THE GRAVITY SYSTEM

Sales Intelligence and Forecasting System

An evidence-based operating system for predicting sales and converting demand into sound decisions

Record → Explain → Compare → Forecast → Staff → Review → Preserve

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Purpose and promise

The Gravity Sales Intelligence and Forecasting System turns daily sales history into local operating knowledge. It records what happened, explains why it happened, compares the right trading days, predicts likely demand, converts that demand into labor and production requirements, and preserves the lesson for future managers. A closed day remains editable when a governing factor is learned later, but every material amendment is documented in the Daily Revision Log.

> The governing principle
> A forecast is not a guess. It is a documented expectation built from comparable history, known demand drivers, current trends, and stated assumptions.

Complete capability index

Capability	Where it happens	What the system does
Record daily operating history	Daily Journal	Sales, guests, average check, labor, weather, school, events, promotions, capacity conditions, forecast variance, drivers, and next-year lessons.
Correct any historical day	Daily Revision Log	Records the discovery date, late factor, prior and revised understanding, evidence, editor, approval, and forecast/labor impact.
Search recurring events	Event History	Filters car shows, festivals, Watermelon Parade days, school events, sports, holidays, and other recurring events across years.
Identify weekday versus weekend	Event History	Automatically derives the weekday and weekday/weekend class from each occurrence date.
Compare event weather	Event History	Stores weather summary, temperature range, rain, rain timing/amount, traffic, attendance, sales, guests, and labor.
Preserve school-calendar effects	School Calendar form / Daily Journal	Tracks breaks, first/last days, early release, activities, and observed demand effects.
Preserve community-calendar effects	Annual Calendar / Event History	Maintains recurring local drivers, lead time, historical effect, ownership, and next action.
Document promotions and pricing	Promotion & Pricing Log	Separates promotion, price, channel, lift, margin implication, and continuation decision.
Document disruptions	Operating Disruption Log	Captures outages, closures, construction, staffing restrictions, duration, capacity, and recovery.
Find comparable trading days	Comparable Days	Builds a candidate library based on weekday, season, calendar, weather, promotion, event, capacity, and channel.

Score comparable days	Comparable Days	Produces a transparent similarity score rather than relying on memory alone.
Approve weights and exclusions	Comparable Days	Documents why candidates were selected, excluded, or given greater influence.
Build daily sales forecasts	Daily Forecast	Combines baseline, trend, price/mix, weather, calendar, promotion, capacity, and incremental known sales.
Publish forecast ranges	Daily Forecast	Calculates low, most-likely, and high demand outcomes.
Assign forecast confidence	Daily Forecast / Setup	Uses high, medium, or low confidence with controlled range factors.
Forecast guests and average check	Daily Forecast / Daypart Forecast	Keeps demand volume distinct from check growth.
Forecast by daypart	Daypart Forecast	Places sales, guests, reservations, orders, and demand drivers in the time periods where workload occurs.
Forecast by channel	Daypart Forecast	Separates dine-in, takeout, delivery, catering, and other material channels.
Calculate sales-based labor	Labor Demand	Forecast sales divided by the approved sales-per-labor-hour target.
Calculate guest-based labor	Labor Demand	Forecast guests divided by the approved guests-per-labor-hour target.
Protect minimum coverage	Setup / Labor Demand	Uses role and daypart coverage as a staffing floor.
Add fixed non-selling work	Labor Demand	Includes setup, closing, cleaning, receiving, meetings, and training.
Add event and channel workload	Labor Demand	Adds catering, festival, delivery, party, promotion, or other exceptional workload.
Recommend labor hours	Labor Demand / Daily Forecast	Uses the strongest justified workload requirement plus fixed work, event work, and documented adjustment.
Compare recommended and scheduled hours	Labor Demand	Shows the schedule gap before the schedule is finalized.
Project forecast SPLH	Labor Demand	Shows the productivity result implied by forecast sales and recommended hours.
Translate demand into prep	Production & Prep form	Converts forecast demand into quantities, on-hand offsets, yields, labor minutes, start times, and ownership.
Analyze fiscal-year YTD performance	YTD Analysis	Restricts current results to the selected fiscal year and compares them with normalized prior YTD inputs.

Separate sales drivers	YTD Analysis / Guest & Average Check Bridge	Distinguishes guest-count, average-check, price/mix, channel, and disruption effects.
Calculate rolling performance	YTD Analysis	Calculates true date-based 7-, 28-, and 90-day sales, guests, labor, and SPLH.
Calculate remaining sales to goal	YTD Analysis	Shows annual goal, remaining dollars, days remaining, and required daily run rate.
Measure forecast variance	Accuracy Review	Calculates dollar error, signed percent error, and absolute percent error.
Measure forecast bias	Accuracy Review	Shows persistent optimism or conservatism instead of allowing errors to cancel silently.
Measure tolerance performance	Accuracy Review	Calculates the share of reviewed days inside the approved forecast tolerance.
Measure labor variance	Accuracy Review	Compares forecast labor with actual labor and preserves the root cause.
Track assumptions and revisions	Assumption Register / Forecast Revision Log	Records evidence, magnitude, confidence, expiration, changed forecast, reason, editor, and approval.
Control management action	Action Log	Assigns findings, decisions, owners, due dates, status, verified result, and knowledge preservation.
Provide an executive view	Dashboard	Shows YTD sales, goal, remaining sales, accuracy, bias, tolerance, next forecast, labor recommendation, and control checks.
Standardize terminology	Manual and workbook glossaries	Defines the controlled terms used across instructions, forms, calculations, and reviews.
Preserve institutional memory	All historical registers	Builds a transferable local intelligence library that improves with disciplined use over time.

What this system prevents

- Blind reliance on last year's date when weekday patterns differ.
- Labor schedules built from instinct alone or from a single sales percentage.
- Weather, school, event, promotion, and operational effects being forgotten.
- Forecast revisions with no record of who changed what or why.
- Institutional knowledge leaving when an experienced manager leaves.

The operating loop

Stage	Management question	Primary output
1. Record	What happened?	Daily Sales Intelligence Journal
2. Explain	What materially changed demand or	Driver and exception notes

	capacity?	
3. Compare	Which prior trading days are truly comparable?	Comparable-Day Set
4. Forecast	What is the most likely sales range?	Daily and weekly forecast
5. Staff	What workload and minimum coverage are required?	Labor demand plan
6. Review	Where was the forecast wrong, and why?	Variance review
7. Preserve	What should next year's manager know?	Annual intelligence calendar

Roles and accountability

Role	Accountability	Cadence
Shift leader	Record same-day facts before context is forgotten.	Daily
General manager	Approve comparables, assumptions, forecast, and labor adjustments.	Daily/weekly
Kitchen leader	Translate covers and mix into prep and production.	Daily/weekly
Area/owner	Challenge bias; review trend, accuracy, and structural changes.	Weekly/monthly
System administrator	Protect definitions, access, backups, and calendar history.	Monthly/annual

Data standards

Record facts separately from interpretations. Use net sales after discounts and before sales tax unless the organization adopts another written definition. Keep the definition unchanged across years. Record guest count from the same source every day. Enter weather and events as observed, not as vague memory.

Field	Required standard
Net sales	One written POS definition; same cutoff and exclusions every day.
Guest count	One consistent count method; note system changes.
Labor hours	Paid productive hours, with manager/salaried treatment documented.

Weather	Temperature range, precipitation, severity, and timing.
Event	Name, time, location, expected/observed attendance, traffic effect.
School status	In session, break, early release, first/last day, major activity.
Operational condition	Staffing, outages, capacity restrictions, closures, construction.
Confidence	High, medium, or low with reason.

Daily operating procedure

1. Open the day

Review today's weather, school status, local events, reservations, catering, promotions, road conditions, and prior comparable days.

2. Build the base forecast

Start with a weighted comparable-day baseline. Prefer the same weekday and similar seasonal position over the same calendar date.

3. Adjust only for evidence

Apply separate documented adjustments for trend, price, weather, events, promotions, capacity, and known business.

4. Convert demand to labor

Calculate productive hours from forecast sales and target sales per labor hour; then compare with guest workload and minimum coverage.

5. Approve the schedule

Use the highest justified workload requirement, add non-selling work, respect minimum role coverage, and document the manager adjustment.

6. Close the loop

Enter actual sales, guests, hours, conditions, variance, and the lesson while the day is still fresh.

Late-discovered governing factors

Managers may correct or expand any historical day when better information becomes available days, weeks, or months later. Update the affected Daily Journal and/or Event History row, then add a Daily Revision Log entry showing the original trading date, discovery date, factor learned, affected fields, prior and revised understanding, evidence, editor, approval, forecast/labor impact, and whether the next-year lesson was updated. Do not erase a material prior understanding without this record.

Forecast construction

Layer	Calculation or judgment	Control
Comparable baseline	Weighted average of selected comparable trading days.	Each comparable receives a written reason and weight.
Recent trend	Rolling 7/28/90-day movement after known price effects.	Do not double-count price and trend.
Calendar	Holiday, school, payday, season, car show, festival, parade, or other recurring event.	Use searchable Event History and annual intelligence calendar.
Weather	Timing and severity, not merely “rain.”	Document expected direction and percentage.
Commercial	Promotion, pricing, catering, reservations, delivery change.	Separate committed from speculative sales.
Capacity	Hours, seating, equipment, staffing, construction, outage.	A constrained forecast cannot exceed practical capacity.
Range	Low / most likely / high.	Confidence reflects evidence quality, not optimism.

Comparable-day selection

A good comparable resembles the forecast day in the ways that actually drive demand. Score candidates on weekday, seasonal position, school status, holiday/event pattern, weather, promotion, hours, operating capacity, and channel availability. Exclude days with major unrepeatable disruptions unless the same disruption is expected again.

> Never compare blindly
> A Saturday parade day should usually be compared with prior parade occurrences—not simply the same date last year. Search the Event History for the event name, then compare weekday versus weekend, timing, temperature, rain, attendance, traffic, sales, guests, and labor. A rainy parade day may require a separate scenario or lower weight.

Searchable recurring-event intelligence

Create one Event History row for every occurrence of a recurring car show, festival, Watermelon Parade, school activity, sports event, or other local demand driver. The workbook automatically identifies the year, weekday, and weekday/weekend class from the occurrence date. Use the table filters or spreadsheet search to retrieve every prior occurrence and compare weather, temperature, rainfall timing, event timing, attendance, access, sales, guests, labor hours, and the observed effect. Keep the event name consistent across years so the history remains easy to retrieve.

YTD intelligence

- Compare current YTD with prior YTD using equal numbers of trading days.
- Bridge sales change into guest-count change, average-check change, price/mix, channel, and closure effects.
- Track run rate to year-end goal and the daily/weekly sales still required.
- Separate growth caused by more demand from growth caused only by higher prices.
- Maintain 7-, 28-, 90-, and 365-day views to distinguish noise from structural movement.

Labor demand and scheduling

Labor planning begins with forecast demand but cannot end with a single productivity ratio. The workbook calculates several requirements and makes the recommended hours the greatest justified requirement after coverage and non-selling work.

Component	Method	Why it matters
Sales-based hours	Forecast sales ÷ target sales per labor hour (SPLH).	Links labor investment to revenue workload.
Guest-based hours	Forecast guests ÷ target guests per labor hour (GPLH).	Protects service when check average changes.
Minimum coverage	Required positions × scheduled span by daypart.	Protects safety, service, cash control, and opening/closing.
Fixed work	Setup, prep, receiving, cleaning, meetings, training.	Captures work not proportional to sales.
Event workload	Catering, delivery peaks, parties, festivals, promotions.	Adds channel-specific or time-specific work.
Manager adjustment	Documented final addition or reduction.	Allows judgment while preserving accountability.

Labor guardrail
Never reduce labor below legal, safety, food-safety, security, or minimum-role requirements merely to hit a productivity target.

Daypart scheduling method

- Forecast sales and guests by daypart, not only for the full day.
- Calculate workload hours by daypart and role family.
- Place hours where demand occurs; a correct daily total can still produce a bad schedule.
- Include opening, closing, prep, receiving, cleaning, breaks, and handoffs.
- Use reservations, orders, local event timing, and delivery patterns to shift start/end times.
- Compare scheduled, actual, and earned hours after the day.

Forecast accuracy and learning

Measure	Definition	Use
Dollar variance	Actual − forecast	Shows direction and operating impact.
Percent error	(Actual − forecast) ÷ forecast	Normalizes across high/low sales days.
Absolute percent error	ABS(percent error)	Measures accuracy without canceling misses.
Bias	Average signed percent error	Shows habitual optimism or conservatism.
Labor variance	Actual hours − recommended hours	Shows execution difference.
Earned-hour variance	Actual hours − actual sales ÷ target SPLH	Separates forecast error from labor control.

Governance and review cadence

Meeting	Required review
Daily close	Facts, variances, exceptions, and next-year lesson.
Weekly forecast	Next 14 days, comparables, assumptions, confidence, labor and production implications.
Monthly intelligence	YTD bridge, forecast accuracy, bias, driver performance, changed patterns.
Quarterly calibration	Targets, comparable-day rules, price/mix effects, structural shifts.
Annual rollover	Archive year, publish next-year calendar, preserve recurring-event knowledge.

System interfaces

Gravity system	Handoff
Performance & Profitability	Receives forecast, labor plan, and actual productivity; returns margin and cost implications.
Growth & Sales Building	Supplies campaign and community activity; receives measured demand response.
Guest Relationship & Retention	Supplies reservation/guest behavior signals; receives capacity

	and demand expectations.
Standards & Intelligence Center	Controls definitions, approved methods, and institutional knowledge.
Risk & Continuity	Supplies disruptions and continuity scenarios; receives demand and staffing exposure.
Manager Development	Uses forecast quality and decision records as coaching evidence.
Implementation & Verification	Confirms adoption, completeness, accuracy, and corrective action.

Thirty-tool architecture

#	Tool	Primary use
1	System Charter	Govern
2	Data Definition Register	Record
3	Daily Sales Intelligence Journal & Revision Log	Plan
4	Weather & Condition Log	Analyze
5	School Calendar	Control
6	Searchable Event History	Govern
7	Promotion & Pricing Log	Record
8	Operating Disruption Log	Plan
9	Comparable-Day Candidate Register	Analyze
10	Comparable-Day Scoring Sheet	Control
11	Comparable-Day Approval Record	Govern
12	Daily Forecast Builder	Record
13	14-Day Forecast	Plan
14	Weekly Forecast Summary	Analyze
15	Monthly Forecast	Control
16	YTD Trading-Day Analysis	Govern

17	Guest Count & Average Check Bridge	Record
18	Daypart Forecast	Plan
19	Channel Forecast	Analyze
20	Labor Standards Register	Control
21	Minimum Coverage Matrix	Govern
22	Labor Demand Calculator	Record
23	Daypart Labor Deployment Plan	Plan
24	Production & Prep Translation	Analyze
25	Forecast Assumption Register	Control
26	Forecast Revision Log	Govern
27	Forecast-vs-Actual Review	Record
28	Accuracy & Bias Scorecard	Plan
29	Annual Intelligence Calendar	Analyze
30	Management Action & Learning Log	Control

Implementation sequence

- Week 1: adopt definitions, roles, targets, and access rules.
- Week 2: begin daily journal and collect calendars, events, weather, promotions, and disruptions.
- Week 3: select comparable days and publish the first documented 14-day forecast.
- Week 4: activate labor-demand planning, variance review, and forecast accuracy scoring.
- Day 60: calibrate weights and labor targets using actual results.
- Day 90: complete implementation verification and lock the operating cadence.

Glossary

Term	Definition
Absolute percent error (APE)	The size of forecast error as a percentage of forecast, without regard to direction.
Actual labor hours	Paid hours actually worked under the organization’s written labor definition.
Average check	Net sales divided by guest count.

Bias	A recurring tendency to forecast above or below actual results.
Comparable day	A prior trading day judged relevant to the forecast day based on demand drivers and operating conditions.
Confidence level	High, medium, or low rating of evidence quality and uncertainty.
Daypart	A defined trading period such as breakfast, lunch, afternoon, dinner, or late night.
Earned labor hours	Hours justified by actual workload at the approved productivity standard.
Fixed work	Required work that does not vary directly with sales, including opening, closing, receiving, and cleaning.
Forecast	A documented estimate of future demand based on evidence and stated assumptions.
Forecast range	Low, most-likely, and high outcomes used to express uncertainty.
Guest per labor hour (GPLH)	Guest count divided by productive labor hours.
Institutional memory	Operating knowledge preserved so it remains available after personnel changes.
Labor demand	The hours and role coverage required to perform forecast workload safely and effectively.
Minimum coverage	Lowest approved role staffing needed regardless of calculated sales productivity.
Net sales	Sales measured under the organization’s written exclusions, discounts, tax, and cutoff rules.
Non-selling work	Prep, setup, cleaning, receiving, training, and similar workload outside direct sales production.
Price/mix effect	Sales change caused by prices or what guests buy rather than by guest volume.
Sales per labor hour (SPLH)	Net sales divided by productive labor hours.
Trading day	A day the operation was open for business under its defined schedule.
Trading-day normalization	Comparing periods with an equal or explicitly adjusted number and mix of operating days.
Variance	The difference between actual and planned or forecast performance.

Weather timing	The part of the day in which weather occurs, which may matter more than the daily summary.
YTD	Year to date, measured from the first day of the fiscal/calendar year through the selected date.

Release controls

Document ID: GRV-SF-MAN-001 | Version: 1.2 | Owner: General Manager / Forecast Owner | Review cycle: annual or after a material data-definition change. Controlled files are the released package files. Local copies should carry version and owner information.

THE GRAVITY RESTAURANT LEADERSHIP SYSTEM

THE FOUNDING YEAR

USE IT. TEST IT. TELL US THE TRUTH.

Published by Thomas Monroe Books

THE FOUNDING YEAR PROMISE

Every finished digital Gravity System product released on ThomasMonroeBooks.com is available at no cost through October 1, 2027. Registration is required before digital downloads. No purchase, donation, credit card, paid subscription, or positive review is required. Physical supplies, if offered later, remain optional.

WHY THIS YEAR EXISTS

Gravity is being released into real restaurant work so owners, managers, trainers, and team leaders can help prove what is useful, what is unclear, and what should improve next.

Free access is not a request for praise. It is an invitation to use the material honestly and report what actually happened.

THE FEEDBACK THAT HELPS MOST

- What you used and the problem you were trying to solve
- What worked well in actual restaurant conditions
- What felt confusing, repetitive, incomplete, or impractical
- What changed after the tool, book, or system was used
- What would make the next revision more useful

WHY REVIEWS MATTER

Positive, mixed, and critical reviews are all useful. A specific review helps another restaurant decide where to begin, helps Gravity identify which tools create real value, and helps future revisions become clearer and more practical. You never owe us a favorable rating.

SHARE YOUR EXPERIENCE

Public review: thomasmonroebooks.com/review

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Please do not include guest, employee, financial, or other confidential information.

Always use the current version. Product updates and revision notes are posted at thomasmonroebooks.com/releases.

HOW THE FOUNDING YEAR IMPROVES THE SYSTEM

1. **USE** — Apply the current product in real restaurant work.
2. **REPORT** — Share the result, the friction, and what is missing.
3. **IMPROVE** — Gravity uses the evidence to strengthen the next revision.