Socio-technical analysis result (Tomcat)

	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.cor	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	3-08 45	36	1	8	0.8000	0.0222	0.1778	2	0.0444	0	0.0000	2	19	19	3	1	0	18	0	3	0.7000) (0.8556	0.0000	0.0000
	2 2013-	08 - 2013	3-11 51	41	0	10	0.8039	0.0000	0.1961	2	0.0392	0	0.0000	3	23	22	5	0	0	27	1	1	0.8571		0.9000	0.3125	0.1053
		11 - 2014		49	3			0.0517	0.1034	0	0.0000	0	0.0000	2	23	23	3	1	0	31	0	1	0.8750		0.9167	0.3119	0.1053
		02 - 2014		41	3	6	0.8200	0.0600	0.1200	0	0.0000	0	0.0000	3	20	20	4	3	0	10	0	4	0.6000		0.7333	0.5000	0.2222
		05 - 2014		38	0	7	0.8444	0.0000	0.1556	0	0.0000	0	0.0000	2	20	20	4	0	0	12	0	1	0.9000		0.9286	0.4000	0.3750
		08 - 2014		38	2		0.7755	0.0408	0.1837	2	0.0408	0	0.0000	3	19	19	3	0	0	21	0	1	0.8750		0.9773	0.3617	0.2222
		11 - 2015		37	0		0.8043	0.0000	0.1957	0	0.0000	0	0.0000	2	20	20	4	0	0	25	1	0	1.0000		1.0000	0.5474	0.4000
		02 - 2015		33	0		0.7674	0.0000	0.2326	1	0.0233	1	0.1000	3	18	18	5	0	0	6	0	1	0.9091		0.9727	0.4494	0.1053
		05 - 2015		26	0			0.0000	0.2571	0	0.0000	0	0.0000	2	15	15	3	0	0	10	0	1	0.8571		0.9524	0.4872	0.2105
1		08 - 2015		39	2		0.7800	0.0400	0.1800	3	0.0600	0	0.0000	3	20	19	4	2	0	19	0	6	0.5714		0.7987	0.2353	0.1000
1		11 - 2016		19	1		0.5938	0.0312	0.3750	2	0.0625	0	0.0000	2	14	13	6	5	0	0	0	9	0.6250		0.7949	0.6341	0.1667
1	2 2016-	02 - 2010	6-05 39	30	0	9	0.7692	0.0000	0.2308	0	0.0000	0	0.0000	3	16	16	2	0	0	7	0	0	1.0000]	1.0000	0.3662	0.3636
	e				-																	O)) Ø		٥	Ψ)
	core.global.turnover	core.mail.turnover	core.code.turnover		ratio.smelly.quitters	ratio.smelly.devs	global.truck			code.truck	closeness.centr	hetweenness centr	degree.centr		global.mod)	mail.mod		tom open		density	mail.onlv.core.devs		ml.code.core.devs	ratio.mail.only.core		ratio.ml.code.co
1	0.0000	0.0000	0.0000	0.00	$ \overline{0} $ ratio.smelly.	0.4667	0.5778	3 0.568	2 0.666	7 (closeness 0.7539	0.4784	0.2010 degree.centr	0	[reqola 0.0138	3 0.	.0982	-(0.3505	5 0.	.2081	lmail.onlv.	7 1	2	0.8500	0.0500 ratio.code.only.	ratio.ml.code.co
1 2	0.0000 0.1429	0.0000 0.1463	0.0000 0.0000	0.00	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$0.4667 \\ 0.5294$	0.5778 0.5490	3 0.568 0 0.568	2 0.666 6 0.500	7 (0.7539 0.7537	0.4784 0.4253	0.7010 degree.centr	0	[reqola 0.0138 0.0051	3 0. 0.	.0982 .0769	-(-().3505).3456	5 0. 5 0.	.2081	77 18 18	7 1 3 1	2 4	0.8500 0.7826		0 0.1000 5 0.1739
3	0.0000 0.1429 0.1739	0.0000 0.1463 0.1778	0.0000 0.0000 0.5000	0.00 0.60 0.64	12 00 ratio.smelly.	0.4667 0.5294 0.5517	0.5778 0.5490 0.6034	3 0.568 0 0.568 1 0.581	2 0.666 6 0.500 8 0.666	7 (0 (7 (0.7539 0.7537 0.1492	0.4784 0.4253 0.4886	0.7010 6 0.6788 6 0.6546	0 0).0138).0051).0307	3 0. 0. 0.	.0982 .0769 .0382	-(-(-().3505).3456).3360	5 0. 5 0. 0 0.	.2081 .2212 .1700	17 18 20	7 1 3 1 0 0	2 4 3	0.8500 0.7826 0.8696	i.kino.oboo.oista. 0 0.0500 6 0.0435 6 0.0000	0 0.1000 5 0.1739 0 0.1304
$\frac{3}{4}$	0.0000 0.1429 0.1739 0.4186	0.0000 0.1463 0.1778 0.4186	0.0000 0.0000 0.5000 0.2857	0.00 0.60 0.64 0.62	00 00 17,00 00 18,00	$0.4667 \\ 0.5294 \\ 0.5517 \\ 0.2600$	0.5778 0.5490 0.6034 0.6000	3 0.568 0 0.568 1 0.581 0 0.574	2 0.666 6 0.500 8 0.666 5 0.555	7 (0 0 (7 6 (0.7539 0.7537 0.1492 0.2422	0.4784 0.4253 0.4886 0.3923	0.7010 0.6788 0.6546 0.5992	0 0 0 0	0.0138 0.0051 0.0307 0.0869	3 0. 0. 7 0. 0 0.	.0982 .0769 .0382 .1721	-(-(-().3505).3456).3360	5 0. 5 0. 0 0.	.2081 .2212 .1700 .1355	17 18 20 17	7 1 3 1 0 0 7 1	2 4 3 3	0.8500 0.7826 0.8696 0.8095	ixino iposicipali 0 0.0500 6 0.0435 6 0.0000 6 0.0476	0 0.1000 5 0.1739 0 0.1304 6 0.1429
3 4 5	0.0000 0.1429 0.1739 0.4186 0.3500	0.0000 0.1463 0.1778 0.4186 0.3500	0.0000 0.0000 0.5000 0.2857 0.2500	0.00 0.60 0.64 0.62 0.36	00 00 71 284	0.4667 0.5294 0.5517 0.2600 0.2889	0.5778 0.5490 0.6034 0.6000 0.5556	3 0.568 0 0.568 1 0.581 0 0.574 0 0.555	2 0.666 6 0.5000 8 0.666 5 0.5550 6 0.4280	7 (0 0 (7 6 (6 6 (0.7539 0.7537 0.1492 0.2422 0.1473	0.4784 0.4253 0.4886 0.3923 0.4066	0.7010 0.6788 0.6546 0.5992 0.6657	0 0 0 0	7 reqois 0.0138 0.0051 0.0307 0.0869 0.0158	3 0. 0. 0. 0 0. 0 0. 8 0.	.0982 .0769 .0382 .1721 .1460	-(-(-(-(0.3505 0.3456 0.3366 0.2759 0.4536	5 0. 5 0. 0 0. 0 0.	.2081 .2212 .1700 .1355 .1525	17 18 20 17	7 1 3 1 0 0 7 1 7 1	2 4 3 3 3	0.8500 0.7826 0.8696 0.8095	; in o o o o o o o o o o o o o o o o o o	0 0.1000 5 0.1739 0 0.1304 6 0.1429 6 0.1429
$\frac{3}{4}$	0.0000 0.1429 0.1739 0.4186 0.3500 0.5128	0.0000 0.1463 0.1778 0.4186 0.3500 0.5128	0.0000 0.0000 0.5000 0.2857 0.2500 0.2857	0.00 0.60 0.64 0.62 0.36	71 96 84 29	0.4667 0.5294 0.5517 0.2600 0.2889 0.4694	0.5778 0.5490 0.6034 0.6000 0.5556 0.6122	3 0.568 0 0.568 1 0.581 0 0.574 6 0.555 2 0.595	2 0.666 6 0.500 8 0.666 5 0.555 6 0.428 7 0.727	7 (0 0 (7 6 (6 6 (3)	0.7539 0.7537 0.1492 0.2422 0.1473 0.1441	0.4784 0.4253 0.4886 0.3923 0.4066 0.3914	0.7010 0.6788 0.6546 0.5992 0.66657 0.6662	0 0 0 0 0	0.0138 0.0051 0.0307 0.0869 0.0158	3 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	.0982 .0769 .0382 .1721 .1460	-(-(-(-(-(0.3505 0.3456 0.3360 0.2759 0.4530	5 0. 6 0. 7 0. 9 0. 9 0. 9 0. 9 0.	.2081 .2212 .1700 .1355 .1525	17 18 20 17 16	7 1 8 1 0 0 7 1 7 1 6 0	2 4 3 3	0.8500 0.7826 0.8696 0.8095 0.8095 0.8421	in i	0.1000 0.1739 0.1304 0.1429 0.1429 0.1579
3 4 5	0.0000 0.1429 0.1739 0.4186 0.3500 0.5128 0.4103	0.0000 0.1463 0.1778 0.4186 0.3500 0.5128 0.4103	0.0000 0.0000 0.5000 0.2857 0.2500 0.2857 0.0000	0.00 0.60 0.64 0.62 0.36 0.35	000 71 884 29 885	0.4667 0.5294 0.5517 0.2600 0.2889 0.4694 0.5435	0.5778 0.5490 0.6034 0.6000 0.5556 0.6122 0.5652	3 0.568 0 0.568 1 0.581 0 0.574 5 0.555 2 0.595 2 0.565	2 0.666 6 0.500 8 0.666 5 0.555 6 0.428 7 0.727 2 0.555	7 0 0 0 7 0 6 0 6 0 8 0	0.7539 0.7537 0.1492 0.2422 0.1473 0.1441 0.0964	0.4784 0.4253 0.4886 0.3923 0.4066 0.3914 0.3985	0.7010 0.6788 0.6546 0.6657 0.6662 0.6000	0 0 0 0 0 0	0.0138 0.0051 0.0307 0.0869 0.0158 0.0161 0.0151	3 0. 0. 0. 0 0. 0 0. 8 0. 0 0.	.0982 .0769 .0382 .1721 .1460 .0751	-(-(-(-(-(-(0.3505 0.3456 0.3360 0.2759 0.4530 0.3535	5 0.6 6 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0	.2081 .2212 .1700 .1355 .1525 .1879 .1333	17 18 20 17 16 16	7 1 8 1 0 0 7 1 7 1 6 0 6 0	2 4 3 3 3	0.8500 0.7826 0.8696 0.8095 0.8095 0.8421 0.8000	in i	0 0.1000 5 0.1739 0 0.1304 6 0.1429 6 0.1429 0 0.1579 0 0.2000
3 4 5	0.0000 0.1429 0.1739 0.4186 0.3500 0.5128 0.4103 0.3684	0.0000 0.1463 0.1778 0.4186 0.3500 0.5128 0.4103 0.3684	0.0000 0.0000 0.5000 0.2857 0.2500 0.2857 0.0000 0.4444	0.00 0.60 0.64 0.62 0.36 0.35 0.53	000 71 884 885 900	0.4667 0.5294 0.5517 0.2600 0.2889 0.4694 0.5435 0.1860	0.5778 0.5490 0.6034 0.6000 0.5556 0.6122 0.5652 0.5814	3 0.568 0 0.568 1 0.581 0 0.574 3 0.555 2 0.595 2 0.565 4 0.581	2 0.666 6 0.500 8 0.666 5 0.555 6 0.428 7 0.727 2 0.555 4 0.500	7 0 0 0 7 0 6 0 6 0 3 0 6 0	0.7539 0.7537 0.1492 0.2422 0.1473 0.1441 0.0964 0.1513	0.4784 0.4253 0.4886 0.3923 0.4066 0.3914 0.3985 0.4390	0.7010 0.6788 0.6546 0.6657 0.6662 0.6000 0.6661	0 0 0 0 0 0	0.0138 0.0051 0.0307 0.0869 0.0158 0.0161 0.0151	3 0. 0. 0 0. 0 0. 8 0. 0 0.	.0982 .0769 .0382 .1721 .1460 .0751 .0832	-(-() -() -() -() ()	0.3505 0.3456 0.3360 0.2759 0.4530 0.3535 0.0079	5 0. 5 0. 0 0. 0 0. 0 0. 0 0. 0 0. 0 0. 0 0.	.2081 .2212 .1700 .1355 .1525 .1879 .1333	17 18 20 17 16 16	7 1 8 1 0 0 7 1 7 1 6 0 6 0 4 1	2 4 3 3 3 4 4	0.8500 0.7826 0.8696 0.8095 0.8095 0.8421 0.8000 0.7368	in view of the control of the contro	0 0.1000 5 0.1739 0 0.1304 6 0.1429 6 0.1429 0 0.1579 0 0.2000 6 0.2105
3 4 5 6 7 8 9	0.0000 0.1429 0.1739 0.4186 0.3500 0.5128 0.4103 0.3684 0.3030	0.0000 0.1463 0.1778 0.4186 0.3500 0.5128 0.4103 0.3684 0.3030	0.0000 0.0000 0.5000 0.2857 0.2500 0.2857 0.0000 0.4444 0.5000	0.00 0.60 0.64 0.62 0.36 0.35 0.60 0.31	000 000 71 96 84 98 900 58	0.4667 0.5294 0.5517 0.2600 0.2889 0.4694 0.5435 0.1860 0.3429	0.5778 0.5490 0.6034 0.6000 0.5556 0.6122 0.5652 0.5814 0.5714	3 0.568 0 0.568 1 0.581 0 0.574 6 0.555 2 0.595 2 0.565 4 0.581 4 0.571	2 0.666' 6 0.5000' 8 0.666' 5 0.5550' 6 0.428' 7 0.727' 2 0.5550' 4 0.5000' 4 0.666'	7 0 0 0 7 0 6 0 6 0 3 0 6 0 7 0	0.7539 0.7537 0.1492 0.2422 0.1473 0.1441 0.0964 0.1513 0.1012	0.4784 0.4253 0.4886 0.3923 0.4066 0.3914 0.3985 0.4390 0.3709	0.7010 0.6788 0.6546 0.65992 0.6662 0.6662 0.6661 0.5571	0 0 0 0 0 0 0	0.0138 0.0051 0.0307 0.0869 0.0158 0.0161 0.0151 0.0611	3 0. 0 0. 0 0. 3 0. 0 0. 0 0. 0 0.	.0982 .0769 .0382 .1721 .1460 .0751 .0832 .0243	-(-(-(-(-(-(-(0.3508 0.3456 0.3366 0.2759 0.4536 0.3538 0.0079 0.3236	6 0.0 0 0 0 0.0 0 0 0 0.0 0 0 0 0.0 0 0 0 0.0 0 0 0 0.0 0 0 0 0.0 0 0	.2081 .2212 .1700 .1355 .1525 .1879 .1333 .1672 .1782	17 18 20 17 16 16 14 13	7 1 8 1 0 0 7 1 7 1 6 0 6 0 4 1 8 1	2 4 3 3 3 4 4 2	0.8500 0.7826 0.8696 0.8095 0.8421 0.8000 0.7368 0.8125	in i	0 0.1000 5 0.1739 0 0.1304 6 0.1429 0 0.1579 0 0.2000 6 0.2105 6 0.1250
3 4 5 6 7 8 9	0.0000 0.1429 0.1739 0.4186 0.3500 0.5128 0.4103 0.3684 0.3030 0.1714	0.0000 0.1463 0.1778 0.4186 0.3500 0.5128 0.4103 0.3684 0.3030 0.1765	0.0000 0.0000 0.5000 0.2857 0.2500 0.2857 0.0000 0.4444 0.5000 0.0000	0.00 0.60 0.64 0.62 0.36 0.35 0.53 0.60 0.31 0.30	000 000 71 96 884 985 900 588 000	0.4667 0.5294 0.5517 0.2600 0.2889 0.4694 0.5435 0.1860 0.3429 0.4200	0.5778 0.5490 0.6034 0.6000 0.5556 0.6122 0.5652 0.5814 0.5714	3 0.568 0 0.568 1 0.581 0 0.574 6 0.555 2 0.595 2 0.565 4 0.581 4 0.571 0 0.604	2 0.666' 6 0.5000 8 0.666' 5 0.5556 6 0.4280 7 0.727' 2 0.5550 4 0.5000 4 0.666' 2 0.636	7 0 0 0 7 0 6 0 6 0 6 0 7 0 4 0	0.7539 0.7537 0.1492 0.2422 0.1473 0.1441 0.0964 0.1513 0.1012 0.0933	0.4784 0.4253 0.4886 0.3923 0.4066 0.3914 0.3985 0.4390 0.3709 0.2686	0.7010 0.6788 0.6546 0.65992 0.6662 0.66000 0.6661 0.5571 0.6106	0 0 0 0 0 0 0 0	0.0138 0.0051 0.0307 0.0869 0.0158 0.0151 0.0111 0.0611 0.1264	3 0. 3 0. 7 0. 9 0. 8 0. 9 0.	.0982 .0769 .0382 .1721 .1460 .0751 .0832 .0243 .1622	-(-(-() -() -() () -()	0.3505 0.3456 0.3366 0.2759 0.4536 0.3535 0.0079 0.3236 0.4037	6 0.6 6 0.0 0 0 0 0.0 0 0 0 0.0 0 0 0 0.0 0 0 0 0.0 0 0 0 0.0 0 0 0 0.0 0 0	.2081 .2212 .1700 .1355 .1525 .1879 .1333 .1672 .1782	17 18 20 17 16 16 14 13	7 1 3 1 0 0 7 1 7 1 3 0 6 0 4 1 3 1	2 4 3 3 3 4 4	0.8500 0.7826 0.8696 0.8095 0.8421 0.8000 0.7368 0.8125 0.8000	in opposite in opp	0 0.1000 5 0.1739 0 0.1304 6 0.1429 0 0.1579 0 0.2000 6 0.2105 6 0.1250 0 0.1500
3 4 5 6 7 8 9	0.0000 0.1429 0.1739 0.4186 0.3500 0.5128 0.4103 0.3684 0.3030	0.0000 0.1463 0.1778 0.4186 0.3500 0.5128 0.4103 0.3684 0.3030	0.0000 0.0000 0.5000 0.2857 0.2500 0.2857 0.0000 0.4444 0.5000	0.00 0.60 0.64 0.62 0.36 0.35 0.60 0.31	%[] San	0.4667 0.5294 0.5517 0.2600 0.2889 0.4694 0.5435 0.1860 0.3429	0.5778 0.5490 0.6034 0.6000 0.5556 0.6122 0.5652 0.5814 0.5714	3 0.568 0 0.568 1 0.581 0 0.574 6 0.555 2 0.595 2 0.565 1 0.581 1 0.571 0 0.604 6 0.580	2 0.666' 6 0.5000 8 0.666' 5 0.5556 6 0.4280 7 0.727' 2 0.5550 4 0.5000 4 0.666' 2 0.636- 6 0.538	7 (0 0 (0 7 (6 6 (6 3 (6 0 (0 7 (4 4 (6 5 (6	0.7539 0.7537 0.1492 0.2422 0.1473 0.1441 0.0964 0.1513 0.1012 0.0933 0.5466	0.4784 0.4253 0.4886 0.3923 0.4066 0.3914 0.3985 0.4390 0.3709	0.7010 0.6788 0.6546 0.65992 0.66657 0.6662 0.6661 0.5571 0.6106 0.5040	0 0 0 0 0 0 0 0	0.0138 0.0051 0.0307 0.0869 0.0158 0.0161 0.0151 0.0611	3 0. 3 0. 4 0. 5 0. 6 0. 6 0. 7 0. 8 0. 9 0.	.0982 .0769 .0382 .1721 .1460 .0751 .0832 .0243	-(0 -(0 -(0 -(0 -(0 -(0 -(0 -(0	0.3508 0.3456 0.3366 0.2759 0.4536 0.3538 0.0079 0.3236	6 0.6 6 0.0 9 0.0 9 0.0 9 0.0 9 0.0 9 0.0 1	.2081 .2212 .1700 .1355 .1525 .1879 .1333 .1672 .1782	17 18 20 17 16 16 14 13	7 1 8 1 0 0 7 1 7 1 6 0 6 0 4 1 8 1 6 1	2 4 3 3 3 4 4 2	0.8500 0.7826 0.8696 0.8095 0.8421 0.8000 0.7368 0.8125	in i	0 0.1000 5 0.1739 0 0.1304 6 0.1429 0 0.1579 0 0.2000 6 0.2105 6 0.1250 0 0.1500 8 0.2667

	Community smells: Pearson's correlation (Tomcat)																							
	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	-0.24	-0.34	0.47	0.20	-0.62	0.60	0.38	0.30	0.46	-0.20	-0.20	-0.11	-0.30	-0.38	0.51	-	-	-0.42	-0.30	0.94	-0.80	-0.83	0.43	-0
prima.donnas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
radio.silence	0.82	0.80	0.28	-0.39	0.64	0.17	-0.65	0.08	-0.07	-0.32	-0.32	-0.06	0.84	0.83	-0.26	-0.42	-	-	0.54	-0.42	0.22	0.19	-0.56	-0
black.cloud	0.21	0.21	-0.39	0.21	0.20	-0.41	-0.05	0.04	-0.02	-0.15	-0.15	-0.04	0.43	0.39	0.26	-0.30	-	0.54	-	-0.31	0.33	0.23	0.05	0
missing.links	-0.29	-0.40	0.36	0.35	-0.67	0.49	0.46	0.56	0.69	-0.15	-0.15	-0.06	-0.34	-0.44	0.56	0.94	-	-0.42	-0.31	-	-0.87	-0.82	0.29	-0
		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.c	ratio.mail.only.core	ratio.code.only.core	ratio.ml.code.core	_	
	rg.silo	0.28	0.24	-0.35	-0.10	-0.29	0.07	0.20	-0.14	0.27	-0.66	-0.66	0.18	-0.19	0.22	0.30	-0.45	0.64	0.22	-0.65	0.70	0.45		
prima.d		_	_	_	_	_		_	_	_	-	_	_	<u>-</u>	_		-	_	<u>-</u>	_	_	_		
radio.s	silence	-0.40	-0.31	-0.27	0.49	0.95	0.14	-0.03	0.12	0.05	0.36	0.35	-0.07	-0.02	0.25	-0.14	0.82	-0.58	0.09	0.54	-0.64	-0.33		

0.13

-0.79

0.08

-0.64

-0.36

0.22

-0.05

-0.22

0.37

0.28

0.03

0.41

0.26

-0.50

-0.17

0.54

 $0.75 \quad 0.20$

-0.02

-0.69

-0.22

0.79

0.24

0.45

black.cloud

missing.links

-0.17

0.21

-0.13

-0.43

0.19 -0.46

0.39

-0.25

0.59

-0.26

-0.55

0.02

-0.43

0.29

-0.31

-0.15 0.31

0.44

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

	Community sinens. I earson's correlation - p-values (Tomca																								
		devs	ml.only.devs	code.only.devs	ml.code.devs	perc.ml.onlv.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 cilence		black.cloud	missing.miks	so.congruence	global.turnover	code.turnover
org.	silo	0.46	0.29	0.12	0.54	0.03	0.04	0.23	0.34	0.13	0.54	0.54	0.74	0.34	0.22	0.09	-	-	0.18	0.3	8 0.0	0.0	0.0	0.19	0.38
prima.don	nas	-	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	-		-
radio.sile	ence	0.00	0.00	0.38	0.21	0.03	0.60	0.02	0.81	0.82	0.32	0.32	0.86	0.00	0.00	0.42	0.18	-	-	0.0	9 0.1	8 0.4	9 - 0.5	5 0.07	0.68
black.clo	oud	0.54	0.54	0.23	0.53	0.57	0.21	0.89	0.91	0.96	0.66	0.66	0.90	0.18	0.23	0.45	0.38	-	0.09)	- 0.3	6 - 0.3	1 - 0.4	9 0.89	0.65
missing.li	nks	0.36	0.20	0.25	0.26	0.02	0.10	0.13	0.06	0.01	0.63	0.63	0.84	0.28	0.15	0.06	0.00	-	0.18	0.3	6	- 0.0	0.0	0.39	0.24
					core.mail.turnover	core.code.turnover	ratio		giobal.tiuch				betwee			mail.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.sile		11 0.4	18 0.	29 0	77 0.	36 0.8	3 - 0.53	0.67	0.39	0.0	2 - 0.0	2 0.5	0.5	0.5	50 0.3	34	0.15	0.02	0.50	0.02	0.01	0.14	
_		donna		-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	
		silence			-	-	12 0.												0.00	0.05	0.78	0.07	0.03	0.29	
		k.cloud						06 0.0											0.44	0.61	0.09	0.95	0.51	0.48	
1	missii	ng.link	s = 0.5	64 - 0.5	68 0.	15 0	46 0.	42 0.9	6 0.35	5 0.64	0.33	3 0.0	0.0	3 0.4	9 0.4	9 0.5	38 0.	19	0.10	0.01	0.54	0.01	0.00	0.15	

					\mathbf{C}_{0}	omm	unity	sm	ells:	Spear	rman	's co	rrela	tion	(Toi	\mathbf{mcat})							
	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	0.12	0.13	0.74	-0.18	0.04	0.73	-0.25	0.31	0.44	-0.24	-0.24	-0.11	0.00	-0.06	0.24	-	-	-0.17	-0.35	0.85	-0.78	-0.85	0.13	-
prima.donnas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
radio.silence	0.82	0.75	0.24	-0.34	0.67	0.19	-0.56	0.07	-0.10	-0.39	-0.39	-0.07	0.82	0.81	-0.20	-0.17	-	-	0.52	-0.26	0.05	0.10	-0.57	-
black.cloud	0.30	0.19	-0.41	0.27	0.22	-0.41	0.07	0.04	-0.04	-0.15	-0.15	-0.04	0.46	0.45	0.31	-0.35	-	0.52	-	-0.41	0.23	0.19	0.07	
missing.links	0.02	0.05	0.59	0.03	-0.16	0.59	-0.10	0.58	0.66	-0.09	-0.09	0.00	-0.10	-0.19	0.41	0.85	-	-0.26	-0.41	-	-0.92	-0.91	0.03	-
		core.global.turnover	core.mail.turnover	core.code.turnover	ratio.smelly.quitters	ratio.smelly.devs	global.truck	mail.tmck	эроэ			degree.centr				density		mail.only.core.devs	code.only.core.devs			ratio.code.only.core	ratio.ml.code.core	
or	g.silo	0.15	0.24	-0.27	0.01	-0.09	0.23	0.23	-0.01	0.27	-0.32	-0.46	0.13	-0.05	0.54	0.09	0.0	05 0.	47 0.0)2 -0.1	6 0.3	88 0.0)3	
prima.do	onnas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	

0.13

-0.30

-0.21

-0.24

0.07

0.26

0.21

0.15

-0.42

0.08

-0.45

-0.01

0.14

0.15

0.03

0.03

0.22

0.31

-0.11

-0.07

0.25

0.75

0.30

-0.03

-0.53

-0.17

0.75

0.08

0.56

0.06

0.25

-0.34

-0.36

-0.64

-0.34

0.66

-0.10

0.37

0.13

0.26

0.15

-0.53

-0.23

-0.15 -0.54

0.31 -0.40

-0.40

-0.22

0.14

radio.silence

black.cloud

missing.links

-0.20

0.50

0.26

-0.05

0.95

0.52

-0.16

0.14

-0.52

0.07

-0.07

-0.52

0.17

0.1

	Community smells: Spearman's correlation - p-values (Tomcat)																							
	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	امتصلم المقاط	missing.links	st.congruence	communicability	global.turnover	code.turnover
org.silo	0.71	0.68	0.01	0.58	0.91	0.01	0.43	0.33	0.16	0.44	0.44	0.74	1.00	0.86	0.45	-	-	0.59	0.30	0.00	0.00	0.00	0.71	0.26
prima.donnas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
radio.silence	0.00	0.01	0.45	0.28	0.02	0.55	0.06	0.83	0.75	0.21	0.21	0.82	0.00	0.00	0.53	0.59	-	-	0.10	, 0.11	0.87	0.76	0.07	0.82
black.cloud	0.37	0.58	0.21	0.41	0.51	0.21	0.83	0.90	0.91	0.66	0.66	0.90	0.16	0.16	0.36	0.30	-	0.10	-	- 0.21	0.51	0.58	0.83	0.66
missing.links	0.95	0.88	0.05	0.94	0.63	0.04	0.75	0.05	0.02	0.77	0.77	1.00	0.75	0.55	0.18	0.00	-	0.41	0.21	_	0.00	0.00	0.92	0.08
			core.global.turnd	core.maıl.	core.code.tur	ratio.smelly	ratio.smelly.devs				closeness.cen		degree.centr	-	mail.m		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.sil		67 0.4	7 0.4	2 0.9	0.7	9 0.4	8 0.48	8 0.9	7 0.3	9 0.3	1 0.1	3 0.7	0 0.8	7 0.0	7 0.7	9 (0.87	0.13	0.94	0.63	0.23	0.92	
prima	a.donna	ıs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

radio.silence 0.22

black.cloud 0.51

0.50

0.66

missing.links 0.67 0.36 0.22 0.87 0.61 0.83

0.56

0.09

0.12

0.44

0.00

0.66

0.10 0.10

0.82

0.10

0.59

0.70

 $0.37 \quad 0.83$

0.46

 $0.52 \quad 0.41 \quad 0.08$

0.42

0.66

0.50

0.81

 $0.66 \quad 0.17$

 $0.18 \quad 0.96$

0.67

0.66

0.93

0.75

 $0.92 \quad 0.33 \quad 0.43 \quad 0.92 \quad 0.00$

 $0.51 \quad 0.83$

0.01

 $0.37 \quad 0.62$

0.08

0.80

0.07

 $0.44 \quad 0.02$

 $0.31 \quad 0.30$

 $0.86 \quad 0.24 \quad 0.02 \quad 0.70$

0.75

0.26