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Poirot Stats 4-15-4-19, 5-_16Sep9eaJ7Nfhb_sZAj7J36miuqWXu9OcSzbYLbjVAaE.xlsx
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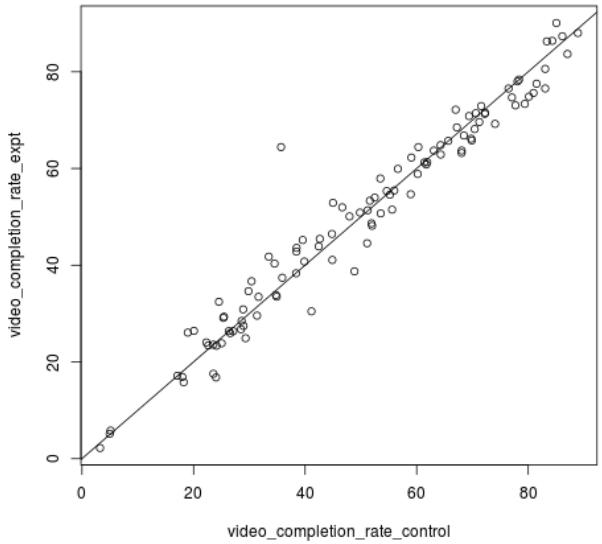
	Control	Experiment	
Active view rate			
Video completion rate	33.23%	33.40%	0.50%
CPD			5.00% (significant)
Clicks PD			5.00% (significant)



Brand metrics

	Control	**Experiment**	**Change**
E	52.73%	53.04%	0.58%
PG	30.85%	30.29%	-1.84%
T	9.92%	9.95%	0.33%
MA	3.69%	3.74%	1.33%
NR	2.81%	2.99%	6.36%

Mobile vs desktop Impact on mobile is smaller (not surprising)

Mobile

	control	*expt*	*change*
imps	77564554	75638841	-2.48%
revenue	$167,269.52	$156,501.28	-6.44%
payout	$135,170.71	$126,453.44	-6.45%
value	$1,325,402.51	$1,319,321.63	-0.46%
surplus	$1,190,231.80	$1,192,868.19	0.22%
revenue/value	0.126	0.119	-6.01%

Desktop

	control	*expt*	*change*
imps	124262500	116338152	-6.38%
revenue	$398,710.04	$352,638.80	-11.56%
payout	$318,029.86	$281,381.67	-11.52%
value	$665,385.51	$644,652.80	-3.12%
surplus	$347,355.65	$363,271.13	4.58%
revenue/value	0.599	0.547	-8.71%

Video vs non-Video Not terribly different

Video

	control	*expt*	*change*
imps	12977397	12253620	-5.58%
revenue	163881.3754	151540.5462	-7.53%
payout	138165.7896	127777.7853	-7.52%
value	270249.4851	262971.4949	-2.69%
surplus	132083.6955	135193.7096	2.35%
revenue/value	0.606	0.576	-4.97%

Non-video

	control	*expt*	*change*
imps	201782777	192200330	-4.75%
revenue	444865.2205	397590.8831	-10.63%
payout	350154.0299	312919.8298	-10.63%
value	1793542.271	1772615.059	-1.17%
surplus	1443388.241	1459695.229	1.13%
revenue/value	0.248	0.224	-9.57%

Placeholder – Excel Spreadsheet
Tab Name: Bid multiplier stability

On 3p exchanges

	control	*expt*	*change*
imps	335762376	285353621	-15.01%
revenue	$1,290,659	$1,025,859	-20.52%
payout	$1,008,971	$798,777	-20.83%
value	$1,750,917	$1,625,862	-7.14%
surplus	$741,946	$827,085	11.48%
revenue/value	0.737	0.631	-14.40%

On 3p unclean exchanges

imps
revenue
payout
value
surplus
revenue/value

Adsense + Adx

	control	*expt*	*change*
imps	608456596	612618150	0.68%
revenue	$1,286,958	$1,296,947	0.78%
payout	$1,040,643	$1,048,070	0.71%
value	$9,251,187	$9,278,554	0.30%
surplus	$8,210,545	$8,230,484	0.24%
revenue/value	0.139	0.140	0.48%

Adx only

imps
revenue
payout
value
surplus
revenue/value

Overall

imps	944218972	897971771	-4.90%
revenue	$2,577,617	$2,322,807	-9.89%
payout	$2,049,614	$1,846,847	-9.89%
value	$11,002,104	$10,904,417	-0.89%
surplus	$8,952,491	$9,057,569	1.17%
revenue/value	0.234	0.213	-9.08%

control	*expt*	*change*
307133612	256337080	-16.54%
$1,073,304	$806,624	-24.85%
$834,979	$623,239	-25.36%
$1,370,873	$1,242,579	-9.36%
$535,894	$619,339	15.57%
0.783	0.649	-17.09%

control	*expt*	*change*
337645058	341340337	1.09%
$1,045,585	$1,054,859	0.89%
$853,526	$860,466	0.81%
$8,783,325	$8,809,280	0.30%
$7,929,799	$7,948,814	0.24%
0.119	0.120	0.59%

Clean 3p

28628764	29016541	1.35%
$217,355	$219,235	0.86%
$173,992	$175,538	0.89%
$380,044	$383,284	0.85%
$206,052	$207,746	0.82%
0.572	0.572	0.01%

web_property	exchange	cntl imps	expt imps	cntl revenue	expt revenue	cntl payout	expt payout	cntl value
ca-pub-1429895623202285	spotxchange	2242130	2113950	$34,163.39	$31,139.48	$27,195.25	$24,729.65	$40,402.92
ca-pub-1525150946658422	adingo	1088218	1047651	$1,529.02	$1,410.44	$1,144.17	$1,054.71	$3,596.19
ca-pub-1633277228031978	adaptv	2819035	2878747	$27,969.59	$28,499.94	$21,955.34	$22,382.48	$65,207.85
ca-pub-1640496599382717	lijit	4654946	3673786	$14,789.08	$10,397.50	$11,221.25	$7,749.20	$14,539.46
ca-pub-1852583624082418	smartclip	725781	647017	$13,686.17	$11,549.61	$11,189.19	$9,405.96	$18,191.68
ca-pub-1974716548107238	imobile	236571	244477	$183.12	$179.67	$127.90	$125.15	$580.70
ca-pub-2093442111761240	united	771965	683760	$600.29	$473.75	$435.03	$346.49	$1,486.93
ca-pub-2328895497139603	smartstreamtv	79561	80221	$1,544.23	$1,554.15	$1,231.39	$1,242.61	$2,253.72
ca-pub-2399441271239169	rightmedia	19671533	17778961	$61,929.81	$53,209.75	$47,699.11	$40,914.54	$96,290.73
ca-pub-2409612739278653	baidu	37803	37379	$27.73	$26.47	$22.98	$21.98	$1,307.94
ca-pub-2965089325117527	contextweb	7301053	5884145	$23,307.18	$15,624.15	$18,250.02	$12,126.35	$20,831.08
ca-pub-3028258428956246	openx	33363774	25456459	$106,729.63	$70,287.89	$80,683.74	$52,536.45	$127,745.91
ca-pub-3076890012741467	appnexus	74811769	63210999	$203,384.54	$159,092.29	$159,932.90	$124,701.15	$297,835.79
ca-pub-3567512973010615	adscale	1105453	884187	$3,275.34	$2,537.50	$2,566.06	$1,970.01	$6,593.47
ca-pub-3868886228591888	platformid	96306	106268	$87.09	$89.52	$57.35	$58.64	$235.81
ca-pub-4339119772293745	tanx	529095	528983	$70.76	$70.32	$61.47	$60.78	$270.32
ca-pub-4393823001626070	microad	710265	677942	$634.92	$590.58	$432.71	$408.06	$1,647.70
ca-pub-4497245928647415	dailymotion	145220	147473	$1,026.15	$1,043.41	$769.46	$780.18	$1,408.24
ca-pub-4925306480219738	brightroll	4003680	3245044	$45,908.29	$36,179.13	$37,127.35	$28,814.87	$58,091.89
ca-pub-5085450378852851	nexage	2013139	2059667	$5,483.72	$5,566.08	$4,180.28	$4,238.88	$9,635.33
ca-pub-5446915690262785	tremorvideo	2557800	2582121	$36,431.91	$36,744.30	$29,988.35	$30,246.50	$66,646.18
ca-pub-5722610347565274	casale	22981803	17119506	$94,747.50	$62,541.69	$72,143.22	$47,035.58	$106,450.87
ca-pub-5955580522647743	geniee	3843438	3586734	$4,111.81	$3,847.16	$3,161.72	$2,996.16	$10,809.83
ca-pub-6068497455919343	smartrtb	7188723	7299612	$16,377.00	$16,381.29	$12,366.82	$12,351.26	$39,315.26
ca-pub-6362111942204036	pubmatic	38638136	30628582	$208,880.27	$143,639.66	$165,403.48	$113,009.19	$187,885.95
ca-pub-6402014330148934	mopub	12159237	11340535	$14,432.27	$12,678.25	$10,917.21	$9,489.82	$27,685.57
ca-pub-6451420571434375	qihoo	8491	8208	$3.01	$2.87	$2.71	$2.59	$18.09
ca-pub-6463948665732549	adtech	11994934	10405297	$32,023.16	$25,509.60	$23,930.85	$18,933.77	$46,018.34
ca-pub-6513011533210025	teadstv	2554285	2560995	$37,418.30	$37,538.02	$30,704.60	$30,806.43	$63,874.85
ca-pub-6579838053286784	rubicon	49026633	41686177	$129,563.11	$99,247.73	$99,727.60	$75,757.49	$195,568.82
ca-pub-6677732202158146	stickyexchange	4476007	4523028	$58,300.87	$58,897.92	$46,471.17	$47,001.44	$77,234.14
ca-pub-6771908423553379	xbidpub	229535	230361	$3,786.64	$3,805.11	$3,527.25	$3,545.24	$3,538.17
ca-pub-6949724085261467	admeta	636086	612218	$1,658.27	$1,577.08	$1,361.98	$1,294.21	$2,151.75
ca-pub-7098577362019730	adform	1672152	1690378	$5,175.47	$5,173.28	$4,241.36	$4,243.28	$9,275.33
ca-pub-7306760027101340	yieldmo	450110	451338	$1,776.16	$1,780.26	$1,474.53	$1,478.76	$3,412.42
ca-pub-7350897138099958	bidswitch	17257558	15506657	$76,923.77	$64,047.56	$59,686.56	$49,185.44	$105,640.18
ca-pub-8391639848056334	improvedigital	3625995	3680085	$22,641.62	$22,846.66	$17,509.24	$17,661.60	$37,134.95
ca-pub-8436534779487435	ibillboard	54156	54673	$77.95	$79.03	$69.62	$70.61	$102.88

expt value	cntl surplus	expt surplus	Unclean
$38,901.70	$13,207.67	$14,172.05	TRUE
$3,550.39	$2,452.02	$2,495.68	TRUE
$66,521.59	$43,252.51	$44,139.12	FALSE
$12,652.57	$3,318.21	$4,903.36	TRUE
$16,909.53	$7,002.50	$7,503.57	TRUE
$553.26	$452.81	$428.11	FALSE
$1,461.72	$1,051.90	$1,115.23	TRUE
$2,258.07	$1,022.33	$1,015.46	FALSE
$94,633.28	$48,591.62	$53,718.74	TRUE
$1,312.96	$1,284.95	$1,290.99	FALSE
$18,176.47	$2,581.06	$6,050.12	TRUE
$110,974.65	$47,062.17	$58,438.20	TRUE
$274,946.32	$137,902.89	$150,245.18	TRUE
$5,697.13	$4,027.40	$3,727.12	TRUE
$267.04	$178.46	$208.41	FALSE
$267.76	$208.85	$206.98	FALSE
$1,681.63	$1,215.00	$1,273.56	TRUE
$1,429.16	$638.78	$648.98	TRUE
$51,510.46	$20,964.54	$22,695.59	TRUE
$9,781.93	$5,455.05	$5,543.06	FALSE
$67,099.74	$36,657.83	$36,853.24	FALSE
$89,011.32	$34,307.65	$41,975.74	TRUE
$10,767.79	$7,648.12	$7,771.63	TRUE
$39,555.19	$26,948.45	$27,203.93	FALSE
$162,131.83	$22,482.47	$49,122.64	TRUE
$26,586.15	$16,768.36	$17,096.33	TRUE
$16.26	$15.38	$13.66	FALSE
$42,626.00	$22,087.48	$23,692.23	TRUE
$64,151.11	$33,170.25	$33,344.68	FALSE
$177,853.74	$95,841.22	$102,096.25	TRUE
$77,694.07	$30,762.97	$30,692.63	FALSE
$3,556.87	$10.92	$11.62	FALSE
$2,122.69	$789.77	$828.48	TRUE
$9,239.13	$5,033.98	$4,995.85	FALSE
$3,417.55	$1,937.90	$1,938.80	FALSE
$98,954.05	$45,953.62	$49,768.61	TRUE
$37,487.16	$19,625.71	$19,825.56	FALSE
$104.20	$33.26	$33.59	FALSE

web_property	exchange	cntl imps	expt imps	cntl revenue	expt revenue	cntl payout
ca-pub-1525150946658422	adingo	1088218	1047651	$1,529.02	$1,410.44	$1,144.17
ca-pub-6949724085261467	admeta	636086	612218	$1,658.27	$1,577.08	$1,361.98
ca-pub-3567512973010615	adscale	1105453	884187	$3,275.34	$2,537.50	$2,566.06
ca-pub-6463948665732549	adtech	11994934	10405297	$32,023.16	$25,509.60	$23,930.85
ca-pub-3076890012741467	appnexus	74811769	63210999	$203,384.54	$159,092.29	$159,932.90
ca-pub-7350897138099958	bidswitch	17257558	15506657	$76,923.77	$64,047.56	$59,686.56
ca-pub-4925306480219738	brightroll	4003680	3245044	$45,908.29	$36,179.13	$37,127.35
ca-pub-5722610347565274	casale	22981803	17119506	$94,747.50	$62,541.69	$72,143.22
ca-pub-2965089325117527	contextweb	7301053	5884145	$23,307.18	$15,624.15	$18,250.02
ca-pub-4497245928647415	dailymotion	145220	147473	$1,026.15	$1,043.41	$769.46
ca-pub-5955580522647743	geniee	3843438	3586734	$4,111.81	$3,847.16	$3,161.72
ca-pub-1640496599382717	lijit	4654946	3673786	$14,789.08	$10,397.50	$11,221.25
ca-pub-4393823001626070	microad	710265	677942	$634.92	$590.58	$432.71
ca-pub-6402014330148934	mopub	12159237	11340535	$14,432.27	$12,678.25	$10,917.21
ca-pub-3028258428956246	openx	33363774	25456459	$106,729.63	$70,287.89	$80,683.74
ca-pub-6362111942204036	pubmatic	38638136	30628582	$208,880.27	$143,639.66	$165,403.48
ca-pub-2399441271239169	rightmedia	19671533	17778961	$61,929.81	$53,209.75	$47,699.11
ca-pub-6579838053286784	rubicon	49026633	41686177	$129,563.11	$99,247.73	$99,727.60
ca-pub-1852583624082418	smartclip	725781	647017	$13,686.17	$11,549.61	$11,189.19
ca-pub-1429895623202285	spotxchange	2242130	2113950	$34,163.39	$31,139.48	$27,195.25
ca-pub-2093442111761240	united	771965	683760	$600.29	$473.75	$435.03

expt payout	cntl value	expt value	cntl surplus	expt surplus	Unclean
$1,054.71	$3,596.19	$3,550.39	$2,452.02	$2,495.68	TRUE
$1,294.21	$2,151.75	$2,122.69	$789.77	$828.48	TRUE
$1,970.01	$6,593.47	$5,697.13	$4,027.40	$3,727.12	TRUE
$18,933.77	$46,018.34	$42,626.00	$22,087.48	$23,692.23	TRUE
$124,701.15	$297,835.79	$274,946.32	$137,902.89	$150,245.18	TRUE
$49,185.44	$105,640.18	$98,954.05	$45,953.62	$49,768.61	TRUE
$28,814.87	$58,091.89	$51,510.46	$20,964.54	$22,695.59	TRUE
$47,035.58	$106,450.87	$89,011.32	$34,307.65	$41,975.74	TRUE
$12,126.35	$20,831.08	$18,176.47	$2,581.06	$6,050.12	TRUE
$780.18	$1,408.24	$1,429.16	$638.78	$648.98	TRUE
$2,996.16	$10,809.83	$10,767.79	$7,648.12	$7,771.63	TRUE
$7,749.20	$14,539.46	$12,652.57	$3,318.21	$4,903.36	TRUE
$408.06	$1,647.70	$1,681.63	$1,215.00	$1,273.56	TRUE
$9,489.82	$27,685.57	$26,586.15	$16,768.36	$17,096.33	TRUE
$52,536.45	$127,745.91	$110,974.65	$47,062.17	$58,438.20	TRUE
$113,009.19	$187,885.95	$162,131.83	$22,482.47	$49,122.64	TRUE
$40,914.54	$96,290.73	$94,633.28	$48,591.62	$53,718.74	TRUE
$75,757.49	$195,568.82	$177,853.74	$95,841.22	$102,096.25	TRUE
$9,405.96	$18,191.68	$16,909.53	$7,002.50	$7,503.57	TRUE
$24,729.65	$40,402.92	$38,901.70	$13,207.67	$14,172.05	TRUE
$346.49	$1,486.93	$1,461.72	$1,051.90	$1,115.23	TRUE

Data from a 5% experiment on 4/15 to 4/19

Advertiser * exchange level

212547019	control
212547020	experiment

ZESTA

	control	*expt*	*expt_scaled*	*change*
Adsense BC	$186,493	$187,015	$207,835	11.44%
Adsense noBC	$54,390	$54,584	$54,584	0.36%
Adx BC	$808,990	$815,254	$906,015	11.99%
Adx noBC	$236,076	$239,088	$239,088	1.28%
3p clean BC	$170,787	$171,526	$190,622	11.61%
3p clean noBC	$55,346	$55,415	$55,415	0.12%
3p unclean BC	$869,334	$657,891	$731,133	-15.90%
3p unclean noBC	$204,319	$148,940	$148,940	-27.10%
Total DBM_BC	$2,035,604	$1,831,686	$2,035,604	0.00%
Total DBM_on_Adx	$1,045,066	$1,054,342	$1,145,103	9.57%
Total DBM	$2,585,735	$2,329,713	$2,533,631	-2.02%
Adx fraction of DBM	40.42%	45.26%	45.20%	11.83%

Scaling	1.111
Fraction of Adx that's DBM	30.04%
Fraction of 3p that's clean	17.40%

Since DBM is 31% of Adx, overall Adx revenue increases by 3%

	Control	Expt	Change
Adsense	$240,883	$262,419	8.94%
Adx	$1,045,066	$1,145,103	9.57%
Clean	$226,133	$246,037	8.80%
Unclean	$1,073,653	$880,073	-18.03%
	$2,585,735	$2,533,631	-2.02%
	$240,883	$241,599	0.30%
	$1,045,066	$1,054,342	0.89%
	$226,133	$226,941	0.36%
	$1,073,653	$806,831	-24.85%
	$2,585,735	$2,329,713	-9.90%

ZESTA

	revenue			rpi	
	control	experiment	experiment_scaled	control	experiment
Adsense	$240,883	$241,599	$262,419	$0.89	$0.89
Adx	$1,045,066	$1,054,342	$1,145,103	$3.10	$3.09
3p clean	$226,133	$226,941	$246,037	$7.56	$7.51
3p dirty	$1,073,653	$806,831	$880,073	$3.49	$3.15

	impressions				
experiment_scaled	control	experiment	experiment_scaled		
$0.89	270,169,358	270,638,512	293,961,031	0.17%	8.81%
$3.09	337,553,618	341,255,179	370,631,352	1.10%	9.80%
$7.51	29,929,984	30,211,670	32,753,791	0.94%	9.43%
$3.15	307,240,807	256,413,589	279,690,050	-16.54%	-8.97%
	944,893,767	898,518,950	977,036,224	-4.91%	3.40%