

Socio-technical analysis result (matplotlib)

	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	2013-05 – 2013-08		117	28	72	17	0.2393	0.6154	0.1453	8	0.0684	0	0.0000	1	24	23	3	3	0	11	0	3	0.5000	0.9719	0.0000	0.0000																			
2	2013-08 – 2013-11		70	17	37	16	0.2429	0.5286	0.2286	11	0.1571	1	0.0189	1	16	15	5	6	0	14	0	7	0.4167	0.9434	0.8235	0.8310																			
3	2013-11 – 2014-02		73	23	41	9	0.3151	0.5616	0.1233	11	0.1507	0	0.0000	1	15	15	0	0	0	2	0	0	1.0000	1.0000	0.5874	0.6019																			
4	2014-02 – 2014-05		126	18	95	13	0.1429	0.7540	0.1032	18	0.1429	3	0.0278	1	19	13	12	20	0	2	0	21	0.0000	0.9414	0.2312	0.1266																			
5	2014-05 – 2014-08		82	16	55	11	0.1951	0.6707	0.1341	15	0.1829	0	0.0000	1	23	14	13	40	0	0	0	40	0.0476	0.8571	0.8654	0.8966																			
6	2014-08 – 2014-11		89	24	58	7	0.2697	0.6517	0.0787	13	0.1461	1	0.0154	1	22	13	11	70	0	7	0	71	0.0000	0.7872	0.5146	0.5496																			
7	2014-11 – 2015-02		91	31	52	8	0.3407	0.5714	0.0879	12	0.1319	0	0.0000	1	21	17	11	19	0	4	0	20	0.0000	0.8800	0.6111	0.7040																			
8	2015-02 – 2015-05		108	29	72	7	0.2685	0.6667	0.0648	13	0.1204	4	0.0506	1	27	17	18	44	0	12	0	45	0.0000	0.8940	0.5126	0.5180																			
9	2015-05 – 2015-08		113	28	78	7	0.2478	0.6903	0.0619	12	0.1062	0	0.0000	1	22	14	16	62	0	2	0	63	0.0455	0.8037	0.5701	0.5854																			
10	2015-08 – 2015-11		82	21	51	10	0.2561	0.6220	0.1220	14	0.1707	2	0.0328	1	21	15	12	32	0	8	0	32	0.0303	0.8674	0.7487	0.7945																			
11	2015-11 – 2016-02		74	15	50	9	0.2027	0.6757	0.1216	11	0.1486	0	0.0000	1	15	12	5	16	0	6	0	16	0.1579	0.9010	0.6538	0.6500																			
12	2016-02 – 2016-05		123	26	90	7	0.2114	0.7317	0.0569	13	0.1057	1	0.0103	1	21	16	9	22	2	11	0	24	0.0000	0.9076	0.2640	0.2436																			
		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
1		0.0000		0.0000	0.0000		0.1111	0.7949	0.4889	0.9663	0.0068	0.0924	0.3373		0.2310	0.2137	-0.3885	0.0248	22	2	1	0.8800	0.0800	0.0400																					
2		0.6500		0.6842	0.2500	0.0779	0.3000	0.7714	0.5455	0.9057	0.0127	0.0929	0.3093		0.2533	0.2772	-0.2184	0.0385	13	3	2	0.7222	0.1667	0.1111																					
3		0.6452		0.6000	2.0000	0.2381	0.0274	0.7945	0.5312	1.0000	0.0096	0.0443	0.1416		0.4595	0.4595	0.0000	0.0251	15	0	0	1.0000	0.0000	0.0000																					
4		0.4706		0.7857	0.0000	0.0435	0.1825	0.8492	0.5806	0.8889	0.0050	0.0422	0.1159		0.6921	0.3174	0.6467	0.0121	11	10	2	0.4783	0.4348	0.0870																					
5		0.4762		0.5926	0.8000	0.1333	0.3171	0.7195	0.4815	0.8030	0.0135	0.1522	0.1843		0.3469	0.5151	0.3331	0.0256	11	10	3	0.4583	0.4167	0.1250																					
6		0.7111		0.6667	0.9167	0.3409	0.4045	0.7528	0.5806	0.8308	0.0132	0.1245	0.2251		0.3723	0.1466	0.3184	0.0363	12	10	1	0.5217	0.4348	0.0435																					
7		0.6047		0.4000	0.5455	0.3455	0.2527	0.7692	0.5641	0.8167	0.0118	0.0816	0.2276		0.5077	0.1922	0.4117	0.0391	14	8	3	0.5600	0.3200	0.1200																					
8		0.3750		0.4118	0.6207	0.2353	0.4167	0.7500	0.5278	0.7722	0.0099	0.0866	0.2695		0.6946	0.2889	0.6264	0.0296	16	17	1	0.4706	0.5000	0.0294																					
9		0.5714		0.5806	0.9412	0.4444	0.3540	0.8053	0.6000	0.8118	0.0104	0.1045	0.1930		0.4016	0.1301	0.3609	0.0302	10	12	4	0.3846	0.4615	0.1538																					
10		0.5116		0.6207	0.7857	0.2877	0.3659	0.7439	0.5161	0.8033	0.0144	0.1044	0.2662		0.2900	0.0947	0.0548	0.0425	13	10	2	0.5200	0.4000	0.0800																					
11		0.7778		0.7407	1.0588	0.3137	0.1757	0.7973	0.5000	0.9153	0.0095	0.0300	0.1770		0.1058	0.3126	-0.2498	0.0285	9	2	3	0.6429	0.1429	0.2143																					
12		0.3333		0.3571	0.2857	0.0769	0.2276	0.8293	0.5152	0.9072	0.0059	0.0519	0.1487		0.3980	0.1519	0.1913	0.0152	14	7	2	0.6087	0.3043	0.0870																					

Community smells: Pearson's correlation (matplotlib)

	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	0.17	0.20	0.24	-0.59	-0.01	0.41	-0.57	0.35	0.09	0.19	0.22	-	0.53	-0.38	0.77	-	-0.08	-0.20	-	1.00	-0.64	-0.93	-0.05	-0.00
prima.donnas	0.42	0.17	0.46	-0.28	-0.19	0.40	-0.36	0.05	-0.30	0.00	-0.05	-	0.04	0.07	-0.03	-0.08	-	0.30	-	-0.06	-0.19	0.06	-0.52	-0.49
radio.silence	0.07	0.18	-0.03	0.27	0.07	-0.24	0.26	-0.43	-0.35	0.33	0.45	-	0.17	0.45	-0.13	-0.20	0.30	-	-	-0.19	0.01	0.21	-0.01	-0.01
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	0.18	0.21	0.25	-0.60	-0.01	0.42	-0.58	0.35	0.08	0.20	0.23	-	0.54	-0.38	0.78	1.00	-0.06	-0.19	-	-	-0.65	-0.93	-0.07	-0.02

	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	-0.09	-0.07	-0.04	0.50	0.81	-0.34	0.44	-0.76	0.38	0.58	-0.07	0.20	-0.34	0.57	0.22	-0.42	0.76	0.29	-0.77	0.81	0.08
prima.donnas	-0.54	-0.54	-0.29	-0.39	-0.09	0.40	-0.17	0.17	-0.44	-0.28	-0.31	0.00	-0.26	0.02	-0.47	0.06	-0.04	0.00	0.01	-0.00	-0.02
radio.silence	-0.17	-0.27	-0.38	-0.25	0.20	-0.05	-0.23	0.09	-0.06	-0.06	0.68	-0.20	-0.42	-0.38	0.22	0.49	-0.06	-0.35	0.22	-0.16	-0.23
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	-0.10	-0.09	-0.06	0.49	0.81	-0.33	0.46	-0.76	0.37	0.57	-0.07	0.21	-0.35	0.58	0.21	-0.42	0.77	0.30	-0.78	0.82	0.08

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

	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	0.60	0.54	0.46	0.04	0.97	0.18	0.05	0.27	0.79	0.55	0.49	-	0.07	0.22	0.00	-	0.80	0.53	-	0.00	0.02	0.00	0.89	0.99
prima.donnas	0.18	0.60	0.13	0.39	0.54	0.20	0.26	0.87	0.34	1.00	0.88	-	0.89	0.82	0.92	0.80	-	0.35	-	0.85	0.56	0.86	0.10	0.13
radio.silence	0.84	0.58	0.92	0.40	0.82	0.45	0.41	0.17	0.26	0.29	0.14	-	0.60	0.14	0.68	0.53	0.35	-	-	0.56	0.98	0.52	0.97	0.98
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	0.57	0.52	0.43	0.04	0.97	0.18	0.05	0.26	0.81	0.53	0.48	-	0.07	0.22	0.00	0.00	0.85	0.56	-	-	0.02	0.00	0.85	0.95

	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	0.80	0.83	0.90	0.12	0.00	0.27	0.15	0.00	0.22	0.05	0.83	0.54	0.28	0.05	0.49	0.18	0.00	0.35	0.00	0.00	0.80
prima.donnas	0.09	0.09	0.39	0.24	0.79	0.19	0.60	0.60	0.15	0.38	0.33	0.99	0.42	0.96	0.13	0.85	0.91	1.00	0.98	1.00	0.95
radio.silence	0.62	0.43	0.24	0.46	0.53	0.89	0.47	0.77	0.85	0.85	0.01	0.54	0.18	0.22	0.50	0.10	0.85	0.27	0.49	0.62	0.48
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	0.77	0.80	0.86	0.12	0.00	0.29	0.14	0.00	0.23	0.05	0.82	0.52	0.27	0.05	0.51	0.18	0.00	0.35	0.00	0.00	0.80

Community smells: Spearman's correlation (matplotlib)

	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	0.29	0.19	0.46	-0.62	0.05	0.49	-0.63	0.64	-0.04	0.35	0.34	-	0.57	-0.28	0.83	-	0.04	-0.11	-	1.00	-0.65	-0.89	-0.26	-0.25
prima.donnas	0.39	0.13	0.39	-0.36	-0.22	0.39	-0.48	0.13	-0.39	0.14	0.05	-	-0.04	0.22	-0.13	0.04	-	0.26	-	0.04	-0.32	0.13	-0.40	-0.40
radio.silence	-0.02	0.22	-0.10	0.01	0.14	-0.31	0.03	-0.31	-0.27	0.47	0.53	-	0.15	0.50	-0.20	-0.11	0.26	-	-	-0.11	-0.07	0.26	-0.07	-0.08
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	0.29	0.19	0.46	-0.62	0.05	0.49	-0.63	0.64	-0.04	0.35	0.34	-	0.57	-0.28	0.83	1.00	0.04	-0.11	-	-	-0.65	-0.89	-0.26	-0.25

	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	-0.30	-0.26	0.08	0.29	0.86	-0.30	0.30	-0.78	0.41	0.59	0.01	0.29	-0.42	0.59	0.27	-0.36	0.89	0.25	-0.85	0.89	0.14
prima.donnas	-0.50	-0.50	-0.30	-0.40	-0.13	0.39	-0.22	0.22	-0.39	-0.22	-0.31	0.04	-0.22	-0.04	-0.39	0.18	-0.13	0.00	0.13	-0.13	0.00
radio.silence	-0.02	-0.07	-0.39	-0.18	0.22	-0.07	-0.16	0.08	-0.04	-0.02	0.67	-0.24	-0.36	-0.35	0.22	0.51	-0.10	-0.40	0.36	-0.12	-0.34
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	-0.30	-0.26	0.08	0.29	0.86	-0.30	0.30	-0.78	0.41	0.59	0.01	0.29	-0.42	0.59	0.27	-0.36	0.89	0.25	-0.85	0.89	0.14

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

	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	0.36	0.55	0.13	0.03	0.89	0.11	0.03	0.03	0.90	0.26	0.29	-	0.05	0.38	0.00	-	0.89	0.74	-	0.00	0.02	0.00	0.43	0.45
prima.donnas	0.21	0.68	0.21	0.26	0.50	0.21	0.11	0.68	0.21	0.66	0.89	-	0.89	0.49	0.68	0.89	-	0.41	-	0.89	0.32	0.68	0.22	0.22
radio.silence	0.95	0.48	0.76	0.97	0.65	0.32	0.93	0.32	0.39	0.12	0.08	-	0.64	0.10	0.54	0.74	0.41	-	-	0.74	0.84	0.41	0.83	0.81
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	0.36	0.55	0.13	0.03	0.89	0.11	0.03	0.03	0.90	0.26	0.29	-	0.05	0.38	0.00	0.00	0.89	0.74	-	-	0.02	0.00	0.43	0.45
	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	0.37	0.43	0.82	0.39	0.00	0.34	0.34	0.00	0.18	0.05	0.97	0.37	0.18	0.05	0.39	0.25	0.00	0.44	0.00	0.00	0.66			
prima.donnas	0.12	0.12	0.37	0.22	0.68	0.21	0.49	0.50	0.21	0.50	0.33	0.89	0.50	0.89	0.21	0.59	0.68	1.00	0.68	0.68	1.00			
radio.silence	0.96	0.83	0.23	0.59	0.50	0.82	0.63	0.79	0.90	0.94	0.02	0.45	0.25	0.27	0.49	0.09	0.77	0.20	0.26	0.70	0.28			
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
missing.links	0.37	0.43	0.82	0.39	0.00	0.34	0.34	0.00	0.18	0.05	0.97	0.37	0.18	0.05	0.39	0.25	0.00	0.44	0.00	0.00	0.66			