

## Case study -1

- 1) How to get part-worth and standardized part-worth?

F24					=D24/E23	
	A	B	C	D	E	F
1		Estimate		part-worth	std dev	std parth
2	Intercept	8.50E+00				
3	brand1	1.37E-16		0.00E+00	0.20412415	6.73E-16
4	brand2	-2.50E-01		-2.50E-01		-1.22E+00
5	brand3	-1.20E-16		0.00E+00		0.00E+00
6	brand4	2.50E-01		2.50E-01		1.22E+00
7	startup1	7.50E-01		7.50E-01	0.61237244	1.22E+00
8	startup2	8.24E-16		0.00E+00		0
9	startup3	-2.79E-16		0.00E+00		0
10	startup4	-7.50E-01		-7.50E-01		-1.22E+00
11	monthly1	5.00E+00		5.00E+00	4.60525063	1.09E+00
12	monthly2	2.00E+00		2.00E+00		4.34E-01
13	monthly3	-1.25E+00		-1.25E+00		-2.71E-01
14	monthly 4	-5.75E+00		-5.75E+00		-1.25E+00
15	service0	1.75E+00		-1.75E+00	0	0
16	service1	-1.75E+00		-1.75E+00		0
17	retail0	-2.50E-01		-2.50E-01	0.35355339	-7.07E-01
18	retail1	2.50E-01		2.50E-01		7.07E-01
19	apple0	-2.50E-01		-2.50E-01	0.35355339	-7.07E-01
20	apple1	2.50E-01		2.50E-01		7.07E-01
21	samsung0	1.13E+00		1.13E+00	1.59099026	7.07E-01
22	samsung1	-1.13E+00		-1.13E+00		-7.07E-01
23	google0	7.50E-01		7.50E-01	1.06066017	7.07E-01
24	google1	-7.50E-01		-7.50E-01		-7.07E-01
25						
26						

- 2) Why we use standardized part-worth in the spine chart?  
We use standardized part-worth to compare between the variables. It makes comparison easy.
- 3) How to calculate attribute importance?

H24									
	A	B	C	D	E	F	G	H	I
		Estimate		part-worth	std dev	std parth	Range	Attribute importance	
2	Intercept	8.50E+00							
3	brand1	1.37E-16		0.00E+00	0.20412415	6.73E-16	5.00E-01	0.02985075	
4	brand2	-2.50E-01		-2.50E-01		-1.22E+00			
5	brand3	-1.20E-16		0.00E+00		0.00E+00			
6	brand4	2.50E-01		2.50E-01		1.22E+00			
7	startup1	7.50E-01		7.50E-01	0.61237244	1.22E+00	7.50E-01	0.04477612	
8	startup2	8.24E-16		0.00E+00		0			
9	startup3	-2.79E-16		0.00E+00		0			
10	startup4	-7.50E-01		-7.50E-01		-1.22E+00			
11	monthly1	5.00E+00		5.00E+00	4.60525063	1.09E+00	1.08E+01	0.64179104	
12	monthly2	2.00E+00		2.00E+00		4.34E-01			
13	monthly3	-1.25E+00		-1.25E+00		-2.71E-01			
14	monthly 4	-5.75E+00		-5.75E+00		-1.25E+00			
15	service0	1.75E+00		-1.75E+00	0	0	0.00E+00	0	
16	service1	-1.75E+00		-1.75E+00		0			
17	retail0	-2.50E-01		-2.50E-01	0.35355339	-7.07E-01	5.00E-01	0.02985075	
18	retail1	2.50E-01		2.50E-01		7.07E-01			
19	apple0	-2.50E-01		-2.50E-01	0.35355339	-7.07E-01	5.00E-01	0.02985075	
20	apple1	2.50E-01		2.50E-01		7.07E-01			
21	samsung0	1.13E+00		1.13E+00	1.59099026	7.07E-01	2.25E+00	0.13432836	
22	samsung1	-1.13E+00		-1.13E+00		-7.07E-01			
23	google0	7.50E-01		7.50E-01	1.06066017	7.07E-01	1.50E+00	0.08955224	
24	google1	-7.50E-01		-7.50E-01		-7.07E-01			
25							1.68E+01		
26									
27									
28									

- 4) What is the limitation of this study?  
 R square value suggests overfitting, degree of freedom is 1 and data is small