

MEANS 프로 시저

grp_resp	grp_amt	관측값 수	변수	중위수
0	0	969	DONOR_AGE INCOME_GROUP WEALTH_RATING	64.0000000 4.0000000 5.0000000
	1	2325	DONOR_AGE INCOME_GROUP WEALTH_RATING	59.0000000 4.0000000 5.0000000
	2	3216	DONOR_AGE INCOME_GROUP WEALTH_RATING	57.0000000 4.0000000 6.0000000
1	0	1396	DONOR_AGE INCOME_GROUP WEALTH_RATING	65.0000000 4.0000000 5.0000000
	1	2557	DONOR_AGE INCOME_GROUP WEALTH_RATING	58.0000000 4.0000000 5.0000000
	2	2394	DONOR_AGE INCOME_GROUP WEALTH_RATING	57.0000000 4.0000000 6.0000000
2	0	4244	DONOR_AGE INCOME_GROUP WEALTH_RATING	63.0000000 4.0000000 5.0000000
	1	1430	DONOR_AGE INCOME_GROUP WEALTH_RATING	61.0000000 4.0000000 5.0000000
	2	841	DONOR_AGE INCOME_GROUP WEALTH_RATING	59.0000000 4.0000000 6.0000000

The CLUSTER Procedure
Ward's Minimum Variance Cluster Analysis

Eigenvalues of the Covariance Matrix				
	Eigenvalue	Difference	Proportion	Cumulative
1	0.00108418		1.0000	1.0000

Root-Mean-Square Total-Sample Standard Deviation	0.032927
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Root-Mean-Square Distance Between Observations	0.046566
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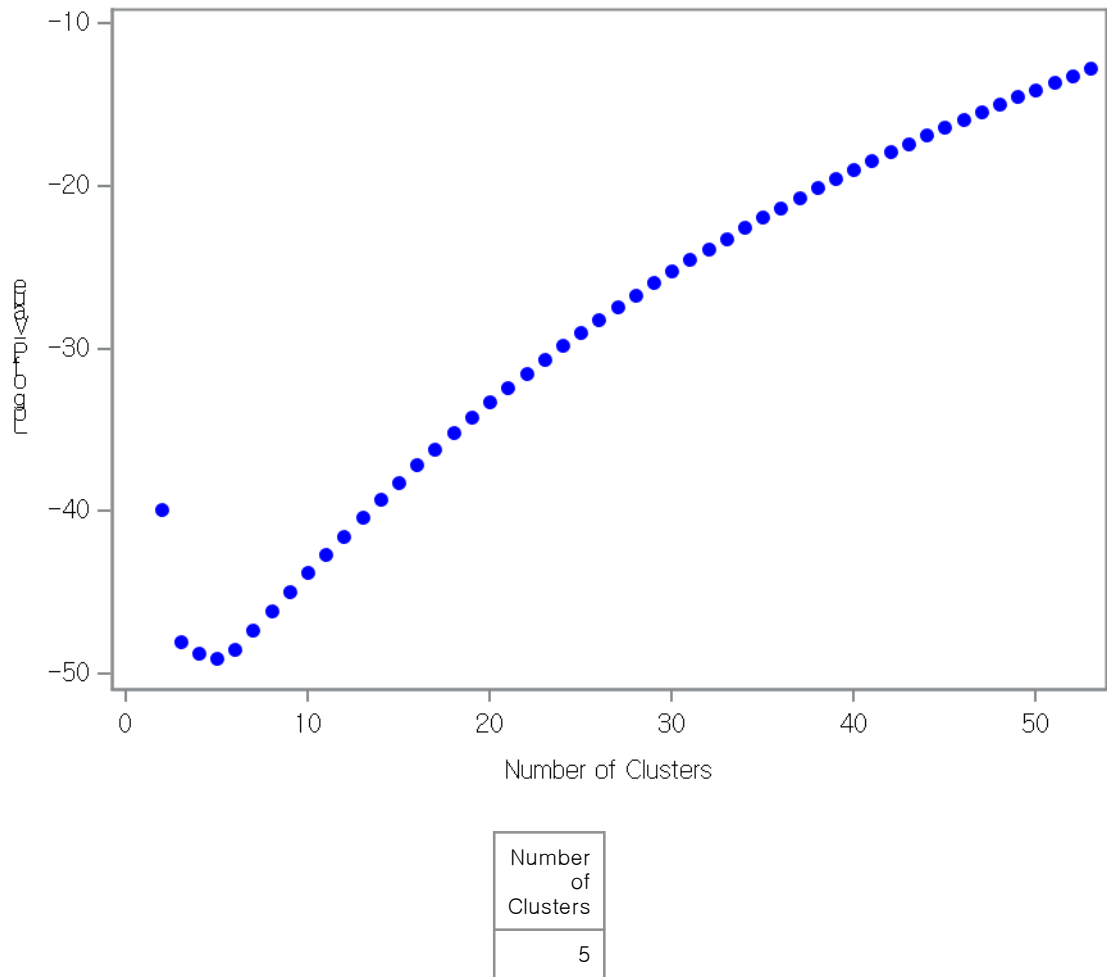
Cluster History						
Number of Clusters	Clusters Joined		Freq	Semipartial R-Square	R-Square	Tie
53	16	38	624	0.0000	1.00	T
52	09	43	621	0.0000	1.00	
51	23	39	805	0.0000	1.00	
50	03	40	1130	0.0000	1.00	
49	07	34	468	0.0000	1.00	
48	27	31	915	0.0000	1.00	
47	49	51	1135	0.0000	1.00	
46	18	24	1414	0.0000	1.00	
45	06	10	510	0.0000	1.00	
44	21	30	872	0.0000	1.00	
43	CL49	33	577	0.0000	1.00	
42	01	14	693	0.0000	1.00	
41	22	36	967	0.0000	1.00	
40	05	29	369	0.0000	1.00	
39	45	52	542	0.0000	1.00	
38	CL45	32	662	0.0000	1.00	
37	04	48	293	0.0000	1.00	
36	08	37	582	0.0000	1.00	
35	12	26	833	0.0000	1.00	
34	15	25	496	0.0000	1.00	
33	CL53	CL46	2038	0.0000	1.00	
32	19	42	382	0.0000	1.00	
31	CL50	46	1499	0.0000	1.00	
30	CL52	50	777	0.0000	1.00	
29	41	44	814	0.0000	1.00	
28	02	11	864	0.0000	1.00	
27	CL36	CL44	1454	0.0000	1.00	
26	CL40	CL34	865	0.0000	1.00	
25	13	20	896	0.0000	1.00	
24	CL39	CL47	1677	0.0000	1.00	
23	CL32	CL41	1349	0.0001	1.00	
22	CL42	35	1420	0.0001	1.00	

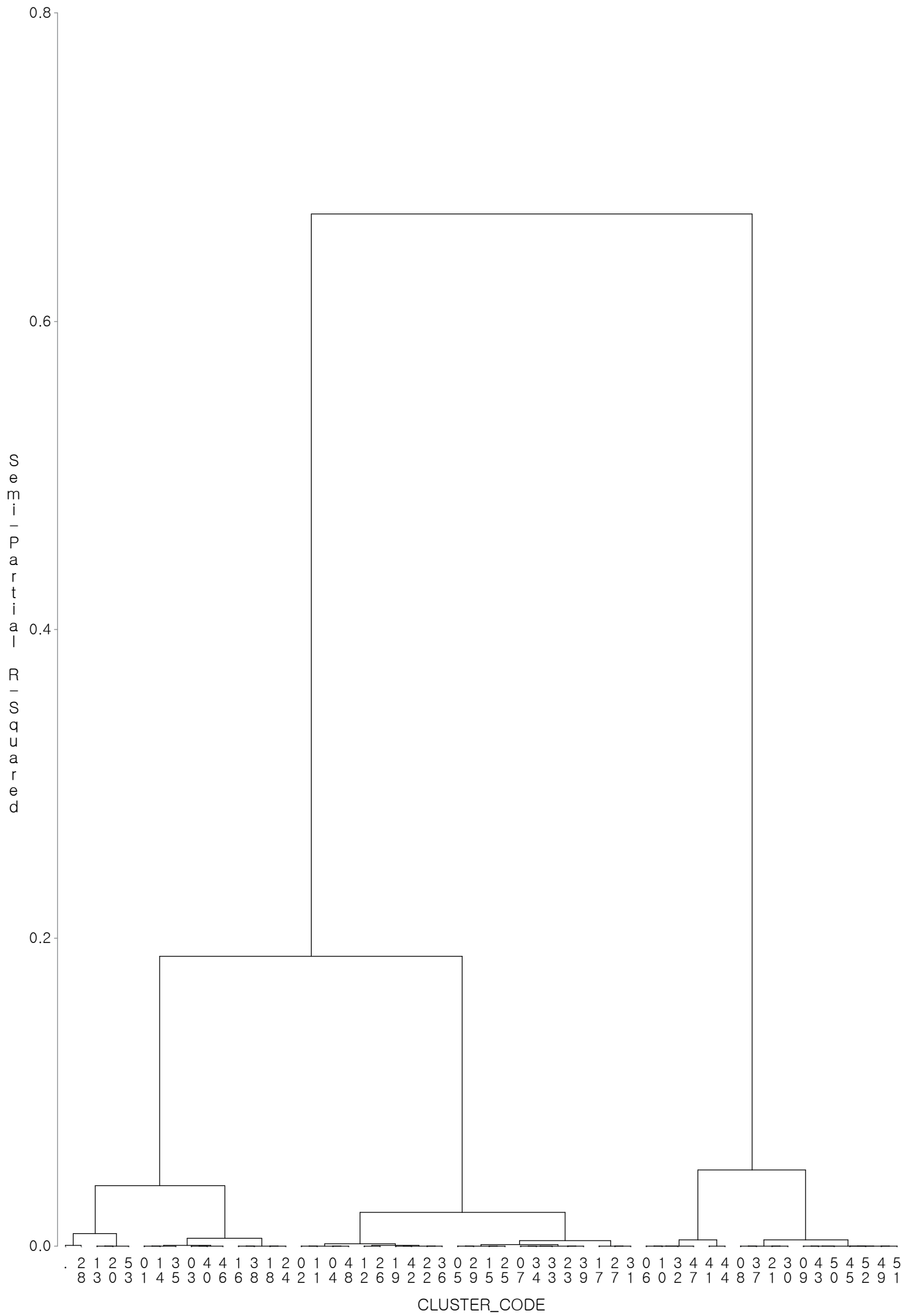
The CLUSTER Procedure
Ward's Minimum Variance Cluster Analysis

Cluster History						
Number of Clusters	Clusters Joined		Freq	Semipartial R-Square	R-Square	Tie
21	17	CL48	1264	0.0001	.999	
20	CL43	CL51	1382	0.0002	.999	
19	CL25	53	1199	0.0002	.999	
18	CL38	47	847	0.0002	.999	
17	CL28	CL37	1157	0.0002	.999	
16	CL30	CL24	2454	0.0004	.998	
15	CL35	CL23	2182	0.0005	.998	
14	CL22	CL31	2919	0.0006	.997	
13	.	28	797	0.0008	.996	
12	CL26	CL20	2247	0.0010	.995	
11	CL17	CL15	3339	0.0015	.994	
10	CL12	CL21	3511	0.0038	.990	
9	CL27	CL16	3908	0.0040	.986	
8	CL18	CL29	1661	0.0042	.982	
7	CL14	CL33	4957	0.0052	.977	
6	CL13	CL19	1996	0.0081	.969	
5	CL11	CL10	6850	0.0218	.947	
4	CL6	CL7	6953	0.0394	.907	
3	CL8	CL9	5569	0.0494	.858	
2	CL4	CL5	13803	0.1881	.670	
1	CL2	CL3	19372	0.6698	.000	

Detailed description of the dendrogram: The dendrogram illustrates the hierarchical clustering of 51 samples. The x-axis, labeled 'R-Squared', ranges from 1.0 on the left to 0.0 on the right. The y-axis lists the sample IDs. The tree structure shows that the samples are grouped into two primary clusters that merge at an R-Squared value of approximately 0.65. The left primary cluster is formed by merging a group of samples (including 51, 45, 46, 33, 30, 31, 32, 34, 35, 36, 37, 38, 41, 44, 47, 48, 49, 50) at R-Squared ≈ 0.9 and a group of samples (including 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29) at R-Squared ≈ 0.7. The right primary cluster is formed by merging a group of samples (including 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100) at R-Squared ≈ 0.9 and a group of samples (including 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200) at R-Squared ≈ 0.7.

Plot of the Log of the P-Value by Number of Clusters





CL5	23	3
	39	3
	07	3
	34	3
	27	3
	31	3
	33	3
	22	3
	36	3
	05	3
	29	3
	04	3
	48	3
	12	3
	26	3
	15	3
	25	3
	19	3
	42	3
	02	3
	11	3
	17	3

CLUSNAME	CLUSTER_CODE	CLUSTER
CL6	13	5
	20	5
	53	5
	.	5
	28	5

CLUSNAME	CLUSTER_CODE	CLUSTER
CL7	16	1
	38	1
	03	1
	40	1
	18	1
	24	1
	01	1
	14	1

Cluster Assignments

CLUSNAME	CLUSTER_CODE	CLUSTER
CL7	46	1
	35	1

CLUSNAME	CLUSTER_CODE	CLUSTER
CL8	06	4
	10	4
	32	4
	41	4
	44	4
	47	4

CLUSNAME	CLUSTER_CODE	CLUSTER
CL9	09	2
	43	2
	49	2
	51	2
	21	2
	30	2
	45	2
	52	2
	08	2
	37	2
	50	2

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Observations	19372	Proportion	0
Variables	56	Maxeigen	0.7

Clustering algorithm converged.

Cluster Summary for 1 Cluster					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	56	56	7.864678	0.1404	5.5681

Total variation explained = 7.864678 Proportion = 0.1404

Cluster 1 will be split because it has the largest second eigenvalue, 5.568126, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 2 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	26	26	6.729063	0.2588	2.4245
2	30	30	5.69118	0.1897	4.2127

Total variation explained = 12.42024 Proportion = 0.2218

2 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.7747	0.0160	0.2289
	DONOR_AGE	0.0579	0.0094	0.9510
	IN_HOUSE	0.1235	0.0019	0.8783
	PUBLISHED_PHONE	0.0044	0.0001	0.9957
	MOR_HIT_RATE	0.0100	0.0008	0.9908
	PCT_MALE_MILITARY	0.0024	0.0000	0.9976
	PCT_VIETNAM_VETERANS	0.0047	0.0023	0.9976
	PCT_WWII_VETERANS	0.0021	0.0002	0.9980
	PEP_STAR	0.4542	0.1177	0.6187
	RECENT_STAR_STATUS	0.1484	0.0002	0.8517
	LIFETIME_CARD_PROM	0.9007	0.0199	0.1013
	LIFETIME_PROM	0.9300	0.0095	0.0707
	LIFETIME_GIFT_AMOUNT	0.5003	0.0317	0.5160
	LIFETIME_GIFT_COUNT	0.7280	0.1342	0.3141
	CARD_PROM_12	0.1557	0.0081	0.8511
	NUMBER_PROM_12	0.2005	0.0003	0.7997
	MONTHS_SINCE_LAST_GIFT	0.0414	0.0239	0.9821
	MONTHS_SINCE_FIRST_GIFT	0.7922	0.0170	0.2114
	STATUS_FL	0.1842	0.0325	0.8432

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

2 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	STATUS_ES	0.1955	0.1282	0.9228
	nses_	0.0081	0.0000	0.9920
	nurbu	0.0019	0.0008	0.9989
	nurb_	0.0081	0.0000	0.9920
	mi_DONOR_AGE	0.0152	0.0032	0.9879
	mi_INCOME_GROUP	0.0011	0.0005	0.9995
	mi_WEALTH_RATING	0.4838	0.0000	0.5162
Cluster 2	INCOME_GROUP	0.0822	0.0066	0.9239
	WEALTH_RATING	0.1261	0.0113	0.8839
	MEDIAN_HOME_VALUE	0.1472	0.0010	0.8537
	MEDIAN_HOUSEHOLD_INCOME	0.1788	0.0008	0.8219
	PCT_OWNER_OCCUPIED	0.0098	0.0014	0.9916
	PER_CAPITA_INCOME	0.1717	0.0001	0.8284
	PCT_MALE_VETERANS	0.0004	0.0001	0.9997
	FREQUENCY_STATUS_97NK	0.3756	0.0431	0.6525
	RECENT_RESPONSE_PROP	0.3497	0.0019	0.6516
	RECENT_AVG_GIFT_AMT	0.5998	0.0035	0.4016
	RECENT_CARD_RESPONSE_PROP	0.1961	0.0070	0.8095
	RECENT_AVG_CARD_GIFT_AMT	0.2091	0.0006	0.7914
	RECENT_RESPONSE_COUNT	0.3912	0.1421	0.7096
	RECENT_CARD_RESPONSE_COUNT	0.3009	0.0792	0.7593
	LIFETIME_AVG_GIFT_AMT	0.6040	0.0477	0.4158
	LIFETIME_GIFT_RANGE	0.1960	0.0880	0.8816
	LIFETIME_MAX_GIFT_AMT	0.4723	0.0036	0.5296
	LIFETIME_MIN_GIFT_AMT	0.3019	0.1959	0.8682
	LAST_GIFT_AMT	0.5806	0.0058	0.4218
	home01	0.0111	0.0001	0.9890
	nses1	0.1306	0.0019	0.8710
	nses3	0.0519	0.0000	0.9481
	nses4	0.0029	0.0006	0.9977
	nurbr	0.0456	0.0015	0.9558
	nurbs	0.0452	0.0021	0.9569
	nurbt	0.0006	0.0001	0.9995
	ClusCdGrp1	0.0071	0.0002	0.9931
	ClusCdGrp2	0.0318	0.0004	0.9685
	ClusCdGrp3	0.0118	0.0006	0.9888
	ClusCdGrp4	0.0592	0.0003	0.9411

Cluster 2 will be split because it has the largest second eigenvalue, 4.212711, which is greater than the MAXEIGEN=0.7 value.

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Clustering algorithm converged.

Cluster Summary for 3 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	26	26	6.729063	0.2588	2.4245
2	13	13	5.389252	0.4146	3.0137
3	17	17	4.477656	0.2634	1.7640

Total variation explained = 16.59597 Proportion = 0.2964

3 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.7747	0.0127	0.2282
	DONOR_AGE	0.0579	0.0065	0.9482
	IN_HOUSE	0.1235	0.0017	0.8780
	PUBLISHED_PHONE	0.0044	0.0016	0.9972
	MOR_HIT_RATE	0.0100	0.0037	0.9936
	PCT_MALE_MILITARY	0.0024	0.0003	0.9978
	PCT_VIETNAM_VETERANS	0.0047	0.0121	1.0075
	PCT_WWII_VETERANS	0.0021	0.0001	0.9980
	PEP_STAR	0.4542	0.1310	0.6282
	RECENT_STAR_STATUS	0.1484	0.0011	0.8525
	LIFETIME_CARD_PROM	0.9007	0.0187	0.1012
	LIFETIME_PROM	0.9300	0.0086	0.0706
	LIFETIME_GIFT_AMOUNT	0.5003	0.0370	0.5189
	LIFETIME_GIFT_COUNT	0.7280	0.1439	0.3177
	CARD_PROM_12	0.1557	0.0121	0.8546
	NUMBER_PROM_12	0.2005	0.0002	0.7996
	MONTHS_SINCE_LAST_GIFT	0.0414	0.0310	0.9892
	MONTHS_SINCE_FIRST_GIFT	0.7922	0.0138	0.2107
	STATUS_FL	0.1842	0.0381	0.8481
	STATUS_ES	0.1955	0.1497	0.9461
	nses_	0.0081	0.0003	0.9922
	nurbu	0.0019	0.0007	0.9988
	nurb_	0.0081	0.0003	0.9922
	mi_DONOR_AGE	0.0152	0.0091	0.9938
	mi_INCOME_GROUP	0.0011	0.0016	1.0006
	mi_WEALTH_RATING	0.4838	0.0001	0.5163
Cluster 2	FREQUENCY_STATUS_97NK	0.4599	0.0431	0.5644
	RECENT_RESPONSE_PROP	0.4379	0.0042	0.5644
	RECENT_AVG_GIFT_AMT	0.6796	0.0141	0.3250
	RECENT_CARD_RESPONSE_PROP	0.2680	0.0070	0.7371

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

3 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	RECENT_AVG_CARD_GIFT_AMT	0.2190	0.0084	0.7876
	RECENT_RESPONSE_COUNT	0.4830	0.1421	0.6027
	RECENT_CARD_RESPONSE_COUNT	0.3960	0.0792	0.6560
	LIFETIME_AVG_GIFT_AMT	0.6719	0.0477	0.3445
	LIFETIME_GIFT_RANGE	0.2351	0.0880	0.8386
	LIFETIME_MAX_GIFT_AMT	0.5469	0.0075	0.4565
	LIFETIME_MIN_GIFT_AMT	0.3307	0.1959	0.8324
	LAST_GIFT_AMT	0.6605	0.0130	0.3440
	nurbt	0.0007	0.0001	0.9994
Cluster 3	INCOME_GROUP	0.2477	0.0097	0.7597
	WEALTH_RATING	0.3689	0.0161	0.6414
	MEDIAN_HOME_VALUE	0.5205	0.0120	0.4853
	MEDIAN_HOUSEHOLD_INCOME	0.7491	0.0094	0.2533
	PCT_OWNER_OCCUPIED	0.0873	0.0014	0.9140
	PER_CAPITA_INCOME	0.6606	0.0117	0.3434
	PCT_MALE_VETERANS	0.0147	0.0004	0.9856
	home01	0.0464	0.0007	0.9543
	nses1	0.5324	0.0073	0.4710
	nses3	0.2511	0.0016	0.7501
	nses4	0.0288	0.0006	0.9718
	nurbr	0.1992	0.0019	0.8023
	nurbs	0.2051	0.0021	0.7965
	ClusCdGrp1	0.0364	0.0002	0.9638
	ClusCdGrp2	0.1751	0.0006	0.8254
	ClusCdGrp3	0.0813	0.0006	0.9193
	ClusCdGrp4	0.2731	0.0021	0.7284

Cluster 2 will be split because it has the largest second eigenvalue, 3.013748, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 4 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	26	26	6.729063	0.2588	2.4245
2	8	8	4.44914	0.5561	1.3505
3	17	17	4.477656	0.2634	1.7640
4	5	5	3.827122	0.7654	0.6010

Total variation explained = 19.48298 Proportion = 0.3479

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

4 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.7747	0.0187	0.2296
	DONOR_AGE	0.0579	0.0047	0.9466
	IN_HOUSE	0.1235	0.0064	0.8822
	PUBLISHED_PHONE	0.0044	0.0016	0.9972
	MOR_HIT_RATE	0.0100	0.0037	0.9936
	PCT_MALE_MILITARY	0.0024	0.0003	0.9978
	PCT_VIETNAM_VETERANS	0.0047	0.0121	1.0075
	PCT_WWII_VETERANS	0.0021	0.0004	0.9983
	PEP_STAR	0.4542	0.1387	0.6338
	RECENT_STAR_STATUS	0.1484	0.0097	0.8599
	LIFETIME_CARD_PROM	0.9007	0.0108	0.1004
	LIFETIME_PROM	0.9300	0.0072	0.0705
	LIFETIME_GIFT_AMOUNT	0.5003	0.1385	0.5800
	LIFETIME_GIFT_COUNT	0.7280	0.1731	0.3289
	CARD_PROM_12	0.1557	0.0556	0.8940
	NUMBER_PROM_12	0.2005	0.0161	0.8126
	MONTHS_SINCE_LAST_GIFT	0.0414	0.0670	1.0274
	MONTHS_SINCE_FIRST_GIFT	0.7922	0.0191	0.2119
	STATUS_FL	0.1842	0.0238	0.8357
	STATUS_ES	0.1955	0.2171	1.0275
	nses_	0.0081	0.0009	0.9929
	nurbu	0.0019	0.0006	0.9987
	nurb_	0.0081	0.0009	0.9929
	mi_DONOR_AGE	0.0152	0.0091	0.9938
	mi_INCOME_GROUP	0.0011	0.0017	1.0006
	mi_WEALTH_RATING	0.4838	0.0023	0.5174
Cluster 2	RECENT_AVG_GIFT_AMT	0.8095	0.1195	0.2163
	RECENT_AVG_CARD_GIFT_AMT	0.4626	0.0084	0.5419
	LIFETIME_AVG_GIFT_AMT	0.8354	0.0922	0.1813
	LIFETIME_GIFT_RANGE	0.3928	0.0880	0.6657
	LIFETIME_MAX_GIFT_AMT	0.7884	0.0457	0.2217
	LIFETIME_MIN_GIFT_AMT	0.3670	0.1959	0.7872
	LAST_GIFT_AMT	0.7926	0.1088	0.2327
	nurbt	0.0007	0.0001	0.9994
Cluster 3	INCOME_GROUP	0.2477	0.0078	0.7582
	WEALTH_RATING	0.3689	0.0174	0.6423
	MEDIAN_HOME_VALUE	0.5205	0.0135	0.4860
	MEDIAN_HOUSEHOLD_INCOME	0.7491	0.0102	0.2535
	PCT_OWNER_OCCUPIED	0.0873	0.0014	0.9140

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

4 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	PER_CAPITA_INCOME	0.6606	0.0141	0.3442
	PCT_MALE_VETERANS	0.0147	0.0004	0.9857
	home01	0.0464	0.0016	0.9551
	nses1	0.5324	0.0073	0.4711
	nses3	0.2511	0.0019	0.7504
	nses4	0.0288	0.0006	0.9718
	nurbr	0.1992	0.0018	0.8022
	nurbs	0.2051	0.0021	0.7965
	ClusCdGrp1	0.0364	0.0003	0.9638
	ClusCdGrp2	0.1751	0.0009	0.8257
	ClusCdGrp3	0.0813	0.0006	0.9193
	ClusCdGrp4	0.2731	0.0021	0.7284
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1114	0.3641
	RECENT_RESPONSE_PROP	0.8340	0.0676	0.1781
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0196	0.3472
	RECENT_RESPONSE_COUNT	0.8270	0.1421	0.2016
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.0792	0.1845

Cluster 1 will be split because it has the largest second eigenvalue, 2.424482, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 5 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	18	18	6.347711	0.3527	1.8005
2	8	8	4.44914	0.5561	1.3505
3	17	17	4.477656	0.2634	1.7640
4	5	5	3.827122	0.7654	0.6010
5	8	8	2.549634	0.3187	1.9619

Total variation explained = 21.65126 Proportion = 0.3866

5 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8403	0.0187	0.1627
	DONOR_AGE	0.0569	0.0071	0.9498
	PUBLISHED_PHONE	0.0053	0.0016	0.9963
	MOR_HIT_RATE	0.0089	0.0037	0.9948
	PCT_MALE_MILITARY	0.0020	0.0009	0.9989
	PEP_STAR	0.4753	0.1387	0.6092

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

5 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	RECENT_STAR_STATUS	0.1634	0.0097	0.8448
	LIFETIME_CARD_PROM	0.9101	0.0769	0.0974
	LIFETIME_PROM	0.8879	0.1684	0.1347
	LIFETIME_GIFT_AMOUNT	0.4702	0.1385	0.6150
	LIFETIME_GIFT_COUNT	0.7332	0.1731	0.3227
	MONTHS_SINCE_FIRST_GIFT	0.8545	0.0212	0.1486
	STATUS_FL	0.1940	0.0238	0.8256
	STATUS_ES	0.2139	0.2171	1.0040
	nurbu	0.0021	0.0010	0.9989
	mi_DONOR_AGE	0.0164	0.0091	0.9927
	mi_INCOME_GROUP	0.0008	0.0017	1.0009
	mi_WEALTH_RATING	0.5124	0.0139	0.4944
Cluster 2	RECENT_AVG_GIFT_AMT	0.8095	0.1195	0.2163
	RECENT_AVG_CARD_GIFT_AMT	0.4626	0.0084	0.5419
	LIFETIME_AVG_GIFT_AMT	0.8354	0.0922	0.1813
	LIFETIME_GIFT_RANGE	0.3928	0.0767	0.6576
	LIFETIME_MAX_GIFT_AMT	0.7884	0.0457	0.2217
	LIFETIME_MIN_GIFT_AMT	0.3670	0.2054	0.7967
	LAST_GIFT_AMT	0.7926	0.1088	0.2327
	nurbt	0.0007	0.0039	1.0032
Cluster 3	INCOME_GROUP	0.2477	0.0078	0.7582
	WEALTH_RATING	0.3689	0.0174	0.6423
	MEDIAN_HOME_VALUE	0.5205	0.0135	0.4860
	MEDIAN_HOUSEHOLD_INCOME	0.7491	0.0102	0.2535
	PCT_OWNER_OCCUPIED	0.0873	0.0016	0.9142
	PER_CAPITA_INCOME	0.6606	0.0141	0.3442
	PCT_MALE_VETERANS	0.0147	0.0683	1.0575
	home01	0.0464	0.0016	0.9551
	nses1	0.5324	0.0073	0.4711
	nses3	0.2511	0.0019	0.7504
	nses4	0.0288	0.0006	0.9718
	nurbr	0.1992	0.0029	0.8031
	nurbs	0.2051	0.0040	0.7980
	ClusCdGrp1	0.0364	0.0006	0.9641
	ClusCdGrp2	0.1751	0.0047	0.8288
	ClusCdGrp3	0.0813	0.0014	0.9200
	ClusCdGrp4	0.2731	0.0026	0.7288
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1114	0.3641
	RECENT_RESPONSE_PROP	0.8340	0.0676	0.1781

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

5 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0196	0.3472
	RECENT_RESPONSE_COUNT	0.8270	0.1276	0.1983
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.0702	0.1828
Cluster 5	IN_HOUSE	0.3837	0.0619	0.6570
	PCT_VIETNAM_VETERANS	0.0667	0.0121	0.9448
	PCT_WWII_VETERANS	0.0253	0.0022	0.9769
	CARD_PROM_12	0.3038	0.0836	0.7597
	NUMBER_PROM_12	0.5644	0.0978	0.4828
	MONTHS_SINCE_LAST_GIFT	0.3215	0.0670	0.7273
	nres_	0.4422	0.0019	0.5589
	nurb_	0.4422	0.0019	0.5589

Cluster 5 will be split because it has the largest second eigenvalue, 1.961928, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 6 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	18	18	6.347711	0.3527	1.8005
2	8	8	4.44914	0.5561	1.3505
3	17	17	4.477656	0.2634	1.7640
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	4	4	2.175861	0.5440	1.4285

Total variation explained = 23.59943 Proportion = 0.4214

6 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8403	0.0237	0.1635
	DONOR_AGE	0.0569	0.0101	0.9527
	PUBLISHED_PHONE	0.0053	0.0017	0.9964
	MOR_HIT_RATE	0.0089	0.0046	0.9957
	PCT_MALE_MILITARY	0.0020	0.0005	0.9985
	PEP_STAR	0.4753	0.1387	0.6092
	RECENT_STAR_STATUS	0.1634	0.0097	0.8448
	LIFETIME_CARD_PROM	0.9101	0.1182	0.1020
	LIFETIME_PROM	0.8879	0.2459	0.1486
	LIFETIME_GIFT_AMOUNT	0.4702	0.1414	0.6171
	LIFETIME_GIFT_COUNT	0.7332	0.1731	0.3227

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

6 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	MONTHS_SINCE_FIRST_GIFT	0.8545	0.0284	0.1497
	STATUS_FL	0.1940	0.0238	0.8256
	STATUS_ES	0.2139	0.2171	1.0040
	nurbu	0.0021	0.0022	1.0002
	mi_DONOR_AGE	0.0164	0.0091	0.9927
	mi_INCOME_GROUP	0.0008	0.0017	1.0009
	mi_WEALTH_RATING	0.5124	0.0286	0.5019
Cluster 2	RECENT_AVG_GIFT_AMT	0.8095	0.1195	0.2163
	RECENT_AVG_CARD_GIFT_AMT	0.4626	0.0084	0.5419
	LIFETIME_AVG_GIFT_AMT	0.8354	0.0922	0.1813
	LIFETIME_GIFT_RANGE	0.3928	0.0767	0.6576
	LIFETIME_MAX_GIFT_AMT	0.7884	0.0457	0.2217
	LIFETIME_MIN_GIFT_AMT	0.3670	0.2054	0.7967
	LAST_GIFT_AMT	0.7926	0.1088	0.2327
	nurbt	0.0007	0.0063	1.0056
Cluster 3	INCOME_GROUP	0.2477	0.0078	0.7582
	WEALTH_RATING	0.3689	0.0174	0.6423
	MEDIAN_HOME_VALUE	0.5205	0.0135	0.4860
	MEDIAN_HOUSEHOLD_INCOME	0.7491	0.0102	0.2535
	PCT_OWNER_OCCUPIED	0.0873	0.0016	0.9142
	PER_CAPITA_INCOME	0.6606	0.0141	0.3442
	PCT_MALE_VETERANS	0.0147	0.1702	1.1874
	home01	0.0464	0.0023	0.9558
	nses1	0.5324	0.0133	0.4739
	nses3	0.2511	0.0027	0.7509
	nses4	0.0288	0.0006	0.9718
	nurbr	0.1992	0.0064	0.8059
	nurbs	0.2051	0.0074	0.8008
	ClusCdGrp1	0.0364	0.0024	0.9659
	ClusCdGrp2	0.1751	0.0104	0.8336
	ClusCdGrp3	0.0813	0.0011	0.9197
	ClusCdGrp4	0.2731	0.0050	0.7306
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1114	0.3641
	RECENT_RESPONSE_PROP	0.8340	0.0676	0.1781
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0196	0.3472
	RECENT_RESPONSE_COUNT	0.8270	0.1276	0.1983
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.0702	0.1828
Cluster 5	IN_HOUSE	0.4666	0.0619	0.5686
	CARD_PROM_12	0.5231	0.0836	0.5204

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

6 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	NUMBER_PROM_12	0.8466	0.0978	0.1701
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	PCT_VIETNAM_VETERANS	0.1303	0.0121	0.8803
	PCT_WWII_VETERANS	0.0856	0.0022	0.9164
	nses_	0.9799	0.0168	0.0204
	nurb_	0.9799	0.0168	0.0204

Cluster 1 will be split because it has the largest second eigenvalue, 1.800516, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 7 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	13	13	6.321985	0.4863	1.0778
2	8	8	4.44914	0.5561	1.3505
3	17	17	4.477656	0.2634	1.7640
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	4	4	2.175861	0.5440	1.4285
7	5	5	1.794723	0.3589	1.0067

Total variation explained = 25.36842 Proportion = 0.4530

7 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8400	0.0237	0.1639
	DONOR_AGE	0.0568	0.0101	0.9528
	PCT_MALE_MILITARY	0.0020	0.0005	0.9985
	PEP_STAR	0.4775	0.1387	0.6066
	RECENT_STAR_STATUS	0.1635	0.0097	0.8447
	LIFETIME_CARD_PROM	0.9100	0.1182	0.1021
	LIFETIME_PROM	0.8881	0.2459	0.1484
	LIFETIME_GIFT_AMOUNT	0.4725	0.1414	0.6144
	LIFETIME_GIFT_COUNT	0.7370	0.1731	0.3181
	MONTHS_SINCE_FIRST_GIFT	0.8541	0.0284	0.1501
	STATUS_FL	0.1940	0.0238	0.8256
	STATUS_ES	0.2167	0.2171	1.0004
	mi_WEALTH_RATING	0.5097	0.0286	0.5047
Cluster 2	RECENT_AVG_GIFT_AMT	0.8095	0.1195	0.2163
	RECENT_AVG_CARD_GIFT_AMT	0.4626	0.0084	0.5419

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

7 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	LIFETIME_AVG_GIFT_AMT	0.8354	0.0922	0.1813
	LIFETIME_GIFT_RANGE	0.3928	0.0770	0.6578
	LIFETIME_MAX_GIFT_AMT	0.7884	0.0457	0.2217
	LIFETIME_MIN_GIFT_AMT	0.3670	0.2054	0.7967
	LAST_GIFT_AMT	0.7926	0.1088	0.2327
	nurbt	0.0007	0.0063	1.0056
Cluster 3	INCOME_GROUP	0.2477	0.0078	0.7582
	WEALTH_RATING	0.3689	0.0174	0.6423
	MEDIAN_HOME_VALUE	0.5205	0.0135	0.4860
	MEDIAN_HOUSEHOLD_INCOME	0.7491	0.0102	0.2535
	PCT_OWNER_OCCUPIED	0.0873	0.0128	0.9246
	PER_CAPITA_INCOME	0.6606	0.0141	0.3442
	PCT_MALE_VETERANS	0.0147	0.1702	1.1874
	home01	0.0464	0.2974	1.3573
	nses1	0.5324	0.0133	0.4739
	nses3	0.2511	0.0027	0.7509
	nses4	0.0288	0.0031	0.9742
	nurbr	0.1992	0.0064	0.8059
	nurbs	0.2051	0.0074	0.8008
	ClusCdGrp1	0.0364	0.0024	0.9659
	ClusCdGrp2	0.1751	0.0104	0.8336
	ClusCdGrp3	0.0813	0.0011	0.9197
	ClusCdGrp4	0.2731	0.0050	0.7306
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1114	0.3641
	RECENT_RESPONSE_PROP	0.8340	0.0676	0.1781
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0196	0.3472
	RECENT_RESPONSE_COUNT	0.8270	0.1291	0.1986
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.0712	0.1830
Cluster 5	IN_HOUSE	0.4666	0.0615	0.5683
	CARD_PROM_12	0.5231	0.0833	0.5202
	NUMBER_PROM_12	0.8466	0.0977	0.1701
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	PCT_VIETNAM_VETERANS	0.1303	0.0121	0.8803
	PCT_WWII_VETERANS	0.0856	0.0029	0.9170
	nses_	0.9799	0.0168	0.0204
	nurb_	0.9799	0.0168	0.0204
Cluster 7	PUBLISHED_PHONE	0.4302	0.0028	0.5714
	MOR_HIT_RATE	0.2388	0.0054	0.7653
	nurbu	0.0125	0.0022	0.9897

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

7 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	mi_DONOR_AGE	0.4728	0.0104	0.5328
	mi_INCOME_GROUP	0.6405	0.0017	0.3601

Cluster 3 will be split because it has the largest second eigenvalue, 1.763991, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 8 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	13	13	6.321985	0.4863	1.0778
2	8	8	4.44914	0.5561	1.3505
3	12	12	4.309162	0.3591	1.2860
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	4	4	2.175861	0.5440	1.4285
7	5	5	1.794723	0.3589	1.0067
8	5	5	1.679909	0.3360	1.1463

Total variation explained = 26.87984 Proportion = 0.4800

8 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8400	0.0237	0.1639
	DONOR_AGE	0.0568	0.0101	0.9528
	PCT_MALE_MILITARY	0.0020	0.0009	0.9989
	PEP_STAR	0.4775	0.1387	0.6066
	RECENT_STAR_STATUS	0.1635	0.0097	0.8447
	LIFETIME_CARD_PROM	0.9100	0.1182	0.1021
	LIFETIME_PROM	0.8881	0.2459	0.1484
	LIFETIME_GIFT_AMOUNT	0.4725	0.1414	0.6144
	LIFETIME_GIFT_COUNT	0.7370	0.1731	0.3181
	MONTHS_SINCE_FIRST_GIFT	0.8541	0.0284	0.1501
	STATUS_FL	0.1940	0.0238	0.8256
	STATUS_ES	0.2167	0.2171	1.0004
	mi_WEALTH_RATING	0.5097	0.0286	0.5047
	RECENT_AVG_GIFT_AMT	0.8095	0.1195	0.2163
Cluster 2	RECENT_AVG_CARD_GIFT_AMT	0.4626	0.0086	0.5420
	LIFETIME_AVG_GIFT_AMT	0.8354	0.0922	0.1813
	LIFETIME_GIFT_RANGE	0.3928	0.0770	0.6578
	LIFETIME_MAX_GIFT_AMT	0.7884	0.0457	0.2217

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

8 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	LIFETIME_MIN_GIFT_AMT	0.3670	0.2054	0.7967
	LAST_GIFT_AMT	0.7926	0.1088	0.2327
	nurbt	0.0007	0.0063	1.0056
Cluster 3	INCOME_GROUP	0.2491	0.0151	0.7625
	WEALTH_RATING	0.3705	0.0297	0.6487
	MEDIAN_HOME_VALUE	0.5430	0.0135	0.4632
	MEDIAN_HOUSEHOLD_INCOME	0.7205	0.0964	0.3093
	PER_CAPITA_INCOME	0.6513	0.0668	0.3737
	home01	0.0436	0.2974	1.3612
	nses1	0.5425	0.0342	0.4736
	nses3	0.2619	0.0083	0.7442
	nurbr	0.2348	0.0064	0.7701
	nurbs	0.1962	0.0305	0.8291
	ClusCdGrp2	0.1765	0.0213	0.8414
	ClusCdGrp4	0.3190	0.0050	0.6844
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1114	0.3641
	RECENT_RESPONSE_PROP	0.8340	0.0676	0.1781
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0196	0.3472
	RECENT_RESPONSE_COUNT	0.8270	0.1291	0.1986
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.0712	0.1830
Cluster 5	IN_HOUSE	0.4666	0.0615	0.5683
	CARD_PROM_12	0.5231	0.0833	0.5202
	NUMBER_PROM_12	0.8466	0.0977	0.1701
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	PCT_VIETNAM_VETERANS	0.1303	0.0114	0.8797
	PCT_WWII_VETERANS	0.0856	0.0522	0.9647
	nses_	0.9799	0.0168	0.0204
	nurb_	0.9799	0.0168	0.0204
Cluster 7	PUBLISHED_PHONE	0.4302	0.0061	0.5733
	MOR_HIT_RATE	0.2388	0.0054	0.7653
	nurbu	0.0125	0.1471	1.1578
	mi_DONOR_AGE	0.4728	0.0104	0.5328
	mi_INCOME_GROUP	0.6405	0.0038	0.3609
Cluster 8	PCT_OWNER_OCCUPIED	0.2820	0.0444	0.7513
	PCT_MALE_VETERANS	0.2785	0.1702	0.8695
	nses4	0.5326	0.0075	0.4710
	ClusCdGrp1	0.1077	0.0185	0.9091
	ClusCdGrp3	0.4791	0.0394	0.5423

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster 6 will be split because it has the largest second eigenvalue, 1.428525, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 9 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	13	13	6.321985	0.4863	1.0778
2	8	8	4.44914	0.5561	1.3505
3	12	12	4.309162	0.3591	1.2860
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	5	5	1.794723	0.3589	1.0067
8	5	5	1.679909	0.3360	1.1463
9	2	2	1.429265	0.7146	0.5707

Total variation explained = 28.13324 Proportion = 0.5024

9 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8400	0.0237	0.1639
	DONOR_AGE	0.0568	0.0177	0.9602
	PCT_MALE_MILITARY	0.0020	0.0226	1.0210
	PEP_STAR	0.4775	0.1387	0.6066
	RECENT_STAR_STATUS	0.1635	0.0097	0.8447
	LIFETIME_CARD_PROM	0.9100	0.1182	0.1021
	LIFETIME_PROM	0.8881	0.2459	0.1484
	LIFETIME_GIFT_AMOUNT	0.4725	0.1414	0.6144
	LIFETIME_GIFT_COUNT	0.7370	0.1731	0.3181
	MONTHS_SINCE_FIRST_GIFT	0.8541	0.0284	0.1501
	STATUS_FL	0.1940	0.0238	0.8256
	STATUS_ES	0.2167	0.2171	1.0004
	mi_WEALTH_RATING	0.5097	0.0286	0.5047
Cluster 2	RECENT_AVG_GIFT_AMT	0.8095	0.1195	0.2163
	RECENT_AVG_CARD_GIFT_AMT	0.4626	0.0086	0.5420
	LIFETIME_AVG_GIFT_AMT	0.8354	0.0922	0.1813
	LIFETIME_GIFT_RANGE	0.3928	0.0770	0.6578
	LIFETIME_MAX_GIFT_AMT	0.7884	0.0457	0.2217
	LIFETIME_MIN_GIFT_AMT	0.3670	0.2054	0.7967
	LAST_GIFT_AMT	0.7926	0.1088	0.2327
	nurbt	0.0007	0.0071	1.0064
Cluster 3	INCOME_GROUP	0.2491	0.0151	0.7625

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

9 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	WEALTH_RATING	0.3705	0.0297	0.6487
	MEDIAN_HOME_VALUE	0.5430	0.0135	0.4632
	MEDIAN_HOUSEHOLD_INCOME	0.7205	0.0964	0.3093
	PER_CAPITA_INCOME	0.6513	0.0668	0.3737
	home01	0.0436	0.2974	1.3612
	nses1	0.5425	0.0342	0.4736
	nses3	0.2619	0.0083	0.7442
	nurbr	0.2348	0.0063	0.7700
	nurbs	0.1962	0.0305	0.8291
	ClusCdGrp2	0.1765	0.0314	0.8501
	ClusCdGrp4	0.3190	0.0061	0.6851
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1114	0.3641
	RECENT_RESPONSE_PROP	0.8340	0.0676	0.1781
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0196	0.3472
	RECENT_RESPONSE_COUNT	0.8270	0.1291	0.1986
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.0712	0.1830
Cluster 5	IN_HOUSE	0.4666	0.0615	0.5683
	CARD_PROM_12	0.5231	0.0833	0.5202
	NUMBER_PROM_12	0.8466	0.0977	0.1701
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0168	0.0000
	nurb_	1.0000	0.0168	0.0000
Cluster 7	PUBLISHED_PHONE	0.4302	0.0061	0.5733
	MOR_HIT_RATE	0.2388	0.0054	0.7653
	nurbu	0.0125	0.1471	1.1578
	mi_DONOR_AGE	0.4728	0.0104	0.5328
	mi_INCOME_GROUP	0.6405	0.0038	0.3609
Cluster 8	PCT_OWNER_OCCUPIED	0.2820	0.0444	0.7513
	PCT_MALE_VETERANS	0.2785	0.1396	0.8386
	nses4	0.5326	0.0075	0.4710
	ClusCdGrp1	0.1077	0.0397	0.9292
	ClusCdGrp3	0.4791	0.0394	0.5423
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.0635	0.3047

Cluster 2 will be split because it has the largest second eigenvalue, 1.350485, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 10 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	13	13	6.321985	0.4863	1.0778
2	6	6	3.513551	0.5856	0.9998
3	12	12	4.309162	0.3591	1.2860
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	5	5	1.794723	0.3589	1.0067
8	5	5	1.679909	0.3360	1.1463
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282

Total variation explained = 29.06949 Proportion = 0.5191

10 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8400	0.0507	0.1686
	DONOR_AGE	0.0568	0.0177	0.9602
	PCT_MALE_MILITARY	0.0020	0.0226	1.0210
	PEP_STAR	0.4775	0.1387	0.6066
	RECENT_STAR_STATUS	0.1635	0.0097	0.8447
	LIFETIME_CARD_PROM	0.9100	0.1182	0.1021
	LIFETIME_PROM	0.8881	0.2459	0.1484
	LIFETIME_GIFT_AMOUNT	0.4725	0.2765	0.7291
	LIFETIME_GIFT_COUNT	0.7370	0.1731	0.3181
	MONTHS_SINCE_FIRST_GIFT	0.8541	0.0523	0.1539
	STATUS_FL	0.1940	0.0568	0.8545
	STATUS_ES	0.2167	0.2171	1.0004
	mi_WEALTH_RATING	0.5097	0.0286	0.5047
Cluster 2	RECENT_AVG_GIFT_AMT	0.8006	0.3960	0.3301
	RECENT_AVG_CARD_GIFT_AMT	0.4776	0.1948	0.6487
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5557	0.2054	0.5592
	LAST_GIFT_AMT	0.7759	0.4036	0.3758
	nurbt	0.0010	0.0071	1.0062
Cluster 3	INCOME_GROUP	0.2491	0.0151	0.7625
	WEALTH_RATING	0.3705	0.0297	0.6487
	MEDIAN_HOME_VALUE	0.5430	0.0154	0.4641
	MEDIAN_HOUSEHOLD_INCOME	0.7205	0.0964	0.3093
	PER_CAPITA_INCOME	0.6513	0.0668	0.3737
	home01	0.0436	0.2974	1.3612

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

10 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	nses1	0.5425	0.0342	0.4736
	nses3	0.2619	0.0083	0.7442
	nurbr	0.2348	0.0063	0.7700
	nurbs	0.1962	0.0305	0.8291
	ClusCdGrp2	0.1765	0.0314	0.8501
	ClusCdGrp4	0.3190	0.0061	0.6851
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1347	0.3739
	RECENT_RESPONSE_PROP	0.8340	0.0666	0.1779
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0281	0.3503
	RECENT_RESPONSE_COUNT	0.8270	0.1291	0.1986
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.0712	0.1830
Cluster 5	IN_HOUSE	0.4666	0.0615	0.5683
	CARD_PROM_12	0.5231	0.0833	0.5202
	NUMBER_PROM_12	0.8466	0.0977	0.1701
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0168	0.0000
	nurb_	1.0000	0.0168	0.0000
Cluster 7	PUBLISHED_PHONE	0.4302	0.0061	0.5733
	MOR_HIT_RATE	0.2388	0.0054	0.7653
	nurbu	0.0125	0.1471	1.1578
	mi_DONOR_AGE	0.4728	0.0104	0.5328
	mi_INCOME_GROUP	0.6405	0.0038	0.3609
Cluster 8	PCT_OWNER_OCCUPIED	0.2820	0.0444	0.7513
	PCT_MALE_VETERANS	0.2785	0.1396	0.8386
	nses4	0.5326	0.0075	0.4710
	ClusCdGrp1	0.1077	0.0397	0.9292
	ClusCdGrp3	0.4791	0.0394	0.5423
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.0635	0.3047
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402

Cluster 3 will be split because it has the largest second eigenvalue, 1.285995, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 11 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	13	13	6.321985	0.4863	1.0778
2	6	6	3.513551	0.5856	0.9998
3	8	8	3.598431	0.4498	1.1072
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	5	5	1.794723	0.3589	1.0067
8	5	5	1.679909	0.3360	1.1463
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	4	4	1.932927	0.4832	0.9183

Total variation explained = 30.29168 Proportion = 0.5409

11 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8400	0.0507	0.1686
	DONOR_AGE	0.0568	0.0177	0.9602
	PCT_MALE_MILITARY	0.0020	0.0226	1.0210
	PEP_STAR	0.4775	0.1387	0.6066
	RECENT_STAR_STATUS	0.1635	0.0097	0.8447
	LIFETIME_CARD_PROM	0.9100	0.1182	0.1021
	LIFETIME_PROM	0.8881	0.2459	0.1484
	LIFETIME_GIFT_AMOUNT	0.4725	0.2765	0.7291
	LIFETIME_GIFT_COUNT	0.7370	0.1731	0.3181
	MONTHS_SINCE_FIRST_GIFT	0.8541	0.0523	0.1539
	STATUS_FL	0.1940	0.0568	0.8545
	STATUS_ES	0.2167	0.2171	1.0004
	mi_WEALTH_RATING	0.5097	0.0286	0.5047
Cluster 2	RECENT_AVG_GIFT_AMT	0.8006	0.3960	0.3301
	RECENT_AVG_CARD_GIFT_AMT	0.4776	0.1948	0.6487
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5557	0.2054	0.5592
	LAST_GIFT_AMT	0.7759	0.4036	0.3758
	nurbt	0.0010	0.0716	1.0761
Cluster 3	INCOME_GROUP	0.2752	0.0592	0.7704
	WEALTH_RATING	0.3574	0.1450	0.7516
	MEDIAN_HOME_VALUE	0.6248	0.1107	0.4219
	MEDIAN_HOUSEHOLD_INCOME	0.7885	0.1842	0.2592
	PER_CAPITA_INCOME	0.7422	0.1375	0.2989

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

11 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	home01	0.0446	0.2974	1.3598
	nses1	0.5612	0.1733	0.5308
	nurbs	0.2045	0.0573	0.8439
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1347	0.3739
	RECENT_RESPONSE_PROP	0.8340	0.0666	0.1779
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0281	0.3503
	RECENT_RESPONSE_COUNT	0.8270	0.1291	0.1986
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.0712	0.1830
Cluster 5	IN_HOUSE	0.4666	0.0615	0.5683
	CARD_PROM_12	0.5231	0.0833	0.5202
	NUMBER_PROM_12	0.8466	0.0977	0.1701
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0168	0.0000
	nurb_	1.0000	0.0168	0.0000
Cluster 7	PUBLISHED_PHONE	0.4302	0.0061	0.5733
	MOR_HIT_RATE	0.2388	0.0054	0.7653
	nurbu	0.0125	0.1471	1.1578
	mi_DONOR_AGE	0.4728	0.0104	0.5328
	mi_INCOME_GROUP	0.6405	0.0038	0.3609
Cluster 8	PCT_OWNER_OCCUPIED	0.2820	0.0647	0.7676
	PCT_MALE_VETERANS	0.2785	0.1396	0.8386
	nses4	0.5326	0.0167	0.4753
	ClusCdGrp1	0.1077	0.0397	0.9292
	ClusCdGrp3	0.4791	0.0458	0.5459
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.0635	0.3047
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.4573	0.1326	0.6256
	nurbr	0.3941	0.1209	0.6893
	ClusCdGrp2	0.3510	0.0821	0.7071
	ClusCdGrp4	0.7306	0.1342	0.3112

Cluster 8 will be split because it has the largest second eigenvalue, 1.146334, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 12 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	13	13	6.321985	0.4863	1.0778
2	6	6	3.513551	0.5856	0.9998
3	8	8	3.598431	0.4498	1.1072
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	5	5	1.794723	0.3589	1.0067
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	4	4	1.932927	0.4832	0.9183
12	3	3	1.356595	0.4522	0.9199

Total variation explained = 31.43459 Proportion = 0.5613

12 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8400	0.0507	0.1686
	DONOR_AGE	0.0568	0.0177	0.9602
	PCT_MALE_MILITARY	0.0020	0.0226	1.0210
	PEP_STAR	0.4775	0.1387	0.6066
	RECENT_STAR_STATUS	0.1635	0.0097	0.8447
	LIFETIME_CARD_PROM	0.9100	0.1182	0.1021
	LIFETIME_PROM	0.8881	0.2459	0.1484
	LIFETIME_GIFT_AMOUNT	0.4725	0.2765	0.7291
	LIFETIME_GIFT_COUNT	0.7370	0.1731	0.3181
	MONTHS_SINCE_FIRST_GIFT	0.8541	0.0523	0.1539
	STATUS_FL	0.1940	0.0568	0.8545
	STATUS_ES	0.2167	0.2171	1.0004
	mi_WEALTH_RATING	0.5097	0.0286	0.5047
Cluster 2	RECENT_AVG_GIFT_AMT	0.8006	0.3960	0.3301
	RECENT_AVG_CARD_GIFT_AMT	0.4776	0.1948	0.6487
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5557	0.2054	0.5592
	LAST_GIFT_AMT	0.7759	0.4036	0.3758
	nurbt	0.0010	0.0716	1.0761
Cluster 3	INCOME_GROUP	0.2752	0.0592	0.7704
	WEALTH_RATING	0.3574	0.1450	0.7516
	MEDIAN_HOME_VALUE	0.6248	0.1107	0.4219
	MEDIAN_HOUSEHOLD_INCOME	0.7885	0.1842	0.2592

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

12 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	PER_CAPITA_INCOME	0.7422	0.1375	0.2989
	home01	0.0446	0.2974	1.3598
	nses1	0.5612	0.1733	0.5308
	nurbs	0.2045	0.0573	0.8439
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1347	0.3739
	RECENT_RESPONSE_PROP	0.8340	0.0666	0.1779
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0281	0.3503
	RECENT_RESPONSE_COUNT	0.8270	0.1291	0.1986
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.0712	0.1830
Cluster 5	IN_HOUSE	0.4666	0.0615	0.5683
	CARD_PROM_12	0.5231	0.0833	0.5202
	NUMBER_PROM_12	0.8466	0.0977	0.1701
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0514	0.0000
	nurb_	1.0000	0.0514	0.0000
Cluster 7	PUBLISHED_PHONE	0.4302	0.0078	0.5743
	MOR_HIT_RATE	0.2388	0.0054	0.7653
	nurbu	0.0125	0.0997	1.0968
	mi_DONOR_AGE	0.4728	0.0104	0.5328
	mi_INCOME_GROUP	0.6405	0.0076	0.3622
Cluster 8	nses4	0.7331	0.0322	0.2758
	ClusCdGrp3	0.7331	0.0458	0.2797
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1325	0.3289
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.4573	0.1326	0.6256
	nurbr	0.3941	0.1209	0.6893
	ClusCdGrp2	0.3510	0.0821	0.7071
	ClusCdGrp4	0.7306	0.1342	0.3112
Cluster 12	PCT_OWNER_OCCUPIED	0.5180	0.0647	0.5154
	PCT_MALE_VETERANS	0.5758	0.1396	0.4930
	ClusCdGrp1	0.2628	0.0397	0.7676

Cluster 3 will be split because it has the largest second eigenvalue, 1.107165, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 13 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	13	13	6.321985	0.4863	1.0778
2	6	6	3.513551	0.5856	0.9998
3	6	6	3.362338	0.5604	0.8806
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	5	5	1.794723	0.3589	1.0067
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	4	4	1.932927	0.4832	0.9183
12	3	3	1.356595	0.4522	0.9199
13	2	2	1.251543	0.6258	0.7485

Total variation explained = 32.45004 Proportion = 0.5795

13 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8400	0.0507	0.1686
	DONOR_AGE	0.0568	0.0177	0.9602
	PCT_MALE_MILITARY	0.0020	0.0226	1.0210
	PEP_STAR	0.4775	0.1387	0.6066
	RECENT_STAR_STATUS	0.1635	0.0097	0.8447
	LIFETIME_CARD_PROM	0.9100	0.1182	0.1021
	LIFETIME_PROM	0.8881	0.2459	0.1484
	LIFETIME_GIFT_AMOUNT	0.4725	0.2765	0.7291
	LIFETIME_GIFT_COUNT	0.7370	0.1731	0.3181
	MONTHS_SINCE_FIRST_GIFT	0.8541	0.0523	0.1539
	STATUS_FL	0.1940	0.0568	0.8545
	STATUS_ES	0.2167	0.2171	1.0004
	mi_WEALTH_RATING	0.5097	0.0286	0.5047
Cluster 2	RECENT_AVG_GIFT_AMT	0.8006	0.3960	0.3301
	RECENT_AVG_CARD_GIFT_AMT	0.4776	0.1948	0.6487
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5557	0.2054	0.5592
	LAST_GIFT_AMT	0.7759	0.4036	0.3758
	nurbt	0.0010	0.0716	1.0761
Cluster 3	WEALTH_RATING	0.3534	0.1450	0.7562
	MEDIAN_HOME_VALUE	0.6584	0.1107	0.3841
	MEDIAN_HOUSEHOLD_INCOME	0.7997	0.1842	0.2455

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

13 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	PER_CAPITA_INCOME	0.7773	0.1375	0.2582
	nses1	0.5642	0.1733	0.5271
	nurbs	0.2092	0.0573	0.8389
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1347	0.3739
	RECENT_RESPONSE_PROP	0.8340	0.0666	0.1779
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0281	0.3503
	RECENT_RESPONSE_COUNT	0.8270	0.1291	0.1986
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.0712	0.1830
Cluster 5	IN_HOUSE	0.4666	0.0615	0.5683
	CARD_PROM_12	0.5231	0.0833	0.5202
	NUMBER_PROM_12	0.8466	0.0977	0.1701
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0514	0.0000
	nurb_	1.0000	0.0514	0.0000
Cluster 7	PUBLISHED_PHONE	0.4302	0.0150	0.5785
	MOR_HIT_RATE	0.2388	0.0098	0.7687
	nurbu	0.0125	0.0997	1.0968
	mi_DONOR_AGE	0.4728	0.0809	0.5736
	mi_INCOME_GROUP	0.6405	0.1307	0.4136
Cluster 8	nses4	0.7331	0.0322	0.2758
	ClusCdGrp3	0.7331	0.0464	0.2799
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1325	0.3289
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.4573	0.1283	0.6225
	nurbr	0.3941	0.1215	0.6897
	ClusCdGrp2	0.3510	0.0769	0.7031
	ClusCdGrp4	0.7306	0.1327	0.3106
Cluster 12	PCT_OWNER_OCCUPIED	0.5180	0.0586	0.5120
	PCT_MALE_VETERANS	0.5758	0.1396	0.4930
	ClusCdGrp1	0.2628	0.0397	0.7676
Cluster 13	INCOME_GROUP	0.6258	0.1553	0.4430
	home01	0.6258	0.2974	0.5326

Cluster 1 will be split because it has the largest second eigenvalue, 1.077754, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 14 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	10	10	5.675356	0.5675	0.9989
2	6	6	3.513551	0.5856	0.9998
3	6	6	3.362338	0.5604	0.8806
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	5	5	1.794723	0.3589	1.0067
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	4	4	1.932927	0.4832	0.9183
12	3	3	1.356595	0.4522	0.9199
13	2	2	1.251543	0.6258	0.7485
14	3	3	1.550213	0.5167	0.9514

Total variation explained = 33.35362 Proportion = 0.5956

14 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8637	0.2673	0.1859
	PCT_MALE_MILITARY	0.0022	0.0226	1.0209
	RECENT_STAR_STATUS	0.1646	0.0491	0.8785
	LIFETIME_CARD_PROM	0.9287	0.3063	0.1028
	LIFETIME_PROM	0.9125	0.2805	0.1215
	LIFETIME_GIFT_AMOUNT	0.4873	0.2765	0.7086
	LIFETIME_GIFT_COUNT	0.6999	0.4368	0.5328
	MONTHS_SINCE_FIRST_GIFT	0.8776	0.2731	0.1684
	STATUS_FL	0.1976	0.0676	0.8606
	mi_WEALTH_RATING	0.5411	0.1237	0.5237
Cluster 2	RECENT_AVG_GIFT_AMT	0.8006	0.3960	0.3301
	RECENT_AVG_CARD_GIFT_AMT	0.4776	0.1948	0.6487
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5557	0.1932	0.5507
	LAST_GIFT_AMT	0.7759	0.4036	0.3758
	nurbt	0.0010	0.0716	1.0761
Cluster 3	WEALTH_RATING	0.3534	0.1450	0.7562
	MEDIAN_HOME_VALUE	0.6584	0.1107	0.3841
	MEDIAN_HOUSEHOLD_INCOME	0.7997	0.1842	0.2455
	PER_CAPITA_INCOME	0.7773	0.1375	0.2582
	nses1	0.5642	0.1733	0.5271

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

14 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	nurbs	0.2092	0.0573	0.8389
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1921	0.4005
	RECENT_RESPONSE_PROP	0.8340	0.1431	0.1938
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0576	0.3612
	RECENT_RESPONSE_COUNT	0.8270	0.2733	0.2380
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2080	0.2146
Cluster 5	IN_HOUSE	0.4666	0.0657	0.5709
	CARD_PROM_12	0.5231	0.0868	0.5222
	NUMBER_PROM_12	0.8466	0.1042	0.1713
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0514	0.0000
	nurb_	1.0000	0.0514	0.0000
Cluster 7	PUBLISHED_PHONE	0.4302	0.0150	0.5785
	MOR_HIT_RATE	0.2388	0.0098	0.7687
	nurbu	0.0125	0.0997	1.0968
	mi_DONOR_AGE	0.4728	0.0809	0.5736
	mi_INCOME_GROUP	0.6405	0.1307	0.4136
Cluster 8	nses4	0.7331	0.0322	0.2758
	ClusCdGrp3	0.7331	0.0464	0.2799
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1325	0.3289
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.4573	0.1283	0.6225
	nurbr	0.3941	0.1215	0.6897
	ClusCdGrp2	0.3510	0.0769	0.7031
	ClusCdGrp4	0.7306	0.1327	0.3106
Cluster 12	PCT_OWNER_OCCUPIED	0.5180	0.0586	0.5120
	PCT_MALE_VETERANS	0.5758	0.1396	0.4930
	ClusCdGrp1	0.2628	0.0397	0.7676
Cluster 13	INCOME_GROUP	0.6258	0.1553	0.4430
	home01	0.6258	0.2974	0.5326
Cluster 14	DONOR_AGE	0.1296	0.0402	0.9068
	PEP_STAR	0.7212	0.3673	0.4406
	STATUS_ES	0.6994	0.2171	0.3840

Cluster 7 will be split because it has the largest second eigenvalue, 1.006684, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 15 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	10	10	5.675356	0.5675	0.9989
2	6	6	3.513551	0.5856	0.9998
3	6	6	3.362338	0.5604	0.8806
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	4	4	1.789177	0.4473	0.9241
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	4	4	1.932927	0.4832	0.9183
12	3	3	1.356595	0.4522	0.9199
13	2	2	1.251543	0.6258	0.7485
14	3	3	1.550213	0.5167	0.9514
15	1	1	1	1.0000	

Total variation explained = 34.34808 Proportion = 0.6134

15 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8637	0.2673	0.1859
	PCT_MALE_MILITARY	0.0022	0.0226	1.0209
	RECENT_STAR_STATUS	0.1646	0.0491	0.8785
	LIFETIME_CARD_PROM	0.9287	0.3063	0.1028
	LIFETIME_PROM	0.9125	0.2805	0.1215
	LIFETIME_GIFT_AMOUNT	0.4873	0.2765	0.7086
	LIFETIME_GIFT_COUNT	0.6999	0.4368	0.5328
	MONTHS_SINCE_FIRST_GIFT	0.8776	0.2731	0.1684
	STATUS_FL	0.1976	0.0676	0.8606
	mi_WEALTH_RATING	0.5411	0.1237	0.5237
Cluster 2	RECENT_AVG_GIFT_AMT	0.8006	0.3960	0.3301
	RECENT_AVG_CARD_GIFT_AMT	0.4776	0.1948	0.6487
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5557	0.1932	0.5507
	LAST_GIFT_AMT	0.7759	0.4036	0.3758
	nurbt	0.0010	0.0716	1.0761
Cluster 3	WEALTH_RATING	0.3534	0.1450	0.7562
	MEDIAN_HOME_VALUE	0.6584	0.1107	0.3841
	MEDIAN_HOUSEHOLD_INCOME	0.7997	0.1842	0.2455
	PER_CAPITA_INCOME	0.7773	0.1375	0.2582

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

15 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	nses1	0.5642	0.1733	0.5271
	nurbs	0.2092	0.0573	0.8389
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1921	0.4005
	RECENT_RESPONSE_PROP	0.8340	0.1431	0.1938
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0576	0.3612
	RECENT_RESPONSE_COUNT	0.8270	0.2733	0.2380
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2080	0.2146
Cluster 5	IN_HOUSE	0.4666	0.0657	0.5709
	CARD_PROM_12	0.5231	0.0868	0.5222
	NUMBER_PROM_12	0.8466	0.1042	0.1713
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0514	0.0000
	nurb_	1.0000	0.0514	0.0000
Cluster 7	PUBLISHED_PHONE	0.4265	0.0150	0.5822
	MOR_HIT_RATE	0.2403	0.0098	0.7672
	mi_DONOR_AGE	0.4792	0.0809	0.5666
	mi_INCOME_GROUP	0.6431	0.1307	0.4105
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0464	0.2799
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1325	0.3289
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.4573	0.1283	0.6225
	nurbr	0.3941	0.1215	0.6897
	ClusCdGrp2	0.3510	0.0769	0.7031
	ClusCdGrp4	0.7306	0.1327	0.3106
Cluster 12	PCT_OWNER_OCCUPIED	0.5180	0.0617	0.5137
	PCT_MALE_VETERANS	0.5758	0.1396	0.4930
	ClusCdGrp1	0.2628	0.0397	0.7676
Cluster 13	INCOME_GROUP	0.6258	0.1553	0.4430
	home01	0.6258	0.2997	0.5344
Cluster 14	DONOR_AGE	0.1296	0.0402	0.9068
	PEP_STAR	0.7212	0.3673	0.4406
	STATUS_ES	0.6994	0.2171	0.3840
Cluster 15	nurbu	1.0000	0.0997	0.0000

Cluster 2 will be split because it has the largest second eigenvalue, 0.99984, which is greater than the MAXEIGEN=0.7 value.

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Clustering algorithm converged.

Cluster Summary for 16 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	10	10	5.675356	0.5675	0.9989
2	5	5	3.512852	0.7026	0.7664
3	6	6	3.362338	0.5604	0.8806
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	4	4	1.789177	0.4473	0.9241
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	4	4	1.932927	0.4832	0.9183
12	3	3	1.356595	0.4522	0.9199
13	2	2	1.251543	0.6258	0.7485
14	3	3	1.550213	0.5167	0.9514
15	1	1	1	1.0000	
16	1	1	1	1.0000	

Total variation explained = 35.34738 Proportion = 0.6312

16 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8637	0.2673	0.1859
	PCT_MALE_MILITARY	0.0022	0.0226	1.0209
	RECENT_STAR_STATUS	0.1646	0.0491	0.8785
	LIFETIME_CARD_PROM	0.9287	0.3063	0.1028
	LIFETIME_PROM	0.9125	0.2805	0.1215
	LIFETIME_GIFT_AMOUNT	0.4873	0.2765	0.7086
	LIFETIME_GIFT_COUNT	0.6999	0.4368	0.5328
	MONTHS_SINCE_FIRST_GIFT	0.8776	0.2731	0.1684
	STATUS_FL	0.1976	0.0676	0.8606
	mi_WEALTH_RATING	0.5411	0.1237	0.5237
Cluster 2	RECENT_AVG_GIFT_AMT	0.8007	0.3960	0.3300
	RECENT_AVG_CARD_GIFT_AMT	0.4778	0.1948	0.6486
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5556	0.1932	0.5508
	LAST_GIFT_AMT	0.7760	0.4036	0.3756
Cluster 3	WEALTH_RATING	0.3534	0.1450	0.7562
	MEDIAN_HOME_VALUE	0.6584	0.1107	0.3841

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

16 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	MEDIAN_HOUSEHOLD_INCOME	0.7997	0.1842	0.2455
	PER_CAPITA_INCOME	0.7773	0.1375	0.2582
	nses1	0.5642	0.1733	0.5271
	nurbs	0.2092	0.0772	0.8569
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1921	0.4005
	RECENT_RESPONSE_PROP	0.8340	0.1431	0.1938
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0576	0.3612
	RECENT_RESPONSE_COUNT	0.8270	0.2733	0.2380
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2080	0.2146
Cluster 5	IN_HOUSE	0.4666	0.0657	0.5709
	CARD_PROM_12	0.5231	0.0868	0.5222
	NUMBER_PROM_12	0.8466	0.1042	0.1713
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0514	0.0000
	nurb_	1.0000	0.0514	0.0000
Cluster 7	PUBLISHED_PHONE	0.4265	0.0150	0.5822
	MOR_HIT_RATE	0.2403	0.0098	0.7672
	mi_DONOR_AGE	0.4792	0.0809	0.5666
	mi_INCOME_GROUP	0.6431	0.1307	0.4105
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0464	0.2799
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1325	0.3289
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.4573	0.1283	0.6225
	nurbr	0.3941	0.1215	0.6897
	ClusCdGrp2	0.3510	0.0769	0.7031
	ClusCdGrp4	0.7306	0.1327	0.3106
Cluster 12	PCT_OWNER_OCCUPIED	0.5180	0.0617	0.5137
	PCT_MALE_VETERANS	0.5758	0.1396	0.4930
	ClusCdGrp1	0.2628	0.0397	0.7676
Cluster 13	INCOME_GROUP	0.6258	0.1553	0.4430
	home01	0.6258	0.2997	0.5344
Cluster 14	DONOR_AGE	0.1296	0.0402	0.9068
	PEP_STAR	0.7212	0.3673	0.4406
	STATUS_ES	0.6994	0.2171	0.3840

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

16 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0716	0.0000

Cluster 1 will be split because it has the largest second eigenvalue, 0.998937, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 17 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	9	9	5.673561	0.6304	0.9271
2	5	5	3.512852	0.7026	0.7664
3	6	6	3.362338	0.5604	0.8806
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	4	4	1.789177	0.4473	0.9241
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	4	4	1.932927	0.4832	0.9183
12	3	3	1.356595	0.4522	0.9199
13	2	2	1.251543	0.6258	0.7485
14	3	3	1.550213	0.5167	0.9514
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	

Total variation explained = 36.34558 Proportion = 0.6490

17 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8638	0.2673	0.1859
	RECENT_STAR_STATUS	0.1646	0.0491	0.8785
	LIFETIME_CARD_PROM	0.9287	0.3063	0.1027
	LIFETIME_PROM	0.9125	0.2805	0.1215
	LIFETIME_GIFT_AMOUNT	0.4874	0.2765	0.7086
	LIFETIME_GIFT_COUNT	0.7001	0.4368	0.5326
	MONTHS_SINCE_FIRST_GIFT	0.8777	0.2731	0.1683
	STATUS_FL	0.1976	0.0676	0.8606
	mi_WEALTH_RATING	0.5412	0.1237	0.5236

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

17 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 2	RECENT_AVG_GIFT_AMT	0.8007	0.3960	0.3300
	RECENT_AVG_CARD_GIFT_AMT	0.4778	0.1948	0.6486
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5556	0.1932	0.5508
	LAST_GIFT_AMT	0.7760	0.4036	0.3756
Cluster 3	WEALTH_RATING	0.3534	0.1450	0.7562
	MEDIAN_HOME_VALUE	0.6584	0.1107	0.3841
	MEDIAN_HOUSEHOLD_INCOME	0.7997	0.1842	0.2455
	PER_CAPITA_INCOME	0.7773	0.1375	0.2582
	nses1	0.5642	0.1733	0.5271
	nurbs	0.2092	0.0772	0.8569
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.1921	0.4005
	RECENT_RESPONSE_PROP	0.8340	0.1431	0.1938
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0576	0.3612
	RECENT_RESPONSE_COUNT	0.8270	0.2733	0.2380
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2080	0.2146
Cluster 5	IN_HOUSE	0.4666	0.0657	0.5709
	CARD_PROM_12	0.5231	0.0867	0.5222
	NUMBER_PROM_12	0.8466	0.1042	0.1713
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0514	0.0000
	nurb_	1.0000	0.0514	0.0000
Cluster 7	PUBLISHED_PHONE	0.4265	0.0150	0.5822
	MOR_HIT_RATE	0.2403	0.0098	0.7672
	mi_DONOR_AGE	0.4792	0.0809	0.5666
	mi_INCOME_GROUP	0.6431	0.1307	0.4105
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0464	0.2799
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1325	0.3289
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.4573	0.1283	0.6225
	nurbr	0.3941	0.1215	0.6897
	ClusCdGrp2	0.3510	0.0769	0.7031
	ClusCdGrp4	0.7306	0.1327	0.3106
Cluster 12	PCT_OWNER_OCCUPIED	0.5180	0.0617	0.5137
	PCT_MALE_VETERANS	0.5758	0.1396	0.4930

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

17 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	ClusCdGrp1	0.2628	0.0397	0.7676
Cluster 13	INCOME_GROUP	0.6258	0.1553	0.4430
	home01	0.6258	0.2997	0.5344
Cluster 14	DONOR_AGE	0.1296	0.0401	0.9068
	PEP_STAR	0.7212	0.3673	0.4406
	STATUS_ES	0.6994	0.2171	0.3840
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0716	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000

Cluster 14 will be split because it has the largest second eigenvalue, 0.951359, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 18 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	9	9	5.673561	0.6304	0.9271
2	5	5	3.512852	0.7026	0.7664
3	6	6	3.362338	0.5604	0.8806
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	4	4	1.789177	0.4473	0.9241
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	4	4	1.932927	0.4832	0.9183
12	3	3	1.356595	0.4522	0.9199
13	2	2	1.251543	0.6258	0.7485
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	
18	1	1	1	1.0000	

Total variation explained = 37.29544 Proportion = 0.6660

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

18 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8638	0.2470	0.1809
	RECENT_STAR_STATUS	0.1646	0.0469	0.8765
	LIFETIME_CARD_PROM	0.9287	0.2918	0.1006
	LIFETIME_PROM	0.9125	0.2645	0.1189
	LIFETIME_GIFT_AMOUNT	0.4874	0.2765	0.7086
	LIFETIME_GIFT_COUNT	0.7001	0.4296	0.5258
	MONTHS_SINCE_FIRST_GIFT	0.8777	0.2532	0.1638
	STATUS_FL	0.1976	0.0646	0.8578
	mi_WEALTH_RATING	0.5412	0.1182	0.5203
Cluster 2	RECENT_AVG_GIFT_AMT	0.8007	0.3960	0.3300
	RECENT_AVG_CARD_GIFT_AMT	0.4778	0.1948	0.6486
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5556	0.1932	0.5508
	LAST_GIFT_AMT	0.7760	0.4036	0.3756
Cluster 3	WEALTH_RATING	0.3534	0.1450	0.7562
	MEDIAN_HOME_VALUE	0.6584	0.1107	0.3841
	MEDIAN_HOUSEHOLD_INCOME	0.7997	0.1842	0.2455
	PER_CAPITA_INCOME	0.7773	0.1375	0.2582
	nses1	0.5642	0.1733	0.5271
	nurbs	0.2092	0.0772	0.8569
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	IN_HOUSE	0.4666	0.0657	0.5709
	CARD_PROM_12	0.5231	0.0867	0.5222
	NUMBER_PROM_12	0.8466	0.1042	0.1713
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0514	0.0000
	nurb_	1.0000	0.0514	0.0000
Cluster 7	PUBLISHED_PHONE	0.4265	0.0150	0.5822
	MOR_HIT_RATE	0.2403	0.0098	0.7672
	mi_DONOR_AGE	0.4792	0.0809	0.5666
	mi_INCOME_GROUP	0.6431	0.1307	0.4105
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0464	0.2799
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

18 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	PCT_WWII_VETERANS	0.7146	0.1325	0.3289
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.4573	0.1283	0.6225
	nurbr	0.3941	0.1215	0.6897
	ClusCdGrp2	0.3510	0.0769	0.7031
	ClusCdGrp4	0.7306	0.1327	0.3106
Cluster 12	PCT_OWNER_OCCUPIED	0.5180	0.0617	0.5137
	PCT_MALE_VETERANS	0.5758	0.1396	0.4930
	ClusCdGrp1	0.2628	0.0397	0.7676
Cluster 13	INCOME_GROUP	0.6258	0.1553	0.4430
	home01	0.6258	0.2997	0.5344
Cluster 14	PEP_STAR	0.7500	0.3673	0.3951
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0716	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0401	0.0000

Cluster 1 will be split because it has the largest second eigenvalue, 0.927057, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 19 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	8	8	5.504992	0.6881	0.8571
2	5	5	3.512852	0.7026	0.7664
3	6	6	3.362338	0.5604	0.8806
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	4	4	1.789177	0.4473	0.9241
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	4	4	1.932927	0.4832	0.9183
12	3	3	1.356595	0.4522	0.9199
13	2	2	1.251543	0.6258	0.7485

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 19 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	
18	1	1	1	1.0000	
19	1	1	1	1.0000	

Total variation explained = 38.12687 Proportion = 0.6808

19 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8657	0.2470	0.1784
	RECENT_STAR_STATUS	0.1705	0.0469	0.8703
	LIFETIME_CARD_PROM	0.9269	0.2918	0.1033
	LIFETIME_PROM	0.9135	0.2645	0.1177
	LIFETIME_GIFT_AMOUNT	0.4975	0.2765	0.6946
	LIFETIME_GIFT_COUNT	0.7093	0.4296	0.5096
	MONTHS_SINCE_FIRST_GIFT	0.8797	0.2532	0.1611
	mi_WEALTH_RATING	0.5420	0.1182	0.5193
Cluster 2	RECENT_AVG_GIFT_AMT	0.8007	0.3960	0.3300
	RECENT_AVG_CARD_GIFT_AMT	0.4778	0.1948	0.6486
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5556	0.1888	0.5478
	LAST_GIFT_AMT	0.7760	0.4036	0.3756
Cluster 3	WEALTH_RATING	0.3534	0.1450	0.7562
	MEDIAN_HOME_VALUE	0.6584	0.1107	0.3841
	MEDIAN_HOUSEHOLD_INCOME	0.7997	0.1842	0.2455
	PER_CAPITA_INCOME	0.7773	0.1375	0.2582
	nses1	0.5642	0.1733	0.5271
	nurbs	0.2092	0.0772	0.8569
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	IN_HOUSE	0.4666	0.0680	0.5723
	CARD_PROM_12	0.5231	0.0826	0.5198
	NUMBER_PROM_12	0.8466	0.1059	0.1716
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0514	0.0000

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

19 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	nurb_	1.0000	0.0514	0.0000
Cluster 7	PUBLISHED_PHONE	0.4265	0.0150	0.5822
	MOR_HIT_RATE	0.2403	0.0098	0.7672
	mi_DONOR_AGE	0.4792	0.0809	0.5666
	mi_INCOME_GROUP	0.6431	0.1307	0.4105
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0464	0.2799
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1325	0.3289
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.4573	0.1283	0.6225
	nurbr	0.3941	0.1215	0.6897
	ClusCdGrp2	0.3510	0.0769	0.7031
	ClusCdGrp4	0.7306	0.1327	0.3106
Cluster 12	PCT_OWNER_OCCUPIED	0.5180	0.0617	0.5137
	PCT_MALE_VETERANS	0.5758	0.1396	0.4930
	ClusCdGrp1	0.2628	0.0397	0.7676
Cluster 13	INCOME_GROUP	0.6258	0.1553	0.4430
	home01	0.6258	0.2997	0.5344
Cluster 14	PEP_STAR	0.7500	0.3654	0.3939
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0716	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0400	0.0000
Cluster 19	STATUS_FL	1.0000	0.1430	0.0000

Cluster 7 will be split because it has the largest second eigenvalue, 0.92409, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 20 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	8	8	5.504992	0.6881	0.8571
2	5	5	3.512852	0.7026	0.7664
3	6	6	3.362338	0.5604	0.8806
4	5	5	3.827122	0.7654	0.6010

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 20 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	3	3	1.667485	0.5558	0.8207
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	4	4	1.932927	0.4832	0.9183
12	3	3	1.356595	0.4522	0.9199
13	2	2	1.251543	0.6258	0.7485
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	
18	1	1	1	1.0000	
19	1	1	1	1.0000	
20	1	1	1	1.0000	

Total variation explained = 39.00517 Proportion = 0.6965

20 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8657	0.2470	0.1784
	RECENT_STAR_STATUS	0.1705	0.0469	0.8703
	LIFETIME_CARD_PROM	0.9269	0.2918	0.1033
	LIFETIME_PROM	0.9135	0.2645	0.1177
	LIFETIME_GIFT_AMOUNT	0.4975	0.2765	0.6946
	LIFETIME_GIFT_COUNT	0.7093	0.4296	0.5096
	MONTHS_SINCE_FIRST_GIFT	0.8797	0.2532	0.1611
	mi_WEALTH_RATING	0.5420	0.1182	0.5193
Cluster 2	RECENT_AVG_GIFT_AMT	0.8007	0.3960	0.3300
	RECENT_AVG_CARD_GIFT_AMT	0.4778	0.1948	0.6486
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5556	0.1888	0.5478
	LAST_GIFT_AMT	0.7760	0.4036	0.3756
Cluster 3	WEALTH_RATING	0.3534	0.1450	0.7562
	MEDIAN_HOME_VALUE	0.6584	0.1107	0.3841
	MEDIAN_HOUSEHOLD_INCOME	0.7997	0.1842	0.2455
	PER_CAPITA_INCOME	0.7773	0.1375	0.2582
	nses1	0.5642	0.1733	0.5271
	nurbs	0.2092	0.0772	0.8569

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

20 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	IN_HOUSE	0.4666	0.0680	0.5723
	CARD_PROM_12	0.5231	0.0826	0.5198
	NUMBER_PROM_12	0.8466	0.1059	0.1716
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0514	0.0000
	nurb_	1.0000	0.0514	0.0000
Cluster 7	PUBLISHED_PHONE	0.4182	0.0459	0.6098
	mi_DONOR_AGE	0.5491	0.0809	0.4906
	mi_INCOME_GROUP	0.7002	0.1307	0.3449
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0464	0.2799
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1325	0.3289
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.4573	0.1283	0.6225
	nurbr	0.3941	0.1215	0.6897
	ClusCdGrp2	0.3510	0.0769	0.7031
	ClusCdGrp4	0.7306	0.1327	0.3106
Cluster 12	PCT_OWNER_OCCUPIED	0.5180	0.0617	0.5137
	PCT_MALE_VETERANS	0.5758	0.1396	0.4930
	ClusCdGrp1	0.2628	0.0397	0.7676
Cluster 13	INCOME_GROUP	0.6258	0.1553	0.4430
	home01	0.6258	0.3165	0.5475
Cluster 14	PEP_STAR	0.7500	0.3654	0.3939
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0716	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0400	0.0000
Cluster 19	STATUS_FL	1.0000	0.1430	0.0000
Cluster 20	MOR_HIT_RATE	1.0000	0.0572	0.0000

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster 12 will be split because it has the largest second eigenvalue, 0.919871, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 21 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	8	8	5.504992	0.6881	0.8571
2	5	5	3.512852	0.7026	0.7664
3	6	6	3.362338	0.5604	0.8806
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	3	3	1.667485	0.5558	0.8207
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	4	4	1.932927	0.4832	0.9183
12	2	2	1.271282	0.6356	0.7287
13	2	2	1.251543	0.6258	0.7485
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	
18	1	1	1	1.0000	
19	1	1	1	1.0000	
20	1	1	1	1.0000	
21	1	1	1	1.0000	

Total variation explained = 39.91986 Proportion = 0.7129

21 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8657	0.2470	0.1784
	RECENT_STAR_STATUS	0.1705	0.0469	0.8703
	LIFETIME_CARD_PROM	0.9269	0.2918	0.1033
	LIFETIME_PROM	0.9135	0.2645	0.1177
	LIFETIME_GIFT_AMOUNT	0.4975	0.2765	0.6946
	LIFETIME_GIFT_COUNT	0.7093	0.4296	0.5096
	MONTHS_SINCE_FIRST_GIFT	0.8797	0.2532	0.1611
	mi_WEALTH_RATING	0.5420	0.1182	0.5193
Cluster 2	RECENT_AVG_GIFT_AMT	0.8007	0.3960	0.3300
	RECENT_AVG_CARD_GIFT_AMT	0.4778	0.1948	0.6486

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

21 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5556	0.1888	0.5478
	LAST_GIFT_AMT	0.7760	0.4036	0.3756
Cluster 3	WEALTH_RATING	0.3534	0.1450	0.7562
	MEDIAN_HOME_VALUE	0.6584	0.1107	0.3841
	MEDIAN_HOUSEHOLD_INCOME	0.7997	0.1842	0.2455
	PER_CAPITA_INCOME	0.7773	0.1375	0.2582
	nses1	0.5642	0.1733	0.5271
	nurbs	0.2092	0.0772	0.8569
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	IN_HOUSE	0.4666	0.0680	0.5723
	CARD_PROM_12	0.5231	0.0826	0.5198
	NUMBER_PROM_12	0.8466	0.1059	0.1716
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0552	0.0000
	nurb_	1.0000	0.0552	0.0000
Cluster 7	PUBLISHED_PHONE	0.4182	0.0459	0.6098
	mi_DONOR_AGE	0.5491	0.0809	0.4906
	mi_INCOME_GROUP	0.7002	0.1307	0.3449
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0464	0.2799
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1033	0.3182
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.4573	0.1283	0.6225
	nurbr	0.3941	0.1215	0.6897
	ClusCdGrp2	0.3510	0.0769	0.7031
	ClusCdGrp4	0.7306	0.1327	0.3106
Cluster 12	PCT_OWNER_OCCUPIED	0.6356	0.0617	0.3883
	PCT_MALE_VETERANS	0.6356	0.1396	0.4235
Cluster 13	INCOME_GROUP	0.6258	0.1553	0.4430
	home01	0.6258	0.3165	0.5475
Cluster 14	PEP_STAR	0.7500	0.3654	0.3939

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

21 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0716	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0400	0.0000
Cluster 19	STATUS_FL	1.0000	0.1430	0.0000
Cluster 20	MOR_HIT_RATE	1.0000	0.0572	0.0000
Cluster 21	ClusCdGrp1	1.0000	0.0397	0.0000

Cluster 11 will be split because it has the largest second eigenvalue, 0.918306, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 22 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	8	8	5.504992	0.6881	0.8571
2	5	5	3.512852	0.7026	0.7664
3	6	6	3.362338	0.5604	0.8806
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	3	3	1.667485	0.5558	0.8207
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	2	2	1.266835	0.6334	0.7332
12	2	2	1.271282	0.6356	0.7287
13	2	2	1.251543	0.6258	0.7485
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	
18	1	1	1	1.0000	
19	1	1	1	1.0000	
20	1	1	1	1.0000	
21	1	1	1	1.0000	
22	2	2	1.474259	0.7371	0.5257

Total variation explained = 40.72803 Proportion = 0.7273

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

22 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8657	0.2470	0.1784
	RECENT_STAR_STATUS	0.1705	0.0469	0.8703
	LIFETIME_CARD_PROM	0.9269	0.2918	0.1033
	LIFETIME_PROM	0.9135	0.2645	0.1177
	LIFETIME_GIFT_AMOUNT	0.4975	0.2765	0.6946
	LIFETIME_GIFT_COUNT	0.7093	0.4296	0.5096
	MONTHS_SINCE_FIRST_GIFT	0.8797	0.2532	0.1611
	mi_WEALTH_RATING	0.5420	0.1182	0.5193
Cluster 2	RECENT_AVG_GIFT_AMT	0.8007	0.3960	0.3300
	RECENT_AVG_CARD_GIFT_AMT	0.4778	0.1948	0.6486
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5556	0.1888	0.5478
	LAST_GIFT_AMT	0.7760	0.4036	0.3756
Cluster 3	WEALTH_RATING	0.3534	0.1131	0.7290
	MEDIAN_HOME_VALUE	0.6584	0.0952	0.3775
	MEDIAN_HOUSEHOLD_INCOME	0.7997	0.1544	0.2369
	PER_CAPITA_INCOME	0.7773	0.1024	0.2481
	nses1	0.5642	0.1231	0.4970
	nurbs	0.2092	0.0772	0.8569
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	IN_HOUSE	0.4666	0.0680	0.5723
	CARD_PROM_12	0.5231	0.0826	0.5198
	NUMBER_PROM_12	0.8466	0.1059	0.1716
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0552	0.0000
	nurb_	1.0000	0.0552	0.0000
Cluster 7	PUBLISHED_PHONE	0.4182	0.0459	0.6098
	mi_DONOR_AGE	0.5491	0.0809	0.4906
	mi_INCOME_GROUP	0.7002	0.1307	0.3449
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0464	0.2799
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1033	0.3182
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

22 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.6334	0.1283	0.4205
	ClusCdGrp2	0.6334	0.0802	0.3986
Cluster 12	PCT_OWNER_OCCUPIED	0.6356	0.0617	0.3883
	PCT_MALE_VETERANS	0.6356	0.1396	0.4235
Cluster 13	INCOME_GROUP	0.6258	0.1553	0.4430
	home01	0.6258	0.3165	0.5475
Cluster 14	PEP_STAR	0.7500	0.3654	0.3939
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0678	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0400	0.0000
Cluster 19	STATUS_FL	1.0000	0.1430	0.0000
Cluster 20	MOR_HIT_RATE	1.0000	0.0572	0.0000
Cluster 21	ClusCdGrp1	1.0000	0.0397	0.0000
Cluster 22	nurbr	0.7371	0.1215	0.2992
	ClusCdGrp4	0.7371	0.2373	0.3447

Cluster 3 will be split because it has the largest second eigenvalue, 0.880605, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 23 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	8	8	5.504992	0.6881	0.8571
2	5	5	3.512852	0.7026	0.7664
3	5	5	3.205764	0.6412	0.7850
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	3	3	1.667485	0.5558	0.8207
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	2	2	1.266835	0.6334	0.7332
12	2	2	1.271282	0.6356	0.7287
13	2	2	1.251543	0.6258	0.7485

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 23 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	
18	1	1	1	1.0000	
19	1	1	1	1.0000	
20	1	1	1	1.0000	
21	1	1	1	1.0000	
22	2	2	1.474259	0.7371	0.5257
23	1	1	1	1.0000	

Total variation explained = 41.57146 Proportion = 0.7423

23 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8657	0.2470	0.1784
	RECENT_STAR_STATUS	0.1705	0.0469	0.8703
	LIFETIME_CARD_PROM	0.9269	0.2918	0.1033
	LIFETIME_PROM	0.9135	0.2645	0.1177
	LIFETIME_GIFT_AMOUNT	0.4975	0.2765	0.6946
	LIFETIME_GIFT_COUNT	0.7093	0.4296	0.5096
	MONTHS_SINCE_FIRST_GIFT	0.8797	0.2532	0.1611
	mi_WEALTH_RATING	0.5420	0.1182	0.5193
Cluster 2	RECENT_AVG_GIFT_AMT	0.8007	0.3960	0.3300
	RECENT_AVG_CARD_GIFT_AMT	0.4778	0.1948	0.6486
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5556	0.1888	0.5478
	LAST_GIFT_AMT	0.7760	0.4036	0.3756
Cluster 3	WEALTH_RATING	0.3502	0.1131	0.7327
	MEDIAN_HOME_VALUE	0.6799	0.0952	0.3538
	MEDIAN_HOUSEHOLD_INCOME	0.8023	0.1544	0.2338
	PER_CAPITA_INCOME	0.8020	0.1024	0.2206
	nses1	0.5714	0.1231	0.4888
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	IN_HOUSE	0.4666	0.0680	0.5723
	CARD_PROM_12	0.5231	0.0826	0.5198

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

23 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	NUMBER_PROM_12	0.8466	0.1059	0.1716
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0552	0.0000
	nurb_	1.0000	0.0552	0.0000
Cluster 7	PUBLISHED_PHONE	0.4182	0.0459	0.6098
	mi_DONOR_AGE	0.5491	0.0809	0.4906
	mi_INCOME_GROUP	0.7002	0.1307	0.3449
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0418	0.2785
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1033	0.3182
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.6334	0.1288	0.4208
	ClusCdGrp2	0.6334	0.0802	0.3986
Cluster 12	PCT_OWNER_OCCUPIED	0.6356	0.0617	0.3883
	PCT_MALE_VETERANS	0.6356	0.1396	0.4235
Cluster 13	INCOME_GROUP	0.6258	0.1539	0.4423
	home01	0.6258	0.3165	0.5475
Cluster 14	PEP_STAR	0.7500	0.3654	0.3939
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0772	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0400	0.0000
Cluster 19	STATUS_FL	1.0000	0.1430	0.0000
Cluster 20	MOR_HIT_RATE	1.0000	0.0572	0.0000
Cluster 21	ClusCdGrp1	1.0000	0.0592	0.0000
Cluster 22	nurbr	0.7371	0.1076	0.2946
	ClusCdGrp4	0.7371	0.2373	0.3447
Cluster 23	nurbs	1.0000	0.1153	0.0000

Cluster 1 will be split because it has the largest second eigenvalue, 0.857141, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 24 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	7	7	5.361	0.7659	0.6786
2	5	5	3.512852	0.7026	0.7664
3	5	5	3.205764	0.6412	0.7850
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	3	3	1.667485	0.5558	0.8207
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	2	2	1.266835	0.6334	0.7332
12	2	2	1.271282	0.6356	0.7287
13	2	2	1.251543	0.6258	0.7485
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	
18	1	1	1	1.0000	
19	1	1	1	1.0000	
20	1	1	1	1.0000	
21	1	1	1	1.0000	
22	2	2	1.474259	0.7371	0.5257
23	1	1	1	1.0000	
24	1	1	1	1.0000	

Total variation explained = 42.42746 Proportion = 0.7576

24 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8709	0.2470	0.1715
	LIFETIME_CARD_PROM	0.9315	0.2918	0.0967
	LIFETIME_PROM	0.9182	0.2645	0.1112
	LIFETIME_GIFT_AMOUNT	0.4984	0.2765	0.6933
	LIFETIME_GIFT_COUNT	0.7123	0.4296	0.5043
	MONTHS_SINCE_FIRST_GIFT	0.8847	0.2532	0.1543
	mi_WEALTH_RATING	0.5449	0.1182	0.5161
Cluster 2	RECENT_AVG_GIFT_AMT	0.8007	0.3960	0.3300
	RECENT_AVG_CARD_GIFT_AMT	0.4778	0.1948	0.6486
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5556	0.1888	0.5478

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

24 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	LAST_GIFT_AMT	0.7760	0.4036	0.3756
Cluster 3	WEALTH_RATING	0.3502	0.1131	0.7327
	MEDIAN_HOME_VALUE	0.6799	0.0952	0.3538
	MEDIAN_HOUSEHOLD_INCOME	0.8023	0.1544	0.2338
	PER_CAPITA_INCOME	0.8020	0.1024	0.2206
	nses1	0.5714	0.1231	0.4888
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	IN_HOUSE	0.4666	0.0691	0.5729
	CARD_PROM_12	0.5231	0.0860	0.5218
	NUMBER_PROM_12	0.8466	0.1087	0.1722
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0552	0.0000
	nurb_	1.0000	0.0552	0.0000
Cluster 7	PUBLISHED_PHONE	0.4182	0.0459	0.6098
	mi_DONOR_AGE	0.5491	0.0809	0.4906
	mi_INCOME_GROUP	0.7002	0.1307	0.3449
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0418	0.2785
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1033	0.3182
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.6334	0.1288	0.4208
	ClusCdGrp2	0.6334	0.0802	0.3986
Cluster 12	PCT_OWNER_OCCUPIED	0.6356	0.0617	0.3883
	PCT_MALE_VETERANS	0.6356	0.1396	0.4235
Cluster 13	INCOME_GROUP	0.6258	0.1539	0.4423
	home01	0.6258	0.3165	0.5475
Cluster 14	PEP_STAR	0.7500	0.3532	0.3865
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0772	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0402	0.0000

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

24 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 19	STATUS_FL	1.0000	0.1462	0.0000
Cluster 20	MOR_HIT_RATE	1.0000	0.0572	0.0000
Cluster 21	ClusCdGrp1	1.0000	0.0592	0.0000
Cluster 22	nurbr	0.7371	0.1076	0.2946
	ClusCdGrp4	0.7371	0.2373	0.3447
Cluster 23	nurbs	1.0000	0.1153	0.0000
Cluster 24	RECENT_STAR_STATUS	1.0000	0.1210	0.0000

Cluster 7 will be split because it has the largest second eigenvalue, 0.820652, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 25 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	7	7	5.361	0.7659	0.6786
2	5	5	3.512852	0.7026	0.7664
3	5	5	3.205764	0.6412	0.7850
4	5	5	3.827122	0.7654	0.6010
5	4	4	2.321936	0.5805	0.7955
6	2	2	2	1.0000	0.0000
7	2	2	1.44732	0.7237	0.5527
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	2	2	1.266835	0.6334	0.7332
12	2	2	1.271282	0.6356	0.7287
13	2	2	1.251543	0.6258	0.7485
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	
18	1	1	1	1.0000	
19	1	1	1	1.0000	
20	1	1	1	1.0000	
21	1	1	1	1.0000	
22	2	2	1.474259	0.7371	0.5257
23	1	1	1	1.0000	

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 25 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
24	1	1	1	1.0000	
25	1	1	1	1.0000	

Total variation explained = 43.2073 Proportion = 0.7716

25 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8709	0.2470	0.1715
	LIFETIME_CARD_PROM	0.9315	0.2918	0.0967
	LIFETIME_PROM	0.9182	0.2645	0.1112
	LIFETIME_GIFT_AMOUNT	0.4984	0.2765	0.6933
	LIFETIME_GIFT_COUNT	0.7123	0.4296	0.5043
	MONTHS_SINCE_FIRST_GIFT	0.8847	0.2532	0.1543
	mi_WEALTH_RATING	0.5449	0.1182	0.5161
Cluster 2	RECENT_AVG_GIFT_AMT	0.8007	0.3960	0.3300
	RECENT_AVG_CARD_GIFT_AMT	0.4778	0.1948	0.6486
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5556	0.1888	0.5478
	LAST_GIFT_AMT	0.7760	0.4036	0.3756
Cluster 3	WEALTH_RATING	0.3502	0.1131	0.7327
	MEDIAN_HOME_VALUE	0.6799	0.0952	0.3538
	MEDIAN_HOUSEHOLD_INCOME	0.8023	0.1544	0.2338
	PER_CAPITA_INCOME	0.8020	0.1024	0.2206
	nses1	0.5714	0.1231	0.4888
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	IN_HOUSE	0.4666	0.0691	0.5729
	CARD_PROM_12	0.5231	0.0860	0.5218
	NUMBER_PROM_12	0.8466	0.1087	0.1722
	MONTHS_SINCE_LAST_GIFT	0.4857	0.0670	0.5513
Cluster 6	nses_	1.0000	0.0552	0.0000
	nurb_	1.0000	0.0552	0.0000
Cluster 7	mi_DONOR_AGE	0.7237	0.0809	0.3006
	mi_INCOME_GROUP	0.7237	0.1307	0.3179
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0418	0.2785

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

25 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1033	0.3182
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.6334	0.1288	0.4208
	ClusCdGrp2	0.6334	0.0802	0.3986
Cluster 12	PCT_OWNER_OCCUPIED	0.6356	0.0617	0.3883
	PCT_MALE_VETERANS	0.6356	0.1396	0.4235
Cluster 13	INCOME_GROUP	0.6258	0.1539	0.4423
	home01	0.6258	0.3399	0.5669
Cluster 14	PEP_STAR	0.7500	0.3532	0.3865
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0772	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0402	0.0000
Cluster 19	STATUS_FL	1.0000	0.1462	0.0000
Cluster 20	MOR_HIT_RATE	1.0000	0.0459	0.0000
Cluster 21	ClusCdGrp1	1.0000	0.0592	0.0000
Cluster 22	nurbr	0.7371	0.1076	0.2946
	ClusCdGrp4	0.7371	0.2373	0.3447
Cluster 23	nurbs	1.0000	0.1153	0.0000
Cluster 24	RECENT_STAR_STATUS	1.0000	0.1210	0.0000
Cluster 25	PUBLISHED_PHONE	1.0000	0.0997	0.0000

Cluster 5 will be split because it has the largest second eigenvalue, 0.795547, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 26 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	7	7	5.361	0.7659	0.6786
2	5	5	3.512852	0.7026	0.7664
3	5	5	3.205764	0.6412	0.7850
4	5	5	3.827122	0.7654	0.6010
5	3	3	1.973097	0.6577	0.7942
6	2	2	2	1.0000	0.0000
7	2	2	1.44732	0.7237	0.5527

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 26 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	2	2	1.266835	0.6334	0.7332
12	2	2	1.271282	0.6356	0.7287
13	2	2	1.251543	0.6258	0.7485
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	
18	1	1	1	1.0000	
19	1	1	1	1.0000	
20	1	1	1	1.0000	
21	1	1	1	1.0000	
22	2	2	1.474259	0.7371	0.5257
23	1	1	1	1.0000	
24	1	1	1	1.0000	
25	1	1	1	1.0000	
26	1	1	1	1.0000	

Total variation explained = 43.85846 Proportion = 0.7832

26 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8709	0.2470	0.1715
	LIFETIME_CARD_PROM	0.9315	0.2918	0.0967
	LIFETIME_PROM	0.9182	0.2934	0.1157
	LIFETIME_GIFT_AMOUNT	0.4984	0.2765	0.6933
	LIFETIME_GIFT_COUNT	0.7123	0.4296	0.5043
	MONTHS_SINCE_FIRST_GIFT	0.8847	0.2532	0.1543
	mi_WEALTH_RATING	0.5449	0.1182	0.5161
Cluster 2	RECENT_AVG_GIFT_AMT	0.8007	0.3960	0.3300
	RECENT_AVG_CARD_GIFT_AMT	0.4778	0.1948	0.6486
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5556	0.1888	0.5478
	LAST_GIFT_AMT	0.7760	0.4036	0.3756
Cluster 3	WEALTH_RATING	0.3502	0.1131	0.7327
	MEDIAN_HOME_VALUE	0.6799	0.0952	0.3538
	MEDIAN_HOUSEHOLD_INCOME	0.8023	0.1544	0.2338
	PER_CAPITA_INCOME	0.8020	0.1024	0.2206

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

26 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	nses1	0.5714	0.1231	0.4888
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	IN_HOUSE	0.5114	0.1032	0.5448
	CARD_PROM_12	0.5924	0.1011	0.4534
	NUMBER_PROM_12	0.8693	0.2630	0.1774
Cluster 6	nses_	1.0000	0.0552	0.0000
	nurb_	1.0000	0.0552	0.0000
Cluster 7	mi_DONOR_AGE	0.7237	0.0809	0.3006
	mi_INCOME_GROUP	0.7237	0.1307	0.3179
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0418	0.2785
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1033	0.3182
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.6334	0.1288	0.4208
	ClusCdGrp2	0.6334	0.0802	0.3986
Cluster 12	PCT_OWNER_OCCUPIED	0.6356	0.0617	0.3883
	PCT_MALE_VETERANS	0.6356	0.1396	0.4235
Cluster 13	INCOME_GROUP	0.6258	0.1539	0.4423
	home01	0.6258	0.3399	0.5669
Cluster 14	PEP_STAR	0.7500	0.3532	0.3865
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0772	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0402	0.0000
Cluster 19	STATUS_FL	1.0000	0.1462	0.0000
Cluster 20	MOR_HIT_RATE	1.0000	0.0459	0.0000
Cluster 21	ClusCdGrp1	1.0000	0.0592	0.0000
Cluster 22	nurbr	0.7371	0.1076	0.2946
	ClusCdGrp4	0.7371	0.2373	0.3447
Cluster 23	nurbs	1.0000	0.1153	0.0000
Cluster 24	RECENT_STAR_STATUS	1.0000	0.1210	0.0000

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

26 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 25	PUBLISHED_PHONE	1.0000	0.0997	0.0000
Cluster 26	MONTHS_SINCE_LAST_GIFT	1.0000	0.2331	0.0000

Cluster 5 will be split because it has the largest second eigenvalue, 0.794179, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 27 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	7	7	5.361	0.7659	0.6786
2	5	5	3.512852	0.7026	0.7664
3	5	5	3.205764	0.6412	0.7850
4	5	5	3.827122	0.7654	0.6010
5	2	2	1.64433	0.8222	0.3557
6	2	2	2	1.0000	0.0000
7	2	2	1.44732	0.7237	0.5527
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	2	2	1.266835	0.6334	0.7332
12	2	2	1.271282	0.6356	0.7287
13	2	2	1.251543	0.6258	0.7485
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	
18	1	1	1	1.0000	
19	1	1	1	1.0000	
20	1	1	1	1.0000	
21	1	1	1	1.0000	
22	2	2	1.474259	0.7371	0.5257
23	1	1	1	1.0000	
24	1	1	1	1.0000	
25	1	1	1	1.0000	
26	1	1	1	1.0000	
27	1	1	1	1.0000	

Total variation explained = 44.52969 Proportion = 0.7952

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

27 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8709	0.2470	0.1715
	LIFETIME_CARD_PROM	0.9315	0.2918	0.0967
	LIFETIME_PROM	0.9182	0.2645	0.1112
	LIFETIME_GIFT_AMOUNT	0.4984	0.2765	0.6933
	LIFETIME_GIFT_COUNT	0.7123	0.4296	0.5043
	MONTHS_SINCE_FIRST_GIFT	0.8847	0.2532	0.1543
	mi_WEALTH_RATING	0.5449	0.1182	0.5161
Cluster 2	RECENT_AVG_GIFT_AMT	0.8007	0.3960	0.3300
	RECENT_AVG_CARD_GIFT_AMT	0.4778	0.1948	0.6486
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5556	0.1888	0.5478
	LAST_GIFT_AMT	0.7760	0.4036	0.3756
Cluster 3	WEALTH_RATING	0.3502	0.1131	0.7327
	MEDIAN_HOME_VALUE	0.6799	0.0952	0.3538
	MEDIAN_HOUSEHOLD_INCOME	0.8023	0.1544	0.2338
	PER_CAPITA_INCOME	0.8020	0.1024	0.2206
	nses1	0.5714	0.1231	0.4888
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	CARD_PROM_12	0.8222	0.1011	0.1978
	NUMBER_PROM_12	0.8222	0.3309	0.2658
Cluster 6	nses_	1.0000	0.0552	0.0000
	nurb_	1.0000	0.0552	0.0000
Cluster 7	mi_DONOR_AGE	0.7237	0.0809	0.3006
	mi_INCOME_GROUP	0.7237	0.1307	0.3179
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0418	0.2785
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1033	0.3182
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.6334	0.1288	0.4208
	ClusCdGrp2	0.6334	0.0802	0.3986
Cluster 12	PCT_OWNER_OCCUPIED	0.6356	0.0617	0.3883
	PCT_MALE_VETERANS	0.6356	0.1396	0.4235

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

27 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 13	INCOME_GROUP	0.6258	0.1539	0.4423
	home01	0.6258	0.3399	0.5669
Cluster 14	PEP_STAR	0.7500	0.3532	0.3865
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0772	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0402	0.0000
Cluster 19	STATUS_FL	1.0000	0.1462	0.0000
Cluster 20	MOR_HIT_RATE	1.0000	0.0459	0.0000
Cluster 21	ClusCdGrp1	1.0000	0.0592	0.0000
Cluster 22	nurbr	0.7371	0.1076	0.2946
	ClusCdGrp4	0.7371	0.2373	0.3447
Cluster 23	nurbs	1.0000	0.1153	0.0000
Cluster 24	RECENT_STAR_STATUS	1.0000	0.1210	0.0000
Cluster 25	PUBLISHED_PHONE	1.0000	0.0997	0.0000
Cluster 26	MONTHS_SINCE_LAST_GIFT	1.0000	0.2099	0.0000
Cluster 27	IN_HOUSE	1.0000	0.1862	0.0000

Cluster 3 will be split because it has the largest second eigenvalue, 0.78504, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 28 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	7	7	5.361	0.7659	0.6786
2	5	5	3.512852	0.7026	0.7664
3	4	4	2.936002	0.7340	0.5478
4	5	5	3.827122	0.7654	0.6010
5	2	2	1.64433	0.8222	0.3557
6	2	2	2	1.0000	0.0000
7	2	2	1.44732	0.7237	0.5527
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	2	2	1.266835	0.6334	0.7332
12	2	2	1.271282	0.6356	0.7287
13	2	2	1.251543	0.6258	0.7485

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 28 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	
18	1	1	1	1.0000	
19	1	1	1	1.0000	
20	1	1	1	1.0000	
21	1	1	1	1.0000	
22	2	2	1.474259	0.7371	0.5257
23	1	1	1	1.0000	
24	1	1	1	1.0000	
25	1	1	1	1.0000	
26	1	1	1	1.0000	
27	1	1	1	1.0000	
28	1	1	1	1.0000	

Total variation explained = 45.25993 Proportion = 0.8082

28 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8709	0.2470	0.1715
	LIFETIME_CARD_PROM	0.9315	0.2918	0.0967
	LIFETIME_PROM	0.9182	0.2645	0.1112
	LIFETIME_GIFT_AMOUNT	0.4984	0.2765	0.6933
	LIFETIME_GIFT_COUNT	0.7123	0.4296	0.5043
	MONTHS_SINCE_FIRST_GIFT	0.8847	0.2532	0.1543
	mi_WEALTH_RATING	0.5449	0.1182	0.5161
Cluster 2	RECENT_AVG_GIFT_AMT	0.8007	0.3960	0.3300
	RECENT_AVG_CARD_GIFT_AMT	0.4778	0.1948	0.6486
	LIFETIME_AVG_GIFT_AMT	0.9027	0.3148	0.1420
	LIFETIME_MIN_GIFT_AMT	0.5556	0.1888	0.5478
	LAST_GIFT_AMT	0.7760	0.4036	0.3756
Cluster 3	MEDIAN_HOME_VALUE	0.7325	0.0952	0.2957
	MEDIAN_HOUSEHOLD_INCOME	0.8109	0.1980	0.2358
	PER_CAPITA_INCOME	0.8345	0.1492	0.1945
	nses1	0.5581	0.1778	0.5374
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

28 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	CARD_PROM_12	0.8222	0.1011	0.1978
	NUMBER_PROM_12	0.8222	0.3309	0.2658
Cluster 6	nses_	1.0000	0.0552	0.0000
	nurb_	1.0000	0.0552	0.0000
Cluster 7	mi_DONOR_AGE	0.7237	0.0809	0.3006
	mi_INCOME_GROUP	0.7237	0.1307	0.3179
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0418	0.2785
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1033	0.3182
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.1539	0.0757
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5429	0.1402
Cluster 11	nses3	0.6334	0.1139	0.4137
	ClusCdGrp2	0.6334	0.0802	0.3986
Cluster 12	PCT_OWNER_OCCUPIED	0.6356	0.0617	0.3883
	PCT_MALE_VETERANS	0.6356	0.1396	0.4235
Cluster 13	INCOME_GROUP	0.6258	0.1417	0.4360
	home01	0.6258	0.3399	0.5669
Cluster 14	PEP_STAR	0.7500	0.3532	0.3865
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0772	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0402	0.0000
Cluster 19	STATUS_FL	1.0000	0.1462	0.0000
Cluster 20	MOR_HIT_RATE	1.0000	0.0459	0.0000
Cluster 21	ClusCdGrp1	1.0000	0.0592	0.0000
Cluster 22	nurbr	0.7371	0.0974	0.2912
	ClusCdGrp4	0.7371	0.2373	0.3447
Cluster 23	nurbs	1.0000	0.1061	0.0000
Cluster 24	RECENT_STAR_STATUS	1.0000	0.1210	0.0000
Cluster 25	PUBLISHED_PHONE	1.0000	0.0997	0.0000
Cluster 26	MONTHS_SINCE_LAST_GIFT	1.0000	0.2099	0.0000
Cluster 27	IN_HOUSE	1.0000	0.1862	0.0000
Cluster 28	WEALTH_RATING	1.0000	0.2021	0.0000

Cluster 2 will be split because it has the largest second eigenvalue, 0.766411, which is greater than the MAXEIGEN=0.7 value.

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Clustering algorithm converged.

Cluster Summary for 29 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	7	7	5.361	0.7659	0.6786
2	2	2	1.804668	0.9023	0.1953
3	4	4	2.936002	0.7340	0.5478
4	5	5	3.827122	0.7654	0.6010
5	2	2	1.64433	0.8222	0.3557
6	2	2	2	1.0000	0.0000
7	2	2	1.44732	0.7237	0.5527
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	2	2	1.266835	0.6334	0.7332
12	2	2	1.271282	0.6356	0.7287
13	2	2	1.251543	0.6258	0.7485
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	
18	1	1	1	1.0000	
19	1	1	1	1.0000	
20	1	1	1	1.0000	
21	1	1	1	1.0000	
22	2	2	1.474259	0.7371	0.5257
23	1	1	1	1.0000	
24	1	1	1	1.0000	
25	1	1	1	1.0000	
26	1	1	1	1.0000	
27	1	1	1	1.0000	
28	1	1	1	1.0000	
29	3	3	2.288765	0.7629	0.5351

Total variation explained = 45.84051 Proportion = 0.8186

29 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8709	0.2470	0.1715
	LIFETIME_CARD_PROM	0.9315	0.2918	0.0967
	LIFETIME_PROM	0.9182	0.2645	0.1112
	LIFETIME_GIFT_AMOUNT	0.4984	0.2765	0.6933

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

29 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	LIFETIME_GIFT_COUNT	0.7123	0.4296	0.5043
	MONTHS_SINCE_FIRST_GIFT	0.8847	0.2532	0.1543
	mi_WEALTH_RATING	0.5449	0.1182	0.5161
Cluster 2	LIFETIME_AVG_GIFT_AMT	0.9023	0.6735	0.2991
	LIFETIME_MIN_GIFT_AMT	0.9023	0.2578	0.1316
Cluster 3	MEDIAN_HOME_VALUE	0.7325	0.0952	0.2957
	MEDIAN_HOUSEHOLD_INCOME	0.8109	0.1980	0.2358
	PER_CAPITA_INCOME	0.8345	0.1492	0.1945
	nses1	0.5581	0.1778	0.5374
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	CARD_PROM_12	0.8222	0.1011	0.1978
	NUMBER_PROM_12	0.8222	0.3309	0.2658
Cluster 6	nses_	1.0000	0.0552	0.0000
	nurb_	1.0000	0.0552	0.0000
Cluster 7	mi_DONOR_AGE	0.7237	0.0809	0.3006
	mi_INCOME_GROUP	0.7237	0.1307	0.3179
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0418	0.2785
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1033	0.3182
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.2758	0.0885
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5536	0.1436
Cluster 11	nses3	0.6334	0.1139	0.4137
	ClusCdGrp2	0.6334	0.0802	0.3986
Cluster 12	PCT_OWNER_OCCUPIED	0.6356	0.0617	0.3883
	PCT_MALE_VETERANS	0.6356	0.1396	0.4235
Cluster 13	INCOME_GROUP	0.6258	0.1417	0.4360
	home01	0.6258	0.3399	0.5669
Cluster 14	PEP_STAR	0.7500	0.3532	0.3865
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0772	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0402	0.0000

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

29 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 19	STATUS_FL	1.0000	0.1462	0.0000
Cluster 20	MOR_HIT_RATE	1.0000	0.0459	0.0000
Cluster 21	ClusCdGrp1	1.0000	0.0592	0.0000
Cluster 22	nurbr	0.7371	0.0974	0.2912
	ClusCdGrp4	0.7371	0.2373	0.3447
Cluster 23	nurbs	1.0000	0.1061	0.0000
Cluster 24	RECENT_STAR_STATUS	1.0000	0.1210	0.0000
Cluster 25	PUBLISHED_PHONE	1.0000	0.0997	0.0000
Cluster 26	MONTHS_SINCE_LAST_GIFT	1.0000	0.2099	0.0000
Cluster 27	IN_HOUSE	1.0000	0.1862	0.0000
Cluster 28	WEALTH_RATING	1.0000	0.2021	0.0000
Cluster 29	RECENT_AVG_GIFT_AMT	0.8785	0.4455	0.2191
	RECENT_AVG_CARD_GIFT_AMT	0.6297	0.1994	0.4626
	LAST_GIFT_AMT	0.7806	0.4931	0.4328

Cluster 13 will be split because it has the largest second eigenvalue, 0.748457, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 30 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	7	7	5.361	0.7659	0.6786
2	2	2	1.804668	0.9023	0.1953
3	4	4	2.936002	0.7340	0.5478
4	5	5	3.827122	0.7654	0.6010
5	2	2	1.64433	0.8222	0.3557
6	2	2	2	1.0000	0.0000
7	2	2	1.44732	0.7237	0.5527
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	2	2	1.266835	0.6334	0.7332
12	2	2	1.271282	0.6356	0.7287
13	1	1	1	1.0000	
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 30 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
18	1	1	1	1.0000	
19	1	1	1	1.0000	
20	1	1	1	1.0000	
21	1	1	1	1.0000	
22	2	2	1.474259	0.7371	0.5257
23	1	1	1	1.0000	
24	1	1	1	1.0000	
25	1	1	1	1.0000	
26	1	1	1	1.0000	
27	1	1	1	1.0000	
28	1	1	1	1.0000	
29	3	3	2.288765	0.7629	0.5351
30	1	1	1	1.0000	

Total variation explained = 46.58897 Proportion = 0.8319

30 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8709	0.2470	0.1715
	LIFETIME_CARD_PROM	0.9315	0.2918	0.0967
	LIFETIME_PROM	0.9182	0.2645	0.1112
	LIFETIME_GIFT_AMOUNT	0.4984	0.2765	0.6933
	LIFETIME_GIFT_COUNT	0.7123	0.4296	0.5043
	MONTHS_SINCE_FIRST_GIFT	0.8847	0.2532	0.1543
	mi_WEALTH_RATING	0.5449	0.1182	0.5161
Cluster 2	LIFETIME_AVG_GIFT_AMT	0.9023	0.6735	0.2991
	LIFETIME_MIN_GIFT_AMT	0.9023	0.2578	0.1316
Cluster 3	MEDIAN_HOME_VALUE	0.7325	0.0952	0.2957
	MEDIAN_HOUSEHOLD_INCOME	0.8109	0.1980	0.2358
	PER_CAPITA_INCOME	0.8345	0.1492	0.1945
	nses1	0.5581	0.1778	0.5374
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	CARD_PROM_12	0.8222	0.1011	0.1978
	NUMBER_PROM_12	0.8222	0.3309	0.2658
Cluster 6	nses_	1.0000	0.0552	0.0000
	nurb_	1.0000	0.0552	0.0000

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

30 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 7	mi_DONOR_AGE	0.7237	0.1571	0.3278
	mi_INCOME_GROUP	0.7237	0.3547	0.4283
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0418	0.2785
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1033	0.3182
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.2758	0.0885
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5536	0.1436
Cluster 11	nses3	0.6334	0.1139	0.4137
	ClusCdGrp2	0.6334	0.0802	0.3986
Cluster 12	PCT_OWNER_OCCUPIED	0.6356	0.0617	0.3883
	PCT_MALE_VETERANS	0.6356	0.1396	0.4235
Cluster 13	INCOME_GROUP	1.0000	0.1417	0.0000
Cluster 14	PEP_STAR	0.7500	0.3532	0.3865
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0772	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0402	0.0000
Cluster 19	STATUS_FL	1.0000	0.1462	0.0000
Cluster 20	MOR_HIT_RATE	1.0000	0.0459	0.0000
Cluster 21	ClusCdGrp1	1.0000	0.0592	0.0000
Cluster 22	nurbr	0.7371	0.0974	0.2912
	ClusCdGrp4	0.7371	0.2373	0.3447
Cluster 23	nurbs	1.0000	0.1061	0.0000
Cluster 24	RECENT_STAR_STATUS	1.0000	0.1210	0.0000
Cluster 25	PUBLISHED_PHONE	1.0000	0.0997	0.0000
Cluster 26	MONTHS_SINCE_LAST_GIFT	1.0000	0.2099	0.0000
Cluster 27	IN_HOUSE	1.0000	0.1862	0.0000
Cluster 28	WEALTH_RATING	1.0000	0.2021	0.0000
Cluster 29	RECENT_AVG_GIFT_AMT	0.8785	0.4455	0.2191
	RECENT_AVG_CARD_GIFT_AMT	0.6297	0.1994	0.4626
	LAST_GIFT_AMT	0.7806	0.4931	0.4328
Cluster 30	home01	1.0000	0.3399	0.0000

Cluster 11 will be split because it has the largest second eigenvalue, 0.733165, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 31 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	7	7	5.361	0.7659	0.6786
2	2	2	1.804668	0.9023	0.1953
3	4	4	2.936002	0.7340	0.5478
4	5	5	3.827122	0.7654	0.6010
5	2	2	1.64433	0.8222	0.3557
6	2	2	2	1.0000	0.0000
7	2	2	1.44732	0.7237	0.5527
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	1	1	1	1.0000	
12	2	2	1.271282	0.6356	0.7287
13	1	1	1	1.0000	
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	
18	1	1	1	1.0000	
19	1	1	1	1.0000	
20	1	1	1	1.0000	
21	1	1	1	1.0000	
22	2	2	1.474259	0.7371	0.5257
23	1	1	1	1.0000	
24	1	1	1	1.0000	
25	1	1	1	1.0000	
26	1	1	1	1.0000	
27	1	1	1	1.0000	
28	1	1	1	1.0000	
29	3	3	2.288765	0.7629	0.5351
30	1	1	1	1.0000	
31	1	1	1	1.0000	

Total variation explained = 47.32213 Proportion = 0.8450

31 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8709	0.2470	0.1715
	LIFETIME_CARD_PROM	0.9315	0.2918	0.0967
	LIFETIME_PROM	0.9182	0.2645	0.1112
	LIFETIME_GIFT_AMOUNT	0.4984	0.2765	0.6933

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

31 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
	LIFETIME_GIFT_COUNT	0.7123	0.4296	0.5043
	MONTHS_SINCE_FIRST_GIFT	0.8847	0.2532	0.1543
	mi_WEALTH_RATING	0.5449	0.1182	0.5161
Cluster 2	LIFETIME_AVG_GIFT_AMT	0.9023	0.6735	0.2991
	LIFETIME_MIN_GIFT_AMT	0.9023	0.2578	0.1316
Cluster 3	MEDIAN_HOME_VALUE	0.7325	0.0952	0.2957
	MEDIAN_HOUSEHOLD_INCOME	0.8109	0.1980	0.2358
	PER_CAPITA_INCOME	0.8345	0.1492	0.1945
	nses1	0.5581	0.1778	0.5374
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	CARD_PROM_12	0.8222	0.1011	0.1978
	NUMBER_PROM_12	0.8222	0.3309	0.2658
Cluster 6	nses_	1.0000	0.0552	0.0000
	nurb_	1.0000	0.0552	0.0000
Cluster 7	mi_DONOR_AGE	0.7237	0.1571	0.3278
	mi_INCOME_GROUP	0.7237	0.3547	0.4283
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0382	0.2775
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1033	0.3182
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.2758	0.0885
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5536	0.1436
Cluster 11	nses3	1.0000	0.1139	0.0000
Cluster 12	PCT_OWNER_OCCUPIED	0.6356	0.0617	0.3883
	PCT_MALE_VETERANS	0.6356	0.1396	0.4235
Cluster 13	INCOME_GROUP	1.0000	0.1417	0.0000
Cluster 14	PEP_STAR	0.7500	0.3532	0.3865
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0772	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0402	0.0000
Cluster 19	STATUS_FL	1.0000	0.1462	0.0000
Cluster 20	MOR_HIT_RATE	1.0000	0.0459	0.0000

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

31 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 21	ClusCdGrp1	1.0000	0.0592	0.0000
Cluster 22	nurbr	0.7371	0.0974	0.2912
	ClusCdGrp4	0.7371	0.2310	0.3419
Cluster 23	nurbs	1.0000	0.1061	0.0000
Cluster 24	RECENT_STAR_STATUS	1.0000	0.1210	0.0000
Cluster 25	PUBLISHED_PHONE	1.0000	0.0997	0.0000
Cluster 26	MONTHS_SINCE_LAST_GIFT	1.0000	0.2099	0.0000
Cluster 27	IN_HOUSE	1.0000	0.1862	0.0000
Cluster 28	WEALTH_RATING	1.0000	0.2021	0.0000
Cluster 29	RECENT_AVG_GIFT_AMT	0.8785	0.4455	0.2191
	RECENT_AVG_CARD_GIFT_AMT	0.6297	0.1994	0.4626
	LAST_GIFT_AMT	0.7806	0.4931	0.4328
Cluster 30	home01	1.0000	0.3399	0.0000
Cluster 31	ClusCdGrp2	1.0000	0.0802	0.0000

Cluster 12 will be split because it has the largest second eigenvalue, 0.728718, which is greater than the MAXEIGEN=0.7 value.

Clustering algorithm converged.

Cluster Summary for 32 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
1	7	7	5.361	0.7659	0.6786
2	2	2	1.804668	0.9023	0.1953
3	4	4	2.936002	0.7340	0.5478
4	5	5	3.827122	0.7654	0.6010
5	2	2	1.64433	0.8222	0.3557
6	2	2	2	1.0000	0.0000
7	2	2	1.44732	0.7237	0.5527
8	2	2	1.466216	0.7331	0.5338
9	2	2	1.429265	0.7146	0.5707
10	2	2	1.871837	0.9359	0.1282
11	1	1	1	1.0000	
12	1	1	1	1.0000	
13	1	1	1	1.0000	
14	2	2	1.500067	0.7500	0.4999
15	1	1	1	1.0000	
16	1	1	1	1.0000	
17	1	1	1	1.0000	

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Summary for 32 Clusters					
Cluster	Members	Cluster Variation	Variation Explained	Proportion Explained	Second Eigenvalue
18	1	1	1	1.0000	
19	1	1	1	1.0000	
20	1	1	1	1.0000	
21	1	1	1	1.0000	
22	2	2	1.474259	0.7371	0.5257
23	1	1	1	1.0000	
24	1	1	1	1.0000	
25	1	1	1	1.0000	
26	1	1	1	1.0000	
27	1	1	1	1.0000	
28	1	1	1	1.0000	
29	3	3	2.288765	0.7629	0.5351
30	1	1	1	1.0000	
31	1	1	1	1.0000	
32	1	1	1	1.0000	

Total variation explained = 48.05085 Proportion = 0.8581

32 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 1	MONTHS_SINCE_ORIGIN	0.8709	0.2470	0.1715
	LIFETIME_CARD_PROM	0.9315	0.2918	0.0967
	LIFETIME_PROM	0.9182	0.2645	0.1112
	LIFETIME_GIFT_AMOUNT	0.4984	0.2765	0.6933
	LIFETIME_GIFT_COUNT	0.7123	0.4296	0.5043
	MONTHS_SINCE_FIRST_GIFT	0.8847	0.2532	0.1543
	mi_WEALTH_RATING	0.5449	0.1182	0.5161
Cluster 2	LIFETIME_AVG_GIFT_AMT	0.9023	0.6735	0.2991
	LIFETIME_MIN_GIFT_AMT	0.9023	0.2578	0.1316
Cluster 3	MEDIAN_HOME_VALUE	0.7325	0.0952	0.2957
	MEDIAN_HOUSEHOLD_INCOME	0.8109	0.1980	0.2358
	PER_CAPITA_INCOME	0.8345	0.1492	0.1945
	nses1	0.5581	0.1778	0.5374
Cluster 4	FREQUENCY_STATUS_97NK	0.6765	0.2014	0.4051
	RECENT_RESPONSE_PROP	0.8340	0.1529	0.1960
	RECENT_CARD_RESPONSE_PROP	0.6596	0.0656	0.3643
	RECENT_RESPONSE_COUNT	0.8270	0.2874	0.2427
	RECENT_CARD_RESPONSE_COUNT	0.8301	0.2236	0.2189
Cluster 5	CARD_PROM_12	0.8222	0.1011	0.1978
	NUMBER_PROM_12	0.8222	0.3309	0.2658

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

32 Clusters		R-squared with		1-R**2 Ratio
Cluster	Variable	Own Cluster	Next Closest	
Cluster 6	nses_	1.0000	0.1396	0.0000
	nurb_	1.0000	0.1396	0.0000
Cluster 7	mi_DONOR_AGE	0.7237	0.1571	0.3278
	mi_INCOME_GROUP	0.7237	0.3547	0.4283
Cluster 8	nses4	0.7331	0.1404	0.3105
	ClusCdGrp3	0.7331	0.0382	0.2775
Cluster 9	PCT_VIETNAM_VETERANS	0.7146	0.0772	0.3092
	PCT_WWII_VETERANS	0.7146	0.1771	0.3468
Cluster 10	LIFETIME_GIFT_RANGE	0.9359	0.2758	0.0885
	LIFETIME_MAX_GIFT_AMT	0.9359	0.5536	0.1436
Cluster 11	nses3	1.0000	0.1139	0.0000
Cluster 12	PCT_OWNER_OCCUPIED	1.0000	0.0736	0.0000
Cluster 13	INCOME_GROUP	1.0000	0.1417	0.0000
Cluster 14	PEP_STAR	0.7500	0.3532	0.3865
	STATUS_ES	0.7500	0.2171	0.3193
Cluster 15	nurbu	1.0000	0.0997	0.0000
Cluster 16	nurbt	1.0000	0.0772	0.0000
Cluster 17	PCT_MALE_MILITARY	1.0000	0.0226	0.0000
Cluster 18	DONOR_AGE	1.0000	0.0402	0.0000
Cluster 19	STATUS_FL	1.0000	0.1462	0.0000
Cluster 20	MOR_HIT_RATE	1.0000	0.0459	0.0000
Cluster 21	ClusCdGrp1	1.0000	0.0592	0.0000
Cluster 22	nurbr	0.7371	0.0974	0.2912
	ClusCdGrp4	0.7371	0.2310	0.3419
Cluster 23	nurbs	1.0000	0.1061	0.0000
Cluster 24	RECENT_STAR_STATUS	1.0000	0.1210	0.0000
Cluster 25	PUBLISHED_PHONE	1.0000	0.0997	0.0000
Cluster 26	MONTHS_SINCE_LAST_GIFT	1.0000	0.2099	0.0000
Cluster 27	IN_HOUSE	1.0000	0.1862	0.0000
Cluster 28	WEALTH_RATING	1.0000	0.2021	0.0000
Cluster 29	RECENT_AVG_GIFT_AMT	0.8785	0.4455	0.2191
	RECENT_AVG_CARD_GIFT_AMT	0.6297	0.1994	0.4626
	LAST_GIFT_AMT	0.7806	0.4931	0.4328
Cluster 30	home01	1.0000	0.3399	0.0000
Cluster 31	ClusCdGrp2	1.0000	0.0802	0.0000
Cluster 32	PCT_MALE_VETERANS	1.0000	0.1396	0.0000

No cluster meets the criterion for splitting.

Variable Clustering of PVA data set

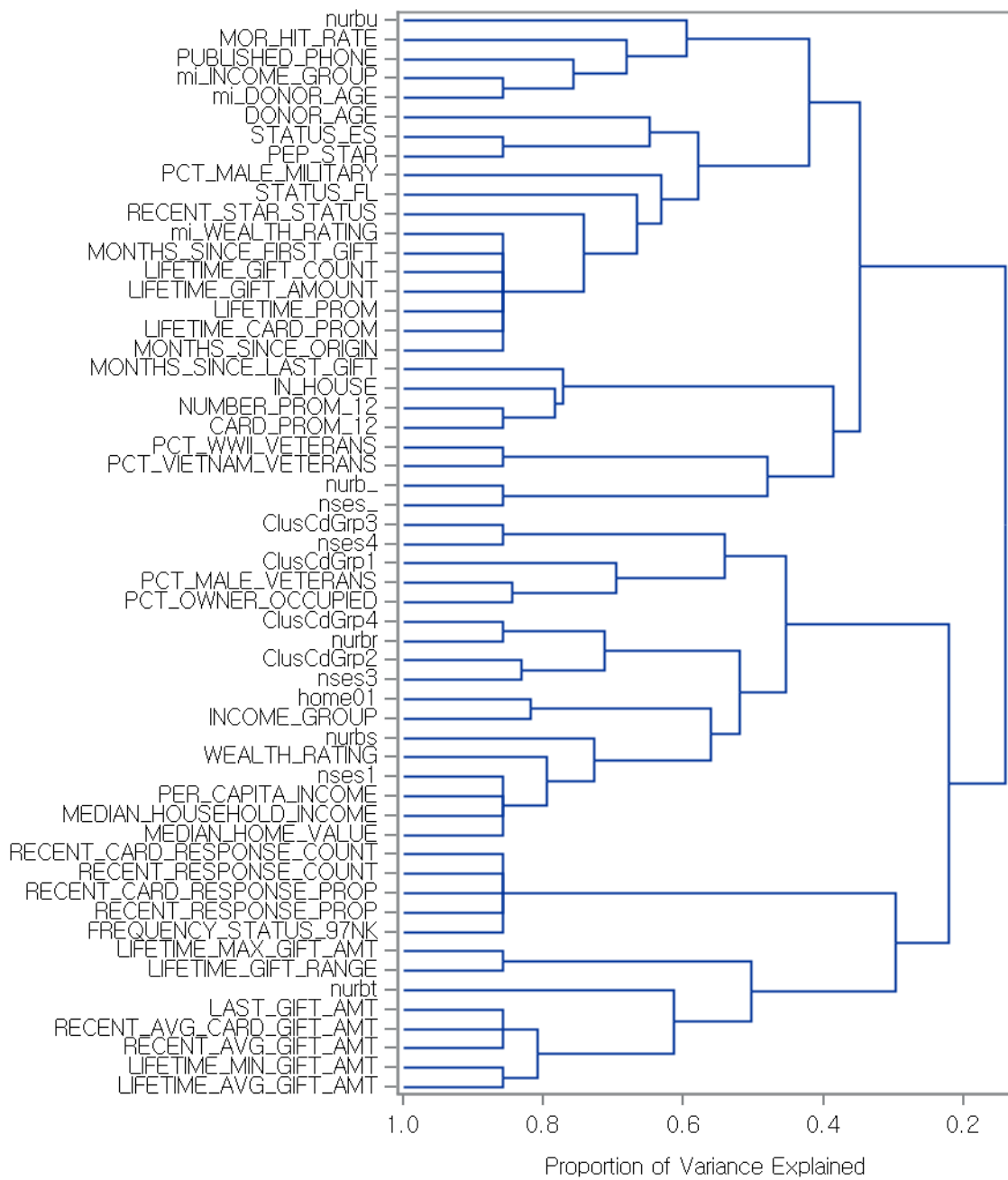
Oblique Principal Component Cluster Analysis

Number of Clusters	Total Variation Explained by Clusters	Proportion of Variation Explained by Clusters	Minimum Proportion Explained by a Cluster	Maximum Second Eigenvalue in a Cluster	Minimum R-squared for a Variable	Maximum $1-R^{*2}$ Ratio for a Variable
1	7.864678	0.1404	0.1404	5.568126	0.0000	
2	12.420243	0.2218	0.1897	4.212711	0.0004	0.9997
3	16.595971	0.2964	0.2588	3.013748	0.0007	1.0075
4	19.482981	0.3479	0.2588	2.424482	0.0007	1.0275
5	21.651264	0.3866	0.2634	1.961928	0.0007	1.0575
6	23.599426	0.4214	0.2634	1.800516	0.0007	1.1874
7	25.368423	0.4530	0.2634	1.763991	0.0007	1.3573
8	26.879837	0.4800	0.3360	1.428525	0.0007	1.3612
9	28.133241	0.5024	0.3360	1.350485	0.0007	1.3612
10	29.069488	0.5191	0.3360	1.285995	0.0010	1.3612
11	30.291685	0.5409	0.3360	1.146334	0.0010	1.3598
12	31.434587	0.5613	0.3589	1.107165	0.0010	1.3598
13	32.450036	0.5795	0.3589	1.077754	0.0010	1.0968
14	33.353621	0.5956	0.3589	1.006684	0.0010	1.0968
15	34.348075	0.6134	0.4473	0.999840	0.0010	1.0761
16	35.347376	0.6312	0.4473	0.998937	0.0022	1.0209
17	36.345581	0.6490	0.4473	0.951359	0.1296	0.9068
18	37.295435	0.6660	0.4473	0.927057	0.1646	0.8765
19	38.126866	0.6808	0.4473	0.924090	0.1705	0.8703
20	39.005175	0.6965	0.4522	0.919871	0.1705	0.8703
21	39.919862	0.7129	0.4832	0.918306	0.1705	0.8703
22	40.728030	0.7273	0.5558	0.880605	0.1705	0.8703
23	41.571456	0.7423	0.5558	0.857141	0.1705	0.8703
24	42.427463	0.7576	0.5558	0.820652	0.3502	0.7327
25	43.207298	0.7716	0.5805	0.795547	0.3502	0.7327
26	43.858458	0.7832	0.6258	0.794179	0.3502	0.7327
27	44.529691	0.7952	0.6258	0.785040	0.3502	0.7327
28	45.259930	0.8082	0.6258	0.766411	0.4778	0.6933
29	45.840511	0.8186	0.6258	0.748457	0.4984	0.6933
30	46.588968	0.8319	0.6334	0.733165	0.4984	0.6933
31	47.322133	0.8450	0.6356	0.728718	0.4984	0.6933
32	48.050850	0.8581	0.7146	0.678626	0.4984	0.6933

Variable Clustering of PVA data set

Oblique Principal Component Cluster Analysis

Cluster Analysis



Variable Clustering of PVA data set

CORR 프로시저

1 개의 With 변수:	TARGET_B
32 개의 변수:	LIFETIME_CARD_PROM LIFETIME_MIN_GIFT_AMT PER_CAPITA_INCOME RECENT_RESPONSE_PROP CARD_PROM_12 nses_ mi_DONOR_AGE ClusCdGrp3 PCT_VIETNAM_VETERANS LIFETIME_GIFT_RANGE nses3 PCT_MALE_VETERANS INCOME_GROUP STATUS_ES nurbu nurbt PCT_MALE_MILITARY DONOR_AGE STATUS_FL MOR_HIT_RATE ClusCdGrp1 nurbr nurbs RECENT_STAR_STATUS PUBLISHED_PHONE MONTHS_SINCE_LAST_GIFT IN_HOUSE WEALTH_RATING RECENT_AVG_GIFT_AMT home01 ClusCdGrp2 PCT_OWNER_OCCUPIED

단순 통계량						
변수	N	평균	표준편차	중위수	최솟값	최댓값
TARGET_B	19372	0.25000	0.43302	0	0	1.00000
LIFETIME_CARD_PROM	19372	18.66808	8.55878	18.00000	2.00000	56.00000
LIFETIME_MIN_GIFT_AMT	19372	7.62093	7.95979	5.00000	0	450.00000
PER_CAPITA_INCOME	19372	15857	8711	13817	0	174523
RECENT_RESPONSE_PROP	19372	0.19013	0.11395	0.16700	0	1.00000
CARD_PROM_12	19372	5.36713	1.26420	6.00000	0	17.00000
nses_	19372	0.02344	0.15129	0	0	1.00000
mi_DONOR_AGE	19372	0.24752	0.43158	0	0	1.00000
ClusCdGrp3	19372	0.08574	0.27999	0	0	1.00000
PCT_VIETNAM_VETERANS	19372	29.60329	15.12036	29.00000	0	99.00000
LIFETIME_GIFT_RANGE	19372	11.58788	15.11689	10.00000	0	997.00000
nses3	19372	0.17154	0.37699	0	0	1.00000
PCT_MALE_VETERANS	19372	30.57392	11.42147	31.00000	0	99.00000
INCOME_GROUP	19372	3.92851	1.64028	4.00000	1.00000	7.00000
STATUS_ES	19372	0.23993	0.42705	0	0	1.00000
nurbu	19372	0.12678	0.33274	0	0	1.00000
nurbt	19372	0.20359	0.40268	0	0	1.00000
PCT_MALE_MILITARY	19372	1.02901	4.91830	0	0	97.00000
DONOR_AGE	19372	59.21789	14.53619	59.00000	0	87.00000
STATUS_FL	19372	0.08332	0.27637	0	0	1.00000
MOR_HIT_RATE	19372	3.36166	9.50348	0	0	241.00000
ClusCdGrp1	19372	0.07960	0.27068	0	0	1.00000
nurbr	19372	0.20674	0.40498	0	0	1.00000
nurbs	19372	0.23183	0.42201	0	0	1.00000
RECENT_STAR_STATUS	19372	0.93114	2.54558	0	0	22.00000
PUBLISHED_PHONE	19372	0.49773	0.50001	0	0	1.00000
MONTHS_SINCE_LAST_GIFT	19372	18.19115	4.03306	18.00000	4.00000	27.00000
IN_HOUSE	19372	0.07320	0.26047	0	0	1.00000
WEALTH_RATING	19372	5.14831	2.10828	5.00000	0	9.00000
RECENT_AVG_GIFT_AMT	19372	15.36540	10.16748	14.00000	0	260.00000
home01	19372	0.54749	0.49775	1.00000	0	1.00000
ClusCdGrp2	19372	0.25588	0.43637	0	0	1.00000
PCT_OWNER_OCCUPIED	19372	69.69900	21.71102	76.00000	0	99.00000

Variable Clustering of PVA data set

CORR 프로시저

스피어만 상관 계수, N = 19372 H0: Rho=0 가정하에서 Prob > r				
TARGET_B	RECENT_RESPONSE_PROP 0.11365 <.0001	RECENT_AVG_GIFT_AMT -0.11182 <.0001	STATUS_ES 0.09743 <.0001	LIFETIME_MIN_GIFT_AMT -0.09353 <.0001

스피어만 상관 계수, N = 19372 H0: Rho=0 가정하에서 Prob > r				
TARGET_B	MONTHS_SINCE_LAST_GIFT -0.08118 <.0001	RECENT_STAR_STATUS 0.06558 <.0001	LIFETIME_CARD_PROM 0.06373 <.0001	STATUS_FL -0.05586 <.0001

스피어만 상관 계수, N = 19372 H0: Rho=0 가정하에서 Prob > r							
TARGET_B	PER_CAPITA_INCOME 0.04518 <.0001	ClusCdGrp3 -0.04481 <.0001	IN_HOUSE 0.04096 <.0001	DONOR_AGE 0.03988 <.0001	ClusCdGrp2 0.03654 <.0001	INCOME_GROUP 0.03368 <.0001	ClusCdGrp1 0.03325 <.0001

스피어만 상관 계수, N = 19372 H0: Rho=0 가정하에서 Prob > r							
TARGET_B	CARD_PROM_12 0.03302 <.0001	nses3 -0.03091 <.0001	LIFETIME_GIFT_RANGE -0.02816 <.0001	MOR_HIT_RATE 0.02229 0.0019	nurbr -0.02186 0.0023	nses_ 0.02088 0.0037	nurbs 0.01815 0.0115

스피어만 상관 계수, N = 19372 H0: Rho=0 가정하에서 Prob > r					
TARGET_B	PCT_MALE_VETERANS 0.01360 0.0583	home01 0.01353 0.0596	nurbu -0.01326 0.0650	PCT_OWNER_OCCUPIED 0.01281 0.0746	PCT_VIETNAM_VETERANS -0.01008 0.1606

스피어만 상관 계수, N = 19372 H0: Rho=0 가정하에서 Prob > r					
TARGET_B	mi_DONOR_AGE -0.00960 0.1816	nurbt 0.00592 0.4099	WEALTH_RATING 0.00545 0.4482	PUBLISHED_PHONE -0.00322 0.6542	PCT_MALE_MILITARY 0.00184 0.7984

Variable Clustering of PVA data set

CORR 프로시저

호에프딩 종속 계수, N = 19372 H0: D=0 가정하에서 Prob > D				
TARGET_B	RECENT_RESPONSE_PROP 0.00175 <.0001	RECENT_AVG_GIFT_AMT 0.00174 <.0001	LIFETIME_MIN_GIFT_AMT 0.00105 <.0001	MONTHS_SINCE_LAST_GIFT 0.00081 <.0001

호에프딩 종속 계수, N = 19372 H0: D=0 가정하에서 Prob > D					
TARGET_B	STATUS_ES 0.00054 <.0001	LIFETIME_CARD_PROM 0.00049 <.0001	RECENT_STAR_STATUS 0.00033 <.0001	PER_CAPITA_INCOME 0.00023 <.0001	DONOR_AGE 0.00023 <.0001

호에프딩 종속 계수, N = 19372 H0: D=0 가정하에서 Prob > D						
TARGET_B	LIFETIME_GIFT_RANGE 0.00021 0.0002	CARD_PROM_12 0.00009 0.0104	INCOME_GROUP 0.00009 0.0119	ClusCdGrp2 0.00003 0.1185	STATUS_FL 0.00001 0.2165	MOR_HIT_RATE -0.00001 0.4625

호에프딩 종속 계수, N = 19372 H0: D=0 가정하에서 Prob > D						
TARGET_B	ClusCdGrp3 -0.00002 0.7775	PCT_MALE_VETERANS -0.00002 0.8176	nses3 -0.00002 0.8516	PCT_OWNER_OCCUPIED -0.00003 0.9989	WEALTH_RATING -0.00003 0.9998	IN_HOUSE -0.00003 1.0000

호에프딩 종속 계수, N = 19372 H0: D=0 가정하에서 Prob > D						
TARGET_B	PCT_VIETNAM_VETERANS -0.00004 1.0000	nurbr -0.00004 1.0000	home01 -0.00004 1.0000	nurbs -0.00004 1.0000	ClusCdGrp1 -0.00004 1.0000	mi_DONOR_AGE -0.00006 1.0000

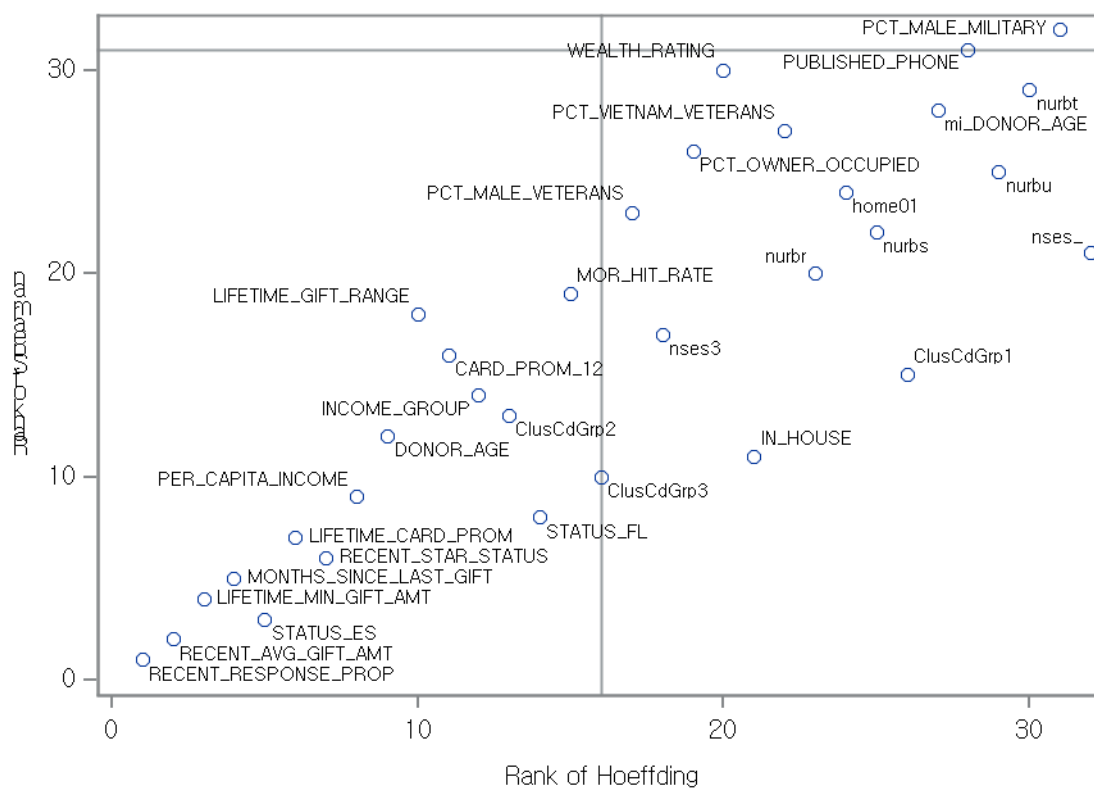
호에프딩 종속 계수, N = 19372 H0: D=0 가정하에서 Prob > D					
TARGET_B	PUBLISHED_PHONE -0.00006 1.0000	nurbu -0.00006 1.0000	nurbt -0.00006 1.0000	PCT_MALE_MILITARY -0.00006 1.0000	nses_ -0.00007 1.0000

OBS	variable	Spearman rank of variables	Hoeffding rank of variables
1	RECENT_RESPONSE_PROP	1	1
2	RECENT_AVG_GIFT_AMT	2	2
3	STATUS_ES	3	5
4	LIFETIME_MIN_GIFT_AMT	4	3
5	MONTHS_SINCE_LAST_GIFT	5	4
6	RECENT_STAR_STATUS	6	7
7	LIFETIME_CARD_PROM	7	6
8	STATUS_FL	8	14
9	PER_CAPITA_INCOME	9	8
10	ClusCdGrp3	10	16
11	IN_HOUSE	11	21
12	DONOR_AGE	12	9
13	ClusCdGrp2	13	13
14	INCOME_GROUP	14	12
15	ClusCdGrp1	15	26

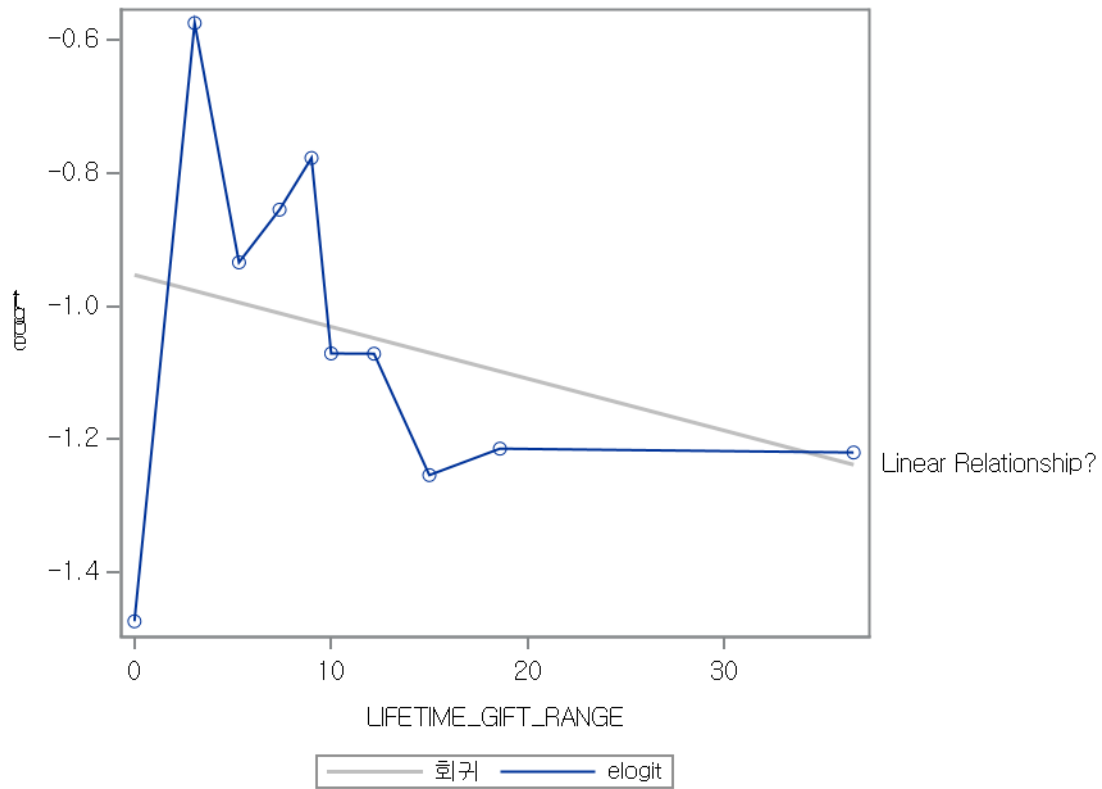
Ranks of Variables Based on Spearman and Hoeffding

OBS	variable	Spearman rank of variables	Hoeffding rank of variables
16	CARD_PROM_12	16	11
17	nses3	17	18
18	LIFETIME_GIFT_RANGE	18	10
19	MOR_HIT_RATE	19	15
20	nurbr	20	23
21	nses_	21	32
22	nurbs	22	25
23	PCT_MALE_VETERANS	23	17
24	home01	24	24
25	nurbu	25	29
26	PCT_OWNER_OCCUPIED	26	19
27	PCT_VIETNAM_VETERANS	27	22
28	mi_DONOR_AGE	28	27
29	nurbt	29	30
30	WEALTH_RATING	30	20
31	PUBLISHED_PHONE	31	28
32	PCT_MALE_MILITARY	32	31

Scatter Plot of the Ranks of Spearman vs. Hoeffding



Empirical Logit against LIFETIME_GIFT_RANGE



Empirical Logit against Binned LIFETIME_GIFT_RANGE

