

Socio-technical analysis result (LLVM)

	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
1	2013-06 – 2013-09		409	273	55	81	0.6675	0.1345	0.1980	17	0.0416	1	0.0074	2	122	117	50	307	2	156	0	703	0.1510	0.7381	0.0000
2	2013-09 – 2013-12		418	268	57	93	0.6411	0.1364	0.2225	18	0.0431	3	0.0200	3	127	122	54	380	4	139	0	844	0.1078	0.7398	0.4740
3	2013-12 – 2014-03		384	235	50	99	0.6120	0.1302	0.2578	24	0.0625	5	0.0336	2	123	118	57	396	0	100	0	874	0.1457	0.6966	0.5112
4	2014-03 – 2014-06		416	258	52	106	0.6202	0.1250	0.2548	33	0.0793	1	0.0063	3	116	115	55	385	0	136	0	1048	0.1466	0.6961	0.4225
5	2014-06 – 2014-09		455	288	60	107	0.6330	0.1319	0.2352	23	0.0505	3	0.0180	2	125	127	58	437	0	151	0	1166	0.1812	0.7351	0.4409
6	2014-09 – 2014-12		454	280	64	110	0.6167	0.1410	0.2423	29	0.0639	4	0.0230	3	132	118	61	511	0	160	1	1029	0.1840	0.7740	0.4532
7	2014-12 – 2015-03		478	303	60	115	0.6339	0.1255	0.2406	22	0.0460	3	0.0171	2	145	139	65	464	4	180	0	1057	0.2112	0.7618	0.4421
8	2015-03 – 2015-06		482	300	79	103	0.6224	0.1639	0.2137	36	0.0747	7	0.0385	3	129	114	63	826	0	162	1	1438	0.1764	0.7252	0.4729
9	2015-06 – 2015-08		447	261	77	109	0.5839	0.1723	0.2438	27	0.0604	6	0.0323	2	132	123	71	934	0	178	0	1690	0.1077	0.6758	0.4909
10	2015-08 – 2015-11		491	292	89	110	0.5947	0.1813	0.2240	44	0.0896	7	0.0352	3	139	117	69	1028	2	226	0	1652	0.0608	0.7042	0.4179
11	2015-11 – 2016-02		478	276	91	111	0.5774	0.1904	0.2322	30	0.0628	6	0.0297	2	141	123	71	1008	4	166	0	1515	0.0734	0.7430	0.4644
12	2016-02 – 2016-05		596	364	117	115	0.6107	0.1963	0.1930	37	0.0621	3	0.0129	3	164	138	78	1229	0	309	0	1909	0.0888	0.7465	0.3184
		core.global.turnover			ratio.smelly.quitters																				
		core.mail.turnover				ratio.smelly.devs																			
		core.code.turnover					global.truck																		
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																						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	0.5501	0.7017	0.6695	0.6324	0.0067	0.1359	0.2369	0.3855	0.4225	0.4008	0.0278	85	18	32	0.6296	0.1333	0.2370				
2	0.3855	0.4268	0.3846	0.4643	0.5622	0.6962	0.6620	0.6400	0.0077	0.1090	0.2563	0.4750	0.4073	0.4808	0.0267	90	22	32	0.6250	0.1528	0.2222				
3	0.3760	0.4417	0.4505	0.4293	0.5078	0.6797	0.6467	0.6174	0.0090	0.1317	0.3538	0.3030	0.3554	0.3172	0.0327	87	26	31	0.6042	0.1806	0.2153				
4	0.4017	0.4378	0.4464	0.3846	0.5409	0.7212	0.6841	0.6519	0.0058	0.1242	0.3124	0.1513	0.4200	0.2466	0.0321	80	20	35	0.5926	0.1481	0.2593				
5	0.2822	0.3719	0.3363	0.4323	0.5407	0.7253	0.6785	0.6527	0.0073	0.1490	0.3257	0.3351	0.3153	0.3500	0.0311	89	20	38	0.6054	0.1361	0.2585				
6	0.2646	0.4653	0.3025	0.3835	0.5639	0.7093	0.6974	0.6494	0.0061	0.1063	0.2967	0.4078	0.3156	0.4263	0.0322	86	29	32	0.5850	0.1973	0.2177				
7	0.3466	0.3113	0.3333	0.4515	0.5795	0.6967	0.6675	0.6286	0.0091	0.0998	0.3337	0.3479	0.3993	0.3513	0.0311	98	24	41	0.6012	0.1472	0.2515				
8	0.4380	0.5217	0.4375	0.4846	0.5415	0.7324	0.7171	0.6538	0.0058	0.1062	0.3308	0.3293	0.3626	0.3778	0.0351	80	29	34	0.5594	0.2028	0.2378				
9	0.3602	0.3882	0.2388	0.4211	0.6600	0.7047	0.6676	0.6183	0.0081	0.0802	0.2810	0.3267	0.4062	0.3119	0.0351	89	37	34	0.5562	0.2312	0.2125				
10	0.3764	0.5833	0.3714	0.5255	0.6945	0.7169	0.7090	0.6533	0.0063	0.0842	0.2437	0.3131	0.2395	0.3479	0.0318	92	44	25	0.5714	0.2733	0.1553				
11	0.3429	0.4000	0.3143	0.5822	0.6172	0.7050	0.6822	0.6485	0.0058	0.1216	0.2802	0.4626	0.2412	0.4916	0.0322	91	39	32	0.5617	0.2407	0.1975				
12	0.3082	0.4138	0.3624	0.4503	0.7097	0.7248	0.7119	0.6638	0.0043	0.1565	0.3435	0.3960	0.2847	0.4183	0.0279	102	42	36	0.5667	0.2333	0.2000				

Community smells: Pearson’s correlation (LLVM)

		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
org.silo		0.80	0.59	0.96	0.58	-0.73	0.97	-0.38	0.74	0.48	0.62	0.43	0.22	0.75	0.25	0.93	-	-0.07	0.78	-0.03	0.96	-0.66	-0.12	-0.48
prima.donnas		-0.04	-0.02	-0.04	-0.11	0.10	0.00	-0.13	-0.32	-0.39	-0.03	-0.06	-0.20	0.19	0.26	-0.03	-0.07	-	-0.05	-0.34	-0.20	-0.20	0.38	0.12
radio.silence		0.93	0.89	0.88	0.49	-0.25	0.72	-0.63	0.57	0.21	0.10	-0.10	0.33	0.88	0.56	0.78	0.78	-0.05	-	-0.11	0.77	-0.43	0.20	-0.86
black.cloud		0.04	0.09	-0.02	-0.04	0.15	-0.03	-0.12	0.20	0.22	0.29	0.31	0.43	-0.13	-0.41	-0.12	-0.03	-0.34	-0.11	-	-0.08	0.45	0.36	0.16
missing.links		0.80	0.59	0.91	0.68	-0.73	0.89	-0.27	0.75	0.51	0.57	0.38	0.21	0.69	0.30	0.93	0.96	-0.20	0.77	-0.08	-	-0.56	-0.21	-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		-0.02	0.28	-0.32	0.55	0.86	0.42	0.63	0.40	-0.54	-0.15	0.01	0.19	-0.66	0.21	0.22	0.46	0.95	-0.22	-0.86	0.90	-0.69		
prima.donnas		0.12	-0.25	-0.16	0.61	0.08	-0.42	-0.28	-0.14	0.25	-0.24	-0.45	0.54	-0.03	0.55	-0.42	0.36	-0.01	-0.03	0.29	-0.06	-0.14		
radio.silence		-0.27	0.10	-0.27	0.23	0.87	0.47	0.65	0.52	-0.58	0.11	0.02	0.19	-0.48	0.19	-0.25	0.71	0.69	0.03	-0.48	0.56	-0.48		
black.cloud		-0.02	0.41	0.06	-0.18	-0.29	0.34	0.51	0.26	-0.29	-0.19	0.12	0.10	-0.01	0.18	0.39	-0.48	-0.07	-0.08	-0.26	0.06	0.11		
missing.links		-0.05	0.21	-0.36	0.41	0.84	0.52	0.63	0.40	-0.49	-0.15	0.12	0.02	-0.59	0.02	0.31	0.44	0.88	-0.08	-0.88	0.83	-0.56		

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

	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	0.04	0.00	0.05	0.01	0.00	0.23	0.01	0.11	0.03	0.17	0.49	0.01	0.43	0.00	-	0.82	0.00	0.92	0.00	0.02	0.71	0.13	0.81																	
prima.donnas	0.89	0.95	0.91	0.74	0.76	0.99	0.69	0.31	0.21	0.92	0.85	0.54	0.56	0.41	0.93	0.82	-	0.89	0.31	0.53	0.54	0.23	0.73	0.56																	
radio.silence	0.00	0.00	0.00	0.10	0.43	0.01	0.03	0.06	0.52	0.75	0.76	0.29	0.00	0.06	0.00	0.00	0.89	-	0.74	0.00	0.16	0.54	0.00	0.13																	
black.cloud	0.91	0.80	0.95	0.90	0.66	0.93	0.72	0.55	0.52	0.39	0.35	0.19	0.71	0.21	0.73	0.92	0.31	0.74	-	0.81	0.17	0.27	0.63	0.64																	
missing.links	0.00	0.04	0.00	0.01	0.01	0.00	0.40	0.00	0.09	0.05	0.22	0.52	0.01	0.34	0.00	0.00	0.53	0.00	0.81	-	0.06	0.51	0.09	0.75																	
		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		0.96	0.40	0.34	0.08	0.00	0.18	0.03	0.20	0.07	0.65	0.96	0.56	0.02	0.51	0.48	0.13	0.00	0.50	0.00	0.00	0.01																			
prima.donnas		0.73	0.45	0.65	0.04	0.81	0.18	0.38	0.67	0.43	0.46	0.14	0.07	0.92	0.06	0.17	0.26	0.96	0.94	0.37	0.84	0.66																			
radio.silence		0.43	0.78	0.42	0.50	0.00	0.12	0.02	0.08	0.05	0.74	0.94	0.56	0.12	0.55	0.43	0.01	0.01	0.92	0.12	0.06	0.11																			
black.cloud		0.96	0.21	0.86	0.60	0.39	0.31	0.11	0.44	0.38	0.58	0.74	0.76	0.97	0.59	0.23	0.13	0.85	0.82	0.43	0.87	0.74																			
missing.links		0.89	0.54	0.27	0.21	0.00	0.08	0.03	0.19	0.11	0.64	0.72	0.95	0.04	0.94	0.32	0.16	0.00	0.81	0.00	0.00	0.06																			

Community smells: Spearman’s correlation (LLVM)

	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
org.silo	0.83	0.57	0.92	0.77	-0.78	0.80	-0.20	0.77	0.48	0.65	0.43	0.19	0.82	0.27	0.96	-	-0.12	0.83	0.07	0.92	-0.49	0.12	-0.37
prima.donnas	0.08	0.12	0.06	0.10	0.21	0.04	-0.30	-0.36	-0.36	-0.06	-0.08	-0.19	0.29	0.23	-0.05	-0.12	-	0.19	-0.35	-0.21	-0.17	0.40	0.02
radio.silence	0.83	0.75	0.85	0.77	-0.42	0.69	-0.44	0.47	0.11	0.38	0.15	0.10	0.89	0.39	0.84	0.83	0.19	-	-0.07	0.77	-0.31	0.31	-0.48
black.cloud	0.15	0.22	0.15	-0.11	0.15	0.07	-0.15	0.22	0.37	0.34	0.37	0.43	-0.04	-0.49	-0.07	0.07	-0.35	-0.07	-	-0.15	0.45	0.30	0.15
missing.links	0.77	0.49	0.84	0.69	-0.72	0.69	-0.16	0.71	0.38	0.52	0.29	0.10	0.68	0.32	0.92	0.92	-0.21	0.77	-0.15	-	-0.49	-0.12	-0.41
	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	-0.30	0.09	-0.45	0.37	0.75	0.44	0.59	0.47	-0.42	-0.28	0.15	0.03	-0.78	0.10	0.35	0.54	0.94	0.02	-0.83	0.87	-0.68		
prima.donnas	0.09	-0.23	-0.15	0.68	0.30	-0.50	-0.34	-0.27	0.25	-0.23	-0.49	0.51	0.03	0.49	-0.48	0.47	-0.03	-0.19	0.28	-0.03	-0.17		
radio.silence	-0.26	-0.15	-0.51	0.41	0.90	0.27	0.47	0.35	-0.23	-0.36	-0.03	0.19	-0.49	0.18	-0.01	0.67	0.73	0.19	-0.59	0.59	-0.52		
black.cloud	0.00	0.52	-0.07	-0.15	-0.15	0.37	0.52	0.30	-0.30	-0.22	0.07	0.15	0.00	0.30	0.45	-0.56	0.07	-0.11	-0.30	0.07	0.15		
missing.links	-0.17	-0.15	-0.40	0.30	0.66	0.54	0.53	0.47	-0.37	-0.23	0.18	-0.13	-0.61	-0.13	0.32	0.49	0.78	0.27	-0.82	0.73	-0.48		

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

	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	0.06	0.00	0.00	0.00	0.00	0.53	0.01	0.12	0.02	0.16	0.55	0.00	0.39	0.00	-	0.71	0.00	0.83	0.00	0.11	0.72	0.26	0.99																	
prima.donnas	0.80	0.71	0.86	0.76	0.51	0.89	0.35	0.25	0.25	0.86	0.80	0.55	0.36	0.47	0.87	0.71	-	0.56	0.29	0.51	0.60	0.20	0.95	0.66																	
radio.silence	0.00	0.01	0.00	0.00	0.18	0.02	0.15	0.13	0.73	0.23	0.65	0.77	0.00	0.21	0.00	0.00	0.56	-	0.83	0.01	0.33	0.32	0.14	0.73																	
black.cloud	0.66	0.51	0.66	0.74	0.66	0.83	0.66	0.51	0.26	0.30	0.26	0.19	0.91	0.13	0.83	0.83	0.29	0.83	-	0.66	0.17	0.37	0.66	0.66																	
missing.links	0.00	0.11	0.00	0.01	0.01	0.02	0.62	0.01	0.22	0.08	0.35	0.77	0.01	0.31	0.00	0.00	0.51	0.01	0.66	-	0.11	0.72	0.21	0.92																	
		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	0.80	0.17	0.26	0.01	0.15	0.05	0.13	0.17	0.38	0.64	0.92	0.00	0.75	0.27	0.07	0.00	0.94	0.00	0.00	0.00	0.02																			
prima.donnas	0.80	0.49	0.66	0.02	0.34	0.09	0.28	0.40	0.43	0.47	0.10	0.09	0.93	0.11	0.11	0.12	0.93	0.56	0.38	0.93	0.60																				
radio.silence	0.43	0.65	0.11	0.21	0.00	0.39	0.13	0.27	0.47	0.26	0.92	0.56	0.11	0.57	0.97	0.02	0.01	0.55	0.05	0.05	0.08																				
black.cloud	1.00	0.10	0.83	0.66	0.66	0.26	0.10	0.37	0.37	0.51	0.83	0.66	1.00	0.37	0.16	0.07	0.83	0.74	0.37	0.83	0.66																				
missing.links	0.61	0.67	0.23	0.37	0.02	0.07	0.08	0.13	0.23	0.47	0.57	0.68	0.04	0.70	0.31	0.10	0.00	0.40	0.00	0.01	0.12																				