

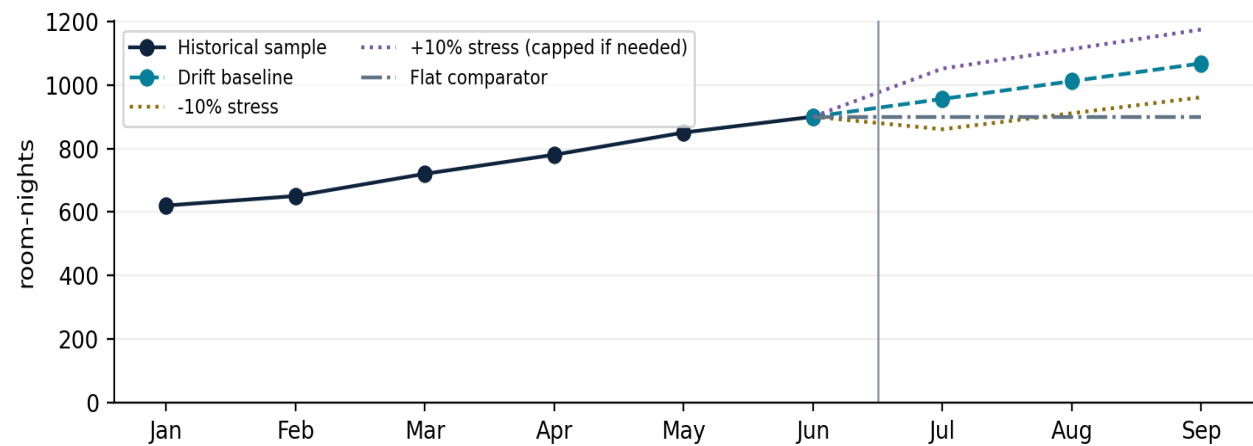
Hotels & hospitality

Forecasting & Trend Projections

Projection cut-off: 30 June 2026 | July-September planning illustration. This is a worked historical example, not a current forecast. Synthetic data; no customer records or actual post-June outcomes are used.

Planning question

What occupancy and room demand should the next quarter plan support?



Projection summary

June actual	Average monthly change	Q3 drift baseline
900	56	3,036

The drift baseline continues the January-June average absolute monthly change. The flat comparator holds June constant. Stress lines apply an assumed +/-10% adjustment; they are not probability bounds.

What can be used for planning

Compare forward bookings with scenario room-nights to review staffing and channel availability; revenue also requires an agreed ADR assumption.

All inputs are synthetic. Baseline extrapolation is a transparent example method, not a validated demand model or a performance guarantee.

Method & historical checks

Reproducible baseline

Average monthly change = (June - January) / 5 = (900 - 620) / 5 = 56 room-nights per month.
Raw horizon-h baseline = June + h x average monthly change, for h = 1, 2, 3.

Negative values are bounded at zero. For the hotel examples, room-night projections are also bounded by known available room-night capacity. Bounds are stated explicitly; capacity is unknown for the other examples.

Three chronological one-step checks

Train on January-March and predict April; extend through April and predict May; extend through May and predict June. At each origin, both methods use only data available before the predicted month. Errors are absolute differences in the KPI unit.

Test month	Actual	Flat	Drift	Flat error	Drift error
Apr	780	720	770	60	10
May	850	780	833.3	70	16.7
Jun	900	850	907.5	50	7.5

Diagnostic	Flat comparator	Drift baseline
Mean absolute error (MAE)	60	11.4

How to interpret the check

Drift MAE is lower than the flat comparator in these three one-step tests. This is a small historical diagnostic, not evidence of durable superiority. The drift example is not selected or tuned by this result.

Only three forecast errors are available. There is no independent multi-quarter test, no validated seasonal pattern and no three-month-ahead accuracy estimate. A real scope requires more history and horizon-appropriate validation.

KPI definition

Occupied room-nights for completed stays, excluding cancelled bookings. The example has 40 rooms and no closures.

Scenario assumptions & decisions

July-September values (room-nights)

Period	-10% stress	Drift base	+10% stress	Flat comparator
Jul	860.4	956	1,051.6	900
Aug	910.8	1,012	1,113.2	900
Sep	961.2	1,068	1,174.8	900
Q3 total	2,732.4	3,036	3,339.6	2,700

Tables show one decimal where needed; monetary summary values are rounded to whole EUR. Fractional counts are planning averages, not partial completed events. Calculations and totals use unrounded values.

Meaning of the stress cases

Lower stress = 90% of the bounded drift baseline; upper stress = 110%, subject to known hotel capacity. The 10% adjustment is an illustrative planning choice. It is not estimated from forecast errors, assigned a likelihood or presented as a confidence interval.

Hotel capacity: July 1,240, August 1,240 and September 1,200 available room-nights (40 rooms, no closures). Upper values that exceed capacity are capped. Unconstrained room demand and displaced bookings are not estimated.

Industry / area assumptions

Capacity is 1,240 room-nights in July and August and 1,200 in September. All scenarios remain below that capacity.

Proposed actual-versus-plan review

When July actuals are available, reconcile the KPI definition and reporting cut-off first. Record actual minus baseline and its percentage of baseline. If actuals sit outside the illustrative stress cases, investigate the driver and revise the assumptions; this is a proposed planning trigger, not a statistical anomaly rule.

Repeat the calculation with each accepted new period, compare the drift and flat baselines, and keep a dated log of assumptions and revisions. No post-June actuals are supplied here, so actual forecast performance is not claimed.

Source and scope

Separate ReTriev synthetic hotels & hospitality dataset; one monthly KPI series and a May/June supporting measure. This is not the general dashboard dataset.

Forecasting setup is optional and scoped to the selected KPI and feasible history. Predictive machine learning, cash forecasting, causal attribution and recurring updates are not implied by this example.