Adstock Rate - Deriving with Analytical Method

Instructions

- 1. Insert Sales and Advertising
- 2. Open Solver by going to the Data menu and selecting Solver If Solver isn't available then load the Add-in.
- 3. Click Solve

	Sales	Advertising Before Adstock	Advertising After Adstock	-	Model Results After Adstock
1	670,871	-	-	Adstock Rate	89.40%
2	35,524,494	-	-	α	45477287.4
3	50,173,057	-	-	β	22727722.9171
4	46,849,336	-	-	SSE	############
5	39,246,118	-	-	Correlation	0.4430
6	21,362	-	-	R-Squared	0.1962
7	8,831	-	-		<u> </u>
8	17,987	-	-		
9	72,788	-	-		
10	70,691,096	0.100	0.100		
11	98,352,774	0.140	0.229		
12	96,408,086	0.140	0.344		
13	97,663,276	0.140	0.447		
14	72,524,082	0.419	0.818		
15	44,150,510	0.791	1.522		
16	293,596,202	0.791	2.151		
17	52,892,091	0.791	2.714		
18	91,911,501	0.791	3.217		
19	93,892,473	0.047	2.922		
20	120,030,002	0.047	2.659		
21	50,012,648	0.047	2.424		
22	47,577,866	0.047	2.213		
23	66,395,702	0.196	2.175		
24	108,721,179	0.256	2.200		
25	69,263,878	0.256	2.222		
26	154,607,585	0.256	2.243		
27	71,141,134	0.243	2.247		
28	69,654,386	0.209	2.218		
29	62,962,474	0.209	2.192		
30	147,178,533	0.209	2.169		
31	73,797,654	0.209	2.149		
32	76,441,432	0.150	2.070		
33	69,958,251	0.140	1.990		
34	84,762,834	0.140	1.919		
35	89,314,294	0.140	1.855		
36	73,083,886	0.106	1.765		

37	148,786,415	0.093	1.670
38	77,341,625	0.093	1.586
39	70,677,953	0.093	1.511
40	73,150,392	0.066	1.417
41	81,245,287	-	1.267
42	69,788,971	-	1.133
43	52,650,999	-	1.013
44	114,397,752	-	0.905
45	74,672,993	0.186	0.995
46	76,415,745	0.186	1.076
47	78,010,767	0.186	1.148
48	150,047,690	0.186	1.212
49	67,177,030	0.080	1.163
50	68,384,498	-	1.040
51	70,872,725	-	0.930
52	75,167,242	-	0.831
53_	51,431,436		0.743
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