1	8	0.00157	0.011478	7.311334
mie goreng	1	7	0.00157	0.010043	6.397418
kebab	1	7	0.00157	0.010043	6.397418

<i>label</i>	<i>count_bottom</i>	<i>count_top</i>	<i>prob_bottom</i>	<i>prob_top</i>	<i>lift</i>
classic cocktail	24	6	0.037677	0.008608	0.228479
supermarket	18	4	0.028257	0.005739	0.203093
market	5	1	0.007849	0.001435	0.182783
entertainment	6	1	0.009419	0.001435	0.152319
supper	8	1	0.012559	0.001435	0.11424

Recipe for Success

- Focusing on suburban clusters (8, 5, 30) because that's where the real whitespace is.
- Mexican works best as the anchor – it's familiar, popular, and underrepresented (Especially in suburbs!)
- Adding a Korean twist makes it stand out and gives a fresh edge.
- Top spots already use outdoor, truck-style, casual vibes – bringing that energy to these clusters can really work.



Questions?