Model Summary
Data

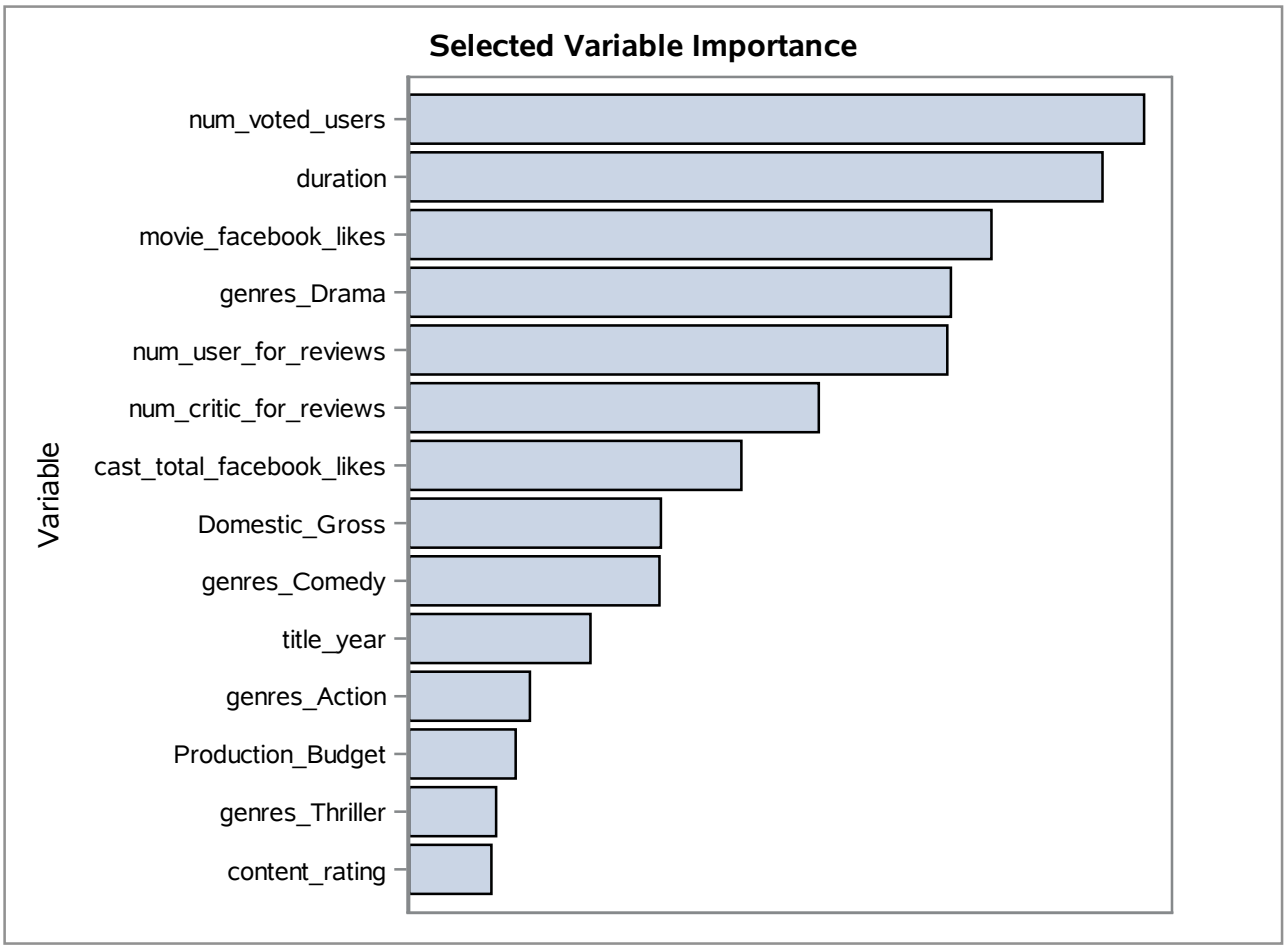
Property	Value
Input Data Source	MYLIB.IMDBRATING
Target Variable	Binary_imdb_level
Event Level	1
Observations	4049
Original Variables	51
Selected Variables	14

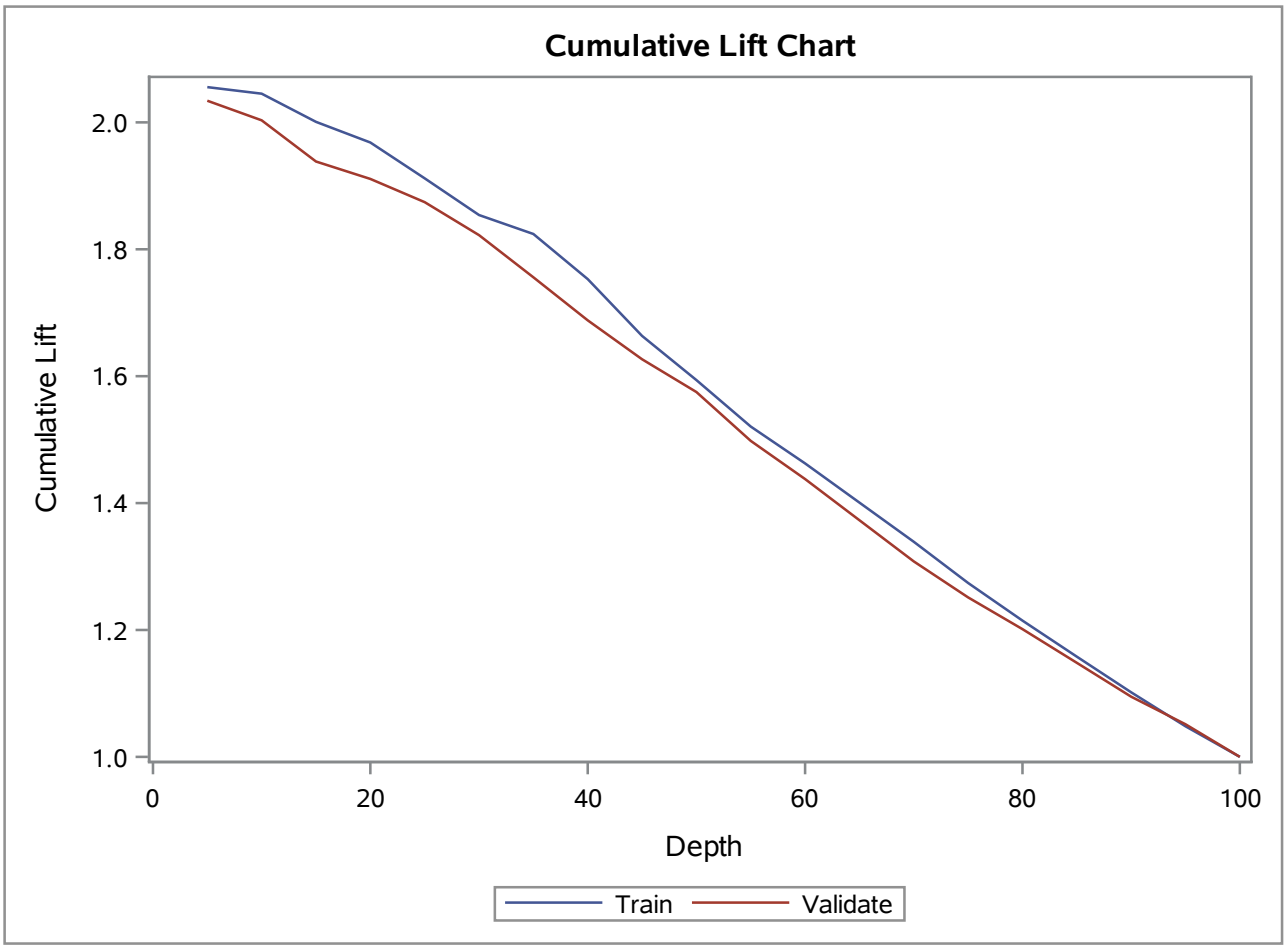
Model Summary
Target: Binary_imdb_level

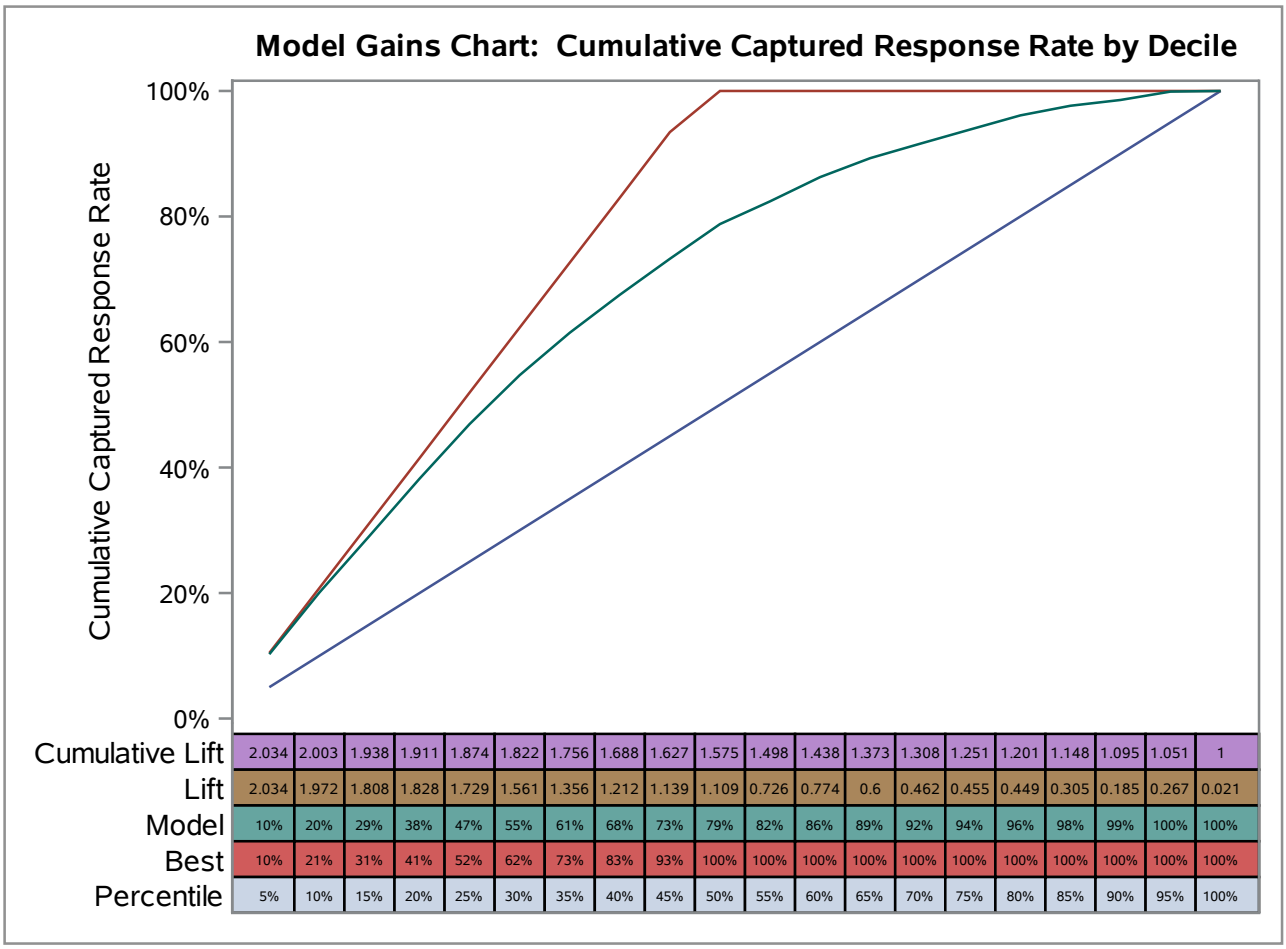
Value	CODE	Count	Data Percentage	1	0
1	0	1951	0.48185	2.07535	0.00000
0	1	2098	0.51815	0.00000	1.92993

Model Summary
Variable Summary

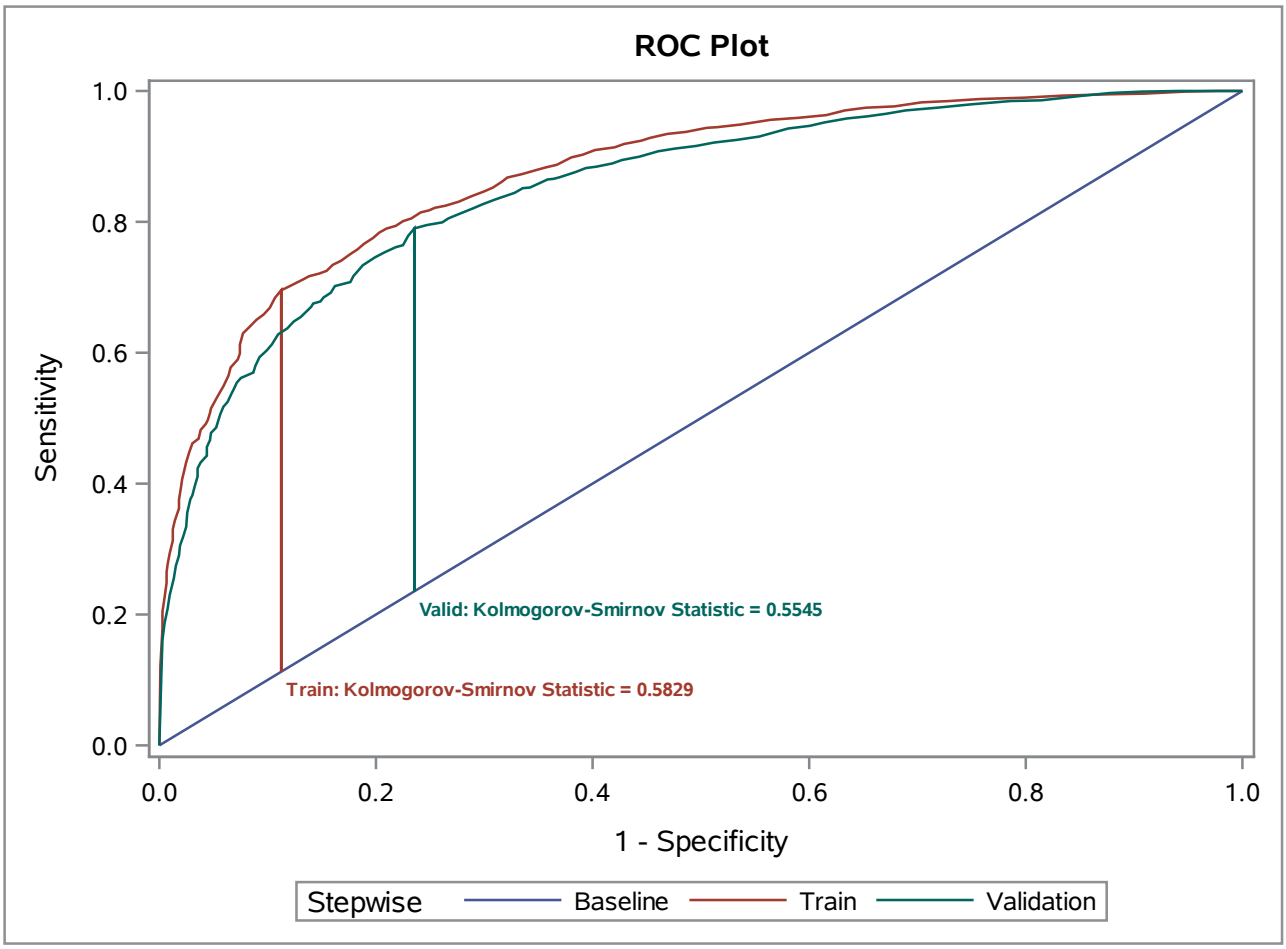
Role	Level	Original Count	Selected Input Count
Assess	Interval	1	0
ID	Nominal	1	0
Input	Binary	13	4
Input	Interval	19	9
Input	Nominal	5	1
Rejected	Interval	1	0
Rejected	Nominal	8	0
Target	Binary	1	0
Text	Nominal	1	0
Time ID	Interval	1	0


Selected Variable Importance
Variable
num_voted_users
duration
movie_facebook_likes
genres_Drama
num_user_for_reviews
num_critic_for_reviews
cast_total_facebook_likes
Domestic_Gross
genres_Comedy
title_year
genres_Action
Production_Budget
genres_Thriller
content_rating


Cumulative Lift Chart
Cumulative Lift
2.0
1.8
1.6
1.4
1.2
1.0
0
20
40
60
80
100
Depth
Train
Validate



Cumulative Lift	2.034	2.003	1.938	1.911	1.874	1.822	1.756	1.688	1.627	1.575	1.498	1.438	1.373	1.308	1.251	1.201	1.148	1.095	1.051	1
Lift	2.034	1.972	1.808	1.828	1.729	1.561	1.356	1.212	1.139	1.109	0.726	0.774	0.6	0.462	0.455	0.449	0.305	0.185	0.267	0.021
Model	10%	20%	29%	38%	47%	55%	61%	68%	73%	79%	82%	86%	89%	92%	94%	96%	98%	99%	100%	100%
Best	10%	21%	31%	41%	52%	62%	73%	83%	93%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Percentile	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%


ROC Plot
Sensitivity
1 - Specificity
0.0
0.2
0.4
0.6
0.8
1.0
Valid: Kolmogorov-Smirnov Statistic = 0.5545
Train: Kolmogorov-Smirnov Statistic = 0.5829
Stepwise
Baseline
Train
Validation

		Scorecard Points	Overall N	Overall %	Binary_imdb_level			
					0		1	
					N	%	N	%
Domestic_Gross	1: LOW - 145061.5	0.00	270.00	13.34	190.00	18.11	80.00	8.21
	2: 145061.5 - 10595777.5	43.00	504.00	24.90	238.00	22.69	266.00	27.28
	3: 10595777.5 - 51509155.5	10.00	709.00	35.03	405.00	38.61	304.00	31.18
	4: 51509155.5 - 155453420	26.00	420.00	20.75	189.00	18.02	231.00	23.69
	5: 155453420 - HIGH	25.00	121.00	5.98	27.00	2.57	94.00	9.64
Production_Budget	1: LOW - 22250000	65.00	1133.00	55.98	571.00	54.43	562.00	57.64
	2: 22250000 - 31500000	66.00	204.00	10.08	96.00	9.15	108.00	11.08
	3: 31500000 - 84500000	0.00	491.00	24.26	299.00	28.50	192.00	19.69
	4: 84500000 - 182500000	5.00	170.00	8.40	75.00	7.15	95.00	9.74
	5: 182500000 - HIGH	17.00	26.00	1.28	8.00	0.76	18.00	1.85
cast_total_facebook_likes	1: LOW - 518	86.00	174.00	8.60	53.00	5.05	121.00	12.41
	2: 518 - 11080.5	0.00	1210.00	59.78	723.00	68.92	487.00	49.95
	3: 11080.5 - HIGH	4.00	640.00	31.62	273.00	26.02	367.00	37.64
content_rating	APPROVED	111.00	16.00	0.79	0.00	0.00	16.00	1.64
	G	66.00	51.00	2.52	24.00	2.29	27.00	2.77
	GP	114.00	3.00	0.15	0.00	0.00	3.00	0.31
	NC-17	101.00	5.00	0.25	3.00	0.29	2.00	0.21
	NOT RATED	89.00	33.00	1.63	15.00	1.43	18.00	1.85
	PASSED	0.00	1.00	0.05	1.00	0.10	0.00	0.00
	PG	73.00	306.00	15.12	158.00	15.06	148.00	15.18
	PG-13	34.00	620.00	30.63	367.00	34.99	253.00	25.95
	R	53.00	881.00	43.53	425.00	40.51	456.00	46.77
	TV-14	75.00	1.00	0.05	1.00	0.10	0.00	0.00
	TV-PG	58.00	2.00	0.10	2.00	0.19	0.00	0.00
	UNKNOWN	109.00	83.00	4.10	45.00	4.29	38.00	3.90
	UNRATED	79.00	16.00	0.79	5.00	0.48	11.00	1.13
	X	85.00	6.00	0.30	3.00	0.29	3.00	0.31
duration	1: LOW - 71.5	127.00	11.00	0.54	2.00	0.19	9.00	0.92
	2: 71.5 - 95.5	0.00	574.00	28.36	395.00	37.65	179.00	18.36
	3: 95.5 - 112.5	8.00	794.00	39.23	457.00	43.57	337.00	34.56
	4: 112.5 - 130.5	40.00	409.00	20.21	148.00	14.11	261.00	26.77
	5: 130.5 - HIGH	61.00	236.00	11.66	47.00	4.48	189.00	19.38

(Continued)

Variable Attribute Importance and Crosstabulations

		Scorecard Points	Overall N	Overall %	Binary_imdb_level			
					0		1	
					N	%	N	%
genres_Action	0	30.00	1573.00	77.72	765.00	72.93	808.00	82.87
	1	0.00	451.00	22.28	284.00	27.07	167.00	17.13
genres_Comedy	0	27.00	1253.00	61.91	560.00	53.38	693.00	71.08
	1	0.00	771.00	38.09	489.00	46.62	282.00	28.92
genres_Drama	0	0.00	963.00	47.58	632.00	60.25	331.00	33.95
	1	63.00	1061.00	52.42	417.00	39.75	644.00	66.05
genres_Thriller	0	35.00	1440.00	71.15	704.00	67.11	736.00	75.49
	1	0.00	584.00	28.85	345.00	32.89	239.00	24.51
movie_facebook_likes	1: LOW - 8	31.00	873.00	43.13	434.00	41.37	439.00	45.03
	2: 8 - 4500	0.00	645.00	31.87	457.00	43.57	188.00	19.28
	3: 4500 - 70500	38.00	463.00	22.88	154.00	14.68	309.00	31.69
	4: 70500 - HIGH	94.00	43.00	2.12	4.00	0.38	39.00	4.00
num_critic_for_reviews	1: LOW - 66.5	0.00	614.00	30.34	410.00	39.08	204.00	20.92
	2: 66.5 - 278	34.00	1146.00	56.62	566.00	53.96	580.00	59.49
	3: 278 - HIGH	35.00	264.00	13.04	73.00	6.96	191.00	19.59
num_user_for_reviews	1: LOW - 126.5	0.00	826.00	40.81	557.00	53.10	269.00	27.59
	2: 126.5 - 291.5	28.00	602.00	29.74	296.00	28.22	306.00	31.38
	3: 291.5 - 699.5	10.00	445.00	21.99	168.00	16.02	277.00	28.41
	4: 699.5 - HIGH	11.00	151.00	7.46	28.00	2.67	123.00	12.62
num_voted_users	1: LOW - 17829	0.00	700.00	34.58	466.00	44.42	234.00	24.00
	2: 17829 - 90058	22.00	775.00	38.29	445.00	42.42	330.00	33.85
	3: 90058 - 167526	78.00	258.00	12.75	107.00	10.20	151.00	15.49
	4: 167526 - HIGH	152.00	291.00	14.38	31.00	2.96	260.00	26.67
title_year	1: LOW - 1982.5	100.00	120.00	5.93	26.00	2.48	94.00	9.64
	2: 1982.5 - 1998.5	65.00	344.00	17.00	154.00	14.68	190.00	19.49
	3: 1998.5 - 2015.5	15.00	1524.00	75.30	849.00	80.93	675.00	69.23
	4: 2015.5 - HIGH	0.00	36.00	1.78	20.00	1.91	16.00	1.64

Classification Matrix Target=Binary_imdb_level

	Data Role			
	TRAIN		VALIDATE	
	Predicted		Predicted	
	0	1	0	1
Target				
0	81.12	18.88	81.70	18.30
1	23.38	76.62	27.56	72.44

Model Fit Statistics

Statistic	Train	Validation
Akaike's Information Criterion	1853.9671	.
Average Squared Error	0.1432	0.1557
Average Error Function	0.4402	0.4800
Maximum Absolute Error	0.9940	1.0000
Mean Squared Error	0.1458	0.1557
Sum of Frequencies	2024.0000	2025.0000
Root Average Square Error	0.3785	0.3945
Root Mean Squared Error	0.3819	0.3945
Schwarz's Bayesian Criterion	2056.0290	.
Sum of Square Errors	579.8369	630.4224
Misclassification Rate	0.2105	0.2277
Roc Index	0.8750	0.8530
Gini Coefficient	0.7500	0.7070
Kolmogorov-Smirnov Statistic	0.5830	0.5540
Kolmogorov-Smirnov Probability Cutoff	0.6000	.
Lift at 10%	2.0348	1.9721
Cumulative Lift at 10%	2.0452	2.0033
Captured Response at 10%	10.1538	9.8361
Cumulative % Captured Response at 10%	20.5128	20.0820

Model Selection based on Model Node

Selected Model	Model Node	Model Description	Target Label
Y	Reg2	Stepwise	Binary_imdb_level
	Reg3	Forwards	Binary_imdb_level
	Reg	Main Effects Regression	Binary_imdb_level
	Tree2	Decision Tree (2)	Binary_imdb_level

Train: Akaike's Information Criterion	Train: Lift	Valid: Lift
1853.97	2.03479	1.97208
1841.91	2.01424	1.97208
1870.87	1.99368	1.86937
.	1.84995	1.83843

Project Information

Property	Value
Name	RPM
Diagram	RPM1 - Binary_imdb_level
Path	/saswork/SAS_workF7AB00015B76_odaws04-prod-us/SAS_work19DA00015B76_odaws04-prod-us./helenwang9403150/RPM
Date Created	02Nov2016:12:54:44