

A grayscale photograph of a person sitting at a desk, looking at a large computer monitor. The monitor displays a video call with another person who is gesturing while speaking. The desk has a keyboard, a mouse, and some papers. The overall scene is dimly lit, with the primary light source being the computer screen.

Minimize forecast error and improve demand planning visibility

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Meet the speakers



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Today's agenda

1. Economic perspective
2. Increasing forecast accuracy
3. The Prevedere method & demo
4. Customer spotlight
5. Power BI integration & demo

Economic volatility, pricing uncertainty

Do you *really* know which external forces affect your organization, when, and by how much?

Persistent inflation

Cooling labor market

Supply chain & pricing volatility

Consumer spending priorities

Stock market uncertainty

Economic perspective – Prevedere & RSM



1

Consumer confidence and spending are expected to decline through the rest of the year after an unexpected strong show in the summer months.



2

The cut back in spending – as a result of depleted savings, reduction in government benefits, resumption of loan payments, interest rates – will be **felt across all categories**.



3

A strong labor market should help mitigate long term pull back in consumer spending.

Market-validated planning with forecast accuracy

Criticality of leading indicators and econometrics

Leading Indicators: If your forecasting models do not include contextually relevant leading indicators, forecasts do not incorporate the best predictors of future performance.

Econometrics: If models do not leverage econometrics (i.e. cause-and-effect economic relationships), their accuracy will be limited - especially if the business KPI being forecasted is impacted by outside forces.

Accuracy: Overall accuracy is essential to forecasting, whether short term operational or longer term strategic. If your modeling process cannot precisely identify, quantify and incorporate external dynamics, it is blindsided and basically flawed.

FORECASTING ERROR BASED ON THE MODEL USED

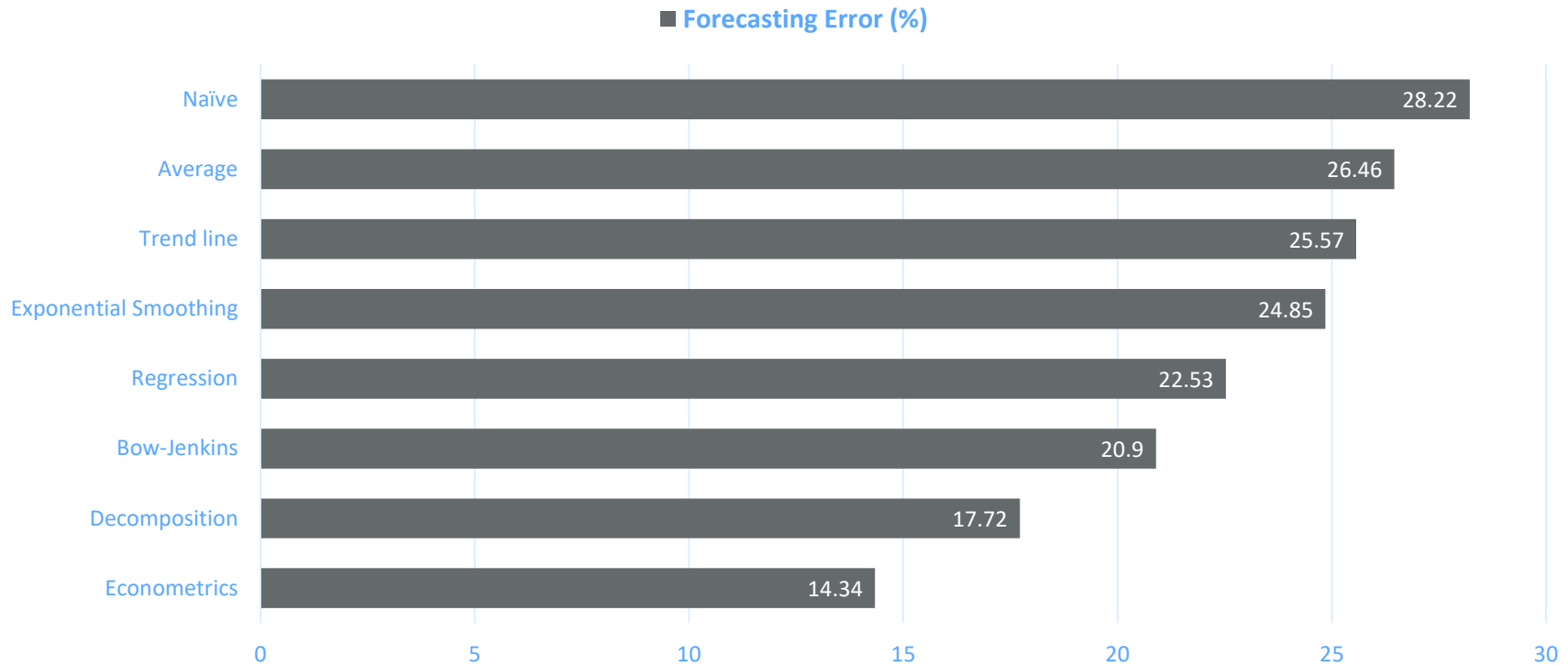
TIME SERIES MODEL		CAUSE-AND-EFFECT MODELS	
MODEL	FORECAST ERROR (%)	MODEL	FORECAST ERROR (%)
Decomposition	17.72	Econometrics	14.34
Box-Jenkins	20.90	Regression	22.53
Exponential smoothing	24.85		
Trend line	25.57		
Average	26.46		
Naïve	28.22		
Time Series Models Combined	24.86	Cause-And-Effect Models Combined	20.79



Institute of Business
Forecasting & Planning

Consider forecasting method and error (%)

Combine internally used method with econometrics to deliver increased accuracy



Questions to consider...

When evaluating your internal planning and forecasting process:

- How do you arrive at a baseline for a demand or sales forecast before adding input from the internal business units like marketing and operations?
- How long does it take to generate your demand forecasts?

When looking at the accuracy and trustworthiness of your current forecasting process:

- Do you know what factors outside your company have an impact on your business?
- Have you tested your hypothesis?
- Can you quantify those factors?
- Do you have a method or mechanism for monitoring those factors on an ongoing basis?

The Prevedere method



Discovery

- Data exploration to uncover insights, correlations, and trends
- Identification of relevant external data sources and variables for analysis

1



Analysis

- Statistical techniques used to analyze indicator relevance and offset
- Consolidation of workbench with explanatory variables

2



Predict

- Utilization of predictive models to generate forecasts and predictions
- Evaluation and refinement of forecasting results

3



Interpret

- Interpretation of the forecasted outcomes and their implications
- Communication of insights and recommendations to stakeholders

4

PREVEDERE DEMO

Econometric forecasting in action

Customer spotlight



RSM

THE PLANNING NEED

A dairy CPG company needed market validation demographic-specific demand forecasts to complete category planning with greater accuracy and consumer granularity

KEY SUCCESS METRICS

- Model accuracy lands between **92% - 98%** across four sales models
- Forecast provides a more comprehensive understanding of quantifiable external business impacts than prior forecasting methods

PROJECT RECAP

- Models forecasting sales for:
 - Total company
 - Fastest-growing product category
 - Largest customer base
 - Geographic region with highest expansion opportunities
- Data extracted from Prevedere API into data warehouse using Azure Data Factory and visualized in Power BI for consumption by forecast and executive team



prevedere

Data flow: Prevedere to Power BI



POWER BI DEMO

Surfacing Prevedere results in Power BI

THANK YOU FOR
YOUR TIME AND
ATTENTION



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