

What governed autonomy looks like — modeled before it is sold.

Three reference operating models for autonomous coordination in Consumer Goods supply chains: where the decisions live, how governance bounds them, and what a credible first deployment instruments.

HOW TO READ THESE MODELS — COMPOSITE AND ILLUSTRATIVE

These models are composite and illustrative. They are synthesized from structured conversations with consumer-goods supply chain practitioners and from the founder's operating experience leading supply chain and fulfillment organizations at scale. They are NOT customer engagements; no commercial relationships, deployments, or measured results are claimed or implied. All parameters shown are design targets used to specify the platform's behavior.

Model 01 · Replenishment governance — multi-plant packaged food

Archetype

A European packaged-food manufacturer operating ~10 plants and ~35 distribution centers, with shelf-life constraints, promotional volatility, and a planning team that spends Monday through Wednesday reconciling shortage lists across ERP, APS, and spreadsheets.

The loop

Shortage and excess signals on SKU–DC pairs open decisions automatically. The twin snapshots cover, capacity, inbound risk, and policy floors; the optimization core proposes feasible responses; governance routes anything above threshold to named approvers with a one-page memo; approved actions are prepared in the ERP; outcomes close the loop.

Governance envelope (illustrative parameters)

PARAMETER	DESIGN TARGET
Decision rights modeled	~40–50 distinct rights across planning, supply, logistics, finance
Approver tiers	4 (planner → site lead → SC director → executive)
L3-eligible action class	Replenishment adjustments below value cap, within region
Always-approval classes	Cross-region reallocation · expedites above cost threshold
Pilot scope rule	Start with the SKU–DC pairs producing the majority of weekly shortage incidents

What to instrument from day one

- Exceptions resolved within policy without human touch (rate and value).

- Planner hours displaced from reconciliation to judgment.
- Expedite spend avoided; write-offs avoided on shelf-life stock.
- Decision latency: signal → governed action, in minutes.

Model 02 · Allocation under contested service commitments — beauty & personal care

Archetype

A global beauty group allocating constrained launch and promotional stock across strategic retailers, channels, and regions — where the real allocation policy lives in planners' heads and is re-derived every Monday morning under pressure.

The loop

Constrained-supply events open allocation decisions. Customer tiers, channel priorities, margin objectives, and launch-protection rules — captured once as explicit, inspectable policy — drive scenario generation. Trade-offs between strategic-customer service, channel margin, and launch protection are compared explicitly; approvals route by customer impact; every allocation carries its rationale.

Governance envelope (illustrative parameters)

PARAMETER	DESIGN TARGET
Customer tiers encoded	~8–10, with explicit service commitments per tier
Allocation rules captured	150–200, versioned and inspectable — out of heads, into policy
Always-approval classes	Any allocation reducing a strategic-tier fill rate
Meeting load addressed	The recurring Monday allocation cycle becomes a governed loop with memos

What to instrument from day one

- Strategic-tier fill rates versus commitments, per event.
- Margin per constrained unit versus the policy baseline.
- Hours of recurring allocation meetings displaced by governed runs.
- Policy drift: how often humans override the encoded rules — and why.

Model 03 · The governed-autonomy reference pattern

Across archetypes, credible enterprise autonomy keeps recurring as the same small set of interfaces. Any operating layer — ours or anyone's — must implement these to be trustworthy at scale:

Decision archetypes (the recurring eleven)

Demand-to-supply balancing · MRP exception resolution · inventory replenishment · production planning & scheduling · allocation & order promising · logistics exception management · supplier disruption response · inbound-risk mitigation · returns & recovery · working-capital trade-offs · executive scenario planning.

Governance primitives (the non-negotiable seven)

01 Decision rights

Who may approve which action type, under which conditions.

02 Thresholds

Value, customer-impact, and compliance limits that route approvals.

03 Blast-radius caps

Scope, value, and rate limits on any automated class.

04 Audit envelope

Immutable, replayable records for every run.

05 Explainability

Assumptions and binding constraints shipped with every recommendation.

06 Override & escalation

Human pause, modify, reject — with timed escalation tiers.

07 Earned autonomy

Promotion and demotion of decision classes by measured performance.

Using these models

Each model maps directly onto the 90-day design partnership, orchestrated by Loop Zero — ZeroMan's agent-led onboarding: weeks 0–2 select and scope the loop; weeks 3–6 model the twin; weeks 7–10 set the governance envelope; weeks 11–13 shape the pilot path and success measures. If one of these archetypes resembles your operation, the fastest way to test the fit is a structured conversation:

zeroman.ai/partner-program.

SCOPE

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