

# Results and Analysis

## 1. Model Outputs

- **Decision Tree Model**

- Achieved Valid Average Squared Error (VASE): 0.11199
- Misclassification Rate: 15.74%

- **Neural Network Model**

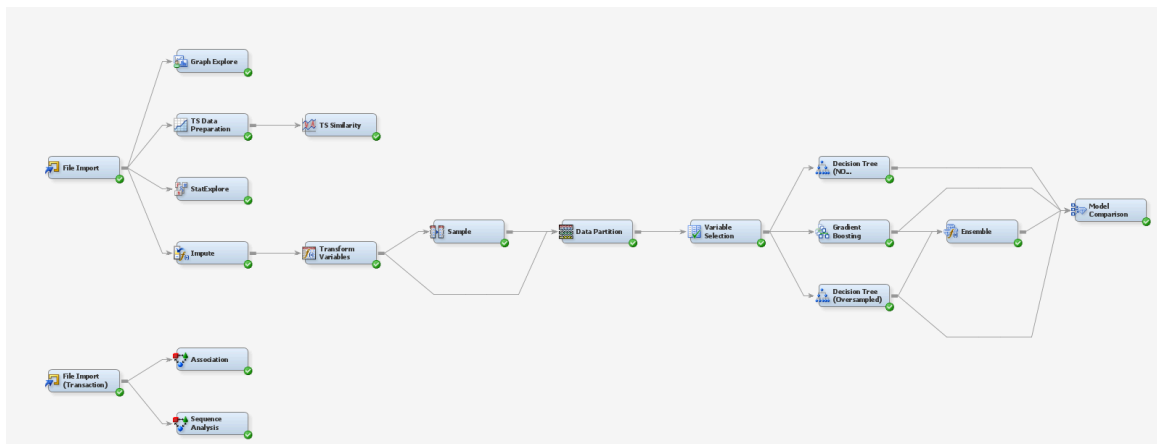
- Average Squared Error: 0.12675
- Misclassification Rate: 17.47%

- **Gradient Boosting Model**

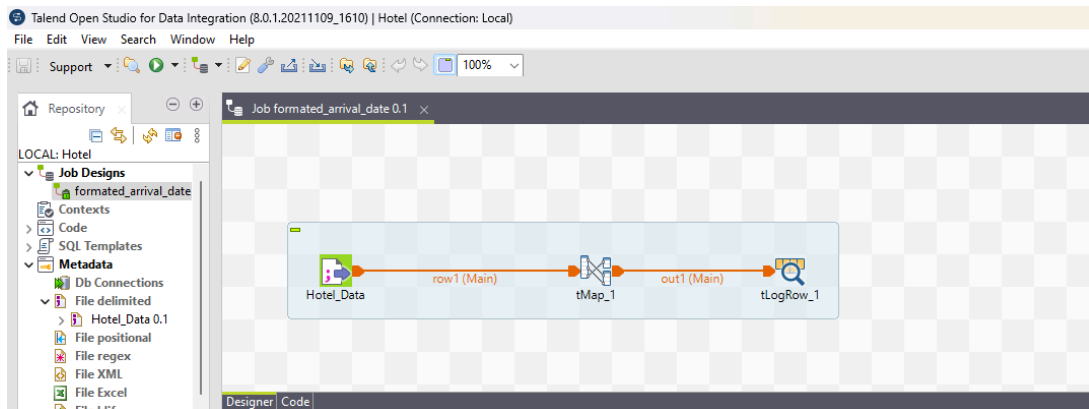
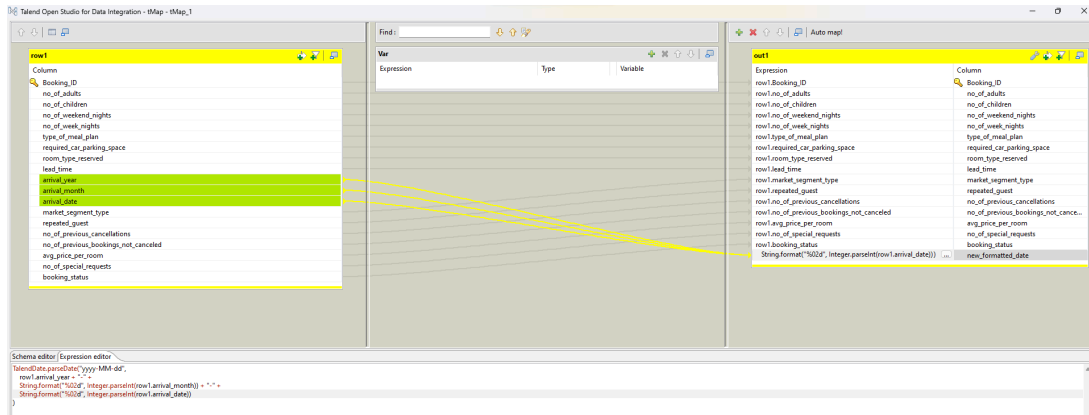
- Average Squared Error: 0.12800
- Misclassification Rate: 17.70%

## 2. Output for each tools

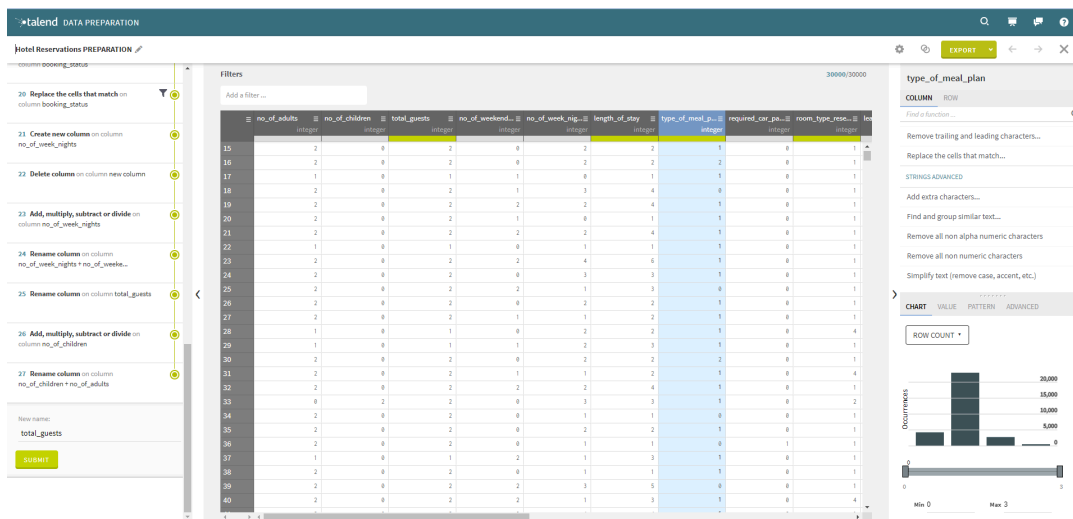
- **SAS Enterprise Miner**



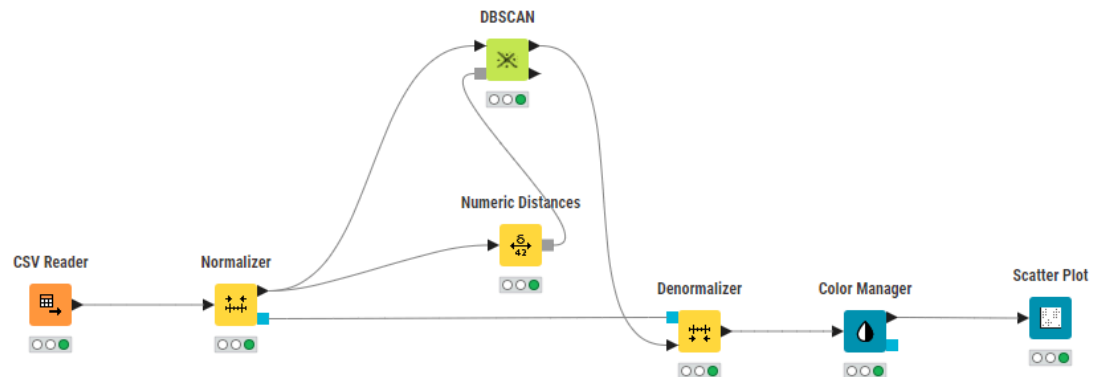
## ● Talend Open Studio for Data Integration



## ● Talend Data Preparation



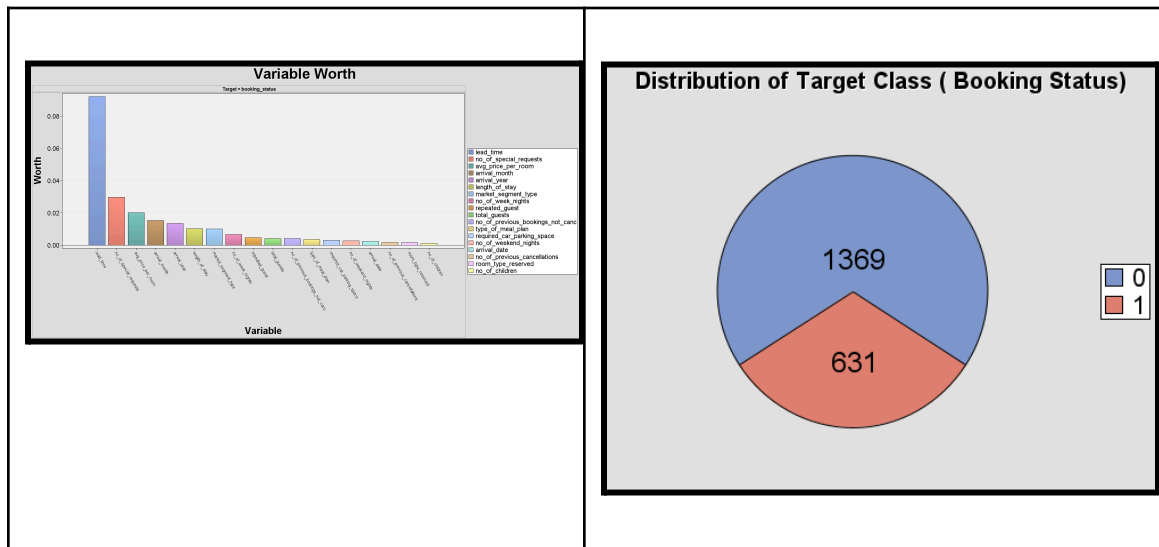
- **Knime**

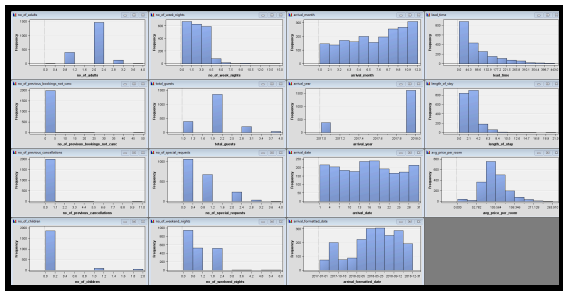
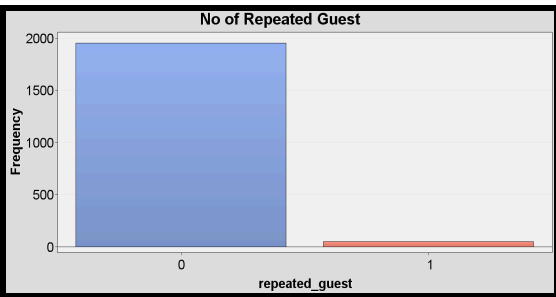
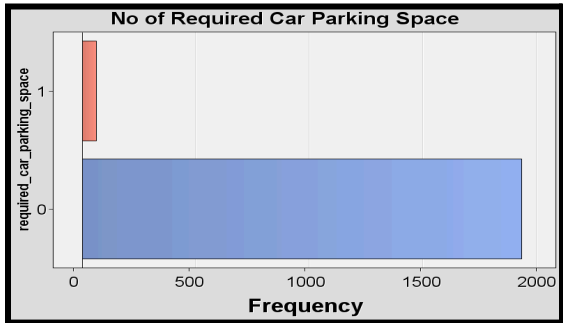
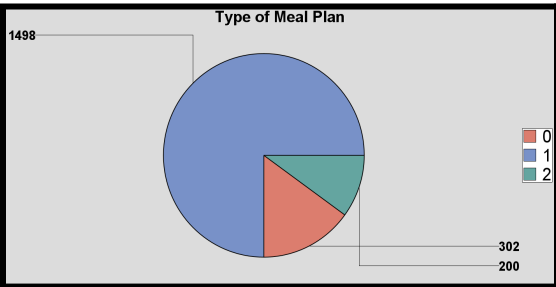
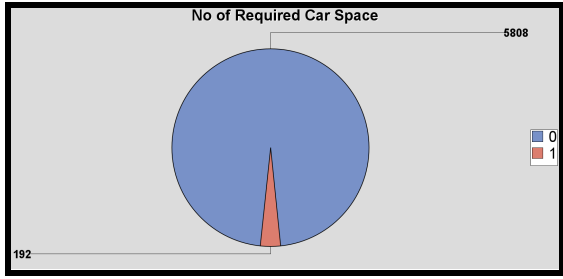
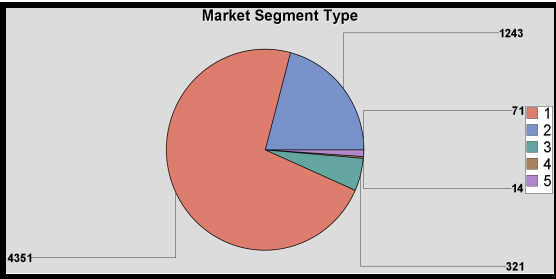


### 3. Visualizations

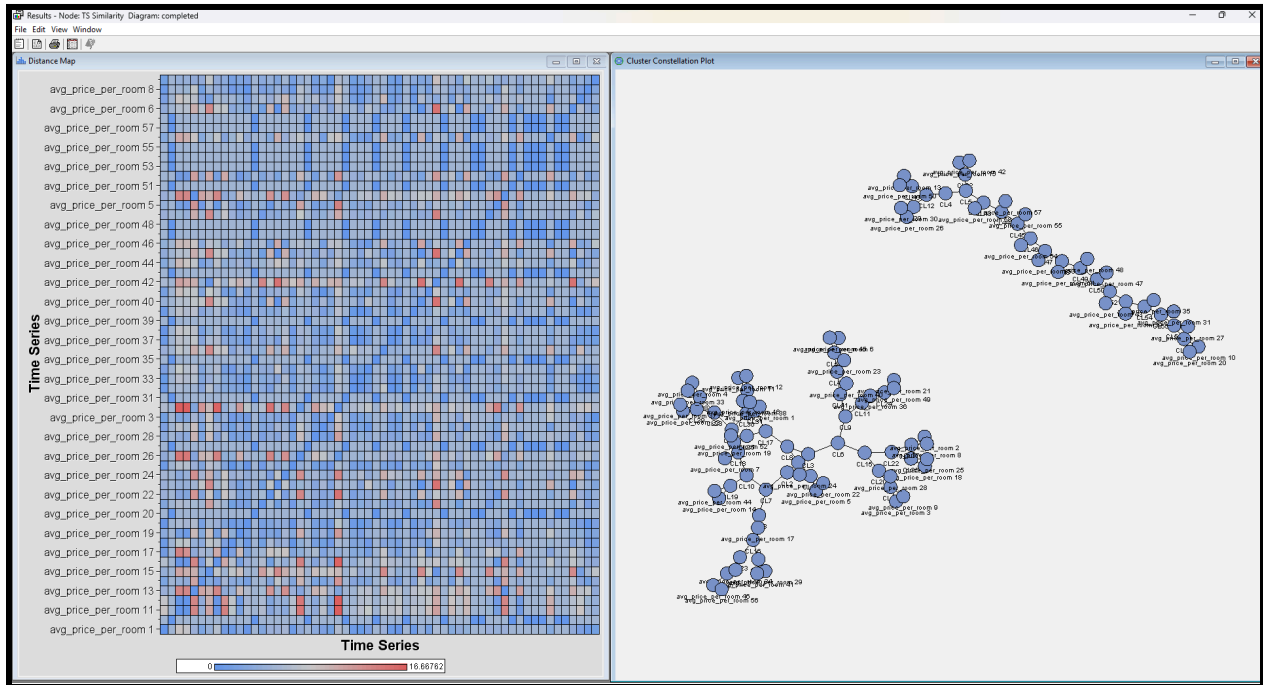
- **Explore Stage**

- Exploratory Data Analysis

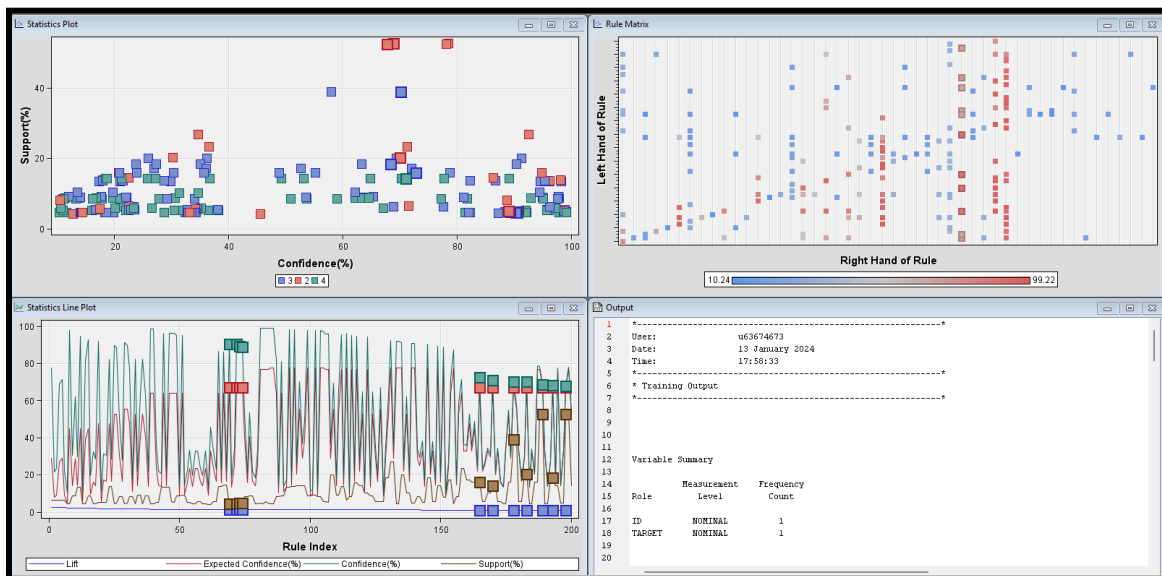




## ○ Time series Analysis



## ○ Association Analysis



## ○ DBSCAN Clustering



