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Model Comparison

| Champion | Name | Algorithm Name | KS (Youden) |
|----------|------------------------|------------------------|-------------|
| true | Decision Tree | Decision Tree | 0.4381 |
| false | Logistic Regression | Logistic Regression | 0.3540 |

| Accuracy | Average Squared Error | Area Under ROC | Cumulative Lift |
|----------|-----------------------|----------------|-----------------|
| 0.7708 | 0.1768 | 0.8205 | 2.7646 |
| 0.6799 | 0.2056 | 0.7028 | 1.9866 |

| Cumulative Captured Response Percentage | Cutoff | Data Role | Depth |
|---|--------|-----------|-------|
| 27.6455 | 0.5000 | TEST | 10 |
| 19.8661 | 0.5000 | TEST | 10 |

| F1 Score | False Discovery Rate | False Positive Rate | Gain |
|----------|-------------------------|------------------------|--------|
| 0.5346 | 0.0211 | 0.0044 | 1.7646 |
| 0.4192 | 0.4020 | 0.1209 | 0.9866 |

| Gini Coefficient | ROC Separation | Lift | Misclassification Rate |
|------------------|----------------|--------|---------------------------|
| 0.6411 | 0.3633 | 2.7249 | 0.4782 |
| 0.4055 | 0.2018 | 1.7163 | 0.5275 |

| Multi-Class Log Loss | Misclassification at Cutoff | | Number of Observations |
|-------------------------|-----------------------------|--------|------------------------|
| 0.8457 | 0.4782 | 0.2292 | 1,056 |
| 1.0232 | 0.5275 | 0.3201 | 1,056 |

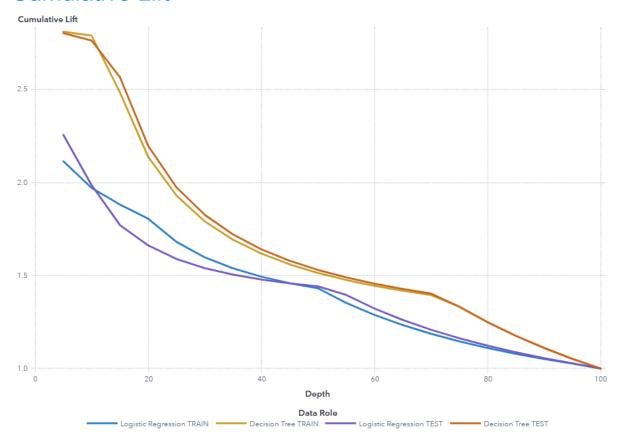
| Root Average | Captured |
|---------------|------------|
| Squared Error | Response |
| | Percentage |

| Root Average | Captured |
|---------------|------------|
| Squared Error | Response |
| | Percentage |
| 0.4205 | 13.6243 |
| 0.4534 | 8.5813 |
| | |

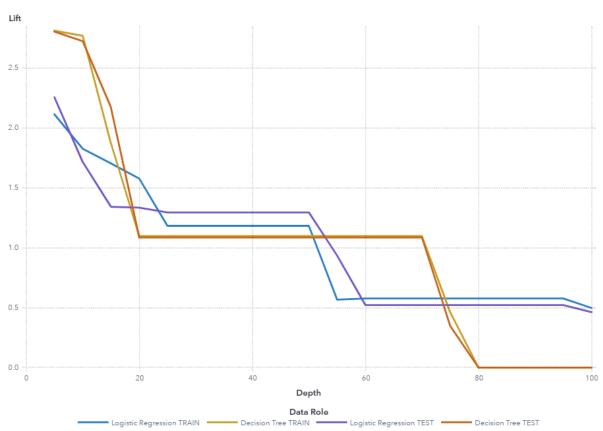
Properties

| | - |
|----------------------------|--|
| Property Name | Property Value |
| selectionCriteriaCl ass | Kolmogorov- Smirnov statistic (KS) |
| selectionCriteriaInt erval | Average squared error |
| selectionTable | Test |
| selectionDepth | 10 |
| cutoff | 0.50 |

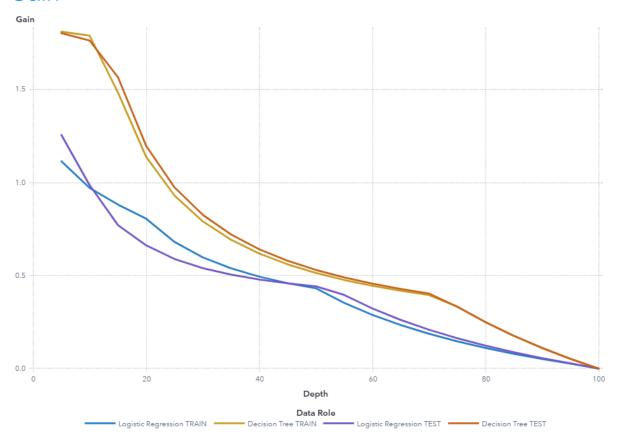
Cumulative Lift



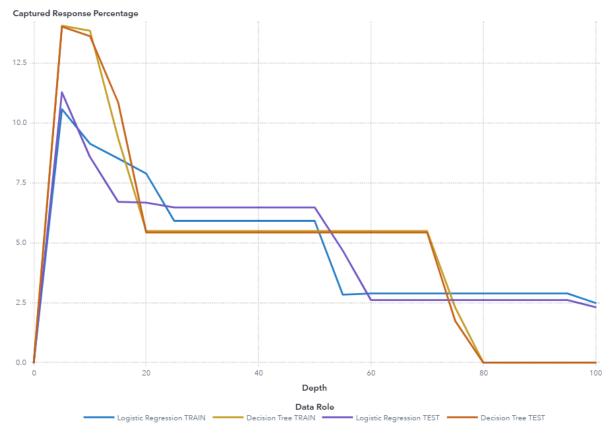




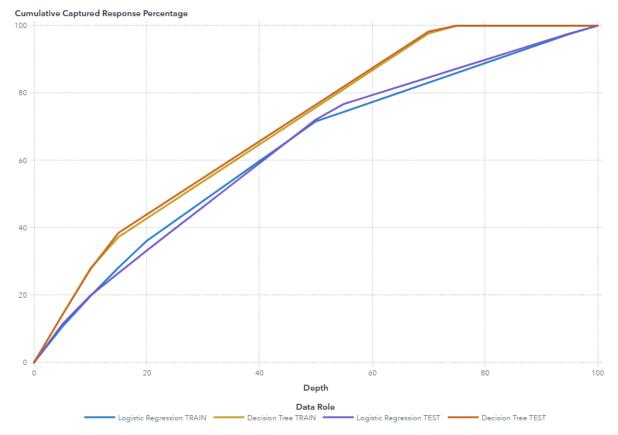
Gain



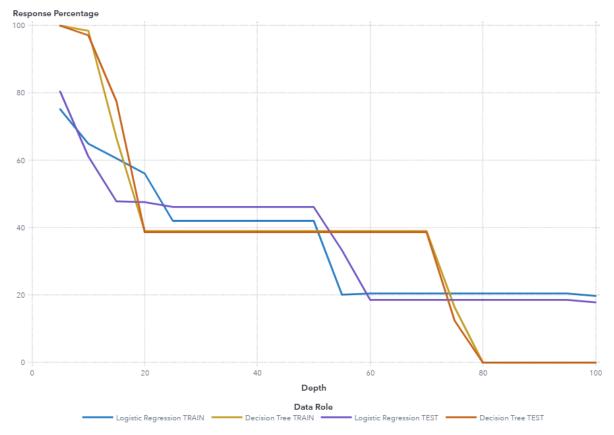
Captured Response Percentage



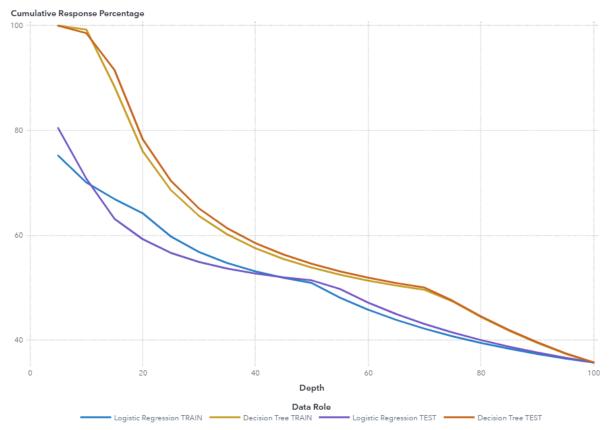
Cumulative Captured Response Percentage



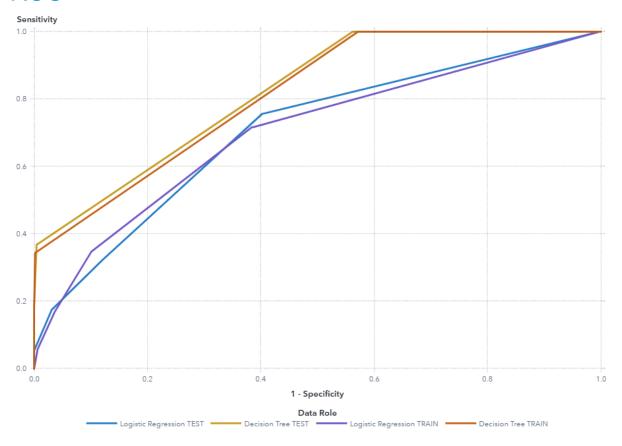
Response Percentage



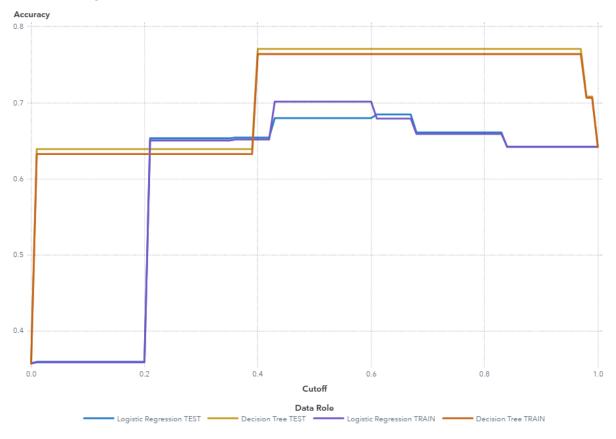
Cumulative Response Percentage



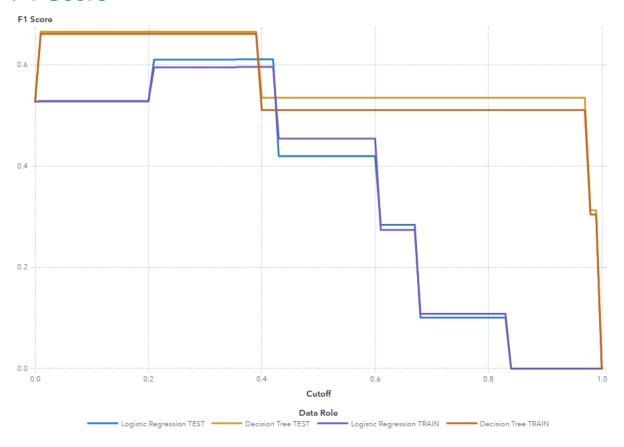
ROC



Accuracy



F1 Score



Fit Statistics

| Otatiatiaa Labat | TDAINL Lastatia | TEOT Laster D | TDAIN Desiste |
|---|-----------------|-----------------|-----------------|
| Statistics Label | TRAIN_Logistic_ | TEST_Logistic_R | TRAIN_Decision_ |
| | Regression | egression | Tree |
| Area Under ROC | 0.6994 | 0.7028 | 0.8116 |
| Average Squared Error | 0.2054 | 0.2056 | 0.1736 |
| Divisor for ASE | 2,467 | 1,056 | 2,467 |
| Formatted Partition | 1 | 2 | 1 |
| Gamma | 0.5643 | 0.5661 | 0.9960 |
| Gini Coefficient | 0.3989 | 0.4055 | 0.6232 |
| KS (Youden) | 0.3323 | 0.3540 | 0.4284 |
| KS at Default Cutoff | 0.2460 | 0.2018 | 0.3416 |
| KS Cutoff | 0.3600 | 0.3600 | 0.0100 |
| Misclassification Rate | 0.5334 | 0.5275 | 0.4682 |
| Misclassification Rate (Event) | 0.2983 | 0.3201 | 0.2359 |
| Misclassification Rate at KS Cutoff (Event) | 0.3482 | 0.3456 | 0.3672 |
| Multi-Class Log Loss | 1.0237 | 1.0232 | 0.8342 |
| Number of Observations | 2,467 | 1,056 | 2,467 |
| Partition Indicator | 1 | 2 | 1 |
| Root Average Squared Error | 0.4532 | 0.4534 | 0.4167 |
| Target Name | acci_severity | acci_severity | acci_severity |
| Tau | 0.1833 | 0.1866 | 0.2864 |

| TEST_Decision_T |
|-----------------|
| ree |
| 0.8205 |
| 0.1768 |

| TEST_Decision_T |
|-----------------|
| ree |
| 1,056 |
| 2 |
| 0.9913 |
| 0.6411 |
| 0.4381 |
| 0.3633 |
| 0.0100 |
| 0.4782 |
| 0.2292 |
| 0.3608 |
| 0.8457 |
| 1,056 |
| 2 |
| 0.4205 |
| acci_severity |
| 0.2950 |