

Fitting the Model

- Open file **Global Broadband.dxp**
 - Go to **Tools > Regression Modeling**
 - **Name** the model MyModel01
 - Add a **Comment** “Assumes parametric statistical methods can be applied”
 - Choose Linear Regression **Model Method**
 - Choose the **Data Table**: Training Countries
 - On the General Tab
 - Response column: Fixed broadband Internet subscribers
 - Predictor columns: Consumer price index, Cost to export, Cost to import, Internet users, Mobile cellular subscriptions, Rural population, Telephone lines, and Urban population
 - Choose Linear: X
 - Click Add
 - Click OK
 - Evaluate MyModel01 Model Summary and diagnostic visualizations
 - Go to **Tools > Regression Modeling**
 - **Name** the model MyModel02
 - Add a **Comment** “Applies nonparametric statistical methods”
 - Choose Regression Tree **Model Method**
 - Choose the Data Table: Training Countries
 - On the **General Tab**
 - Response column: Fixed broadband Internet subscribers
 - Predictor columns: Consumer price index, Cost to export, Cost to import, Internet users, Mobile cellular subscriptions, Rural population, Telephone lines, and Urban population
 - Choose Linear: X
 - Click Add
 - Click OK
 - Evaluate MyModel02 Model Summary and diagnostic visualizations

Evaluating the Model

- Go to the Country Partitioning Page
 - Go to **View > Analytic Models**
 - Click on the icon to **Evaluate** the Linear Regression Model
 - Select data table: Validation Countries
 - Note all columns are named the same as the Training data table
 - Click OK
 - Examine how the model fits the new data
 - Go to the My Model02 tab
 - Click on the icon in the Title bar of the Model Summary to Evaluate the model
 - Select data table: Validation Countries

- Note all columns are named the same as the Training data table
 - Click OK
- Examine how the model fits the new data
 - Notice the R-squared value and Sum of Squares Error both suggest that this model does not fit the data as well as our first model

Predicting from the Model

- Go to the Country Partitioning tab
 - Go to the **Analytic Model** Panel > MyModel01 Model Method
 - Click on the icon to **Predict**
 - Choose the **Data table** Broadband Unreported
 - **Match** the Consumer Price Index column with the CPI column
 - Click OK
 - Activate the Broadband Unreported Data table > Click the icon to **Maximize Active**
 - Notice the new column: Predicted Column
 - Add the Filters Panel
 - Choose the filters associated with the Broadband Unreported data table
 - Scroll to the bottom
 - Right click on the Predicted Column filter
 - Rename: Predicted fixed broadband Internet subscribers