

# Socio-technical analysis result ( Rails )

	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		313	75	216	22	0.2396	0.6901	0.0703	62	0.1981	4	0.0168	1	63	44	30	84	0	4	0	96	0.0495	0.9579	0.0000	0.0000
2	2013-08 – 2013-11		266	45	202	19	0.1692	0.7594	0.0714	67	0.2519	4	0.0181	1	49	33	19	59	0	7	0	60	0.0000	0.9600	0.7703	0.7407
3	2013-11 – 2014-02		319	64	232	23	0.2006	0.7273	0.0721	48	0.1505	6	0.0235	1	49	28	37	147	0	26	0	167	0.0565	0.9346	0.5060	0.5210
4	2014-02 – 2014-05		316	52	246	18	0.1646	0.7785	0.0570	64	0.2025	8	0.0303	1	72	35	47	148	0	10	0	157	0.0063	0.9363	0.7370	0.7322
5	2014-05 – 2014-08		299	63	218	18	0.2107	0.7291	0.0602	53	0.1773	1	0.0042	1	63	33	40	205	0	2	0	217	0.0046	0.9126	0.7577	0.7920
6	2014-08 – 2014-11		275	66	183	26	0.2400	0.6655	0.0945	46	0.1673	4	0.0191	1	69	48	33	133	0	9	0	151	0.0131	0.9297	0.7387	0.7685
7	2014-11 – 2015-02		328	59	243	26	0.1799	0.7409	0.0793	52	0.1585	5	0.0186	1	69	35	46	190	2	23	0	212	0.0185	0.9238	0.6169	0.5983
8	2015-02 – 2015-05		298	52	231	15	0.1745	0.7752	0.0503	58	0.1946	2	0.0081	1	78	38	49	172	0	4	0	181	0.0000	0.9494	0.7572	0.7612
9	2015-05 – 2015-08		256	54	186	16	0.2109	0.7266	0.0625	36	0.1406	1	0.0050	1	60	32	34	160	0	2	0	167	0.0060	0.9229	0.7798	0.8036
10	2015-08 – 2015-11		244	44	187	13	0.1803	0.7664	0.0533	45	0.1844	5	0.0250	1	53	27	34	124	0	4	0	134	0.0074	0.9263	0.7480	0.7164
11	2015-11 – 2016-02		336	43	274	19	0.1280	0.8155	0.0565	58	0.1726	6	0.0205	1	62	33	35	173	0	2	0	183	0.0161	0.9391	0.5690	0.5558
12	2016-02 – 2016-05		237	37	185	15	0.1561	0.7806	0.0633	52	0.2194	3	0.0150	1	57	31	34	178	0	0	0	181	0.0000	0.9078	0.8831	0.8966
	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	0.0000	0.2141	0.7987	0.5464	0.8739	0.0023	0.0265	0.0709	0.5890	0.5418	0.5786	0.0060	34	20	10	0.5312	0.3125	0.1562					
2	0.7857	0.8571	0.8163	0.1256	0.1767	0.8158	0.4844	0.9140	0.0023	0.0337	0.0852	0.4606	0.5249	0.3675	0.0054	31	17	2	0.6200	0.3400	0.0400					
3	0.6531	0.8197	0.4286	0.1419	0.3197	0.8464	0.6782	0.8549	0.0027	0.0642	0.1335	0.4458	0.1030	0.3391	0.0112	20	29	8	0.3509	0.5088	0.1404					
4	0.4298	0.6032	0.4048	0.2265	0.3513	0.7722	0.5000	0.8220	0.0028	0.0630	0.1106	0.6298	0.4053	0.6005	0.0068	30	42	5	0.3896	0.5455	0.0649					
5	0.7111	0.7059	0.6667	0.2704	0.3612	0.7893	0.5926	0.8305	0.0037	0.1248	0.1374	0.4778	0.5056	0.4690	0.0103	29	36	4	0.4203	0.5217	0.0580					
6	0.5606	0.4938	0.6849	0.2783	0.3055	0.7491	0.4783	0.8421	0.0036	0.0825	0.1190	0.4468	0.5854	0.4377	0.0088	41	26	7	0.5541	0.3514	0.0946					
7	0.6087	0.8434	0.4304	0.2097	0.3780	0.7896	0.5882	0.8290	0.0031	0.0844	0.1438	0.4527	0.4146	0.4233	0.0091	29	40	6	0.3867	0.5333	0.0800					
8	0.5714	0.7123	0.5474	0.2996	0.3758	0.7383	0.4328	0.8008	0.0032	0.1073	0.1009	0.6099	0.7167	0.5922	0.0068	31	42	7	0.3875	0.5250	0.0875					
9	0.7971	0.8000	0.8675	0.2870	0.3359	0.7656	0.5429	0.8317	0.0039	0.0801	0.1082	0.5216	0.5412	0.5124	0.0095	28	30	4	0.4516	0.4839	0.0645					
10	0.8319	0.8814	0.7647	0.2727	0.3197	0.7828	0.5263	0.8300	0.0033	0.0633	0.1041	0.5313	0.3966	0.5423	0.0070	20	27	7	0.3704	0.5000	0.1296					
11	0.5739	0.6333	0.6087	0.2242	0.2560	0.8155	0.4677	0.8805	0.0020	0.0360	0.0814	0.4668	0.7734	0.4354	0.0051	28	30	5	0.4444	0.4762	0.0794					
12	0.6723	0.8125	0.6087	0.1660	0.3544	0.7595	0.4038	0.8300	0.0032	0.0302	0.0977	0.4077	0.8144	0.4043	0.0083	26	29	5	0.4333	0.4833	0.0833					

Community smells: Pearson's correlation ( Rails )

	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	0.21	-0.11	0.30	-0.09	-0.24	0.26	-0.24	-0.37	-0.52	-0.22	-0.35	-	0.42	-0.22	0.73	-	0.31	0.03	-	0.99	-0.23	-0.74	-0.10	0.00
prima.donnas	0.35	0.13	0.28	0.50	-0.07	-0.04	0.34	-0.05	-0.27	0.14	0.06	-	0.24	0.01	0.36	0.31	-	0.57	-	0.37	0.06	-0.18	-0.30	-0.35
radio.silence	0.48	0.37	0.32	0.67	0.11	-0.23	0.47	-0.06	-0.36	0.49	0.43	-	-0.09	-0.10	0.26	0.03	0.57	-	-	0.14	0.56	0.05	-0.71	-0.69
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	0.28	-0.02	0.33	0.02	-0.17	0.18	-0.15	-0.39	-0.59	-0.17	-0.30	-	0.43	-0.18	0.75	0.99	0.37	0.14	-	-	-0.13	-0.72	-0.20	-0.09

	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	-0.31	-0.17	-0.42	0.40	0.84	-0.28	0.06	-0.68	0.47	0.59	0.59	-0.18	0.17	-0.01	0.51	-0.20	0.78	-0.11	-0.68	0.79	-0.24
prima.donnas	-0.12	0.27	-0.40	-0.10	0.32	0.04	0.28	-0.16	0.05	0.18	0.50	-0.22	-0.18	-0.18	0.20	0.00	0.36	0.02	-0.22	0.26	-0.09
radio.silence	-0.25	0.17	-0.63	-0.42	0.17	0.47	0.67	0.01	-0.13	0.11	0.61	-0.21	-0.76	-0.42	0.46	-0.20	0.19	0.27	-0.31	0.20	0.25
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	-0.34	-0.19	-0.48	0.39	0.84	-0.23	0.15	-0.68	0.46	0.61	0.66	-0.19	0.09	-0.03	0.56	-0.18	0.78	-0.03	-0.69	0.77	-0.16

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

	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	0.50	0.72	0.34	0.79	0.45	0.41	0.46	0.24	0.08	0.49	0.26	-	0.18	0.48	0.01	-	0.32	0.91	-	0.00	0.47	0.01	0.76	1.00
prima.donnas	0.27	0.70	0.38	0.10	0.82	0.90	0.28	0.88	0.40	0.67	0.85	-	0.45	0.97	0.25	0.32	-	0.05	-	0.23	0.85	0.57	0.37	0.30
radio.silence	0.11	0.23	0.31	0.02	0.73	0.47	0.12	0.86	0.24	0.11	0.16	-	0.78	0.77	0.42	0.91	0.05	-	-	0.67	0.06	0.87	0.01	0.02
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	0.37	0.96	0.29	0.94	0.60	0.57	0.64	0.21	0.04	0.59	0.34	-	0.16	0.58	0.00	0.00	0.23	0.67	-	-	0.68	0.01	0.55	0.78
	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	0.35	0.61	0.20	0.23	0.00	0.39	0.85	0.02	0.12	0.04	0.04	0.58	0.59	0.98	0.09	0.53	0.00	0.73	0.02	0.00	0.46			
prima.donnas	0.72	0.42	0.23	0.78	0.31	0.89	0.37	0.61	0.88	0.57	0.10	0.49	0.57	0.57	0.54	0.99	0.24	0.94	0.49	0.41	0.78			
radio.silence	0.46	0.62	0.04	0.20	0.60	0.13	0.02	0.99	0.68	0.73	0.03	0.51	0.00	0.17	0.13	0.53	0.55	0.40	0.33	0.52	0.43			
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
missing.links	0.30	0.57	0.14	0.24	0.00	0.47	0.64	0.02	0.13	0.03	0.02	0.56	0.79	0.93	0.06	0.57	0.00	0.94	0.01	0.00	0.61			

Community smells: Spearman’s correlation ( Rails )

	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	0.24	-0.18	0.31	-0.12	-0.29	0.34	-0.18	-0.14	-0.27	-0.24	-0.39	-	0.35	-0.07	0.65	-	0.39	-0.35	-	0.98	-0.17	-0.64	0.05	0.22
prima.donnas	0.39	0.13	0.31	0.44	-0.04	-0.04	0.39	-0.09	-0.31	0.18	0.04	-	0.26	0.18	0.31	0.39	-	0.40	-	0.39	0.31	-0.22	-0.30	-0.30
radio.silence	0.45	0.46	0.33	0.62	0.18	-0.30	0.49	0.09	-0.19	0.60	0.60	-	0.12	0.25	0.19	-0.35	0.40	-	-	-0.28	0.51	0.35	-0.68	-0.64
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	0.37	-0.12	0.41	-0.03	-0.26	0.31	-0.18	-0.15	-0.38	-0.18	-0.35	-	0.31	-0.07	0.69	0.98	0.39	-0.28	-	-	-0.05	-0.54	-0.11	0.04

	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	-0.15	-0.25	-0.33	0.06	0.78	-0.24	0.00	-0.47	0.31	0.50	0.43	-0.17	0.22	-0.07	0.38	-0.28	0.73	-0.30	-0.34	0.55	-0.33
prima.donnas	-0.10	0.30	-0.30	-0.20	0.48	0.13	0.31	-0.31	-0.04	0.31	0.48	-0.22	-0.22	-0.22	0.22	0.00	0.31	0.04	-0.31	0.39	-0.04
radio.silence	-0.39	0.11	-0.49	-0.25	-0.04	0.30	0.41	-0.06	-0.28	0.17	0.47	-0.06	-0.65	-0.13	0.16	0.20	0.01	0.40	-0.32	0.30	0.26
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	-0.16	-0.23	-0.37	0.05	0.73	-0.12	0.07	-0.38	0.23	0.55	0.44	-0.20	0.18	-0.13	0.39	-0.31	0.72	-0.22	-0.40	0.54	-0.26

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

	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	0.44	0.57	0.33	0.72	0.37	0.28	0.57	0.66	0.39	0.44	0.21	-	0.27	0.84	0.02	-	0.21	0.26	-	0.00	0.60	0.03	0.88	0.52
prima.donnas	0.21	0.68	0.33	0.15	0.89	0.89	0.21	0.79	0.33	0.58	0.89	-	0.41	0.58	0.33	0.21	-	0.20	-	0.20	0.33	0.50	0.37	0.37
radio.silence	0.14	0.13	0.30	0.03	0.58	0.34	0.11	0.78	0.55	0.04	0.04	-	0.70	0.44	0.56	0.26	0.20	-	-	0.38	0.09	0.26	0.02	0.03
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
missing.links	0.23	0.72	0.19	0.93	0.42	0.33	0.59	0.65	0.22	0.57	0.27	-	0.32	0.82	0.01	0.00	0.20	0.38	-	-	0.87	0.07	0.74	0.90
	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	0.67	0.47	0.32	0.86	0.00	0.46	1.00	0.13	0.33	0.10	0.17	0.59	0.48	0.83	0.23	0.38	0.01	0.34	0.29	0.07	0.30			
prima.donnas	0.77	0.37	0.37	0.56	0.11	0.68	0.33	0.33	0.89	0.33	0.11	0.50	0.50	0.50	0.49	1.00	0.33	0.89	0.33	0.21	0.89			
radio.silence	0.24	0.75	0.12	0.45	0.91	0.34	0.18	0.85	0.38	0.60	0.12	0.86	0.02	0.69	0.61	0.53	0.97	0.19	0.31	0.34	0.41			
black.cloud	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
missing.links	0.63	0.50	0.26	0.89	0.01	0.71	0.82	0.23	0.48	0.06	0.15	0.54	0.59	0.69	0.21	0.33	0.01	0.50	0.20	0.07	0.41			