



Data to Decision: Market Prices and Occupancy Analyzer

A comprehensive analytics platform that transforms competitive intelligence into actionable revenue strategies for self-storage operators.

Made by Divaye Behal

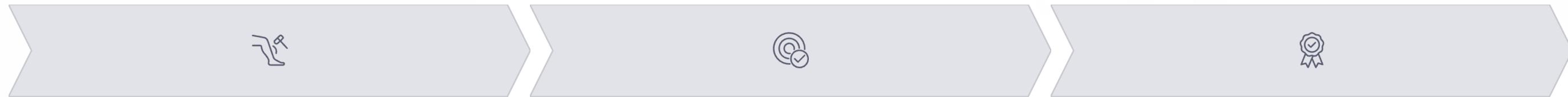
Problem Statement



Self-storage operators face a critical visibility gap when evaluating their competitive position. Without reliable benchmark data, pricing decisions become guesswork rather than strategy.

The consequences are tangible: **lost revenue**, slow occupancy growth, and missed market opportunities. Operators need a clear, data-driven view of their market competitiveness to adjust strategy confidently and quickly.

The Solution: Automated Intelligence Platform



Automated Rate Shopping

Scrapes public pricing from major brands and local listings, building a live price map. What took hours becomes seconds.

Clear Price Gap Insights

Compares your pricing to market median for every unit type, flagging opportunities and quantifying revenue impact (e.g., "+\$480/month").

Occupancy Benchmarks

Blends your data with industry datasets and REIT reports to show whether your 82% occupancy is strong, average, or weak.

1

2

3

Weekly AI Revenue Coach

Automated email summarizing KPIs, opportunities, and 3–5 concrete actions like "raise 10×10 climate by \$7."

Simple Subscription Model

REIT-level competitive intelligence for a flat monthly fee—no data team or complex BI tools required.

Continuous Monitoring

Regular refresh cycles keep insights current, enabling proactive pricing adjustments as markets shift.

Impact for Self-Storage Operators

1-Week Free Trial

Competitive Intelligence

01

See hidden money quickly with "Revenue Opportunity per Month" calculations showing alignment potential.

02

Understand competitive pressure through Discount/Promo Pressure Index and Competitor Price Spread analysis.

03

Get a competitiveness score (0–100) showing exactly where you stand in your ZIP code market.

Starter Tier

Occupancy Benchmark

01

Know if occupancy is healthy with area and seasonal benchmarks guiding price vs. volume strategy.

02

Focus on high-value units with Vacant High-Value Units Count highlighting where to target marketing.

03

Reduce occupancy risk early using the Risk Index, Turnover, and Move-In Pace indicators.



The Challenge: Six Critical Pain Points



Pricing Uncertainty

Most operators price based on gut feel, potentially leaving **5–15% revenue on the table** without knowing how they compare to 10–20 nearby competitors.



Manual Intelligence Gathering

Rate shopping means clicking through multiple websites—taking **1–2 hours per location**—making weekly updates nearly impossible.



Occupancy Without Context

Knowing "86% full" means nothing without ZIP code benchmarks, seasonal comparisons, or unit-type analysis.



Decision Paralysis

Even with reports, operators struggle to answer: "Which 3–5 price changes should I make this week?" Data exists, but clarity doesn't.



Analytics Inequality

Big REITs have revenue-management teams. Independent operators—often **one person wearing multiple hats**—simply can't match that analytical capacity.



One-Off Insights

Deep dives happen once or twice yearly, but markets shift monthly. Without continuous intelligence, operators react late instead of steering proactively.

Data Collection Strategy

- 1** — Web Scraping Aggregators
Extract publicly visible facility listings from directories and aggregator sites, capturing names, addresses, unit sizes, and rental rates into our database.
- 2** — Industry Report Integration
Leverage published national statistics on average rents, occupancy trends, and facility counts to calibrate and contextualize local market data.
- 3** — Demographic Data Enhancement
Combine scraped facility data with census, housing, and population information to estimate supply per capita, demand potential, and market saturation by geography.



Lead Generation Funnel Strategy



Free → Engagement → Demo → Subscription →
High-Value Insights



Our growth funnel leverages an AI-powered chatbot to engage prospects, qualify leads, and deliver immediate value. The conversational interface guides operators from initial curiosity through free trial to paid subscription, with each stage designed to demonstrate tangible ROI and build trust through data-driven insights.

- Next slide preview:** Detailed walkthrough of the AI chatbot conversation flow and customer journey mapping.

CUBBY AI BOT

Good morning! 🌞

Here's a quick insight :

Self-storage prices in many U.S. cities increased by 6–12% in the last 90 days.

Would like to know how you are perform around competitors ? if yes provide me up with these details :-

- ZIP code
- Facility size (sq ft or number of units)
- Unit mix (5x5, 10x10, 10x20, etc.)
- Current prices
- Current occupancy %

- ZIP: 75034
- City: Frisco
- State: Texas034
- unit type : 10x10
- Facility size : 250 units
- current price : 125
- current occupancy : 45%

Thanks! Let me analyze the market around Frisco, TX...

CUBBY AI BOT

10x10 climate-controlled units in Frisco average around \$148/month. Your price (if typical) is around \$125.

This shows a 12–18% pricing opportunity compared to nearby competitors.

Would you like a full occupancy + pricing report for your facility?

Yes

Perfect!

Before I generate your full report, I need a few details:

1. Your facility name
2. Your email (so I can send the full PDF)
3. Your phone number (optional)

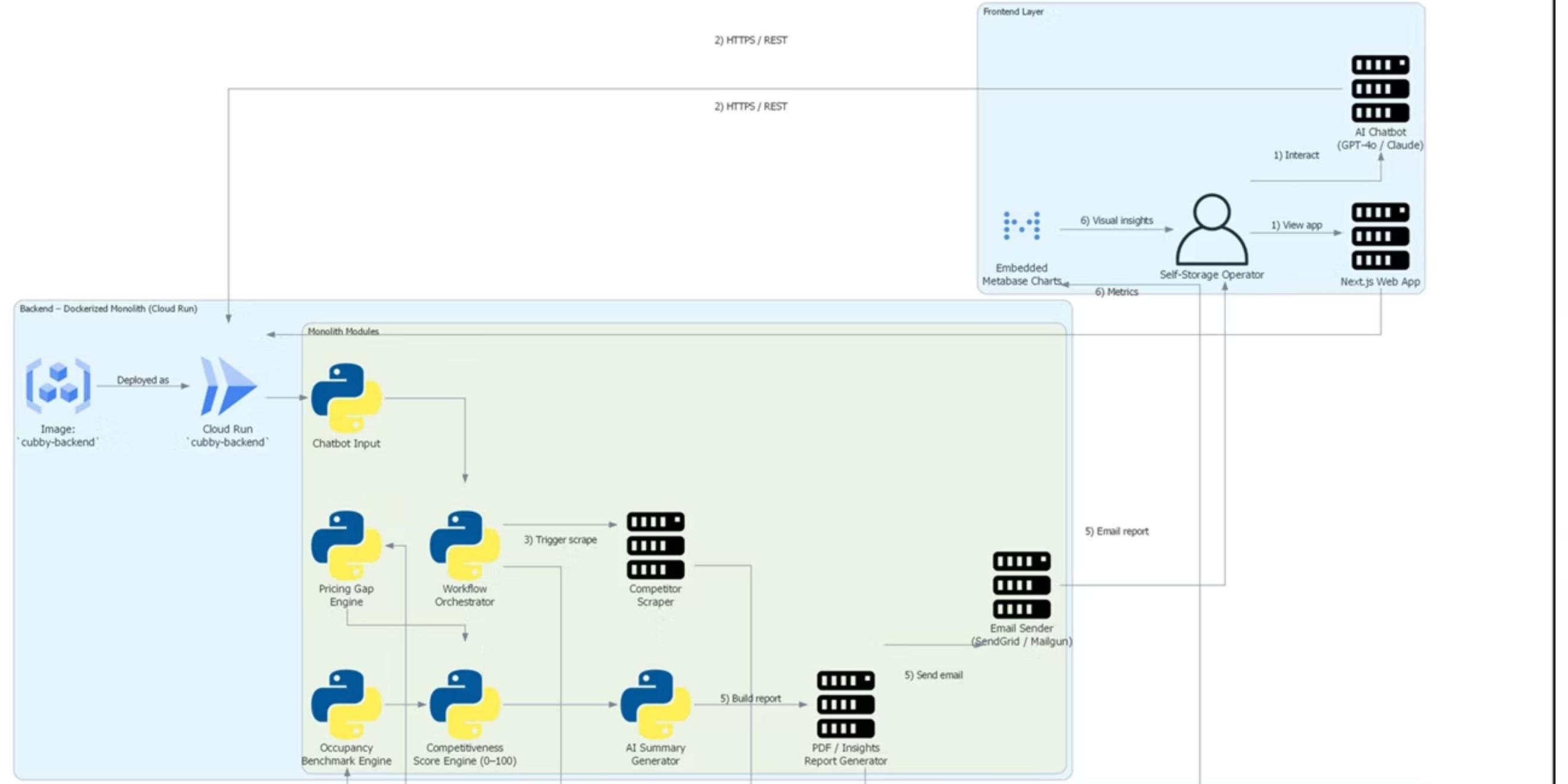
Your info will NOT be shared — it's only for sending your personalized report.

Facility: Lone Star Storage
Email: owner@lsstorage.com
Phone: 972-444-5555.

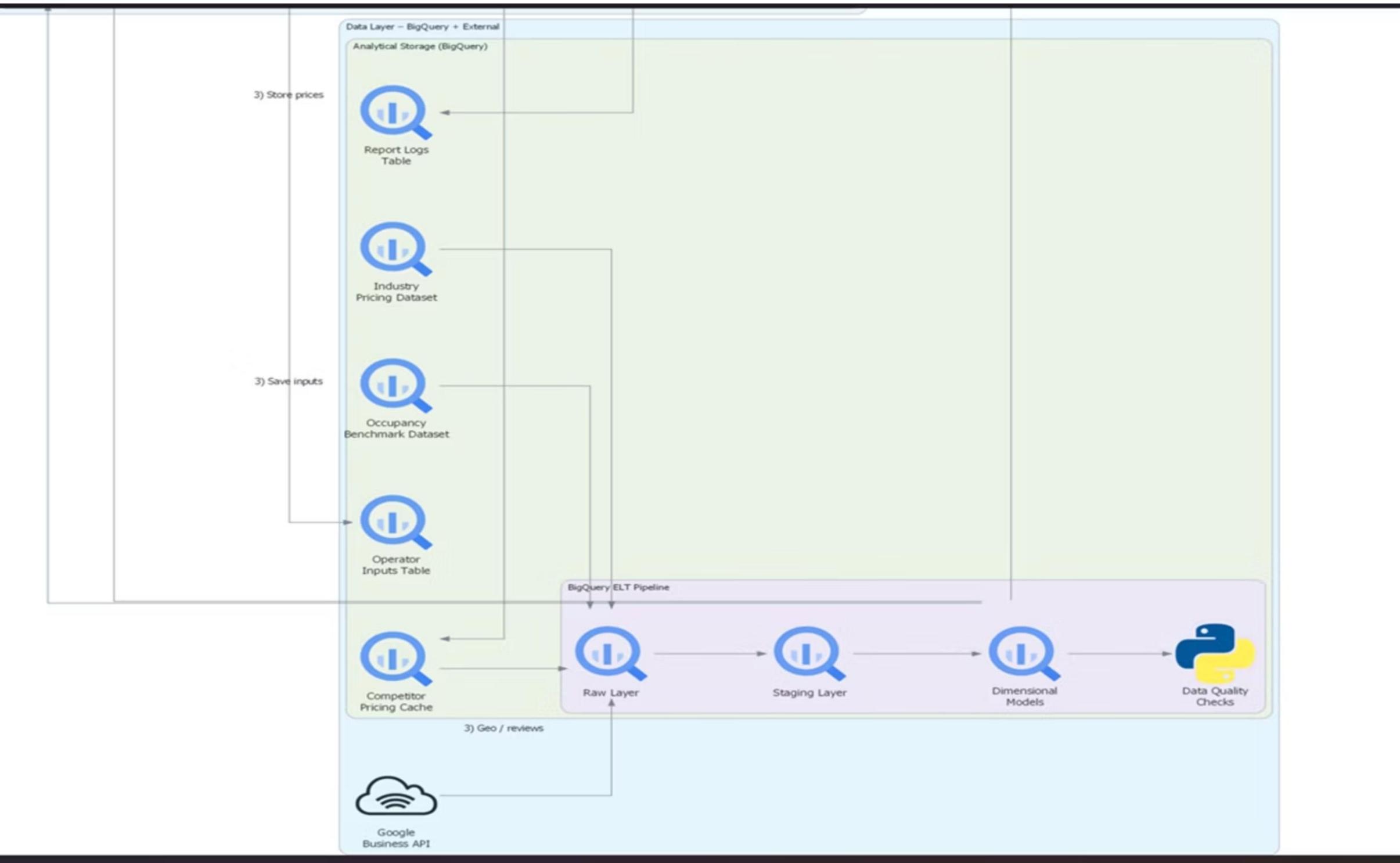
Thank you!

Your full report has been sent on the given Email id

CHATBOT CONVERSING WITH THE CUSTOMER



TECHNICAL INFRASTRUCTURE

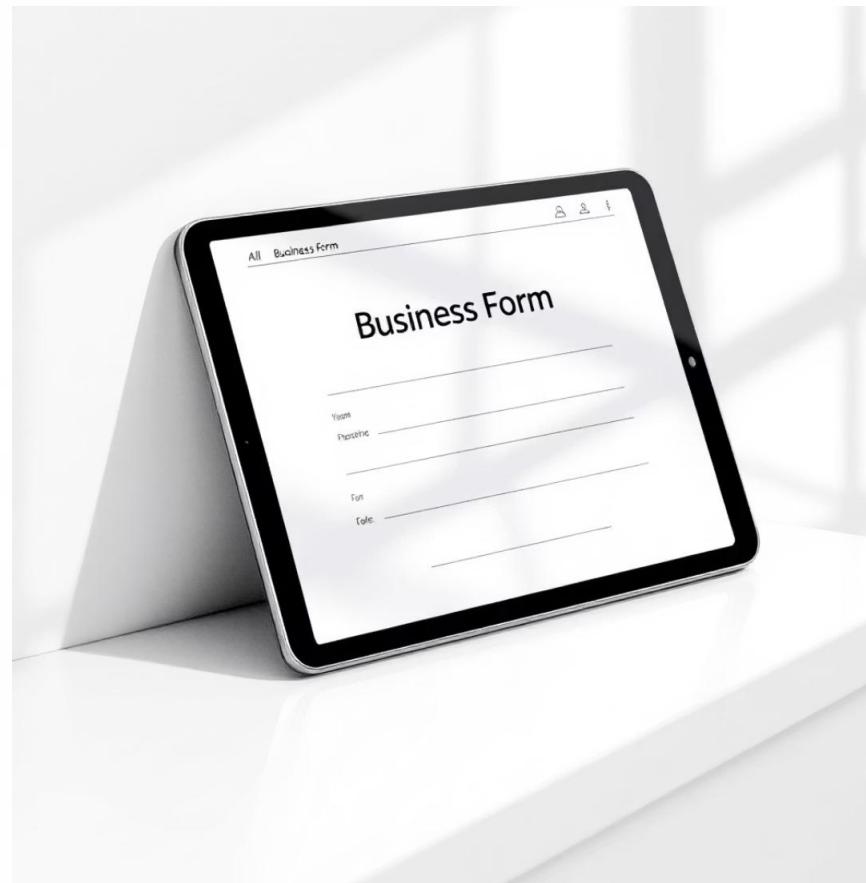


Data Requirements Overview

Operator Data

Collected via chatbot/form

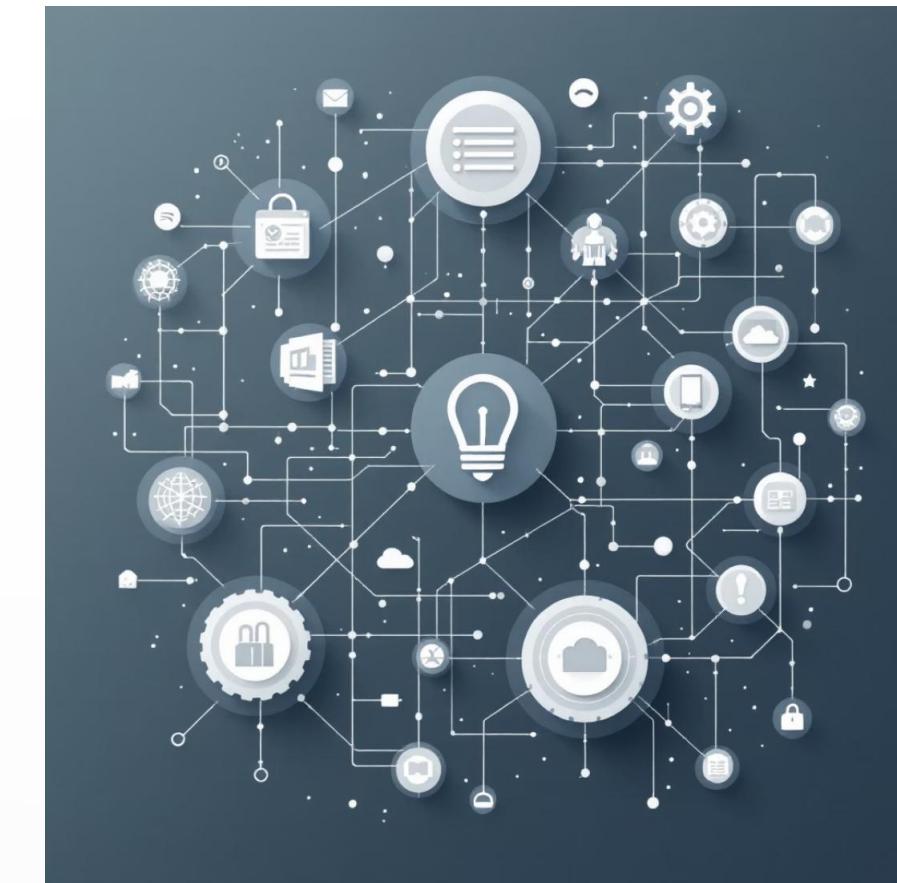
- Property location and ZIP code
- Complete unit mix and current pricing
- Occupancy data by unit type
- Active promotions and discounts



External Market Data

Aggregated from multiple sources

- Public competitor pricing (major brands + local)
- Aggregator sites (SpareFoot, Storage.com)
- Industry benchmarks (BigQuery datasets)
- Local demand signals (housing, population, Google Business)



Analytics Warehouse: BigQuery stores raw scrape data, modeled price/occupancy tables, competitor cache, operator input history, and report logs for comprehensive trend analysis.

AI & Technology Platform Stack



LLM for Intelligence

OpenAI GPT-4o (or GPT-4o mini) generates summaries and actionable recommendations.

Anthropic Claude provides alternate provider support and additional safety layers.

Serving & Orchestration

Python/FastAPI backend on Cloud Run ensures scalable, reliable service delivery.

BigQuery acts as the feature store, feeding AI prompts with rich contextual data.

Future Enhancements

Vertex AI integration planned for custom models and fine-tuning capabilities.

Continuous platform evolution to deliver increasingly sophisticated insights.

Legal Data Sources for Market Intelligence

SpareFoot

www.sparefoot.com

What it provides:

- Storage unit prices across markets
- Detailed unit size specifications
- Current promotions and special offers
- Facility addresses and amenity listings

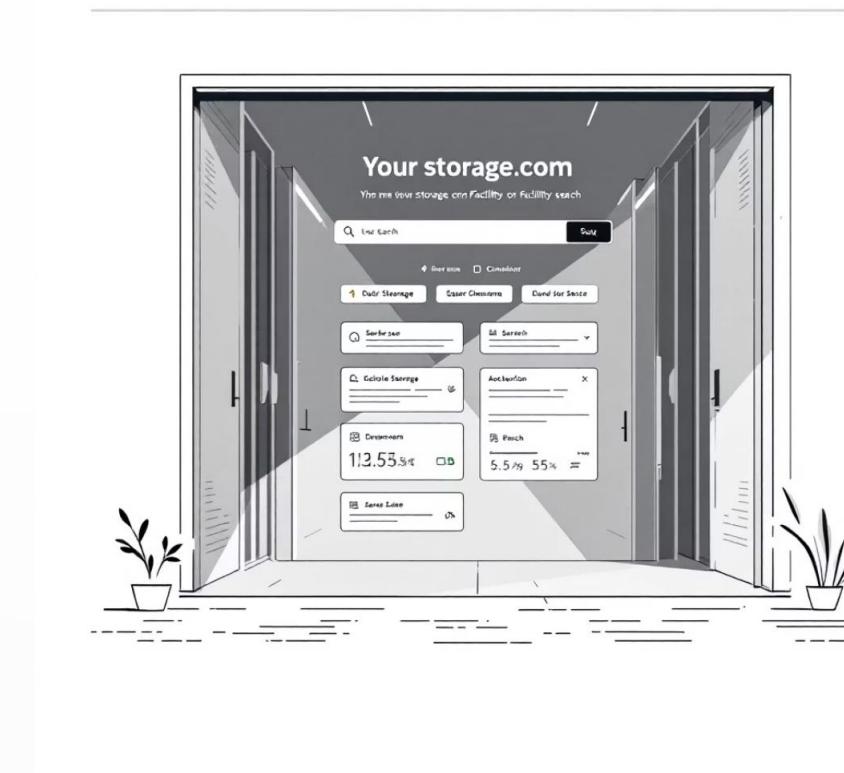


Storage.com

www.storage.com

What it provides:

- Comprehensive facility listings
- Public pricing information
- Photos and feature descriptions
- Available unit type inventory



Dataset that I scraped from Storage.com

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	facility_name	relative_url	street	city	state	zip_code	address_t	distance_miles	lowest_price	starting_price	price_range	promo_flag	rating	rating_count	latitude	longitude		
2	Extra Space Storage - 8610 - Indianapolis - Lafayette Road	/self-storage/indiana/indianapolis/extra	3350 Lafayette Road	Indianapo	IN	46222	3350 Lafa	5	68	76	\$-\$	TRUE	0	0	39.815445	-86.22789		
3	Public Storage - Indianapolis - 5030 N Keystone Ave	/self-storage/indiana/indianapolis/publ	5030 N Keystone Ave	Indianapo	IN	46205	5030 N Ke	5.6	113	150	\$-\$	TRUE	0	0	39.84415	-86.12231		
4	Extra Space Storage - 2075 - Indianapolis - Fulton St	/self-storage/indiana/indianapolis/extra	501 Fulton Street	Indianapo	IN	46202	501 Fulto	0.9	54	60	\$-\$	TRUE	5	1	39.774426	-86.1437		
5	CubeSmart Self Storage - Indianapolis North Illinois Street	/self-storage/indiana/indianapolis/cube	2135 North Illinois Street	Indianapo	IN	46202	2135 Nort	1.9	39.6	66	\$-\$	TRUE	5	14	39.795864	-86.15914		
6	Extra Space Storage - 2198 - Indianapolis - 510 E Thompson Rd	/self-storage/indiana/indianapolis/extra	510 East Thompson Road	Indianapo	IN	46227	510 East	5.1	52	58	\$-\$	TRUE	5	2	39.694	-86.148		
7	StorageMart - I-70 & E Washington St	/self-storage/indiana/indianapolis/stora	1215 East Washington Street	Indianapo	IN	46202	1215 East	1.1	59		\$-\$	FALSE	5	4	39.767	-86.137		
8	Extra Space Storage - 8608 - Indianapolis - Emerson Ave	/self-storage/indiana/indianapolis/extra	4723 South Emerson Avenue	Indianapo	IN	46203	4723 Sou	6.3	67	75	\$-\$	TRUE	5	1	39.6985	-86.08168		
9	Extra Space Storage - 6874 - Indianapolis - 675 E Washington	/self-storage/indiana/indianapolis/extra	675 East Washington Street	Indianapo	IN	46204	675 East	0.6	58		\$-\$	FALSE	0	0	39.765923	-86.14647		
10	Extra Space Storage - 2192 - Indianapolis - 7715 42nd St	/self-storage/indiana/indianapolis/extra	7715 42nd Street	Indianapo	IN	46226	7715 42n	7.9	48	54	\$-\$	TRUE	4.5	3	39.830173	-86.03223		
11	Public Storage - Indianapolis - 7430 Madison Ave	/self-storage/indiana/indianapolis/publ	7430 Madison Ave	Indianapo	IN	46227	7430 Mad	7.6	53	70	\$-\$	TRUE	4.5	49	39.66022	-86.1281		
12	Extra Space Storage - 2195 - Indianapolis - 9201 Washington	/self-storage/indiana/indianapolis/extra	9201 West Washington Street	Indianapo	IN	46231	9201 Wes	9.3	52	58	\$-\$	TRUE	5	3	39.729336	-86.32548		
13	Downtown Indy Self Storage	/self-storage/indiana/indianapolis/dowr	1233 West 18th Street	Indianapo	IN	46202	1233 Wes	2.1	80		\$-\$	FALSE	4.5	15	39.791	-86.183		
14	Public Storage - Indianapolis - 4350 S East Street	/self-storage/indiana/indianapolis/publ	4350 S East Street	Indianapo	IN	46227	4350 S Ea	4.6	56	61	\$-\$	TRUE	4.5	46	39.70174	-86.15087		
15	Public Storage - Indianapolis - 50 Washington Pointe Drive	/self-storage/indiana/indianapolis/publ	50 Washington Pointe Drive	Indianapo	IN	46229	50 Washi	9.4	80		\$-\$	FALSE	4.5	41	39.77641	-85.98066		
16	Extra Space Storage - 0652 - Indianapolis - E 65th St	/self-storage/indiana/indianapolis/extra	5335 East 65th Street	Indianapo	IN	46220	5335 East	8.5	80	90	\$-\$	TRUE	5	1	39.87556	-86.078964		
17	Public Storage - Indianapolis - 8651 E Washington St	/self-storage/indiana/indianapolis/publ	8651 E Washington St	Indianapo	IN	46219	8651 E W	7.6	64	69	\$-\$	TRUE	4.5	36	39.77226	-86.01447		
18	Extra Space Storage - 6003 - Indianapolis - 42nd St	/self-storage/indiana/lawrence/extra-sp	8840 42nd Street	Lawrence	IN	46226	8840 42n	9	29	30	\$-\$	TRUE	5	2	39.83361	-86.01227		
19	Extra Space Storage - 6666 - Indianapolis - Brookville Rd	/self-storage/indiana/indianapolis/extra	6143 Brookville Road	Indianapo	IN	46219	6143 Broo	5.2	47	50	\$-\$	TRUE	0	0	39.757378	-86.0614		
20	Public Storage - Indianapolis - 6429 N Keystone Ave	/self-storage/indiana/indianapolis/publ	6429 N Keystone Ave	Indianapo	IN	46220	6429 N Ke	7.6	101		\$-\$	FALSE	5	2183	39.87399	-86.12011		
21	Public Storage - Indianapolis - 4305 Lafayette Road	/self-storage/indiana/indianapolis/publ	4305 Lafayette Road	Indianapo	IN	46254	4305 Lafa	6.4	48	64	\$-\$	TRUE	4.5	32	39.83356	-86.2426		
22																		
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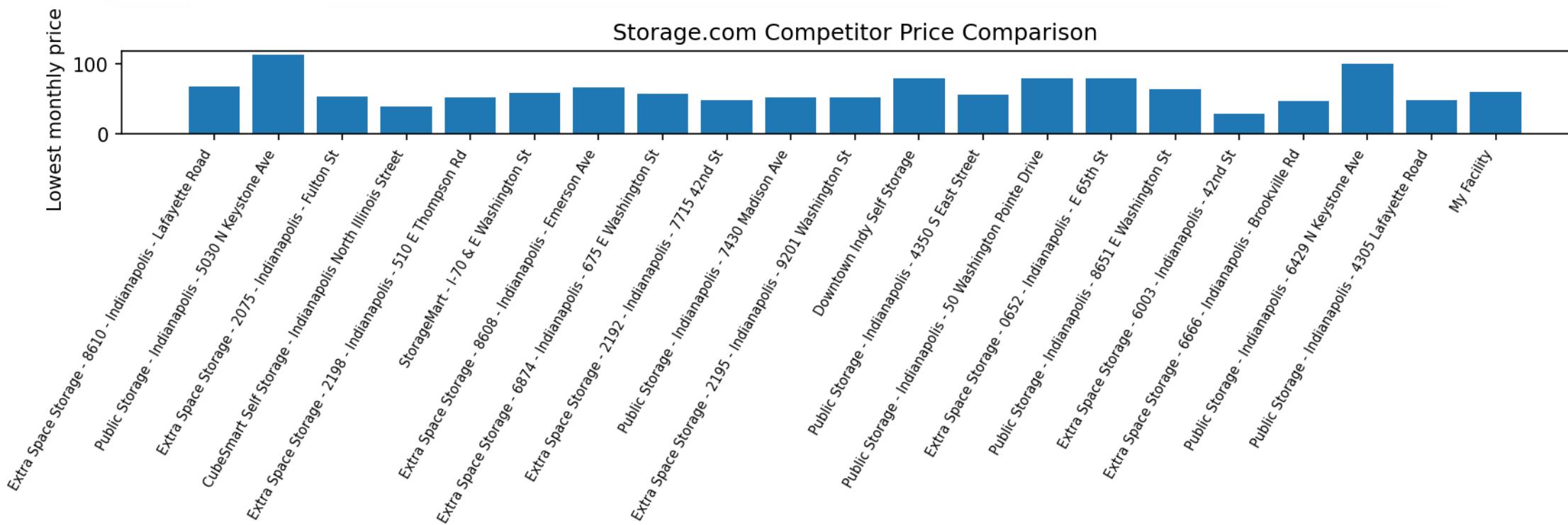
```
divay@LAPTOP-0EJ2R135 MINGW64 ~/Desktop/cubby_diagram
$ python analyze_kpis_and_charts.py
Loaded 20 competitors from storage_market_indianapolis.csv
```

```
== Market KPIs (from Storage.com dataset) ==
Market avg price: $62.43
Market min price: $29.00
Market max price: $113.00
Your price gap: $2.43 (3.9%)
Promo pressure: 75.0% of competitors use promos
Demand / occ. index: 67.0 / 100
```

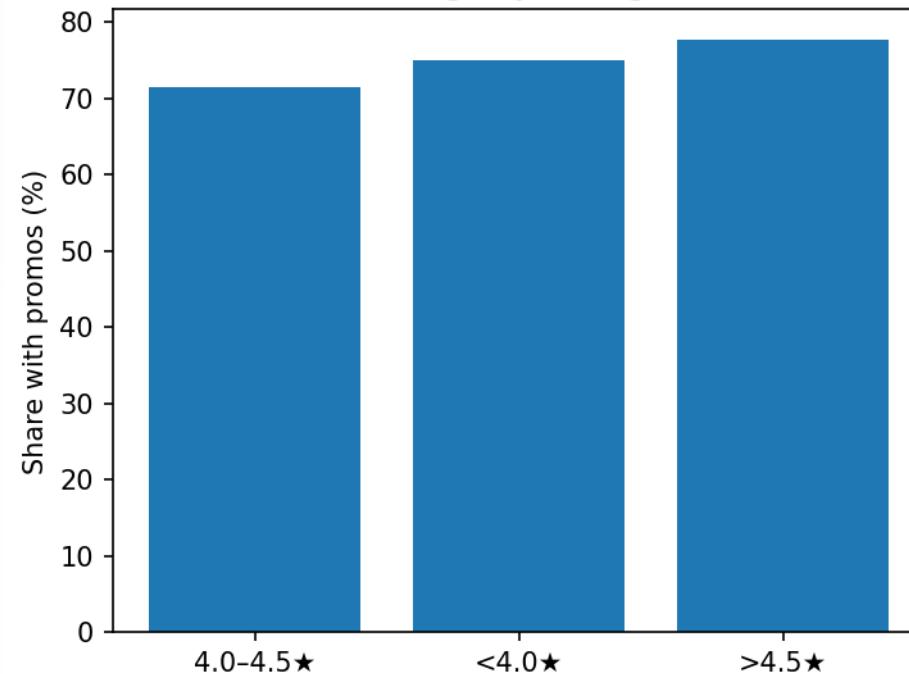
```
== Revenue impact ==
Recommended price: $62.43
Estimated annual uplift if you move to recommended price (for 20 units): $583
```

```
Saved price comparison chart to: C:\Users\divay\Desktop\cubby_diagram\price_comparison.png
```

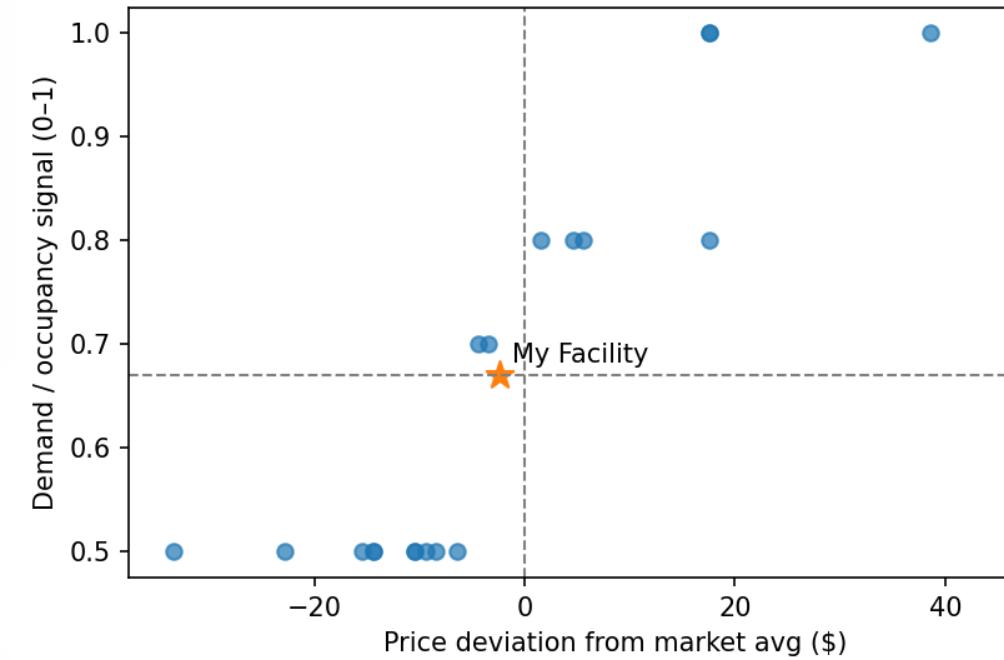
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divay@LAPTOP-0EJ2R135 MINGW64 ~/Desktop/cubby_diagram
$ |
```



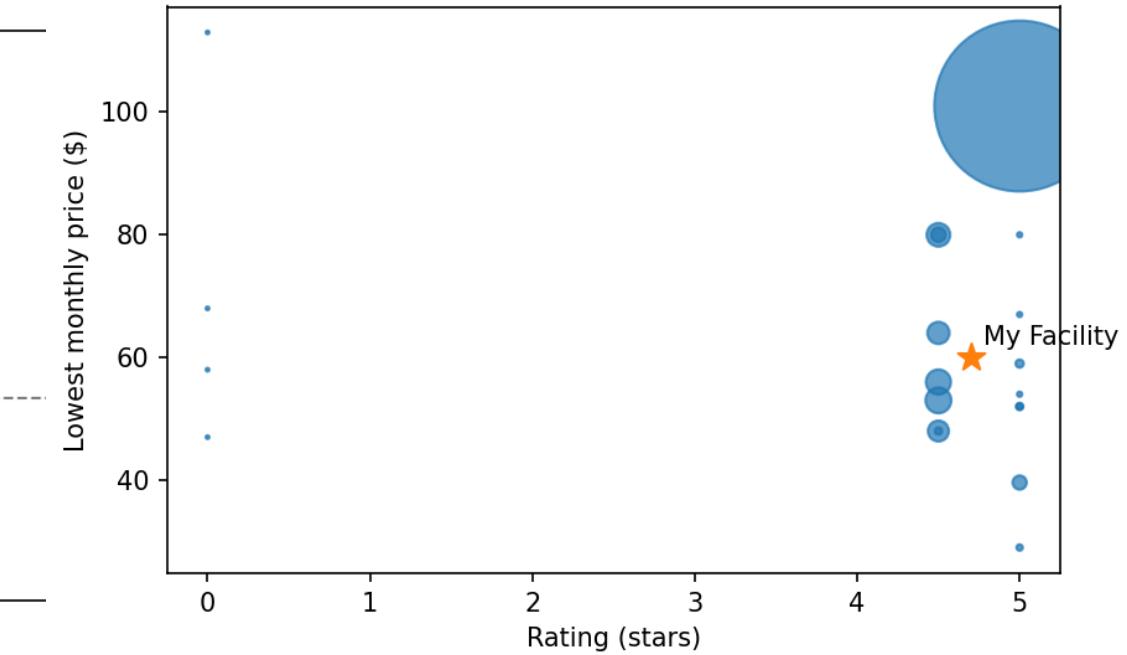
Promo Usage by Rating Bucket



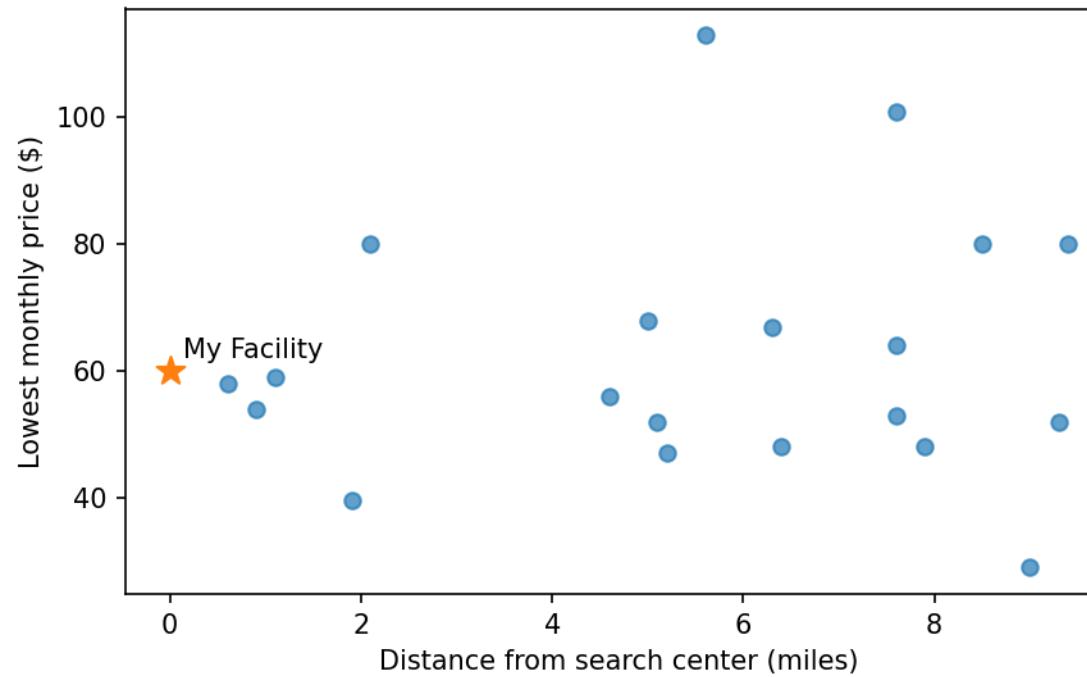
Opportunity Quadrant: Price vs Demand



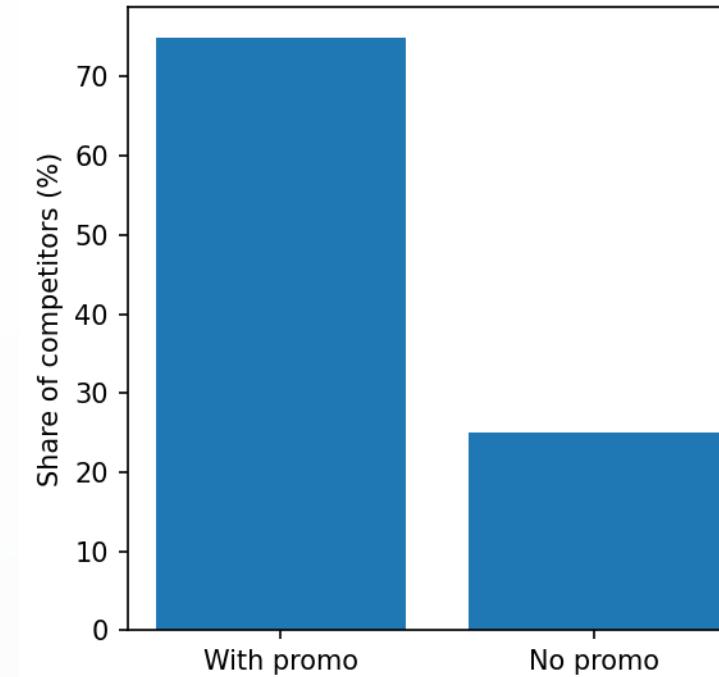
Rating vs Price (Value Positioning)



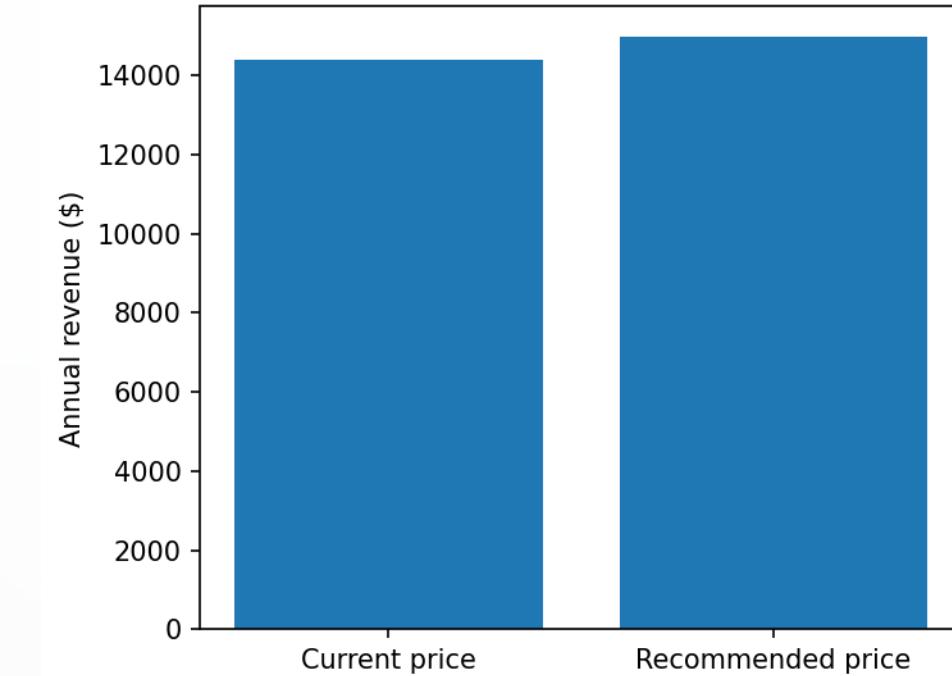
Price vs Distance



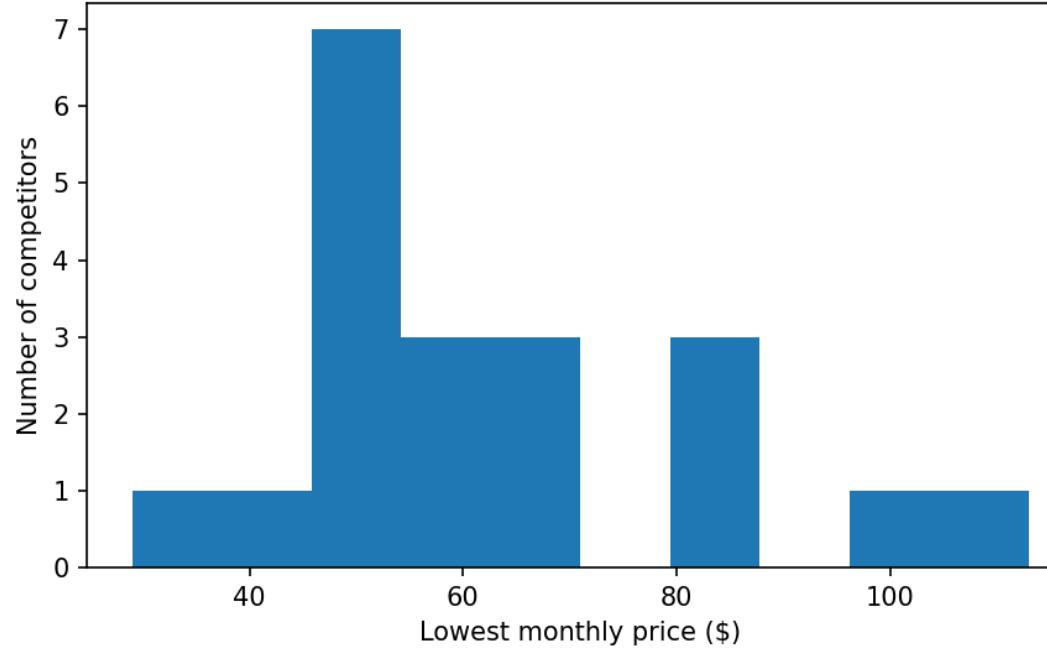
Promo Pressure in Market



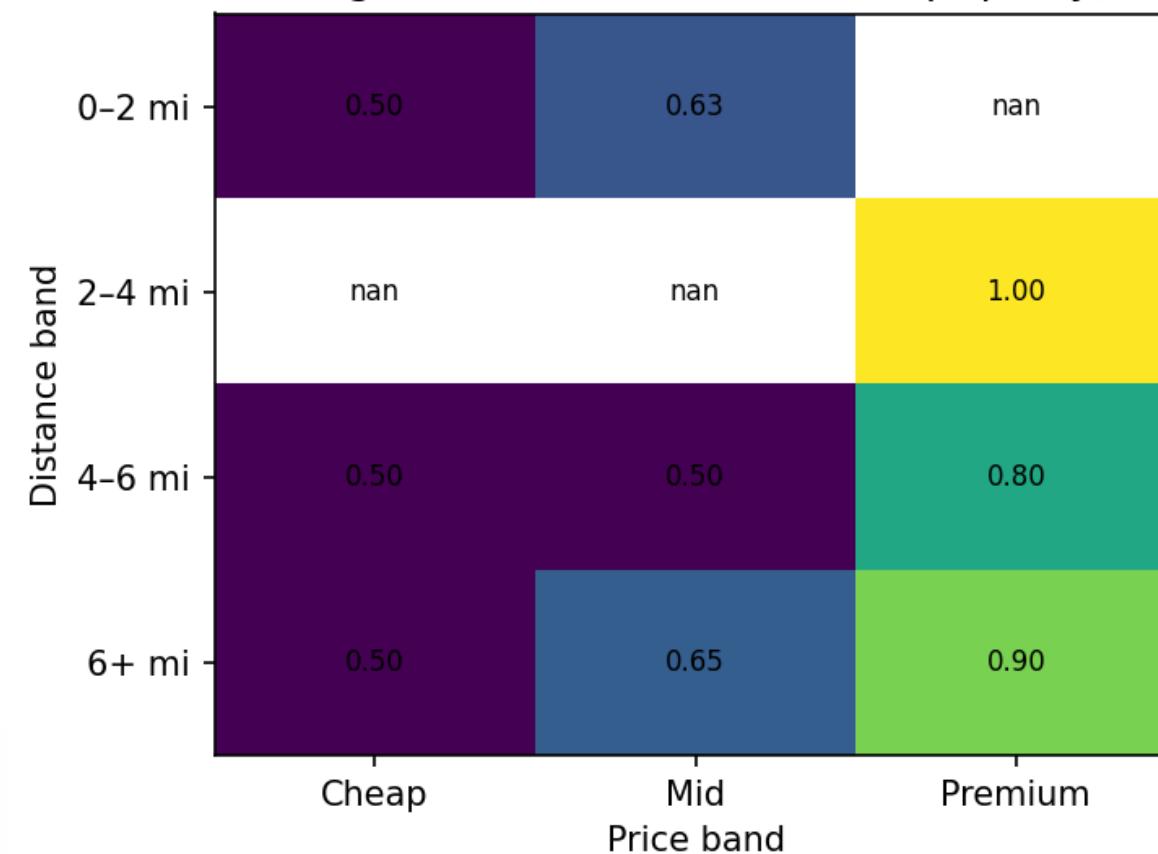
Revenue Impact of Price Optimization



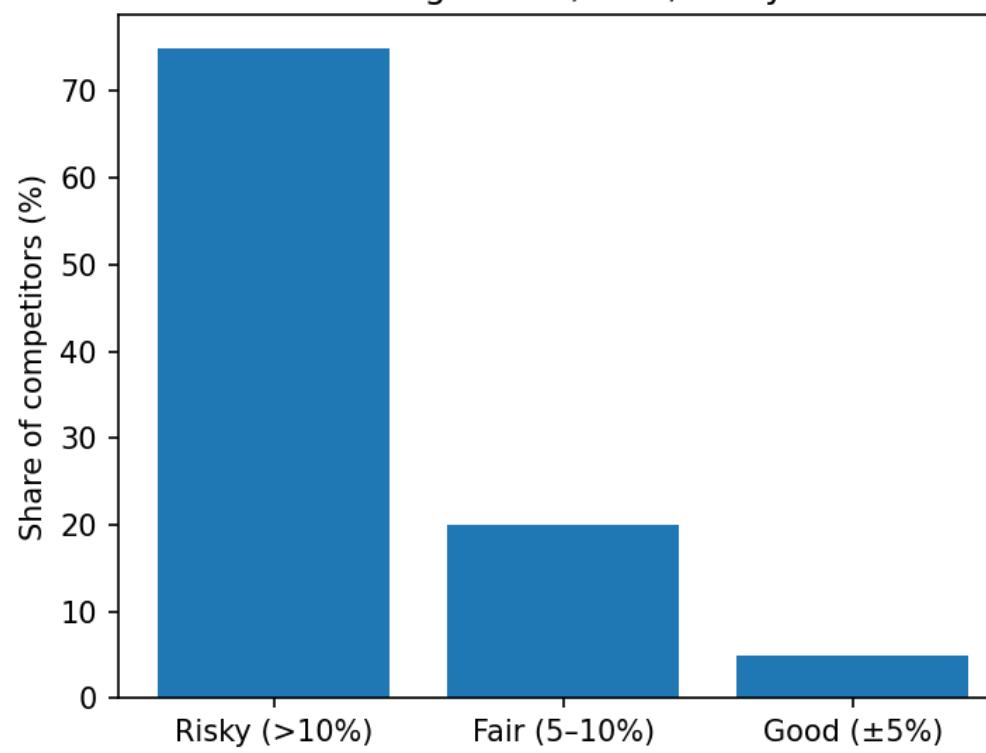
Market Price Distribution



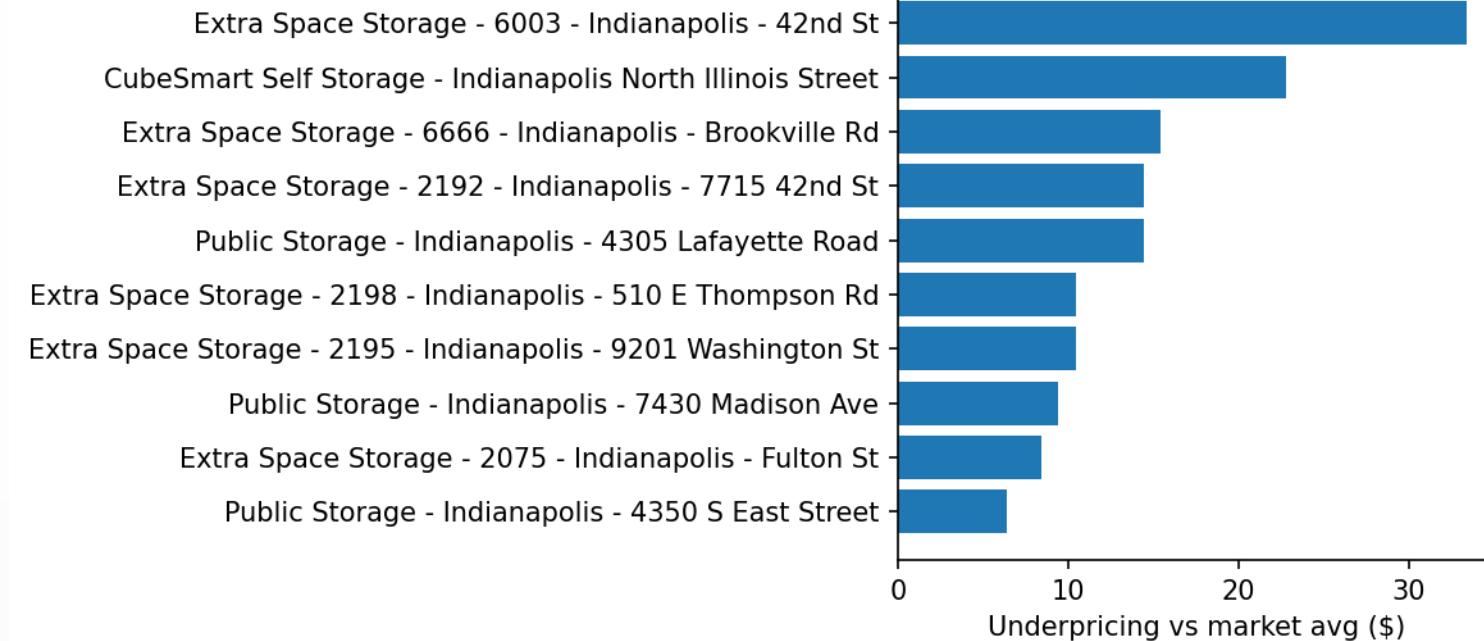
Neighborhood Demand Heatmap (proxy)



Price Positioning: Good / Fair / Risky vs Market



Top 10 Underpriced Competitors (vs Market Avg)



1 week free trial → Starter Tier → Advanced Tier



Competitive Intelligence

- Identify untapped revenue opportunities.
- Gauge competitive pressure via **Discount/Promo Pressure Index**.
- Analyze **Competitor Price Spread** for strategic positioning.
- Monitor **Competitiveness Score (0–100)** for continuous improvement.



Occupancy Benchmark

- Benchmark your occupancy against the market to identify growth opportunities.
- Track and prioritize vacant high-value units to maximize revenue.
- Proactively manage potential dips with the **Occupancy Risk Index**.
- Optimize operations by analyzing turnover and move-in pace.



Weekly AI “CEO Summary”

- Summarize key KPIs (price gaps, occupancy, revenue) in a single page.
- Deliver actionable AI-generated insights for strategic decisions.

THANK YOU !