

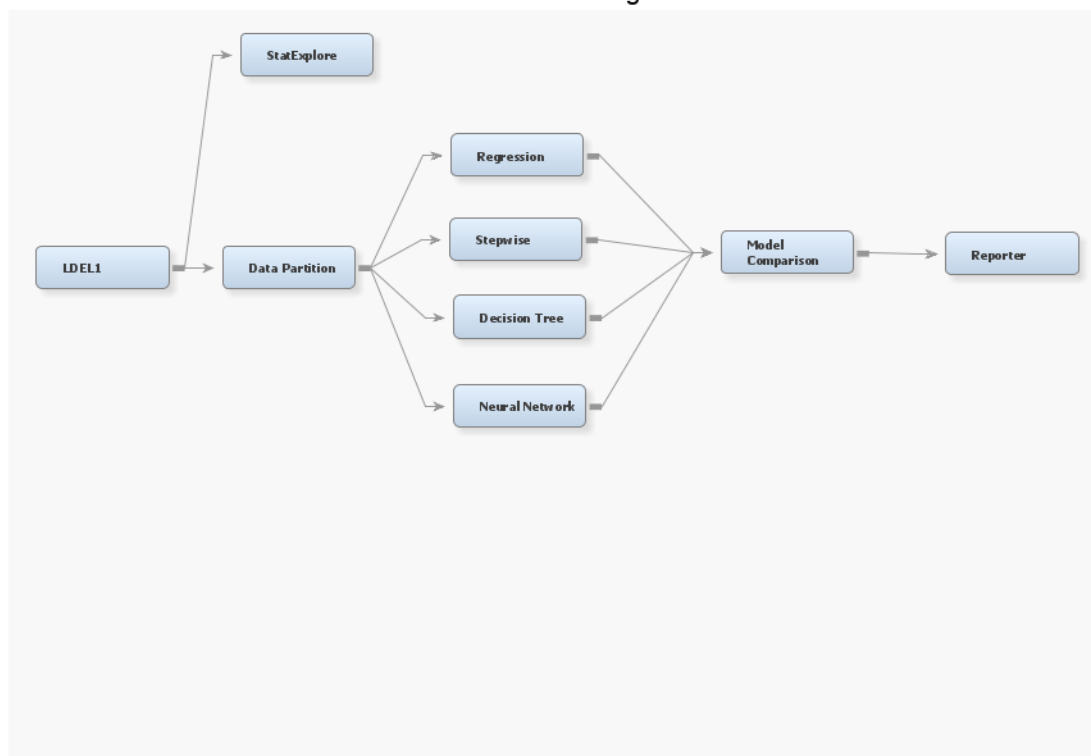
SAS Enterprise Miner Report

User = hoganl
Date = 14:02:53 March 26
Project = team
Diagram = team

Start Node = Report
Node label = Reporter
Nodes = PATH
Showall = N

Format = PDF
Style = LISTING

SAS Enterprise Miner Report Process Flow Diagram



SAS Enterprise Miner Report

Node=LDEL1
Summary

Node id = Ids
Node label = LDEL1
Meta path = Ids
Notes =

Node=LDEL1
Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DataSource		DsCreatedBy	hoganl		NBytes	18285568	.
ApplyIntervalLevelLowerLimit	Y		DsId	Idel		NCols	24	.
ApplyMaxClassLevels	Y		DsModifiedBy	hoganl		NObs	91197	.
ApplyMaxPercentMissing	Y		DsModifyDate	1963921140.9		NewTable		
CMeta	WORK.M2RW0PS6		DsSampleName			NewVariableRole	REJECT	
ComputeStatistics	N		DsSampleSize			OutputType	VIEW	
DBPassThrough	Y		DsSampleSizeType			Role	RAW	TRAIN
Data	TEAM.LDEL1		DsScope	LOCAL		Sample	D	
DataSelection	DATASOURCE		IdentifyEmptyColumns	Y		SampleSizeObs	10000	
DataSource	Idel		IntervalLowerLimit	20		SampleSizePercent	20	
DataSourceRole	RAW		Library	TEAM		SampleSizeType	PERCENT	
Description			MaxClassLevels	20		Scope	LOCAL	
DropMapVariables	Y		MaxPercentMissing	50		Segment		
DsCreateDate	1963921140.9		MetaAdvisor	BASIC		Table	LDEL1	

Node=LDEL1
Data Attributes

Attribute	Value	Attribute	Value	Attribute	Value
Data Name	LDEL1	Date Created	26Mar2022:11:51:25	Data Size	18285568
Data Type	DATA	Date Modified	26Mar2022:11:51:25	Role	RAW
Data Label		Number Rows	91197	Segment	
Engine	BASE	Number Columns	24	Data Library	TEAM

Node=LDEL1
Variables List

Name	Label	Role	Level	Type	Length	Format	Creator
Benefit_per_order		INPUT	INTERVAL	N	8	BEST12.0	
Department_Name		INPUT	NOMINAL	C	7	\$7.	
Late_delivery_risk		TARGET	BINARY	N	8	BEST12.0	
Order_Item_Discount		INPUT	INTERVAL	N	8	BEST12.0	
Order_Item_Discount_Rate		INPUT	INTERVAL	N	8	BEST12.0	
Order_Item_Product_Price		INPUT	INTERVAL	N	8	BEST12.0	
Order_Item_Profit_Ratio		INPUT	INTERVAL	N	8	BEST12.0	
Order_Item_Quantity		INPUT	INTERVAL	N	8	BEST12.0	
Order_Item_Total		INPUT	INTERVAL	N	8	BEST12.0	
Order_Profit_Per_Order		REJECTED	INTERVAL	N	8	BEST12.0	
Product_Price		REJECTED	INTERVAL	N	8	BEST12.0	

Name	Label	Role	Level	Type	Length	Format	Creator
Sales		REJECTED	INTERVAL	N	8	BEST12.0	
Sales_per_customer		REJECTED	INTERVAL	N	8	BEST12.0	
Shipping_Mode		INPUT	NOMINAL	C	14	\$14.	
days_til_ship		INPUT	INTERVAL	N	8		
order_d		INPUT	ORDINAL	N	8		
order_d3		REJECTED	ORDINAL	N	8		
order_m		INPUT	ORDINAL	N	8		
order_yr		REJECTED	INTERVAL	N	8		
region		INPUT	ORDINAL	N	8		
ship_d		REJECTED	ORDINAL	N	8		
ship_d3		REJECTED	ORDINAL	N	8		
ship_m		REJECTED	ORDINAL	N	8		
ship_yr		REJECTED	INTERVAL	N	8		

SAS Enterprise Miner Report

Node=Data Partition
Summary

Node id = Part
Node label = Data Partition
Meta path = Ids => Part
Notes =

Node=Data Partition
Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Partition		Method	DEFAULT		TestPct	0	30
ClassDistribution	Y		OutputType	DATA		TrainPct	50	40
IntervalDistribution	Y		RandomSeed	12345		ValidatePct	50	30

Node=Data Partition
Variable Summary

Role	Level	Frequency Count	Name
TARGET	BINARY	1	Late_delivery_risk
REJECTED	INTERVAL	6	Order_Profit_Per_Order Product_Price Sales Sales_per_customer order_yr ship_yr
REJECTED	ORDINAL	4	order_d3 ship_d ship_d3 ship_m
INPUT	INTERVAL	8	Benefit_per_order Order_Item_Discount Order_Item_Discount_Rate Order_Item_Product_Price Order_Item_Profit_Ratio Order_Item_Quantity Order_Item_Total days_til_ship
INPUT	NOMINAL	2	Department_Name Shipping_Mode
INPUT	ORDINAL	3	order_d order_m region

SAS Enterprise Miner Report

Node=Neural Network
Summary

Node id = Neural
Node label = Neural Network
Meta path = Ids => Part => Neural
Notes =

Node=Neural Network
Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	NeuralNetwork		Hidden	6	3	Prelim	Y	
AbsConvValue	-1.34078E154	-7.237006E75	HiddenActivation	DEFAULT		PrelimMaxTime	1 HOUR	
AbsFTime	1		HiddenBias	Y		PrelimMaxiter	10	
AbsFValue	0		HiddenCombFunction	DEFAULT		PrelimOutest		
AbsGTime	1		HiddenUnits	N		PreliminaryRuns	5	
AbsGValue	1E-5	0.00001	InitialDs			RandDist	NORMAL	
AbsXTime	1		InitialSeed	12345		RandLoc	0	
AbsXValue	1E-8		InputStandardization	STD		RandScale	0.1	
Accelerate	1.2		Learn	0.1		Residuals	Y	
AddHidden	Y		MaxLearn	50		Standardizations	N	
CodefileNoRes			MaxMomentum	1.75		SuppressOutput	N	
CodefileRes			Maxiter	100	50	TargetActivation	DEFAULT	
ConvDefaults	Y		Maxtime	4 HOURS		TargetBias	Y	
Decelerate	0.5		MinLearn	1E-5	0.00001	TargetCombFunction	DEFAULT	
DirectConnection	N		ModelSelectionCriterion	PROFIT/LOSS		TargetError	DEFAULT	
FConvTime	1		Momentum	0		Tilt	0	
FConvValue	0		NetworkArchitecture	MLP		TrainCode		
GConvTime	1		Outest			TrainingTechnique	DEFAULT	
GConvValue	1E-6		Outfit			UseEstimates	N	

Node=Neural Network
Variable Summary

Role	Level	Frequency Count	Name
TARGET	BINARY	1	Late_delivery_risk
INPUT	INTERVAL	8	Benefit_per_order Order_Item_Discount Order_Item_Discount_Rate Order_Item_Product_Price Order_Item_Profit_Ratio Order_Item_Quantity Order_Item_Total days_til_ship
INPUT	NOMINAL	2	Department_Name Shipping_Mode
INPUT	ORDINAL	3	order_d order_m region

Node=Neural Network
Model Fit Statistics

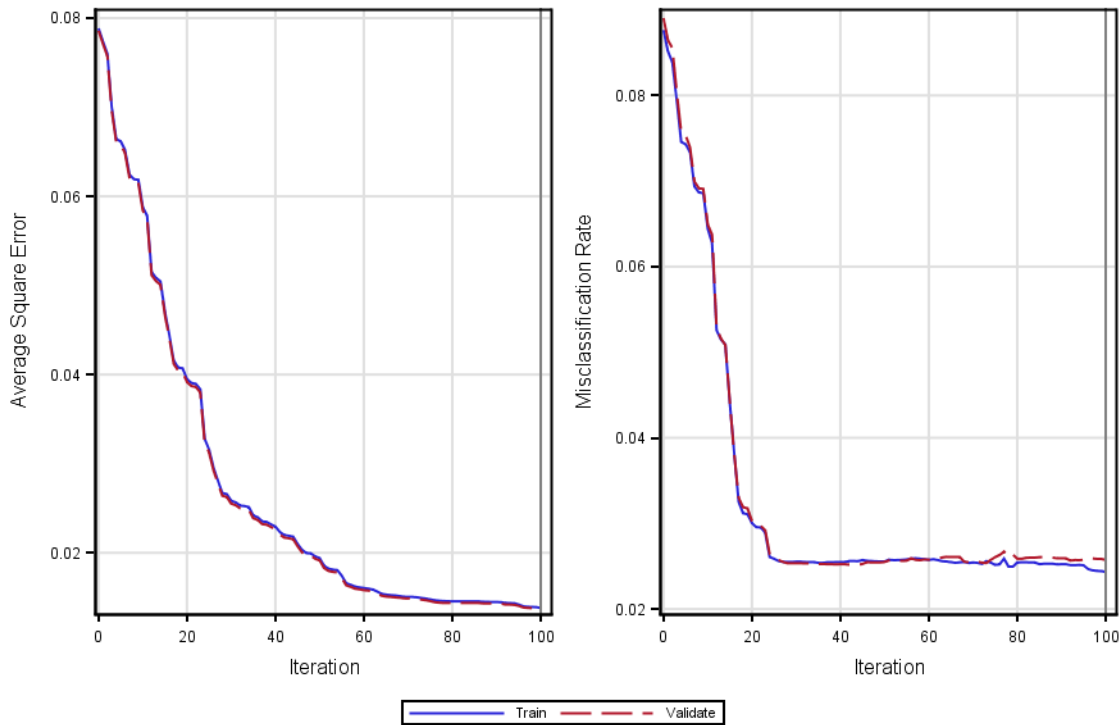
Target=Late_delivery_risk Target Label=''

Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	45597.00	.	.
Degrees of Freedom for Error	45152.00	.	.
Model Degrees of Freedom	445.00	.	.
Number of Estimated Weights	445.00	.	.

Target=Late_delivery_risk Target Label=''

Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	5121.60	.	.
Schwarz's Bayesian Criterion	9005.38	.	.
Average Squared Error	0.01	0.01	.
Maximum Absolute Error	0.85	0.85	.
Divisor for ASE	91194.00	91200.00	.
Sum of Frequencies	45597.00	45600.00	.
Root Average Squared Error	0.12	0.12	.
Sum of Squared Errors	1258.72	1249.16	.
Sum of Case Weights Times Freq	91194.00	91200.00	.
Final Prediction Error	0.01	.	.
Mean Squared Error	0.01	0.01	.
Root Final Prediction Error	0.12	.	.
Root Mean Squared Error	0.12	0.12	.
Average Error Function	0.05	0.05	.
Error Function	4231.60	4183.09	.
Misclassification Rate	0.02	0.03	.
Number of Wrong Classifications	1110.00	1174.00	.

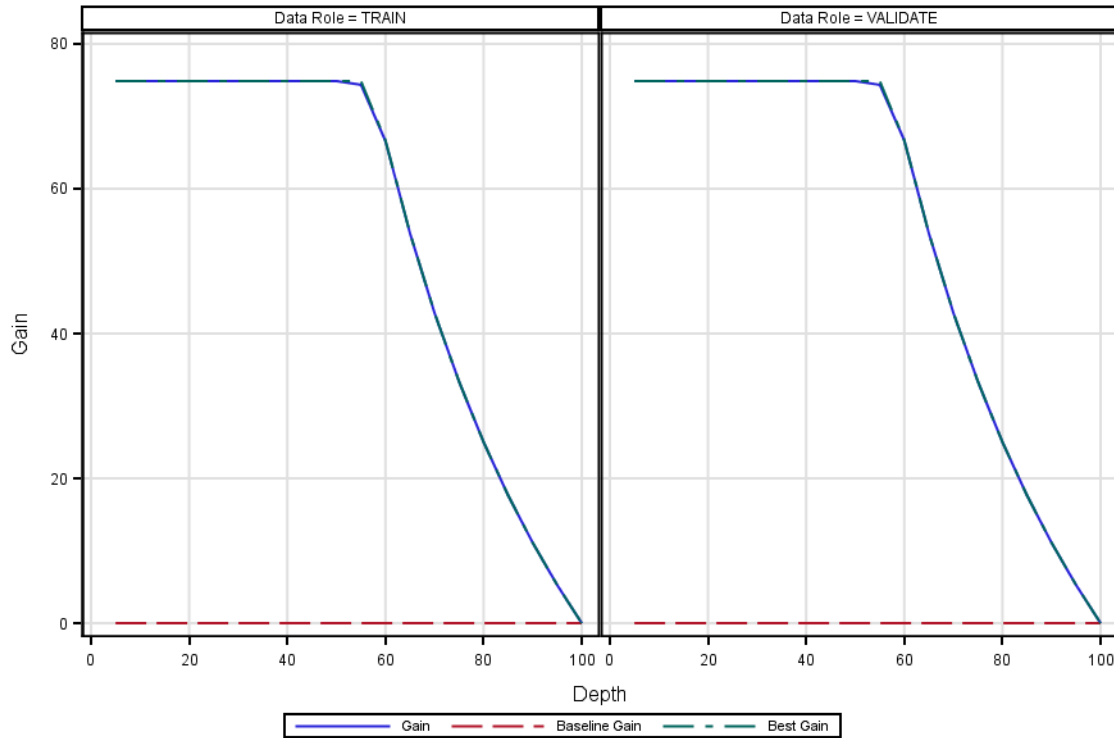
SAS Enterprise Miner Report
Node=Neural Network
Model Iteration Plots



SAS Enterprise Miner Report

Node=Neural Network

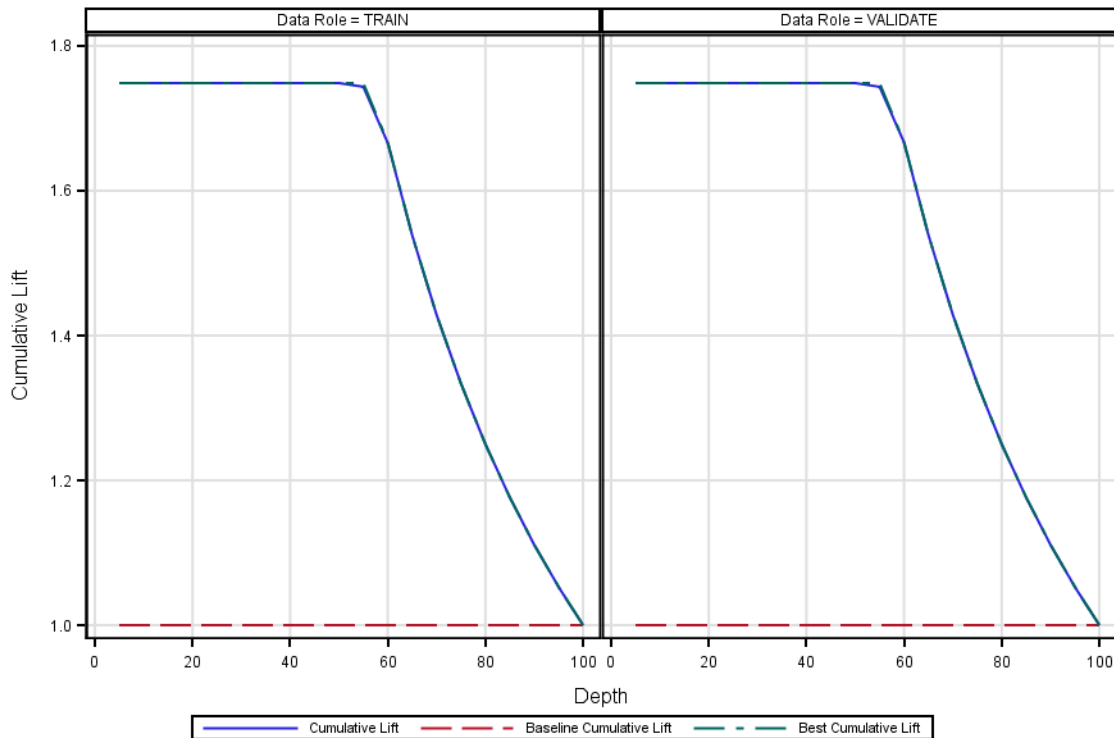
Model Assessment Scores where TARGET='Late_delivery_risk'

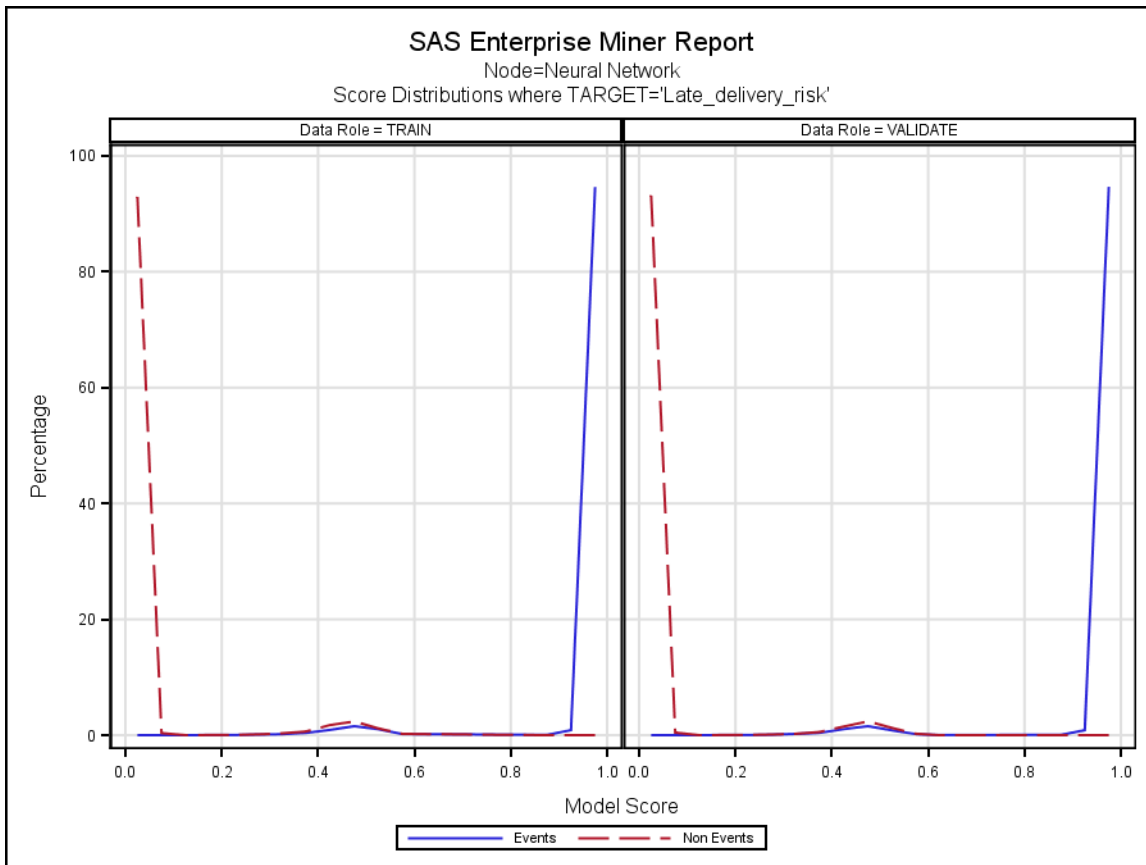
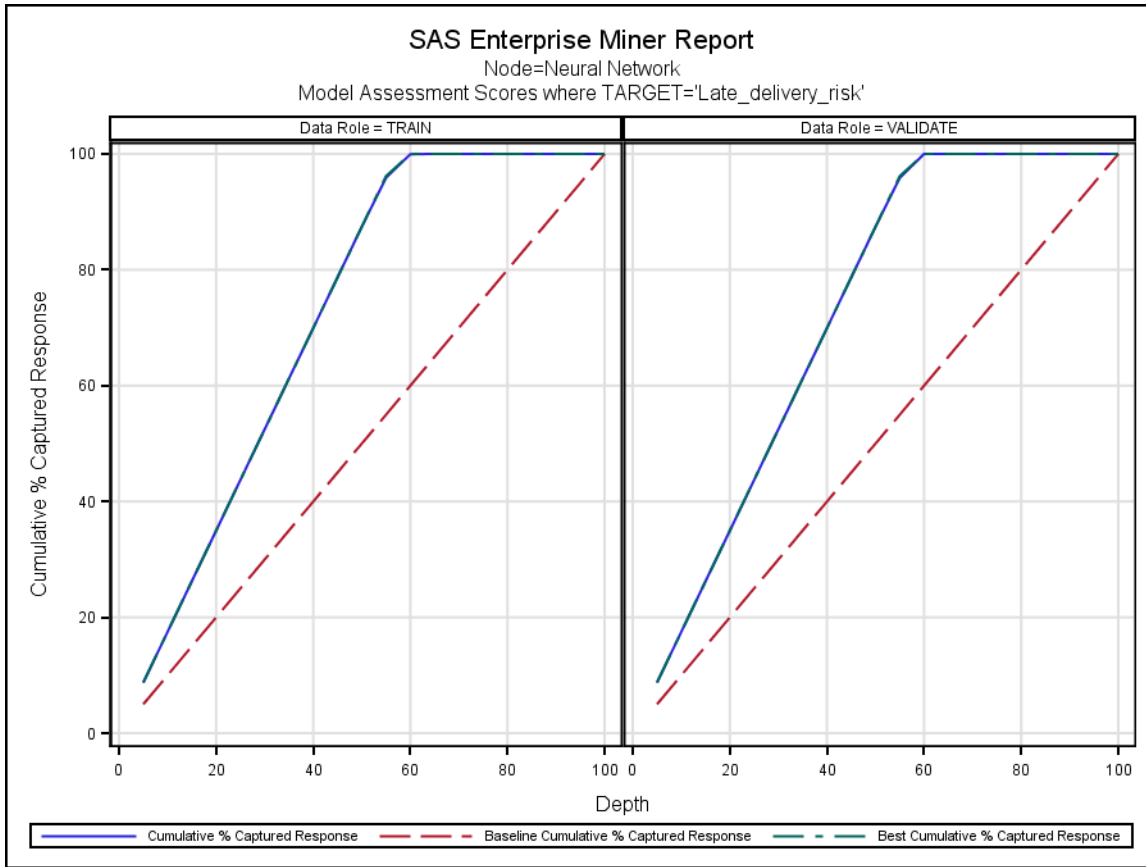


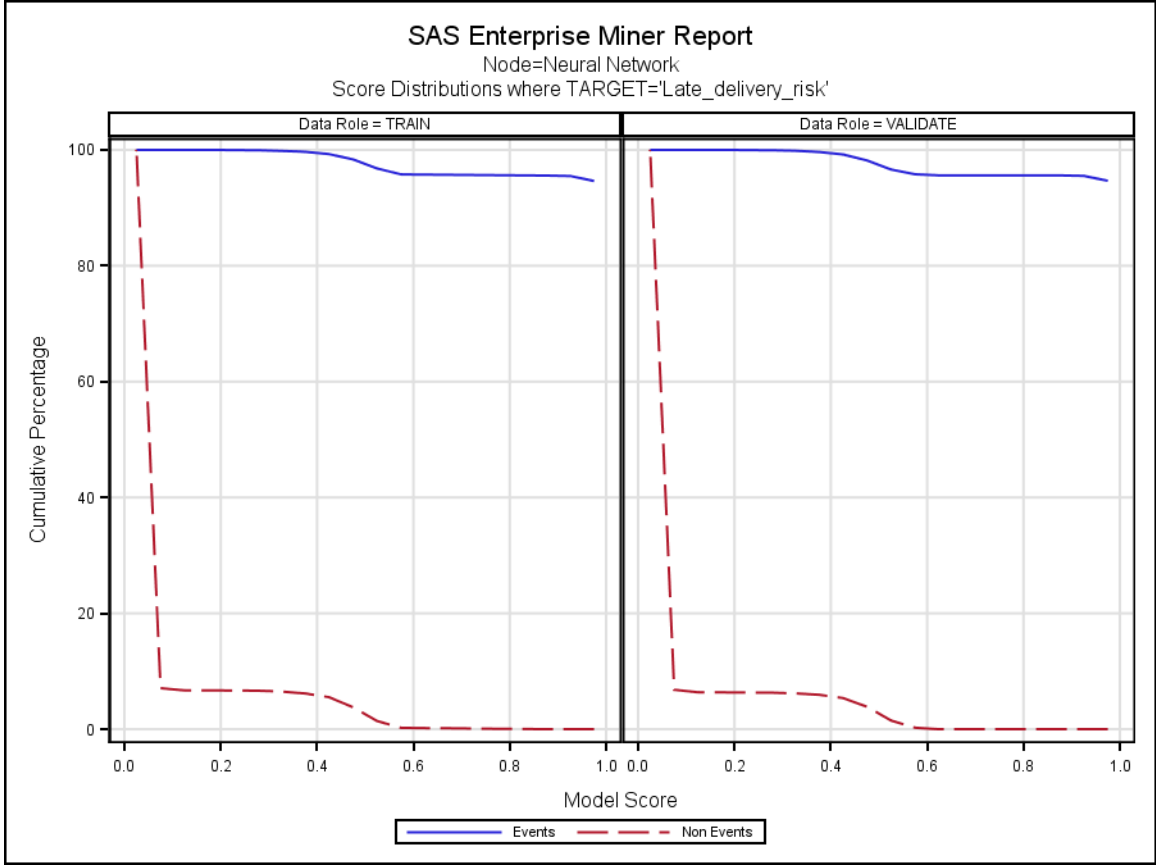
SAS Enterprise Miner Report

Node=Neural Network

Model Assessment Scores where TARGET='Late_delivery_risk'







Node=Neural Network
Score Distributions

Target Variable=Late_delivery_risk Data Role=TRAIN

Posterior Probability Range	Number of Events	Percentage of Events	Percentage of Nonevents	Cumulative Percentage of Events	Cumulative Percentage of Nonevents
0.95-1.00	24674	94.6270	0.0000	94.627	0.000
0.90-0.95	228	0.8744	0.0000	95.501	0.000
0.85-0.90	15	0.0575	0.0000	95.559	0.000
0.55-0.60	51	0.1956	0.2254	95.755	0.225
0.50-0.55	269	1.0316	1.1679	96.786	1.393
0.45-0.50	407	1.5609	2.3717	98.347	3.765
0.40-0.45	240	0.9204	1.7570	99.267	5.522
0.35-0.40	105	0.4027	0.6505	99.670	6.173
0.30-0.35	45	0.1726	0.3381	99.843	6.511
0.25-0.30	27	0.1035	0.1332	99.946	6.644
0.20-0.25	8	0.0307	0.0359	99.977	6.680
0.15-0.20	5	0.0192	0.0205	99.996	6.700
0.10-0.15	1	0.0038	0.0000	100.000	6.700
0.05-0.10	0	0.0000	0.3739	100.000	7.074
0.00-0.05	0	0.0000	92.9259	100.000	100.000

Target Variable=Late_delivery_risk Data Role=VALIDATE

Posterior Probability Range	Number of Events	Percentage of Events	Percentage of Nonevents	Cumulative Percentage of Events	Cumulative Percentage of Nonevents
0.95-1.00	24687	94.6696	0.0000	94.670	0.000
0.90-0.95	223	0.8552	0.0000	95.525	0.000
0.85-0.90	16	0.0614	0.0000	95.586	0.000
0.60-0.65	6	0.0230	0.0051	95.609	0.005
0.55-0.60	48	0.1841	0.2459	95.793	0.251
0.50-0.55	215	0.8245	1.2447	96.618	1.496
0.45-0.50	407	1.5608	2.3869	98.178	3.883
0.40-0.45	272	1.0431	1.5008	99.222	5.383
0.35-0.40	108	0.4142	0.5583	99.636	5.942
0.30-0.35	58	0.2224	0.2459	99.858	6.188
0.25-0.30	24	0.0920	0.1127	99.950	6.300
0.20-0.25	8	0.0307	0.0359	99.981	6.336
0.15-0.20	5	0.0192	0.0205	100.000	6.357
0.10-0.15	0	0.0000	0.0051	100.000	6.362
0.05-0.10	0	0.0000	0.4354	100.000	6.797
0.00-0.05	0	0.0000	93.2029	100.000	100.000

SAS Enterprise Miner Report

Node=Decision Tree Summary

Node id = Tree
Node label = Decision Tree
Meta path = Ids => Part => Tree
Notes =

Node=Decision Tree Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	DecisionTree		Kass	Y		Pred	N	
AVG	Y		KassApply	BEFORE		Predict	Y	
AssessMeasure	PROFIT/LOSS		LeafSize	5		ProfitLoss	NONE	
AssessPercentage	0.25		Leafid	Y		RASE	N	
CV	N		Maxbranch	2		SampleMethod	RANDOM	
CVNIter	10		Maxdepth	6		SampleSeed	12345	
CVRepeat	1		MinCatSize	5		SampleSize	10000	
CVSeed	12345		MissingValue	USEINSEARCH		ShowNodeId	Y	
ClassColorBy	PERCENTCORRECT		NSubtree	1		ShowValid	Y	
Count	Y		NodeRole	SEGMENT		SigLevel	0.2	
CreateSample	DEFAULT		NodeSample	20000		SplitPrecision	4	
Criterion	DEFAULT		NominalCriterion	PROBCHISQ		Splitsize	.	
Depth	Y		Nrules	5		Subtree	ASSESSMENT	
Dummy	N		Nsurrs	0		Target	ALL	
Exhaustive	5000		NumInputs	1		ToolType	MODEL	
Freeze	N		NumSingleImp	5		TrainMode	BATCH	
ImportModel	N		ObsImportance	N		UseDecision	N	
ImportedTreeData			OrdinalCriterion	ENTROPY		UseMultipleTarget	N	
Inputs	N		PercentCorrect	N		UsePriors	N	
IntColorBy	AVG		Performance	DISK		UseVarOnce	N	
IntervalCriterion	PROBF		Precision	4		VarSelection	Y	

Node=Decision Tree Variable Summary

Role	Level	Frequency Count	Name
TARGET	BINARY	1	Late_delivery_risk
INPUT	INTERVAL	8	Benefit_per_order Order_Item_Discount Order_Item_Discount_Rate Order_Item_Product_Price Order_Item_Profit_Ratio Order_Item_Quantity Order_Item_Total days_til_ship
INPUT	NOMINAL	2	Department_Name Shipping_Mode
INPUT	ORDINAL	3	order_d order_m region
ID	INTERVAL	1	_dataobs_

Node=Decision Tree Model Fit Statistics

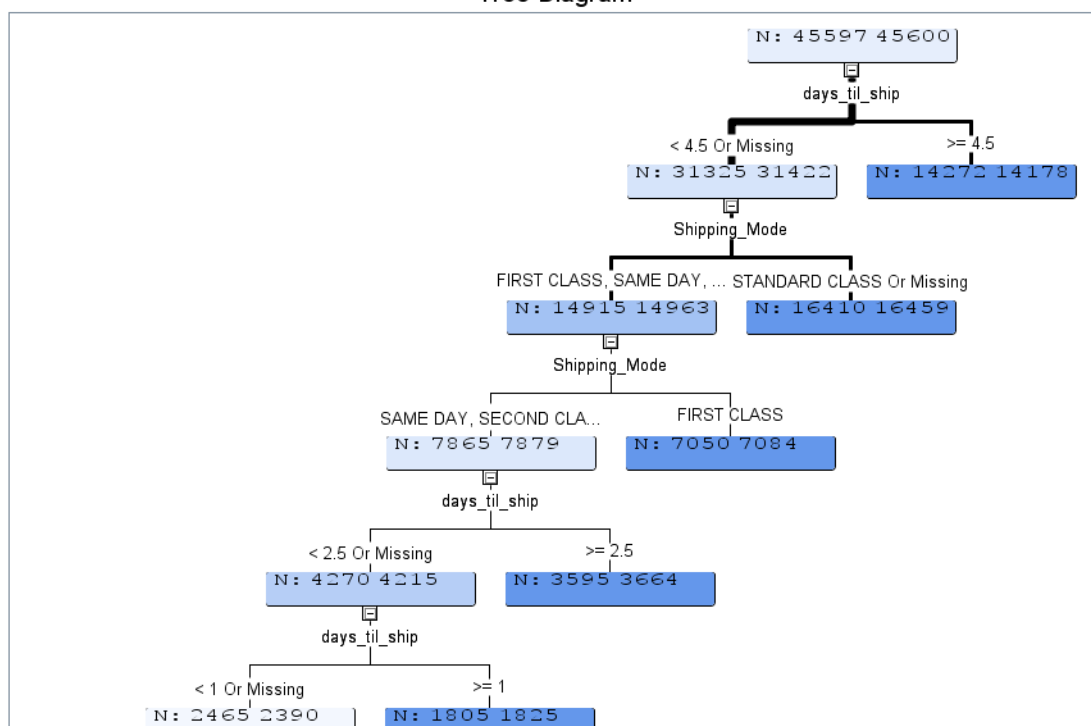
Target=Late_delivery_risk Target Label=''

Label of Statistic	Train	Validation	Test
Sum of Frequencies	45597.00	45600.00	.
Misclassification Rate	0.02	0.03	.
Maximum Absolute Error	0.76	0.76	.
Sum of Squared Errors	1221.35	1196.55	.
Average Squared Error	0.01	0.01	.
Root Average Squared Error	0.12	0.11	.
Divisor for ASE	91194.00	91200.00	.
Total Degrees of Freedom	45597.00	.	.

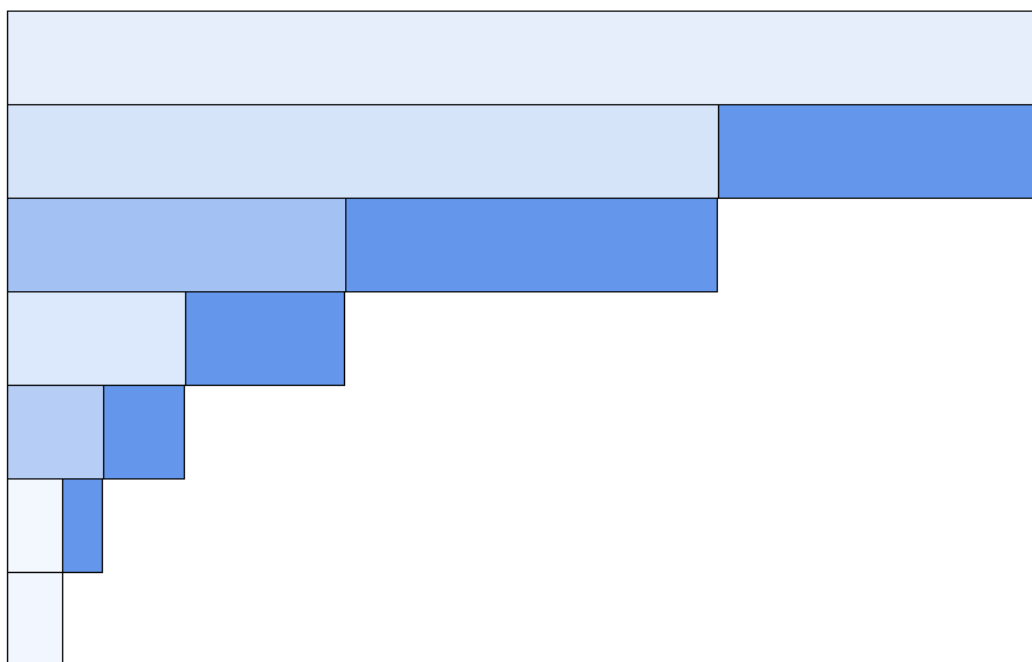
SAS Enterprise Miner Report

Node=Decision Tree

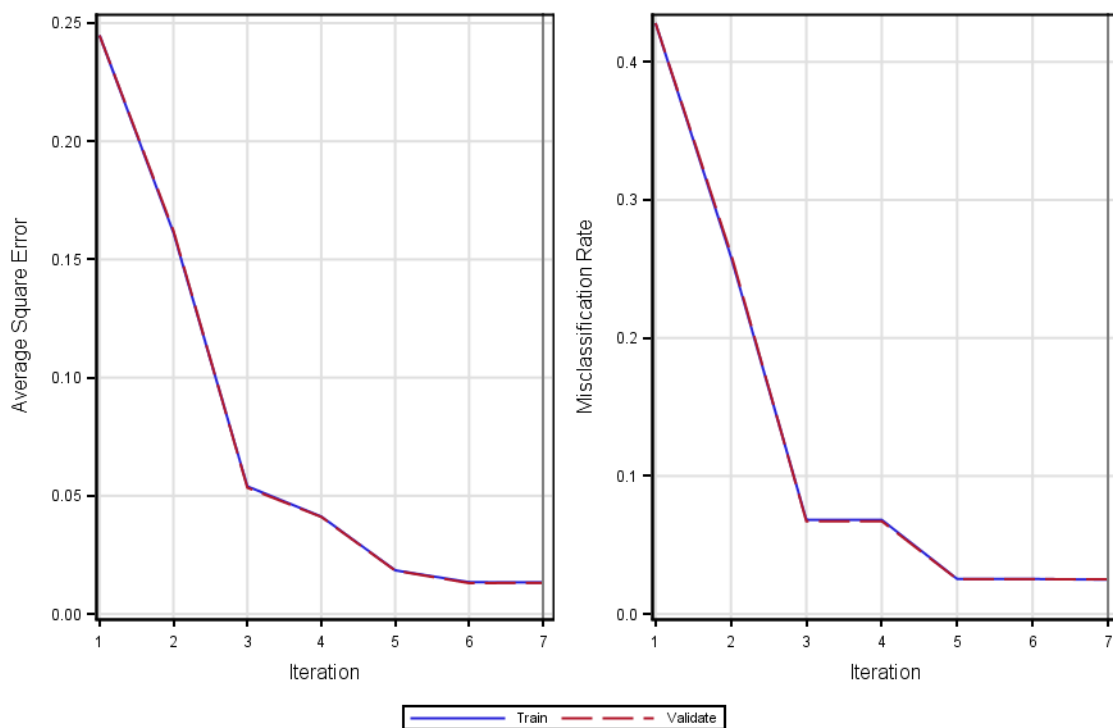
Tree Diagram



SAS Enterprise Miner Report
Node=Decision Tree
Treemap



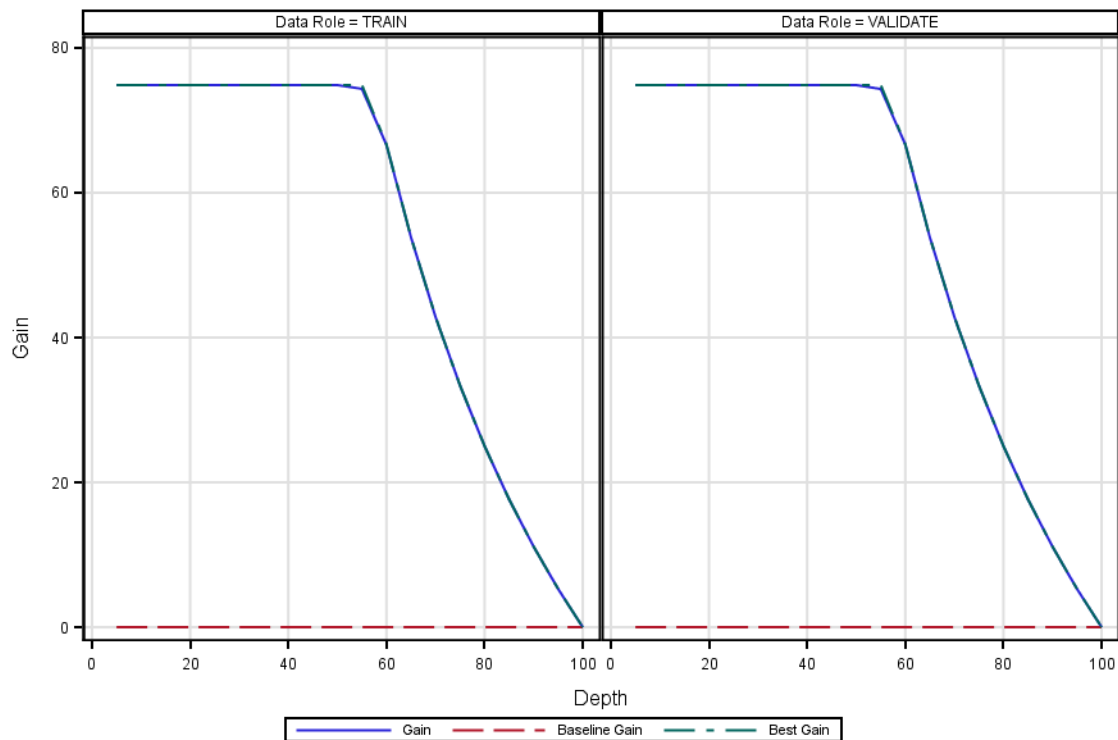
SAS Enterprise Miner Report
Node=Decision Tree
Model Iteration Plots



SAS Enterprise Miner Report

Node=Decision Tree

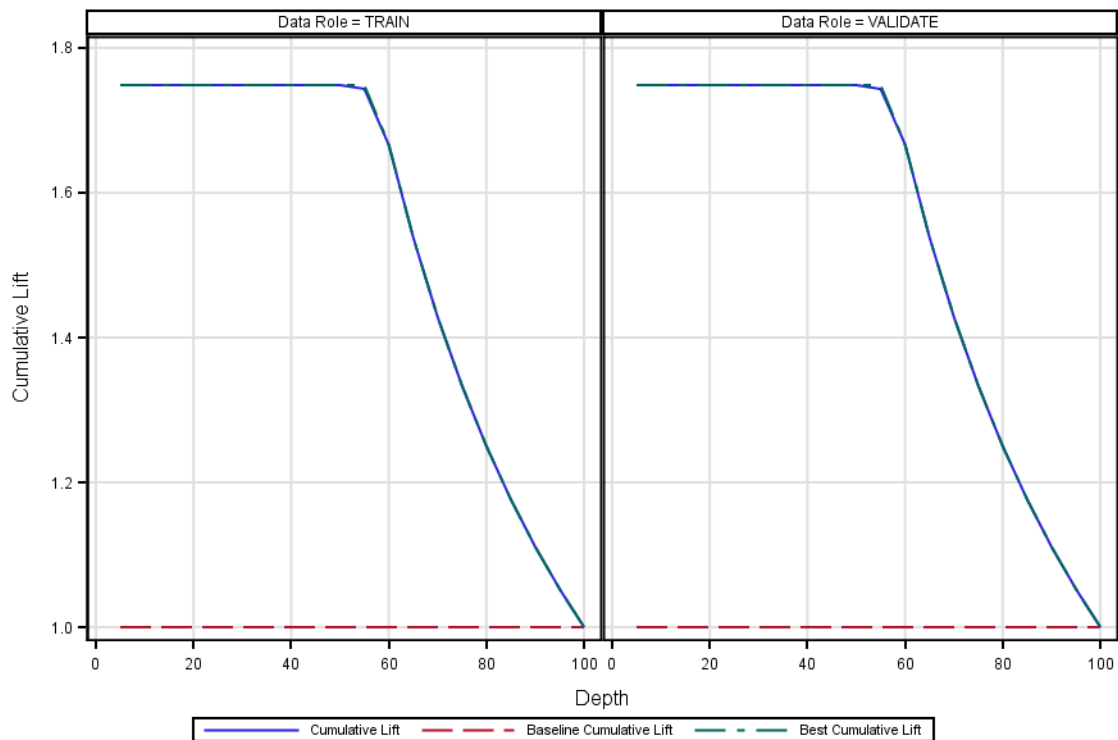
Model Assessment Scores where TARGET='Late_delivery_risk'



SAS Enterprise Miner Report

Node=Decision Tree

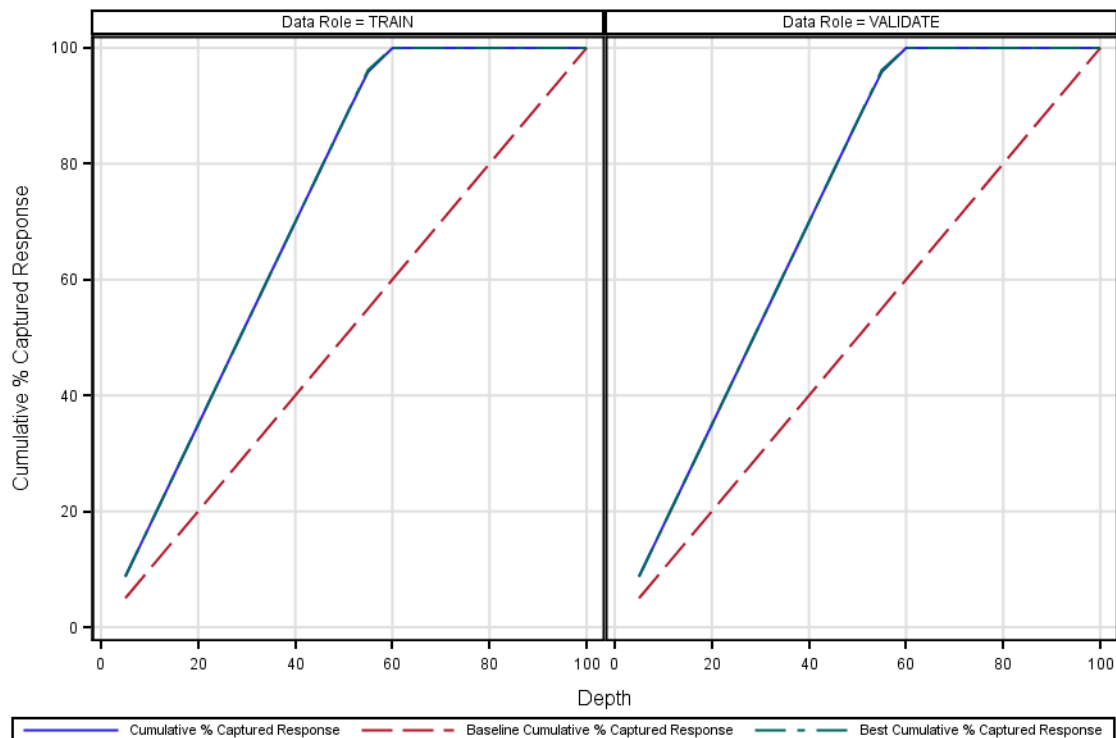
Model Assessment Scores where TARGET='Late_delivery_risk'



SAS Enterprise Miner Report

Node=Decision Tree

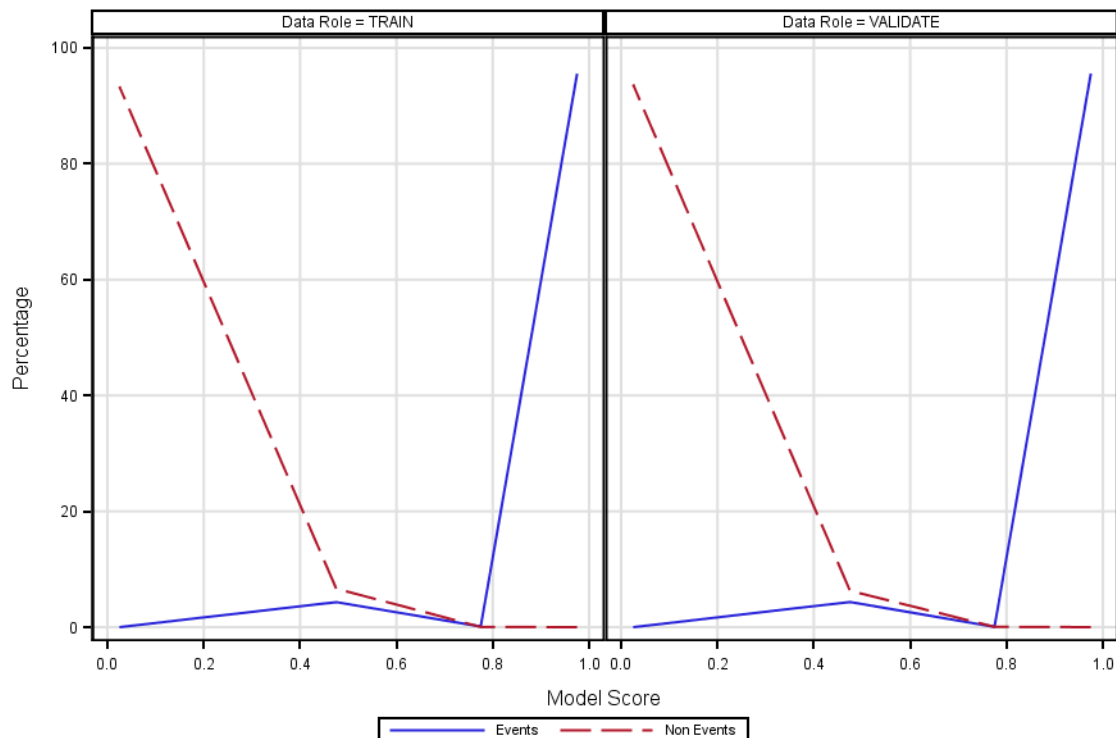
Model Assessment Scores where TARGET='Late_delivery_risk'

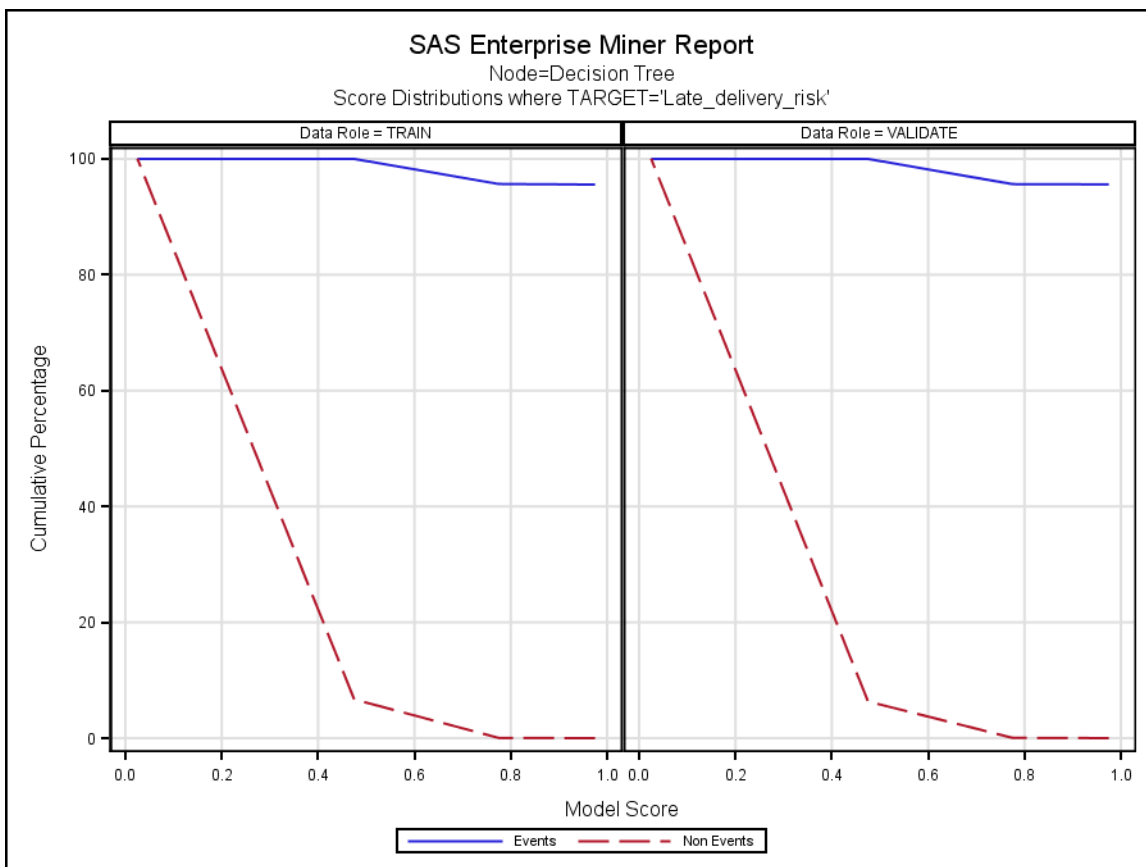


SAS Enterprise Miner Report

Node=Decision Tree

Score Distributions where TARGET='Late_delivery_risk'





Node=Decision Tree Score Distributions

Target Variable=Late_delivery_risk Data Role=TRAIN

Posterior Probability Range	Number of Events	Percentage of Events	Percentage of Nonevents	Cumulative Percentage of Events	Cumulative Percentage of Nonevents
0.95-1.00	24917	95.5590	0.0000	95.559	0.000
0.75-0.80	29	0.1112	0.0461	95.670	0.046
0.45-0.50	1129	4.3298	6.6489	100.000	6.695
0.00-0.05	0	0.0000	93.3050	100.000	100.000

Target Variable=Late_delivery_risk Data Role=VALIDATE

Posterior Probability Range	Number of Events	Percentage of Events	Percentage of Nonevents	Cumulative Percentage of Events	Cumulative Percentage of Nonevents
0.95-1.00	24926	95.5861	0.0000	95.586	0.000
0.75-0.80	15	0.0575	0.0615	95.644	0.061
0.45-0.50	1136	4.3563	6.2849	100.000	6.346
0.00-0.05	0	0.0000	93.6536	100.000	100.000

SAS Enterprise Miner Report

Node=Stepwise Summary

Node id = Reg2
Node label = Stepwise
Meta path = Ids => Part => Reg2
Notes =

Node=Stepwise Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Regression		Force	0		PolynomialDegree	2	
AbsConvValue	-1.34078E154	-7.237006E75	GConvTimes	1		PrintDesignMatrix	N	
AbsFTime	1		GConvValue	1E-6		Rule	NONE	
AbsFValue	0		Hierarchy	CLASS		SASSPDS	N	
AbsGTime	1		InputCoding	DEVIATION		SelectionCriterion	VMISC	DEFAULT
AbsGValue	0.00001		Interactions			SelectionDefault	Y	
AbsXTime	1		LinkFunction	LOGIT		Sequential	N	
AbsXValue	1E-8		MainEffect	Y		Simple	N	
CIParam	N		MaxCPUTime	1 HOUR		SIEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SIStay	0.05	
CorB	N		MaxIterations	.		Start	0	
CovB	N		MaxStep	.		StepOutput	N	
Covout	N		MinResourceUse	N		Stop	0	
Details	N		ModelDefaults	Y		SuppressIntercept	N	
Error	LOGISTIC		ModelSelection	STEPWISE	NONE	SuppressOutput	N	
ExcludedVariable	REJECT		OptimizationTechnique	DEFAULT		Terms	N	
FConvTimes	1		Performance	N		TwoFactor	N	
FConvValue	0		Polynomial	N				

Node=Stepwise Variable Summary

Role	Level	Frequency Count	Name
TARGET	BINARY	1	Late_delivery_risk
INPUT	INTERVAL	8	Benefit_per_order Order_Item_Discount Order_Item_Discount_Rate Order_Item_Product_Price Order_Item_Profit_Ratio Order_Item_Quantity Order_Item_Total days_til_ship
INPUT	NOMINAL	2	Department_Name Shipping_Mode
INPUT	ORDINAL	3	order_d order_m region

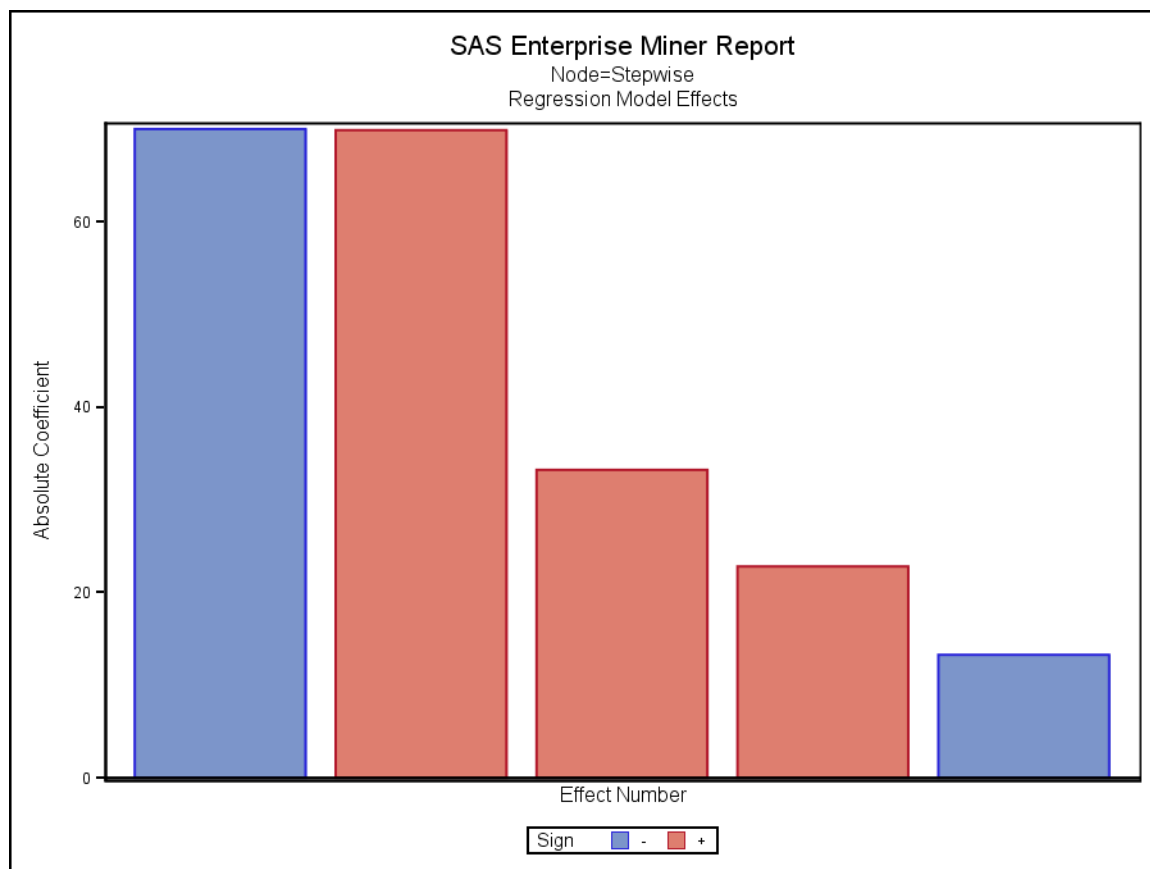
Node=Stepwise Model Fit Statistics

Target=Late_delivery_risk Target Label=''

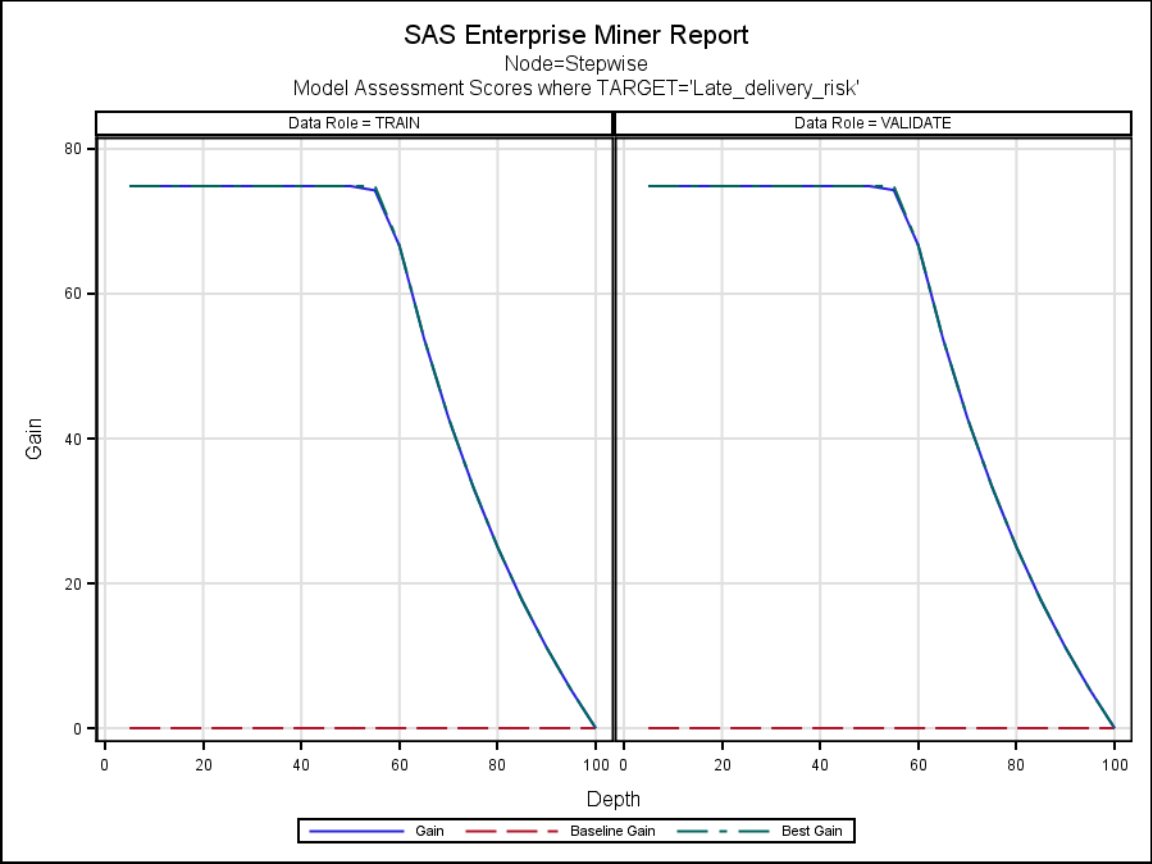
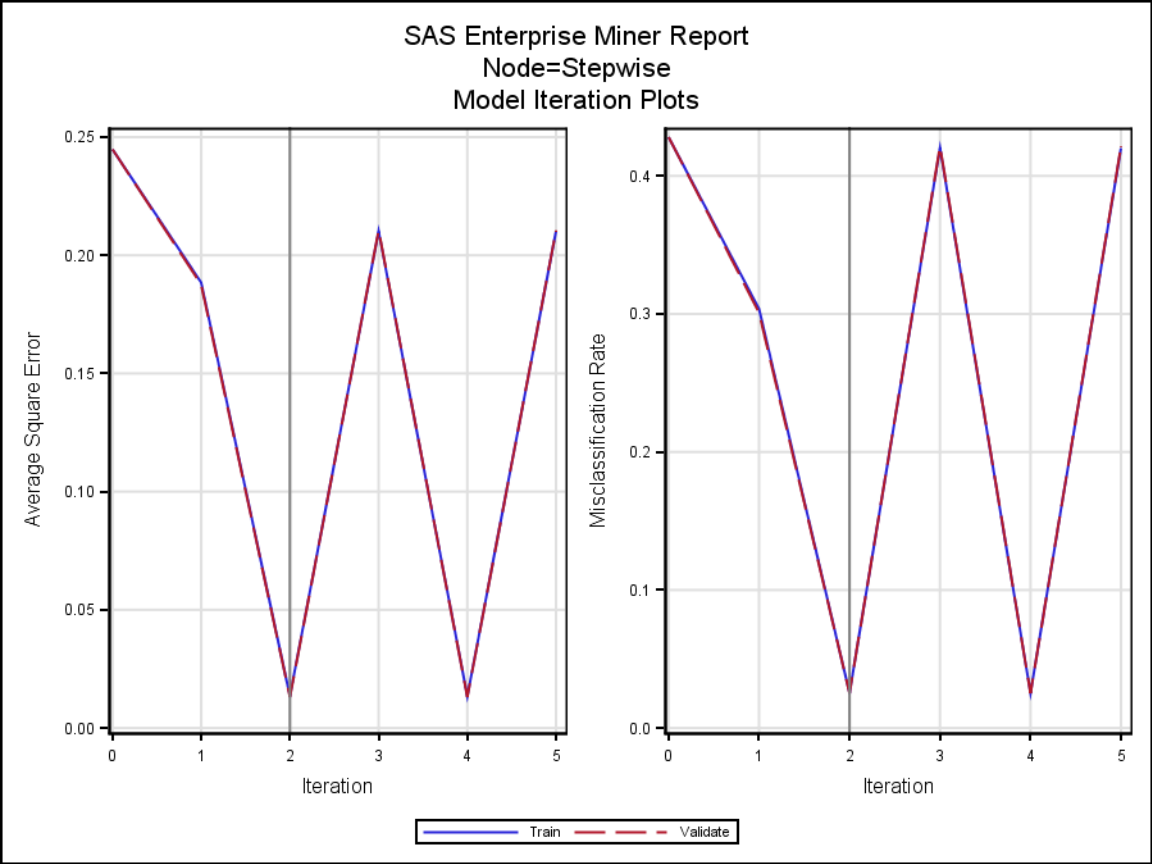
Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	3418.21	.	.
Average Squared Error	0.01	0.01	.
Average Error Function	0.04	0.04	.
Degrees of Freedom for Error	45592.00	.	.
Model Degrees of Freedom	5.00	.	.

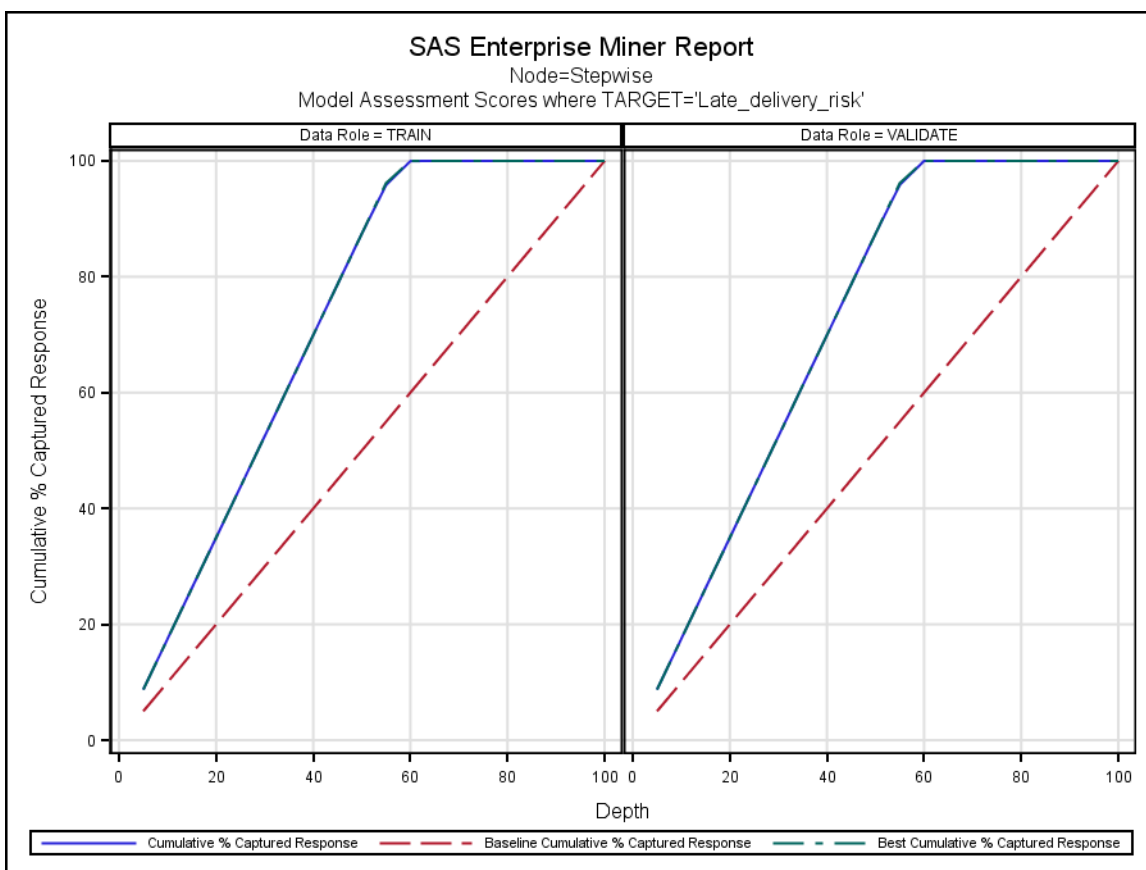
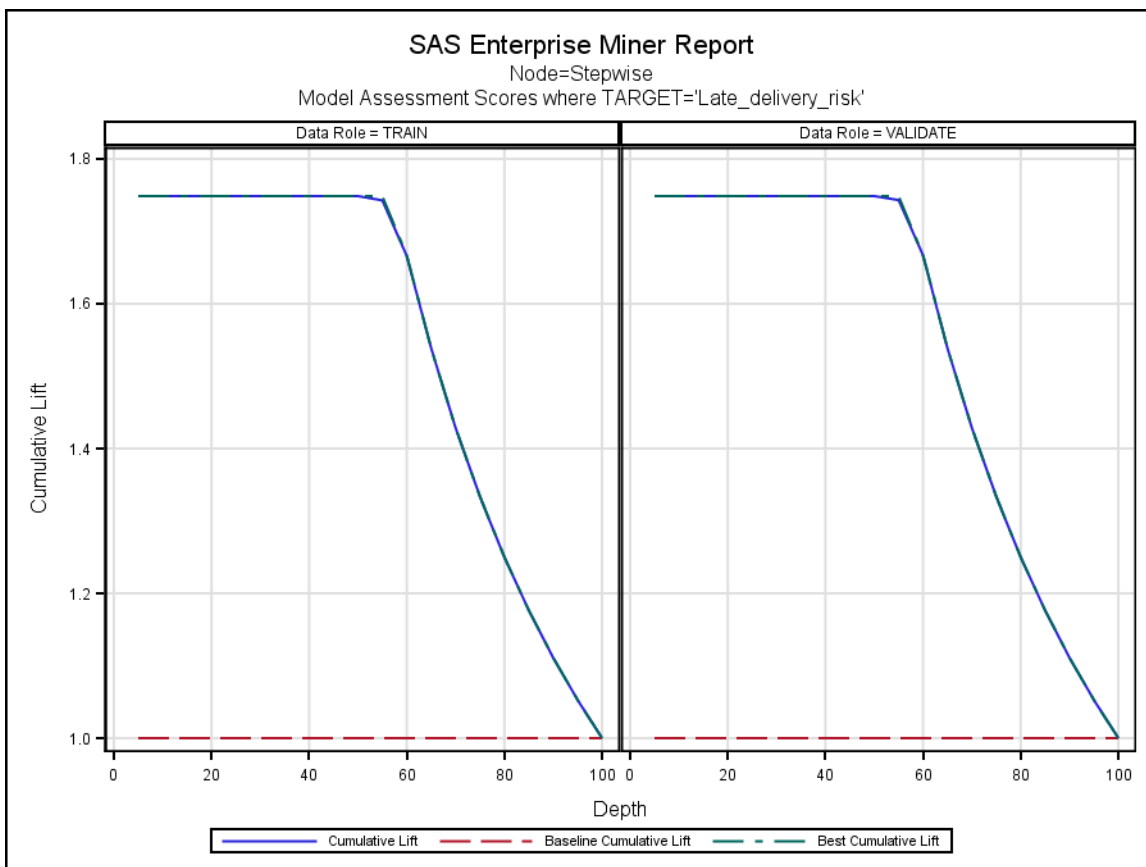
Target=Late_delivery_risk Target Label=''

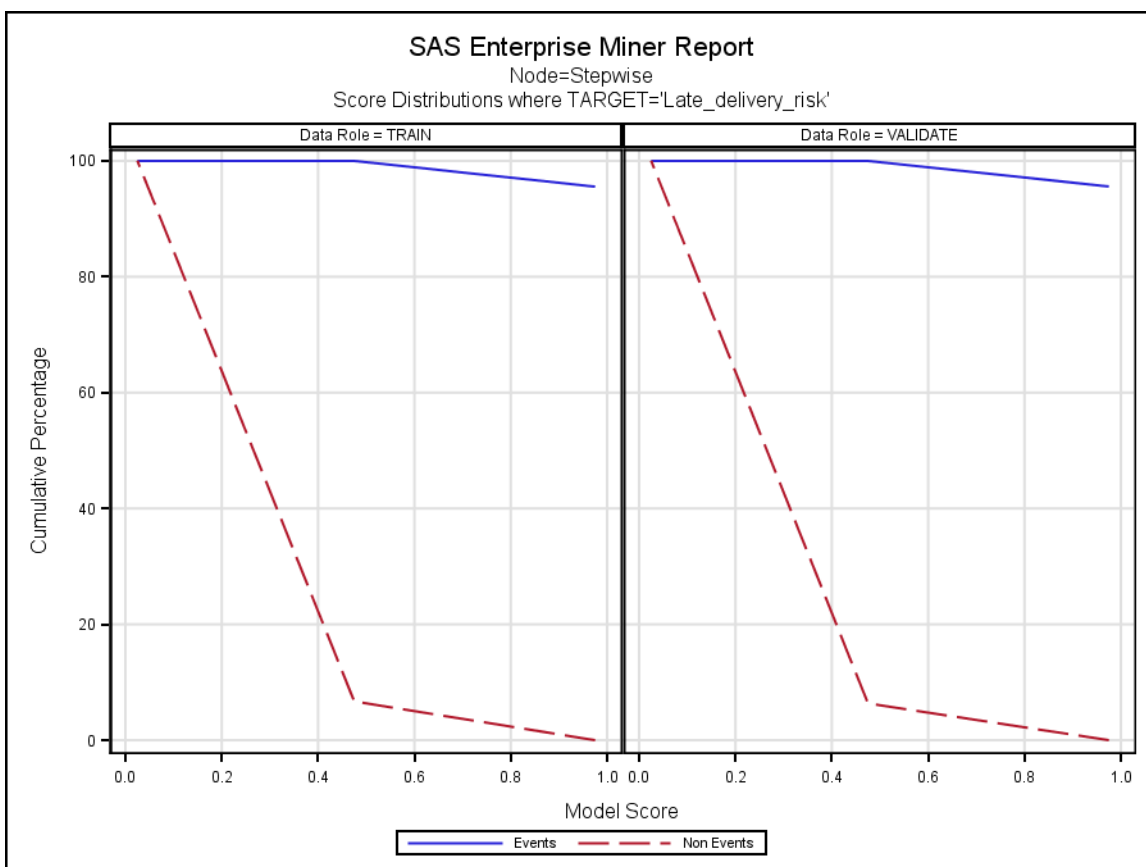
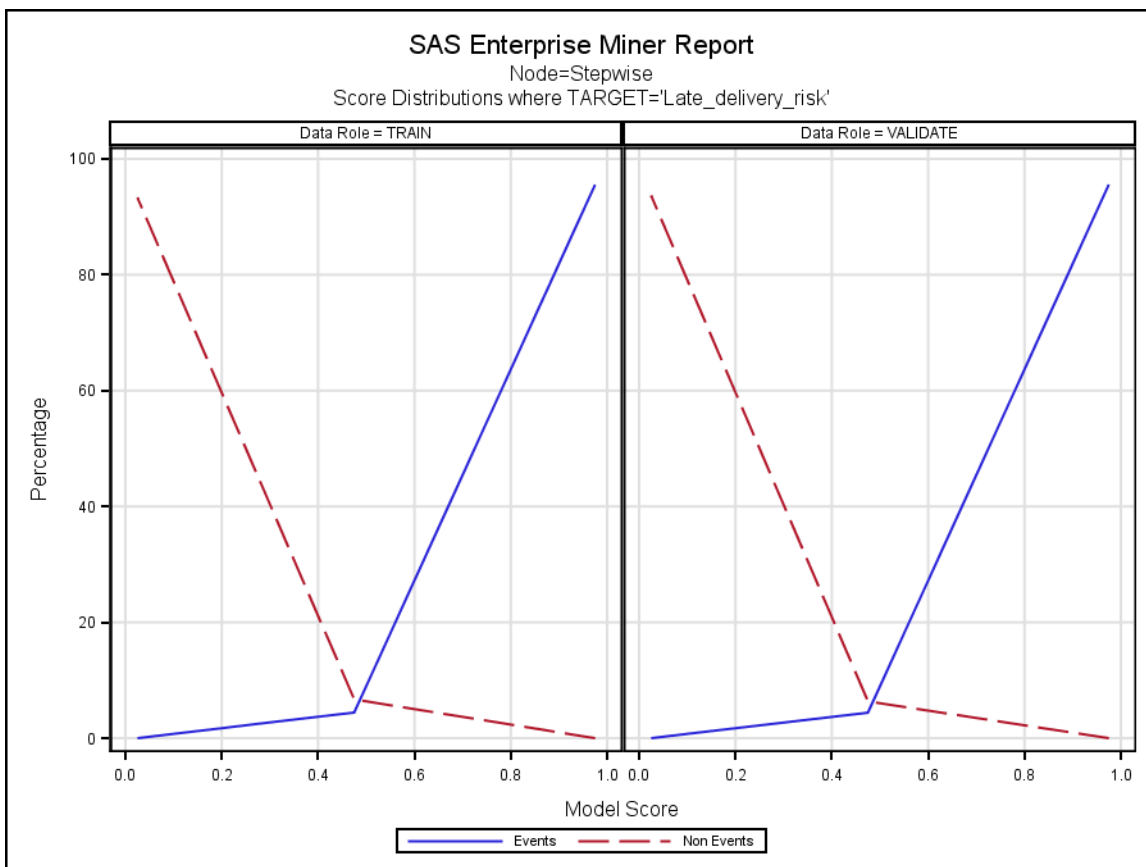
Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	45597.00	.	.
Divisor for ASE	91194.00	91200.00	.
Error Function	3408.21	3311.34	.
Final Prediction Error	0.01	.	.
Maximum Absolute Error	0.53	0.53	.
Mean Square Error	0.01	0.01	.
Sum of Frequencies	45597.00	45600.00	.
Number of Estimate Weights	5.00	.	.
Root Average Sum of Squares	0.12	0.11	.
Root Final Prediction Error	0.12	.	.
Root Mean Squared Error	0.12	0.11	.
Schwarz's Bayesian Criterion	3461.84	.	.
Sum of Squared Errors	1228.00	1194.05	.
Sum of Case Weights Times Freq	91194.00	91200.00	.
Misclassification Rate	0.03	0.03	.



Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
1	Intercept	1	-69.9909	-1734.30	0.00000	4	Shipping_Mode	FIRST_CLASS	22.7944	0.16826	0.86638
2	Shipping_Mode	SAME_DAY	69.8699	.	.	5	Shipping_Mode	SECOND_CLASS	-13.2578	-0.18979	0.84947
3	days_til_ship		33.2151	1.63	0.10395	.			.	.	.







Node=Stepwise
Score Distributions

Target Variable=Late_delivery_risk Data Role=TRAIN

Posterior Probability Range	Number of Events	Percentage of Events	Percentage of Nonevents	Cumulative Percentage of Events	Cumulative Percentage of Nonevents
0.95-1.00	24917	95.5590	0.0000	95.559	0.000
0.45-0.50	1158	4.4410	6.6950	100.000	6.695
0.00-0.05	0	0.0000	93.3050	100.000	100.000

Target Variable=Late_delivery_risk Data Role=VALIDATE

Posterior Probability Range	Number of Events	Percentage of Events	Percentage of Nonevents	Cumulative Percentage of Events	Cumulative Percentage of Nonevents
0.95-1.00	24926	95.5861	0.0000	95.586	0.000
0.45-0.50	1151	4.4139	6.3464	100.000	6.346
0.00-0.05	0	0.0000	93.6536	100.000	100.000

SAS Enterprise Miner Report

Node=Regression Summary

Node id = Reg
Node label = Regression
Meta path = Ids => Part => Reg
Notes =

Node=Regression Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	Regression		Force	0		PolynomialDegree	2	
AbsConvValue	-1.34078E154	-7.237006E75	GConvTimes	1		PrintDesignMatrix	N	
AbsFTime	1		GConvValue	1E-6		Rule	NONE	
AbsFValue	0		Hierarchy	CLASS		SASSPDS	N	
AbsGTime	1		InputCoding	DEVIATION		SelectionCriterion	DEFAULT	
AbsGValue	0.00001		Interactions			SelectionDefault	Y	
AbsXTime	1		LinkFunction	LOGIT		Sequential	N	
AbsXValue	1E-8		MainEffect	Y		Simple	N	
CIParam	N		MaxCPUTime	1 HOUR		SIEntry	0.05	
ConvDefaults	Y		MaxFunctionCalls	.		SIStay	0.05	
CorB	N		MaxIterations	.		Start	0	
CovB	N		MaxStep	.		StepOutput	N	
Covout	N		MinResourceUse	N		Stop	0	
Details	N		ModelDefaults	Y		SuppressIntercept	N	
Error	LOGISTIC		ModelSelection	NONE		SuppressOutput	N	
ExcludedVariable	REJECT		OptimizationTechnique	DEFAULT		Terms	N	
FConvTimes	1		Performance	N		TwoFactor	N	
FConvValue	0		Polynomial	N				

Node=Regression Variable Summary

Role	Level	Frequency Count	Name
TARGET	BINARY	1	Late_delivery_risk
INPUT	INTERVAL	8	Benefit_per_order Order_Item_Discount Order_Item_Discount_Rate Order_Item_Product_Price Order_Item_Profit_Ratio Order_Item_Quantity Order_Item_Total days_til_ship
INPUT	NOMINAL	2	Department_Name Shipping_Mode
INPUT	ORDINAL	3	order_d order_m region

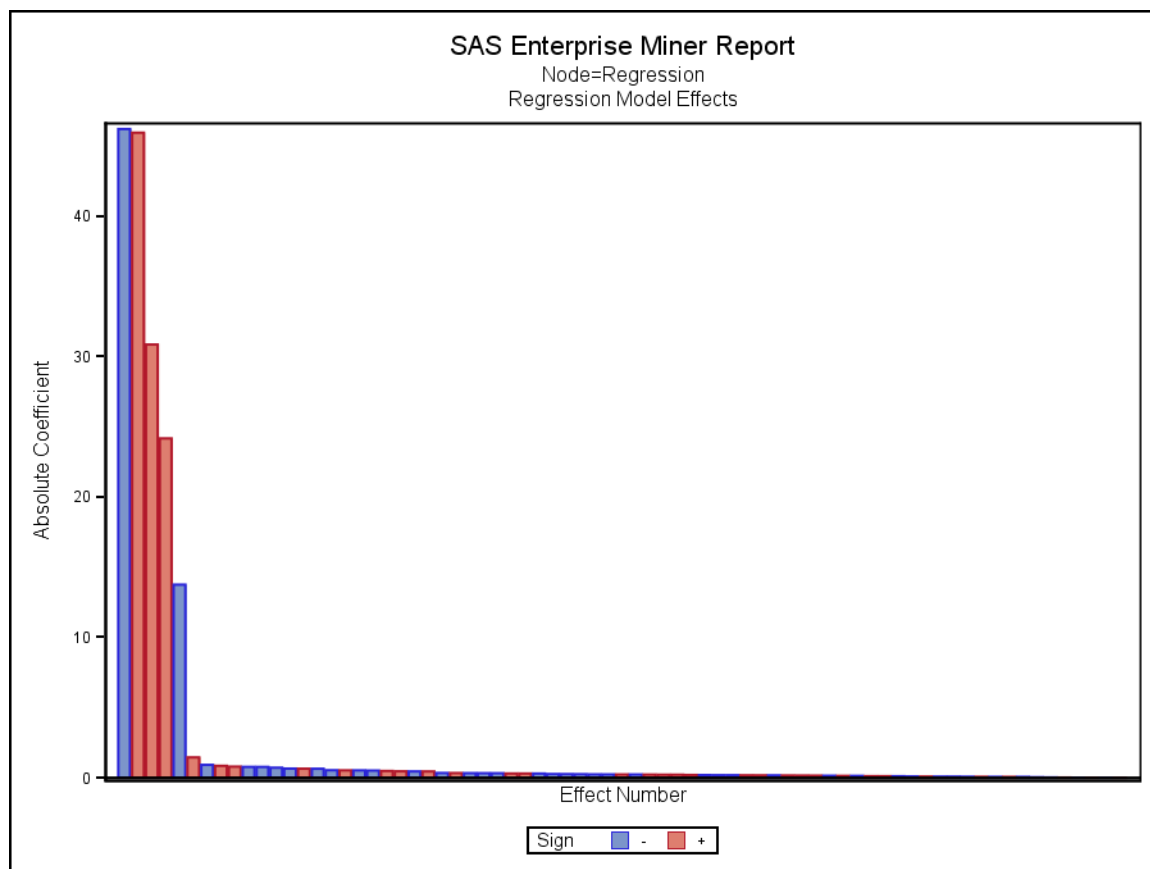
Node=Regression Model Fit Statistics

Target=Late_delivery_risk Target Label=''

Label of Statistic	Train	Validation	Test
Akaike's Information Criterion	3385.75	.	.
Average Squared Error	0.01	0.01	.
Average Error Function	0.04	0.04	.
Degrees of Freedom for Error	45524.00	.	.
Model Degrees of Freedom	73.00	.	.

Target=Late_delivery_risk Target Label=''

Label of Statistic	Train	Validation	Test
Total Degrees of Freedom	45597.00	.	.
Divisor for ASE	91194.00	91200.00	.
Error Function	3239.75	3302.07	.
Final Prediction Error	0.01	.	.
Maximum Absolute Error	0.96	0.95	.
Mean Square Error	0.01	0.01	.
Sum of Frequencies	45597.00	45600.00	.
Number of Estimate Weights	73.00	.	.
Root Average Sum of Squares	0.11	0.11	.
Root Final Prediction Error	0.11	.	.
Root Mean Squared Error	0.11	0.11	.
Schwarz's Bayesian Criterion	4022.87	.	.
Sum of Squared Errors	1147.50	1187.26	.
Sum of Case Weights Times Freq	91194.00	91200.00	.
Misclassification Rate	0.02	0.02	.



Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
1	Intercept	1	-46.1747	-170.575	0.00000	38	region	2	-0.23029	-2.09437	0.03623
2	Shipping_Mode	SAME_DAY	45.9134	.	.	39	order_d	2	0.22313	0.89972	0.36827
3	Shipping_Mode	FIRST_CLASS	30.8328	0.736	0.46198	40	Department_Name	APPAREL	0.21518	1.18290	0.23685
4	days_til_ship		24.1524	3.920	0.00009	41	order_m	8	0.21469	1.52321	0.12771
5	Shipping_Mode	SECOND_CLASS	-13.7431	-0.967	0.33356	42	Department_Name	FOOTWEA	0.19543	0.81395	0.41568
6	Department_Name	BOOK_SH	1.4467	2.101	0.03563	43	Order_Item_Profit_Ratio		-0.18951	-1.09686	0.27270
7	order_d	4	-0.9155	-4.142	0.00003	44	order_m	7	-0.18239	-1.41666	0.15658
8	order_d	5	0.8470	3.262	0.00111	45	order_d	15	-0.18154	-0.86968	0.38447
9	Order_Item_Discount_Rate		0.7916	0.686	0.49291	46	order_m	1	0.17490	1.30489	0.19193

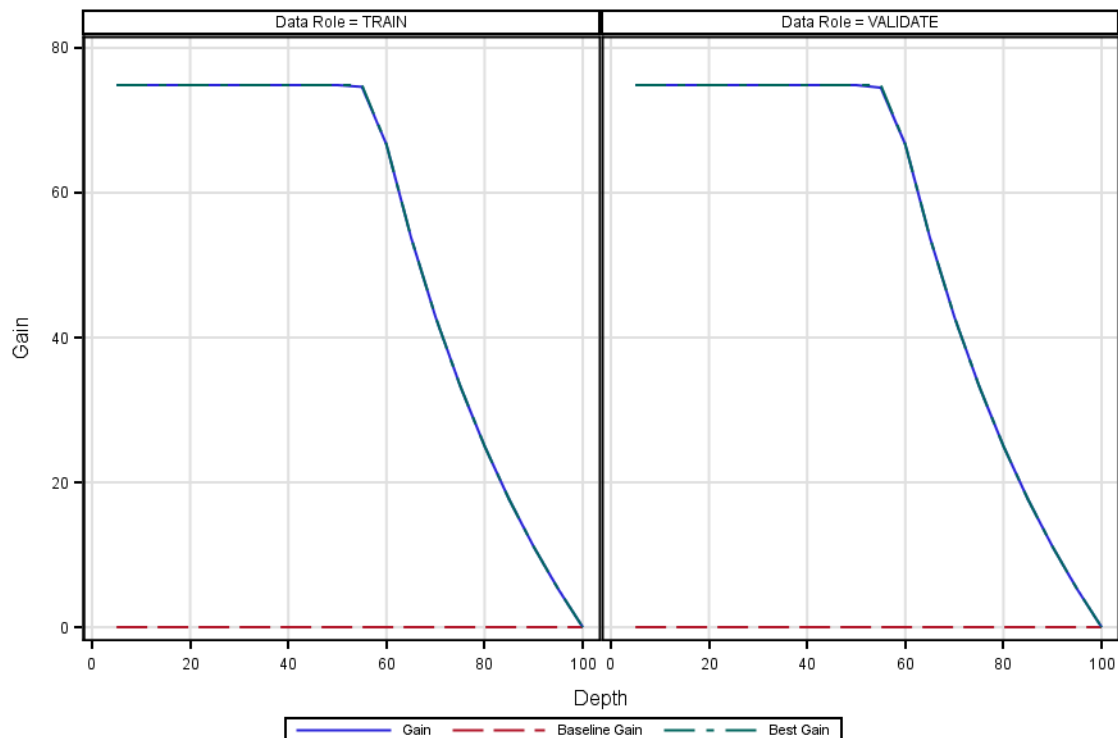
SAS Enterprise Miner Report
Node=Regression
Regression Model Effects

Effect Number	Variable	Level	Coefficient	T-value	P Value	Effect Number	Variable	Level	Coefficient	T-value	P Value
10	order_d	27	-0.7712	-3.491	0.00048	47	order_m	6	0.17223	1.22551	0.22038
11	Department_Name	PET_SHO	-0.7691	-1.118	0.26336	48	order_d	1	-0.17089	-0.72917	0.46590
12	order_d	20	-0.7130	-2.804	0.00505	49	order_m	9	0.16246	1.12544	0.26040
13	Department_Name	HEALTH	-0.6499	-0.587	0.55739	50	order_m	5	0.15773	1.12194	0.26189
14	order_d	19	0.6430	2.392	0.01675	51	Order_Item_Quantity		0.15190	1.55777	0.11929
15	region	10	-0.6382	-1.617	0.10587	52	order_m	11	-0.14384	-0.91502	0.36018
16	order_d	14	-0.5338	-2.412	0.01588	53	order_d	28	0.13386	0.57131	0.56779
17	order_d	7	0.5242	1.782	0.07483	54	order_d	3	-0.13370	-0.54952	0.58265
18	order_d	10	-0.5231	-2.390	0.01683	55	order_m	2	0.11318	0.79630	0.42586
19	order_d	17	-0.5099	-2.273	0.02303	56	region	3	0.11134	0.56795	0.57007
20	region	8	0.4803	1.547	0.12187	57	order_d	22	-0.10836	-0.43534	0.66332
21	order_d	12	0.4567	1.922	0.05460	58	region	4	-0.09254	-0.54958	0.58261
22	order_d	13	-0.4483	-1.830	0.06724	59	Department_Name	FITNESS	0.08542	0.25615	0.79784
23	order_d	26	0.4471	1.819	0.06892	60	region	9	-0.08162	-0.64984	0.51579
24	region	1	-0.3366	-0.724	0.46927	61	order_d	21	-0.08156	-0.41361	0.67916
25	region	7	0.3321	0.733	0.46380	62	order_m	10	-0.07327	-0.44473	0.65652
26	order_d	6	-0.3259	-1.106	0.26893	63	order_d	9	0.06749	0.26417	0.79165
27	order_d	29	-0.3224	-1.463	0.14346	64	order_d	8	-0.06314	-0.26817	0.78857
28	order_d	11	-0.3204	-1.547	0.12197	65	Department_Name	DISCS_S	0.06001	0.13916	0.88932
29	Department_Name	GOLF	0.3009	1.531	0.12568	66	order_d	18	-0.05989	-0.24165	0.80906
30	order_d	23	0.2991	1.334	0.18233	67	Department_Name	FAN_SHO	-0.03599	-0.20198	0.83993
31	region	6	-0.2972	-1.567	0.11714	68	order_m	3	-0.02332	-0.16396	0.86977
32	order_d	24	-0.2630	-1.112	0.26593	69	Department_Name	OUTDOOR	0.01513	0.06209	0.95049
33	order_d	16	-0.2579	-1.297	0.19447	70	Order_Item_Discount		-0.00581	-1.19290	0.23291
34	order_m	4	-0.2510	-1.614	0.10648	71	Order_Item_Product_Price		0.00328	1.89146	0.05856
35	region	5	-0.2382	-1.537	0.12432	72	Order_Item_Total		-0.00244	-1.45222	0.14644
36	order_d	25	-0.2345	-1.019	0.30832	73	Benefit_per_order		0.00065	0.75933	0.44765
37	order_d	30	0.2315	1.084	0.27844	.	.	.	.	.	.

SAS Enterprise Miner Report

Node=Regression

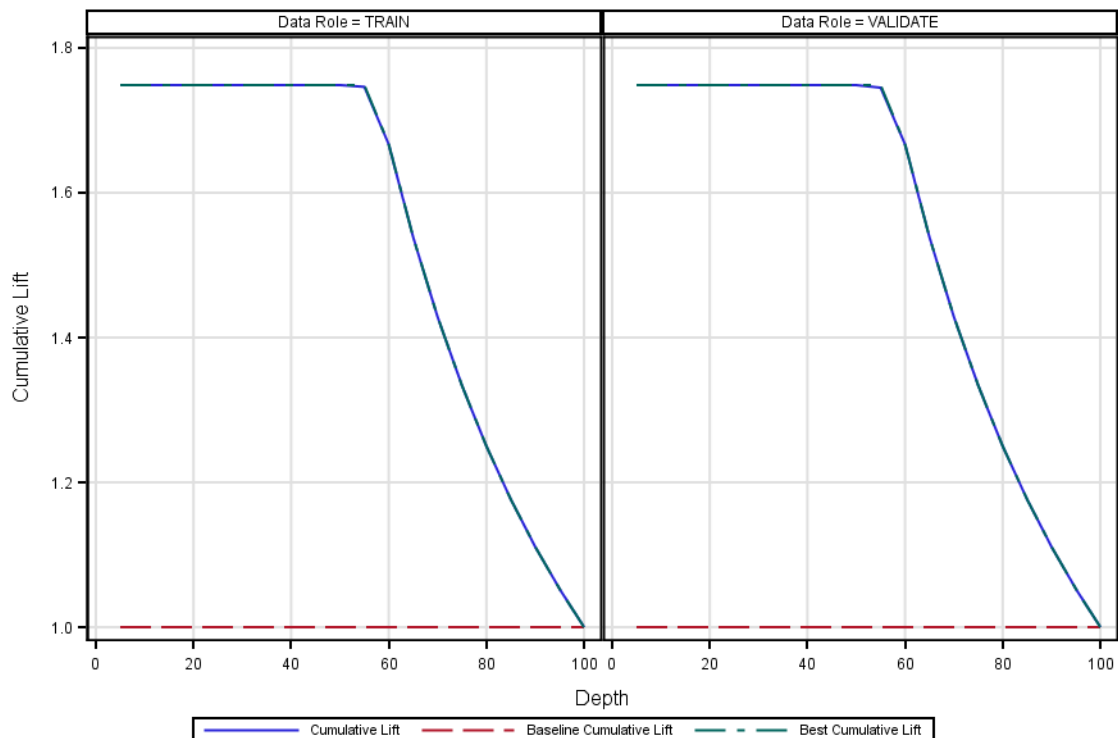
Model Assessment Scores where TARGET='Late_delivery_risk'



SAS Enterprise Miner Report

Node=Regression

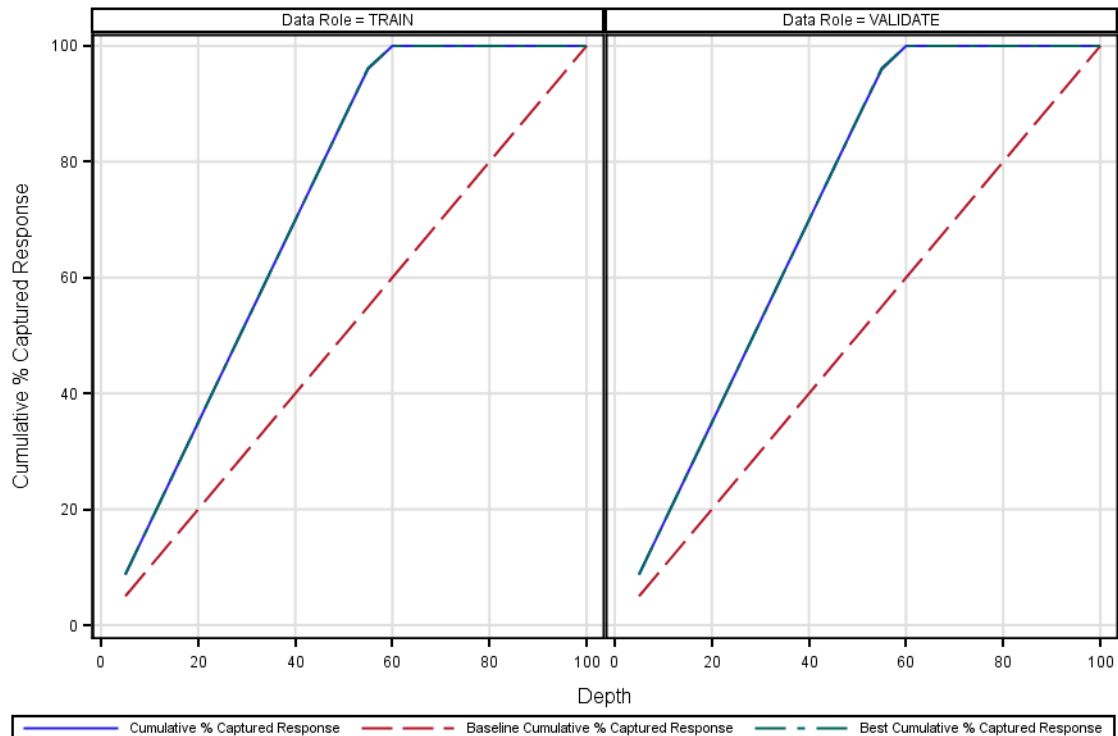
Model Assessment Scores where TARGET='Late_delivery_risk'



SAS Enterprise Miner Report

Node=Regression

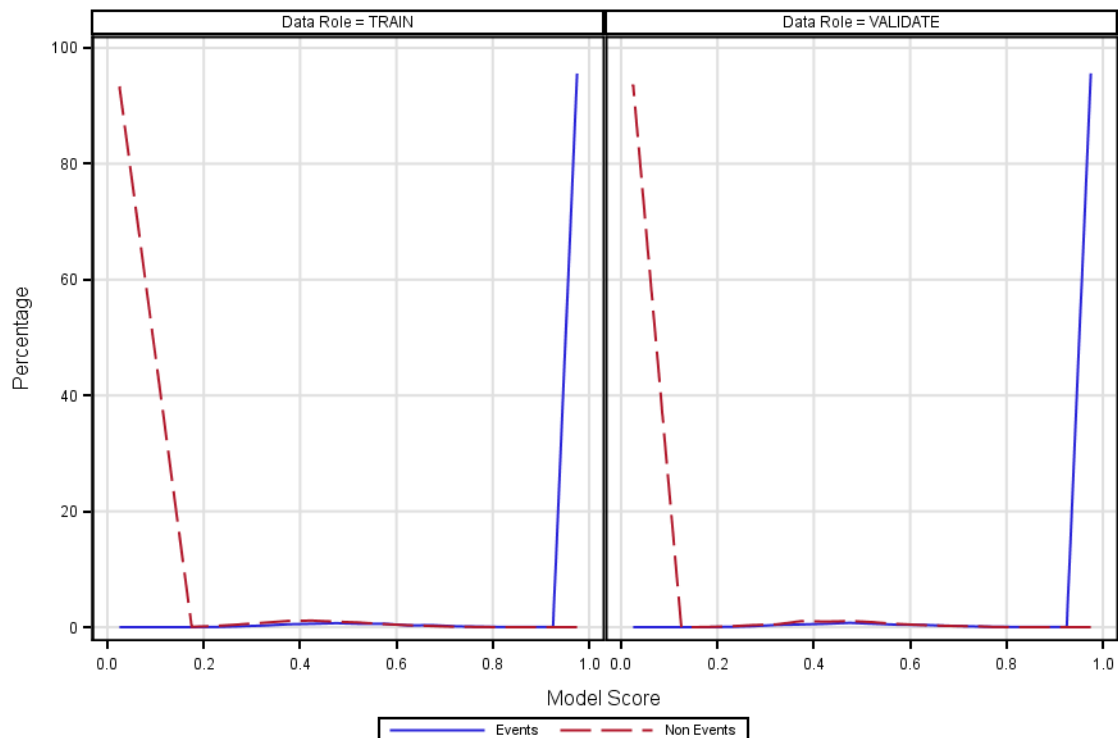
Model Assessment Scores where TARGET='Late_delivery_risk'

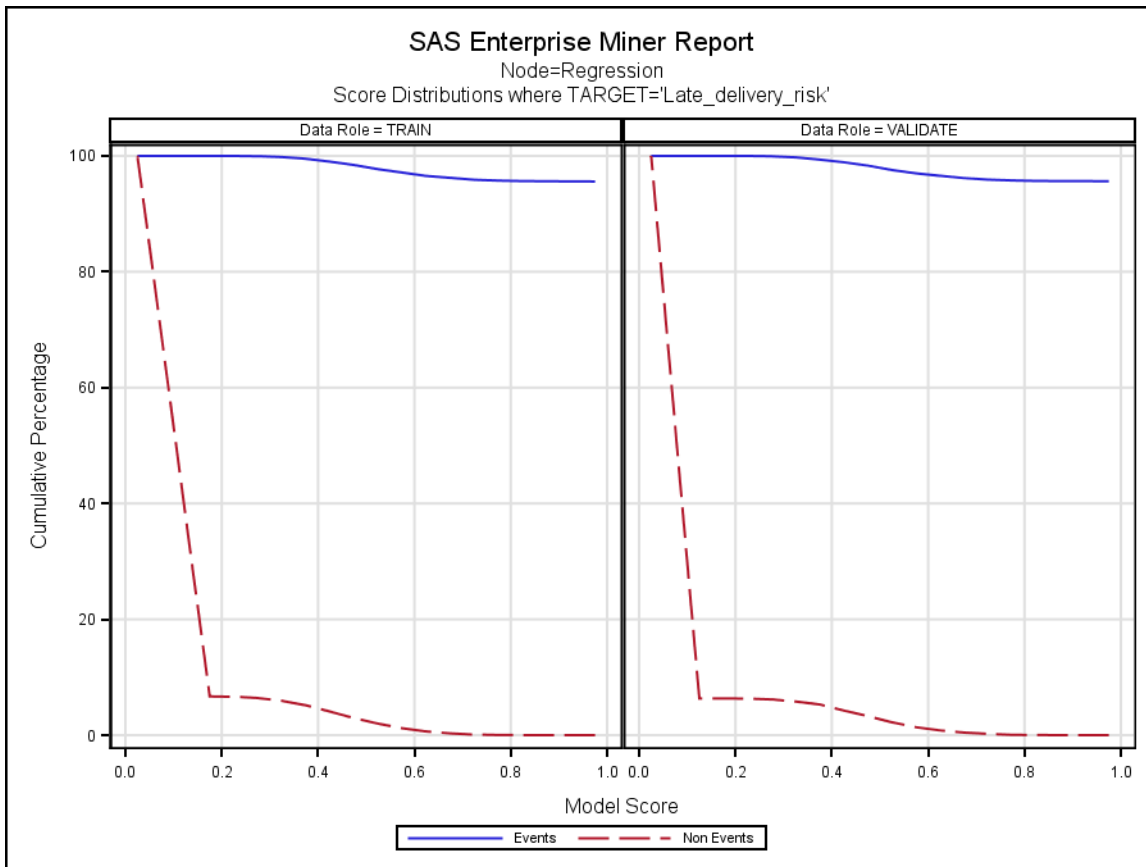


SAS Enterprise Miner Report

Node=Regression

Score Distributions where TARGET='Late_delivery_risk'





Node=Regression Score Distributions

Target Variable=Late_delivery_risk Data Role=TRAIN

Posterior Probability Range	Number of Events	Percentage of Events	Percentage of Nonevents	Cumulative Percentage of Events	Cumulative Percentage of Nonevents
0.95-1.00	24922	95.5781	0.0051	95.578	0.005
0.90-0.95	7	0.0268	0.0000	95.605	0.005
0.85-0.90	5	0.0192	0.0051	95.624	0.010
0.80-0.85	10	0.0384	0.0000	95.663	0.010
0.75-0.80	21	0.0805	0.0256	95.743	0.036
0.70-0.75	34	0.1304	0.0615	95.873	0.097
0.65-0.70	88	0.3375	0.2100	96.211	0.307
0.60-0.65	84	0.3221	0.3330	96.533	0.640
0.55-0.60	150	0.5753	0.5430	97.108	1.183
0.50-0.55	156	0.5983	0.7991	97.707	1.982
0.45-0.50	184	0.7057	0.9528	98.412	2.935
0.40-0.45	154	0.5906	1.1372	99.003	4.072
0.35-0.40	132	0.5062	1.0757	99.509	5.148
0.30-0.35	77	0.2953	0.7837	99.804	5.932
0.25-0.30	38	0.1457	0.4866	99.950	6.418
0.20-0.25	12	0.0460	0.2151	99.996	6.634
0.15-0.20	1	0.0038	0.0615	100.000	6.695
0.00-0.05	0	0.0000	93.3050	100.000	100.000

Target Variable=Late_delivery_risk Data Role=VALIDATE

Posterior Probability Range	Number of Events	Percentage of Events	Percentage of Nonevents	Cumulative Percentage of Events	Cumulative Percentage of Nonevents
0.95-1.00	24935	95.6207	0.0000	95.621	0.000
0.90-0.95	6	0.0230	0.0154	95.644	0.015
0.85-0.90	5	0.0192	0.0000	95.663	0.015
0.80-0.85	8	0.0307	0.0102	95.694	0.026
0.75-0.80	17	0.0652	0.0307	95.759	0.056
0.70-0.75	37	0.1419	0.1793	95.901	0.236
0.65-0.70	69	0.2646	0.2151	96.165	0.451
0.60-0.65	104	0.3988	0.3688	96.564	0.820
0.55-0.60	107	0.4103	0.5532	96.974	1.373
0.50-0.55	153	0.5867	0.8503	97.561	2.223
0.45-0.50	198	0.7593	1.0654	98.320	3.288
0.40-0.45	152	0.5829	0.9630	98.903	4.251
0.35-0.40	122	0.4678	1.0500	99.371	5.301
0.30-0.35	101	0.3873	0.5122	99.758	5.814
0.25-0.30	47	0.1802	0.3586	99.939	6.172
0.20-0.25	14	0.0537	0.1332	99.992	6.305
0.15-0.20	2	0.0077	0.0359	100.000	6.341
0.10-0.15	0	0.0000	0.0051	100.000	6.346
0.00-0.05	0	0.0000	93.6536	100.000	100.000

SAS Enterprise Miner Report

Node=Model Comparison Summary

Node id = MdlComp
Node label = Model Comparison
Meta path = Ids => Part => Reg => MdlComp
Notes =

Node=Model Comparison Properties

Property	Value	Default	Property	Value	Default	Property	Value	Default
Component	ModelCompare		NumberOfReportedLevels	1E-6		SelectionData	DEFAULT	
AssessAllTargetLevels	N		NumberofBins	20		SelectionDepth	10	
DecileBin	20		ProfitEpsilon	1E-6		SelectionTable	TRAIN	TABLE
HPCriteria	DEFAULT		RecomputeAssess	N		StatisticUsed	_ASE_	
LiftEpsilon	1E-6		RocChart	Y		TargetLabel		
ModelCriteria	Train: Average Squared Error		RocEpsilon	0.01		TargetName	Late_delivery_risk	
ModelDescription	Regression		RoiEpsilon	1E-6		classViyaCriteria	DEFAULT	
ModelId	Reg		ScoreDistBin	20		intervalViyaCriteria	DEFAULT	
NormalizeReportingVariables	Y		SelectionCriteria	_ASE_	DEFAULT			

Node=Model Comparison Variable Summary

Role	Level	Frequency Count	Name
TARGET	BINARY	1	Late_delivery_risk

Node=Model Comparison Fit Statistics Table

Selected Model	Predecessor Node	Model Node	Model Description	Target Variable	Target Label	Selection Criterion: Train: Average Squared Error	Train: Average Squared Error	Train: Misclassification Rate	Train: Kolmogorov-Smirnov Statistic
Y	Reg	Reg	Regression	Late_delivery_risk		0.012583	0.012583	0.021602	0.960
	Tree	Tree	Decision Tree	Late_delivery_risk		0.013393	0.013393	0.024958	0.956
	Reg2	Reg2	Stepwise	Late_delivery_risk		0.013466	0.013466	0.025396	0.956
	Neural	Neural	Neural Network	Late_delivery_risk		0.013803	0.013803	0.024344	0.956

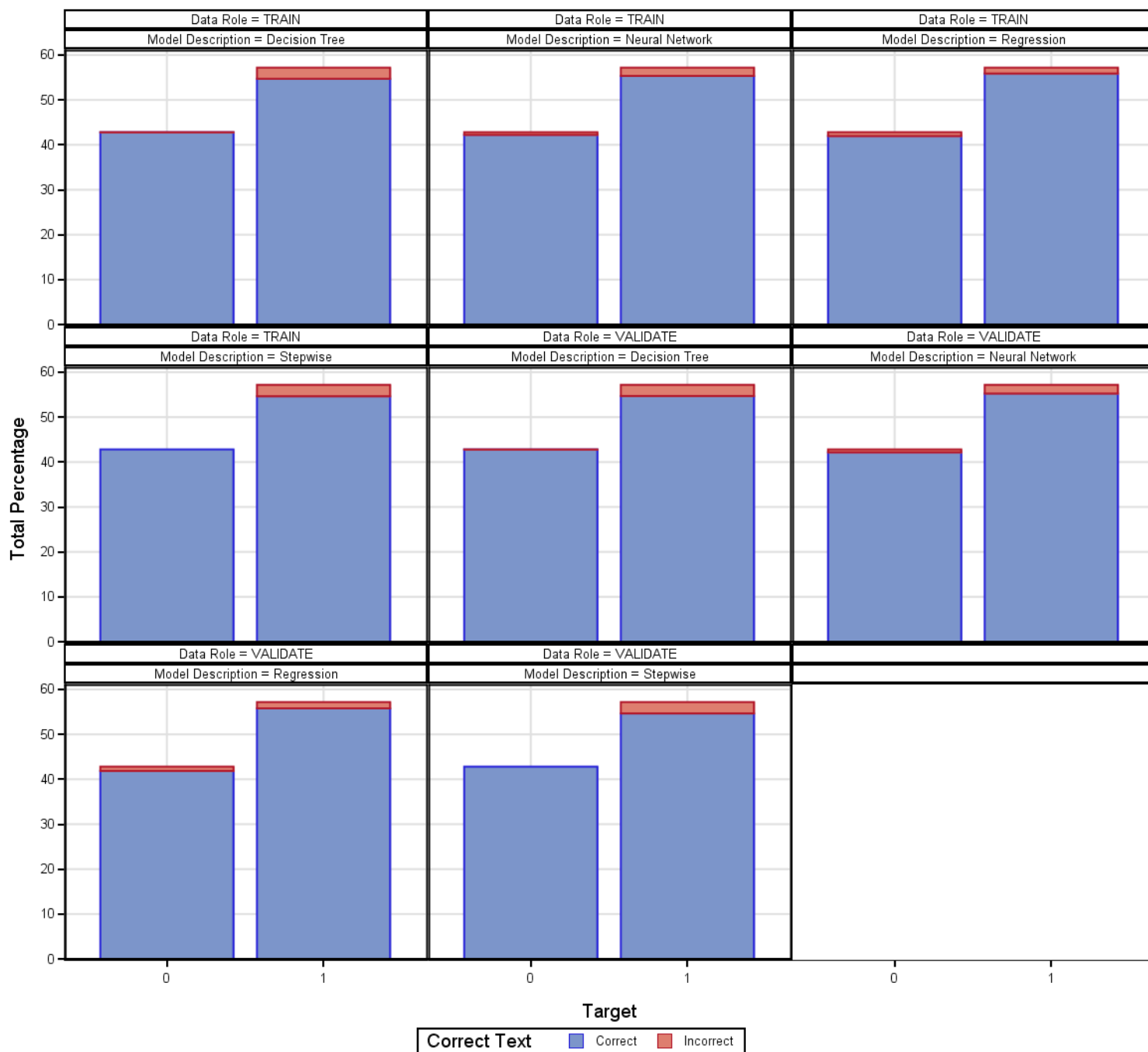
Selected Model	Predecessor Node	Model Node	Model Description	Target Variable	Target Label	Selection Criterion: Train: Average Squared Error	Valid: Average Squared Error	Valid: Misclassification Rate	Valid: Kolmogorov-Smirnov Statistic
Y	Reg	Reg	Regression	Late_delivery_risk		0.012583	0.013018	0.023465	0.958
	Tree	Tree	Decision Tree	Late_delivery_risk		0.013393	0.013120	0.025175	0.956
	Reg2	Reg2	Stepwise	Late_delivery_risk		0.013466	0.013093	0.025241	0.956
	Neural	Neural	Neural Network	Late_delivery_risk		0.013803	0.013697	0.025746	0.956

SAS Enterprise Miner Report

Node=Model Comparison

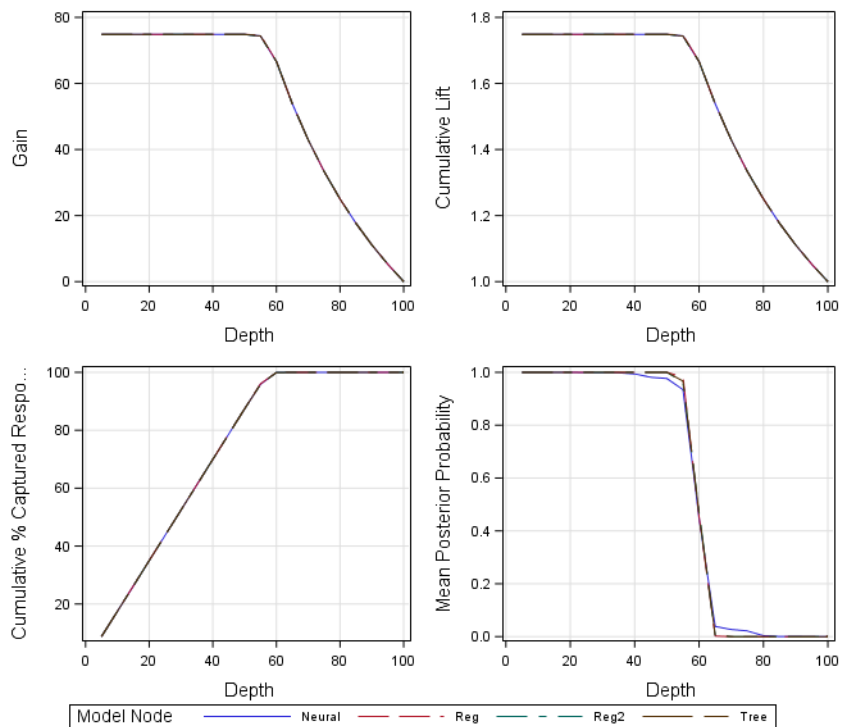
Classification Chart

TARGET='Late_delivery_risk' and _TYPE_='PREDICTION'



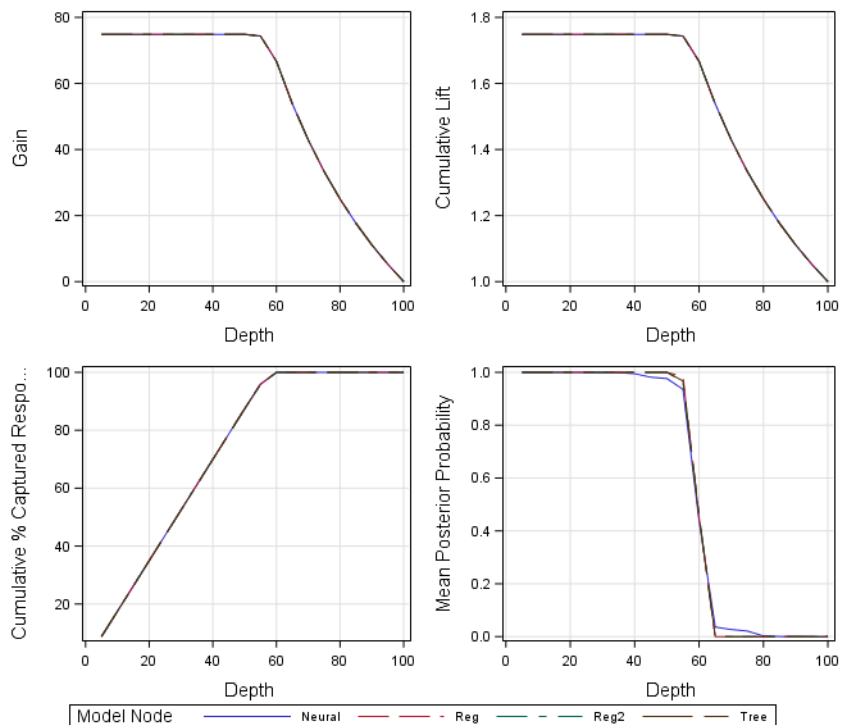
SAS Enterprise Miner Report

Node=Model Comparison
Multiple Model Assessment Scores where DataRole=TRAIN
TARGET='Late_delivery_risk'

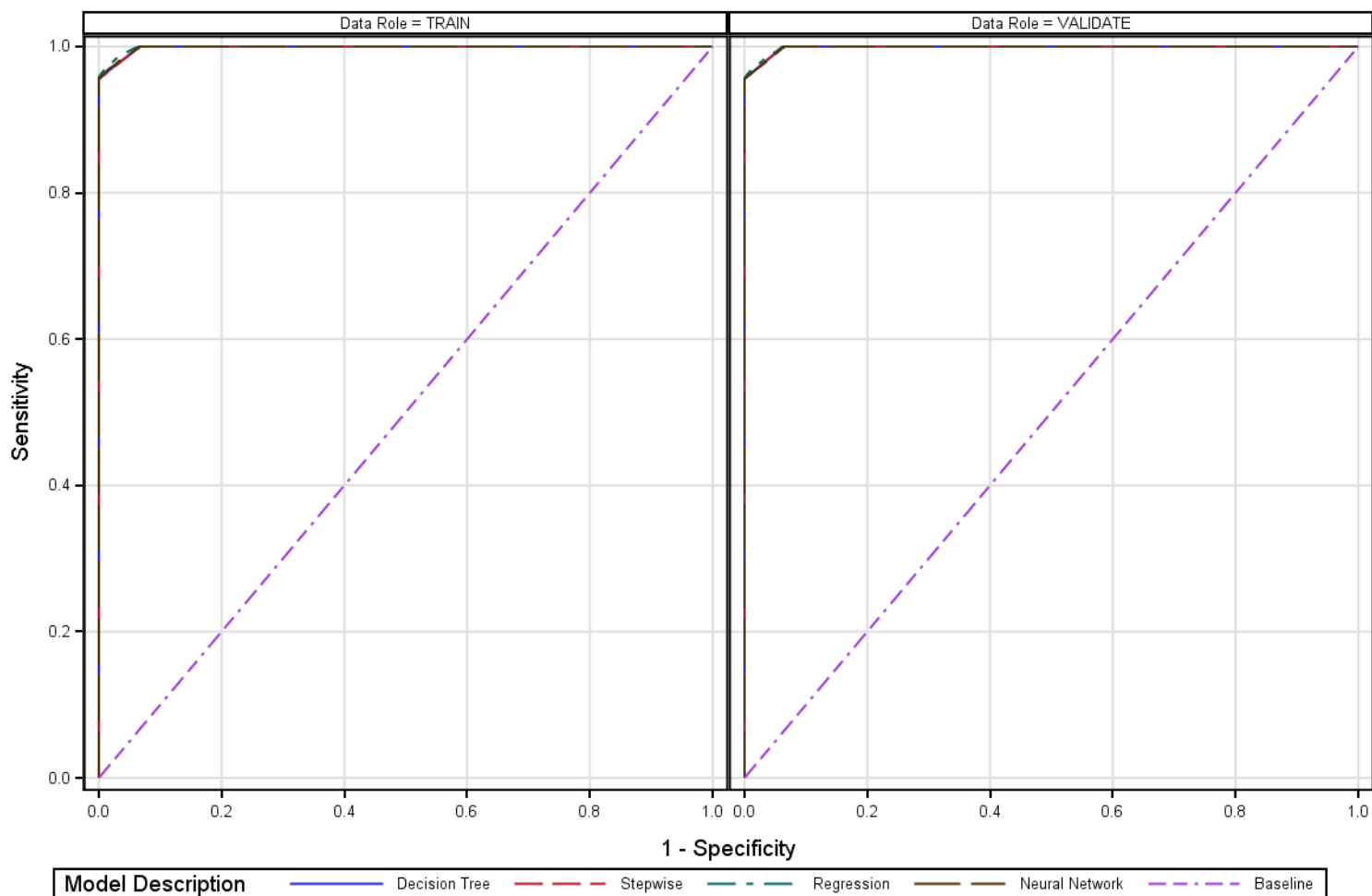


SAS Enterprise Miner Report

Node=Model Comparison
Multiple Model Assessment Scores where DataRole=VALIDATE
TARGET='Late_delivery_risk'



SAS Enterprise Miner Report
Node=Model Comparison
ROC Chart
TARGET='Late_delivery_risk' and EVENT='1'



End of Report