

# Socio-technical analysis result ( Cassandra )

	range.date	devs	ml.only.devs	code.only.devs	ml.code.devs	perc.ml.only.devs	perc.code.only.devs	perc.ml.code.devs	sponsored.devs	ratio.sponsored	sponsored.core.devs	ratio.sponsored.core	num.tz	core.global.devs	core.mail.devs	core.code.devs	org.silo	prima.donnas	radio.silence	black.cloud	missing.links	st.congruence	communicability	global.turnover	code.turnover
1	2013-03 – 2013-06	45	27	8	10	0.6000	0.1778	0.2222	3	0.0667	0	0.0000	14	17	16	5	10	0	10	0	10	0.5238	0.8042	0.0000	0.0000
2	2013-06 – 2013-09	54	36	6	12	0.6667	0.1111	0.2222	5	0.0926	0	0.0000	14	21	20	8	11	0	0	0	25	0.4318	0.6944	0.4444	0.2778
3	2013-09 – 2013-12	44	35	0	9	0.7955	0.0000	0.2045	0	0.0000	0	0.0000	17	18	18	4	0	0	18	0	7	0.5000	0.7540	0.6735	0.6667
4	2013-12 – 2014-03	56	33	13	10	0.5893	0.2321	0.1786	0	0.0000	0	0.0000	15	21	19	7	20	0	10	0	23	0.4390	0.7858	0.4600	0.0000
5	2014-03 – 2014-06	74	39	19	16	0.5270	0.2568	0.2162	4	0.0541	0	0.0000	16	25	22	11	33	0	9	0	52	0.3953	0.7801	0.3846	0.2414
6	2014-06 – 2014-09	60	35	12	13	0.5833	0.2000	0.2167	3	0.0500	0	0.0000	16	19	17	8	11	0	25	0	21	0.3438	0.7925	0.6567	0.6333
7	2014-09 – 2014-12	71	27	31	13	0.3803	0.4366	0.1831	8	0.1127	1	0.0227	19	27	18	18	115	0	6	0	130	0.0780	0.6346	0.4580	0.1739
8	2014-12 – 2015-02	52	25	18	9	0.4808	0.3462	0.1731	2	0.0385	0	0.0000	12	16	15	7	4	0	0	0	6	0.2500	0.9074	0.7317	0.7606
9	2015-02 – 2015-05	120	47	49	24	0.3917	0.4083	0.2000	10	0.0833	1	0.0137	18	30	27	18	49	0	27	0	50	0.2063	0.9132	0.2209	0.1400
10	2015-05 – 2015-08	81	18	45	18	0.2222	0.5556	0.2222	8	0.0988	1	0.0159	21	24	15	19	159	0	9	0	194	0.1638	0.6954	0.7363	0.5882
11	2015-08 – 2015-11	74	18	38	18	0.2432	0.5135	0.2432	23	0.3108	1	0.0179	25	26	17	17	102	0	4	0	132	0.1020	0.6904	0.5677	0.5210
12	2015-11 – 2016-02	79	52	15	12	0.6582	0.1899	0.1519	8	0.1013	1	0.0370	16	27	23	8	15	0	0	0	17	0.0000	0.8061	0.4967	0.8193
	core.global.turnover	core.mail.turnover	core.code.turnover	ratio.smelly.quitters	ratio.smelly.devs	global.truck	mail.truck	code.truck	closeness.cent	betweenness.cent	degree.cent	global.mod	mail.mod	code.mod	density	mail.only.core.devs	code.only.core.devs	ml.code.core.devs	ratio.mail.only.core	ratio.code.only.core	ratio.ml.code.core				
1	0.0000	0.0000	0.0000	0.0000	0.3556	0.6222	0.5676	0.7222	0.0447	0.3520	0.5333	0.0745	0.1929	0.0873	0.1485	12	1	4	0.7059	0.0588	0.2353				
2	0.2105	0.1667	0.0000	0.2273	0.2778	0.6111	0.5833	0.5556	0.0968	0.3689	0.5646	0.0605	0.1068	-0.2283	0.1523	13	1	7	0.6190	0.0476	0.3333				
3	0.3590	0.3684	0.6667	0.1515	0.4318	0.5909	0.5909	0.5556	0.0483	0.1920	0.4059	0.0622	0.1804	0.0256	0.1522	14	0	4	0.7778	0.0000	0.2222				
4	0.4615	0.5405	0.0000	0.4348	0.3393	0.6250	0.5581	0.6957	0.0280	0.1831	0.3909	0.0059	0.1924	0.1206	0.1000	14	2	5	0.6667	0.0952	0.2381				
5	0.4348	0.5366	0.0000	0.2000	0.4459	0.6622	0.6000	0.6857	0.0295	0.2411	0.5157	0.1787	0.0627	0.1516	0.1418	16	5	6	0.5926	0.1852	0.2222				
6	0.5000	0.5641	0.4211	0.3182	0.5500	0.6833	0.6458	0.6800	0.0314	0.2086	0.4215	0.0586	0.2449	0.2550	0.0870	12	3	5	0.6000	0.1500	0.2500				
7	0.2174	0.3429	0.0769	0.4667	0.5493	0.6197	0.5500	0.5909	0.0254	0.1048	0.2606	0.3571	0.4028	0.3661	0.0966	11	11	7	0.3793	0.3793	0.2414				
8	0.8372	0.6061	1.1200	0.4222	0.1731	0.6923	0.5588	0.7407	0.0208	0.1157	0.2406	0.4125	0.3356	0.2511	0.0535	10	2	5	0.5882	0.1176	0.2941				
9	0.3043	0.2857	0.1600	0.0526	0.4583	0.7500	0.6197	0.7534	0.0123	0.0835	0.3024	0.3333	0.1835	0.6058	0.0674	18	9	9	0.5000	0.2500	0.2500				
10	0.5556	0.7143	0.3784	0.3378	0.5432	0.7037	0.5833	0.6984	0.0165	0.0518	0.3819	0.0254	0.1672	0.0257	0.1056	7	11	8	0.2692	0.4231	0.3077				
11	0.2400	0.1875	0.2778	0.3409	0.4865	0.6486	0.5278	0.6964	0.0200	0.0934	0.3199	0.2697	0.0990	0.2423	0.1048	12	12	5	0.4138	0.4138	0.1724				
12	0.4151	0.2000	0.8000	0.2895	0.1519	0.6582	0.6406	0.7037	0.0238	0.1327	0.2423	0.4766	0.3243	0.5236	0.0782	22	7	1	0.7333	0.2333	0.0333				

Community smells: Pearson's correlation ( Cassandra )

	devs	ml.only.devs	code.only.devs	ml.code.devs	perc.ml.only.devs	perc.code.only.devs	perc.ml.code.devs	sponsored.devs	ratio.sponsored	sponsored.core.devs	ratio.sponsored.core	num.tz	core.global.devs	core.mail.devs	core.code.devs	org.silo	prima.donnas	radio.silence	black.cloud	missing.links	st.congruence	communicability	global.turnover	code.turnover
org.silo	0.45	-0.55	0.79	0.56	-0.87	0.85	0.29	0.60	0.55	0.74	0.49	0.79	0.54	-0.20	0.89	-	-	-0.09	-	0.99	-0.58	-0.57	0.09	-0.14
prima.donnas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
radio.silence	0.33	0.25	0.15	0.39	0.06	-0.09	0.22	-0.17	-0.30	-0.06	-0.27	0.09	0.07	0.29	0.08	-0.09	-	-	-	-0.11	0.28	0.32	-0.20	-0.19
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	0.41	-0.58	0.76	0.55	-0.86	0.83	0.36	0.61	0.58	0.70	0.45	0.81	0.52	-0.23	0.87	0.99	-	-0.11	-	-	-0.55	-0.61	0.13	-0.11
	core.global.turnover	core.mail.turnover	core.code.turnover	ratio.smelly.quitters	ratio.smelly.devs	global.truck	mail.truck	code.truck	closeness.cent	betweenness.cent	degree.cent	global.mod	mail.mod	code.mod	density	mail.only.core.devs	code.only.core.devs	ml.code.core.devs	ratio.mail.only.core	ratio.code.only.core	ratio.ml.code.core			
org.silo	-0.21	0.15	-0.29	0.28	0.61	0.26	-0.36	0.04	-0.42	-0.61	-0.28	0.04	0.00	0.08	-0.14	-0.46	0.87	0.51	-0.93	0.91	0.13			
prima.donnas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
radio.silence	-0.09	0.20	-0.18	-0.52	0.58	0.36	0.47	0.13	-0.24	-0.10	0.10	-0.31	-0.14	0.27	-0.06	0.09	-0.05	0.32	0.04	-0.12	0.14			
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
missing.links	-0.21	0.15	-0.30	0.27	0.62	0.23	-0.36	0.00	-0.37	-0.57	-0.22	-0.01	-0.08	0.01	-0.08	-0.49	0.85	0.50	-0.93	0.90	0.15			

Community smells: Pearson's correlation - p-values ( Cassandra )

	devs	ml.only.devs	code.only.devs	ml.code.devs	perc.ml.only.devs	perc.code.only.devs	perc.ml.code.devs	sponsored.devs	ratio.sponsored	sponsored.core.devs	ratio.sponsored.core	num.tz	core.global.devs	core.mail.devs	core.code.devs	org.silo	prima.donnas	radio.silence	black.cloud	missing.links	st.congruence	communicability	global.turnover	code.turnover																			
org.silo	0.14	0.06	0.00	0.06	0.00	0.00	0.36	0.04	0.06	0.01	0.11	0.00	0.07	0.53	0.00	-	-	0.78	-	0.00	0.05	0.05	0.79	0.69																			
prima.donnas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																			
radio.silence	0.30	0.43	0.63	0.21	0.86	0.77	0.49	0.61	0.34	0.85	0.40	0.77	0.83	0.36	0.80	0.78	-	-	-	0.73	0.39	0.31	0.56	0.58																			
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																			
missing.links	0.19	0.05	0.00	0.06	0.00	0.00	0.25	0.04	0.05	0.01	0.15	0.00	0.09	0.47	0.00	0.00	-	0.73	-	-	0.06	0.03	0.70	0.75																			
		core.global.turnover		core.mail.turnover		core.code.turnover		ratio.smelly.quitters		ratio.smelly.devs		global.truck		mail.truck		code.truck		closeness.cent		betweenness.cent		degree.cent		global.mod		mail.mod		code.mod		density		mail.only.core.devs		code.only.core.devs		ml.code.core.devs		ratio.mail.only.core		ratio.code.only.core		ratio.ml.code.core	
org.silo	0.54	0.66	0.39	0.41	0.04	0.42	0.25	0.89	0.17	0.03	0.38	0.90	1.00	0.79	0.67	0.13	0.00	0.09	0.00	0.00	0.00	0.69																					
prima.donnas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																					
radio.silence	0.80	0.56	0.60	0.10	0.05	0.24	0.12	0.69	0.45	0.76	0.76	0.32	0.67	0.40	0.84	0.78	0.87	0.31	0.91	0.72	0.66																						
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																					
missing.links	0.53	0.65	0.37	0.43	0.03	0.48	0.25	0.99	0.23	0.05	0.50	0.98	0.82	0.97	0.81	0.11	0.00	0.09	0.00	0.00	0.65																						

Community smells: Spearman’s correlation ( Cassandra )

	devs	ml.only.devs	code.only.devs	ml.code.devs	perc.ml.only.devs	perc.code.only.devs	perc.ml.code.devs	sponsored.devs	ratio.sponsored	sponsored.core.devs	ratio.sponsored.core	num.tz	core.global.devs	core.mail.devs	core.code.devs	org.silo	prima.donnas	radio.silence	black.cloud	missing.links	st.congruence	communicability	global.turnover	code.turnover																			
org.silo	0.81	-0.21	0.83	0.83	-0.78	0.82	0.18	0.74	0.67	0.76	0.67	0.73	0.77	0.12	0.92	-	-	-0.03	-	0.94	-0.64	-0.42	-0.21	-0.51																			
prima.donnas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																			
radio.silence	0.02	0.16	-0.02	0.18	0.02	-0.08	0.11	-0.22	-0.45	-0.15	-0.31	0.21	-0.04	0.09	-0.06	-0.03	-	-	-	-0.04	0.42	0.26	-0.12	-0.39																			
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																			
missing.links	0.70	-0.24	0.69	0.85	-0.71	0.72	0.45	0.71	0.65	0.61	0.51	0.73	0.67	0.09	0.89	0.94	-	-0.04	-	-	-0.48	-0.60	-0.23	-0.53																			
		core.global.turnover		core.mail.turnover		core.code.turnover		ratio.smelly.quitters		ratio.smelly.devs		global.truck		mail.truck		code.truck		closeness.centr		betweenness.centr		degree.centr		global.mod		mail.mod		code.mod		density		mail.only.core.devs		code.only.core.devs		ml.code.core.devs		ratio.mail.only.core		ratio.code.only.core		ratio.ml.code.core	
org.silo	-0.16	-0.02	-0.40	0.29	0.55	0.35	-0.24	0.10	-0.64	-0.65	-0.26	-0.00	-0.22	0.29	-0.15	-0.14	0.89	0.64	-0.77	0.88	0.04																						
prima.donnas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																				
radio.silence	0.14	0.31	-0.14	-0.36	0.50	0.16	0.36	0.02	0.05	-0.01	0.30	-0.44	-0.07	0.06	0.02	0.20	-0.14	0.11	0.11	-0.11	0.00																						
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																				
missing.links	-0.30	-0.12	-0.54	0.15	0.61	0.21	-0.24	-0.12	-0.44	-0.47	0.01	-0.17	-0.47	0.04	0.13	-0.18	0.78	0.70	-0.76	0.76	0.11																						

# Community smells: Spearman's correlation - p-values ( Cassandra )

	devs	ml.only.devs	code.only.devs	ml.code.devs	perc.ml.only.devs	perc.code.only.devs	perc.ml.code.devs	sponsored.devs	ratio.sponsored	sponsored.core.devs	ratio.sponsored.core	num.tz	core.global.devs	core.mail.devs	core.code.devs	org.silo	prima.donnas	radio.silence	black.cloud	missing.links	st.congruence	communicability	global.turnover	code.turnover																			
org.silo	0.00	0.51	0.00	0.00	0.00	0.00	0.57	0.01	0.02	0.00	0.02	0.01	0.00	0.72	0.00	-	-	0.92	-	0.00	0.03	0.18	0.55	0.11																			
prima.donnas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																			
radio.silence	0.96	0.61	0.96	0.58	0.95	0.79	0.72	0.49	0.14	0.65	0.32	0.51	0.91	0.77	0.85	0.92	-	-	-	0.91	0.18	0.41	0.72	0.23																			
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																			
missing.links	0.01	0.46	0.02	0.00	0.01	0.01	0.14	0.01	0.02	0.03	0.09	0.01	0.02	0.79	0.00	0.00	-	0.91	-	-	0.12	0.04	0.50	0.10																			
		core.global.turnover		core.mail.turnover		core.code.turnover		ratio.smelly.quitters		ratio.smelly.devs		global.truck		mail.truck		code.truck		closeness.cent		betweenness.cent		degree.cent		global.mod		mail.mod		code.mod		density		mail.only.core.devs		code.only.core.devs		ml.code.core.devs		ratio.mail.only.core		ratio.code.only.core		ratio.ml.code.core	
org.silo	0.63	0.96	0.23	0.38	0.06	0.27	0.46	0.76	0.02	0.02	0.41	0.99	0.50	0.37	0.65	0.66	0.00	0.02	0.00	0.00	0.00	0.91																					
prima.donnas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																					
radio.silence	0.68	0.35	0.67	0.28	0.10	0.61	0.25	0.96	0.87	0.97	0.35	0.15	0.83	0.84	0.96	0.53	0.67	0.73	0.74	0.73	1.00																						
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																					
missing.links	0.37	0.73	0.09	0.65	0.04	0.51	0.45	0.72	0.15	0.13	0.99	0.60	0.13	0.90	0.70	0.58	0.00	0.01	0.01	0.01	0.01	0.74																					