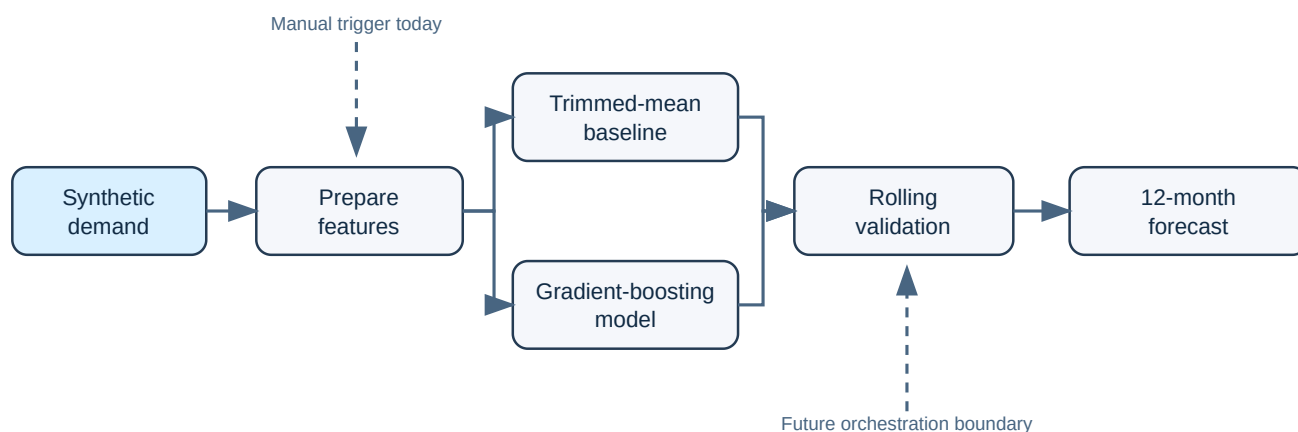


From demand question to forecast evidence

A privacy-safe, player/coach delivery case study using synthetic monthly demand

The case. Build a repeatable forecasting flow without exposing operational data. The public version preserves the delivery decisions that matter: preparation, an auditable baseline, model comparison, validation, and a clear operating boundary.

Architecture



Modeling choices

- Monthly demand by synthetic SKU and region.
- Baseline: previous eight months, excluding one minimum and one maximum.
- One gradient-boosting model with lag and calendar features.
- Rolling-origin validation for a 12-month horizon.

Delivery choices

- Start with a baseline stakeholders can audit.
- Add complexity only when validation earns it.
- Keep triggering manual while the workflow is proved.
- Leave a clean seam for future orchestration.

Evidence

The notebook computes validation metrics and produces comparison charts. This handout makes no numeric business claims because the data is synthetic.

Public-safe artifact: no company rows, identifiers, credentials, private URLs, or copied business values.