The FREQ Procedure

Frequency Percent Row Pct Col Pct	Table of GaveThisYear by Selected		
	Selected(Selection Indicator)		
GaveThisYear	0	1	Total
0	255162 25.52 30.00 85.05	595381 59.54 70.00 85.05	850543 85.05
1	44837 4.48 30.00 14.95	104620 10.46 70.00 14.95	149457 14.95
Total	299999 30.00	700001 70.00	1000000 100.00

The SURVEYSELECT Procedure

Selection Method	Unrestricted Random Sampling
Strata Variable	GaveThisYear

Input Data Set	CORTEX_DATA_TRAIN
Random Number Seed	428545231
Number of Strata	2
Total Sample Size	750000
Output Data Set	CORTEX_DATA_TRAIN

Class Proportions and Frequencies

SeniorList	prop	_FREQ_
0	0.4339804392	128727
1	0.400092974	62383
2	0.4047372364	62737
3	0.3928195141	62642
4	0.3922271665	62474
5	0.3972158963	62354
6	0.3910889491	61968
7	0.3922035699	62131
8	0.3911540895	61633
9	0.3849029846	62052
10	0.3827649058	60899

Ward's Method

The CLUSTER Procedure
Ward's Minimum Variance Cluster Analysis

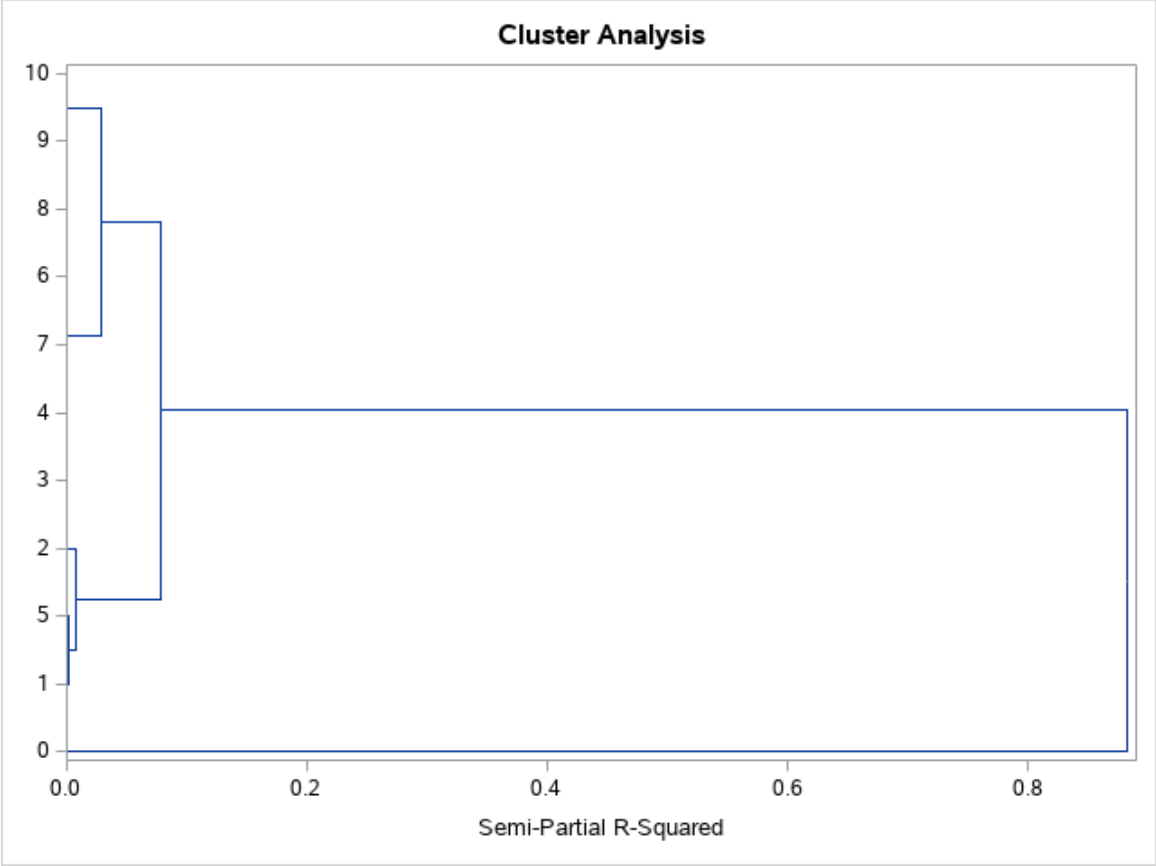
Eigenvalues of the Covariance Matrix				
	Eigenvalue	Difference	Proportion	Cumulative
1	0.00027105		1.0000	1.0000

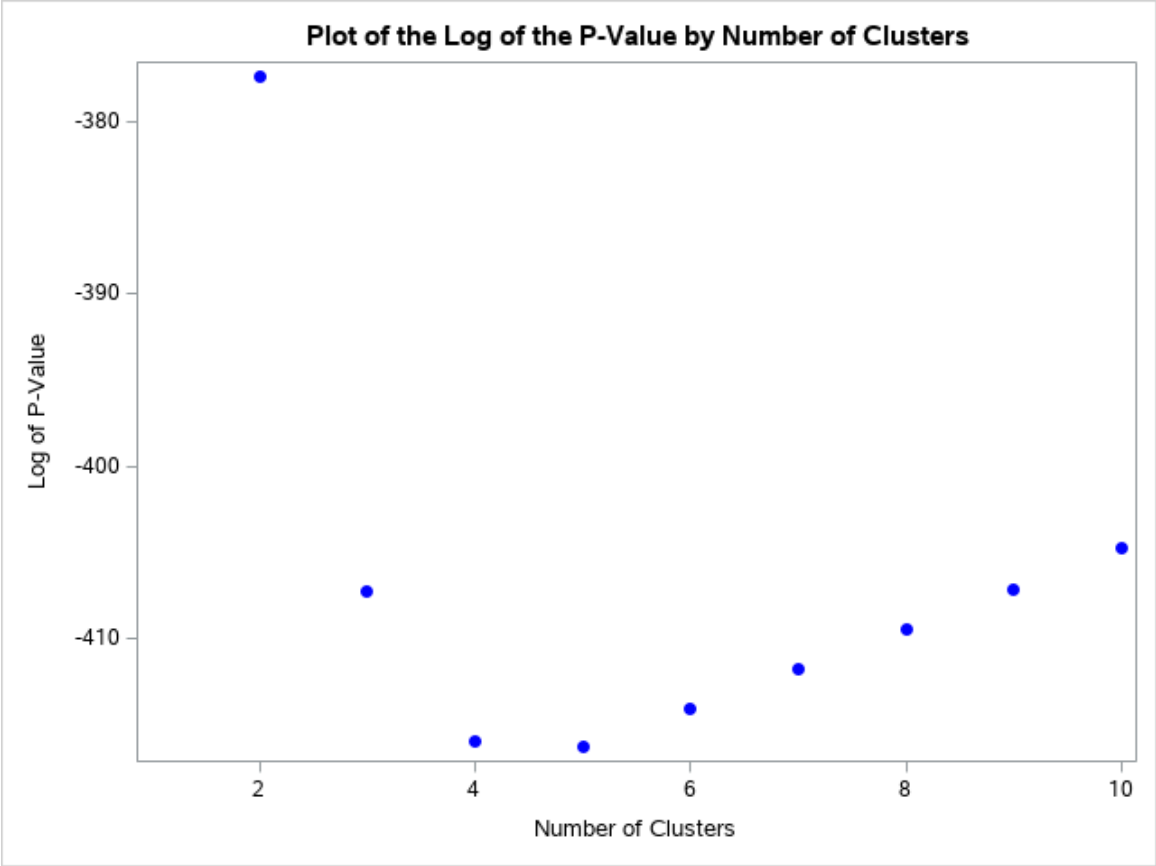
Root-Mean-Square Total-Sample Standard Deviation	0.016464

Root-Mean-Square Distance Between Observations	0.023283

Cluster History

Cluster History						
Number of Clusters	Clusters Joined		Freq	Semipartial R-Square	R-Square	Tie
10	4	7	124605	0.0000	1.00	
9	6	8	125691	0.0000	1.00	
8	3	CL10	187247	0.0001	1.00	
7	CL8	CL9	310848	0.0006	.999	
6	9	10	122951	0.0007	.999	
5	1	5	124737	0.0013	.997	
4	CL5	2	187474	0.0076	.990	
3	CL7	CL6	433799	0.0281	.962	
2	CL4	CL3	621273	0.0789	.883	
1	0	CL2	750000	0.8827	.000	





Number of Clusters Yielding the Minimum Log P-Value

Number of Clusters
5

Proposed Solution

CLUSNAME=0

SeniorList
0

CLUSNAME=2

SeniorList
2

CLUSNAME=CL5

SeniorList
1
5

CLUSNAME=CL6

SeniorList
9
10

CLUSNAME=CL7

SeniorList
4
7
6
8
3

Class Proportions and Frequencies

Seniority	prop	_FREQ_
0	0.5044307716	51684
1	0.4506477794	39674
2	0.4603220774	37817
3	0.4866455038	36542
4	0.4950287197	34297
5	0.5001732665	31743
6	0.4974234826	28915
7	0.5169327814	25365
8	0.525127211	20635
9	0.5320600273	16126
10	0.5409260727	8833
99	0.3258248102	418369

Ward's Method

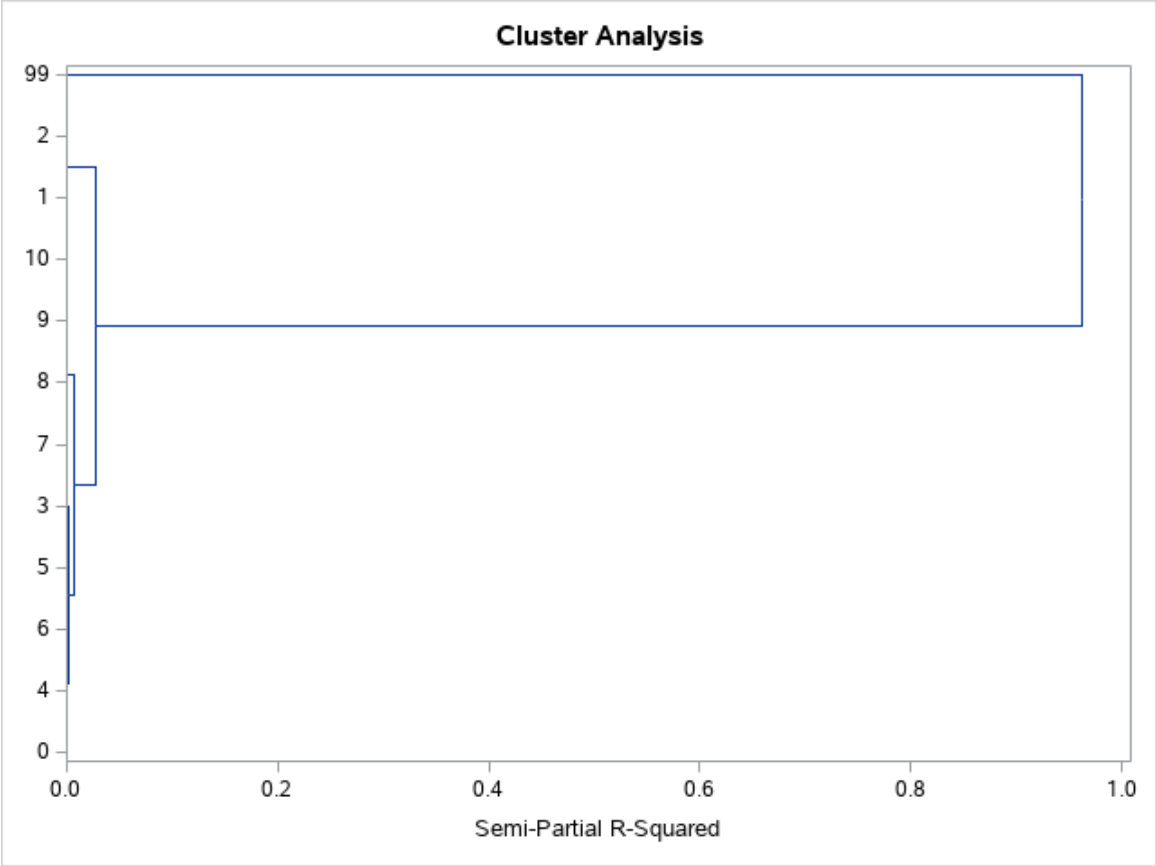
The CLUSTER Procedure
Ward's Minimum Variance Cluster Analysis

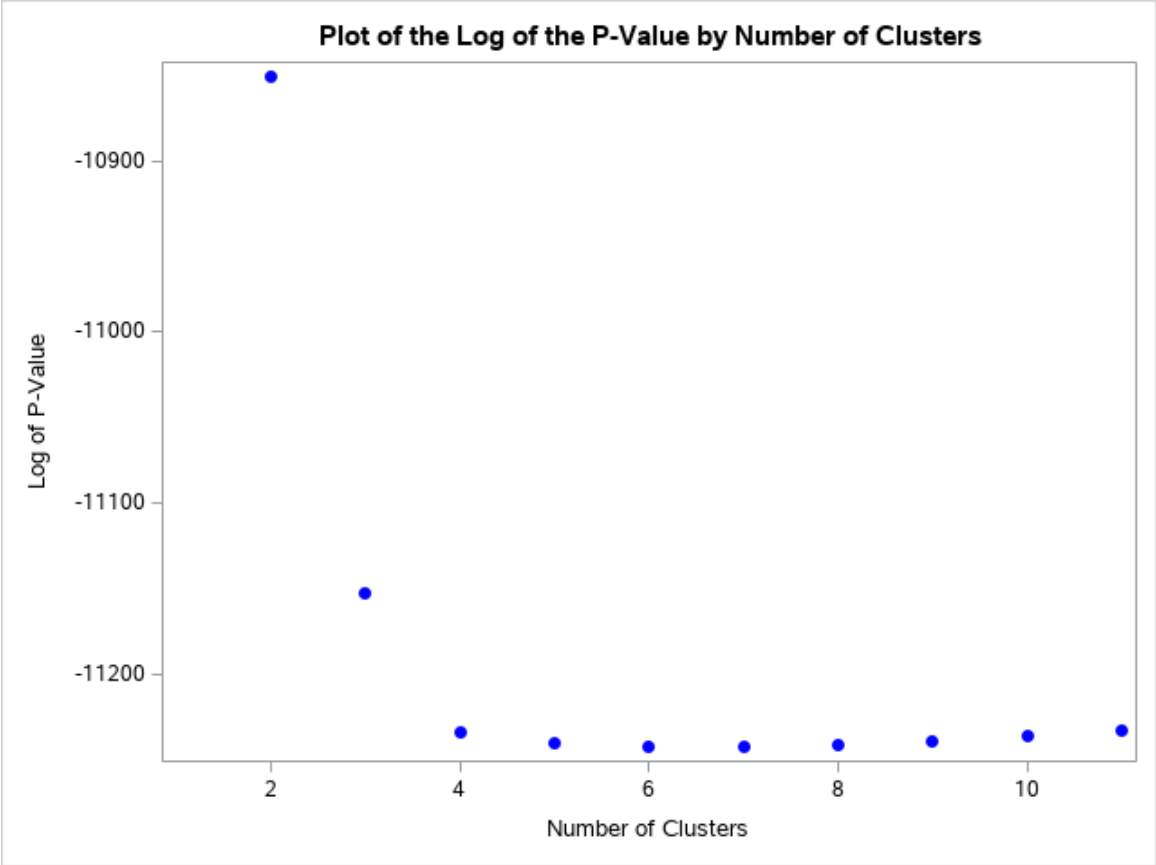
Eigenvalues of the Covariance Matrix				
	Eigenvalue	Difference	Proportion	Cumulative
1	0.00721130		1.0000	1.0000

Root-Mean-Square Total-Sample Standard Deviation	0.084919

Root-Mean-Square Distance Between Observations	0.120094

Cluster History						
Number of Clusters	Clusters Joined		Freq	Semipartial R-Square	R-Square	Tie
11	4	6	63212	0.0000	1.00	
10	CL11	5	94955	0.0001	1.00	
9	8	9	36761	0.0001	1.00	
8	CL9	10	45594	0.0002	1.00	
7	0	CL10	146639	0.0003	.999	
6	1	2	77491	0.0003	.999	
5	7	CL8	70959	0.0006	.998	
4	CL7	3	183181	0.0010	.997	
3	CL4	CL5	254140	0.0077	.990	
2	CL3	CL6	331631	0.0273	.963	
1	CL2	99	750000	0.9625	.000	





Number of Clusters Yielding the Minimum Log P-Value

Number of Clusters

Number of Clusters
6

Proposed Solution

CLUSNAME=3

Seniority
3

CLUSNAME=7

Seniority
7

CLUSNAME=99

Seniority
99

CLUSNAME=CL6

Seniority
1
2

CLUSNAME=CL7

Seniority
4
6
5
0

CLUSNAME=CL8

Seniority
8
9
10

Class Proportions and Frequencies

NbActivities	prop	_FREQ_
0	0.344428063	470043
1	0.4262501912	156936
2	0.5221236329	67846
3	0.5974929903	30315
4	0.6759792627	13888
5	0.7306759624	6598
6	0.7714186611	2883
7	0.8187134503	1026
8	0.8392857143	336
9	0.9134615385	104
10	0.92	25

Ward's Method

The CLUSTER Procedure
Ward's Minimum Variance Cluster Analysis

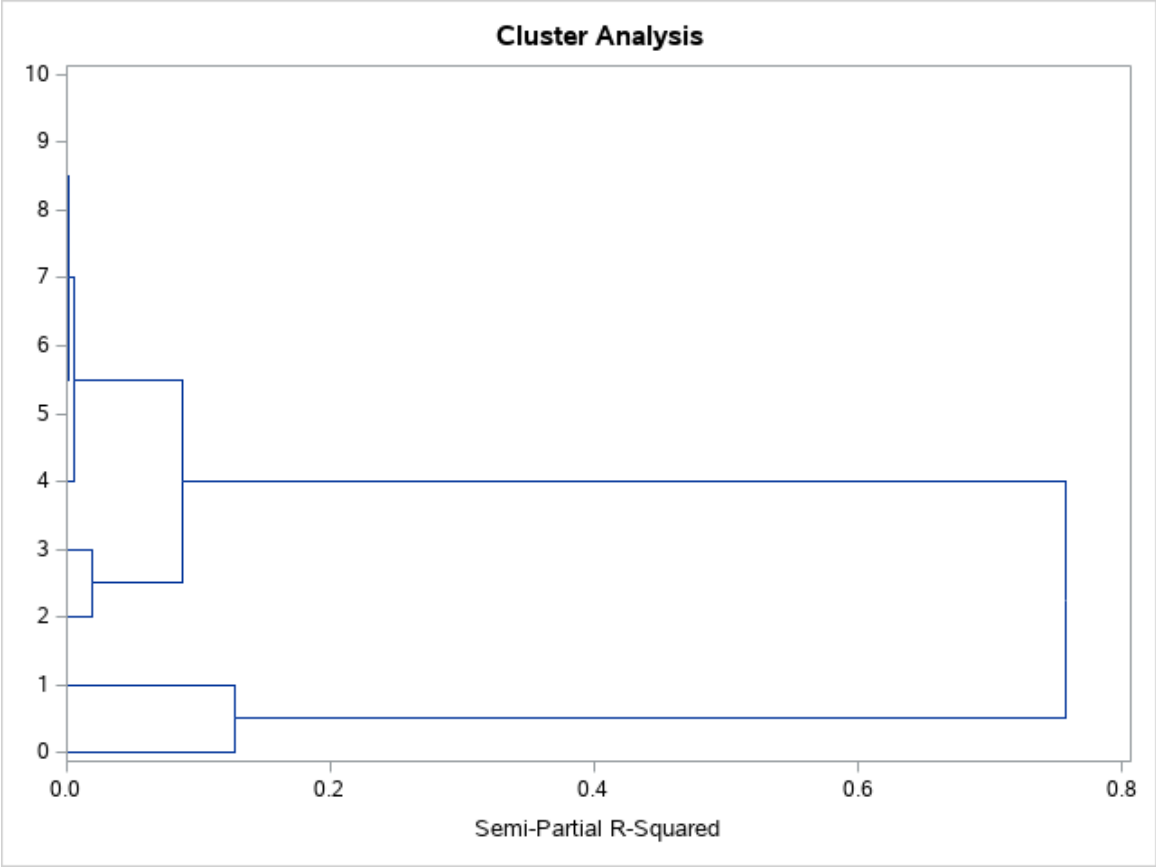
Eigenvalues of the Covariance Matrix				
	Eigenvalue	Difference	Proportion	Cumulative
1	0.00827982		1.0000	1.0000

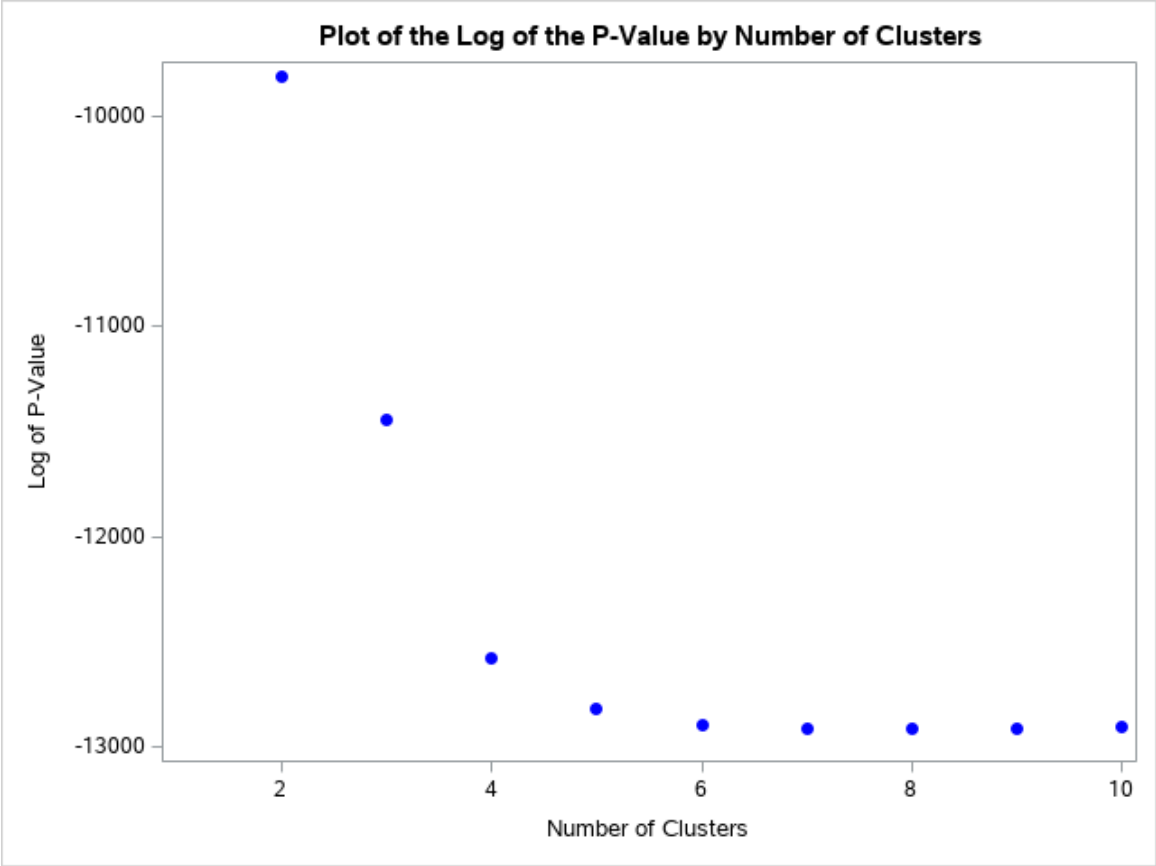
Root-Mean-Square Total-Sample Standard Deviation	0.090994

Root-Mean-Square Distance Between Observations	0.128684

Cluster History

Number of Clusters	Clusters Joined		Freq	Semipartial R-Square	R-Square	Tie
10	9	10	129	0.0000	1.00	
9	7	8	1362	0.0000	1.00	
8	CL9	CL10	1491	0.0002	1.00	
7	5	6	9481	0.0005	.999	
6	CL7	CL8	10972	0.0016	.998	
5	4	CL6	24860	0.0062	.991	
4	2	3	98161	0.0192	.972	
3	CL4	CL5	123021	0.0875	.885	
2	0	1	626979	0.1268	.758	
1	CL2	CL3	750000	0.7580	.000	





Number of Clusters Yielding the Minimum Log P-Value

Number of Clusters
8

Proposed Solution

CLUSNAME=0

NbActivities
0

CLUSNAME=1

NbActivities
1

CLUSNAME=2

NbActivities
2

CLUSNAME=3

NbActivities
3

CLUSNAME=4

NbActivities
4

CLUSNAME=5

NbActivities
5

CLUSNAME=6

NbActivities
6

CLUSNAME=CL8

NbActivities
9
10
7
8

Proposed Solution

Oblique Principal Component Cluster Analysis

Cluster Summary for 1 Cluster					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	8	8	3.958443	0.4948	1.0740

Total variation explained = 3.958443 Proportion = 0.4948

Cluster Summary for 2 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	6	6	3.958213	0.6597	0.9877
2	2	2	1.073548	0.5368	0.9265

Total variation explained = 5.031761 Proportion = 0.6290

2 Clusters		R-squared with		
Cluster	Variable	Own Cluster	Next Closest	1-R**2 Ratio
Cluster 1	logAmtLastYear	0.0477	0.0001	0.9524
	logTotalGift	0.9689	0.0001	0.0311
	logReferrals	0.3706	0.0000	0.6294
	Frequency	0.7775	0.0000	0.2225
	logMaxGift	0.9459	0.0001	0.0541
	logMinGift	0.8476	0.0000	0.1524
Cluster 2	Age	0.5368	0.0000	0.4632
	logSalary	0.5368	0.0002	0.4633

Cluster Summary for 3 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	5	5	3.922173	0.7844	0.7418
2	2	2	1.073548	0.5368	0.9265
3	1	1	1	1.0000	

Total variation explained = 5.995721 Proportion = 0.7495

3 Clusters	R-squared with	1-R**2 Ratio

3 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	logTotalGift	0.9735	0.0224	0.0271
Cluster	Variable	Cluster	Closest	
	logReferrals	0.3667	0.0254	0.6497
	Frequency	0.7762	0.0316	0.2311
	logMaxGift	0.9513	0.0199	0.0497
	logMinGift	0.8544	0.0137	0.1476
Cluster 2	Age	0.5368	0.0000	0.4632
	logSalary	0.5368	0.0001	0.4633
Cluster 3	logAmtLastYear	1.0000	0.0272	0.0000

Cluster Summary for 4 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	5	5	3.922173	0.7844	0.7418
2	1	1	1	1.0000	
3	1	1	1	1.0000	
4	1	1	1	1.0000	

Total variation explained = 6.922173 Proportion = 0.8653

4 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	logTotalGift	0.9735	0.0224	0.0271
	logReferrals	0.3667	0.0254	0.6497
	Frequency	0.7762	0.0316	0.2311
	logMaxGift	0.9513	0.0199	0.0497
	logMinGift	0.8544	0.0137	0.1476
Cluster 2	logSalary	1.0000	0.0054	0.0000
Cluster 3	logAmtLastYear	1.0000	0.0272	0.0000
Cluster 4	Age	1.0000	0.0054	0.0000

Cluster Summary for 5 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	4	4	3.621232	0.9053	0.3468
2	1	1	1	1.0000	
3	1	1	1	1.0000	
4	1	1	1	1.0000	
5	1	1	1	1.0000	

Total variation explained = 7.621232 Proportion = 0.9527

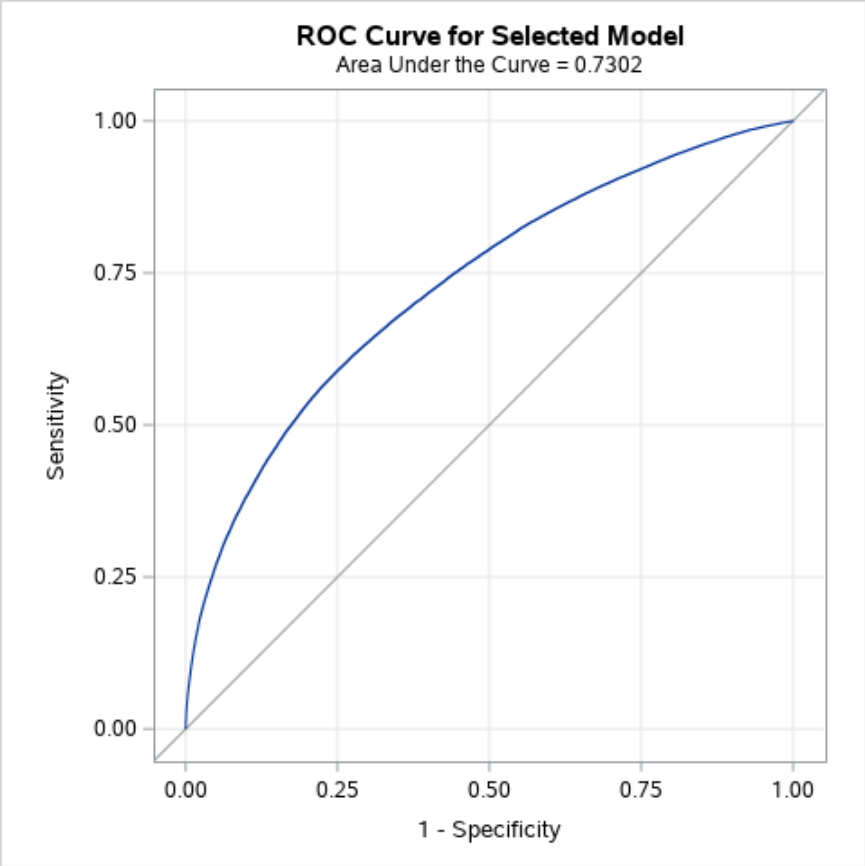
5 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	logTotalGift	0.9944	0.2333	0.0073
	Frequency	0.7564	0.2940	0.3450
	logMaxGift	0.9782	0.2113	0.0276
	logMinGift	0.8922	0.1577	0.1280
Cluster 2	logSalary	1.0000	0.0054	0.0000
Cluster 3	logAmtLastYear	1.0000	0.0254	0.0000
Cluster 4	Age	1.0000	0.0054	0.0000
Cluster 5	logReferrals	1.0000	0.2424	0.0000

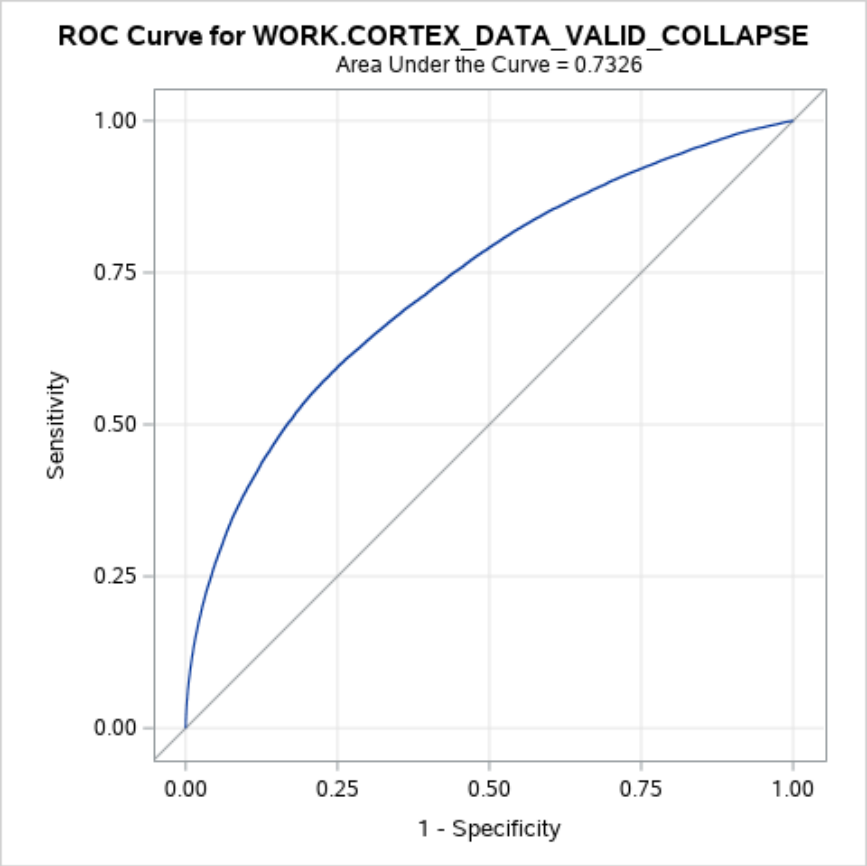
Determine P-Value for Entry and Retention

0.000235

Determine P-Value for Entry and Retention

The LOGISTIC Procedure





Determine P-Value for Entry and Retention

The REG Procedure
Model: MODEL1
Dependent Variable: AmtThisYear

Number of Observations Read	149457
Number of Observations Used	149457

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	57624110	7203014	139.72	<.0001
Error	149448	7704520107	51553		
Corrected Total	149456	7762144217			

Root MSE	227.05326	R-Square	0.0074
Dependent Mean	62.95901	Adj R-Sq	0.0074
Coeff Var	360.63663		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|	Variance Inflation
Intercept	1	-54.45928	5.24729	-10.38	<.0001	0
Age	1	-0.53150	0.03117	-17.05	<.0001	1.00783
logSalary	1	12.98562	0.48540	26.75	<.0001	1.01359
logAmtLastYear	1	1.49938	0.40581	3.69	0.0002	1.03300
logTotalGift	1	10.59101	5.17470	2.05	0.0407	366.59220
logReferrals	1	4.20210	1.25429	3.35	0.0008	1.51634
Frequency	1	-6.41997	1.70441	-3.77	0.0002	14.73886
logMaxGift	1	0.44688	4.42503	0.10	0.9196	233.95527
logMinGift	1	-9.01003	1.34222	-6.71	<.0001	14.60109

Collinearity Diagnostics											
			Proportion of Variation								
Number	Eigenvalue	Condition Index	Intercept	Age	logSalary	logAmtLastYear	logTotalGift	logReferrals	Frequency	logMaxGift	logMinGift
1	6.31661	1.00000	0.00023703	0.00251	0.00024510	0.00521	0.00003369	0.00649	0.00082396	0.00005215	0.00078715
2	1.16750	2.32602	0.00186	0.02437	0.00194	0.03729	0.00014012	0.00401	0.00449	0.00020958	0.00248
3	0.74634	2.90921	0.00051055	0.00772	0.00053084	0.92760	9.614499E-7	0.00112	0.00024829	0.00000360	0.00023645
4	0.42843	3.83974	0.00002866	0.00051836	0.00004156	0.02283	0.00012063	0.70176	0.00374	0.00031326	0.01093
5	0.20970	5.48831	0.00006005	0.00995	0.00005984	0.00436	3.965449E-7	0.27730	0.14002	0.00016859	0.03484
6	0.10023	7.93857	0.02058	0.94909	0.02399	0.00269	4.504835E-7	0.00573	0.00071249	0.00000149	0.00099985
7	0.02370	16.32580	0.00083420	0.00248	0.00066511	0.00000179	0.00788	0.00196	0.15758	0.03299	0.78369
8	0.00653	31.09307	0.97586	0.00335	0.97238	0.00000945	0.00010574	0.00084206	0.00192	0.00029263	0.00793
9	0.00095485	81.33457	0.00003756	0.00000779	0.00014590	0.00000257	0.99172	0.00078891	0.69046	0.96597	0.15812

Collinearity Diagnostics (intercept adjusted)										
			Proportion of Variation							
Number	Eigenvalue	Condition Index	Age	logSalary	logAmtLastYear	logTotalGift	logReferrals	Frequency	logMaxGift	logMinGift
1	3.94636	1.00000	0.00000762	0.00006469	0.00257	0.00016945	0.01762	0.00330	0.00025810	0.00362
2	1.08178	1.90998	0.44023	0.45084	0.02207	5.394299E-7	0.00003044	0.00001240	6.822705E-7	0.00002514
3	0.98345	2.00319	0.02690	0.00329	0.89119	0.00002178	0.01647	0.00006659	0.00004779	0.00141
4	0.92193	2.06895	0.52936	0.52918	0.00292	0.00000143	0.00493	0.00010426	0.00000521	0.00007140
5	0.69836	2.37715	0.00198	0.01015	0.07630	0.00010203	0.68967	0.00295	0.00027296	0.01029
6	0.32587	3.47996	0.00012195	0.00061214	0.00493	0.00000628	0.26827	0.13744	0.00011150	0.04123
7	0.04059	9.86082	0.00139	0.00575	0.00000906	0.00776	0.00224	0.16402	0.03382	0.78453
8	0.00166	48.74279	0.00000752	0.00011365	0.00000295	0.99194	0.00076286	0.69211	0.96548	0.15882

Determine P-Value for Entry and Retention

The SURVEYSELECT Procedure

Selection Method	Simple Random Sampling

Input Data Set	CORTEX_DATA_LINEAR
Random Number Seed	12345
Sampling Rate	0.75
Sample Size	112093
Selection Probability	0.750002
Sampling Weight	0
Output Data Set	CORTEX_DATA_LINEAR

Determine P-Value for Entry and Retention

The GLMSELECT Procedure

Data Set	WORK.TRAIN
Validation Data Set	WORK.VALIDATE
Dependent Variable	AmtThisYear
Selection Method	Backward
Select Criterion	Validation ASE
Stop Criterion	Validation ASE
Choose Criterion	Validation ASE
Effect Hierarchy Enforced	None

Observation Profile for Analysis Data	
Number of Observations Read	112093

Observation Profile for Analysis Data	
Number of Observations Used	112093
Number of Observations Used for Training	112093

Observation Profile for Validation Data	
Number of Observations Read	37364
Number of Observations Used	37364

Class Level Information		
Class	Levels	Values
Woman	2	1 0
Education	3	High School University / College Elementary
City	4	Downtown Rural Suburban City
SeniorList_1	5	1,3 2 6-8 9-1 0
Contact	2	1 0
GaveLastYear	2	1 0
NbActivities_1	5	1 2 3 >=4 0
seniority_1	6	1 2 3-6 8-10 99 0,7

Dimensions	
Number of Effects	92
Number of Parameters	535

Determine P-Value for Entry and Retention

The GLMSELECT Procedure

Backward Selection Summary					
Step	Effect Removed	Number Effects In	Number Parms In	ASE	Validation ASE
0		92	306	47910.4640	60841.9966
	logAmtLas*GaveLastYe	91	306	47910.4640	60841.9966
1	SeniorLis*seniority_	90	294	47915.6181	60827.8627
2	Contact*seniority_1	89	289	47918.8804	60815.9302
3	SeniorLis*NbActiviti	88	279	47923.8713	60804.4685
4	logSalary*City	87	276	47927.7701	60793.4504
5	City*SeniorList_1	86	264	47933.7277	60783.0097
6	logTotalG*NbActiviti	85	260	47939.2105	60774.1842
7	logReferr*SeniorList	84	257	47940.6361	60767.6154
8	Age*City	83	254	47943.1963	60761.4131
9	NbActivit*seniority_	82	234	47950.9680	60756.1690
10	logSalary*logReferra	81	233	47953.6442	60751.2158
11	logAmtLas*NbActiviti	80	229	47960.1453	60746.5197
12	GaveLastY*NbActiviti	79	225	47963.8994	60738.3407
13	Contact*NbActivities	78	221	47965.0187	60733.6501
14	logSalary*seniority_	77	216	47966.9922	60729.4167
15	Education*seniority_	76	206	47968.9977	60724.7323
16	Contact*GaveLastYear	75	205	47970.1403	60720.8367
17	logAmtLastYe*Contact	74	204	47971.0676	60716.1320
18	logReferr*NbActiviti	73	200	47973.5915	60712.6387
19	City*NbActivities_1	72	188	47975.4763	60709.1039
20	Education*NbActiviti	71	180	47976.9640	60705.8990
21	logReferr*logAmtLast	70	179	47977.9249	60702.8252
22	logTotalG*logAmtLast	69	178	47979.4675	60697.9177
23	SeniorList_1*Contact	68	174	47984.6095	60695.2509
24	logReferr*logTotalGi	67	173	47984.9307	60692.7580

* Optimal Value of Criterion

Backward Selection Summary					
Step	Effect Removed	Number Effects In	Number Parms In	ASE	Validation ASE
25	logTotalGift*Contact	66	172	47989.3518	60690.9586
26	logAmtLas*SeniorList	65	168	47989.9205	60689.3074
27	logAmtLas*seniority_	64	164	47991.5437	60687.0699
28	Age*seniority_1	63	159	47993.3511	60685.4837
29	Age*SeniorList_1	62	155	47996.7219	60683.5296
30	logSalary*Education	61	153	47998.5140	60682.2243
31	GaveLastY*seniority_	60	149	48001.8952	60681.0573
32	Woman*Education	59	147	48003.1498	60680.0018
33	Woman*Contact	58	146	48003.6560	60679.4827
34	Education*City	57	140	48006.0200	60679.0469
35	City*GaveLastYear	56	137	48006.3433	60678.6751
36	Woman*seniority_1	55	132	48007.9377	60678.3365
37	logTotalGi*Education	54	130	48007.9900	60678.0799
38	logReferrals*City	53	127	48008.3439	60677.8567
39	Age*logTotalGift	52	126	48008.3605	60677.6564
40	Woman*GaveLastYear	51	125	48008.3605	60677.6490
41	GaveLastYear	50	125	48008.3605	60677.6490
42	Woman	49	125	48008.3605	60677.6490
43	logAmtLastYear	48	125	48008.3605	60677.6490
44	logTotalGift	47	125	48008.3605	60677.6490
45	NbActivities_1	46	125	48008.3605	60677.6490
46	Contact	45	125	48008.3605	60677.6490
47	City	44	125	48008.3605	60677.6490
48	seniority_1	43	125	48008.3605	60677.6490
49	Education	42	125	48008.3605	60677.6490
50	logReferrals	41	125	48008.3605	60677.6490
51	SeniorList_1	40	125	48008.3605	60677.6490
52	Age	39	125	48008.3605	60677.6490
53	logSalary	38	125	48008.3605	60677.6490*
* Optimal Value of Criterion					

Note: Effects dropped at step 0 are redundant.

Selection stopped at a local minimum of the residual sum of squares of the validation data.

Stop Details				
Candidate For	Effect	Candidate Validation ASE		Compare Validation ASE
Removal	Age*GaveLastYear	60677.6924	>	60677.6490

Determine P-Value for Entry and Retention

The GLMSELECT Procedure
Selected Model

The selected model, based on Validation ASE, is the model at Step 53.

Effects:	Intercept Age*Woman logSalary*Woman Age*logSalary Age*Education Woman*City Woman*SeniorList_1 logSalary*SeniorList Education*SeniorList Woman*NbActivities_1 Age*NbActivities_1 logSalary*NbActiviti logReferrals*Woman Age*logReferrals logReferra*Education logTotalGift*Woman logSalary*logTotalGi logTotalGift*City logTotalG*SeniorList Age*Contact logSalary*Contact Education*Contact City*Contact logReferrals*Contact Age*GaveLastYear logSalary*GaveLastYe Education*GaveLastYe SeniorLis*GaveLastYe logReferr*GaveLastYe logTotalG*GaveLastYe logAmtLastYear*Woman Age*logAmtLastYear logSalary*logAmtLast logAmtLast*Education logAmtLastYear*City City*seniority_1 logReferr*seniority_ logTotalG*seniority_

Note: The p-values for parameters and effects are not adjusted for the fact that the terms in the model have been selected and so are generally liberal.

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	124	83469157	673138	14.01	<.0001
Error	111968	5381401158	48062		
Corrected Total	112092	5464870315			

Root MSE	219.23037
Dependent Mean	62.75548
R-Square	0.0153
Adj R-Sq	0.0142
AIC	1320610
AICC	1320610
SBC	1209718
ASE (Train)	48008
ASE (Validate)	60678

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	-173.672702	25.846824	-6.72	<.0001
Age*Woman 1	1	2.168159	0.361826	5.99	<.0001
Age*Woman 0	1	3.277897	0.365129	8.98	<.0001
logSalary*Woman 1	1	28.749188	1.950431	14.74	<.0001
logSalary*Woman 0	1	19.696974	1.936890	10.17	<.0001
Age*logSalary	1	-0.277839	0.030094	-9.23	<.0001
Age*Education High School	1	-0.191805	0.214762	-0.89	0.3718
Age*Education University / College	1	-0.308593	0.212263	-1.45	0.1460
Age*Education Elementary	0	0	.	.	.
Woman*City 1 Downtown	1	-8.748840	14.355001	-0.61	0.5422
Woman*City 1 Rural	1	-21.847320	14.801944	-1.48	0.1400
Woman*City 1 Suburban	1	-13.786177	13.864020	-0.99	0.3200
Woman*City 1 City	1	-21.825253	12.262522	-1.78	0.0751
Woman*City 0 Downtown	1	14.606838	7.747393	1.89	0.0594
Woman*City 0 Rural	1	4.046469	8.606803	0.47	0.6383
Woman*City 0 Suburban	1	8.065944	6.820100	1.18	0.2369
Woman*City 0 City	0	0	.	.	.
Woman*SeniorList_1 1 1,3	1	27.442838	20.730289	1.32	0.1856
Woman*SeniorList_1 1 2	1	7.050907	27.744875	0.25	0.7994
Woman*SeniorList_1 1 6-8	1	27.712450	23.971711	1.16	0.2477
Woman*SeniorList_1 1 9-1	1	3.274038	27.030996	0.12	0.9036
Woman*SeniorList_1 1 0	0	0	.	.	.
Woman*SeniorList_1 0 1,3	1	32.204820	20.973008	1.54	0.1247
Woman*SeniorList_1 0 2	1	11.463592	28.082527	0.41	0.6831
Woman*SeniorList_1 0 6-8	1	37.678018	24.229513	1.56	0.1199
Woman*SeniorList_1 0 9-1	1	19.220150	27.312471	0.70	0.4816
Woman*SeniorList_1 0 0	0	0	.	.	.
logSalary*SeniorList 1,3	1	-4.348238	1.739944	-2.50	0.0125
logSalary*SeniorList 2	1	-1.913954	2.320748	-0.82	0.4095
logSalary*SeniorList 6-8	1	-5.167895	2.000186	-2.58	0.0098
logSalary*SeniorList 9-1	1	-2.680951	2.257997	-1.19	0.2351
logSalary*SeniorList 0	0	0	.	.	.
Education*SeniorList High School 1,3	1	8.743196	14.107364	0.62	0.5354
Education*SeniorList High School 2	1	7.220555	17.852772	0.40	0.6859
Education*SeniorList High School 6-8	1	10.106181	15.554986	0.65	0.5159
Education*SeniorList High School 9-1	1	7.645305	16.913126	0.45	0.6512
Education*SeniorList High School 0	1	1.265810	14.883166	0.09	0.9322

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > |t|
Education*SeniorList University / College 1,3	1	21.509256	13.901933	1.55	0.1218
Education*SeniorList University / College 2	1	18.553192	17.559809	1.06	0.2907
Education*SeniorList University / College 6-8	1	21.455739	15.311195	1.40	0.1611
Education*SeniorList University / College 9-1	1	18.890923	16.642757	1.14	0.2563
Education*SeniorList University / College 0	1	10.866094	14.642412	0.74	0.4580
Education*SeniorList Elementary 1,3	0	0	.	.	.
Education*SeniorList Elementary 2	0	0	.	.	.
Education*SeniorList Elementary 6-8	0	0	.	.	.
Education*SeniorList Elementary 9-1	0	0	.	.	.
Education*SeniorList Elementary 0	0	0	.	.	.
Woman*NbActivities_1 1 1	1	-26.181309	16.134230	-1.62	0.1047
Woman*NbActivities_1 1 2	1	-31.753519	20.905143	-1.52	0.1288
Woman*NbActivities_1 1 3	1	-13.195662	27.403714	-0.48	0.6301
Woman*NbActivities_1 1 >=4	1	-47.488138	29.845107	-1.59	0.1116
Woman*NbActivities_1 1 0	0	0	.	.	.
Woman*NbActivities_1 0 1	1	-31.318901	16.308369	-1.92	0.0548
Woman*NbActivities_1 0 2	1	-40.383924	21.158445	-1.91	0.0563
Woman*NbActivities_1 0 3	1	-19.160592	27.700584	-0.69	0.4891
Woman*NbActivities_1 0 >=4	1	-53.966564	30.112838	-1.79	0.0731
Woman*NbActivities_1 0 0	0	0	.	.	.
Age*NbActivities_1 1	1	-0.113263	0.091207	-1.24	0.2143
Age*NbActivities_1 2	1	-0.144068	0.120523	-1.20	0.2319
Age*NbActivities_1 3	1	-0.057287	0.159169	-0.36	0.7189
Age*NbActivities_1 >=4	1	-0.315005	0.171846	-1.83	0.0668
Age*NbActivities_1 0	0	0	.	.	.
logSalary*NbActiviti 1	1	3.825582	1.497944	2.55	0.0107
logSalary*NbActiviti 2	1	4.761132	1.938262	2.46	0.0140
logSalary*NbActiviti 3	1	1.903399	2.543104	0.75	0.4542
logSalary*NbActiviti >=4	1	6.808869	2.756968	2.47	0.0135
logSalary*NbActiviti 0	0	0	.	.	.
logReferrals*Woman 1	1	11.824218	10.063158	1.18	0.2400
logReferrals*Woman 0	1	10.333549	10.067020	1.03	0.3047
Age*logReferrals	1	-0.055157	0.074696	-0.74	0.4603
logReferra*Education High School	1	-1.855252	8.407887	-0.22	0.8254
logReferra*Education University / College	1	-3.652867	8.244703	-0.44	0.6577
logReferra*Education Elementary	0	0	.	.	.
logTotalGift*Woman 1	1	-5.984481	4.234579	-1.41	0.1576
logTotalGift*Woman 0	1	-6.657571	4.272978	-1.56	0.1192
logSalary*logTotalGi	1	0.731422	0.330924	2.21	0.0271
logTotalGift*City Downtown	1	-0.218340	1.834104	-0.12	0.9052
logTotalGift*City Rural	1	-1.515422	2.082783	-0.73	0.4669
logTotalGift*City Suburban	1	-0.983468	1.596007	-0.62	0.5378
logTotalGift*City City	0	0	.	.	.
logTotalG*SeniorList 1,3	1	-0.710571	1.170455	-0.61	0.5438
logTotalG*SeniorList 2	1	0.644859	1.750148	0.37	0.7125
logTotalG*SeniorList 6-8	1	0.684892	1.104357	0.62	0.5351
logTotalG*SeniorList 9-1	0	0	.	.	.
logTotalG*SeniorList 0	0	0	.	.	.
Age*Contact 1	1	0.070888	0.082986	0.85	0.3930
Age*Contact 0	0	0	.	.	.
logSalary*Contact 1	1	-1.154659	1.286766	-0.90	0.3695
logSalary*Contact 0	0	0	.	.	.
Education*Contact High School 1	1	12.672402	13.762198	0.92	0.3572
Education*Contact High School 0	0	0	.	.	.

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > |t|
Education*Contact University / College 1	1	13.933757	14.133862	0.99	0.3242
Education*Contact University / College 0	0	0	.	.	.
Education*Contact Elementary 1	1	12.732967	15.719125	0.81	0.4179
Education*Contact Elementary 0	0	0	.	.	.
City*Contact Downtown 1	1	-8.870486	4.549758	-1.95	0.0512
City*Contact Downtown 0	0	0	.	.	.
City*Contact Rural 1	1	-10.661846	4.486960	-2.38	0.0175
City*Contact Rural 0	0	0	.	.	.
City*Contact Suburban 1	1	-8.016767	3.845062	-2.08	0.0371
City*Contact Suburban 0	0	0	.	.	.
City*Contact City 1	0	0	.	.	.
City*Contact City 0	0	0	.	.	.
logReferrals*Contact 1	1	4.318203	2.919243	1.48	0.1391
logReferrals*Contact 0	0	0	.	.	.
Age*GaveLastYear 1	1	0.231591	0.315580	0.73	0.4630
Age*GaveLastYear 0	0	0	.	.	.
logSalary*GaveLastYe 1	1	-11.029335	5.152710	-2.14	0.0323
logSalary*GaveLastYe 0	0	0	.	.	.
Education*GaveLastYe High School 1	1	98.212854	56.269894	1.75	0.0809
Education*GaveLastYe High School 0	0	0	.	.	.
Education*GaveLastYe University / College 1	1	100.623724	57.739673	1.74	0.0814
Education*GaveLastYe University / College 0	0	0	.	.	.
Education*GaveLastYe Elementary 1	1	99.480216	66.378861	1.50	0.1340
Education*GaveLastYe Elementary 0	0	0	.	.	.
SeniorLis*GaveLastYe 1,3 1	1	6.401211	5.517541	1.16	0.2460
SeniorLis*GaveLastYe 1,3 0	0	0	.	.	.
SeniorLis*GaveLastYe 2 1	1	-2.001293	7.194552	-0.28	0.7809
SeniorLis*GaveLastYe 2 0	0	0	.	.	.
SeniorLis*GaveLastYe 6-8 1	1	1.027798	6.550741	0.16	0.8753
SeniorLis*GaveLastYe 6-8 0	0	0	.	.	.
SeniorLis*GaveLastYe 9-1 1	1	9.981158	7.313464	1.36	0.1723
SeniorLis*GaveLastYe 9-1 0	0	0	.	.	.
SeniorLis*GaveLastYe 0 1	0	0	.	.	.
SeniorLis*GaveLastYe 0 0	0	0	.	.	.
logReferr*GaveLastYe 1	1	-7.817310	3.633663	-2.15	0.0315
logReferr*GaveLastYe 0	0	0	.	.	.
logTotalG*GaveLastYe 1	1	-1.384506	1.909146	-0.73	0.4683
logTotalG*GaveLastYe 0	0	0	.	.	.
logAmtLastYear*Woman 1	1	-27.097714	18.922015	-1.43	0.1521
logAmtLastYear*Woman 0	1	-28.347805	18.940304	-1.50	0.1345
Age*logAmtLastYear	1	-0.094566	0.088226	-1.07	0.2838
logSalary*logAmtLast	1	3.265570	1.494009	2.19	0.0288
logAmtLast*Education High School	1	2.090424	11.007735	0.19	0.8494
logAmtLast*Education University / College	1	1.403071	10.856301	0.13	0.8972
logAmtLast*Education Elementary	0	0	.	.	.
logAmtLastYear*City Downtown	1	-1.930079	1.555599	-1.24	0.2147
logAmtLastYear*City Rural	1	-2.117288	1.811704	-1.17	0.2425
logAmtLastYear*City Suburban	1	-0.310291	1.371804	-0.23	0.8211
logAmtLastYear*City City	0	0	.	.	.
City*seniority_1 Downtown 1	1	-10.518928	14.539348	-0.72	0.4694
City*seniority_1 Downtown 2	1	-0.536059	14.769349	-0.04	0.9710
City*seniority_1 Downtown 3-6	1	-13.061283	10.649302	-1.23	0.2200
City*seniority_1 Downtown 8-10	1	-22.882908	14.703474	-1.56	0.1196
City*seniority_1 Downtown 99	1	-8.934725	10.263980	-0.87	0.3840

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > |t|
City*seniority_1 Downtown 0,7	0	0	.	.	.
City*seniority_1 Rural 1	1	-3.529904	15.003402	-0.24	0.8140
City*seniority_1 Rural 2	1	-6.669113	15.066007	-0.44	0.6580
City*seniority_1 Rural 3-6	1	-8.598493	10.881856	-0.79	0.4294
City*seniority_1 Rural 8-10	1	-20.221741	15.024662	-1.35	0.1783
City*seniority_1 Rural 99	1	-5.083094	10.490199	-0.48	0.6280
City*seniority_1 Rural 0,7	0	0	.	.	.
City*seniority_1 Suburban 1	1	-11.910740	13.690089	-0.87	0.3843
City*seniority_1 Suburban 2	1	-4.994346	13.790154	-0.36	0.7172
City*seniority_1 Suburban 3-6	1	-4.143603	9.741477	-0.43	0.6706
City*seniority_1 Suburban 8-10	1	-10.961655	13.685669	-0.80	0.4232
City*seniority_1 Suburban 99	1	-4.261753	9.342848	-0.46	0.6483
City*seniority_1 Suburban 0,7	0	0	.	.	.
City*seniority_1 City 1	1	2.279397	13.563452	0.17	0.8665
City*seniority_1 City 2	1	4.908521	13.632364	0.36	0.7188
City*seniority_1 City 3-6	1	-3.984213	9.617369	-0.41	0.6787
City*seniority_1 City 8-10	1	-6.665774	13.690028	-0.49	0.6263
City*seniority_1 City 99	1	5.745563	9.291658	0.62	0.5363
City*seniority_1 City 0,7	0	0	.	.	.
logReferr*seniority_ 1	1	1.971003	6.883533	0.29	0.7746
logReferr*seniority_ 2	1	6.755538	6.711737	1.01	0.3142
logReferr*seniority_ 3-6	1	-1.114720	4.847167	-0.23	0.8181
logReferr*seniority_ 8-10	1	-7.683543	5.673043	-1.35	0.1756
logReferr*seniority_ 99	1	5.033698	5.315164	0.95	0.3436
logReferr*seniority_ 0,7	0	0	.	.	.
logTotalG*seniority_ 1	1	1.741791	3.383001	0.51	0.6066
logTotalG*seniority_ 2	1	-0.619122	3.231899	-0.19	0.8481
logTotalG*seniority_ 3-6	1	2.046948	2.117510	0.97	0.3337
logTotalG*seniority_ 8-10	1	5.571345	2.806823	1.98	0.0472
logTotalG*seniority_ 99	0	0	.	.	.
logTotalG*seniority_ 0,7	0	0	.	.	.

Determine P-Value for Entry and Retention

The PLM Procedure

Store Information	
Item Store	WORK.LINEAR_MODEL
Data Set Created From	WORK.TRAIN
Created By	PROC GLMSELECT
Date Created	14NOV21:01:29:17
Response Variable	AmtThisYear
Class Variables	Woman Education City SeniorList_1 Contact GaveLastYear NbActivities_1 seniority_1
Model Effects	Intercept Age*Woman logSalary*Woman Age*logSalary Age*Education Woman*City Woman*SeniorList_1 ...

Determine P-Value for Entry and Retention

The PLM Procedure

Store Information	
Item Store	WORK.LINEAR_MODEL
Data Set Created From	WORK.TRAIN
Created By	PROC GLMSELECT

Store Information	
Date Created	14NOV21:01:29:17
Response Variable	AmtThisYear
Class Variables	Woman Education City SeniorList_1 Contact GaveLastYear NbActivities_1 seniority_1
Model Effects	Intercept Age*Woman logSalary*Woman Age*logSalary Age*Education Woman*City Woman*SeniorList_1 ...