Power BI: Integrating AI and Machine Learning

with Helen Wall



ARIMA

Power BI ARIMA visual documentation:

https://appsource.microsoft.com/en-us/product/power-bi-visuals/WA104380888?tab=Overview

GitHub open-source code: https://github.com/Microsoft/powerbi-visuals-forcastingarima

In Power BI using the R versions: R 3.3.1, R 3.3.0, MRO 3.3.1, MRO 3.3.0, MRO 3.2.2

Additional R package dependencies: proto, zoo

ARIMA stands for Autoregressive Integrated Moving Average, which is a forecasting methodology for time-series data based on historical data that aim to describe its autocorrelations. This visual supports both seasonal and non-seasonal modeling, but requires input data to be an evenly spaced time series. Developers can adjust the p, q, r, P, Q, R inner parameters of the model.

TBATS

Power BI TBATS visual documentation:

https://appsource.microsoft.com/en-us/product/power-bi-visuals/WA104381326?tab=Overview

GitHub open-source code: https://github.com/Microsoft/PowerBI-visuals-forcasting-tbats

In Power BI using the R versions: R 3.4.0, R 3.3.3, R 3.3.2, MRO 3.2.2

Additional R package dependencies: zoo, scales, reshape2, ggplot2, plotly, forecast, lubridate, htmlwidgets, XML

The TBATS model enables you to use multiple seasonalities in time-series data, which you can set directly in the Power BI visual.