

# Socio-technical analysis result ( Guix )

|    | 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  | 2013-06 – 2013-09 | 7  | 2    | 1            | 4              | 0.2857       | 0.1429            | 0.5714              | 0                 | 0.0000         | 0               | 0                   | 0                    | 4      | 4                | 4              | 0              | 0        | 0            | 0             | 0           | 0             | 1.0000        | 1.0000          | 0.0000          | 0.0000        |
| 2  | 2013-09 – 2013-12 | 22 | 9    | 0            | 13             | 0.4091       | 0.0000            | 0.5909              | 1                 | 0.0455         | 0               | 0                   | 0                    | 11     | 11               | 11             | 1              | 0        | 0            | 8             | 0           | 0             | 1.0000        | 1.0000          | 0.1379          | 0.0000        |
| 3  | 2013-12 – 2014-03 | 33 | 22   | 0            | 11             | 0.6667       | 0.0000            | 0.3333              | 0                 | 0.0000         | 0               | 0                   | 0                    | 9      | 17               | 17             | 1              | 0        | 0            | 4             | 0           | 0             | 1.0000        | 1.0000          | 0.4000          | 0.5000        |
| 4  | 2014-03 – 2014-06 | 30 | 15   | 0            | 15             | 0.5000       | 0.0000            | 0.5000              | 1                 | 0.0333         | 0               | 0                   | 0                    | 13     | 13               | 13             | 0              | 0        | 4            | 30            | 0           | 0             | 1.0000        | 1.0000          | 0.5079          | 0.0769        |
| 5  | 2014-06 – 2014-09 | 32 | 17   | 0            | 15             | 0.5312       | 0.0000            | 0.4688              | 0                 | 0.0000         | 0               | 0                   | 0                    | 15     | 14               | 14             | 2              | 0        | 0            | 9             | 1           | 0             | 1.0000        | 1.0000          | 0.5161          | 0.4667        |
| 6  | 2014-09 – 2014-12 | 48 | 26   | 2            | 20             | 0.5417       | 0.0417            | 0.4167              | 0                 | 0.0000         | 0               | 0                   | 0                    | 19     | 20               | 20             | 3              | 2        | 0            | 18            | 1           | 2             | 0.6667        | 0.9470          | 0.2250          | 0.1081        |
| 7  | 2014-12 – 2015-03 | 55 | 32   | 1            | 22             | 0.5818       | 0.0182            | 0.4000              | 1                 | 0.0182         | 0               | 0                   | 0                    | 13     | 22               | 22             | 0              | 0        | 0            | 21            | 0           | 0             | 1.0000        | 1.0000          | 0.4272          | 0.2667        |
| 8  | 2015-03 – 2015-06 | 53 | 31   | 1            | 21             | 0.5849       | 0.0189            | 0.3962              | 0                 | 0.0000         | 0               | 0                   | 0                    | 15     | 23               | 23             | 2              | 0        | 0            | 8             | 0           | 0             | 1.0000        | 1.0000          | 0.5000          | 0.2667        |
| 9  | 2015-06 – 2015-09 | 63 | 33   | 2            | 28             | 0.5238       | 0.0317            | 0.4444              | 1                 | 0.0159         | 0               | 0                   | 0                    | 22     | 26               | 26             | 0              | 0        | 0            | 16            | 1           | 0             | 1.0000        | 1.0000          | 0.3448          | 0.1923        |
| 10 | 2015-09 – 2015-12 | 77 | 39   | 1            | 37             | 0.5065       | 0.0130            | 0.4805              | 6                 | 0.0779         | 0               | 0                   | 0                    | 25     | 31               | 31             | 2              | 1        | 0            | 17            | 0           | 1             | 0.5000        | 0.9605          | 0.3143          | 0.1176        |
| 11 | 2015-12 – 2016-03 | 83 | 40   | 3            | 40             | 0.4819       | 0.0361            | 0.4819              | 3                 | 0.0361         | 0               | 0                   | 0                    | 17     | 33               | 33             | 2              | 1        | 0            | 37            | 1           | 1             | 0.5000        | 0.9651          | 0.4625          | 0.3704        |
| 12 | 2016-03 – 2016-05 | 97 | 48   | 2            | 47             | 0.4948       | 0.0206            | 0.4845              | 7                 | 0.0722         | 0               | 0                   | 0                    | 25     | 34               | 34             | 2              | 0        | 0            | 30            | 1           | 0             | 1.0000        | 1.0000          | 0.3444          | 0.2826        |

|    | 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 |
|----|----------------------|--------------------|--------------------|-----------------------|-------------------|--------------|------------|------------|----------------|------------------|-------------|------------|----------|----------|---------|---------------------|---------------------|-------------------|----------------------|----------------------|--------------------|
| 1  | 0.0000               | 0.0000             | 0.0000             | 0.0000                | 0.0000            | 0.4286       | 0.3333     | 1.0000     | 0.3038         | 0.4278           | 0.4524      | 0.1311     | 0.1311   | 0.0000   | 0.3810  | 4                   | 0                   | 0                 | 1.0000               | 0                    | 0.0000             |
| 2  | 0.0000               | 0.0000             | 0.0000             | 0.0000                | 0.3636            | 0.5000       | 0.5000     | 0.9231     | 0.9328         | 0.7381           | 0.8052      | 0.0042     | 0.0046   | -0.5000  | 0.1948  | 10                  | 0                   | 1                 | 0.9091               | 0                    | 0.0909             |
| 3  | 0.2143               | 0.2143             | 0.0000             | 0.4545                | 0.1212            | 0.4848       | 0.4848     | 0.9091     | 0.8503         | 0.6943           | 0.7727      | 0.0778     | 0.0783   | -0.5000  | 0.1648  | 16                  | 0                   | 1                 | 0.9412               | 0                    | 0.0588             |
| 4  | 0.6000               | 0.6000             | 2.0000             | 0.1250                | 1.0000            | 0.5667       | 0.5667     | 1.0000     | 0.8958         | 0.7318           | 0.8184      | -0.2035    | -0.2035  | 0.0000   | 0.1471  | 13                  | 0                   | 0                 | 1.0000               | 0                    | 0.0000             |
| 5  | 0.2963               | 0.2963             | 0.0000             | 1.0000                | 0.2812            | 0.5625       | 0.5625     | 0.8667     | 0.9249         | 0.6942           | 0.8185      | 0.0238     | 0.0242   | -0.3576  | 0.1815  | 12                  | 0                   | 2                 | 0.8571               | 0                    | 0.1429             |
| 6  | 0.1765               | 0.1765             | 0.0000             | 0.5556                | 0.4167            | 0.5833       | 0.5652     | 0.8636     | 0.3058         | 0.5977           | 0.7863      | 0.0699     | 0.0726   | 0.3014   | 0.1498  | 17                  | 0                   | 3                 | 0.8500               | 0                    | 0.1500             |
| 7  | 0.2857               | 0.2857             | 2.0000             | 0.5000                | 0.3818            | 0.6000       | 0.5926     | 1.0000     | 0.2577         | 0.4142           | 0.6572      | 0.0857     | 0.0857   | 0.0000   | 0.1576  | 22                  | 0                   | 0                 | 1.0000               | 0                    | 0.0000             |
| 8  | 0.2667               | 0.2667             | 0.0000             | 0.4074                | 0.1509            | 0.5660       | 0.5577     | 0.9091     | 0.2978         | 0.5078           | 0.7754      | 0.0934     | 0.0943   | -0.3812  | 0.1669  | 21                  | 0                   | 2                 | 0.9130               | 0                    | 0.0870             |
| 9  | 0.2449               | 0.2449             | 2.0000             | 0.2500                | 0.2540            | 0.5873       | 0.5738     | 1.0000     | 0.1493         | 0.4340           | 0.7074      | 0.0682     | 0.0682   | 0.0000   | 0.1475  | 26                  | 0                   | 0                 | 1.0000               | 0                    | 0.0000             |
| 10 | 0.2456               | 0.2456             | 0.0000             | 0.4091                | 0.2338            | 0.5974       | 0.5921     | 0.9474     | 0.7929         | 0.5414           | 0.7666      | 0.3026     | 0.3070   | -0.4789  | 0.1282  | 29                  | 0                   | 2                 | 0.9355               | 0                    | 0.0645             |
| 11 | 0.2812               | 0.2812             | 0.5000             | 0.2703                | 0.4578            | 0.6024       | 0.5875     | 0.9535     | 0.1407         | 0.3399           | 0.6721      | 0.1621     | 0.1606   | -0.3760  | 0.1328  | 31                  | 0                   | 2                 | 0.9394               | 0                    | 0.0606             |
| 12 | 0.2985               | 0.2985             | 0.5000             | 0.5161                | 0.3093            | 0.6495       | 0.6421     | 0.9592     | 0.1312         | 0.2909           | 0.6036      | 0.2566     | 0.2556   | -0.3889  | 0.1151  | 32                  | 0                   | 2                 | 0.9412               | 0                    | 0.0588             |

Community smells: Pearson's correlation ( Guix )

|               | 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  | 0.27                 | 0.51           | 0.28               | 0.05              | 0.09                | -0.12             | 0.13                  | 0.07            | -                   | -                    | 0.38         | 0.32             | 0.32           | 0.66           | -          | -0.16        | 0.29           | 0.34        | 1.00             | -0.83         | -0.98           | -0.36           | -0.24         |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| prima.donnas  | -0.24 | -0.26                | -0.34          | -0.19              | -0.03             | -0.22               | 0.16              | -0.09                 | 0.09            | -                   | -                    | -0.13        | -0.26            | -0.26          | -0.37          | -0.16      | -            | 0.37           | -0.29       | -0.16            | 0.17          | 0.17            | 0.35            | -0.34         |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| radio.silence | 0.69  | 0.63                 | 0.56           | 0.73               | 0.11              | -0.28               | 0.01              | 0.55                  | 0.53            | -                   | -                    | 0.55         | 0.66             | 0.66           | 0.15           | 0.29       | 0.37         | -              | 0.36        | 0.29             | -0.43         | -0.33           | 0.21            | -0.13         |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| black.cloud   | 0.42  | 0.36                 | 0.65           | 0.44               | -0.21             | 0.60                | 0.07              | 0.15                  | -0.08           | -                   | -                    | 0.51         | 0.38             | 0.38           | 0.41           | 0.34       | -0.29        | 0.36           | -           | 0.34             | -0.21         | -0.28           | -0.01           | 0.26          |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| missing.links | 0.29  | 0.27                 | 0.51           | 0.28               | 0.05              | 0.09                | -0.12             | 0.13                  | 0.07            | -                   | -                    | 0.38         | 0.32             | 0.32           | 0.66           | 1.00       | -0.16        | 0.29           | 0.34        | -                | -0.83         | -0.98           | -0.36           | -0.24         |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
|               |       | 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      | -0.19 | -0.19                | -0.34          | 0.09               | 0.11              | 0.28                | 0.22              | -0.41                 | -0.18           | -0.05               | 0.17                 | 0.27         | 0.28             | 0.33           | -0.26          | 0.26       | -            | 0.66           | -0.49       | -                | 0.49          |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| prima.donnas  | 0.79  | 0.79                 | 0.50           | -0.36              | 0.85              | 0.03                | 0.08              | 0.35                  | 0.36            | 0.40                | 0.29                 | -0.72        | -0.72            | 0.26           | -0.11          | -0.23      | -            | -0.37          | 0.35        | -                | -0.35         |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| radio.silence | 0.53  | 0.53                 | 0.43           | -0.22              | 0.68              | 0.78                | 0.72              | 0.29                  | -0.33           | -0.40               | 0.03                 | 0.03         | 0.03             | 0.11           | -0.64          | 0.67       | -            | 0.15           | 0.15        | -                | -0.15         |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| black.cloud   | -0.03 | -0.03                | -0.04          | 0.40               | -0.07             | 0.50                | 0.45              | -0.20                 | -0.50           | -0.43               | -0.35                | 0.22         | 0.22             | 0.28           | -0.33          | 0.34       | -            | 0.41           | -0.32       | -                | 0.32          |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| missing.links | -0.19 | -0.19                | -0.34          | 0.09               | 0.11              | 0.28                | 0.22              | -0.41                 | -0.18           | -0.05               | 0.17                 | 0.27         | 0.28             | 0.33           | -0.26          | 0.26       | -            | 0.66           | -0.49       | -                | 0.49          |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |

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

|               | 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 | 0.40                 | 0.09           | 0.38               | 0.87              | 0.79                | 0.72              | 0.68                  | 0.83            | -                   | -                    | 0.22         | 0.31             | 0.31           | 0.02           | -          | 0.62         | 0.36           | 0.31        | 0.00             | 0.00          | 0.00            | 0.28            | 0.48          |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| prima.donnas  | 0.46 | 0.42                 | 0.28           | 0.56               | 0.93              | 0.50                | 0.63              | 0.79                  | 0.77            | -                   | -                    | 0.68         | 0.42             | 0.42           | 0.23           | 0.62       | -            | 0.23           | 0.39        | 0.62             | 0.60          | 0.60            | 0.29            | 0.31          |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| radio.silence | 0.01 | 0.03                 | 0.06           | 0.01               | 0.75              | 0.39                | 0.97              | 0.06                  | 0.08            | -                   | -                    | 0.07         | 0.02             | 0.02           | 0.63           | 0.36       | 0.23         | -              | 0.28        | 0.36             | 0.17          | 0.29            | 0.54            | 0.70          |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| black.cloud   | 0.20 | 0.28                 | 0.03           | 0.17               | 0.53              | 0.05                | 0.84              | 0.67                  | 0.82            | -                   | -                    | 0.11         | 0.25             | 0.25           | 0.21           | 0.31       | 0.39         | 0.28           | -           | 0.31             | 0.54          | 0.40            | 0.97            | 0.44          |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| missing.links | 0.36 | 0.40                 | 0.09           | 0.38               | 0.87              | 0.79                | 0.72              | 0.68                  | 0.83            | -                   | -                    | 0.22         | 0.31             | 0.31           | 0.02           | 0.00       | 0.62         | 0.36           | 0.31        | -                | 0.00          | 0.00            | 0.28            | 0.48          |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
|               |      | 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      | 0.58 | 0.58                 | 0.31           | 0.79               | 0.73              | 0.37                | 0.49              | 0.18                  | 0.57            | 0.87                | 0.60                 | 0.39         | 0.38             | 0.29           | 0.42           | 0.42       | -            | 0.02           | 0.10        | -                | 0.10          |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| prima.donnas  | 0.00 | 0.00                 | 0.11           | 0.28               | 0.00              | 0.92                | 0.80              | 0.27                  | 0.24            | 0.20                | 0.37                 | 0.01         | 0.01             | 0.41           | 0.72           | 0.48       | -            | 0.23           | 0.26        | -                | 0.26          |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| radio.silence | 0.09 | 0.09                 | 0.18           | 0.52               | 0.01              | 0.00                | 0.01              | 0.37                  | 0.29            | 0.19                | 0.92                 | 0.92         | 0.93             | 0.74           | 0.02           | 0.02       | -            | 0.63           | 0.63        | -                | 0.63          |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| black.cloud   | 0.92 | 0.92                 | 0.91           | 0.22               | 0.84              | 0.12                | 0.17              | 0.55                  | 0.12            | 0.18                | 0.29                 | 0.52         | 0.52             | 0.40           | 0.33           | 0.31       | -            | 0.21           | 0.33        | -                | 0.33          |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| missing.links | 0.58 | 0.58                 | 0.31           | 0.79               | 0.73              | 0.37                | 0.49              | 0.18                  | 0.57            | 0.87                | 0.60                 | 0.39         | 0.38             | 0.29           | 0.42           | 0.42       | -            | 0.02           | 0.10        | -                | 0.10          |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |

Community smells: Spearman’s correlation ( Guix )

|               | 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      | 0.37  | 0.37                 | 0.53           | 0.37               | -0.04             | 0.40                | -0.06             | 0.19                  | 0.19            | -                   | -                    | 0.49         | 0.37             | 0.37           | 0.64           | -          | -0.17        | 0.40            | 0.29        | 1.00              | -0.96         | -1.00           | -0.36           | -0.17         |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| prima.donnas  | -0.31 | -0.31                | -0.37          | -0.17              | -0.13             | -0.36               | 0.31              | 0.09                  | 0.14            | -                   | -                    | -0.18        | -0.31            | -0.31          | -0.37          | -0.17      | -            | 0.35            | -0.29       | -0.17             | 0.17          | 0.17            | 0.40            | -0.40         |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| radio.silence | 0.62  | 0.62                 | 0.50           | 0.74               | -0.14             | 0.12                | 0.13              | 0.68                  | 0.56            | -                   | -                    | 0.57         | 0.59             | 0.59           | 0.20           | 0.40       | 0.35         | -               | 0.38        | 0.40              | -0.43         | -0.38           | 0.12            | -0.09         |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| black.cloud   | 0.40  | 0.40                 | 0.63           | 0.43               | -0.23             | 0.62                | 0.12              | 0.09                  | -0.12           | -                   | -                    | 0.58         | 0.40             | 0.40           | 0.43           | 0.29       | -0.29        | 0.38            | -           | 0.29              | -0.22         | -0.26           | 0.00            | 0.29          |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| missing.links | 0.37  | 0.37                 | 0.53           | 0.37               | -0.04             | 0.40                | -0.06             | 0.19                  | 0.19            | -                   | -                    | 0.49         | 0.37             | 0.37           | 0.64           | 1.00       | -0.17        | 0.40            | 0.29        | -                 | -0.96         | -1.00           | -0.36           | -0.17         |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
|               |       | 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 | -0.30                | -0.27          | 0.19               | 0.33              | 0.39                | 0.27              | -0.36                 | -0.12           | -0.11               | 0.01                 | 0.36         | 0.36             | 0.36           | 0.15           | -0.44      | 0.37         | -               | 0.64        | -0.46             | -             | 0.46            |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| prima.donnas  | 0.50  | 0.50                 | 0.44           | -0.40              | 0.48              | -0.04               | 0.04              | 0.36                  | 0.31            | 0.39                | 0.39                 | -0.48        | -0.48            | -0.48          | 0.27           | -0.22      | -0.22        | -               | -0.37       | 0.36              | -             | -0.36           |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| radio.silence | 0.59  | 0.59                 | 0.64           | 0.03               | 0.82              | 0.87                | 0.84              | 0.26                  | -0.44           | -0.39               | -0.09                | 0.15         | 0.15             | 0.15           | 0.26           | -0.81      | 0.66         | -               | 0.20        | 0.10              | -             | -0.10           |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| black.cloud   | 0.12  | 0.12                 | 0.13           | 0.40               | 0.23              | 0.40                | 0.29              | -0.12                 | -0.46           | -0.46               | -0.17                | 0.06         | 0.06             | 0.06           | 0.41           | -0.29      | 0.35         | -               | 0.43        | -0.20             | -             | 0.20            |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |
| missing.links | -0.30 | -0.30                | -0.27          | 0.19               | 0.33              | 0.39                | 0.27              | -0.36                 | -0.12           | -0.11               | 0.01                 | 0.36         | 0.36             | 0.36           | 0.15           | -0.44      | 0.37         | -               | 0.64        | -0.46             | -             | 0.46            |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |

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

|               | 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      | 0.23 | 0.23                 | 0.08           | 0.23               | 0.90              | 0.20                | 0.85              | 0.55                  | 0.56            | -                   | -                    | 0.10         | 0.23             | 0.23           | 0.02           | -          | 0.59         | 0.20           | 0.38        | 0.00             | 0.00          | 0.00            | 0.28            | 0.62          |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| prima.donnas  | 0.33 | 0.33                 | 0.24           | 0.59               | 0.68              | 0.26                | 0.33              | 0.78                  | 0.67            | -                   | -                    | 0.59         | 0.33             | 0.33           | 0.24           | 0.59       | -            | 0.26           | 0.39        | 0.59             | 0.59          | 0.59            | 0.22            | 0.22          |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| radio.silence | 0.03 | 0.03                 | 0.10           | 0.01               | 0.66              | 0.71                | 0.69              | 0.01                  | 0.06            | -                   | -                    | 0.05         | 0.05             | 0.05           | 0.52           | 0.20       | 0.26         | -              | 0.25        | 0.20             | 0.16          | 0.23            | 0.73            | 0.78          |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| black.cloud   | 0.22 | 0.22                 | 0.04           | 0.18               | 0.49              | 0.04                | 0.74              | 0.79                  | 0.73            | -                   | -                    | 0.06         | 0.22             | 0.22           | 0.19           | 0.38       | 0.39         | 0.25           | -           | 0.38             | 0.51          | 0.45            | 1.00            | 0.39          |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| missing.links | 0.23 | 0.23                 | 0.08           | 0.23               | 0.90              | 0.20                | 0.85              | 0.55                  | 0.56            | -                   | -                    | 0.10         | 0.23             | 0.23           | 0.02           | 0.00       | 0.59         | 0.20           | 0.38        | -                | 0.00          | 0.00            | 0.28            | 0.62          |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
|               |      | 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 | 0.37                 | 0.42           | 0.58               | 0.30              | 0.21                | 0.39              | 0.25                  | 0.71            | 0.74                | 0.98                 | 0.25         | 0.25             | 0.63           | 0.16           | 0.23       | -            | 0.02           | 0.13        | -                | 0.13          |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| prima.donnas  | 0.12 | 0.12                 | 0.17           | 0.22               | 0.11              | 0.89                | 0.89              | 0.26                  | 0.33            | 0.21                | 0.21                 | 0.11         | 0.11             | 0.40           | 0.50           | 0.50       | -            | 0.24           | 0.26        | -                | 0.26          |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| radio.silence | 0.05 | 0.05                 | 0.03           | 0.93               | 0.00              | 0.00                | 0.00              | 0.42                  | 0.15            | 0.22                | 0.77                 | 0.65         | 0.65             | 0.41           | 0.00           | 0.02       | -            | 0.52           | 0.75        | -                | 0.75          |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| black.cloud   | 0.74 | 0.74                 | 0.71           | 0.22               | 0.49              | 0.22                | 0.39              | 0.73                  | 0.15            | 0.15                | 0.61                 | 0.87         | 0.87             | 0.21           | 0.39           | 0.30       | -            | 0.19           | 0.55        | -                | 0.55          |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |
| missing.links | 0.37 | 0.37                 | 0.42           | 0.58               | 0.30              | 0.21                | 0.39              | 0.25                  | 0.71            | 0.74                | 0.98                 | 0.25         | 0.25             | 0.63           | 0.16           | 0.23       | -            | 0.02           | 0.13        | -                | 0.13          |                 |                 |               |  |          |  |          |  |         |  |                     |  |                     |  |                   |  |                      |  |                      |  |                    |  |