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Metrolinx REAM Analyst Case Study

Portfolio Performance Analysis & Strategic Recommendations

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✅ Objective

- Looked at property performance using occupancy, financials, satisfaction, and ops data
- Flagged underperformers based on benchmarks and internal results
- Suggested what to do: acquire, hold, renovate, or sell
- Showed how I approached each question — with methods and visuals

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Data Preparation & Summary

Data preparation included:

- Verified dataset contains 26 unique properties across 4 types
- Standardized date formats and numerical fields
- No missing or duplicate values found
- Created new fields: ROI, Net Income, Years Since Renovation
- Performed integrity checks across satisfaction, occupancy, and financials

Property Type Count	Avg Occupancy Rates	Total Rent Income	Min Term Start Date
4	64%	28M	Sunday, December 11, 2011
Property Count	**Avg Tenant Satisfaction Score**	**Total Operating Costs**	**Max Term End Date**
26	71.04	14M	Friday, September 22, 2028

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1. Underperforming Properties (Occupancy)

- Created a calculated column in Power BI for Occupancy Rate = Occupied Area / Total Area
- Set industry benchmark thresholds by property type: Office: 85%, Residential & Retail: 90%, Industrial: 95%
- Defined underperforming as properties below 70% of their industry benchmark, to highlight only the most critical gaps
- Identified properties falling below their benchmark using filter
- Added benchmark lines to the visual for quick comparison

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Reference

- Colliers Toronto Office Report (Q4 2024)
- Marcus & Millichap Retail Report (2025)
- Colliers National Snapshot Report(Q4 2024)
- City of Toronto Rental Housing Plan

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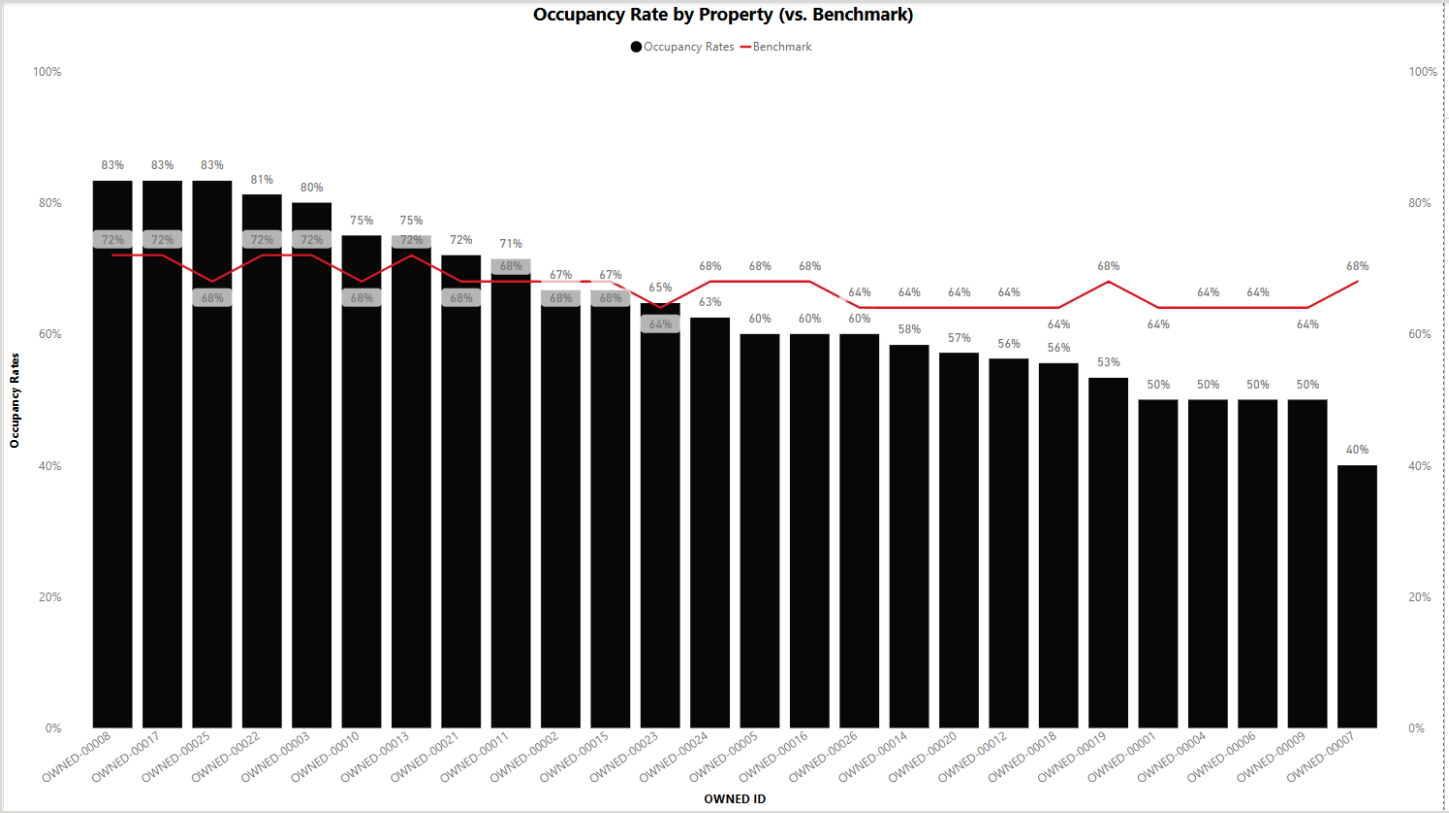
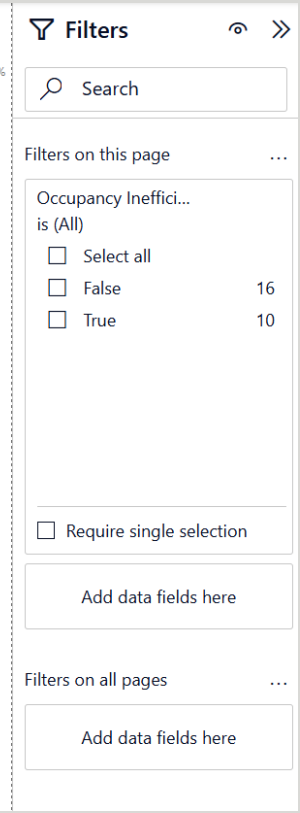
Occupancy Rate by Property vs. Internal Benchmark





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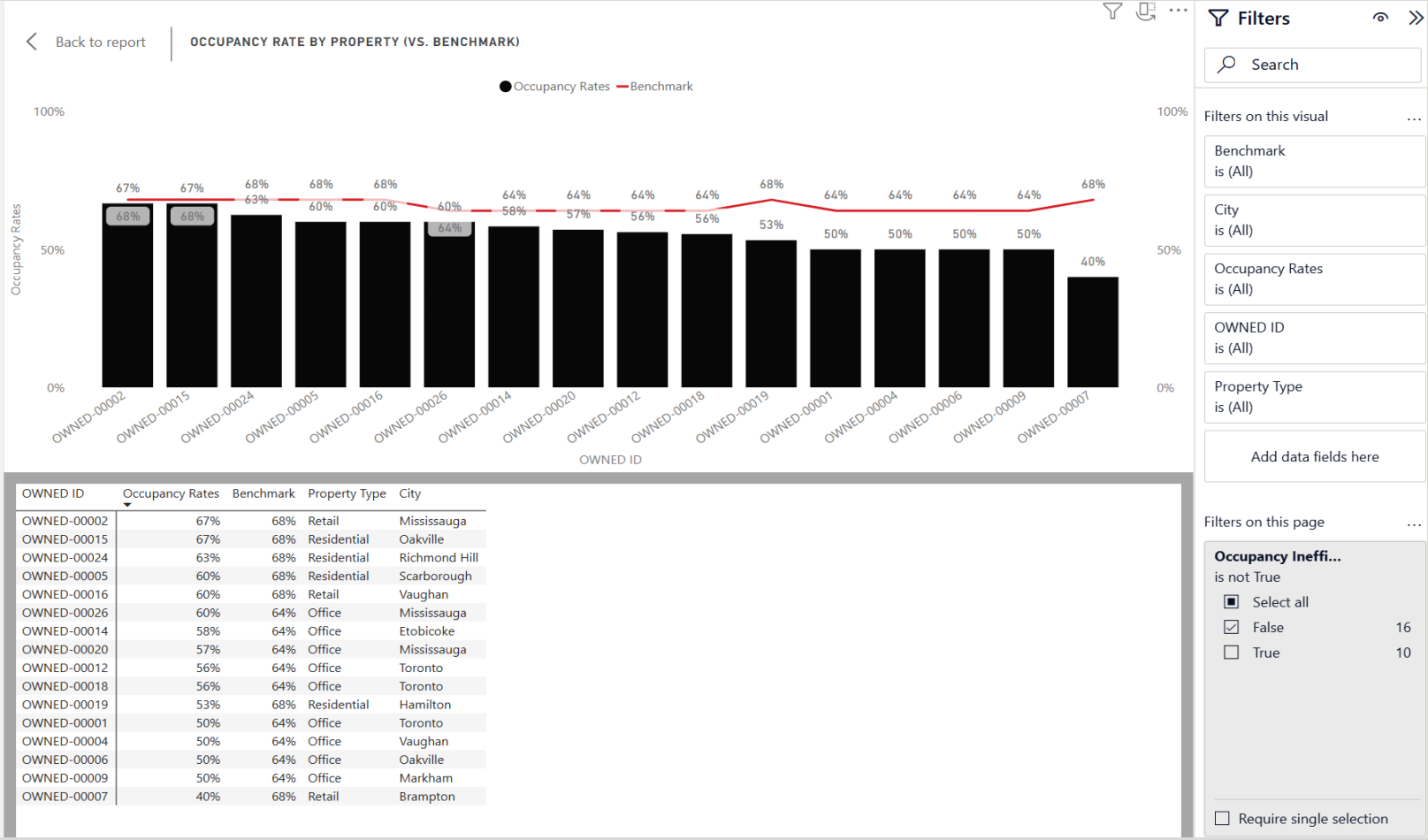
Underperforming Properties



OWNED ID	Occupancy Rates	Benchmark	Property Type	City
OWNED-00002	67%	68%	Retail	Mississauga
OWNED-00015	67%	68%	Residential	Oakville
OWNED-00024	63%	68%	Residential	Richmond Hill
OWNED-00005	60%	68%	Residential	Scarborough
OWNED-00016	60%	68%	Retail	Vaughan
OWNED-00026	60%	64%	Office	Mississauga
OWNED-00014	58%	64%	Office	Etobicoke
OWNED-00020	57%	64%	Office	Mississauga
OWNED-00012	56%	64%	Office	Toronto
OWNED-00018	56%	64%	Office	Toronto
OWNED-00019	53%	68%	Residential	Hamilton
OWNED-00001	50%	64%	Office	Toronto
OWNED-00004	50%	64%	Office	Vaughan
OWNED-00006	50%	64%	Office	Oakville
OWNED-00009	50%	64%	Office	Markham
OWNED-00007	40%	68%	Retail	Brampton

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2 & 3. What's Driving Low Occupancy?

- Used a scatter plot to map occupancy rates against tenant satisfaction, with bubble size based on property age
- Created a bar chart showing average occupancy by satisfaction groups
- Added a grouped bar chart to compare occupancy by years since renovation
- Built a matrix to show occupancy rates across satisfaction levels by property type

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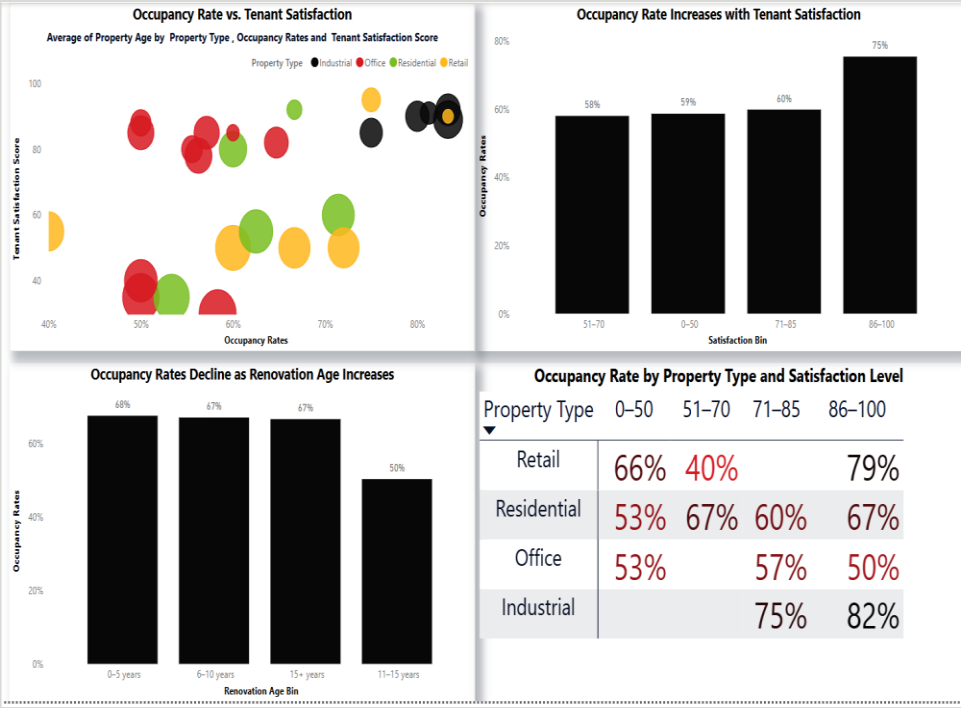
📉 Low Occupancy Drivers: Satisfaction & Renovation Age

- Tenant satisfaction scores (especially below 70) are associated with significantly lower occupancy rates
- Older renovations (11–15 years) correspond with the lowest average occupancy (~50%)
- Property types like Retail and Residential are more sensitive to satisfaction drops — as shown in the matrix



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📌 Recommendation

- Focus on improving satisfaction and updating older properties, particularly in Retail and Residential sectors. These properties show the strongest link between tenant experience and occupancy performance

- 📈 Tenant Satisfaction Drives Occupancy.

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4. Operating Costs vs. Rent

- Calculated Operating Cost Ratio = Operating Costs / Rent Income
- Applied benchmark thresholds by property type:
  - Office: 55%
  - Retail: 30%
  - Residential: 45%
  - Industrial: 25%
- Created a bar + line chart to highlight properties above their target cost ratios
- Flagged those assets as “Cost Inefficient” using DAX

📚 Reference:

BullpenRE:operating expense ratio in real estate

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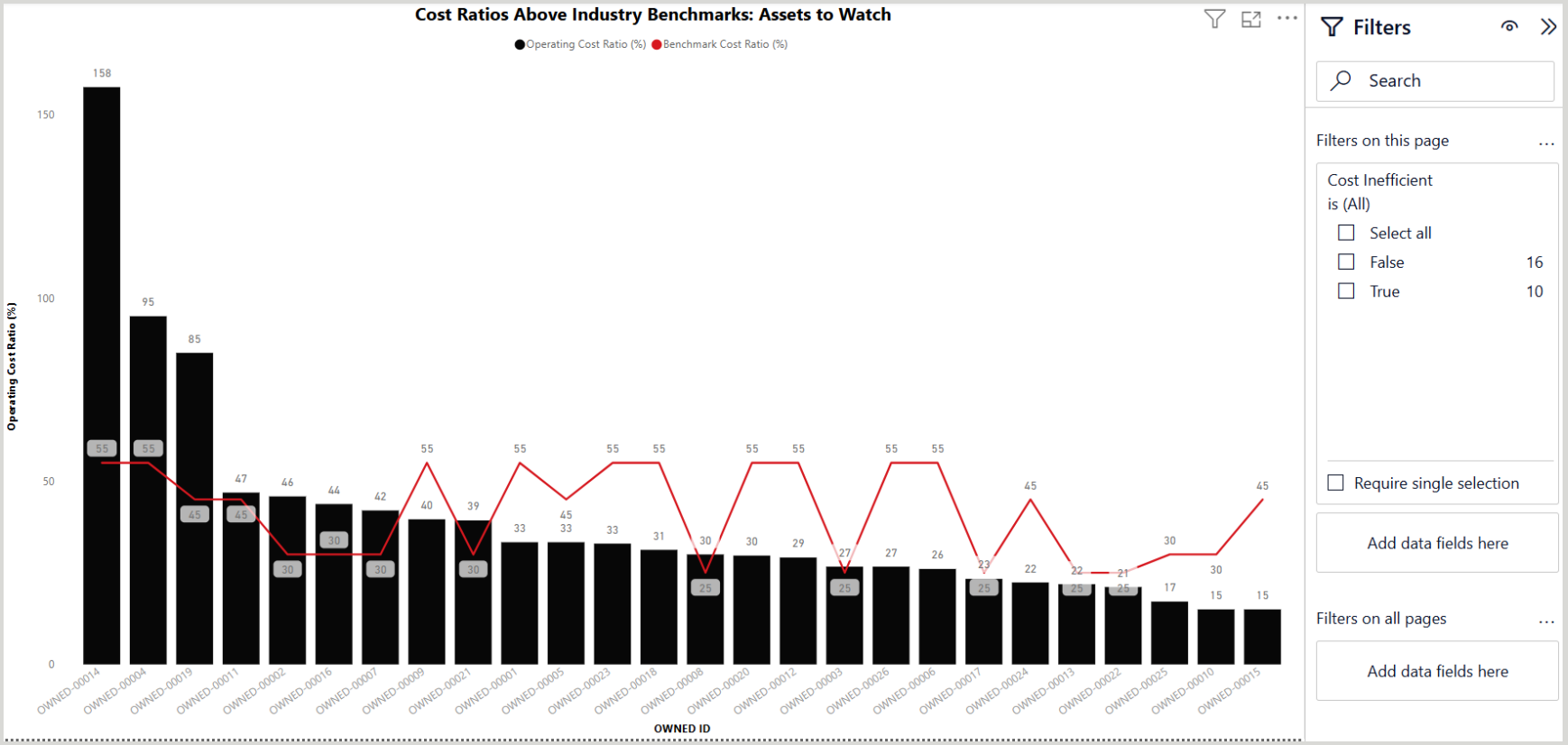
Operating Cost Ratios by Property vs. Industry Benchmarks



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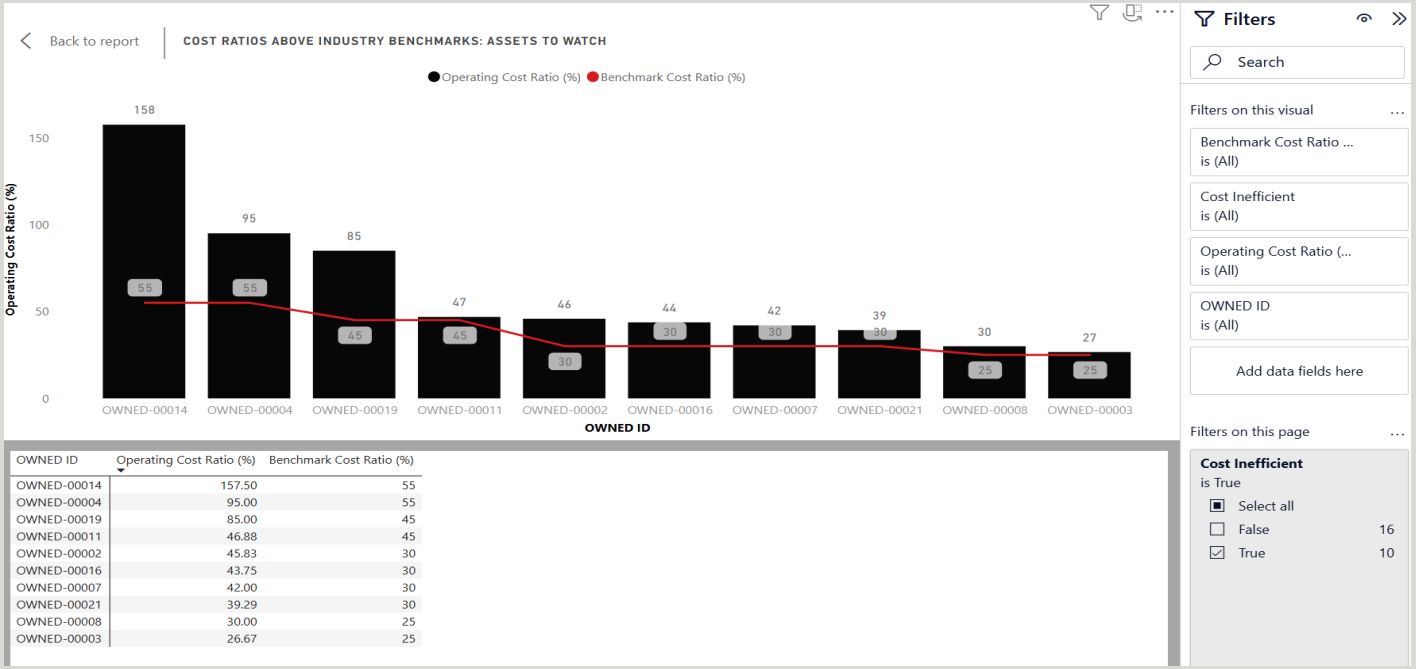
What the Visual Shows

10 properties are operating above their benchmark thresholds - meaning costs are higher than income. These assets stand out as financially inefficient, regardless of occupancy



OWNED ID	Operating Cost Ratio (%)	Benchmark Cost Ratio (%)
OWNED-00014	157.50	55
OWNED-00004	95.00	55
OWNED-00019	85.00	45
OWNED-00011	46.88	45
OWNED-00002	45.83	30
OWNED-00016	43.75	30
OWNED-00007	42.00	30
OWNED-00021	39.29	30
OWNED-00008	30.00	25
OWNED-00003	26.67	25

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5. Highest ROI Properties

- Calculated Return on Investment (ROI) using: ROI = Net Income / Capital Expenditures
- Created a scatter plot to explore the relationship between tenant satisfaction and ROI
- Compared additional drivers (CapEx, occupancy, satisfaction) across property types using stacked visuals
- Linked findings back to Q2/Q3 to show how operational drivers (satisfaction, age, occupancy) ultimately influence ROI

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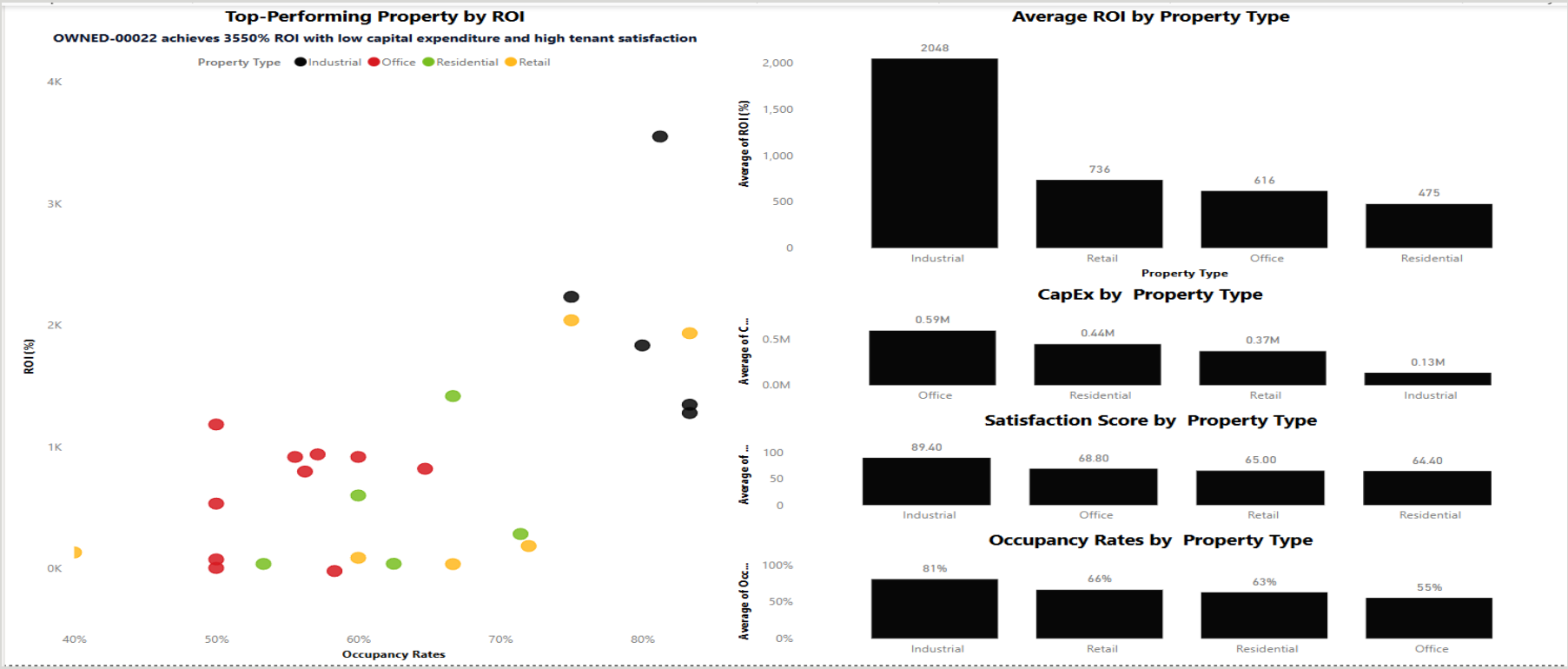
Return on Investment (ROI) Performance and Key Drivers I



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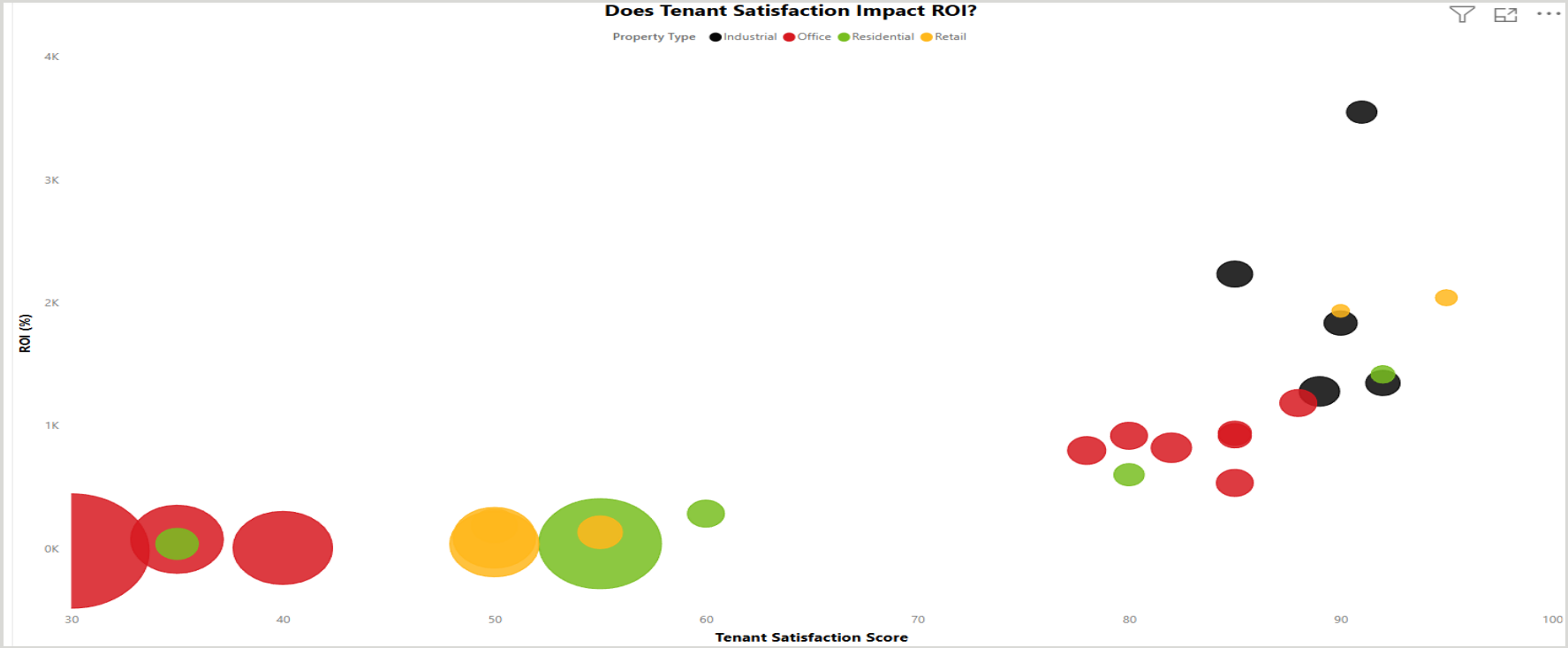
Return on Investment (ROI) Performance and Key Drivers II



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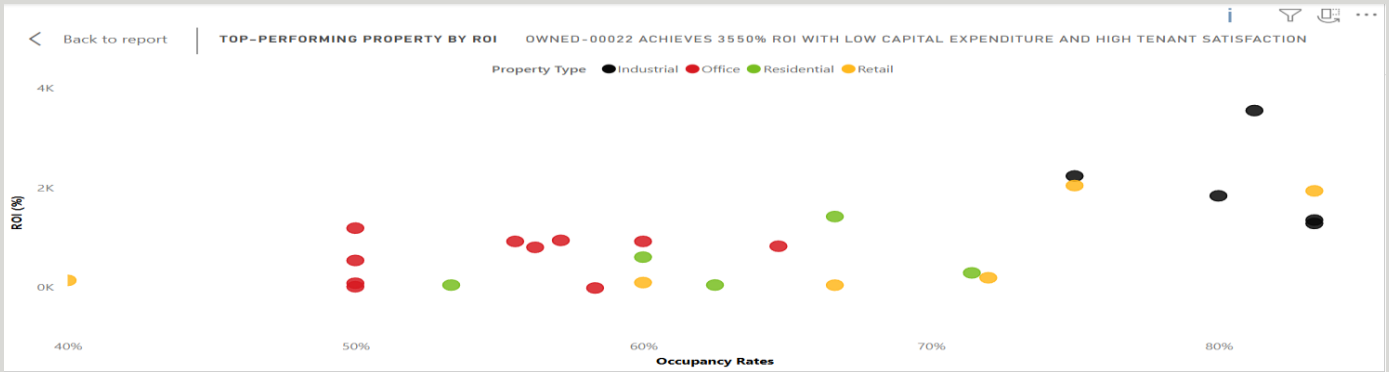
What the Visuals Show

- OWNED-00022 (Industrial) is the top performer with 3550% ROI, Driven by low capital expenditure and high tenant satisfaction
- Industrial properties overall have the highest average ROI (~2048%)
- Office and Residential properties show lower ROI averages, despite higher property count



Property Type	OWNED ID	Net Income ($)	Years Since Renovation	Property Age	Capital Expenditures ($)
Industrial					
75%, 2,232.14	OWNED-00013	3125000.00	4	22	140000.00
80%, 1,833.33	OWNED-00003	2200000.00	10	24	120000.00
81%, 3,550.00	OWNED-00022	3550000.00	5	13	100000.00
83%, 1,277.78	OWNED-00017	2300000.00	5	37	180000.00
83%, 1,346.15	OWNED-00008	1750000.00	8	26	130000.00
Office					
50%, 4.46	OWNED-00004	50000.00	6	47	1120000.00
50%, 74.74	OWNED-00009	725000.00	15	58	970000.00
50%, 533.33	OWNED-00001	800000.00	15	30	150000.00
50%, 1,183.33	OWNED-00006	1775000.00	4	18	150000.00
56%, 916.67	OWNED-00018	1375000.00	4	19	150000.00
56%, 796.88	OWNED-00012	1275000.00	5	32	160000.00
57%, 937.50	OWNED-00020	1125000.00	3	28	120000.00
58%, -20.91	OWNED-00014	-575000.00	11	60	2750000.00
60%, 916.67	OWNED-00026	1100000.00	3	7	120000.00
65%, 819.44	OWNED-00023	1475000.00	9	25	180000.00
Residential					
53%, 37.50	OWNED-00019	75000.00	14	55	200000.00
60%, 600.00	OWNED-00005	600000.00	7	33	100000.00

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🧠 Drivers of ROI Differences

- ROI is positively influenced by:
  - Lower capital expenditures
  - Higher tenant satisfaction
  - Occupancy rates >70%
  - Property type matters: Industrial outperforms due to cost efficiency and stable tenants

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6. Optimizing Strategy

- Created a summary matrix comparing:
  - Average ROI
  - Average Capital Expenditure (CapEx)
  - Average Tenant Satisfaction
- Added a recommendation logic using DAX based on thresholds:
  - [ROI] > 1000 AND [Satisfaction] > 80 AND [CapEx] < 300000, " ✅ Acquire More",
  - [ROI] > 800 OR [Satisfaction] > 85, " 🟡 Monitor for Opportunity",
  - [ROI] < 500 AND [CapEx] > 400000 AND [Satisfaction] < 70, " ❌ Consider Selling",
  - " 🟣 Hold / Monitor"

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Property Type Recommendation Matrix

Property Type	Avg ROI	Avg CapEx	Avg Satisfaction	Recommendation
Industrial	2,048	134K	89	✅ Acquire More
Residential	475	442K	64	❌ Consider Selling
Office	616	587K	69	⚠️ Hold/Monitor
Retail	736	367K	65	⚠️ Hold/Monitor

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6. Optimizing Strategy

Property Type	ROI	CapEx	Satisfaction	Recommendation
Industrial	✅ Very High	✅ Low	✅ High	✅ Acquire More
Residential	❌ Low (<500)	❌ High	❌ Low	❌ Consider Selling
Office	⚠️ Mid	❌ High	⚠️ Borderline	⚪ Hold / Monitor
Retail	⚠️ Mid	⚠️ Borderline	❌ Low	⚪ Hold / Monitor

Acquire More: ROI > 1000 AND Satisfaction > 80 AND CapEx < $300K

Monitor Opportunity: ROI > 800 OR Satisfaction > 85

Consider Selling: ROI < 500 AND CapEx > $400K AND Satisfaction < 70

Hold / Monitor: All other properties

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✅ Final Recommendations I

✅ Industrial – Acquire More

Consistently delivers very high ROI (2048%), with low capital expenditure ($134K) and excellent tenant satisfaction (89).

This category is performing on all fronts — it's cost-efficient, profitable, and well-received by tenants.

Recommend expanding holdings or prioritizing similar industrial investments.

❌ Residential – Consider Selling

Has low ROI (475%), high CapEx ($442K), and poor tenant satisfaction (64).

This asset type is underperforming across all key indicators, suggesting misalignment with portfolio goals.

Explore divestment or redevelopment options to reduce sunk cost and reallocate capital.

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✅ Final Recommendations II

🟣 Office – Hold / Monitor

Moderate ROI (616%), but very high CapEx ($587K) and only borderline satisfaction (69).

Performance is mixed; the ROI is not bad, but costs are high, and tenant sentiment is uncertain.

Monitor for shifts in market or operational performance. Consider future renovation or optimization.

🟣 Retail – Hold / Monitor

ROI is better than residential (736%), CapEx is moderate ($367K), but satisfaction remains low (65).

Could be improved with better tenant experience or smarter investment — but not a strong case to expand or divest yet.

Maintain holdings but assess tenant needs or modernization potential.

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❓ What I would do next

- Validate ROI and satisfaction trends over time to catch volatility
- Explore specific high-ROI and low-satisfaction assets for hidden risk
- Interview tenants in low-performing properties to confirm survey data
- Layer in market rent benchmarks for deeper pricing insight
- Build dashboard for ongoing asset health monitoring