Introduction to decomposition trees

TREND ANALYSIS IN POWER BI

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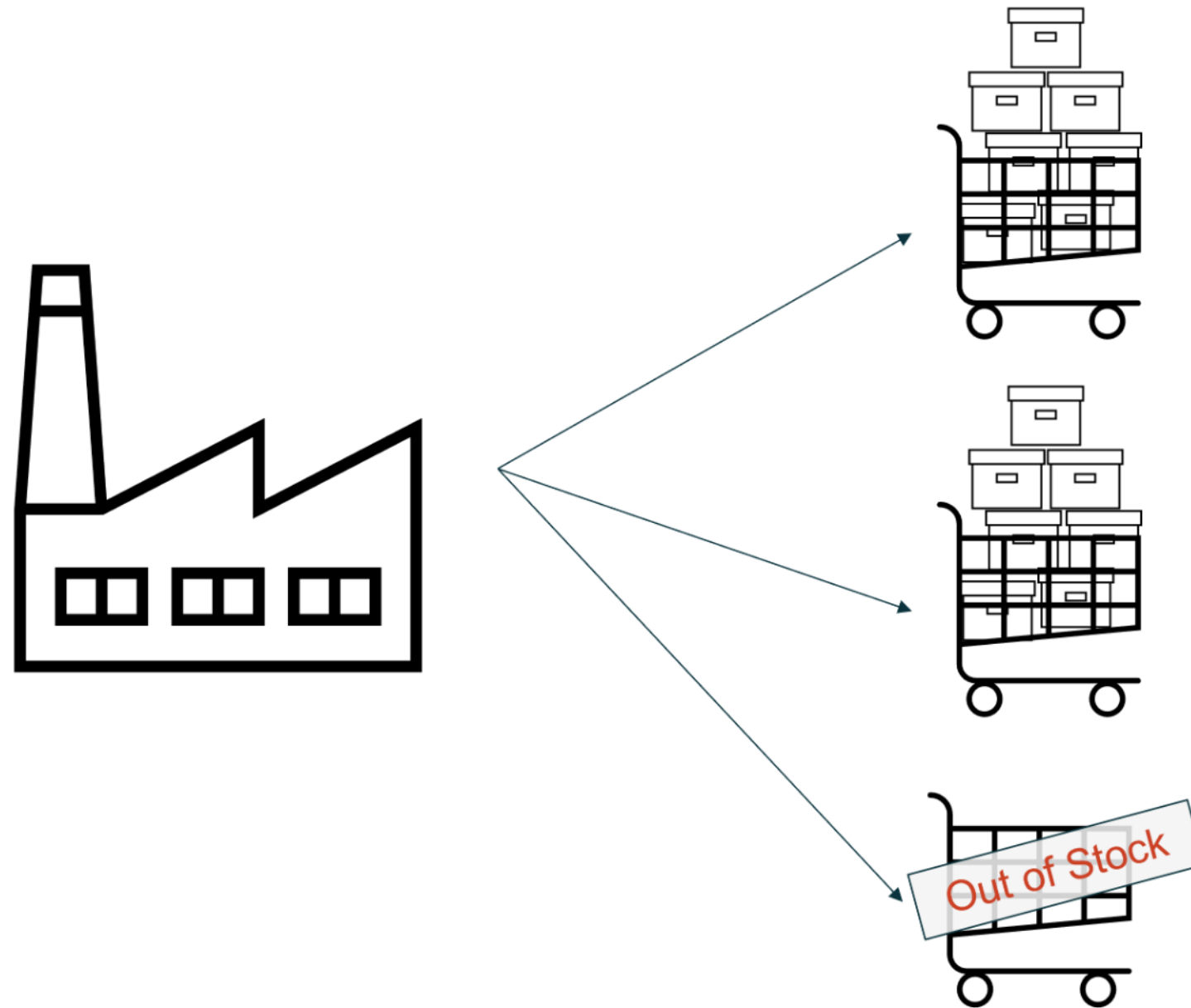
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What is a decomposition tree?

Definition:

A method for breaking down a target variable by multiple dimensions or variables to determine resulting influence.

Use Cases:

- Ad hoc exploration

- Root cause analysis
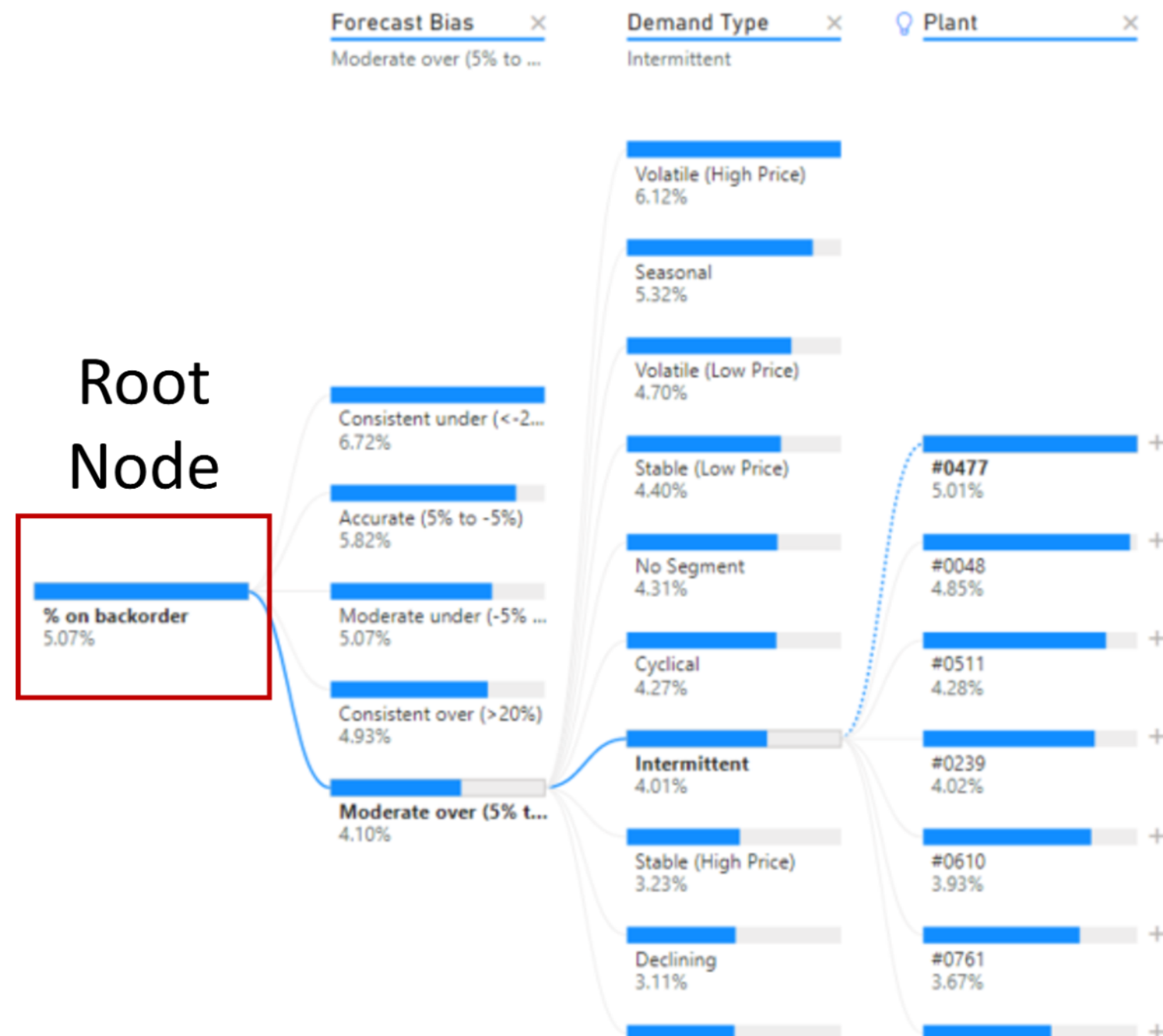
- Identifying influential variables
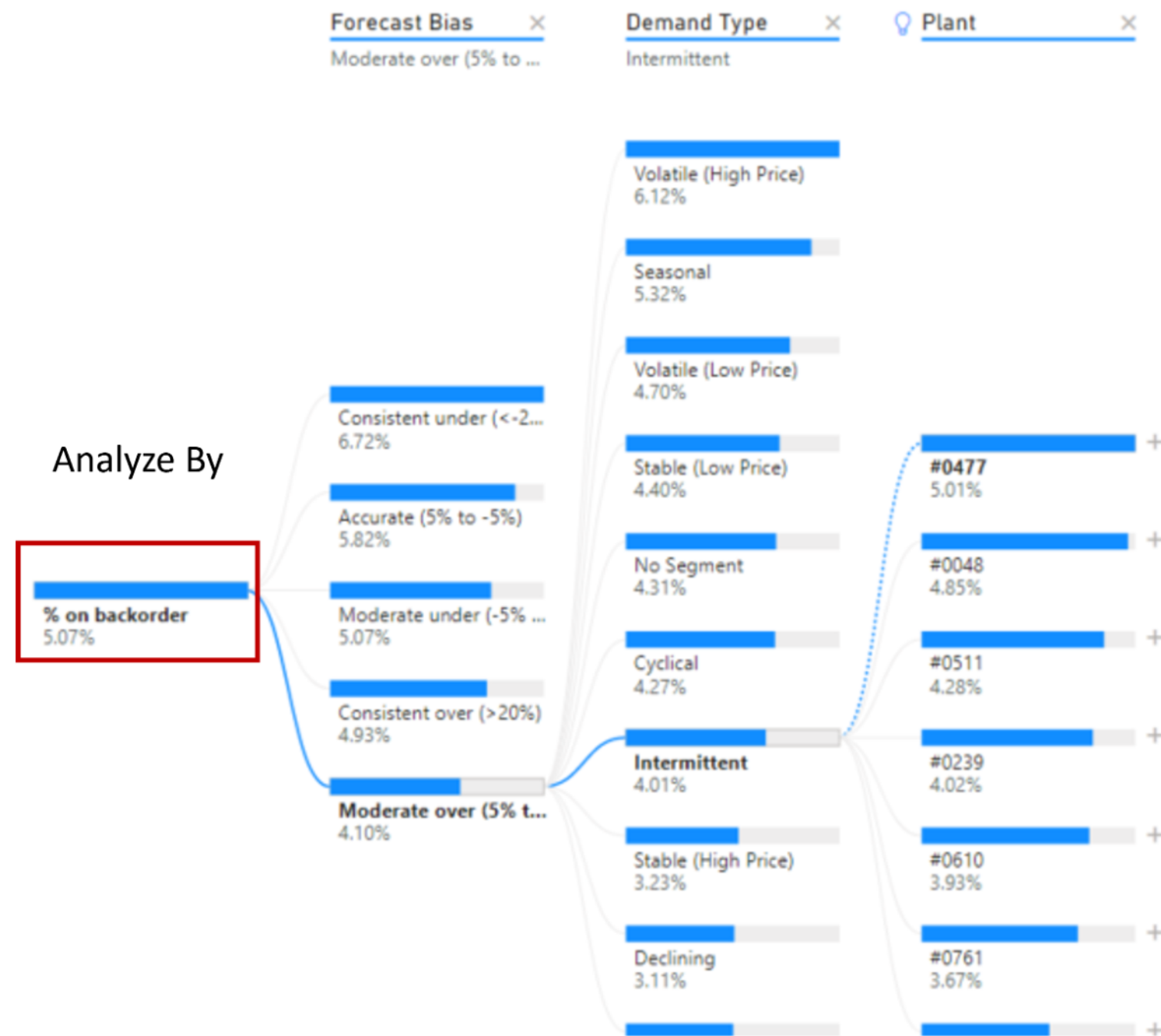
Structure of a decomposition tree
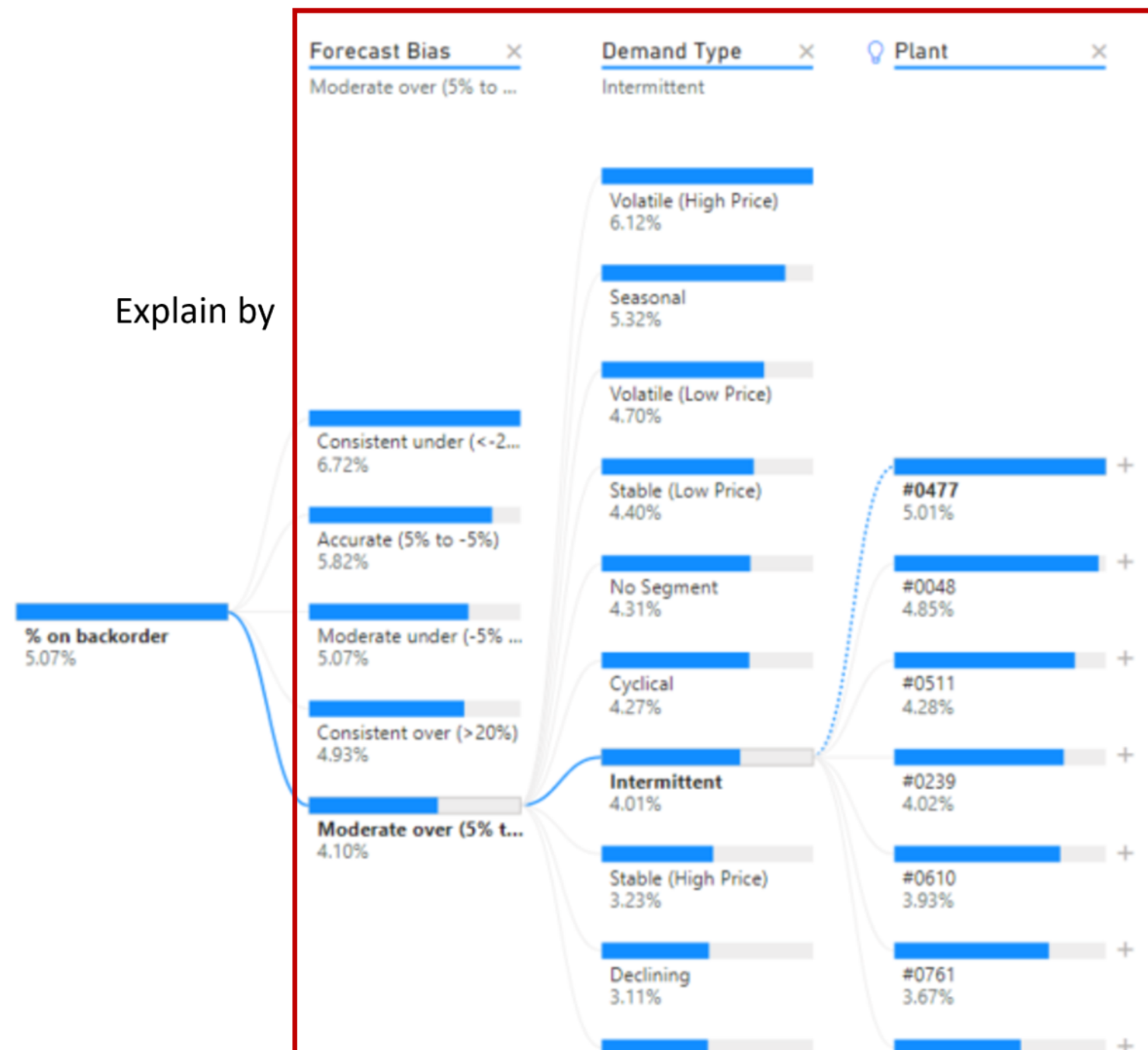
Structure of a decomposition tree

Structure of a decomposition tree

Forecast Bias ✕
Moderate over (5% to ...

Demand Type ✕
Intermittent

💡 Plant ✕

Volatile (High Price)
6.12%

Seasonal
5.32%

Volatile (Low Price)
4.70%

Root
Node

Consistent under (<-2...
6.72%

Accurate (5% to -5%)
5.82%

Stable (Low Price)
4.40%

#0477
5.01%

% on backorder
5.07%

Moderate under (-5% ...
5.07%

No Segment
4.31%

#0048
4.85%

Consistent over (>20%)
4.93%

Cyclical
4.27%

#0511
4.28%

Moderate over (5% t...
4.10%

Intermittent
4.01%

#0239
4.02%

Stable (High Price)
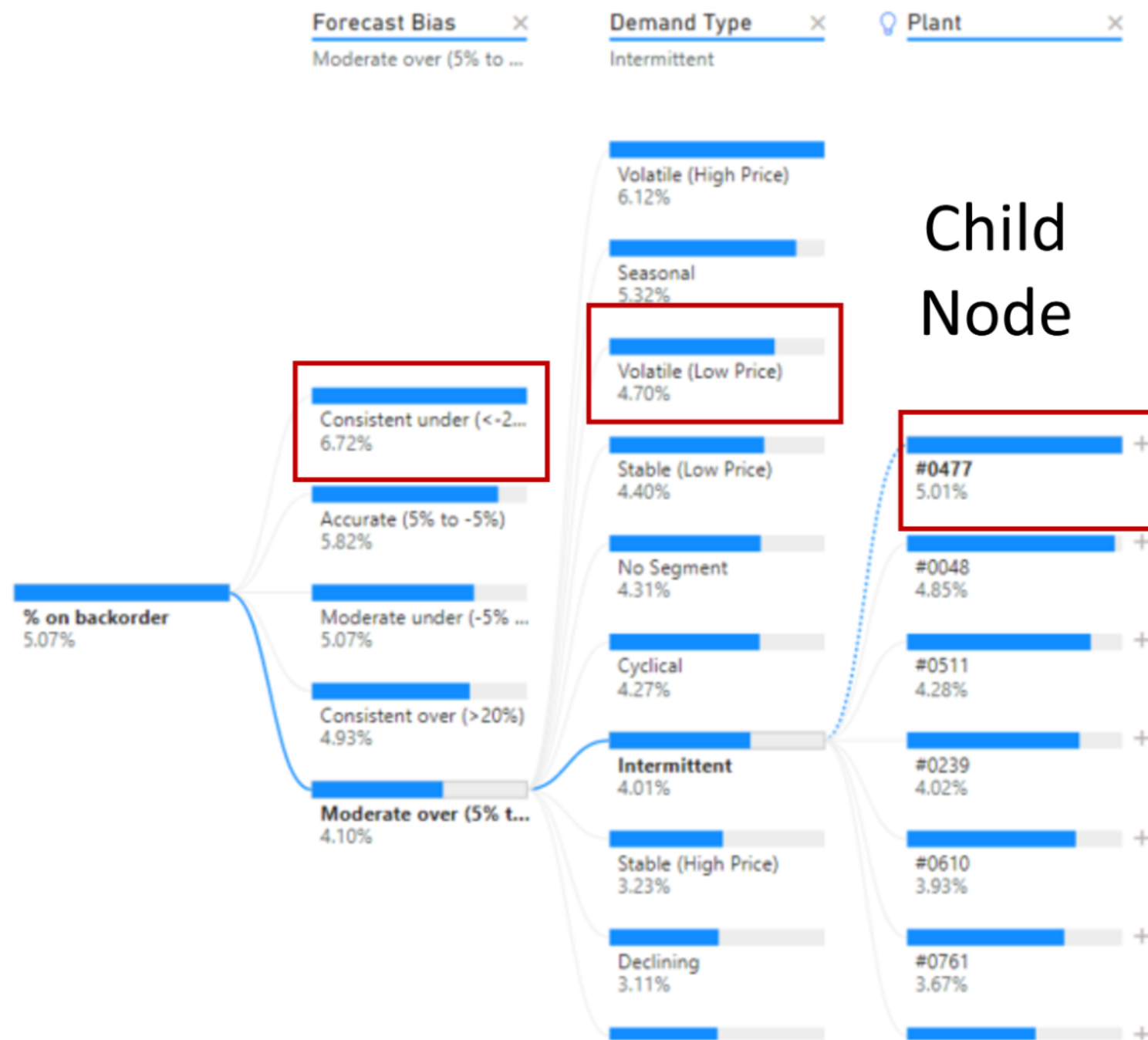3.23%

#0610
3.93%

Declining
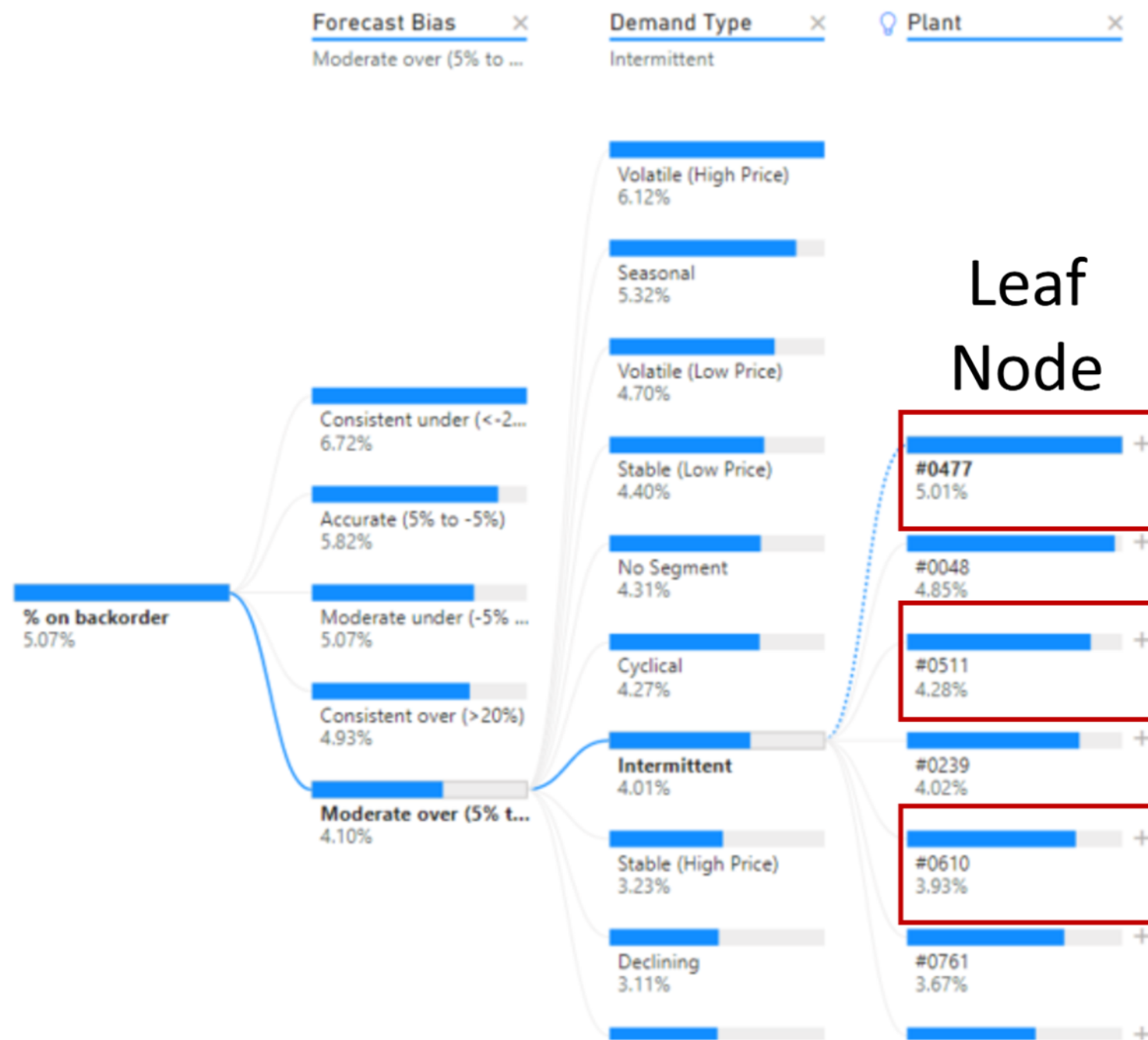3.11%

#0761
3.67%

Structure of a decomposition tree

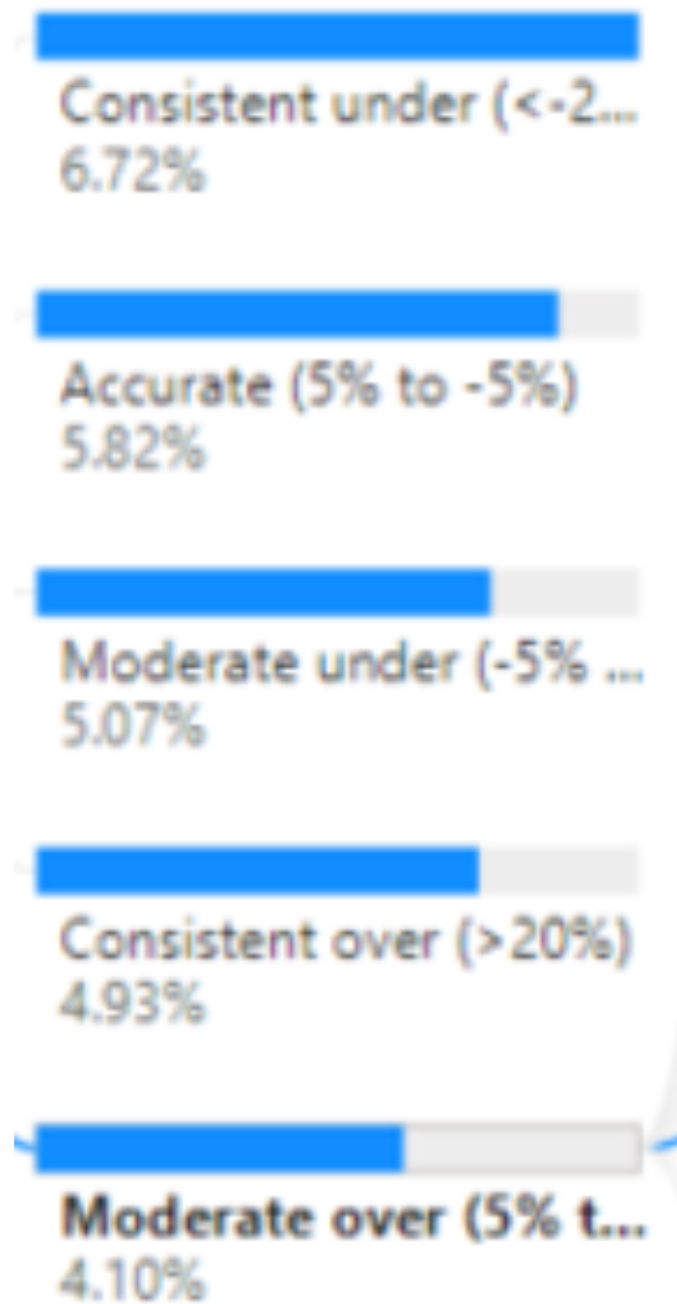# Structure of a decomposition tree

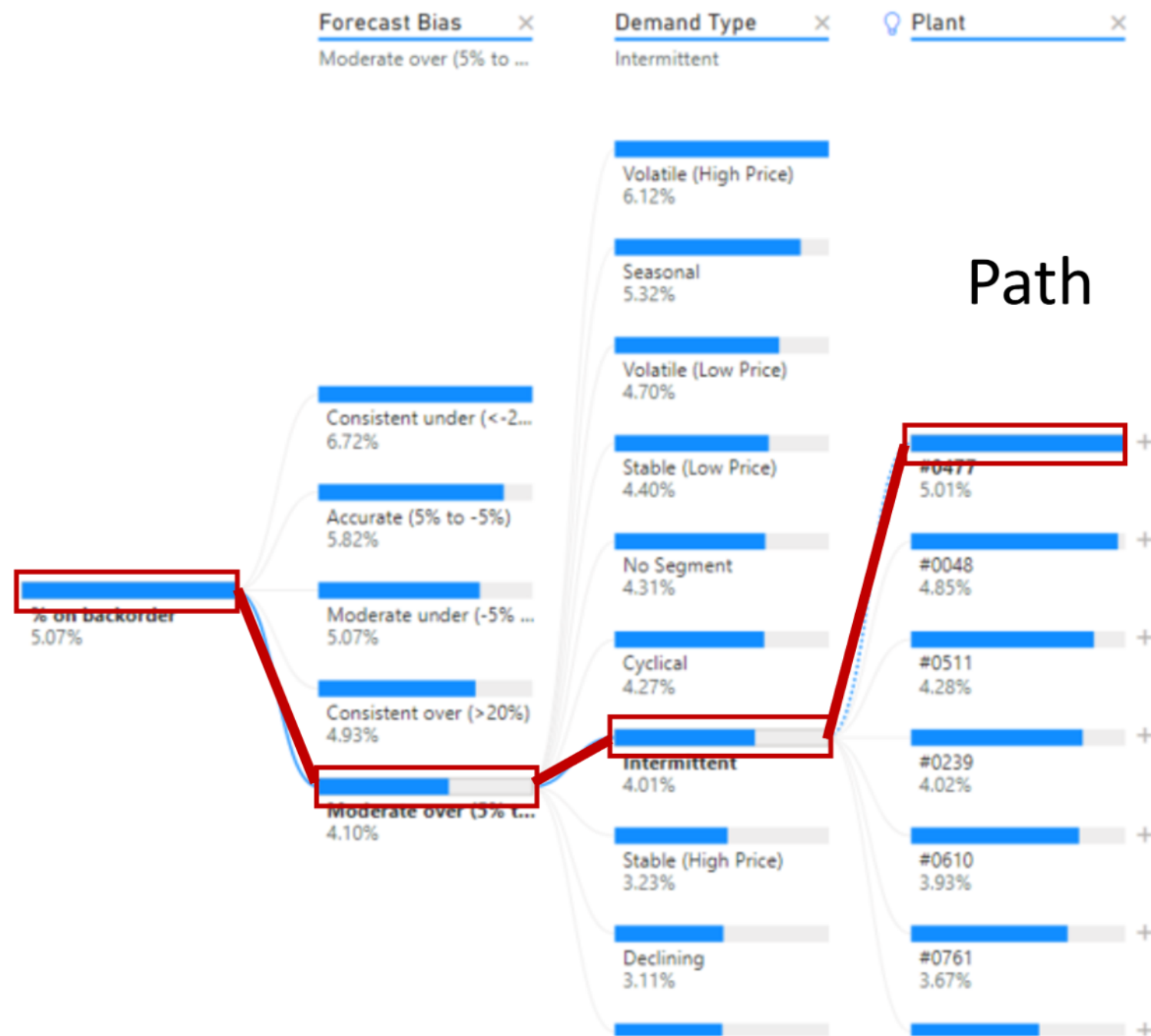# Structure of a decomposition tree

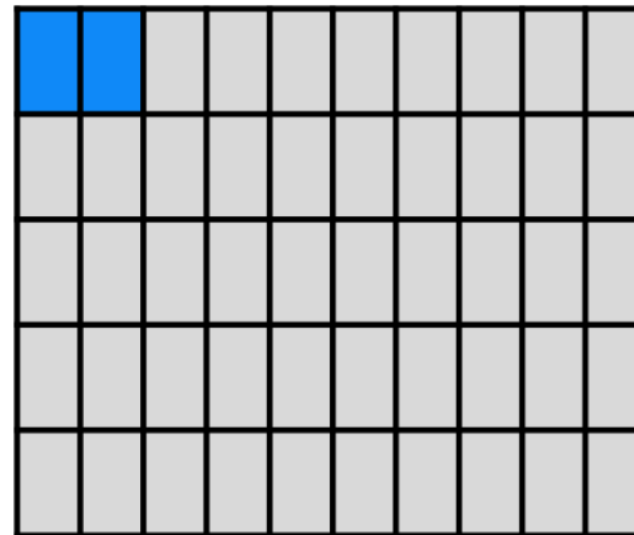# Structure of a decomposition tree

Structure of a decomposition tree

Structure of a decomposition tree

Reading a decomposition tree

% on backorder
5.07%

5.07% on backorder

ALL ORDERS

Reading a decomposition tree
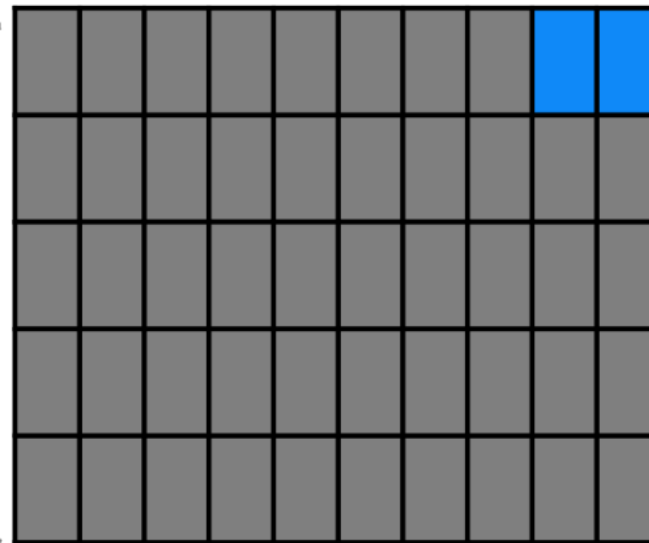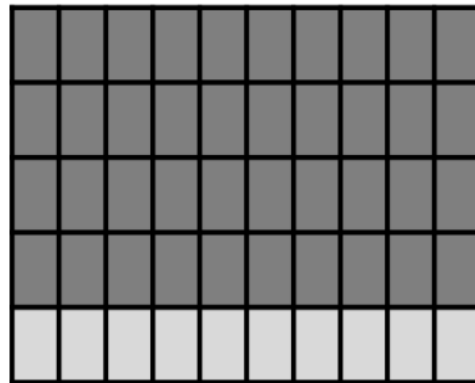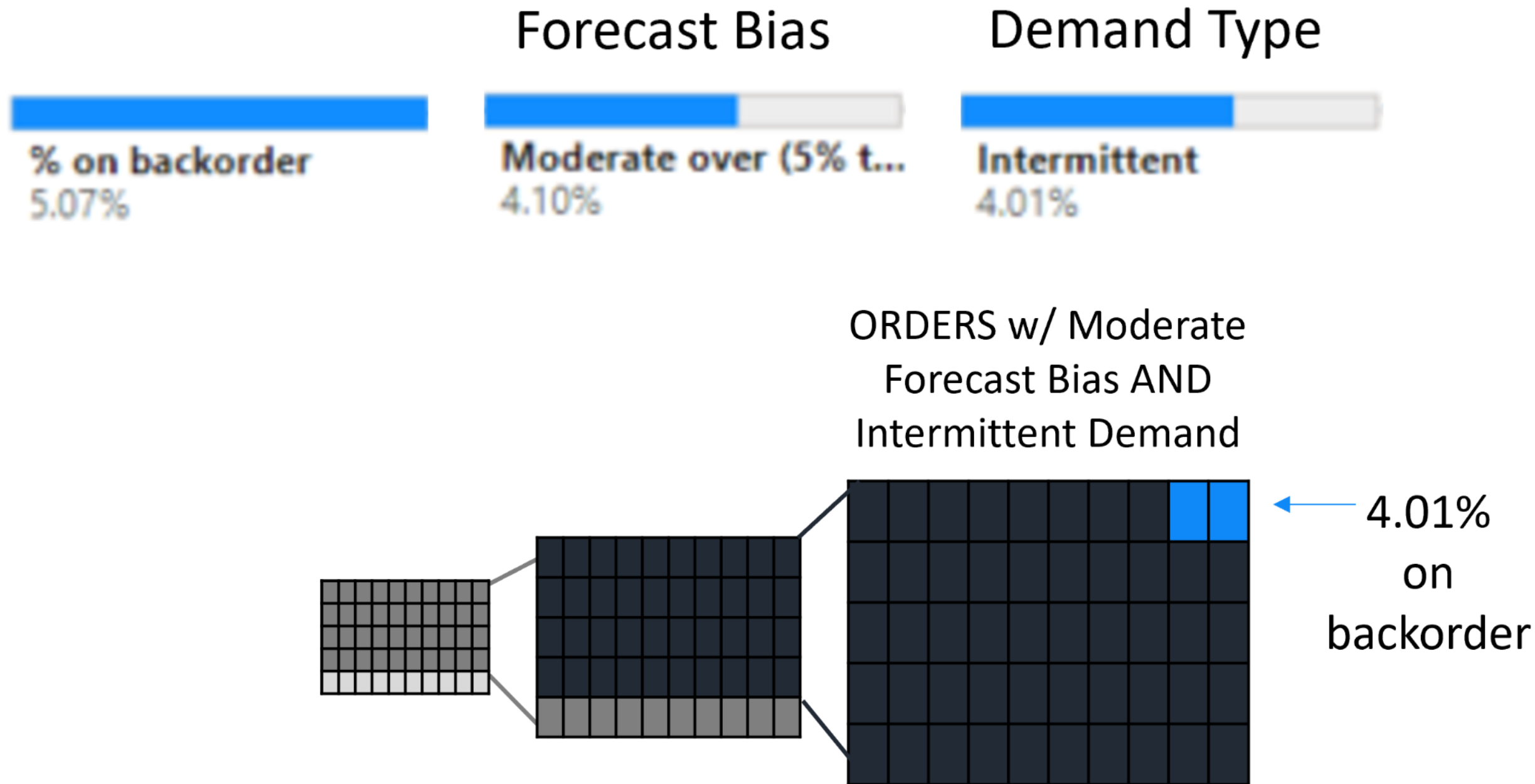
Forecast Bias

% on backorder
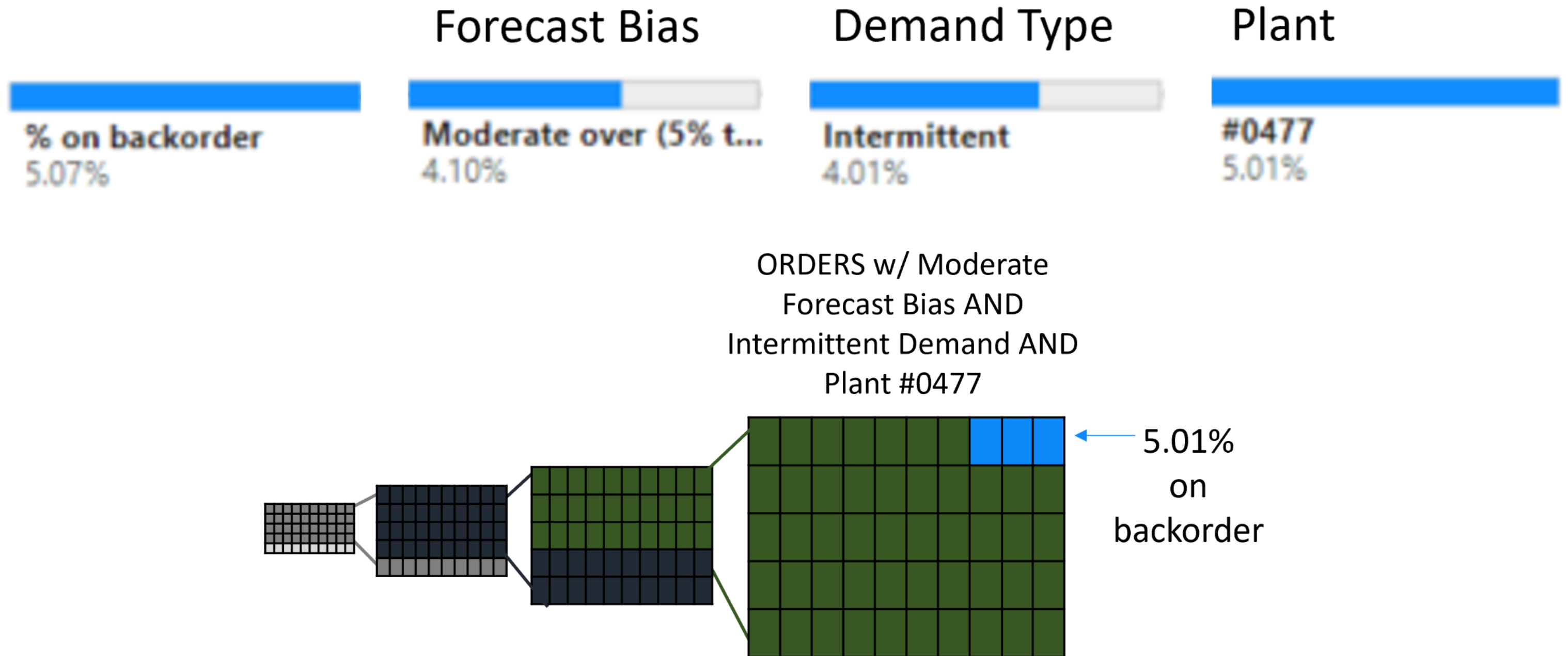5.07%

Moderate over (5% t...
4.10%

SUBSET OF ORDERS

4.10%
on
backorder

Reading a decomposition tree

Forecast Bias

Demand Type

% on backorder
5.07%

Moderate over (5% t...
4.10%

Intermittent
4.01%

ORDERS w/ Moderate
Forecast Bias AND
Intermittent Demand

← 4.01%
on
backorder

Reading a decomposition tree

Let's practice!

TREND ANALYSIS IN POWER BI

Using decomposition trees in Power BI

TREND ANALYSIS IN POWER BI

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Let's practice!

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