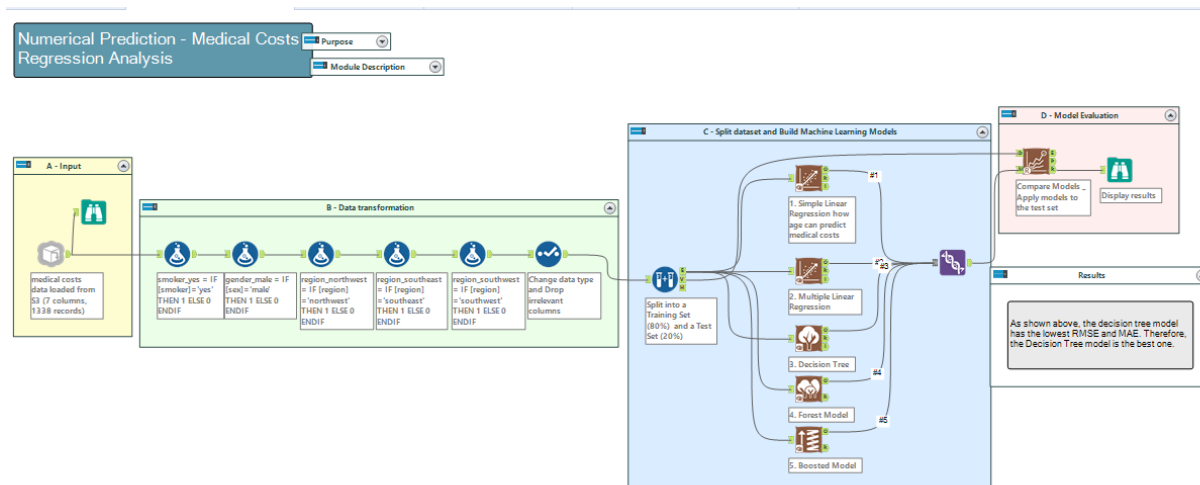


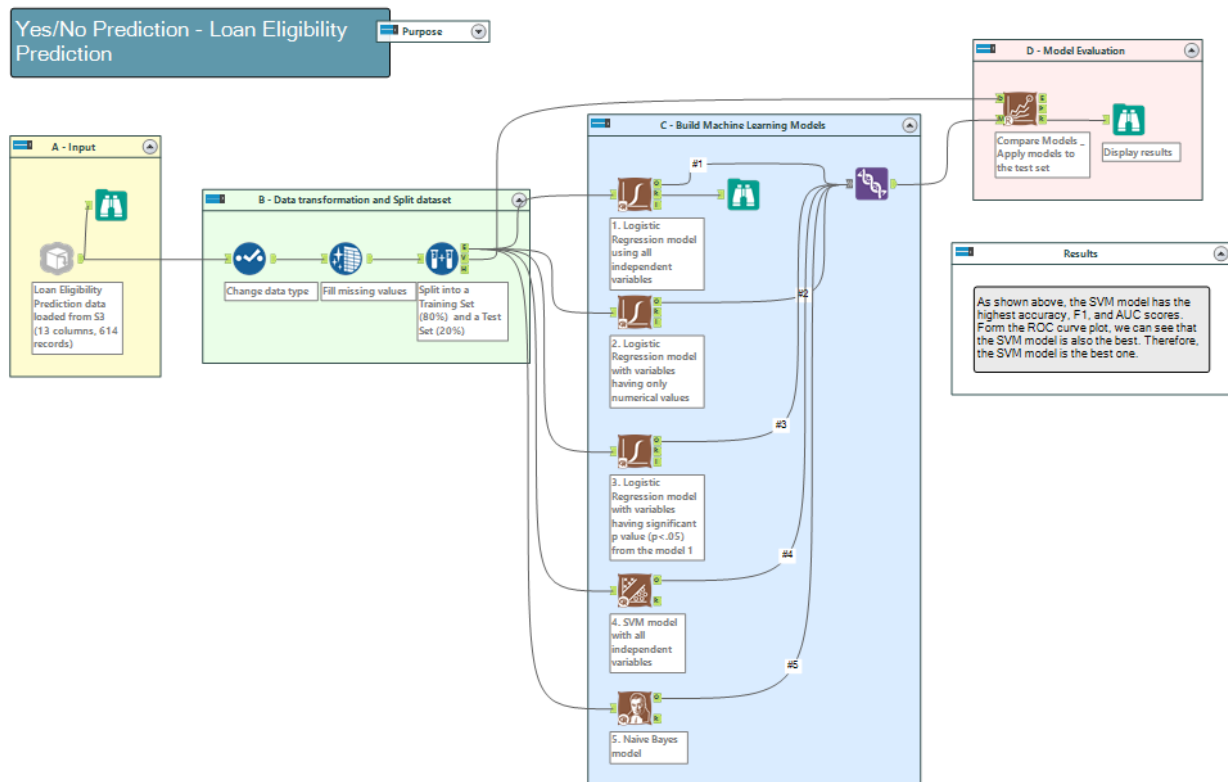
Predictive Modeling with Alteryx

by Qi Sun

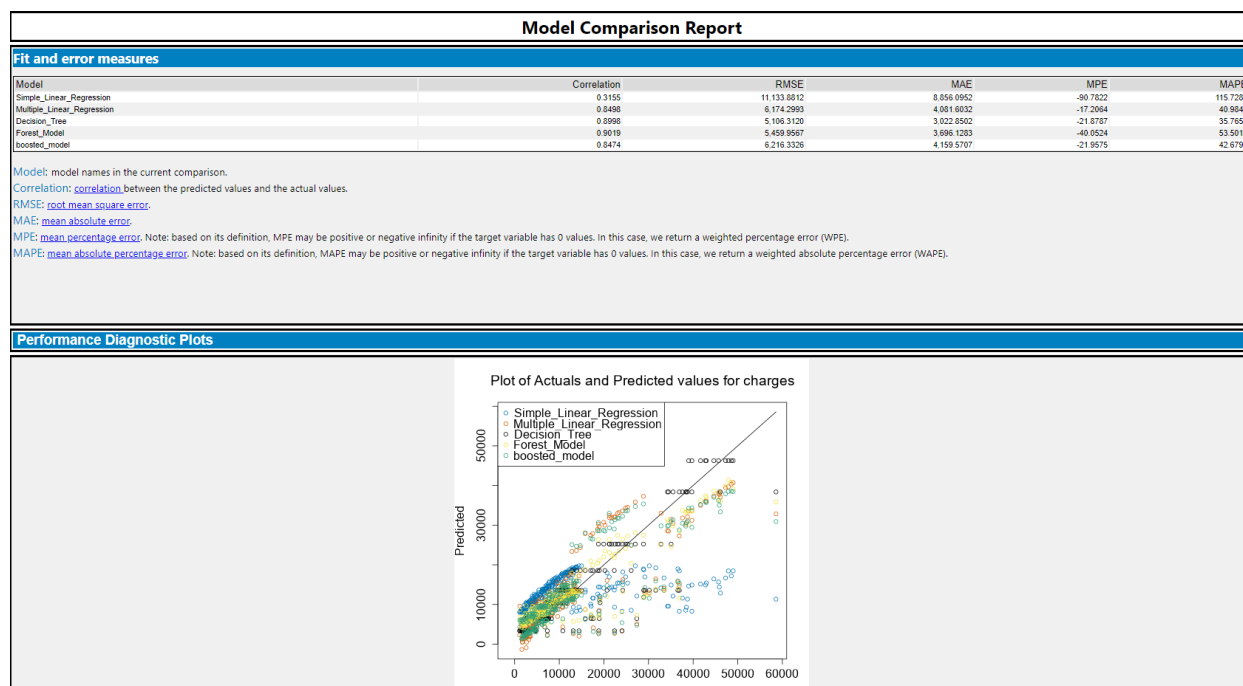
Here is a screenshot of the workflow for Numerical Prediction:



Here is a screenshot of the workflow for Yes/No Prediction:



Screenshot of the results from the Numerical Prediction:



Screenshot of the results from the Yes/No Prediction:

Model Comparison Report						
Fit and error measures						
Model	Accuracy	F1	AUC	Accuracy_N	Accuracy_Y	
Logistic_Regression_01	0.7805	0.4906	0.7399	0.3421	0.9795	
Logistic_Regression_02	0.3889	0.4720	0.4310	1.0000	0.0000	
Logistic_Regression_03	0.7805	0.4906	0.7144	0.3421	0.9795	
SVM_model	0.7898	0.5000	0.7557	0.3421	0.9882	
Naive_Bayes	0.7480	0.4746	0.6827	0.3684	0.9176	

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 Logistic_Regression_01			
	Predicted_N	Actual_N	Actual_Y
		13	2
	Predicted_Y	25	83

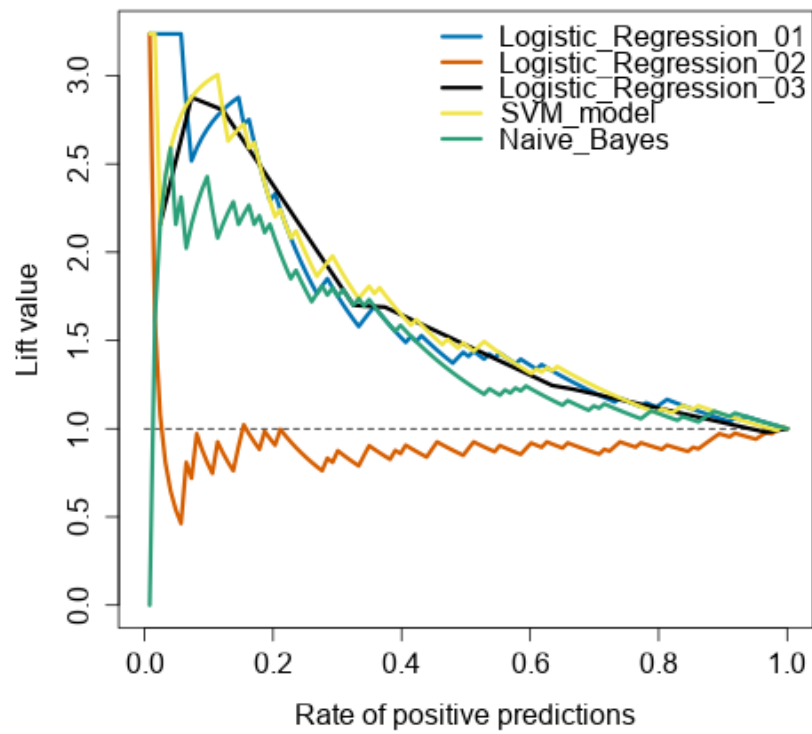
Confusion matrix of Logistic_Regression_02			
	Predicted_N	Actual_N	Actual_Y
		38	85
	Predicted_Y	0	0

Confusion matrix of Logistic_Regression_03			
	Predicted_N	Actual_N	Actual_Y
		13	2
	Predicted_Y	25	83

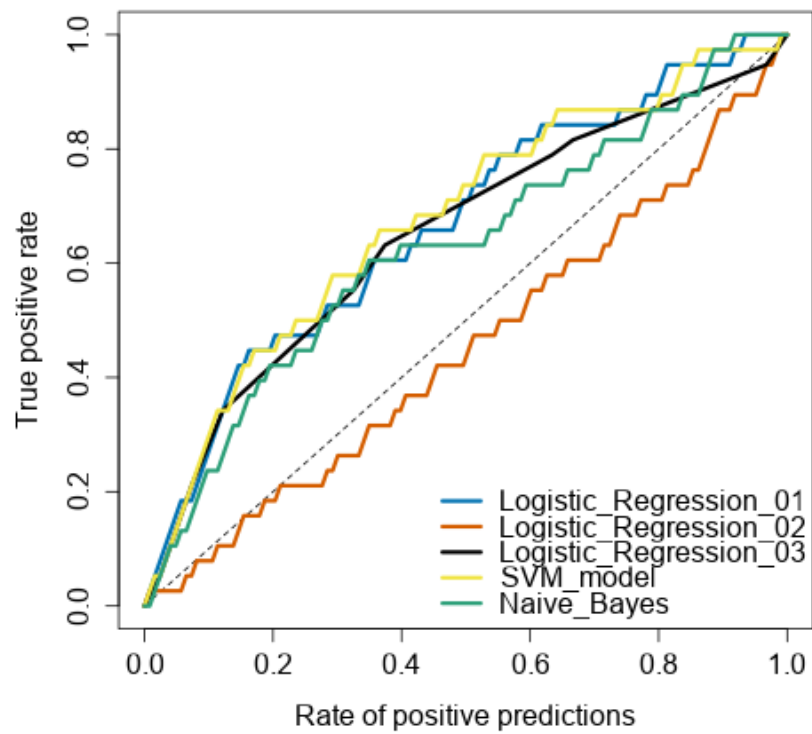
Confusion matrix of Naive_Bayes			
	Predicted_N	Actual_N	Actual_Y
		14	7
	Predicted_Y	24	78

Confusion matrix of SVM_model			
	Predicted_N	Actual_N	Actual_Y
		13	1
	Predicted_Y	25	84

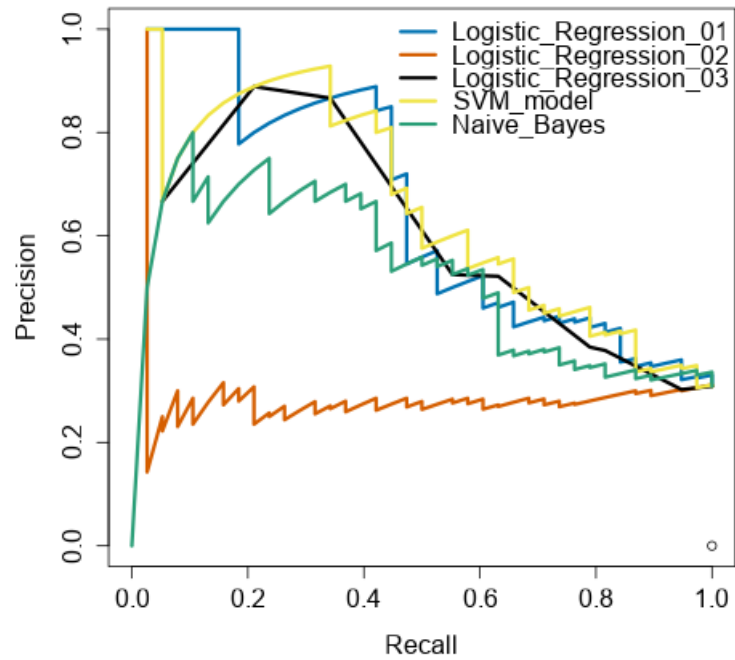
Lift curve



Gain chart



Precision and recall curve



ROC curve

