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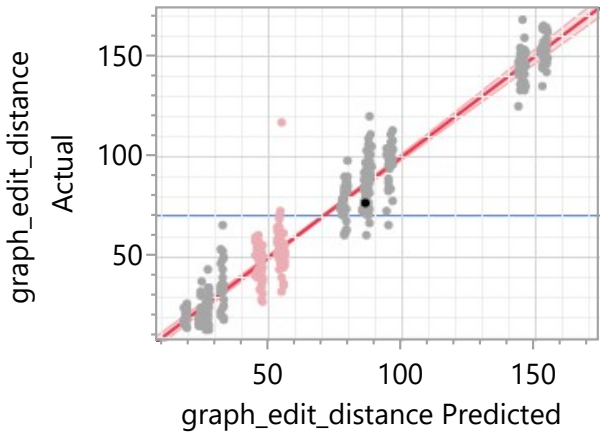
Fit Group

Response graph_edit_distance

Actual by Predicted Plot



RMSE=9.3203 RSq=0.95

PValue=<.0001

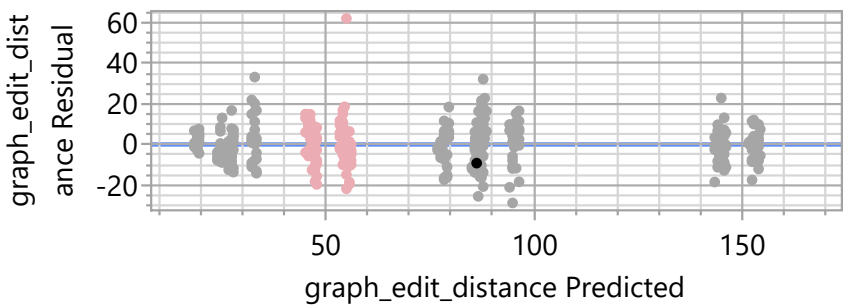
Effect Summary

Source	Logworth	PValue
app_id	274.595	0.00000
summarized	18.099	0.00000
rag	0.861	0.13756
version	0.181	0.65859

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	48	8636.664	179.930	2.3887
Pure Error	387	29150.657	75.325	**Prob > F**
Total Error	435	37787.321		<.0001*
				Max RSq
				0.9632

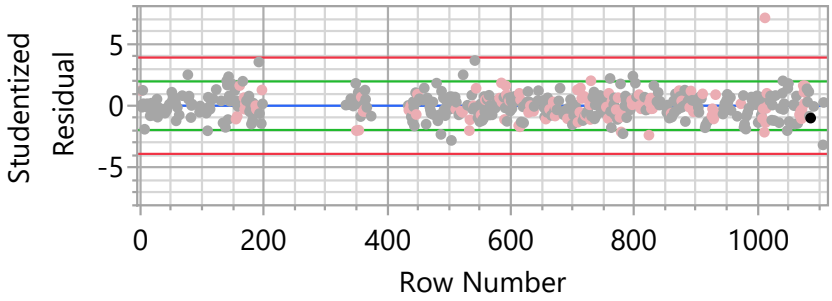
Residual by Predicted Plot



Fit Group

Response graph_edit_distance

Studentized Residuals



Externally studentized residuals with 95% simultaneous limits (Bonferroni) in red, individual limits in green.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	71.079744	0.508465	139.79	<.0001*
app_id[WordPress]	-41.75517	1.146106	-36.43	<.0001*
app_id[eWeLink]	-47.30869	1.170019	-40.43	<.0001*
app_id[Open Energy Monitor]	-20.53553	0.867992	-23.66	<.0001*
app_id[JetRacer]	11.269988	0.976071	11.55	<.0001*
app_id[BookInfo]	20.331741	1.209533	16.81	<.0001*
version[v3]	0.097578	0.59657	0.16	0.8701
version[v2]	0.5165363	0.669233	0.77	0.4406
rag[1]	0.7855085	0.528013	1.49	0.1376
summarized[1]	4.1346251	0.445464	9.28	<.0001*

Effect Tests

Source	Nparm	DF	Sum of Squares	F Ratio	Prob > F
app_id	5	5	678782.28	1562.801	<.0001*
version	2	2	72.63	0.4181	0.6586
rag	1	1	192.25	2.2132	0.1376
summarized	1	1	7483.50	86.1486	<.0001*

Effect Details

app_id

Least Squares Means Table

Level	Least Sq Mean	Std Error	50 100 150	Mean
WordPress	29.325	1.305		28.36
eWeLink	23.771	1.344		23.14
Open Energy Monitor	50.544	0.879		50.93
JetRacer	82.350	0.992		83.44
BookInfo	91.411	1.378		92.11
Stack4Things	149.077	1.142		148.74

Fit Group

Response graph_edit_distance

Effect Details

version

Least Squares Means Table

Level	Least Sq Mean	Std Error	Mean
v3	71.1773	0.6775	75.764
v2	71.5963	0.8612	67.762
v1	70.4656	0.9391	64.447

rag

Least Squares Means Table

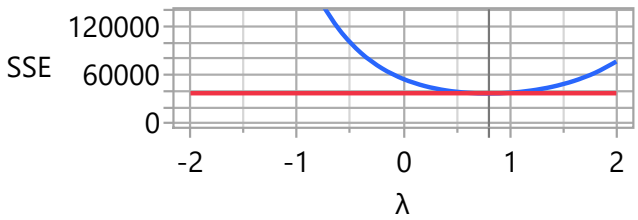
Level	Least Sq Mean	Std Error	Mean
1	71.8653	0.8367	84.972
0	70.2942	0.6120	61.658

summarized

Least Squares Means Table

Level	Least Sq Mean	Std Error	Mean
1	75.2144	0.6636	74.415
0	66.9451	0.6882	66.885

Box-Cox Transformations



Best λ=0.798

Scaled Estimates

Nominal factors expanded to all levels

Term	Scaled Estimate	Std Error	t Ratio	Prob>|t|
Intercept	71.079744	0.508465	139.79	<.0001*
app_id[WordPress]	-41.75517	1.146106	-36.43	<.0001*
app_id[eWeLink]	-47.30869	1.170019	-40.43	<.0001*
app_id[Open Energy Monitor]	-20.53553	0.867992	-23.66	<.0001*
app_id[JetRacer]	11.269988	0.976071	11.55	<.0001*
app_id[BookInfo]	20.331741	1.209533	16.81	<.0001*
app_id[Stack4Things]	77.997657	1.033359	75.48	<.0001*
version[v3]	0.097578	0.59657	0.16	0.8701

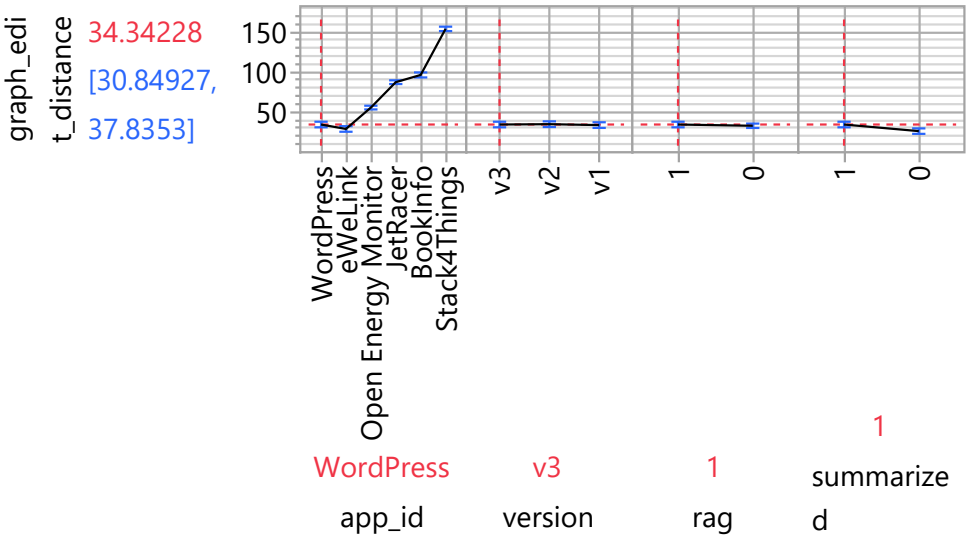
Fit Group

Response graph_edit_distance

Scaled Estimates

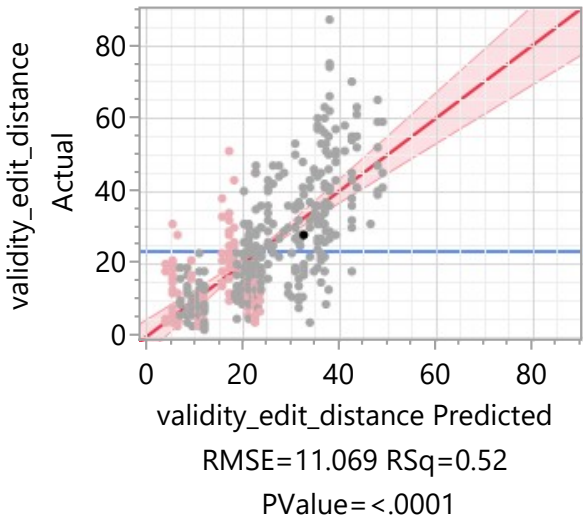
Term	Scaled Estimate	Std Error	t Ratio	Prob>|t|
version[v2]	0.5165363	0.669233	0.77	0.4406
version[v1]	-0.614114	0.709296	-0.87	0.3871
rag[1]	0.7855085	0.528013	1.49	0.1376
rag[0]	-0.785508	0.528013	-1.49	0.1376
summarized[1]	4.1346251	0.445464	9.28	<.0001*
summarized[0]	-4.134625	0.445464	-9.28	<.0001*

Prediction Profiler



Response validity_edit_distance

Actual by Predicted Plot



Fit Group

Response validity_edit_distance

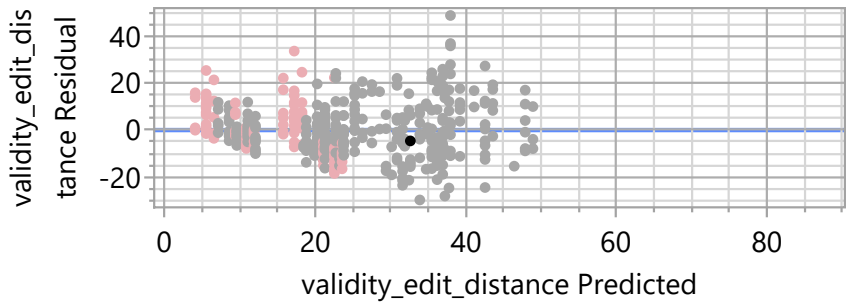
Effect Summary

Source	Logworth	PValue
app_id	44.906	0.00000
summarized	24.506	0.00000
rag	4.586	0.00003
version	0.614	0.24329

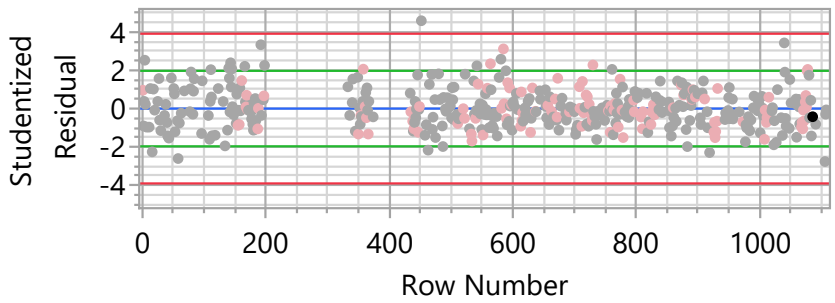
Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	48	17343.494	361.323	3.8896
Pure Error	387	35949.975	92.894	**Prob > F**
Total Error	435	53293.470		<.0001*
				Max RSq
				0.6745

Residual by Predicted Plot



Studentized Residuals



Externally studentized residuals with 95% simultaneous limits (Bonferroni) in red, individual limits in green.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	24.724706	0.603844	40.95	<.0001*
app_id[WordPress]	-5.312456	1.361095	-3.90	0.0001*
app_id[eWeLink]	-7.788478	1.389494	-5.61	<.0001*
app_id[Open Energy Monitor]	-10.83912	1.030812	-10.52	<.0001*
app_id[JetRacer]	3.5644581	1.159165	3.08	0.0022*

Fit Group

Response validity_edit_distance

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
app_id[BookInfo]	5.8504374	1.436421	4.07	<.0001*
version[v3]	0.1423587	0.708476	0.20	0.8408
version[v2]	1.1709756	0.79477	1.47	0.1414
rag[1]	2.6663121	0.627059	4.25	<.0001*
summarized[1]	5.8520024	0.529025	11.06	<.0001*

Effect Tests

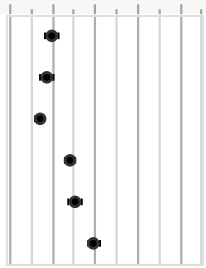
Source	Nparm	DF	Sum of Squares	F Ratio	Prob > F
app_id	5	5	35006.001	57.1463	<.0001*
version	2	2	347.478	1.4181	0.2433
rag	1	1	2215.082	18.0803	<.0001*
summarized	1	1	14991.378	122.3649	<.0001*

Effect Details

app_id

Least Squares Means Table

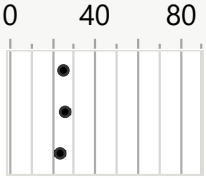
Level	Least Sq Mean	Std Error	0 40 80	Mean
WordPress	19.4123	1.550		16.508
eWeLink	16.9362	1.596		14.544
Open Energy Monitor	13.8856	1.044		14.560
JetRacer	28.2892	1.178		30.362
BookInfo	30.5751	1.636		31.319
Stack4Things	39.2499	1.356		38.657



version

Least Squares Means Table

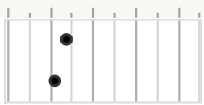
Level	Least Sq Mean	Std Error	0 40 80	Mean
v3	24.8671	0.805		24.616
v2	25.8957	1.023		23.849
v1	23.4114	1.115		21.699



rag

Least Squares Means Table

Level	Least Sq Mean	Std Error	0 40 80	Mean
1	27.3910	0.9937		28.438
0	22.0584	0.7268		20.639



Fit Group

Response validity_edit_distance

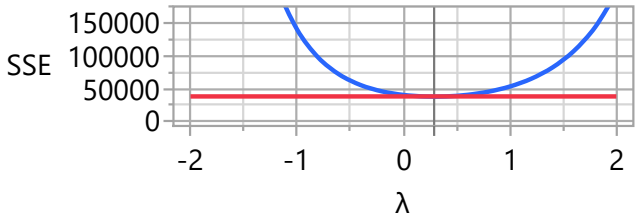
Effect Details

summarized

Least Squares Means Table

Level	Least Sq Mean	Std Error	0 40 80	Mean
1	30.5767	0.7881		29.144
0	18.8727	0.8172		17.603

Box-Cox Transformations



Best λ=0.292

Scaled Estimates

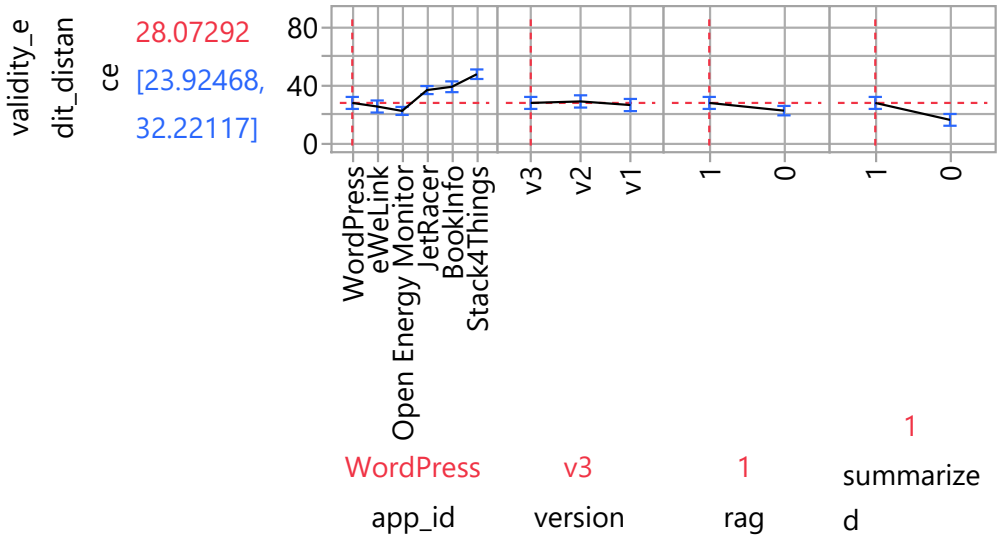
Nominal factors expanded to all levels

Term	Scaled Estimate		Std Error	t Ratio	Prob>|t|
Intercept	24.724706		0.603844	40.95	<.0001*
app_id[WordPress]	-5.312456		1.361095	-3.90	0.0001*
app_id[eWeLink]	-7.788478		1.389494	-5.61	<.0001*
app_id[Open Energy Monitor]	-10.83912		1.030812	-10.52	<.0001*
app_id[JetRacer]	3.5644581		1.159165	3.08	0.0022*
app_id[BookInfo]	5.8504374		1.436421	4.07	<.0001*
app_id[Stack4Things]	14.52516		1.2272	11.84	<.0001*
version[v3]	0.1423587		0.708476	0.20	0.8408
version[v2]	1.1709756		0.79477	1.47	0.1414
version[v1]	-1.313334		0.842347	-1.56	0.1197
rag[1]	2.6663121		0.627059	4.25	<.0001*
rag[0]	-2.666312		0.627059	-4.25	<.0001*
summarized[1]	5.8520024		0.529025	11.06	<.0001*
summarized[0]	-5.852002		0.529025	-11.06	<.0001*

Fit Group

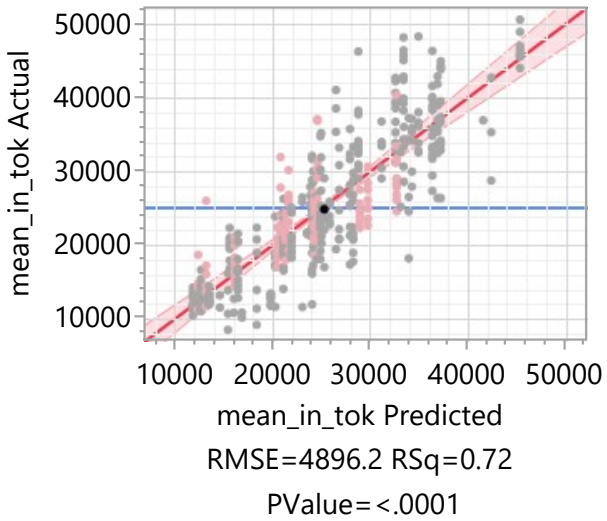
Response validity_edit_distance

Prediction Profiler



Response mean_in_tok

Actual by Predicted Plot



Fit Group

Response mean_in_tok

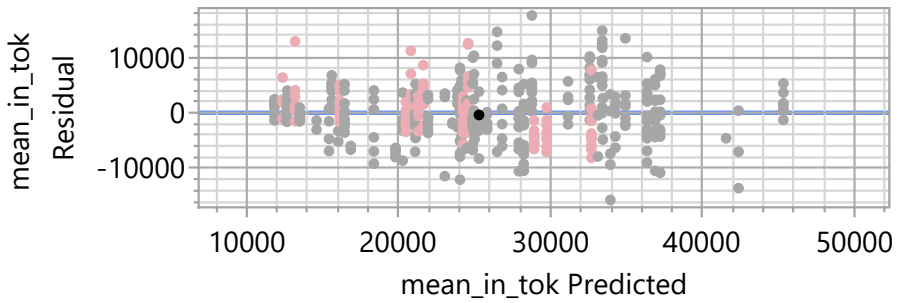
Effect Summary

Source	Logworth	PValue
summarized	53.968	0.00000
app_id	53.309	0.00000
rag	38.934	0.00000
version	10.588	0.00000

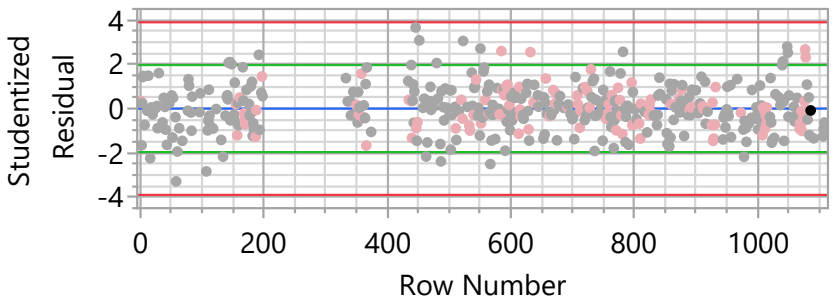
Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	48	3733574138	77782795	4.4964
Pure Error	387	6694717691	17299012	**Prob > F**
Total Error	435	1.0428e+10		<.0001*
				Max RSq
				0.8228

Residual by Predicted Plot



Studentized Residuals



Externally studentized residuals with 95% simultaneous limits (Bonferroni) in red, individual limits in green.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	25226.281	267.1125	94.44	<.0001*
app_id[WordPress]	-3587.991	602.0855	-5.96	<.0001*
app_id[eWeLink]	-2742.387	614.6478	-4.46	<.0001*
app_id[Open Energy Monitor]	-3049.535	455.9836	-6.69	<.0001*
app_id[JetRacer]	611.32339	512.761	1.19	0.2338

Fit Group

Response mean_in_tok

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
app_id[BookInfo]	-815.4357	635.4062	-1.28	0.2001
version[v3]	2239.653	313.3969	7.15	<.0001*
version[v2]	-709.4575	351.5694	-2.02	0.0442*
rag[1]	4055.4003	277.3819	14.62	<.0001*
summarized[1]	4220.2644	234.0161	18.03	<.0001*

Effect Tests

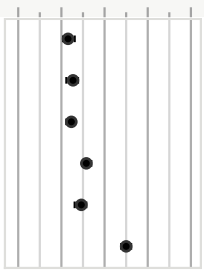
Source	Nparm	DF	Sum of Squares	F Ratio	Prob > F
app_id	5	5	8473141708	70.6888	<.0001*
version	2	2	1236973785	25.7992	<.0001*
rag	1	1	5124308453	213.7526	<.0001*
summarized	1	1	7796719273	325.2280	<.0001*

Effect Details

app_id

Least Squares Means Table

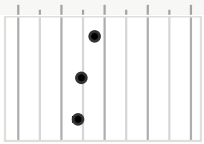
Level	Least Sq Mean	Std Error	10000 40000	Mean
WordPress	21638.3	685.6		17536
eWeLink	22483.9	706.2		18848
Open Energy Monitor	22176.7	461.9		23296
JetRacer	25837.6	521.2		28519
BookInfo	24410.8	723.8		25345
Stack4Things	34810.3	600.0		34886



version

Least Squares Means Table

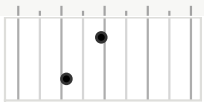
Level	Least Sq Mean	Std Error	10000 40000	Mean
v3	27465.9	355.9		27270
v2	24516.8	452.4		23215
v1	23696.1	493.3		22766



rag

Least Squares Means Table

Level	Least Sq Mean	Std Error	10000 40000	Mean
1	29281.7	439.6		30783
0	21170.9	321.5		21348



Fit Group

Response mean_in_tok

Effect Details

summarized

Least Squares Means Table

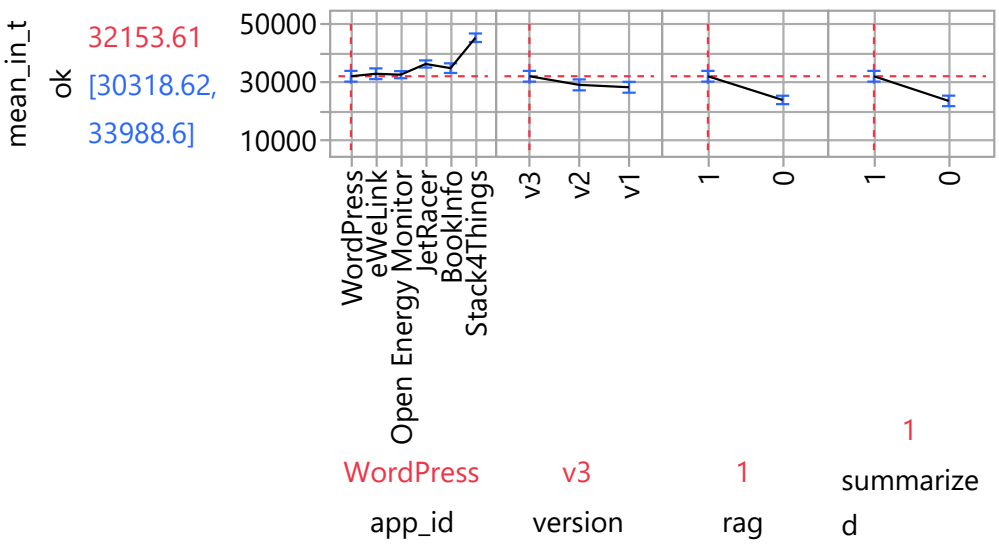
Level	Least Sq Mean	Std Error	10000 40000	Mean
1	29446.5	348.6		28889
0	21006.0	361.5		20778

Scaled Estimates

Nominal factors expanded to all levels

Term	Scaled Estimate		Std Error	t Ratio	Prob>|t|
Intercept	25226.281		267.1125	94.44	<.0001*
app_id[WordPress]	-3587.991		602.0855	-5.96	<.0001*
app_id[eWeLink]	-2742.387		614.6478	-4.46	<.0001*
app_id[Open Energy Monitor]	-3049.535		455.9836	-6.69	<.0001*
app_id[JetRacer]	611.32339		512.761	1.19	0.2338
app_id[BookInfo]	-815.4357		635.4062	-1.28	0.2001
app_id[Stack4Things]	9584.0261		542.8562	17.65	<.0001*
version[v3]	2239.653		313.3969	7.15	<.0001*
version[v2]	-709.4575		351.5694	-2.02	0.0442*
version[v1]	-1530.195		372.6154	-4.11	<.0001*
rag[1]	4055.4003		277.3819	14.62	<.0001*
rag[0]	-4055.4		277.3819	-14.62	<.0001*
summarized[1]	4220.2644		234.0161	18.03	<.0001*
summarized[0]	-4220.264		234.0161	-18.03	<.0001*

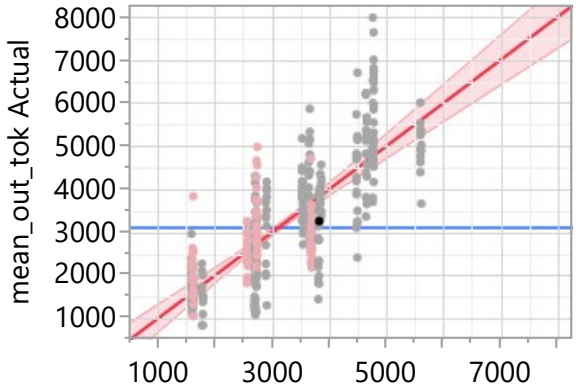
Prediction Profiler



Fit Group

Response mean_out_tok

Actual by Predicted Plot



RMSE=832.29 RSq=0.64

PValue=<.0001

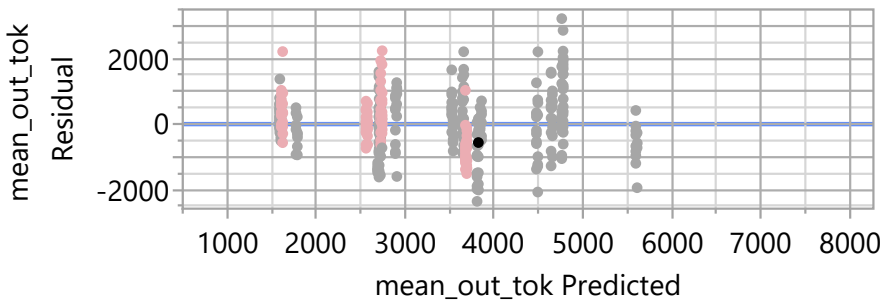
Effect Summary

Source	Logworth	PValue
app_id	49.620	0.00000
summarized	36.497	0.00000
rag	20.963	0.00000
version	0.008	0.98115

Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	48	135812797	2829433	6.6158
Pure Error	387	165511546	427678	Prob > F
Total Error	435	301324343		<.0001*
				Max RSq
				0.8017

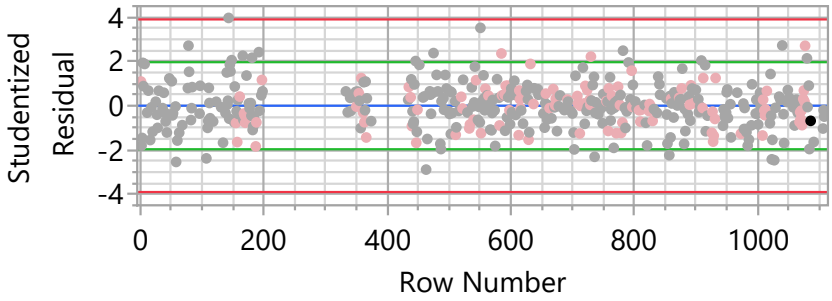
Residual by Predicted Plot



Fit Group

Response mean_out_tok

Studentized Residuals



Externally studentized residuals with 95% simultaneous limits (Bonferroni) in red, individual limits in green.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	3175.5648	45.40511	69.94	<.0001*
app_id[WordPress]	-541.4702	102.3455	-5.29	<.0001*
app_id[eWeLink]	-538.3589	104.4809	-5.15	<.0001*
app_id[Open Energy Monitor]	-521.1723	77.51036	-6.72	<.0001*
app_id[JetRacer]	562.22566	87.16165	6.45	<.0001*
app_id[BookInfo]	-356.2392	108.0095	-3.30	0.0011*
version[v3]	-10.39258	53.27277	-0.20	0.8454
version[v2]	4.2952152	59.76151	0.07	0.9427
rag[1]	476.24849	47.15075	10.10	<.0001*
summarized[1]	558.76109	39.77921	14.05	<.0001*

Effect Tests

Source	Nparm	DF	Sum of Squares	F Ratio	Prob > F
app_id	5	5	223728908	64.5962	<.0001*
version	2	2	26364	0.0190	0.9812
rag	1	1	70669990	102.0211	<.0001*
summarized	1	1	136673678	197.3058	<.0001*

Effect Details

app_id

Least Squares Means Table

Level	Least Sq Mean	Std Error	1000 4000 7000	Mean
WordPress	2634.09	116.5		2129.7
eWeLink	2637.21	120.0		2169.3
Open Energy Monitor	2654.39	78.5		2723.3
JetRacer	3737.79	88.6		4004.6
BookInfo	2819.33	123.0		2852.0
Stack4Things	4570.58	102.0		4464.2

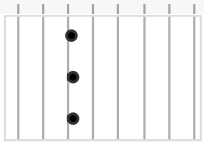
Fit Group

Response mean_out_tok

Effect Details

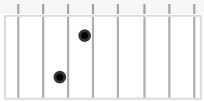
version

Least Squares Means Table

Level	Least Sq Mean	Std Error	1000 4000 7000	Mean
v3	3165.17	60.50		3188.4
v2	3179.86	76.90		3051.4
v1	3181.66	83.86		3099.6

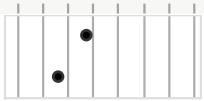
rag

Least Squares Means Table

Level	Least Sq Mean	Std Error	1000 4000 7000	Mean
1	3651.81	74.72		3904.0
0	2699.32	54.65		2622.0

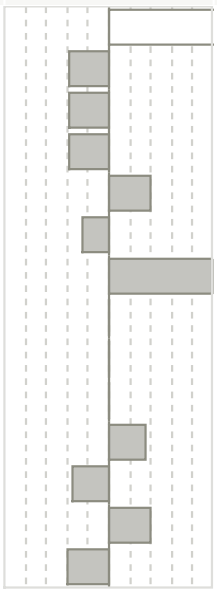
summarized

Least Squares Means Table

Level	Least Sq Mean	Std Error	1000 4000 7000	Mean
1	3734.33	59.26		3641.7
0	2616.80	61.45		2550.2

Scaled Estimates

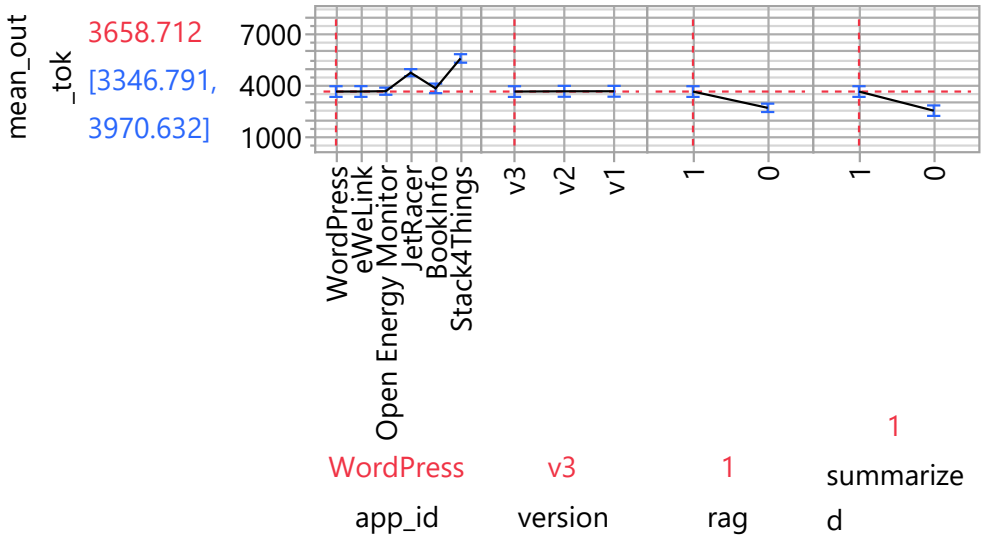
Nominal factors expanded to all levels

Term	Scaled Estimate		Std Error	t Ratio	Prob>|t|
Intercept	3175.5648		45.40511	69.94	<.0001*
app_id[WordPress]	-541.4702		102.3455	-5.29	<.0001*
app_id[eWeLink]	-538.3589		104.4809	-5.15	<.0001*
app_id[Open Energy Monitor]	-521.1723		77.51036	-6.72	<.0001*
app_id[JetRacer]	562.22566		87.16165	6.45	<.0001*
app_id[BookInfo]	-356.2392		108.0095	-3.30	0.0011*
app_id[Stack4Things]	1395.015		92.27739	15.12	<.0001*
version[v3]	-10.39258		53.27277	-0.20	0.8454
version[v2]	4.2952152		59.76151	0.07	0.9427
version[v1]	6.0973688		63.33901	0.10	0.9234
rag[1]	476.24849		47.15075	10.10	<.0001*
rag[0]	-476.2485		47.15075	-10.10	<.0001*
summarized[1]	558.76109		39.77921	14.05	<.0001*
summarized[0]	-558.7611		39.77921	-14.05	<.0001*

Fit Group

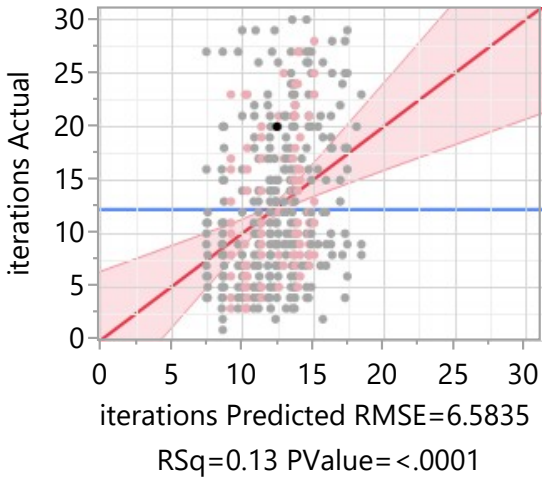
Response mean_out_tok

Prediction Profiler



Response iterations

Actual by Predicted Plot



Fit Group

Response iterations

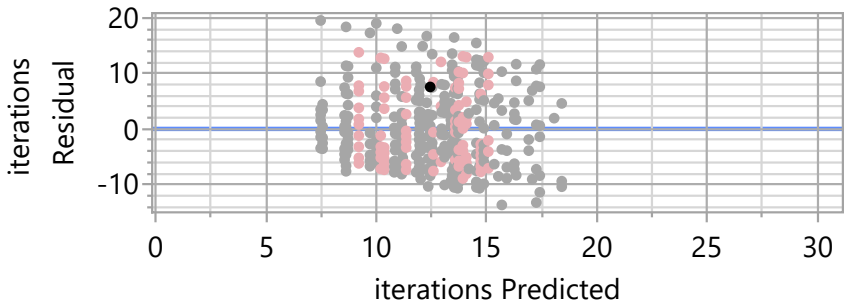
Effect Summary

Source	Logworth	PValue
version	6.759	0.00000
app_id	4.781	0.00002
summarized	1.170	0.06761
rag	0.738	0.18287

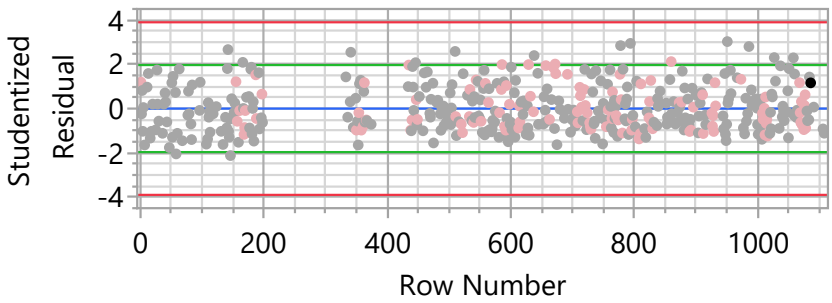
Lack Of Fit

Source	DF	Sum of Squares	Mean Square	F Ratio
Lack Of Fit	48	1851.225	38.5672	0.8778
Pure Error	387	17002.924	43.9352	**Prob > F**
Total Error	435	18854.148		0.7035
				Max RSq
				0.2112

Residual by Predicted Plot



Studentized Residuals



Externally studentized residuals with 95% simultaneous limits (Bonferroni) in red, individual limits in green.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	13.045179	0.359163	36.32	<.0001*
app_id[WordPress]	-2.123618	0.809571	-2.62	0.0090*
app_id[eWeLink]	0.3996161	0.826463	0.48	0.6290
app_id[Open Energy Monitor]	-0.392577	0.613121	-0.64	0.5223
app_id[JetRacer]	-2.033511	0.689464	-2.95	0.0034*

Fit Group

Response iterations

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
app_id[BookInfo]	1.2141405	0.854375	1.42	0.1560
version[v3]	-2.369171	0.421397	-5.62	<.0001*
version[v2]	1.3561101	0.472724	2.87	0.0043*
rag[1]	0.4975741	0.372971	1.33	0.1829
summarized[1]	0.57652	0.314661	1.83	0.0676

Effect Tests

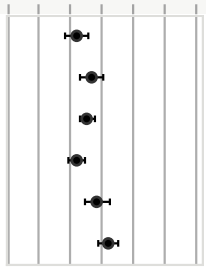
Source	Nparm	DF	Sum of Squares	F Ratio	Prob > F
app_id	5	5	1329.4935	6.1348	<.0001*
version	2	2	1398.5583	16.1337	<.0001*
rag	1	1	77.1407	1.7798	0.1829
summarized	1	1	145.4994	3.3569	0.0676

Effect Details

app_id

Least Squares Means Table

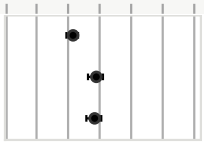
Level	Least Sq Mean	Std Error	0 10 20 30	Mean
WordPress	10.9216	0.9219		10.246
eWeLink	13.4448	0.9496		12.667
Open Energy Monitor	12.6526	0.6211		12.172
JetRacer	11.0117	0.7008		10.777
BookInfo	14.2593	0.9732		13.511
Stack4Things	15.9811	0.8068		15.000



version

Least Squares Means Table

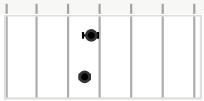
Level	Least Sq Mean	Std Error	0 10 20 30	Mean
v3	10.6760	0.4785		10.606
v2	14.4013	0.6083		14.040
v1	14.0582	0.6634		13.563



rag

Least Squares Means Table

Level	Least Sq Mean	Std Error	0 10 20 30	Mean
1	13.5428	0.5910		12.813
0	12.5476	0.4323		11.903



Fit Group

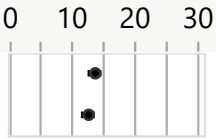
Response iterations

Effect Details

summarized

Least Squares Means Table

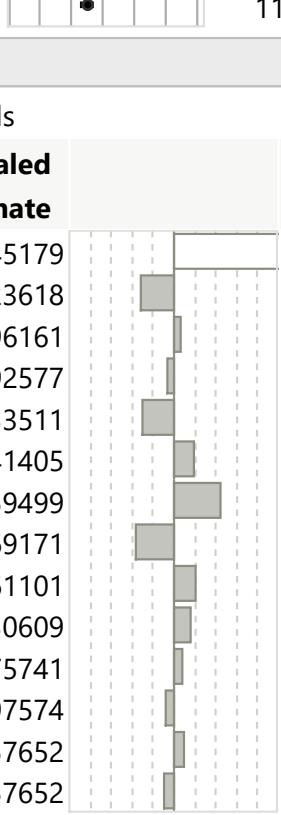
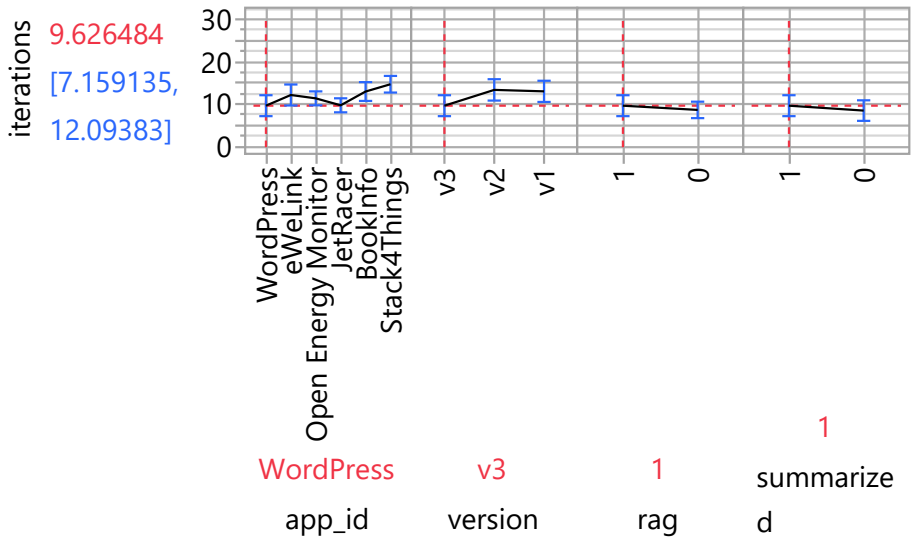
Level	Least Sq Mean	Std Error	Mean
1	13.6217	0.4688	12.720
0	12.4687	0.4861	11.746



Scaled Estimates

Nominal factors expanded to all levels

Term	Scaled Estimate	Std Error	t Ratio	Prob>|t|
Intercept	13.045179	0.359163	36.32	<.0001*
app_id[WordPress]	-2.123618	0.809571	-2.62	0.0090*
app_id[eWeLink]	0.3996161	0.826463	0.48	0.6290
app_id[Open Energy Monitor]	-0.392577	0.613121	-0.64	0.5223
app_id[JetRacer]	-2.033511	0.689464	-2.95	0.0034*
app_id[BookInfo]	1.2141405	0.854375	1.42	0.1560
app_id[Stack4Things]	2.9359499	0.729931	4.02	<.0001*
version[v3]	-2.369171	0.421397	-5.62	<.0001*
version[v2]	1.3561101	0.472724	2.87	0.0043*
version[v1]	1.0130609	0.501023	2.02	0.0438*
rag[1]	0.4975741	0.372971	1.33	0.1829
rag[0]	-0.497574	0.372971	-1.33	0.1829
summarized[1]	0.57652	0.314661	1.83	0.0676
summarized[0]	-0.57652	0.314661	-1.83	0.0676



Prediction Profiler