Model Comparison Report

Fit and error measures

Model	Accuracy	Accuracy_No	Accuracy_Yes	F1	AUC
ddv_logisticregression	0.4898	0.3660	0.6039	0.4076	0.4828
Decision_Tree_34	0.5041	0.4894	0.5176	0.4863	0.4972
Stepwise_Logistic_Regression_DDV	0.5000	0.2340	0.7451	0.3099	0.4644

Model: model names in the current comparison.

Accuracy: overall accuracy, number of correct predictions of all classes divided by total sample number.

Accuracy_[class name]: accuracy of Class [class name] is defined as the number of cases that are **correctly** predicted to be Class [class name] divided by the total number of cases that actually belong to Class [class name], this measure is also known as *recall*.

AUC: area under the ROC curve, only available for two-class classification.

F1: F1 score, 2 * precision * recall / (precision + recall). The *precision* measure is the percentage of actual members of a class that were predicted to be in that class divided by the total number of cases predicted to be in that class. In situations where there are three or more classes, average precision and average recall values across classes are used to calculate the F1 score.

Confusion matrix of Decision_Tree_34

	Actual_No	Actual_Yes
Predicted_No	115	123
Predicted_Yes	120	132

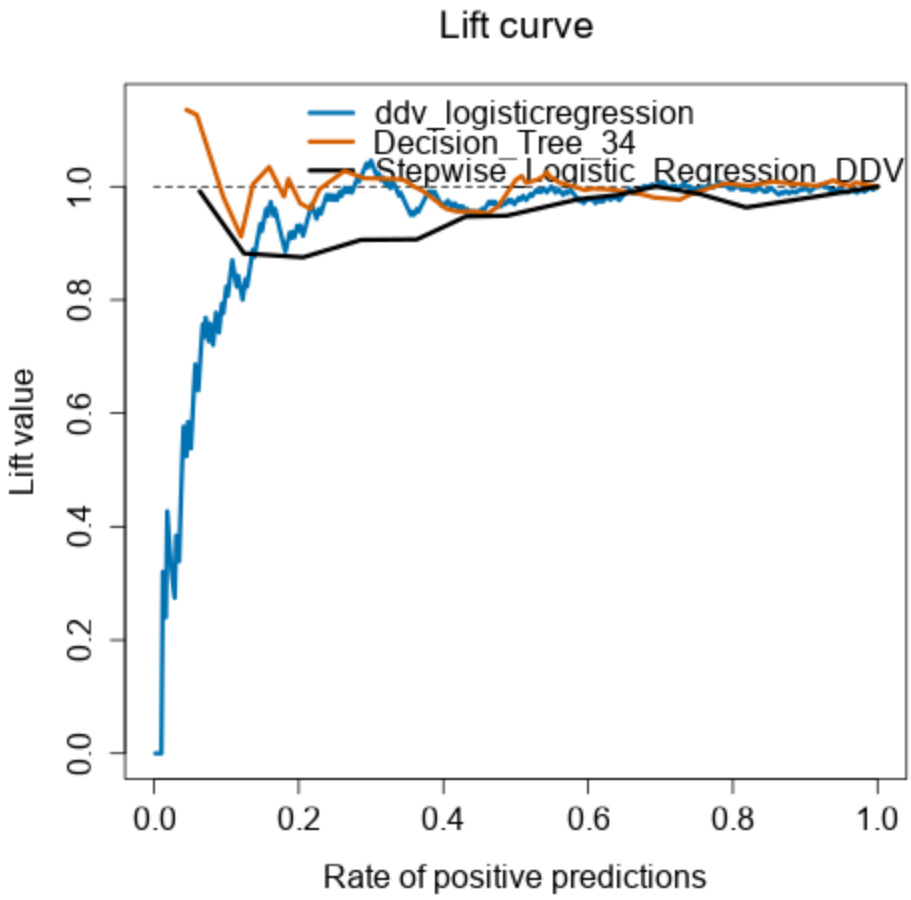
Confusion matrix of Stepwise_Logistic_Regression_DDV

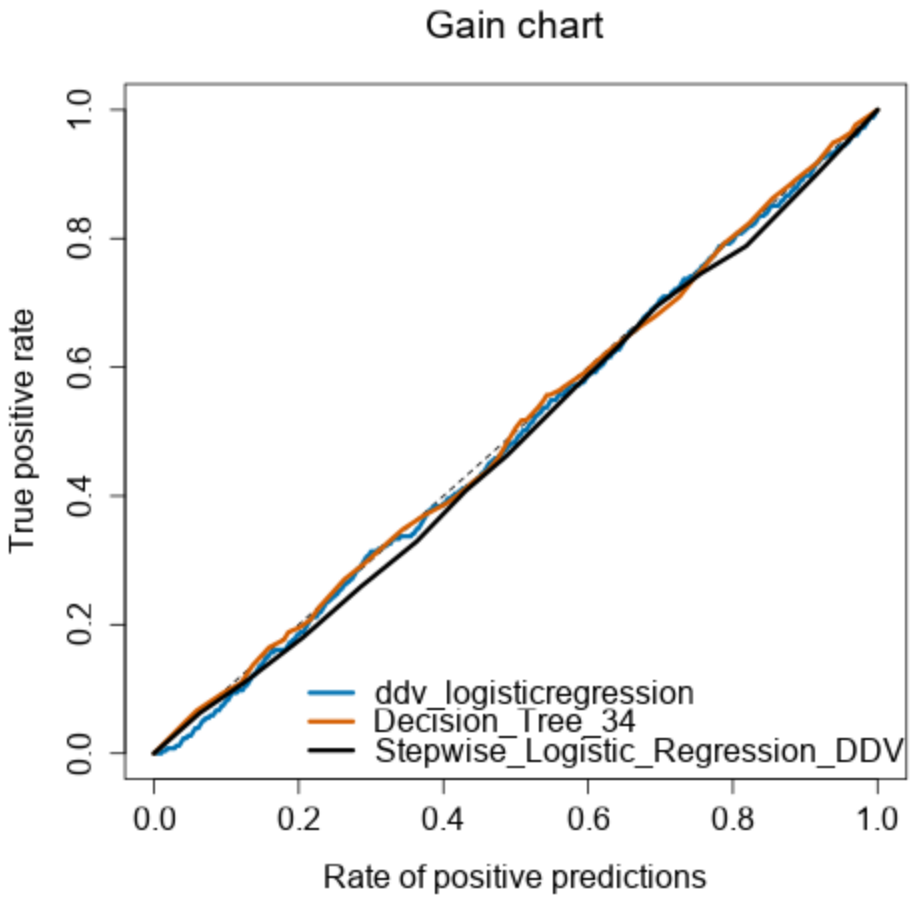
	Actual_No	Actual_Yes
Predicted_No	55	65
Predicted_Yes	180	190

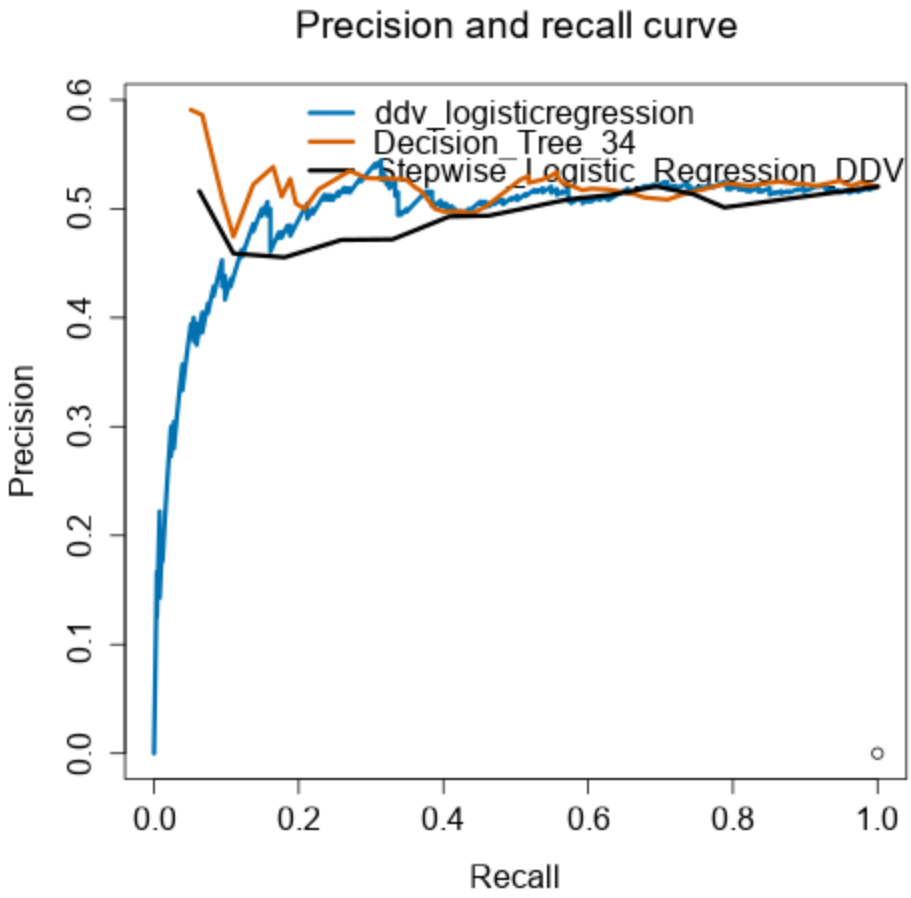
Confusion matrix of ddv_logisticregression

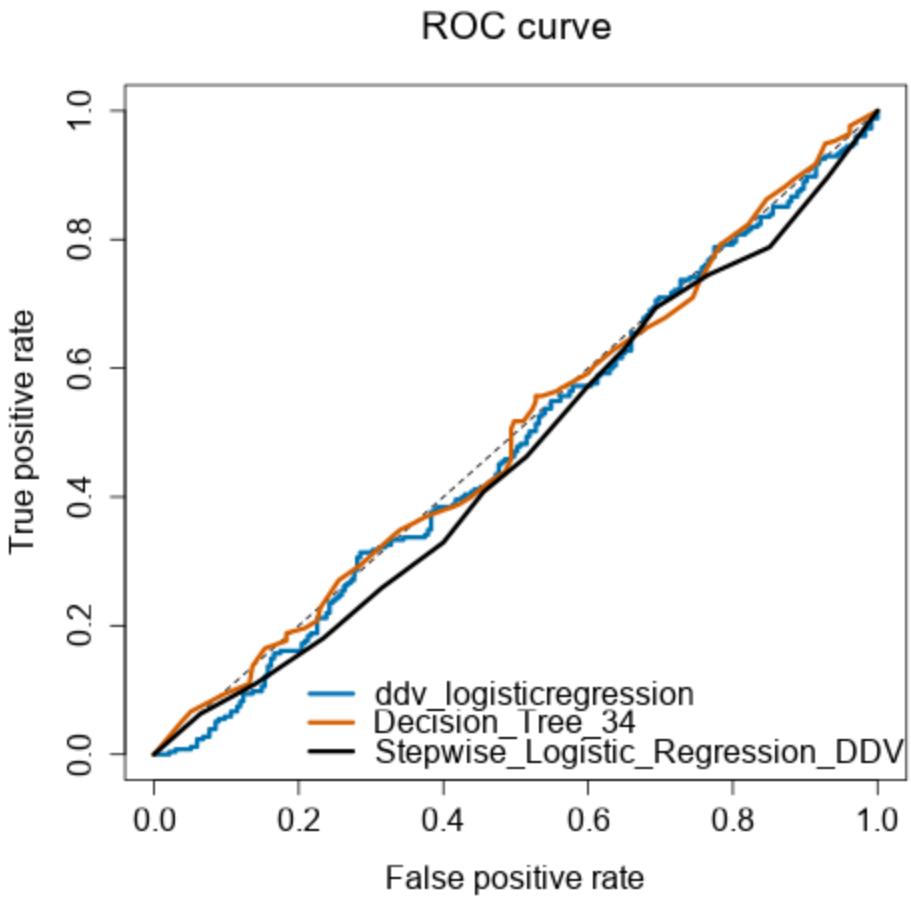
	Actual_No	Actual_Yes
Predicted_No	86	101
Predicted_Yes	149	154

Performance Diagnostic Plots


Lift curve
ddv_logisticregression
Decision_Tree_34
Stepwise_Logistic_Regression_DDV
Lift value
0.0
0.2
0.4
0.6
0.8
1.0
Rate of positive predictions


Gain chart
True positive rate
0.0
0.2
0.4
0.6
0.8
1.0
Rate of positive predictions
ddv_logisticregression
Decision_Tree_34
Stepwise_Logistic_Regression_DDV


Precision and recall curve
ddv_logisticregression
Decision_Tree_34
Stepwise_Logistic_Regression_DDV
Precision
Recall
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.0
0.2
0.4
0.6
0.8
1.0


ROC curve
True positive rate
False positive rate
0.0
0.2
0.4
0.6
0.8
1.0
ddv_logisticregression
Decision_Tree_34
Stepwise_Logistic_Regression_DDV