E2

Forecasting and Writeback

Fabric Planning · Self-Paced · 30 min

The Big Picture

Most organizations set a plan once a year and measure variance against it for twelve months — even as the business changes around them. A rolling forecast solves this by replacing assumptions with facts as each month closes and extending the horizon forward to keep the forward-looking window intact.

In this exercise, ACME's finance team builds a blank 2026 forecast, lets the statistical model populate it from 24 months of history, closes January as the actuals arrive, extends the horizon to January 2027, reforecasts the new month, and commits everything to the Fabric SQL database so it's available for downstream reporting.

What You Will Do in This Exercise

Build a forecast, let the model fill it in, close a period as actuals land, extend the horizon, and commit the results to the DB.

1 Create the Rolling Forecast Sheet

Set up a Forecast sheet anchored on 2024 and 2025 actuals and create a blank Forecast measure covering Jan–Dec 2026, ready to be populated by the model.

2 Generate Statistical Forecast

Run Statistical Forecast across the full Jan–Dec 2026 horizon. Using 24 months of historical actuals, the model uses Trend Decomposition with MSTL to detect seasonal patterns across annual and quarterly cycles and generates a complete year of forecasted values in one pass.

3 Close the Period, Extend, and Reforecast

Bring in January 2026 actuals, close the period to lock them in, and extend the horizon to January 2027. Reforecast the newly opened month by seeding from January 2026 actuals and applying a 4% growth assumption.

4 Writeback

Commit the finalized forecast to the Fabric SQL database, explore writeback settings, verify the results in the database, and review the logs.

Rolling Forecast

1 Rolling Forecast

A forecast that advances with time rather than remaining fixed at a single point. As each month closes, actuals replace forecast values and the horizon extends by one period — maintaining a continuous forward-looking window. Unlike a static annual plan, a rolling forecast reflects what the business knows today, not what it assumed at the start of the year.

2 Open and Closed Periods

A forecast measure contains two types of periods. Closed periods read from an existing measure — typically actuals — so the forecast reflects what actually happened. Once closed, these cells are locked and greyed out. Open periods accept data input, either from manual entry or values seeded from another measure. As time moves forward, periods are progressively closed, replacing forecast assumptions with facts.

3 Reforecast

The step that updates open period assumptions after a forecast has been created. Rather than editing cells individually, Reforecast opens a configuration dialog that lets you change the copy source, apply a growth assumption, and redistribute values across a specific target period in one action — without affecting other open periods. In this exercise, January 2027 is seeded from January 2026 actuals and grown by 4%, keeping the 12-month rolling window complete after the close.

Statistical Forecasting

Instead of entering growth assumptions manually, Statistical Forecasting uses historical actuals to infer trend and seasonality automatically. The model generates predicted values for the full forecast horizon with a configurable confidence interval. A minimum of 24 months of historical data is required — in this exercise, January 2024 through December 2025 provides the foundation.

Historic Data Range

The window of actuals the model learns from

Growth Factor

An optional assumption layered on top of the model's statistically derived trend

Algorithm

Trend Decomposition with MSTL
Exponential Smoothing
ARIMA

Confidence

Probability the actual falls within the predicted range. Default: 90%

Evaluation

Bottom Up: projects at the brand level and aggregates up.
Top Down: distributes from the total downward

Seasonality

Specifies which cycle lengths the model detects. Year captures annual patterns; Quarter adds a within-year layer

Choosing a Forecasting Algorithm

Three algorithms are available. The right choice depends on the structure of your data — how many seasonal cycles it has, how much recent data should be weighted, and how technically complex the underlying pattern is.

1 Trend Decomposition with MSTL

(Multiple Seasonal and Trend decomposition using Loess)

Splits the time series into separate layers — one per seasonal cycle plus a trend component. Each layer is forecast independently, then the results are combined into a single output.

Best for: data with multiple overlapping seasonal patterns, such as beverage sales where demand varies by both quarter and month.

2 Exponential Smoothing

Predicts future values by weighting recent observations more heavily than older ones. The more recent the data point, the greater its influence on the forecast.

Best for: most business data — sales, demand, inventory — where recent trends matter more than older history and the seasonal pattern is relatively stable.

3 ARIMA

(AutoRegressive Integrated Moving Average)

Models the statistical structure of the series — specifically how each value relates to its own past values and past forecast errors. Captures autocorrelation patterns in the data.

Best for: data with strong autocorrelation, where the value at each point is closely related to the values immediately before it.

Writeback

The process of committing values from a planning sheet to a persistent database table so they can be consumed outside the planning environment — by reports, semantic models, Fabric pipelines, notebooks, or other downstream systems. Planning sheets are the working surface; writeback makes the numbers durable.

Writeback Types

1. Long - One row per observation. Full snapshot every run.
2. Wide - Each measure as a separate column. Full snapshot every run.
3. Long with changes - Same as Long but writes only changed values. Builds a history of edits over time
4. Wide with changes - Same as Wide but writes only changed values. Builds a history of edits over time

Controlling What Gets Written

Filter Type

· None writes everything
· Data with Comments only writes cells with comments
· Calculated rows only writes calculated rows

Validation Rules

Require specific conditions before a cell is written — such as cannot be empty or a custom formula condition

Prevent Writeback

Stops the entire run if a validation condition fails — protects downstream data quality

Column Rename

Assigns database-facing column names that differ from the business-facing labels on the sheet

Date Key

Adds a usable date column to the writeback table so it can connect to a date dimension downstream

Your Deliverable at the End of E2

1. Forecast sheet built with 2024–2025 actuals and a blank Forecast measure
2. Statistical Forecast run — full Jan–Dec 2026 populated from 24 months of history
3. January 2026 closed, actuals locked in, horizon extended to Jan 2027, Jan 2027 reforecast at $1,615M
4. Forecast written back to Acme_Beverages SQL database — verified and log reviewed

Data preview - Forecast

	IrId	IrScenario	Category	Brand	Year	QuarterN...	MonthSh...	ValueCol...	Value	Previous...	ValueText	Previous...	IsLatest	LastUpda...
1	1	Base	Hard Seltzer	FizzJoy	2024	Q4	Oct	Forecast	39417885.92	NULL	NULL	NULL	1	NULL
2	2	Base	Hard Seltzer	FizzJoy	2024	Q1	Feb	Forecast	40138961.94	NULL	NULL	NULL	1	NULL
3	3	Base	Hard Seltzer	FizzJoy	2026	Q4	Dec	Forecast	39744333.48	NULL	NULL	NULL	1	2026-06-30 1...
4	4	Base	Hard Seltzer	FizzJoy	2026	Q2	May	Forecast	38965619.27	NULL	NULL	NULL	1	2026-06-30 1...
5	5	Base	Hard Seltzer	FizzJoy	2025	Q1	Mar	Forecast	37354266.12	NULL	NULL	NULL	1	NULL
6	6	Base	Hard Seltzer	FizzJoy	2024	Q2	All	Forecast	119692751.21	NULL	NULL	NULL	1	NULL
7	7	Base	Hard Seltzer	FizzJoy	2025	Q2	May	Forecast	37806972.42	NULL	NULL	NULL	1	NULL
8	8	Base	Hard Seltzer	FizzJoy	2025	Q1	Feb	Forecast	43708625.83	NULL	NULL	NULL	1	NULL
9	9	Base	Hard Seltzer	FizzJoy	2026	Q2	Apr	Forecast	40212154.38	NULL	NULL	NULL	1	2026-06-30 1...
10	10	Base	Hard Seltzer	FizzJoy	2025	Q1	All	Forecast	120427939.08	NULL	NULL	NULL	1	NULL
11	11	Base	Hard Seltzer	FizzJoy	2025	Q1	Jan	Forecast	39365047.13	NULL	NULL	NULL	1	NULL
12	12	Base	Hard Seltzer	FizzJoy	2025	Q3	Sep	Forecast	41934747.67	NULL	NULL	NULL	1	NULL
13	13	Base	Hard Seltzer	FizzJoy	2026	Q1	Feb	Forecast	42555744.26	NULL	NULL	NULL	1	2026-06-30 1...
14	14	Base	Hard Seltzer	FizzJoy	2024	Q1	Jan	Forecast	42579354.41	NULL	NULL	NULL	1	NULL
15	15	Base	Hard Seltzer	FizzJoy	2025	Q3	Jul	Forecast	39350934.04	NULL	NULL	NULL	1	NULL

References - Forecasting

Forecasting	Explains how to create a forecast measure, configure open and closed periods, choose how to populate forecast values using a measure, formula, or data input, and initialize open periods from historical data using Period Setup.
Rolling Forecast	Describes how to close a forecast period as actuals become available, extend the forecast horizon to maintain a continuous forward-looking window, and preview open and closed periods before saving.
Reforecast	Explains how to update open period values after a forecast is created — reconfiguring the copy source, apply operation, and target period range for a specific range without affecting other open periods.
Forecast Settings	Covers how to edit an existing forecast measure — extending or shortening the open period, reopening closed periods, reconfiguring open and closed period settings, and controlling how actuals update forecast values through Overwrite or Retain Forecasts.
Statistical Forecasting	Explains how to run a model-driven forecast using historical actuals, configure seasonality, growth factor, confidence, and evaluation method.

References - Writeback

Writeback Basics	Introduces writeback, including supported destination types, common use cases such as saving budgets, forecasts, and scenario inputs, and the prerequisites required before configuring a destination.
Writeback Destinations	Explains how to create a writeback destination by selecting a database connection, naming the database and table, and setting decimal precision and text length.
General Settings	Covers the core writeback configuration, including selecting the writeback type — Long, Wide, Long with Changes, or Wide with Changes.
Data Settings	Explains how to select which series are included in the writeback, and how to control whether HTML content in text input columns and DAX measures is written back as plain text or with formatting preserved.
Advanced Settings	Covers how to validate writeback columns using a "Cannot be empty" check or a formula-based condition, how to prevent writeback entirely when validation fails, and how to rename writeback columns for the destination table.
Writeback Logs	Describes how to view writeback history for a sheet, including status, duration, user, writeback type, and versions included in each run.