Univariate Analysis of Variance

Between-Subjects Factors

		N
Method	Flipping	648
	Home	648
	RuntimeBar	648
	TapNFlip	648
AppsNumber	1	864
	2	864
	3	864
Distance	0	607
	1	663
	2	690
	3	632
Participant	P1	216
	P10	216
	P11	216
	P12	216
	P2	216
	P3	216
	P4	216
	P5	216
	P6	216
	P7	216
	P8	216
	P9	216

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethod

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	3.063E9	1	3.063E9
	Error	2.187E8	11.001	1.988E7
Method	Hypothesis	1.233E8	3	4.109E7
	Error	6.657E7	33.118	2.010E6
AppsNumber	Hypothesis	1180275.596	2	590137.798
	Error	9359822.419	22.417	417526.683 [c]
Distance	Hypothesis	8044676.259	3	2681558.753
	Error	1.171E7	36.339	322325.246 [d]
Participant	Hypothesis	2.195E8	11	1.995E7
	Error	3.506E7	19.971	1.755E6
Method * AppsNumber	Hypothesis	9503142.000	6	1583857.000
	Error	5.172E7	67.455	766679.492 [f]
Method * Distance	Hypothesis	1.358E7	9	1509246.669
	Error	3.333E7	121.302	274795.998 [g]
Method * Participant	Hypothesis	6.720E7	33	2036332.376
	Error	4.578E7	57.159	800936.013 [h]
AppsNumber * Distance	Hypothesis	2452749.322	6	408791.554
	Error	2.011E7	79.465	253030.444 [i]

a. .996 MS(Participant) - 3.11E-006 MS(Method * Participant) - 4.84E-005 MS(AppsNumber * Participant) + 1.05E-005 MS(Distance * Participant) + 4.36E-005 MS(Method * AppsNumber * Participant) - 1.07E-005 MS(Method * Distance * Participant) + .000 MS(AppsNumber * Distance * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .009 MS(Error)
b. .985 MS(Method * Participant) - .001 MS(Method * AppsNumber * Participant) + .000 MS(Method * Distance * Participant) + .006 MS(Method * AppsNumber * Distance * Participant) + .010 MS(Error)
c. .987 MS(AppsNumber * Participant) - .000 MS(Method * AppsNumber * Participant) + .000 MS (AppsNumber * Distance * Participant) - .005 MS(Method * AppsNumber * Distance * Participant) + .017 MS(Error)
d. .949 MS(Distance * Participant) + .001 MS(Method * Distance * Participant) - .001 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
e. 1.017 MS(Method * Participant) + 1.032 MS(AppsNumber * Participant) + 1.021 MS(Distance * Participant) - 1.058 MS(Method * AppsNumber * Participant) - 1.003 MS(Method * Distance * Participant) - 1.041 MS(AppsNumber * Distance * Participant) + 1.032 MS(Method * AppsNumber * Distance * Participant) + .000 MS(Error)
f. .973 MS(Method * AppsNumber * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .033 MS(Error)
g. .909 MS(Method * Distance * Participant) + .033 MS(Method * AppsNumber * Distance * Participant) + .058 MS(Error)
h. 1.041 MS(Method * AppsNumber * Participant) + .987 MS(Method * Distance * Participant) - 1.008 MS (Method * AppsNumber * Distance * Participant) - .020 MS(Error)
i. .924 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .062 MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethod

Source		F	Sig.
Intercept	Hypothesis	154.094	.000
Method	Hypothesis	20.444	.000
AppsNumber	Hypothesis	1.413	.264
Distance	Hypothesis	8.319	.000
Participant	Hypothesis	11.365	.000
Method * AppsNumber	Hypothesis	2.066	.069
Method * Distance	Hypothesis	5.492	.000
Method * Participant	Hypothesis	2.542	.001
AppsNumber * Distance	Hypothesis	1.616	.154

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethod

Source		Type III Sum of Squares	df	Mean Square
AppsNumber * Participant	Hypothesis	9215756.096	22	418898.004
	Error	4.078E7	53.083	768193.084[j]
Distance * Participant	Hypothesis	1.069E7	33	323808.846
	Error	7092941.259	28.337	250305.117[k]
Method * AppsNumber * Distance	Hypothesis	3.842E7	18	2134304.774
	Error	4.852E7	176.869	274347.005[l]
Method * AppsNumber * Participant	Hypothesis	5.143E7	66	779261.503
	Error	4.267E7	156.476	272696.440[m]
Method * Distance * Participant	Hypothesis	2.704E7	99	273090.200
	Error	4.294E7	157.415	272778.776[n]
AppsNumber * Distance * Participant	Hypothesis	1.646E7	66	249397.155
	Error	4.271E7	156.612	272708.419[o]
Method * AppsNumber * Distance * Participant	Hypothesis	3.910E7	144	271534.678
	Error	6.277E8	2070	303233.152[p]

j. 1.024 MS(Method * AppsNumber * Participant) + 1.008 MS(AppsNumber * Distance * Participant) - 1.007 MS(Method * AppsNumber * Distance * Participant) - .024 MS(Error)
k. .982 MS(Method * Distance * Participant) + 1.019 MS(AppsNumber * Distance * Participant) - .994 MS (Method * AppsNumber * Distance * Participant) - .006 MS(Error)
l. .911 MS(Method * AppsNumber * Distance * Participant) + .089 MS(Error)
m. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
n. .961 MS(Method * AppsNumber * Distance * Participant) + .039 MS(Error)
o. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
p. MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethod

Source		F	Sig.
AppsNumber * Participant	Hypothesis	.545	.940
Distance * Participant	Hypothesis	1.294	.244
Method * AppsNumber * Distance	Hypothesis	7.780	.000
Method * AppsNumber * Participant	Hypothesis	2.858	.000
Method * Distance * Participant	Hypothesis	1.001	.492
AppsNumber * Distance * Participant	Hypothesis	.915	.655
Method * AppsNumber * Distance * Participant	Hypothesis	.895	.804

Post Hoc Tests

Method

Multiple Comparisons

ARTSeenTimeMillisforMethod
Bonferroni

(I) Method	(J) Method	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Flipping	Home	-90.08*	30.593	.020	-170.87	-9.30
	RuntimeBar	67.60	30.593	.163	-13.19	148.38
	TapNFlip	585.13*	30.593	.000	504.34	665.91
Home	Flipping	90.08*	30.593	.020	9.30	170.87
	RuntimeBar	157.68*	30.593	.000	76.89	238.47
	TapNFlip	675.21*	30.593	.000	594.42	756.00
RuntimeBar	Flipping	-67.60	30.593	.163	-148.38	13.19
	Home	-157.68*	30.593	.000	-238.47	-76.89
	TapNFlip	517.53*	30.593	.000	436.74	598.32
TapNFlip	Flipping	-585.13*	30.593	.000	-665.91	-504.34
	Home	-675.21*	30.593	.000	-756.00	-594.42
	RuntimeBar	-517.53*	30.593	.000	-598.32	-436.74

Based on observed means.
The error term is Mean Square(Error) = 303233.152.

*. The mean difference is significant at the .05 level.

Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforAppsNumber

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	3.076E9	1	3.076E9
	Error	2.287E8	11.002	2.079E7
Method	Hypothesis	5.368E7	3	1.789E7
	Error	7.648E7	33.105	2.310E6
AppsNumber	Hypothesis	4.615E7	2	2.308E7
	Error	8065045.819	22.521	358119.314 [c]
Distance	Hypothesis	7331661.530	3	2443887.177
	Error	1.027E7	36.988	277586.426 [d]
Participant	Hypothesis	2.295E8	11	2.087E7
	Error	4.073E7	20.512	1.985E6
Method * AppsNumber	Hypothesis	7094408.312	6	1182401.385
	Error	5.046E7	67.576	746672.410 [f]
Method * Distance	Hypothesis	1.179E7	9	1309951.315
	Error	3.201E7	122.984	260307.392 [g]
Method * Participant	Hypothesis	7.725E7	33	2341048.946
	Error	4.430E7	57.067	776240.870 [h]
AppsNumber * Distance	Hypothesis	1973863.204	6	328977.201
	Error	1.988E7	80.140	248050.044 [i]

a. .996 MS(Participant) - 3.11E-006 MS(Method * Participant) - 4.84E-005 MS(AppsNumber * Participant) + 1.05E-005 MS(Distance * Participant) + 4.36E-005 MS(Method * AppsNumber * Participant) - 1.07E-005 MS(Method * Distance * Participant) + .000 MS(AppsNumber * Distance * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .009 MS(Error)
b. .985 MS(Method * Participant) - .001 MS(Method * AppsNumber * Participant) + .000 MS(Method * Distance * Participant) + .006 MS(Method * AppsNumber * Distance * Participant) + .010 MS(Error)
c. .987 MS(AppsNumber * Participant) - .000 MS(Method * AppsNumber * Participant) + .000 MS (AppsNumber * Distance * Participant) - .005 MS(Method * AppsNumber * Distance * Participant) + .017 MS(Error)
d. .949 MS(Distance * Participant) + .001 MS(Method * Distance * Participant) - .001 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
e. 1.017 MS(Method * Participant) + 1.032 MS(AppsNumber * Participant) + 1.021 MS(Distance * Participant) - 1.058 MS(Method * AppsNumber * Participant) - 1.003 MS(Method * Distance * Participant) - 1.041 MS(AppsNumber * Distance * Participant) + 1.032 MS(Method * AppsNumber * Distance * Participant) + .000 MS(Error)
f. .973 MS(Method * AppsNumber * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .033 MS(Error)
g. .909 MS(Method * Distance * Participant) + .033 MS(Method * AppsNumber * Distance * Participant) + .058 MS(Error)
h. 1.041 MS(Method * AppsNumber * Participant) + .987 MS(Method * Distance * Participant) - 1.008 MS (Method * AppsNumber * Distance * Participant) - .020 MS(Error)
i. .924 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .062 MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforAppsNumber

Source		F	Sig.
Intercept	Hypothesis	147.944	.000
Method	Hypothesis	7.745	.000
AppsNumber	Hypothesis	64.440	.000
Distance	Hypothesis	8.804	.000
Participant	Hypothesis	10.510	.000
Method * AppsNumber	Hypothesis	1.584	.165
Method * Distance	Hypothesis	5.032	.000
Method * Participant	Hypothesis	3.016	.000
AppsNumber * Distance	Hypothesis	1.326	.255

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforAppsNumber

Source		Type III Sum of Squares	df	Mean Square
AppsNumber * Participant	Hypothesis	7886355.794	22	358470.718
	Error	4.075E7	54.066	753790.813[j]
Distance * Participant	Hypothesis	9121318.849	33	276403.601
	Error	6927375.268	28.685	241494.473[k]
Method * AppsNumber * Distance	Hypothesis	2.848E7	18	1582448.427
	Error	4.738E7	179.990	263244.120[l]
Method * AppsNumber * Participant	Hypothesis	5.004E7	66	758246.490
	Error	4.103E7	157.627	260317.158[m]
Method * Distance * Participant	Hypothesis	2.543E7	99	256906.655
	Error	4.132E7	158.655	260463.165[n]
AppsNumber * Distance * Participant	Hypothesis	1.607E7	66	243454.005
	Error	4.108E7	157.776	260338.400[o]
Method * AppsNumber * Distance * Participant	Hypothesis	3.719E7	144	258256.994
	Error	6.509E8	2070	314468.186[p]

j. 1.024 MS(Method * AppsNumber * Participant) + 1.008 MS(AppsNumber * Distance * Participant) - 1.007 MS(Method * AppsNumber * Distance * Participant) - .024 MS(Error)
k. .982 MS(Method * Distance * Participant) + 1.019 MS(AppsNumber * Distance * Participant) - .994 MS (Method * AppsNumber * Distance * Participant) - .006 MS(Error)
l. .911 MS(Method * AppsNumber * Distance * Participant) + .089 MS(Error)
m. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
n. .961 MS(Method * AppsNumber * Distance * Participant) + .039 MS(Error)
o. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
p. MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforAppsNumber

Source		F	Sig.
AppsNumber * Participant	Hypothesis	.476	.971
Distance * Participant	Hypothesis	1.145	.359
Method * AppsNumber * Distance	Hypothesis	6.011	.000
Method * AppsNumber * Participant	Hypothesis	2.913	.000
Method * Distance * Participant	Hypothesis	.986	.525
AppsNumber * Distance * Participant	Hypothesis	.935	.615
Method * AppsNumber * Distance * Participant	Hypothesis	.821	.938

Post Hoc Tests

AppsNumber

Multiple Comparisons

ARTSeenTimeMillisforAppsNumber
Bonferroni

(I) AppsNumber	(J) AppsNumber	Mean Difference (I-J)	Std. Error	Sig.
1	2	-261.73*	26.980	.000
	3	-400.30*	26.980	.000
2	1	261.73*	26.980	.000
	3	-138.58*	26.980	.000
3	1	400.30*	26.980	.000
	2	138.58*	26.980	.000

Based on observed means.
The error term is Mean Square(Error) = 314468.186.

*. The mean difference is significant at the .05 level.

Multiple Comparisons

ARTSeenTimeMillisforAppsNumber
Bonferroni

(I) AppsNumber	(J) AppsNumber	95% Confidence Interval	
		Lower Bound	Upper Bound
1	2	-326.37	-197.09
	3	-464.95	-335.66
2	1	197.09	326.37
	3	-203.22	-73.93
3	1	335.66	464.95
	2	73.93	203.22

Based on observed means.
The error term is Mean Square(Error) = 314468.186.

Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforDistance

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	3.054E9	1	3.054E9
	Error	2.421E8	11.001	2.200E7
Method	Hypothesis	5.016E7	3	1.672E7
	Error	8.081E7	33.105	2.441E6
AppsNumber	Hypothesis	1291445.148	2	645722.574
	Error	9097791.183	22.448	405278.160 [c]
Distance	Hypothesis	1.932E7	3	6440068.174
	Error	9935248.123	37.337	266099.754 [d]
Participant	Hypothesis	2.429E8	11	2.208E7
	Error	4.648E7	21.615	2.151E6
Method * AppsNumber	Hypothesis	3265937.712	6	544322.952
	Error	5.002E7	67.573	740223.441 [f]
Method * Distance	Hypothesis	1.509E7	9	1676256.922
	Error	3.461E7	121.749	284277.756 [g]
Method * Participant	Hypothesis	8.162E7	33	2473431.732
	Error	4.170E7	54.660	762942.601 [h]
AppsNumber * Distance	Hypothesis	2027118.323	6	337853.054
	Error	2.114E7	79.426	266152.935 [i]

a. .996 MS(Participant) - 3.11E-006 MS(Method * Participant) - 4.84E-005 MS(AppsNumber * Participant) + 1.05E-005 MS(Distance * Participant) + 4.36E-005 MS(Method * AppsNumber * Participant) - 1.07E-005 MS(Method * Distance * Participant) + .000 MS(AppsNumber * Distance * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .009 MS(Error)
b. .985 MS(Method * Participant) - .001 MS(Method * AppsNumber * Participant) + .000 MS(Method * Distance * Participant) + .006 MS(Method * AppsNumber * Distance * Participant) + .010 MS(Error)
c. .987 MS(AppsNumber * Participant) - .000 MS(Method * AppsNumber * Participant) + .000 MS (AppsNumber * Distance * Participant) - .005 MS(Method * AppsNumber * Distance * Participant) + .017 MS(Error)
d. .949 MS(Distance * Participant) + .001 MS(Method * Distance * Participant) - .001 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
e. 1.017 MS(Method * Participant) + 1.032 MS(AppsNumber * Participant) + 1.021 MS(Distance * Participant) - 1.058 MS(Method * AppsNumber * Participant) - 1.003 MS(Method * Distance * Participant) - 1.041 MS(AppsNumber * Distance * Participant) + 1.032 MS(Method * AppsNumber * Distance * Participant) + .000 MS(Error)
f. .973 MS(Method * AppsNumber * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .033 MS(Error)
g. .909 MS(Method * Distance * Participant) + .033 MS(Method * AppsNumber * Distance * Participant) + .058 MS(Error)
h. 1.041 MS(Method * AppsNumber * Participant) + .987 MS(Method * Distance * Participant) - 1.008 MS (Method * AppsNumber * Distance * Participant) - .020 MS(Error)
i. .924 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .062 MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforDistance

Source		F	Sig.
Intercept	Hypothesis	138.790	.000
Method	Hypothesis	6.849	.001
AppsNumber	Hypothesis	1.593	.225
Distance	Hypothesis	24.202	.000
Participant	Hypothesis	10.270	.000
Method * AppsNumber	Hypothesis	.735	.623
Method * Distance	Hypothesis	5.897	.000
Method * Participant	Hypothesis	3.242	.000
AppsNumber * Distance	Hypothesis	1.269	.281

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforDistance

Source		Type III Sum of Squares	df	Mean Square
AppsNumber * Participant	Hypothesis	8939230.042	22	406328.638
	Error	3.738E7	50.864	734950.228 [j]
Distance * Participant	Hypothesis	8702867.807	33	263723.267
	Error	6787763.628	26.659	254614.187 [k]
Method * AppsNumber * Distance	Hypothesis	3.227E7	18	1792927.688
	Error	5.141E7	176.256	291696.248 [l]
Method * AppsNumber * Participant	Hypothesis	4.961E7	66	751713.223
	Error	4.535E7	156.250	290238.165 [m]
Method * Distance * Participant	Hypothesis	2.792E7	99	281984.058
	Error	4.563E7	157.171	290310.899 [n]
AppsNumber * Distance * Participant	Hypothesis	1.732E7	66	262394.946
	Error	4.539E7	156.383	290248.747 [o]
Method * AppsNumber * Distance * Participant	Hypothesis	4.165E7	144	289211.883
	Error	6.566E8	2070	317213.807 [p]

j. 1.024 MS(Method * AppsNumber * Participant) + 1.008 MS(AppsNumber * Distance * Participant) - 1.007 MS(Method * AppsNumber * Distance * Participant) - .024 MS(Error)
k. .982 MS(Method * Distance * Participant) + 1.019 MS(AppsNumber * Distance * Participant) - .994 MS (Method * AppsNumber * Distance * Participant) - .006 MS(Error)
l. .911 MS(Method * AppsNumber * Distance * Participant) + .089 MS(Error)
m. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
n. .961 MS(Method * AppsNumber * Distance * Participant) + .039 MS(Error)
o. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
p. MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforDistance

Source		F	Sig.
AppsNumber * Participant	Hypothesis	.553	.935
Distance * Participant	Hypothesis	1.036	.468
Method * AppsNumber * Distance	Hypothesis	6.147	.000
Method * AppsNumber * Participant	Hypothesis	2.590	.000
Method * Distance * Participant	Hypothesis	.971	.558
AppsNumber * Distance * Participant	Hypothesis	.904	.675
Method * AppsNumber * Distance * Participant	Hypothesis	.912	.762

Post Hoc Tests

Distance

Multiple Comparisons

ARTSeenTimeMillisforDistance
Bonferroni

(I) Distance	(J) Distance	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0	1	-96.36*	31.639	.014	-179.91	-12.81
	2	-231.18*	31.342	.000	-313.94	-148.41
	3	-311.41*	32.008	.000	-395.94	-226.89
1	0	96.36*	31.639	.014	12.81	179.91
	2	-134.82*	30.630	.000	-215.70	-53.93
	3	-215.05*	31.311	.000	-297.74	-132.37
2	0	231.18*	31.342	.000	148.41	313.94
	1	134.82*	30.630	.000	53.93	215.70
	3	-80.24	31.010	.058	-162.13	1.66
3	0	311.41*	32.008	.000	226.89	395.94
	1	215.05*	31.311	.000	132.37	297.74
	2	80.24	31.010	.058	-1.66	162.13

Based on observed means.
The error term is Mean Square(Error) = 317213.807.

*. The mean difference is significant at the .05 level.

Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethodAppsNumber

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	3.072E9	1	3.072E9
	Error	2.380E8	11.002	2.164E7
Method	Hypothesis	5.504E7	3	1.835E7
	Error	7.863E7	33.105	2.375E6
AppsNumber	Hypothesis	2161770.779	2	1080885.389
	Error	1.274E7	22.329	570609.669 [c]
Distance	Hypothesis	7508357.261	3	2502785.754
	Error	1.158E7	36.490	317405.486 [d]
Participant	Hypothesis	2.389E8	11	2.172E7
	Error	5.905E7	25.444	2.321E6
Method * AppsNumber	Hypothesis	3.242E7	6	5403981.128
	Error	4.762E7	67.693	703431.779 [f]
Method * Distance	Hypothesis	1.154E7	9	1282061.687
	Error	3.389E7	121.413	279112.203 [g]
Method * Participant	Hypothesis	7.943E7	33	2406874.389
	Error	4.334E7	58.056	746607.728 [h]
AppsNumber * Distance	Hypothesis	1878844.107	6	313140.685
	Error	2.144E7	78.900	271745.411 [i]

a. .996 MS(Participant) - 3.11E-006 MS(Method * Participant) - 4.84E-005 MS(AppsNumber * Participant) + 1.05E-005 MS(Distance * Participant) + 4.36E-005 MS(Method * AppsNumber * Participant) - 1.07E-005 MS(Method * Distance * Participant) + .000 MS(AppsNumber * Distance * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .009 MS(Error)
b. .985 MS(Method * Participant) - .001 MS(Method * AppsNumber * Participant) + .000 MS(Method * Distance * Participant) + .006 MS(Method * AppsNumber * Distance * Participant) + .010 MS(Error)
c. .987 MS(AppsNumber * Participant) - .000 MS(Method * AppsNumber * Participant) + .000 MS (AppsNumber * Distance * Participant) - .005 MS(Method * AppsNumber * Distance * Participant) + .017 MS(Error)
d. .949 MS(Distance * Participant) + .001 MS(Method * Distance * Participant) - .001 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
e. 1.017 MS(Method * Participant) + 1.032 MS(AppsNumber * Participant) + 1.021 MS(Distance * Participant) - 1.058 MS(Method * AppsNumber * Participant) - 1.003 MS(Method * Distance * Participant) - 1.041 MS(AppsNumber * Distance * Participant) + 1.032 MS(Method * AppsNumber * Distance * Participant) + .000 MS(Error)
f. .973 MS(Method * AppsNumber * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .033 MS(Error)
g. .909 MS(Method * Distance * Participant) + .033 MS(Method * AppsNumber * Distance * Participant) + .058 MS(Error)
h. 1.041 MS(Method * AppsNumber * Participant) + .987 MS(Method * Distance * Participant) - 1.008 MS (Method * AppsNumber * Distance * Participant) - .020 MS(Error)
i. .924 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .062 MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethodAppsNumber

Source		F	Sig.
Intercept	Hypothesis	141.958	.000
Method	Hypothesis	7.725	.000
AppsNumber	Hypothesis	1.894	.174
Distance	Hypothesis	7.885	.000
Participant	Hypothesis	9.357	.000
Method * AppsNumber	Hypothesis	7.682	.000
Method * Distance	Hypothesis	4.593	.000
Method * Participant	Hypothesis	3.224	.000
AppsNumber * Distance	Hypothesis	1.152	.340

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethodAppsNumber

Source		Type III Sum of Squares	df	Mean Square
AppsNumber * Participant	Hypothesis	1.262E7	22	573614.944
	Error	4.025E7	55.104	730367.606[j]
Distance * Participant	Hypothesis	1.050E7	33	318204.109
	Error	9730051.743	34.257	284030.271[k]
Method * AppsNumber * Distance	Hypothesis	2.915E7	18	1619294.192
	Error	4.796E7	179.928	266538.091[l]
Method * AppsNumber * Participant	Hypothesis	4.711E7	66	713717.512
	Error	4.154E7	157.604	263601.238[m]
Method * Distance * Participant	Hypothesis	2.745E7	99	277262.596
	Error	4.184E7	158.630	263747.739[n]
AppsNumber * Distance * Participant	Hypothesis	1.774E7	66	268804.767
	Error	4.159E7	157.753	263622.551[o]
Method * AppsNumber * Distance * Participant	Hypothesis	3.766E7	144	261534.112
	Error	6.581E8	2070	317935.267[p]

j. 1.024 MS(Method * AppsNumber * Participant) + 1.008 MS(AppsNumber * Distance * Participant) - 1.007 MS(Method * AppsNumber * Distance * Participant) - .024 MS(Error)
k. .982 MS(Method * Distance * Participant) + 1.019 MS(AppsNumber * Distance * Participant) - .994 MS (Method * AppsNumber * Distance * Participant) - .006 MS(Error)
l. .911 MS(Method * AppsNumber * Distance * Participant) + .089 MS(Error)
m. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
n. .961 MS(Method * AppsNumber * Distance * Participant) + .039 MS(Error)
o. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
p. MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethodAppsNumber

Source		F	Sig.
AppsNumber * Participant	Hypothesis	.785	.729
Distance * Participant	Hypothesis	1.120	.371
Method * AppsNumber * Distance	Hypothesis	6.075	.000
Method * AppsNumber * Participant	Hypothesis	2.708	.000
Method * Distance * Participant	Hypothesis	1.051	.386
AppsNumber * Distance * Participant	Hypothesis	1.020	.451
Method * AppsNumber * Distance * Participant	Hypothesis	.823	.936

Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethodDistance

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	3.103E9	1	3.103E9
	Error	2.483E8	11.001	2.257E7
Method	Hypothesis	4.481E7	3	1.494E7
	Error	8.052E7	33.106	2.432E6
AppsNumber	Hypothesis	1716777.158	2	858388.579
	Error	1.099E7	22.373	491164.694 [c]
Distance	Hypothesis	9303722.870	3	3101240.957
	Error	1.113E7	36.805	302432.908 [d]
Participant	Hypothesis	2.492E8	11	2.265E7
	Error	5.273E7	23.380	2.255E6
Method * AppsNumber	Hypothesis	3778604.037	6	629767.340
	Error	5.119E7	67.552	757816.793 [f]
Method * Distance	Hypothesis	6933667.005	9	770407.445
	Error	3.409E7	122.551	278165.027 [g]
Method * Participant	Hypothesis	8.133E7	33	2464606.640
	Error	4.176E7	54.012	773126.721 [h]
AppsNumber * Distance	Hypothesis	2591994.848	6	431999.141
	Error	2.145E7	79.312	270507.897 [i]

a. .996 MS(Participant) - 3.11E-006 MS(Method * Participant) - 4.84E-005 MS(AppsNumber * Participant) + 1.05E-005 MS(Distance * Participant) + 4.36E-005 MS(Method * AppsNumber * Participant) - 1.07E-005 MS(Method * Distance * Participant) + .000 MS(AppsNumber * Distance * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .009 MS(Error)
b. .985 MS(Method * Participant) - .001 MS(Method * AppsNumber * Participant) + .000 MS(Method * Distance * Participant) + .006 MS(Method * AppsNumber * Distance * Participant) + .010 MS(Error)
c. .987 MS(AppsNumber * Participant) - .000 MS(Method * AppsNumber * Participant) + .000 MS (AppsNumber * Distance * Participant) - .005 MS(Method * AppsNumber * Distance * Participant) + .017 MS(Error)
d. .949 MS(Distance * Participant) + .001 MS(Method * Distance * Participant) - .001 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
e. 1.017 MS(Method * Participant) + 1.032 MS(AppsNumber * Participant) + 1.021 MS(Distance * Participant) - 1.058 MS(Method * AppsNumber * Participant) - 1.003 MS(Method * Distance * Participant) - 1.041 MS(AppsNumber * Distance * Participant) + 1.032 MS(Method * AppsNumber * Distance * Participant) + .000 MS(Error)
f. .973 MS(Method * AppsNumber * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .033 MS(Error)
g. .909 MS(Method * Distance * Participant) + .033 MS(Method * AppsNumber * Distance * Participant) + .058 MS(Error)
h. 1.041 MS(Method * AppsNumber * Participant) + .987 MS(Method * Distance * Participant) - 1.008 MS (Method * AppsNumber * Distance * Participant) - .020 MS(Error)
i. .924 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .062 MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethodDistance

Source		F	Sig.
Intercept	Hypothesis	137.479	.000
Method	Hypothesis	6.141	.002
AppsNumber	Hypothesis	1.748	.197
Distance	Hypothesis	10.254	.000
Participant	Hypothesis	10.044	.000
Method * AppsNumber	Hypothesis	.831	.550
Method * Distance	Hypothesis	2.770	.006
Method * Participant	Hypothesis	3.188	.000
AppsNumber * Distance	Hypothesis	1.597	.159

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethodDistance

Source		Type III Sum of Squares	df	Mean Square
AppsNumber * Participant	Hypothesis	1.085E7	22	493266.815
	Error	3.897E7	51.534	756220.504[j]
Distance * Participant	Hypothesis	9962459.714	33	301892.719
	Error	6467630.354	25.794	250746.004[k]
Method * AppsNumber * Distance	Hypothesis	3.722E7	18	2067844.287
	Error	5.175E7	176.391	293401.239[l]
Method * AppsNumber * Participant	Hypothesis	5.080E7	66	769700.235
	Error	4.562E7	156.299	291869.165[m]
Method * Distance * Participant	Hypothesis	2.723E7	99	275005.750
	Error	4.590E7	157.225	291945.590[n]
AppsNumber * Distance * Participant	Hypothesis	1.761E7	66	266881.598
	Error	4.566E7	156.433	291880.284[o]
Method * AppsNumber * Distance * Participant	Hypothesis	4.187E7	144	290790.803
	Error	6.628E8	2070	320213.711[p]

j. 1.024 MS(Method * AppsNumber * Participant) + 1.008 MS(AppsNumber * Distance * Participant) - 1.007 MS(Method * AppsNumber * Distance * Participant) - .024 MS(Error)
k. .982 MS(Method * Distance * Participant) + 1.019 MS(AppsNumber * Distance * Participant) - .994 MS (Method * AppsNumber * Distance * Participant) - .006 MS(Error)
l. .911 MS(Method * AppsNumber * Distance * Participant) + .089 MS(Error)
m. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
n. .961 MS(Method * AppsNumber * Distance * Participant) + .039 MS(Error)
o. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
p. MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethodDistance

Source		F	Sig.
AppsNumber * Participant	Hypothesis	.652	.863
Distance * Participant	Hypothesis	1.204	.316
Method * AppsNumber * Distance	Hypothesis	7.048	.000
Method * AppsNumber * Participant	Hypothesis	2.637	.000
Method * Distance * Participant	Hypothesis	.942	.623
AppsNumber * Distance * Participant	Hypothesis	.914	.655
Method * AppsNumber * Distance * Participant	Hypothesis	.908	.772

Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforAppsNumberDistance

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	3.068E9	1	3.068E9
	Error	2.496E8	11.001	2.269E7
Method	Hypothesis	5.057E7	3	1.686E7
	Error	8.284E7	33.103	2.502E6
AppsNumber	Hypothesis	733292.283	2	366646.142
	Error	9381265.309	22.442	418020.622 [c]
Distance	Hypothesis	6979053.928	3	2326351.309
	Error	1.057E7	37.033	285337.349 [d]
Participant	Hypothesis	2.505E8	11	2.277E7
	Error	4.925E7	22.098	2.229E6
Method * AppsNumber	Hypothesis	3021302.653	6	503550.442
	Error	5.032E7	67.585	744578.848 [f]
Method * Distance	Hypothesis	1.262E7	9	1401724.248
	Error	3.420E7	122.245	279804.218 [g]
Method * Participant	Hypothesis	8.368E7	33	2535871.641
	Error	4.188E7	54.696	765613.265 [h]
AppsNumber * Distance	Hypothesis	6774121.367	6	1129020.228
	Error	2.209E7	78.725	280656.333 [i]

a. .996 MS(Participant) - 3.11E-006 MS(Method * Participant) - 4.84E-005 MS(AppsNumber * Participant) + 1.05E-005 MS(Distance * Participant) + 4.36E-005 MS(Method * AppsNumber * Participant) - 1.07E-005 MS(Method * Distance * Participant) + .000 MS(AppsNumber * Distance * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .009 MS(Error)
b. .985 MS(Method * Participant) - .001 MS(Method * AppsNumber * Participant) + .000 MS(Method * Distance * Participant) + .006 MS(Method * AppsNumber * Distance * Participant) + .010 MS(Error)
c. .987 MS(AppsNumber * Participant) - .000 MS(Method * AppsNumber * Participant) + .000 MS (AppsNumber * Distance * Participant) - .005 MS(Method * AppsNumber * Distance * Participant) + .017 MS(Error)
d. .949 MS(Distance * Participant) + .001 MS(Method * Distance * Participant) - .001 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
e. 1.017 MS(Method * Participant) + 1.032 MS(AppsNumber * Participant) + 1.021 MS(Distance * Participant) - 1.058 MS(Method * AppsNumber * Participant) - 1.003 MS(Method * Distance * Participant) - 1.041 MS(AppsNumber * Distance * Participant) + 1.032 MS(Method * AppsNumber * Distance * Participant) + .000 MS(Error)
f. .973 MS(Method * AppsNumber * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .033 MS(Error)
g. .909 MS(Method * Distance * Participant) + .033 MS(Method * AppsNumber * Distance * Participant) + .058 MS(Error)
h. 1.041 MS(Method * AppsNumber * Participant) + .987 MS(Method * Distance * Participant) - 1.008 MS (Method * AppsNumber * Distance * Participant) - .020 MS(Error)
i. .924 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .062 MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforAppsNumberDistance

Source		F	Sig.
Intercept	Hypothesis	135.221	.000
Method	Hypothesis	6.736	.001
AppsNumber	Hypothesis	.877	.430
Distance	Hypothesis	8.153	.000
Participant	Hypothesis	10.218	.000
Method * AppsNumber	Hypothesis	.676	.669
Method * Distance	Hypothesis	5.010	.000
Method * Participant	Hypothesis	3.312	.000
AppsNumber * Distance	Hypothesis	4.023	.001

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforAppsNumberDistance

Source		Type III Sum of Squares	df	Mean Square
AppsNumber * Participant	Hypothesis	9221555.773	22	419161.626
	Error	4.020E7	53.020	758119.796[j]
Distance * Participant	Hypothesis	9370251.525	33	283947.016
	Error	7677304.110	28.582	268605.092[k]
Method * AppsNumber * Distance	Hypothesis	3.450E7	18	1916934.771
	Error	5.116E7	176.949	289127.402[l]
Method * AppsNumber * Participant	Hypothesis	4.990E7	66	756068.642
	Error	4.497E7	156.506	287349.923[m]
Method * Distance * Participant	Hypothesis	2.742E7	99	276979.924
	Error	4.526E7	157.447	287438.590[n]
AppsNumber * Distance * Participant	Hypothesis	1.834E7	66	277927.020
	Error	4.501E7	156.642	287362.823[o]
Method * AppsNumber * Distance * Participant	Hypothesis	4.120E7	144	286098.831
	Error	6.629E8	2070	320234.643[p]

j. 1.024 MS(Method * AppsNumber * Participant) + 1.008 MS(AppsNumber * Distance * Participant) - 1.007 MS(Method * AppsNumber * Distance * Participant) - .024 MS(Error)
k. .982 MS(Method * Distance * Participant) + 1.019 MS(AppsNumber * Distance * Participant) - .994 MS (Method * AppsNumber * Distance * Participant) - .006 MS(Error)
l. .911 MS(Method * AppsNumber * Distance * Participant) + .089 MS(Error)
m. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
n. .961 MS(Method * AppsNumber * Distance * Participant) + .039 MS(Error)
o. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
p. MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforAppsNumberDistance

Source		F	Sig.
AppsNumber * Participant	Hypothesis	.553	.936
Distance * Participant	Hypothesis	1.057	.443
Method * AppsNumber * Distance	Hypothesis	6.630	.000
Method * AppsNumber * Participant	Hypothesis	2.631	.000
Method * Distance * Participant	Hypothesis	.964	.575
AppsNumber * Distance * Participant	Hypothesis	.967	.552
Method * AppsNumber * Distance * Participant	Hypothesis	.893	.809

Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethodAppsNumberDistance

Source		Type III Sum of Squares	df	Mean Square
Intercept	Hypothesis	3.096E9	1	3.096E9
	Error	2.538E8	11.001	2.307E7
Method	Hypothesis	6.050E7	3	2.017E7
	Error	8.771E7	33.096	2.650E6
AppsNumber	Hypothesis	651715.538	2	325857.769
	Error	9535954.388	22.447	424820.656 [c]
Distance	Hypothesis	1.048E7	3	3492095.300
	Error	1.018E7	37.226	273333.630 [d]
Participant	Hypothesis	2.547E8	11	2.316E7
	Error	5.428E7	22.783	2.382E6
Method * AppsNumber	Hypothesis	3735932.093	6	622655.349
	Error	5.031E7	67.622	743947.451 [f]
Method * Distance	Hypothesis	1.684E7	9	1870810.700
	Error	3.617E7	120.176	301017.527 [g]
Method * Participant	Hypothesis	8.863E7	33	2685878.105
	Error	4.768E7	59.527	801014.912 [h]
AppsNumber * Distance	Hypothesis	7003068.997	6	1167178.166
	Error	1.966E7	81.091	242459.285 [i]

a. .996 MS(Participant) - 3.11E-006 MS(Method * Participant) - 4.84E-005 MS(AppsNumber * Participant) + 1.05E-005 MS(Distance * Participant) + 4.36E-005 MS(Method * AppsNumber * Participant) - 1.07E-005 MS(Method * Distance * Participant) + .000 MS(AppsNumber * Distance * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .009 MS(Error)
b. .985 MS(Method * Participant) - .001 MS(Method * AppsNumber * Participant) + .000 MS(Method * Distance * Participant) + .006 MS(Method * AppsNumber * Distance * Participant) + .010 MS(Error)
c. .987 MS(AppsNumber * Participant) - .000 MS(Method * AppsNumber * Participant) + .000 MS (AppsNumber * Distance * Participant) - .005 MS(Method * AppsNumber * Distance * Participant) + .017 MS(Error)
d. .949 MS(Distance * Participant) + .001 MS(Method * Distance * Participant) - .001 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
e. 1.017 MS(Method * Participant) + 1.032 MS(AppsNumber * Participant) + 1.021 MS(Distance * Participant) - 1.058 MS(Method * AppsNumber * Participant) - 1.003 MS(Method * Distance * Participant) - 1.041 MS(AppsNumber * Distance * Participant) + 1.032 MS(Method * AppsNumber * Distance * Participant) + .000 MS(Error)
f. .973 MS(Method * AppsNumber * Participant) - .006 MS(Method * AppsNumber * Distance * Participant) + .033 MS(Error)
g. .909 MS(Method * Distance * Participant) + .033 MS(Method * AppsNumber * Distance * Participant) + .058 MS(Error)
h. 1.041 MS(Method * AppsNumber * Participant) + .987 MS(Method * Distance * Participant) - 1.008 MS (Method * AppsNumber * Distance * Participant) - .020 MS(Error)
i. .924 MS(AppsNumber * Distance * Participant) + .014 MS(Method * AppsNumber * Distance * Participant) + .062 MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethodAppsNumberDistance

Source		F	Sig.
Intercept	Hypothesis	134.192	.000
Method	Hypothesis	7.610	.001
AppsNumber	Hypothesis	.767	.476
Distance	Hypothesis	12.776	.000
Participant	Hypothesis	9.720	.000
Method * AppsNumber	Hypothesis	.837	.546
Method * Distance	Hypothesis	6.215	.000
Method * Participant	Hypothesis	3.353	.000
AppsNumber * Distance	Hypothesis	4.814	.000

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethodAppsNumberDistance

Source		Type III Sum of Squares	df	Mean Square
AppsNumber * Participant	Hypothesis	9370542.813	22	425933.764
	Error	3.704E7	50.834	728547.948[j]
Distance * Participant	Hypothesis	8952756.441	33	271295.650
	Error	7959568.601	30.323	262492.284[k]
Method * AppsNumber * Distance	Hypothesis	5509130.928	18	306062.829
	Error	4.969E7	178.998	277625.216[l]
Method * AppsNumber * Participant	Hypothesis	4.984E7	66	755221.409
	Error	4.324E7	157.262	274984.989[m]
Method * Distance * Participant	Hypothesis	2.976E7	99	300571.767
	Error	4.354E7	158.261	275116.693[n]
AppsNumber * Distance * Participant	Hypothesis	1.561E7	66	236560.246
	Error	4.329E7	157.407	275004.150[o]
Method * AppsNumber * Distance * Participant	Hypothesis	3.933E7	144	273126.646
	Error	6.703E8	2070	323831.206[p]

j. 1.024 MS(Method * AppsNumber * Participant) + 1.008 MS(AppsNumber * Distance * Participant) - 1.007 MS(Method * AppsNumber * Distance * Participant) - .024 MS(Error)
k. .982 MS(Method * Distance * Participant) + 1.019 MS(AppsNumber * Distance * Participant) - .994 MS (Method * AppsNumber * Distance * Participant) - .006 MS(Error)
l. .911 MS(Method * AppsNumber * Distance * Participant) + .089 MS(Error)
m. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
n. .961 MS(Method * AppsNumber * Distance * Participant) + .039 MS(Error)
o. .963 MS(Method * AppsNumber * Distance * Participant) + .037 MS(Error)
p. MS(Error)

Tests of Between-Subjects Effects

Dependent Variable:ARTSeenTimeMillisforMethodAppsNumberDistance

Source		F	Sig.
AppsNumber * Participant	Hypothesis	.585	.915
Distance * Participant	Hypothesis	1.034	.465
Method * AppsNumber * Distance	Hypothesis	1.102	.353
Method * AppsNumber * Participant	Hypothesis	2.746	.000
Method * Distance * Participant	Hypothesis	1.093	.308
AppsNumber * Distance * Participant	Hypothesis	.860	.754
Method * AppsNumber * Distance * Participant	Hypothesis	.843	.908