

SPATIAL MARKET SHARE ESTIMATION

F&B Retail Trade Area Analysis

Purwokerto-Banyumas Catchment Area · April 2026

Focal POI: Mie Gacoan Purwokerto

(Not actual client, we used public data for demonstration)

30.1%

Focal POI Market Share

165 /day

Weekday Foot Traffic

214 /day

Weekend Foot Traffic

10 POIs

Competitive Set

Competitive Market Share Distribution Huff Gravity Model Estimate

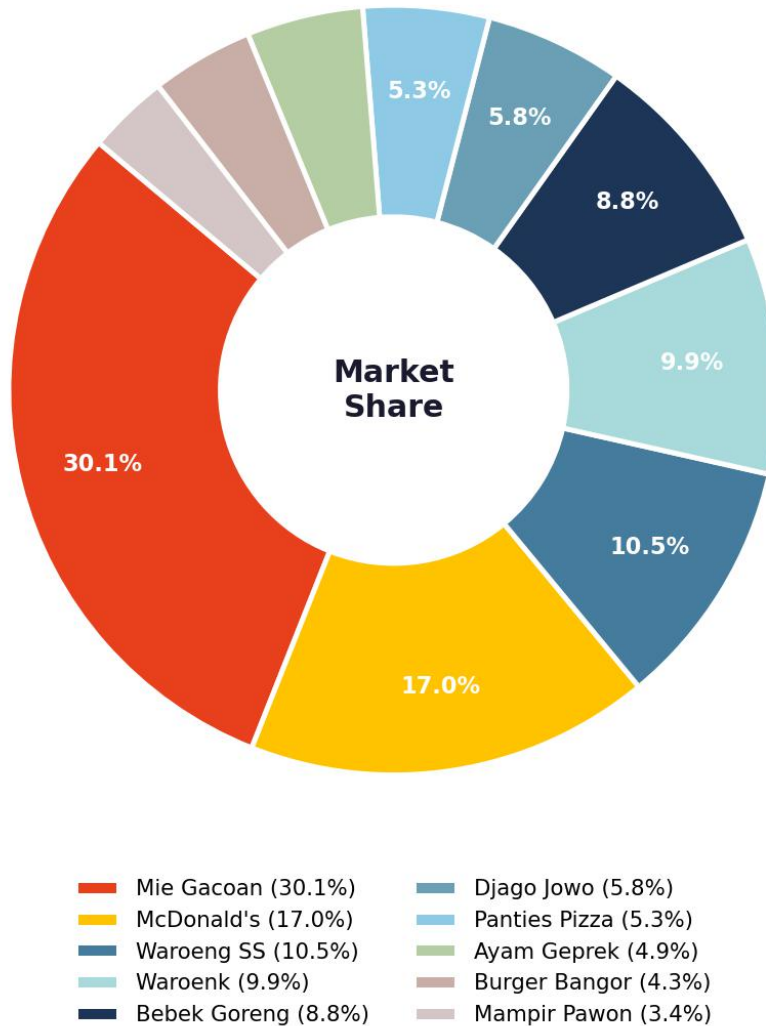


Figure 1 — Huff Gravity Model market share distribution across 10 POIs within 1.5 km catchment

Focal POI: Mie Gacoan Purwokerto

Jl. Dr. Soeparno, Arcawinangun, Purwokerto Timur, Banyumas

Methodology: Foot Traffic Ratio · Area-Based Attractiveness · Huff Gravity Model

This document demonstrates spatial market estimation from public-domain data only.
No internal transaction data was used — by design.

1. Context & Business Objective

Understanding market position before acquiring proprietary data is one of the most valuable capabilities in commercial analytics. This report demonstrates that a credible, decision-grade baseline can be constructed entirely from public information — providing a structural view of market demand before any client onboarding begins.

ANALYTICAL OBJECTIVE

Core Question: What share of total dining demand in this trade area does each outlet structurally attract — given its location, size, and competitive positioning?

The analysis covers Mie Gacoan Purwokerto as the focal point of interest, mapped against 9 direct and indirect competitors within a 1.5 km catchment radius. Three complementary methods are layered to produce a robust estimate:

- ① Foot Traffic Ratio Estimation — vehicle-to-visitor conversion calibrated to road class and outlet category
- ② Area-Based Attractiveness Scoring — store capacity and brand equity as composite attractiveness inputs
- ③ Huff Probabilistic Gravity Model — spatial probability of consumer choice across competing destinations

This static structural estimate is the first layer of a two-layer demand intelligence framework. It establishes the ceiling — the maximum achievable share under ideal conditions. The second layer, dynamic demand estimation (POS data, delivery volumes, seasonality), captures realized demand and temporal fluctuations. Together, they enable accurate demand matching and strategic decisions at scale.

Focal POI Reference

Location	Jl. Dr. Soeparno, Purwokerto Timur	Category	Casual / Fast Food
Pricing Tier	Middle-Low	Google Reviews	6,514
Est. Store Area	350 m ²	Road Classification	Arterial
Catchment Radius	1.5 km	Coordinates	-7.4142, 109.2540

2. Competitive Landscape & Market Share Analysis

The competitive set consists of 10 F&B outlets within 1.5 km of the focal POI. The table below presents each outlet's key structural attributes and estimated market share derived from the Huff gravity model.

#	POI	Dist.	Reviews	Area	Road	Market Share
1	Mie Gacoan Purwokerto	—	6,514	350 m²	Arterial	30.1%
2	McDonald's Suparno	165m	785	300 m ²	Arterial	17.0%
3	Waroeng SS GOR	607m	3,857	200 m ²	Collector	10.5%
4	Waroenk Ora Umum	136m	5,637	150 m ²	Arterial	9.9%
5	Bebek Goreng H. Slamet	364m	1,959	80 m ²	Collector	8.8%
6	Djago Jowo	602m	4,635	120 m ²	Collector	5.8%
7	Panties Pizza	505m	1,197	100 m ²	Collector	5.3%
8	Ayam Geprek Juara	598m	592	60 m ²	Collector	4.9%
9	Burger Bangor	414m	594	60 m ²	Collector	4.3%
10	Mampir Pawon	808m	3,797	100 m ²	Local	3.4%

Table 1 — Competitive set POI inventory with Huff model market share estimates. Highlighted row = focal POI.

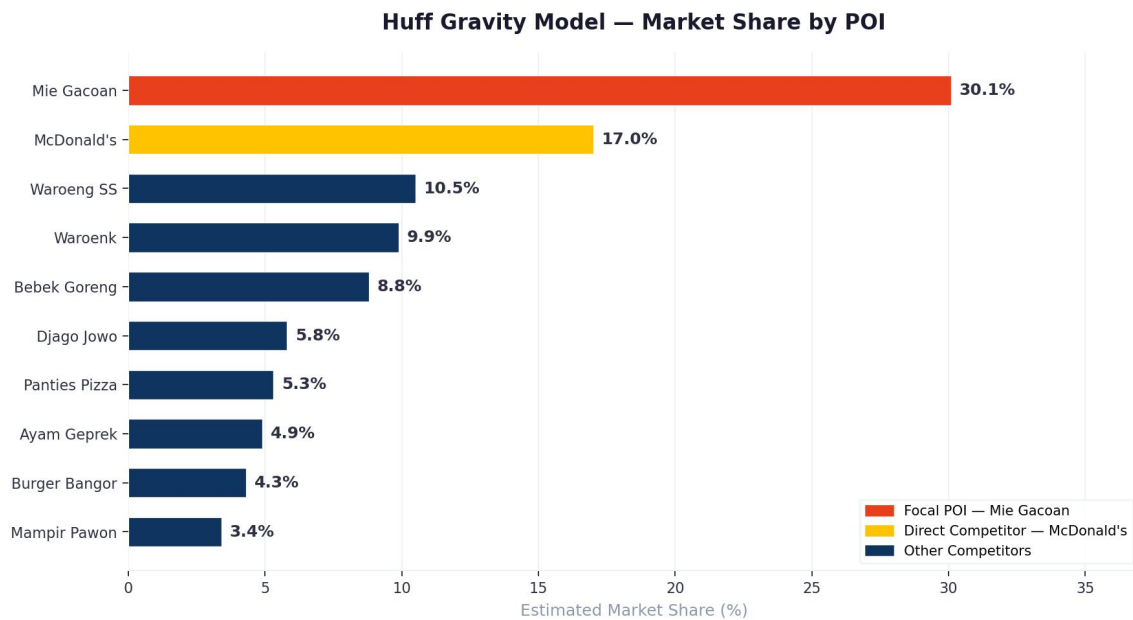


Figure 2 — Horizontal bar chart of estimated market share by POI (Huff Gravity Model)

Foot Traffic Volume

Daily visitor estimates are derived from road vehicle volume, category conversion multipliers, and temporal activity archetypes. Weekend volume applies a uniform 1.30x uplift consistent with Indonesian urban F&B patterns.

Daily Foot Traffic Estimate — Weekday vs Weekend

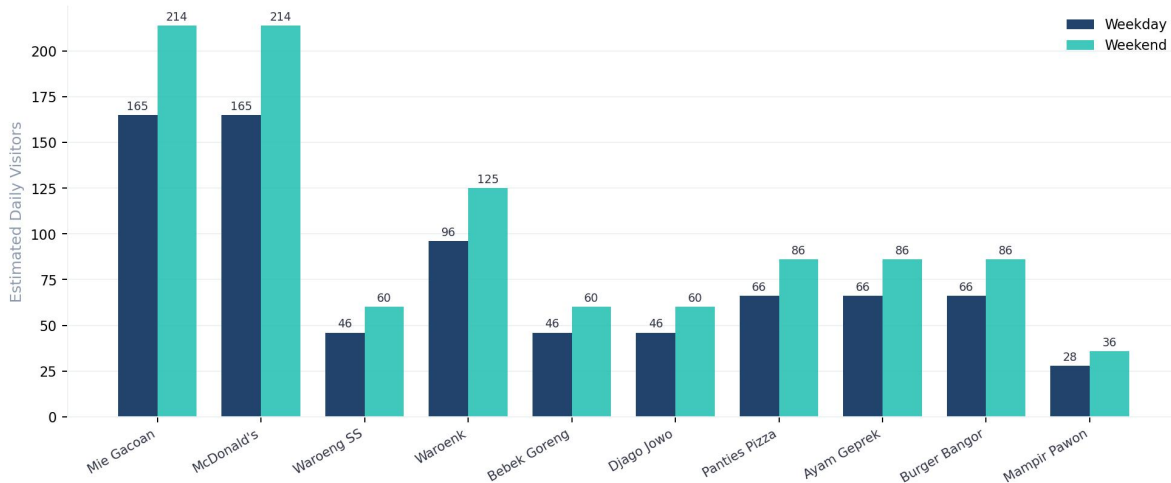


Figure 3 — Estimated daily foot traffic by POI, weekday vs. weekend

POI	Road Class	Category Mult.	Weekday Visitors	Weekend Visitors
Mie Gacoan	Arterial	1.00x	165	214
McDonald's	Arterial	0.70x	165	214
Waroeng SS	Collector	1.00x	46	60
Waroenk	Arterial	0.70x	96	125
Bebek Goreng	Collector	1.00x	46	60
Djago Jowo	Collector	0.70x	46	60
Panties Pizza	Collector	0.70x	66	86
Ayam Geprek	Collector	1.00x	66	86
Burger Bangor	Collector	1.00x	66	86
Mampir Pawon	Local	1.00x	28	36

Table 2 — Daily foot traffic estimates. Mie Gacoan and McDonald's share identical road and category profiles; Mie Gacoan's higher market share stems from superior attractiveness score.

3. Attractiveness & Spatial Position

The Huff model's attractiveness parameter combines two signals: physical store capacity (area, 70% weight) and accumulated brand equity (log-normalized review count, 30% weight). This formulation reflects that throughput capacity is the hard ceiling on demand capture, while brand recognition amplifies the pull beyond pure proximity.

POI	Area (m ²)	Area Score	Log(Reviews)	Review Score	Composite
Mie Gacoan	350	1.000	3.814	1.000	1.0000
McDonald's	300	0.857	2.895	0.759	0.8277
Waroeng SS	200	0.571	3.586	0.940	0.6821
Waroenk	150	0.429	3.751	0.984	0.5951
Djago Jowo	120	0.343	3.666	0.961	0.5284
Mampir Pawon	100	0.286	3.579	0.939	0.4816
Panties Pizza	100	0.286	3.078	0.807	0.4421
Bebek Goreng	80	0.229	3.292	0.863	0.4190
Burger Bangor	60	0.171	2.774	0.727	0.3382
Ayam Geprek	60	0.171	2.772	0.727	0.3381

Table 3 — Attractiveness score decomposition. Composite = 0.70 × Area Score + 0.30 × Review Score.

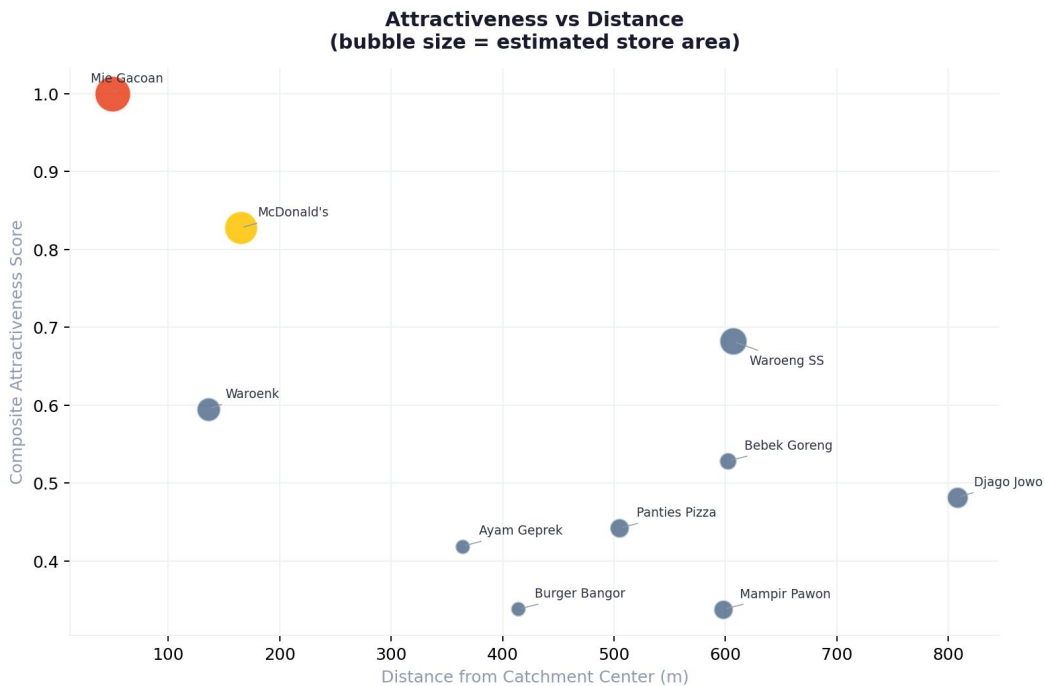


Figure 4 — Attractiveness vs. distance from catchment center. Bubble size = estimated store area. Mie Gacoan dominates on both dimensions.

SENSITIVITY NOTE

Sensitivity check: If McDonald's store area is doubled to 600 m², its composite attractiveness rises to 0.94 — yet Mie Gacoan still retains ~26% market share vs McDonald's ~21%. Mie Gacoan's review volume (6,514 vs 785) provides a durable competitive moat.

4. Business Insights

4.1 Market Position

Market Leader. Mie Gacoan holds a structurally dominant position at 30.1% — nearly double its nearest competitor (McDonald's at 17.0%). This lead is driven by a combination of the highest review count in the set (6,514) and one of the largest footprints (350 m²).

Primary Threat. McDonald's Suparno is the most credible direct substitute: same road class, same daypart profile (Lunch + Dinner), and 165m separation. It captures the same impulse-dining occasion, making it the primary competitive benchmark for assessing Mie Gacoan's day-to-day performance.

Traditional Segment. Waroeng SS (10.5%), Waroenk Ora Umum (9.9%), and Djago Jowo (5.8%) collectively hold 26.2% but operate primarily in the dinner-only window. Their competitive overlap with Mie Gacoan is partial — concentrated in the 17:00-21:00 slot rather than the full day.

4.2 Competitive Cluster View

Cluster	POIs	Combined Share	Key Differentiator
Fast Food / Chain	Mie Gacoan, McDonald's, Burger Bangor, Panties Pizza, Ayam Geprek	61.6%	Speed, price, impulse appeal — full-day occasion
Traditional / Ethnic	Waroenk, Bebek Goreng, Waroeng SS, Djago Jowo	35.0%	Destination dining, local cuisine — dinner-dominant
Casual / Overlap	Mampir Pawon	3.4%	Competes across segments; limited scale

Table 4 — Competitive cluster groupings by segment and daypart profile.

4.3 Logistics Implication

Mie Gacoan's estimated 165-214 daily visitors implies a consistent, predictable throughput of perishable inventory. At an average spend of Rp 25,000-35,000 per visit, this translates to an estimated Rp 4.1-7.5M daily GMV — a scale that warrants structured delivery scheduling rather than ad-hoc replenishment.

LOGISTICS PLANNING SIGNAL

Recommended delivery cadence: 3-4 runs/week for core perishable SKUs (noodles, sauces, proteins).

Weekend uplift (+30%) may justify a dedicated Saturday run to avoid stockouts at peak.

McDonald's, as co-arterial competitor, represents a benchmark delivery SLA to match or exceed.

5. Business Recommendations

The following recommendations translate the market share estimates into actionable commercial decisions across logistics, distribution, expansion, and partnership contexts.

R1 Delivery Route Optimization

Relevant to: F&B Logistics / Distribution Partners

Use market share and foot traffic estimates to tier outlets by demand intensity. Mie Gacoan and McDonald's (Tier 1, arterial) justify dedicated high-frequency routes. Collector-road outlets (Tier 2) can be served on shared multi-stop routes. This tiering reduces per-delivery cost while maintaining service reliability.

R2 FMCG Sales Force Coverage Prioritization

Relevant to: FMCG Brand / Sales Teams

Rank the 10 POIs by composite market share × foot traffic to allocate sales rep visit frequency. Top 3 POIs (Mie Gacoan, McDonald's, Waroeng SS) alone represent 57.6% of catchment demand — prioritizing these maximizes ROI on field activity.

R3 Whitespace & Expansion Analysis

Relevant to: F&B Operators / Investors

The traditional segment (35% combined share) is served by 4 outlets averaging only 8.8% each. A well-located traditional-ethnic outlet at arterial position could capture 12-15% share by displacing the fragmented competition rather than fighting Mie Gacoan's structural moat.

R4 Partner Volume Validation

Relevant to: Commercial Due Diligence / Credit Teams

Before entering a supply or credit agreement with any of these outlets, cross-reference estimated foot traffic against reported purchase orders. A significant gap between model-estimated throughput and claimed volume is a flag for further investigation.

6. Demand Matching & POS Data Integration

This static market share model answers the structural question — what each outlet should capture under normal conditions. It becomes strategically decisive when paired with dynamic signals from POS transactions, delivery platforms, and inventory records.

TWO-LAYER DEMAND INTELLIGENCE

Static Model → What share should this outlet hold, structurally?

Dynamic Data → What share is it actually realizing, in real time?

Gap Analysis → Where is demand being lost, and why?

6.1 How POS Data Refines the Model

POS Integration Layer	Strategic Value Unlocked
Foot Traffic Validation	Match POS transaction count vs. modeled daily visitors. If POS shows 90 transactions vs. model's 165, the conversion rate is 55% — signaling either menu/service gaps or over-estimation of road traffic.
Demand Timing Calibration	POS timestamps validate or correct the temporal archetypes. If real peak is 11:00-13:00 not 17:00-21:00, the delivery scheduling and staff planning recommendations shift accordingly.
SKU-Level Throughput	Item-level POS data converts foot traffic estimates into ingredient demand forecasts — enabling precision replenishment planning (e.g., expected noodle volume per week) rather than broad delivery cadence.
Competitive Recalibration	If Mie Gacoan's POS shows weekday revenue growing while McDonald's next-door shows decline, market share is shifting — the static model's β parameter (distance decay) can be re-estimated from the live data to improve catchment modeling for adjacent areas.
Demand Matching for Logistics	Combining static share estimates with POS-derived order cycles enables true demand matching: the right quantity, at the right outlet, at the right time — minimizing both stockout risk and over-delivery waste.

Table 5 — POS data integration layers and the strategic decisions each enables.

6.2 Strategic Decision Matrix

The table below maps key commercial decisions to the data layer that enables them — showing where the static model alone is sufficient and where POS integration is required for full decision confidence.

Strategic Decision	Static Model Alone	With POS Integration
Outlet delivery frequency	✓ Static model sufficient	Refine timing windows
Route prioritization (tier assignment)	✓ Static model sufficient	Validate with order volumes
SKU-level replenishment quantity	✗ Requires POS	✓ POS = precise forecast
Demand seasonality planning	✗ Requires POS / Popular Times	✓ POS timestamps
Competitor share shift detection	✗ Requires POS + competitor data	✓ Cross-outlet POS
Credit / volume claim validation	Directional flag only	✓ POS = ground truth
New outlet site scoring	✓ Static model core use case	POS calibrates β parameter
FMCG listing prioritization	✓ Static model sufficient	POS confirms sell-through

Table 6 — Decision matrix: static spatial model vs. POS-augmented analysis.

STRATEGIC POSITIONING

The static model delivers immediate value at zero data cost — enabling prioritization, routing, and prospecting before any client relationship is established.

POS integration elevates the same framework into a real-time demand intelligence system that improves with every transaction — compounding analytical value over the engagement lifecycle.

Market Share Estimation Report · Spatial F&B Analytics Portfolio · April 2026

All figures are model-derived estimates from public-domain data. Accuracy improves with POS calibration.