Socio-technical analysis result (Enlightenment)

	range.date		dove	$rac{1}{2}$ 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.dev	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	2013-0				4		0.7647	0.0471	0.1882	5	0.0588	0	0.0000	1	34	33	4	10	0	24	0	10	0.28	57	0.7821	0.0000	0.0000
2	2013-0	9 - 2013-	12 92	70	4	18	0.7609	0.0435	0.1957	4	0.0435	0	0.0000	1	40	39	6	6	0	10	1	7	0.46	15	0.9091	0.3277	0.3333
3	2013-1	2 - 2014-	-	. 79	4	-	0.7822	0.0396	0.1782	2	0.0198	1	0.0455	1	37	37	6	2	0	44	0	8	0.600		0.8523	0.3212	0.3182
4	2014-0	_		73	4	16	0.7849	0.0430	0.1720	7	0.0753	3	0.1500	1	35	34	7	12	2	29	0	16	0.200	00	0.6975	0.4742	0.4762
5	2014-0	5 - 2014-	08 93	70	10	13	0.7527	0.1075	0.1398	4	0.0430	1	0.0435	1	39	38	6	15	0	27	1	17	0.150	00	0.7609	0.4194	0.2791
6	2014-0	8 - 2014-	11 92	65	10	17	0.7065	0.1087	0.1848	10	0.1087	0	0.0000	1	35	34	8	11	0	28	1	14	0.060	67	0.7951	0.3351	0.2800
7	2014-1	1 - 2015-	02 78	54	12	12	0.6923	0.1538	0.1538	6	0.0769	2	0.0833	1	30	28	7	13	0	17	0	16	0.15'	79	0.7741	0.5412	0.5098
8	2015-0	2 - 2015-	05 82	58	15	9	0.7073	0.1829	0.1098	5	0.0610	2	0.0833	1	34	28	9	35	0	31	0	37	0.075	50	0.5500	0.3750	0.5833
9	2015-0	5 - 2015-	08 64	48	7	9	0.7500	0.1094	0.1406	3	0.0469	0	0.0000	1	25	24	5	8	0	13	0	8	0.384	46	0.7740	0.6027	0.7500
10	2015-0	8 - 2015-	11 68	47	11	10	0.6912	0.1618	0.1471	5	0.0735	1	0.0476	1	26	26	6	6	0	24	0	6	0.333	33	0.8942	0.3788	0.3243
11	2015-1	1 - 2016-	02 49	31	9	9	0.6327	0.1837	0.1837	9	0.1837	0	0.0000	1	21	20	5	10	0	17	0	11	0.388	89	0.7778	0.5470	0.7179
12	2016-0	2 - 2016-	05 60	49	4	7	0.8167	0.0667	0.1167	1	0.0167	0	0.0000	1	24	24	3	2	0	23	0	2	0.666	67	0.8182	0.2936	0.7586
	core.global.turnover	core.mail.turnover	core.code.turnover		ratio.smelly.quitters	ratio.smelly.devs	eloba			cone: et uck	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	0.00		0.3647	0.6000					0.3599	0.6469		0.2042		1857		2045		1507	30	1	3	0.8824	0.0294	0.0882
2	0.3784	0.3611	0.0000	0.3'		0.1739						0.2538			0.2688		2560		.3240		1527	35	2	4	0.8537	0.0488	0.0976
3	0.3896	0.3684	0.5000	0.10		0.4950						0.3594	0.6618		0.0136		0579		.0010		1182	32	1	5	0.8421	0.0263	0.1316
4	0.4444	0.4789	0.3077	0.52		0.3978						0.3144	0.5055		0.2825		2152		1734		0923	30	3	4	0.8108	0.0811	0.1081
5	0.5135	0.5278	0.3077	0.30		0.3763						0.3390	0.6370		0.3540		2904		.0085		1022	35	3	3	0.8537	0.0732	0.0732
6	0.5135	0.5000	0.4286	0.25		0.4239						0.1394	0.4140		0.2362		1301		4409		1025	29	3	5	0.7838	0.0811	0.1351
7	0.5231	0.5161	0.5333	0.32		0.3077	0.6154					0.1467	0.3976		0.4132		2518	0.	2198		0959	25	4	3	0.7812	0.1250	0.0938
8	0.3750	0.3929	0.3750	0.10		0.5488						0.3129	0.4821		0.2993		1521		.0164		0858	26	7	2	0.7429	0.2000	0.0571
9	0.5085	0.4615	0.8571	0.50	682	0.3125	0.6094	0.5789	0.687	5 0	0.0680	0.2828	0.5556	0	0.4045		1766	0.	1676	0.1	1270	20	1	4	0.8000	0.0400	0.1600
10	0.2353	0.2400	0.1818	0.28		0.4412						0.2668	0.5202		0.1895		1697		5418	0.1	1067	22	2	4	0.7857	0.0714	0.1429
11	0.4681	0.4783	0.5455	0.43		0.4694						0.1520	0.4681		0.3013		1083		.0663		1777	17	2	3	0.7727	0.0909	0.1364
12	0.2222	0.1818	0.5000	0.50	000	0.4167	0.6000	0.5714	4 - 0.727	3 0	0.1288	0.2613	0.5136	0	0.2239	0.0	0678	-0.	2999	0.1	1475	21	0	3	0.8750	0.0000	0.1250

Community smells: Pearson's correlation (Enlightenment)

																		- '							
	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	o donnas		radio.silence	black.cloud	missing.links	st.congruence	communicability	global.turnover	
org.silo	0.11	-0.00	0.72	-0.22	-0.34	0.53	-0.43	0.28	0.17	0.48	0.42	-	0.20	-0.04	0.69	_	0.0	4 0.	13 -(0.02	0.98	-0.73	-0.88	0.13	0.0
prima.donnas	0.26	0.32	-0.31	0.25	0.29	-0.34	0.14	0.23	0.06	0.66	0.73	-	0.17	0.18	0.19	0.04	Ŀ	- 0.	18 -0	0.19	0.12	-0.18	-0.28	0.17	-0.0
radio.silence	0.52	0.53	-0.00	0.29	0.26	-0.19	-0.09	-0.11	-0.25	0.38	0.38	-	0.36	0.35	0.29	0.13	0.18	8	(0.15	0.27	-0.03	-0.24	-0.46	-0.3
black.cloud	0.50	0.44	-0.03	0.54	0.07	-0.26	0.38	0.21	-0.04	-0.35	-0.35	-	0.64	0.67	0.19	-0.02					-0.02	-0.28	0.26	-0.36	-0.6
missing.links	0.25	0.13	0.68	-0.09	-0.30	0.46	-0.36	0.30	0.14	0.58	0.52	-	0.30	0.07	0.78	0.98	0.13	2 0.	27 -(0.02	-	-0.74	-0.89	0.09	-0.0
		.turnover	rnover	nover	smelly.quitters	levs					intr							devs.	devs.	2770	2	core.	y.core	.core	
		core.global	core.mail.tu	core.code.tu	ratio.smelly.	ratio.smelly.devs	global.truck	mail.truck	code.truck	closeness.centr	betweenness.centr	dogwood constr	degree.centr	global.mod	mail.mod	code.mod	density	mail.only.core.	code.only.core.devs	ml code core devs		ratio.mail.only.	ratio.code.only.core	ratio.ml.code.core	
	g.silo	0.24	core.mail.tu	-0.05	28.0- ratio.smelly.	28.0 ratio.smelly.c	-0.28	0.00	89 code.truck	closeness.	90.0 betweenness.ce	-0.3	0 0.	40 0.	26 -	0.05	-0.50	core	code.only.core	-0.62	2 -0.5	8.0.9	90 -0.		
on prima.d			core.	core.	ratio.	0.37 0.01	-0.28 0.31	0.00 0.43		-0.04 0.89	•	-0.3 -0.1	0 0. 0 0.	40 0. 05 0.	.26 - .19	0.05	-0.50 -0.32	mail.only.core		-0.62 0.15	2 -0.5 5 -0.0	58 0.9 03 0.0	90 -0. 05 -0.	69 04	
prima.d radio.s	onnas ilence	0.24 0.09 -0.14	0.35 0.20 -0.07	-0.05 -0.16 -0.01	-0.37	0.37 0.01 0.73	-0.28 0.31 0.54	0.00 0.43 0.54	-0.58 -0.44 -0.13	-0.04 0.89 0.23	0.06 0.19 0.47	-0.3 -0.1 0.2	0 0. 0 0. 1 -0.	40 0. 05 0. 68 -0.	.26 - .19	0.05 0.03 0.23	-0.50 -0.32 -0.45	core mail.only.core	0.92 0.10 0.14	-0.62 0.15 0.24	2 -0.5 6 -0.0 4 0.0	58 0.9 03 0.0 02 0.0	90 -0. 05 -0. 06 -0.	69 04 13	
prima.d	onnas ilence cloud	0.24 0.09	0.35 0.20	-0.05 -0.16	-0.37 0.40	0.37 0.01	-0.28 0.31	0.00 0.43	-0.58 -0.44	-0.04 0.89	0.06 0.19	-0.3 -0.1	0 0. 0 0. 1 -0. 3 0.	40 0. 05 0. 68 -0. 09 0.	.26 - .19 .44 -	0.05 0.03 0.23 0.29	-0.50 -0.32	0.05 mail.only.core	0.92 0.10	-0.62 0.15	2 -0.5 5 -0.0 4 0.0 5 0.3	58 0.9 03 0.0 02 0.0 33 -0.1	90 -0. 05 -0. 06 -0. 10 -0.	69 04 13 26	

			Co	mmı	ınity	sm	ells:	Pea	rson	's co	rrela	tio	n -	p-va	lues	s (E	nlig	hten	men	t)				
	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		prima.donnas	radio silence		missing links	on on the state of	st. congruence	nove	code. turn over
org.silo	0.73	0.99	0.01	0.50	0.28	0.07	0.16	0.38	0.61	0.12	0.17	-	0.53	0.90	0.01	-	0.00	0.69	0.96	0.00	0.0	1 0.00	0.71	0.85
prima.donnas	0.42	0.31	0.32	0.44	0.35	0.28	0.66	0.48	0.86	0.02	0.01	-	0.60	0.57	0.55	0.90	-	0.59	0.57	0.73	2 - 0.5	7 - 0.3'	0.62	0.97
radio.silence	0.08	0.08	0.99	0.36	0.41	0.55	0.78	0.74	0.43	0.23	0.22	-	0.25	0.27	0.36	0.69	0.59	-	0.66	0.40	0.0	2 - 0.44	0.15	0.25
black.cloud	0.12	0.18	0.93	0.08	0.84	0.44	0.25	0.53	0.90	0.29	0.29	-	0.03	0.02	0.57	0.96	0.57	0.66	; -	0.90	6 - 0.4	0.44	0.28	0.04
missing.links	0.43	0.69	0.01	0.78	0.34	0.13	0.25	0.35	0.65	0.05	0.08	-	0.34	0.83	0.00	0.00	0.72	0.40	0.96	;	- 0.0	1 0.00	0.79	0.93
	org.sil		018:8100	core.mail.turno	core.c	ratio cmolled	svan.y.uevs autosaltmisk 4 0.33				8.0 closeness.centr 8.0 betweenness.centr		degree.centr	pom.ledolg 0:50	pom:jimod	88.0	60.0 density	% mail.only.core.devs	00.00 code.only.core.devs	0.03 ml.code.core.devs	co ratio.mail.only.core	00 ratio.code.only.core	10.0 ratio.ml.code.core	

0.65

0.97

0.13

0.55

0.84

0.37

0.20 - 0.88

prima.donnas 0.80

radio.silence 0.69

black.cloud 0.35

0.36

missing.links

0.23

0.05

0.58

0.16

 $0.97 \quad 0.32$

 $0.17 \quad 0.25$

 $0.18 \quad 0.61$

0.07

0.01

0.16

0.07

0.63

0.71

0.16

0.69

0.00

0.47

 $0.27 \quad 0.53$

 $0.03 \quad 0.96$

0.55

0.13

0.75

0.82

0.75

0.50

0.49

0.88

0.01

0.80

 $0.36 \quad 0.33$

0.56

0.15

0.16

0.49

0.94

0.47

0.38

0.85

0.32

0.14

0.99

0.04

0.60

0.30

0.02

0.65

0.76

0.66

0.90

0.00

0.65

0.45

0.45

0.09

0.92

0.87

 $0.94 \quad 0.85$

 $0.32 \quad 0.77$

 $0.04 \quad 0.00$

0.89

0.68

0.44

0.01

				C	Comn	nunit	y sm	ells:	\mathbf{Spe}	arma	n's c	or	relat	ion	(En	light	enm	ent)						
	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	0.09	0.62	-0.08	-0.32	0.38	-0.24	0.56	0.47	0.52	0.46	-	0.17	0.13	0.62	-	0.22	0.26	0.16	0.95	-0.88	-0.82	0.48	-0.15
prima.donnas	0.35	0.39	-0.32	0.18	0.39	-0.39	0.04	0.31	0.22	0.52	0.51	-	0.18	0.18	0.27	0.22	-	0.31	-0.19	0.26	-0.13	-0.39	0.20	0.00
radio.silence	0.60	0.53	0.09	0.26	0.25	-0.24	-0.21	0.10	-0.04	0.54	0.53	-	0.36	0.33	0.49	0.26	0.31	-	-0.13	0.43	-0.38	-0.28	-0.35	-0.42
black.cloud	0.42	0.39	-0.03	0.56	0.06	-0.26	0.39	0.13	-0.06	-0.34	-0.41	-	0.68	0.68	0.20	0.16	-0.19	-0.13	-	0.13	-0.32	0.19	-0.26	-0.65
missing.links	0.34	0.26	0.52	0.05	-0.22	0.24	-0.19	0.52	0.41	0.58	0.50	-	0.27	0.23	0.66	0.95	0.26	0.43	0.13	-	-0.81	-0.82	0.38	-0.25
		turnover.	urnover	urnover	y.quitters	y.devs	Ä			entr	ss.centr		ı					ore.devs	ore.devs	re.devs	only.core	only.core	de.core	

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.code.core.devs	ratio.mail.only.core	ratio.code.only.core	ratio.ml.code.core
org.silo	0.53	0.76	-0.06	-0.11	-0.01	-0.15	-0.01	-0.40	-0.28	-0.00	-0.45	0.64	0.48	0.08	-0.68	0.14	0.87	-0.49	-0.46	0.82	-0.59
prima.donnas	0.00	0.20	-0.25	0.40	-0.04	0.39	0.39	-0.40	0.48	0.22	-0.13	0.04	0.22	0.04	-0.39	0.18	0.22	0.18	0.04	0.17	-0.04
radio.silence	-0.13	0.10	-0.19	-0.63	0.68	0.54	0.59	-0.18	0.29	0.49	0.11	-0.41	-0.33	-0.28	-0.61	0.36	0.28	0.13	-0.09	0.12	-0.27
black.cloud	0.32	0.32	-0.49	-0.19	-0.39	-0.32	-0.19	0.39	-0.19	-0.19	0.19	0.00	0.45	0.26	0.06	0.65	0.20	0.24	0.32	-0.03	-0.26
missing.links	0.55	0.79	0.00	-0.25	0.12	-0.05	0.14	-0.37	-0.16	0.10	-0.36	0.56	0.35	-0.08	-0.69	0.23	0.83	-0.38	-0.46	0.78	-0.59

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

				COI	ııııu.	шоу	SILICI	115. D	pear	mai		OLLEI	au.	1011	- P-	aruc	ر) ور	D11116	51166	111110	110 <i>j</i>				
		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		prima.donnas	*odio cilonoo	radio.suence	Diack.cloud missing links	st.congruence		global.turnover	code.turnover
org	g.silo	0.59	0.78	0.03	0.80	0.31	0.23	0.45	0.06	0.12	0.08	0.13	-	0.59	0.68	0.03	-	0.49	0.42	2 0.63	3 0.0	0.00	0.00	0.13	0.66
prima.do	nnas	0.26	0.20	0.31	0.58	0.21	0.21	0.89	0.33	0.50	0.08	0.09	-	0.59	0.59	0.40	0.49	-	0.33	0.5'	7 0.4	1 0.68	0.21	0.56	1.00
radio.sil	lence	0.04	0.08	0.77	0.41	0.43	0.45	0.52	0.75	0.90	0.07	0.08	-	0.25	0.30	0.11	0.42	0.33	} .	- 0.70	0.1°	7 - 0.22	0.38	0.29	0.20
black.c	cloud	0.20	0.24	0.92	0.08	0.85	0.44	0.24	0.70	0.85	0.30	0.21	-	0.02	0.02				0.70		- 0.70	0.33		0.44	0.03
missing.	links	0.29	0.41	0.08	0.89	0.48	0.46	0.55	0.09	0.18	0.05	0.10	-	0.39	0.47	0.02	0.00	0.41	0.17	7 0.70)	- 0.00	0.00	0.24	0.46
			- C - C - C - C - C - C - C - C - C - C		core.mail.tu	core.code.tu	racio smelly devs	, -		,			Scomeomica	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.sile	0.1	0.0	1 0.8	5 0.7			0.97			0.99) ().14			0.81	0.02	0.67	0.00	0.11	0.13	0.00	0.04	
	-	.donnas								0.20							0.89	0.21	0.59	0.49	0.56	0.89	0.59	0.89	
		silence.															0.38	0.04	0.24	0.38	0.69	0.77	0.72	0.39	
		ek.cloud														-	0.44	0.85	0.03	0.56	0.48	0.33	0.92	0.44	
	$_{ m missi}$	ng.links	0.0	8 0.0	0 - 1.0	0 - 0.4	6 - 0.71	1 - 0.89	0.66	0.24	0.61	0.75	δ	0.24	0.06	0.27	0.79	0.01	0.46	0.00	0.22	0.14	0.00	0.04	