



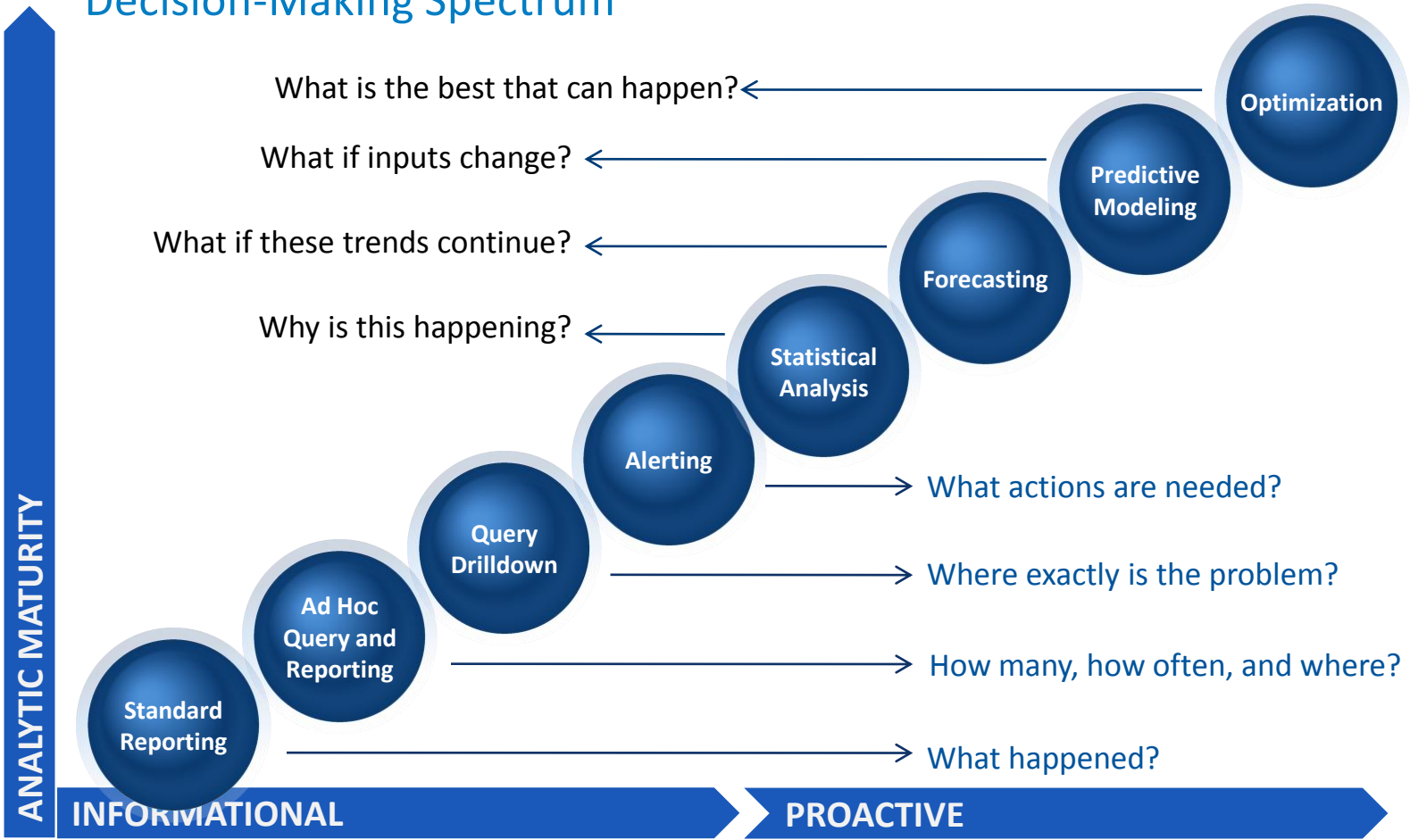
# TIME SERIES FORECASTING

November 2016

**Matt Joyce**  
*Specialist, Data Sciences*

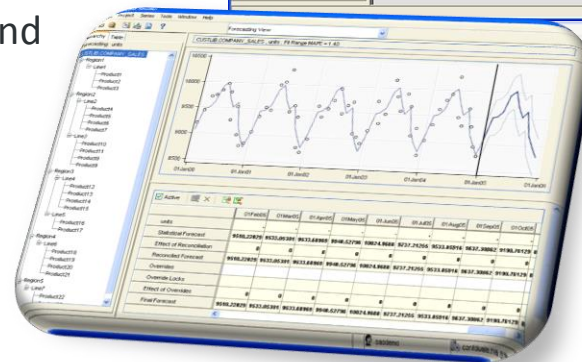
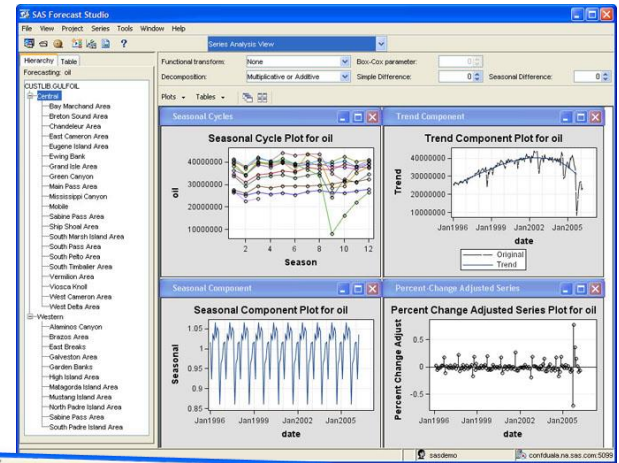


# Decision-Making Spectrum

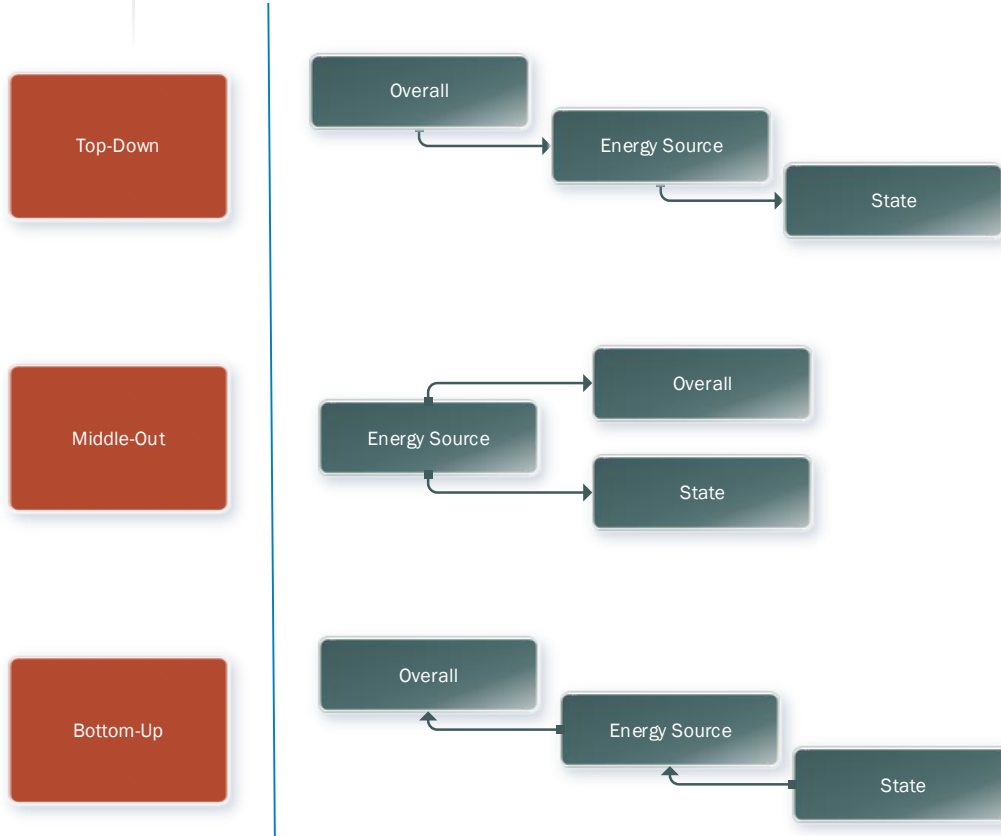


# SAS® FORECAST SERVER LARGE SCALE AUTOMATIC FORECASTING

- Enterprise environment for large-scale automatic forecasting
- Produce large volumes of forecasts quickly and automatically
- Automatically select the most appropriate model and generate forecasts
- Automatically Reconcile multi-level forecasts from top-down, middle-out, or bottom-up.



# SAS FORECAST SERVER RECONCILIATION



**PROBLEM**

How can I efficiently forecast power generation by energy source and by state?

# DEMO



# FORECAST SERVER CLASSES OF MODELS

- Exponential Smoothing Models (ESM)
- Autoregressive Integrated Moving Average (ARIMA & ARIMAX)
- Regression models (e.g., linear, quadratic, log-linear, etc.)
- Simple models (e.g., random walk)\
- Custom (user generated)

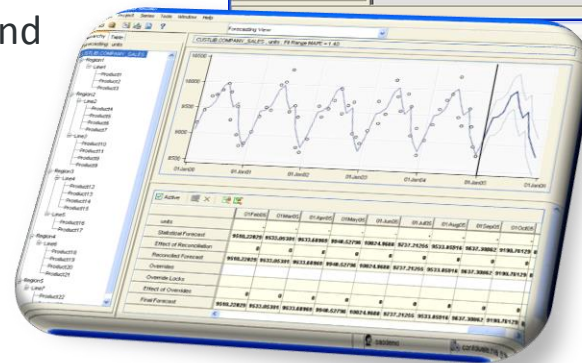
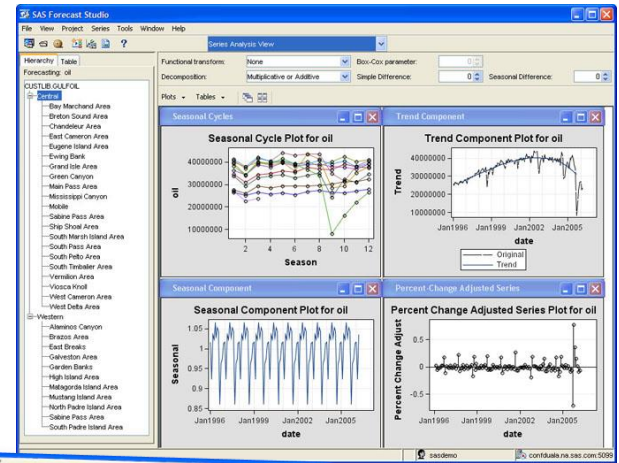
# FORECASTING STEPS “BEHIND THE SCENES”

1. Diagnose
2. Select
3. Fit
4. Forecast
5. Reconcile



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# APPENDIX



THE  
POWER  
TO KNOW.

# LEARN MORE ASK THE EXPERT WEBINAR

**SAS Forecast Server: Getting Started** **New Dates Added!** This session introduces you to SAS Forecast Server. We walk through the eight-step wizard for setting up a new project, navigate the SAS Forecast Studio user interface, review forecasting results, and highlight some of the most commonly used options.

[Register for live event](#)

[Watch on-demand](#)

# SAS VALUE DOCUMENT

- Learn More about:
  - Webinars/Tutorials
  - User Groups
  - Online Communities



SAS Value  
Document