Fourth Homework- Data Analysis Course of Professor Murthi on Conjoint Modified on 10 observation

Meisam Hejazinia

03/05/2013

First Question: Conjoint

The procedure is modified to use 10 data points, rather than 5. Price is still the most important factor among five factors.

Using 10 data points, rather than 5, the predicted choice is changed to first choice, mean choice A, since it has the highest probability to be selected, or let say market share.

person	complete	smile	wave
1	-1.929	3.989	-2.061
2	0.576	-0.235	-0.341
3	0.037	0.113	-0.150
4	0.260	-0.256	-0.004
5	0.516	-0.120	-0.397
6	-2.225	3.434	-1.210
7	0.160	0.880	-1.039
8	-0.821	0.752	0.070
9	-0.508	0.338	0.170
10	1.352	-0.482	-0.869

Table 1: Parth worth of Brand

person	fresh	Lemon	Unscented
1	0.211	0.228	-0.439
2	0.265	0.256	-0.522
3	0.113	-0.556	0.444
4	0.225	0.147	-0.372
5	-2.397	1.893	0.504
6	0.305	0.283	-0.588
7	1.269	-0.394	-0.875
8	0.381	-0.209	-0.172
9	0.560	0.479	-1.039
10	-1.649	1.612	0.037

Table 2: Parth worth of Scent

person	size 32	size 48	size 64
1	0.606	-0.677	0.071
2	1.048	2.432	-3.480
3	0.183	0.446	-0.629
4	-0.189	1.744	-1.555
5	-0.452	0.714	-0.261
6	0.087	-0.066	-0.021
7	1.646	0.880	-2.525
8	0.440	-0.248	-0.192
9	0.152	1.005	-1.156
10	-0.277	0.351	-0.074

Table 3: Parth worth of Size

person	$2.99	$3.99	$4.99
1	-0.069	-0.603	0.672
2	0.386	-2.086	1.701
3	1.629	-1.850	0.221
4	1.035	-2.849	1.813
5	0.430	-1.601	1.171
6	0.449	-1.029	0.579
7	-0.079	-1.565	1.644
8	1.606	-1.323	-0.283
9	1.109	-2.384	1.275
10	0.704	-1.501	0.797

Table 4: Parth worth of Price

Person	Softener	Non Soft.
1	0.146	-0.146
2	-0.083	0.083
3	1.979	-1.979
4	0.292	-0.292
5	0.115	-0.115
6	0.469	-0.469
7	-1.625	1.625
8	1.021	-1.021
9	-0.563	0.563
10	0.010	-0.010

Table 5: Parth worth of Softener

Person	Brand	Scent	Softener	Size	Price
1	0.632	0.070	0.030	0.134	0.133
2	0.079	0.068	0.014	0.511	0.327
3	0.027	0.102	0.405	0.110	0.356
4	0.053	0.062	0.060	0.342	0.483
5	0.097	0.458	0.024	0.124	0.296
6	0.612	0.096	0.101	0.016	0.174
7	0.131	0.146	0.221	0.284	0.218
8	0.201	0.075	0.261	0.088	0.374
9	0.090	0.170	0.120	0.230	0.390
10	0.264	0.387	0.002	0.075	0.273

Table 6: Relative importance of factors of detergent

Variable	Mean	Std dev	Max	Minimum
Brand	0.219	0.224	0.027	0.632
Scent	0.163	0.142	0.062	0.458
Softener	0.124	0.132	0.002	0.405
Size	0.191	0.151	0.016	0.511
Price	0.302	0.106	0.133	0.483

Table 7: Relative importance location and variation of factors

Person	UA	UB	UC	UD	UE	PA	PB	PC	PD	PE
1	7.236	1.819	0.602	8.536	2.764	0.213	0.001	0	0.783	0.002
2	9.389	7.111	3.704	7.995	8.722	0.535	0.055	0.002	0.133	0.275
3	4.681	4.486	3.009	3.749	5.653	0.198	0.163	0.037	0.078	0.524
4	8.361	6.083	1.426	6.35	7.157	0.65	0.067	0.001	0.087	0.195
5	2.924	4.382	3.171	6.048	6.799	0.013	0.055	0.017	0.293	0.622
6	7.576	2.192	0.31	7.707	2.516	0.465	0.002	0	0.53	0.003
7	9.75	6.454	3.204	8.854	6.509	0.673	0.025	0.001	0.275	0.026
8	4.431	3.884	3.806	4.529	3.977	0.26	0.15	0.139	0.286	0.165
9	8.042	5.421	2.435	7.108	5.699	0.639	0.046	0.002	0.251	0.061
10	2.993	3.664	5.069	5.626	7.47	0.009	0.017	0.071	0.123	0.78

Table 8: Probability choice of new products using logit rules

Variable	Mean	Dev	Min	Max
PA	0.366	0.259	0.009	0.673
PB	0.058	0.057	9.50E-04	0.163
PC	0.027	0.046	2.80E-04	0.139
PD	0.284	0.221	0.078	0.783
PE	0.265	0.281	0.002	0.78

Table 9: Choice probability for new products location and variation