

The FASTCLUS Procedure
Replace=FULL Radius=0 Maxclusters=4 Maxiter=100 Converge=0

Initial Seeds			
Cluster	Recency	Frequency	Monetary
1	-0.91048308	11.52611202	1.11607606
2	-0.91048308	25.55573406	15.76712459
3	-0.68051128	2.17303065	13.67504845
4	-0.91048308	8.92803386	30.95907481

Minimum Distance Between Initial Seeds =	15.6608
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Iteration History					
Iteration	Criterion	Relative Change in Cluster Seeds			
		1	2	3	4
1	6.7575	0.7437	0.3946	0.2954	0.0908
2	0.7604	0.00120	0.2510	0.1717	0.1877
3	0.7426	0.000527	0	0.1037	0.1807
4	0.7354	0.000444	0	0.0539	0
5	0.7331	0.000606	0	0.0602	0
6	0.7290	0.000682	0	0.0490	0
7	0.7264	0.000446	0	0.0280	0
8	0.7248	0.000500	0	0.0270	0
9	0.7233	0.000629	0	0.0284	0
10	0.7215	0.000421	0	0.0160	0
11	0.7208	0.000442	0	0.0161	0
12	0.7201	0.000315	0	0.0105	0
13	0.7197	0.000321	0	0.0101	0
14	0.7193	0.000379	0	0.0149	0.1488
15	0.7154	0.000351	0	0.0138	0.1065
16	0.7137	0.000440	0	0.0104	0
17	0.7133	0.000370	0	0.00821	0
18	0.7129	0.000461	0	0.00946	0
19	0.7124	0.000313	0.1697	0.00924	0
20	0.7088	0.000523	0.1114	0.0120	0
21	0.7071	0.000464	0.0966	0.00935	0
22	0.7057	0.000444	0.0759	0.00827	0
23	0.7043	0.000625	0.0730	0.0104	0
24	0.7029	0.000715	0	0.00833	0
25	0.7023	0.000538	0	0.00585	0
26	0.7020	0.000522	0	0.00531	0
27	0.7017	0.000571	0	0.00536	0
28	0.7013	0.000515	0	0.00452	0
29	0.7011	0.000376	0	0.00314	0
30	0.7010	0.000455	0	0.00362	0
31	0.7008	0.000583	0	0.00431	0
32	0.7005	0.000623	0	0.00423	0
33	0.7001	0.000759	0	0.00474	0
34	0.6998	0.000693	0	0.00399	0
35	0.6995	0.000712	0	0.00386	0
36	0.6991	0.000902	0	0.00445	0

Iteration History					
Iteration	Criterion	Relative Change in Cluster Seeds			
		1	2	3	4
37	0.6986	0.00110	0	0.00490	0
38	0.6979	0.00143	0	0.00562	0
39	0.6968	0.00218	0	0.00723	0
40	0.6944	0.00408	0	0.0103	0
41	0.6882	0.00855	0	0.0141	0
42	0.6675	0.0204	0	0.0162	0
43	0.6270	0.0261	0	0.0101	0
44	0.5963	0.0153	0	0.00446	0
45	0.5887	0.00546	0	0.00172	0
46	0.5877	0.00266	0	0.000885	0
47	0.5874	0.00118	0	0.000395	0
48	0.5874	0.000622	0	0.000209	0
49	0.5874	0.000062	0	0.000021	0
50	0.5874	0.000062	0	0.000021	0
51	0.5874	0	0	0	0

Convergence criterion is satisfied.

Criterion Based on Final Seeds = 0.5874

Cluster Summary						
Cluster	Frequency	RMS Std Deviation	Maximum Distance from Seed to Observation	Radius Exceeded	Nearest Cluster	Distance Between Cluster Centroids
1	1091	0.4474	8.5577		3	2.0999
2	8	4.9569	14.3745		3	16.1494
3	3233	0.5539	10.4820		1	2.0999
4	6	4.7901	10.6940		2	18.1642

Statistics for Variables				
Variable	Total STD	Within STD	R-Square	RSQ/(1-RSQ)
Recency	1.00000	0.45431	0.793744	3.848341
Frequency	1.00000	0.71453	0.489793	0.959989
Monetary	1.00000	0.56480	0.681222	2.136980
OVER-ALL	1.00000	0.58764	0.654920	1.897876

Pseudo F Statistic = 2741.80

Approximate Expected Over-All R-Squared = 0.60366

Cubic Clustering Criterion = 20.432

WARNING: The two values above are invalid for correlated variables.

Cluster Means			
Cluster	Recency	Frequency	Monetary
1	1.53643955	-0.34979611	-0.15805645
2	-0.86298891	15.09846948	5.90459709
3	-0.51476916	0.07138392	-0.00026344

Cluster Means			
Cluster	Recency	Frequency	Monetary
4	-0.85049044	5.00926597	21.00908683

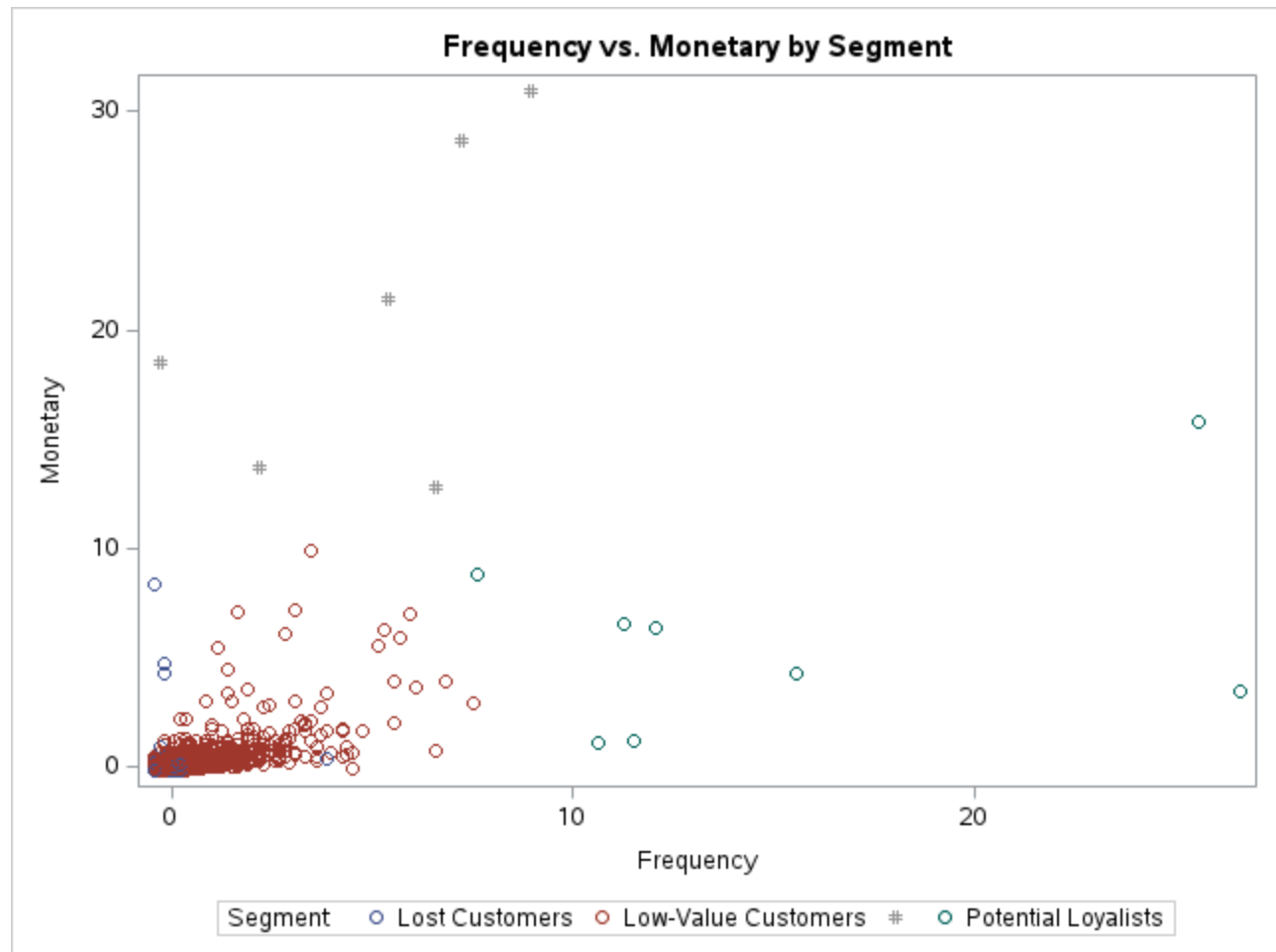
Cluster Standard Deviations			
Cluster	Recency	Frequency	Monetary
1	0.673478857	0.188120795	0.334006912
2	0.130668983	7.115130062	4.803244669
3	0.351787792	0.738073332	0.502003943
4	0.092508923	3.440287811	7.549187588

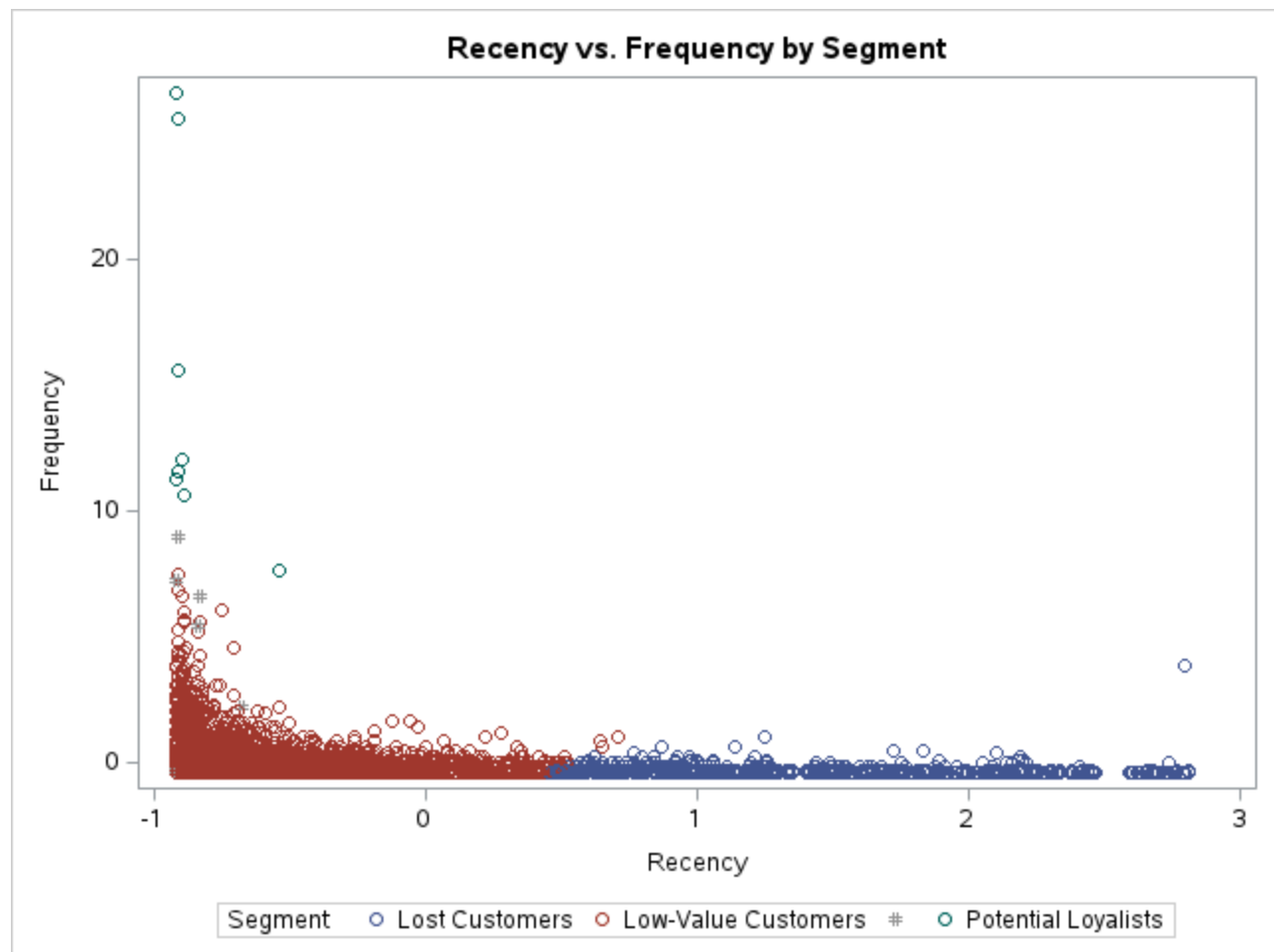
The MEANS Procedure

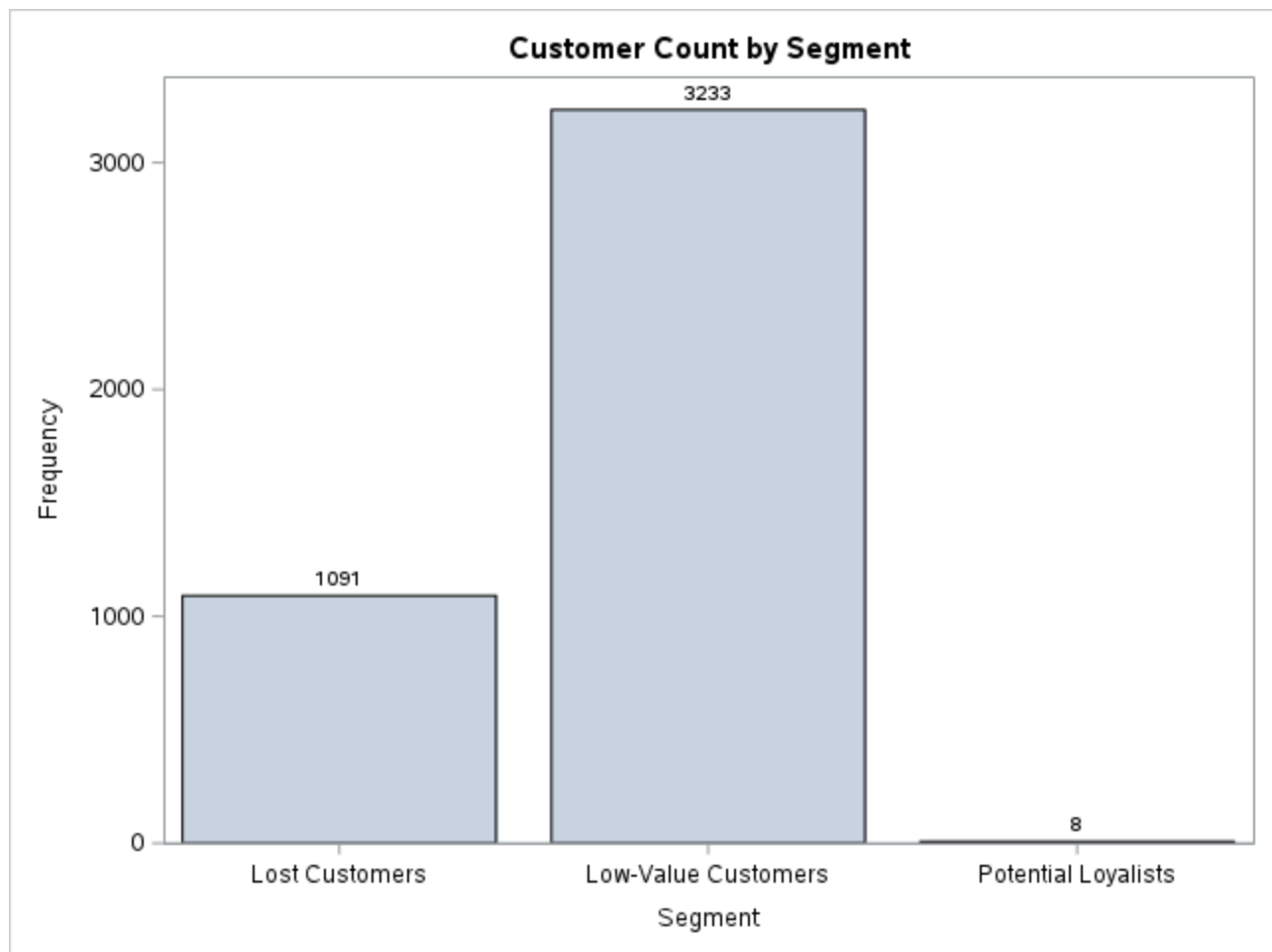
Cluster	N Obs	Variable	N	Mean	Std Dev	Minimum	Maximum
1	1091	Recency	1091	1.54	0.67	0.45	2.81
		Frequency	1091	-0.35	0.19	-0.43	3.86
		Monetary	1091	-0.16	0.33	-0.23	8.36
2	8	Recency	8	-0.86	0.13	-0.92	-0.54
		Frequency	8	15.10	7.12	7.63	26.59
		Monetary	8	5.90	4.80	1.02	15.77
3	3233	Recency	3233	-0.51	0.35	-0.92	0.71
		Frequency	3233	0.07	0.74	-0.43	7.50
		Monetary	3233	-0.00	0.50	-0.23	9.91
4	6	Recency	6	-0.85	0.09	-0.92	-0.68
		Frequency	6	5.01	3.44	-0.30	8.93
		Monetary	6	21.01	7.55	12.82	30.96

The FREQ Procedure

Segment	Frequency
Lost Customers	1091
Low-Value Customers	3233
Potential Loyalists	8
Frequency Missing = 6	







Customer Count by Segment

