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# LAMPIRAN

Lampiran 1. Dokumentasi Penelitian

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Dokumentasi 1 Perusahaan

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Dokumentasi 2 Produk

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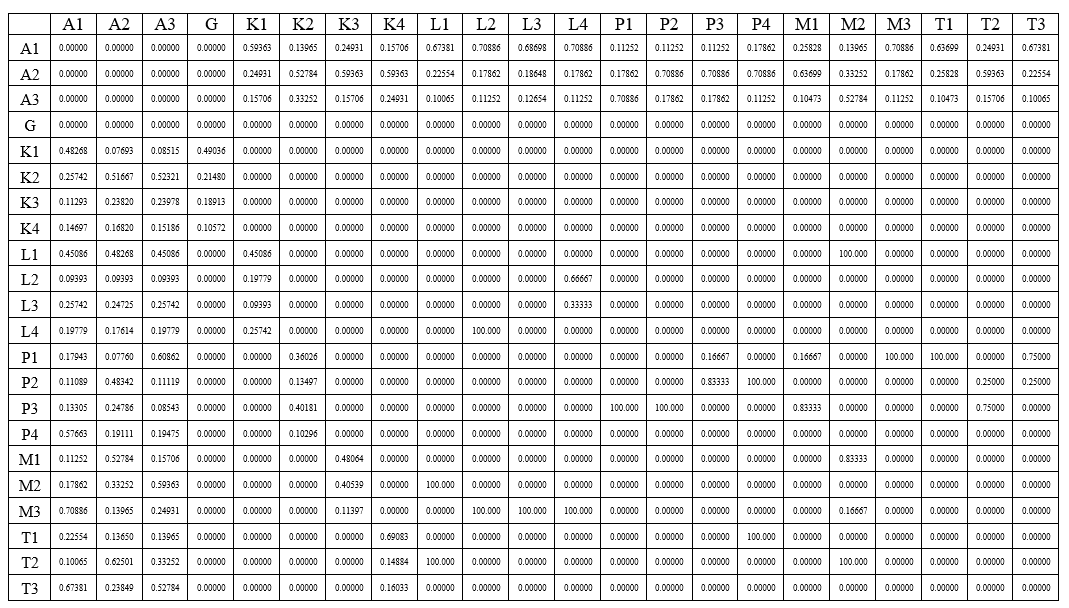
Dokumentasi 3 Observasi Dokumentasi 4 Observasi

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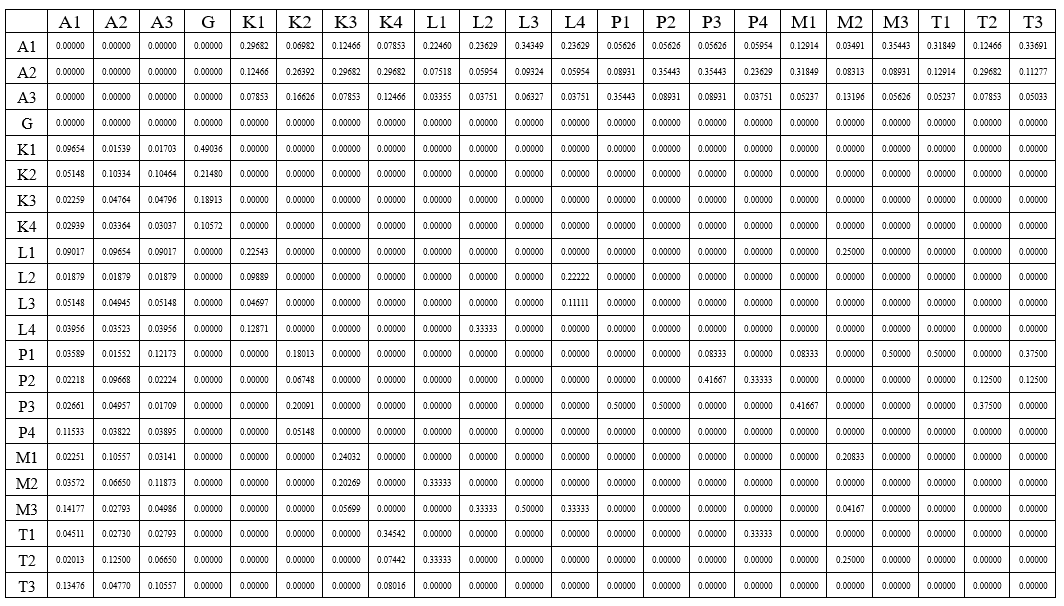
Dokumentasi 5 Wawancara Dokumentasi 6 Observasi

Lampiran 2 Tabel Supermatrix

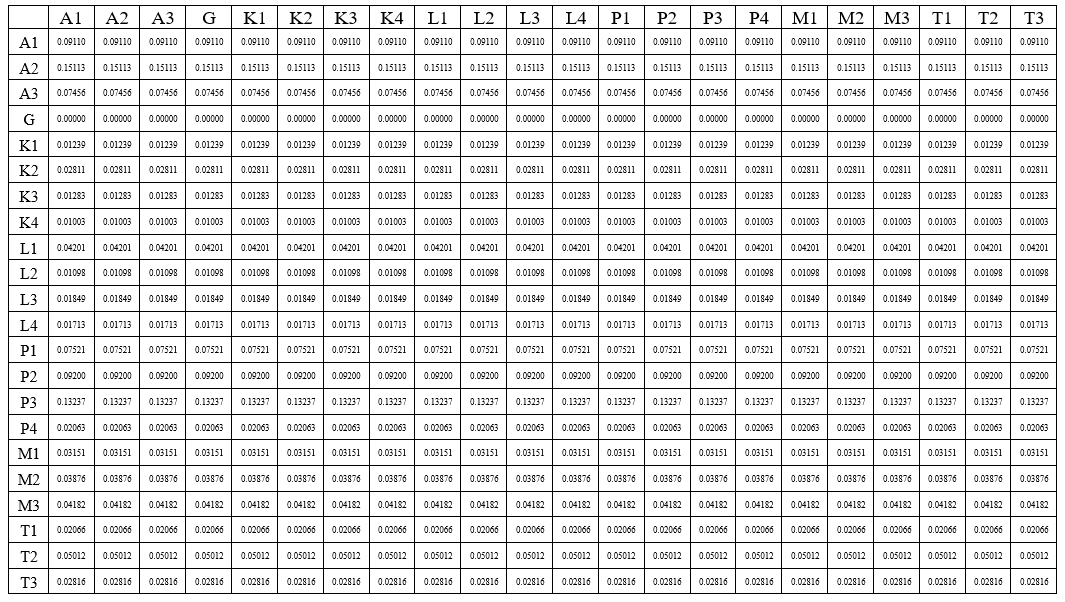
*Unweighted Supermatrix*



*Weighted Supermatrix*



*Limitting Supermatrix*



Lampiran 3 Kuesioner

|  |  |
| --- | --- |
| https://api-frontend.kemdikbud.go.id/v2/detail_pt_logo/QkZERjFGNjgtODIwMC00NTM2LThGRTUtQTczNURDNzkzNTQy**Prodi Teknik Industri**  **FTIK UNIVERSITAS**  **PANCASAKTI TEGAL** | **KUESIONER *ANALYTICAL NETWORK PROCESS* STRATEGI MITIGASI RISIKO KECELAKAAN KERJA** |

**KUESIONER 1**

**PENENTUAN HUBUNGAN ANTAR RISIKO DALAM MITIGASI RISIKO KECELAKAAN KERJA**

**Assalamualaikum Wr. Wb**

Perkenalkan saya Dwinanda Haristiawan, mahasiswa jurusan Teknik Industri, Fakultas Teknik dan Ilmu Komputer, Universitas Pancasakti Tegal. Dengan kuesioner ini meminta kesediaan Bapak/Ibu untuk berpartisipasi dalam mengisi kuesioner ini. Penelitian ini digunakan untuk menyusun tugas akhir dengan judul “**Integrasi *Analitical Network Process* (ANP)-TOPSIS Dalam Mitigasi Risiko Kecelakaan Kerja di PT. XYZ**”. Pada kuesioner ini, responden dimohon untuk menentukan sub-kriteria dengan tujuan untuk mengetahui hubungan antar risiko kecelakaan kerja yang di inginkan dalam mitigasi risiko kecelakaan kerja. Pada kuesioner 1, cara pengisiannya dengan memberi “x” pada kolom yang tersedia. Atas waktu dan kesediaannya saya ucapkan terima kasih.

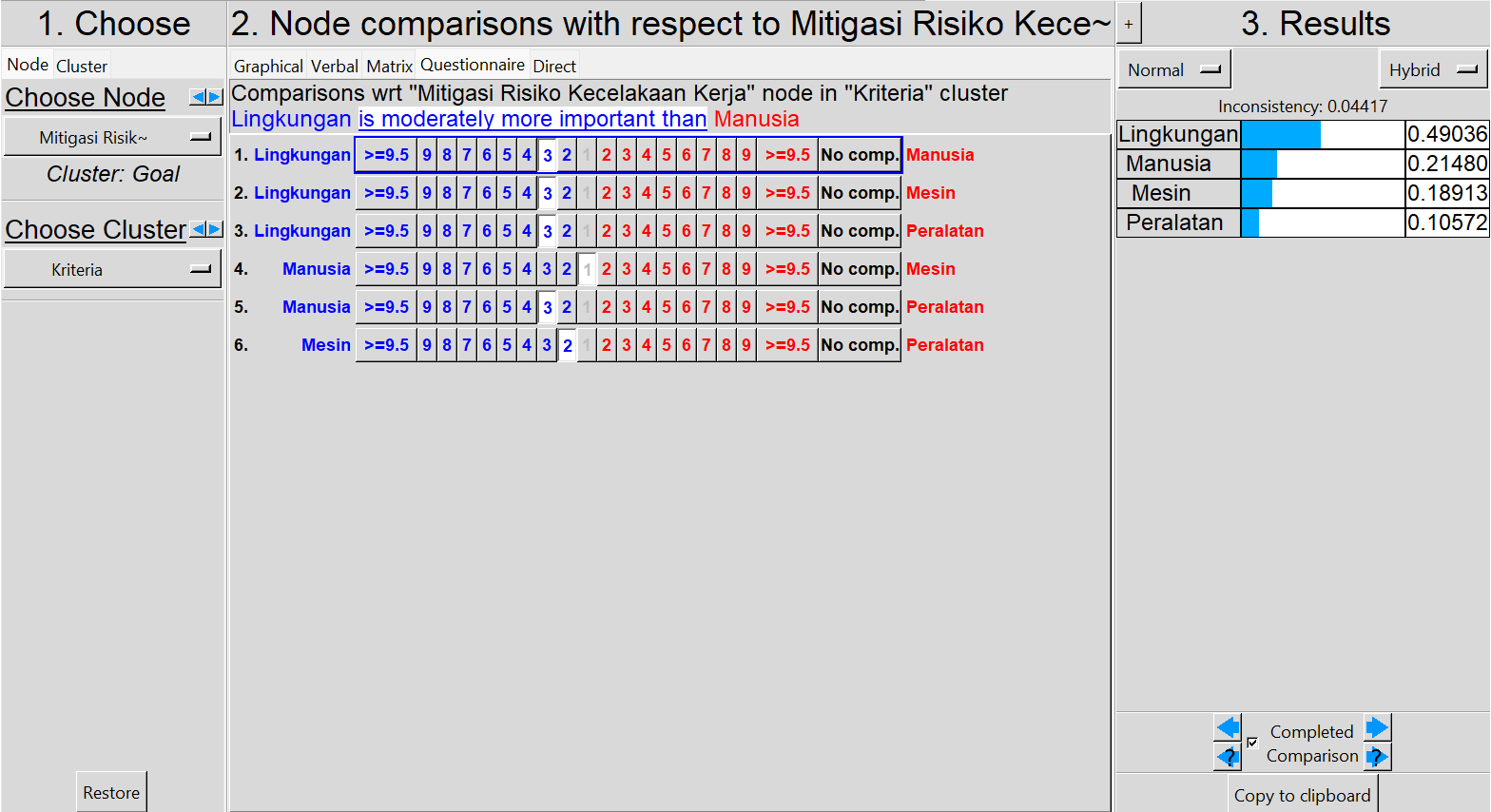
**Nama Responden :**

**Jabatan :**

Lampiran 4 Rekapitulasi Kuesioner

**Kuesioner perbandingan berpasangan antar kriteria untuk penilaian risiko kecelakaan kerja**

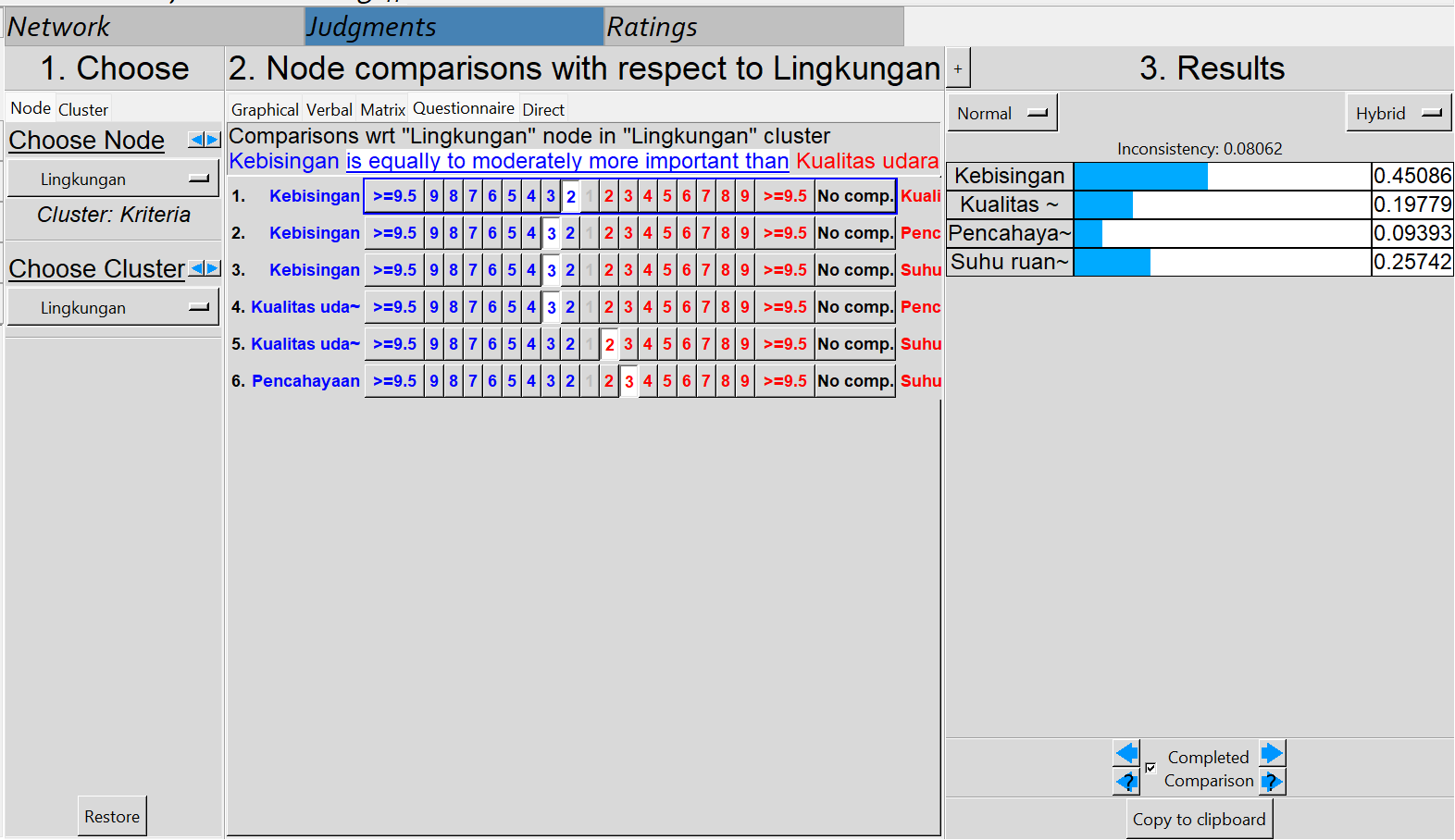
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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| Lingkungan |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | Manusia | 3 | 3 |
| Lingkungan |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | Mesin | 3 | 3 |
| Lingkungan |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | Peralatan | 3 | 3 |
| Manusia |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  | Mesin | 1 | 1 |
| Manusia |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | Peralatan | 3 | 3 |
| Mesin |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | Peralatan | 1,7321 | 2 |

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**Kuesioner perbandingan berpasangan antar kriteria**

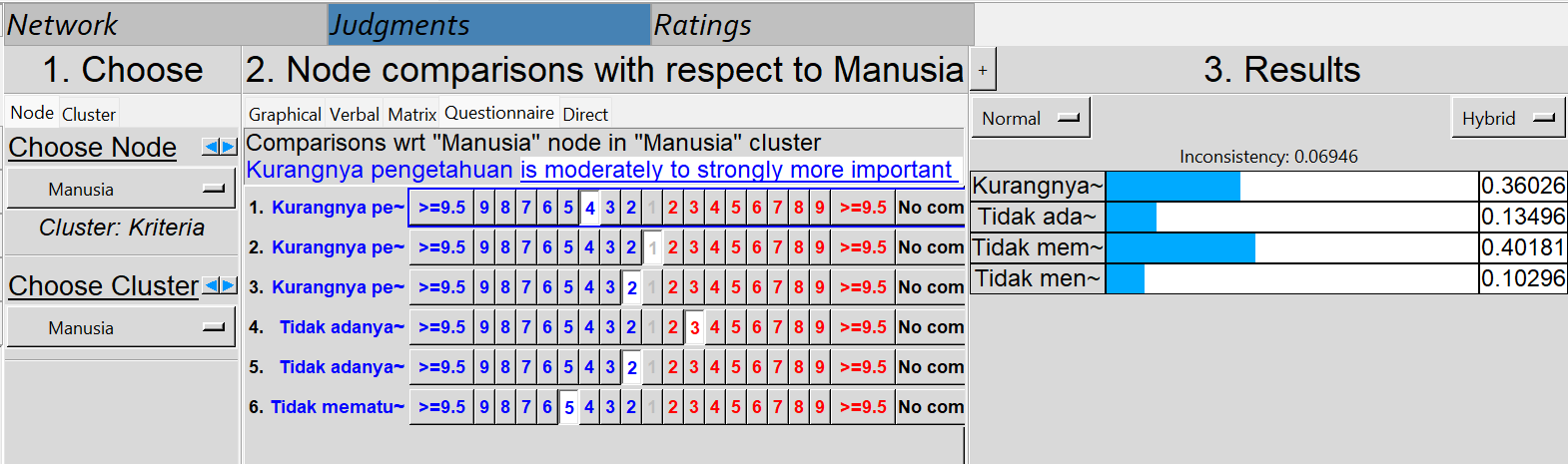
**Lingkungan**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| L1 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | L2 | 1,732 | 2 |
| L1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | L3 | 3 | 3 |
| L1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | L4 | 3 | 3 |
| L2 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | L3 | 3 | 3 |
| L2 |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | L4 | 1,732 | 2 |
| L3 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | L4 | 3 | 3 |

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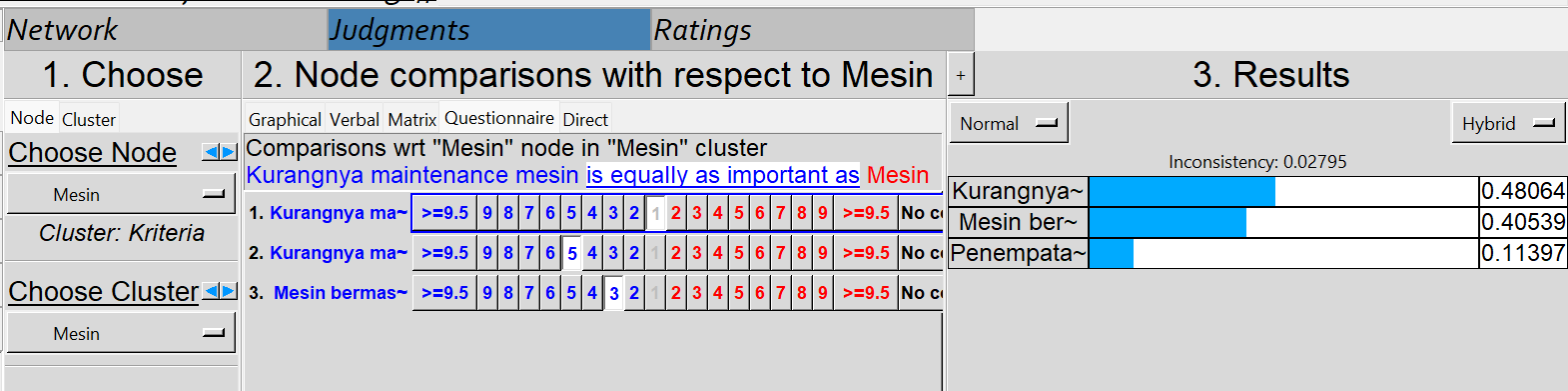
**Manusia**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| P1 |  |  |  |  | 5 |  | 3 |  |  |  |  |  |  |  |  |  |  | P2 | 3,873 | 4 |
| P1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  | P3 | 1 | 1 |
| P1 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | P4 | 1,732 | 2 |
| P2 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | P3 | 3 | 3 |
| P2 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | P4 | 1,732 | 2 |
| P3 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | P4 | 5 | 5 |

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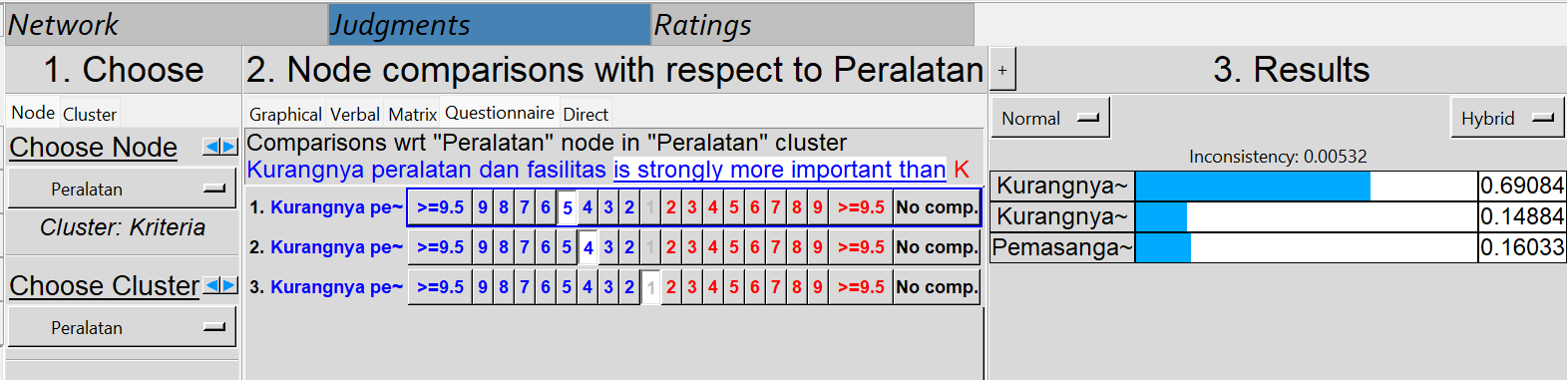
**Mesin**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| M1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  | M2 | 1 | 1 |
| M1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | M3 | 5 | 5 |
| M2 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | M3 | 3 | 3 |

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**Peralatan**

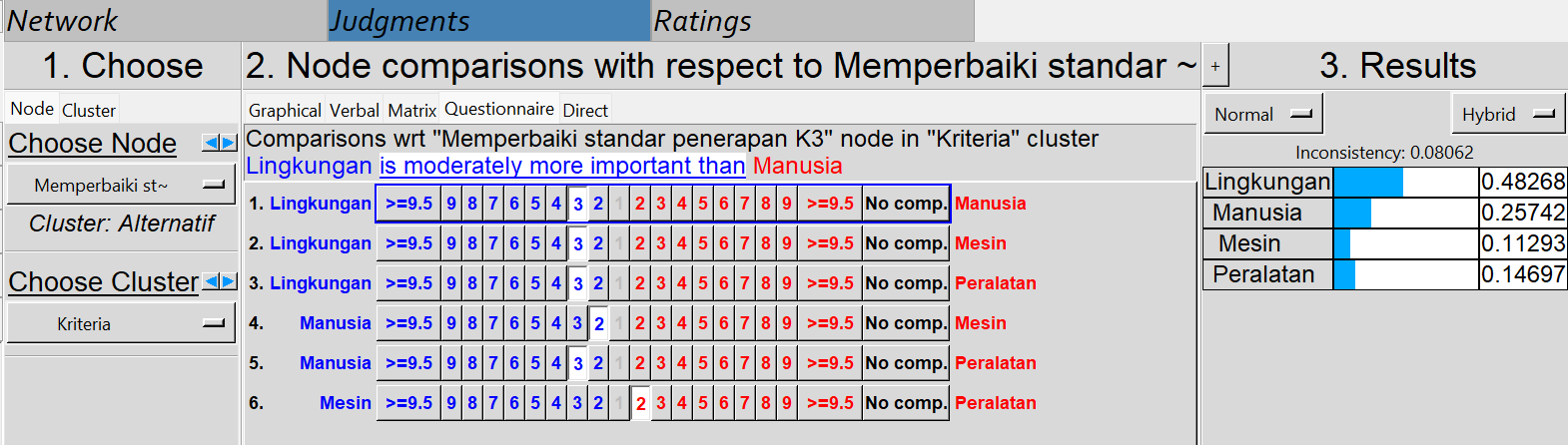
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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| T1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | T2 | 5 | 5 |
| T1 |  |  |  |  | 5 |  | 3 |  |  |  |  |  |  |  |  |  |  | T3 | 3,873 | 4 |
| T2 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  | T3 | 1 | 1 |

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**Kuesioner perbandingan berpasangan alternatif dengan antar kriteria**

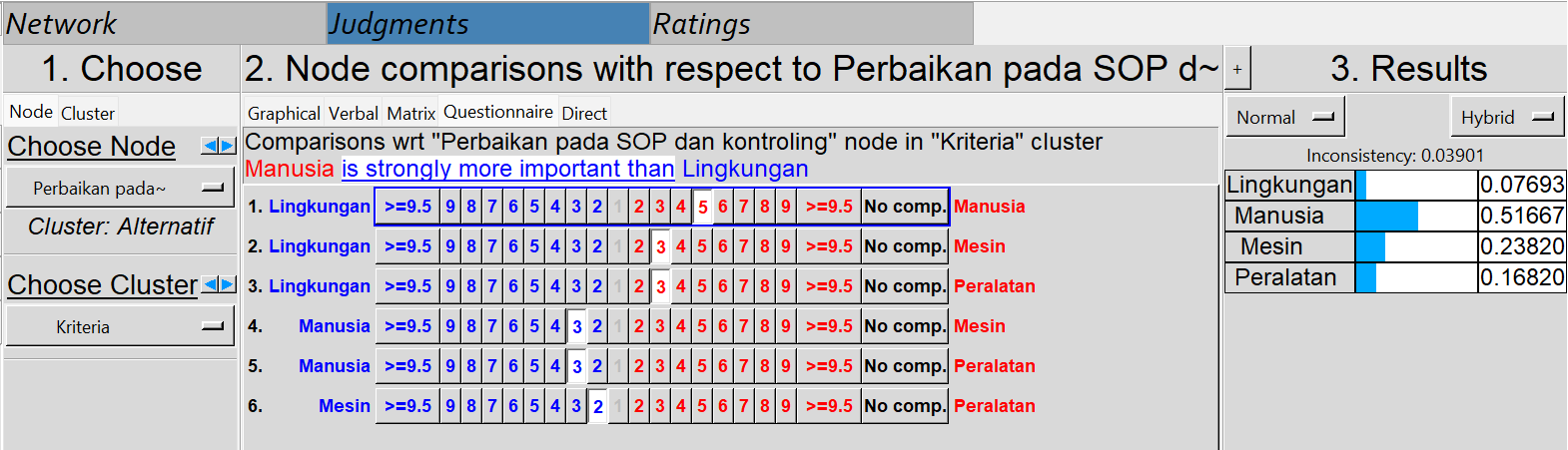
**Memperbaiki standar penerapan K3**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| Lingkungan |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | Manusia | 3 | 3 |
| Lingkungan |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | Mesin | 3 | 3 |
| Lingkungan |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | Peralatan | 3 | 3 |
| Manusia |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | Mesin | 1,7321 | 2 |
| Manusia |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | Peralatan | 3 | 3 |
| Mesin |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | Peralatan | 1,7321 | 2 |

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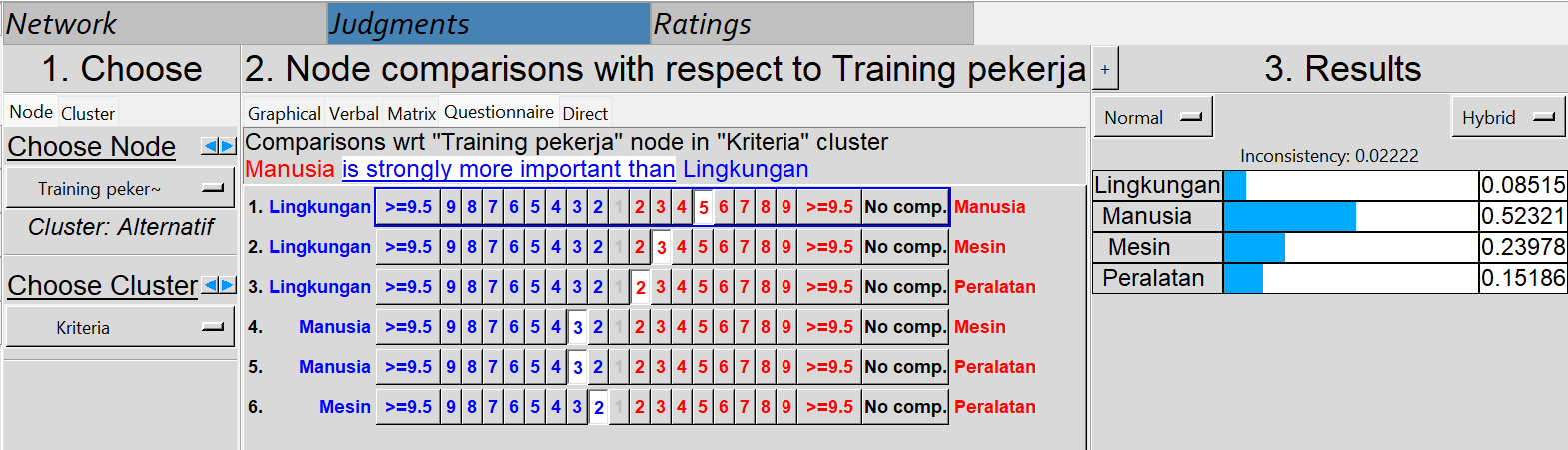
**Perbaikan pada SOP dan kontroling**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| Lingkungan |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | Manusia | 5 | 5 |
| Lingkungan |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | Mesin | 3 | 3 |
| Lingkungan |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | Peralatan | 3 | 3 |
| Manusia |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | Mesin | 3 | 3 |
| Manusia |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | Peralatan | 3 | 3 |
| Mesin |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | Peralatan | 1,7321 | 2 |

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**Training pekerja**

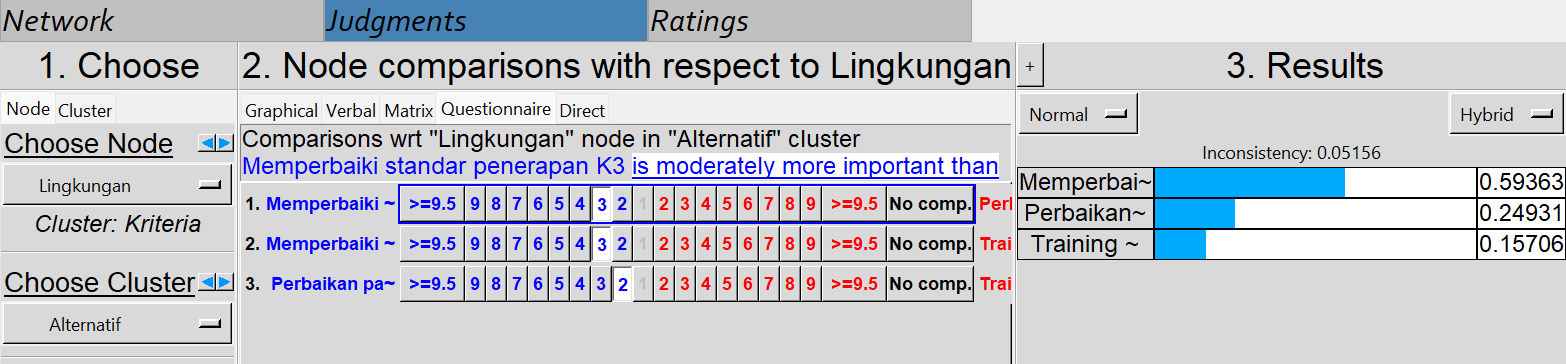
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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| Lingkungan |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | Manusia | 5 | 5 |
| Lingkungan |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | Mesin | 3 | 3 |
| Lingkungan |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | Peralatan | 1,7321 | 2 |
| Manusia |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | Mesin | 3 | 3 |
| Manusia |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | Peralatan | 3 | 3 |
| Mesin |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | Peralatan | 1,7321 | 2 |

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**Kuesioner perbandingan berpasangan kriteria dengan antar alternatif**

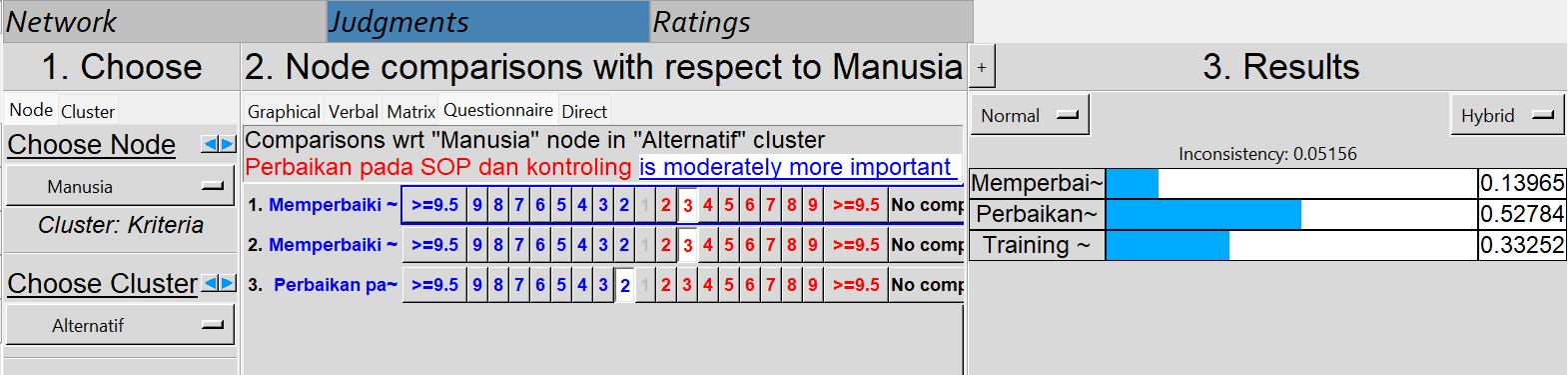
**Lingkungan**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | A2 | 3 | 3 |
| A1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | A3 | 3 | 3 |
| A2 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | A3 | 1,7321 | 2 |

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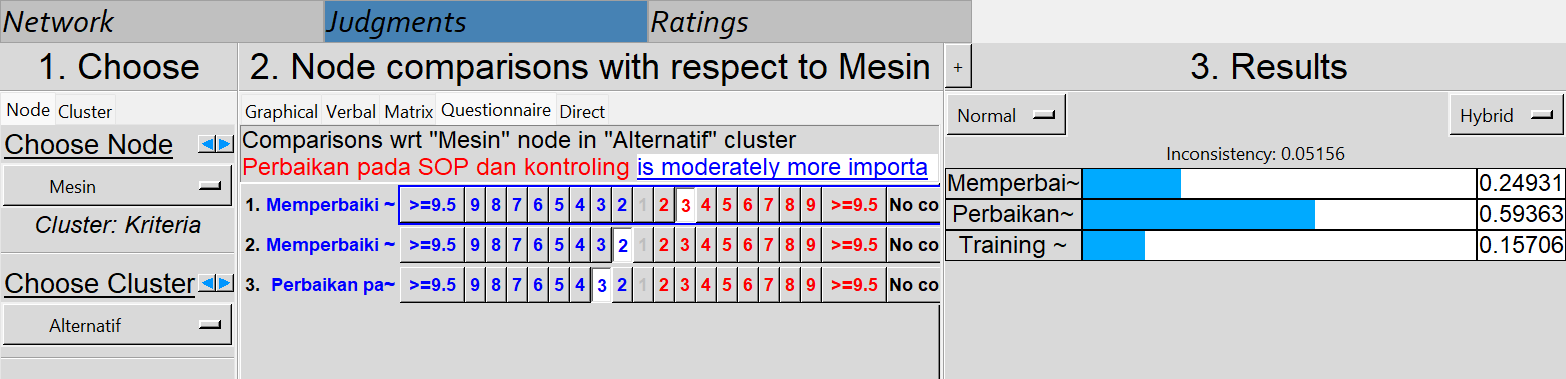
**Manusia**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | A2 | 3 | 3 |
| A1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | A3 | 3 | 3 |
| A2 |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | A3 | 1,7321 | 2 |

****

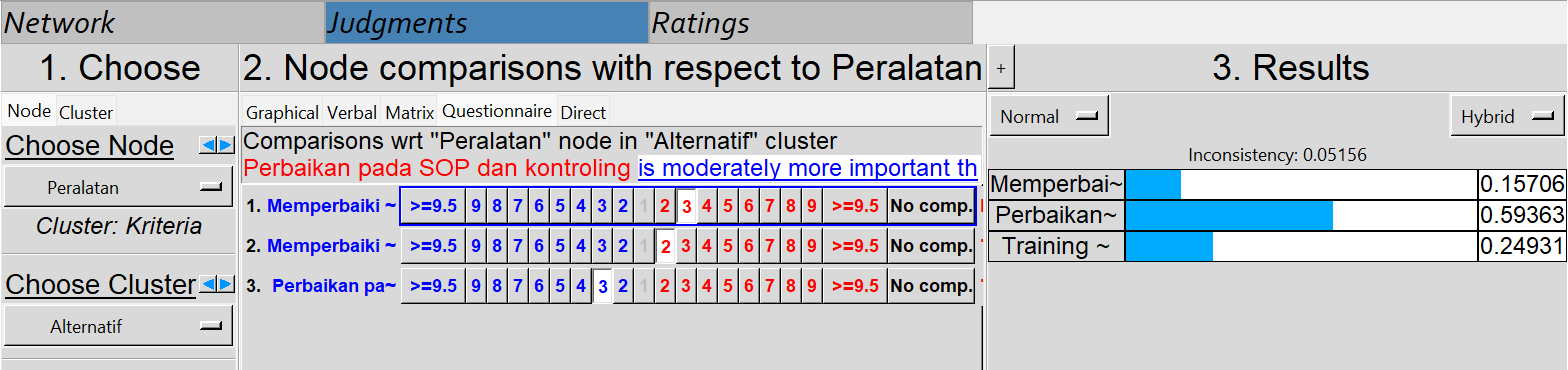
**Mesin**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | A2 | 3 | 3 |
| A1 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | A3 | 1,7321 | 2 |
| A2 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | A3 | 3 | 3 |

****

**Peralatan**

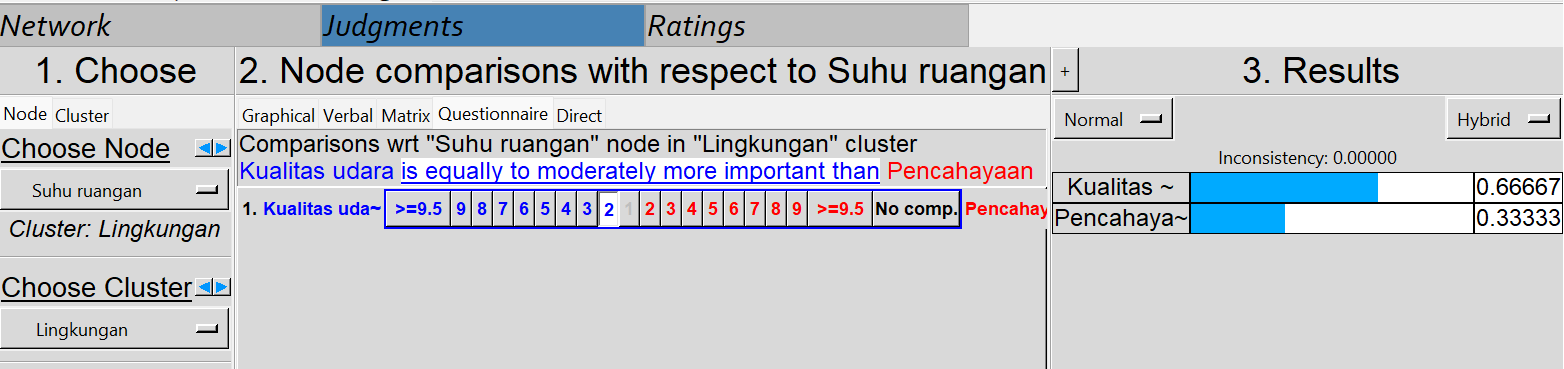
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | A2 | 3 | 3 |
| A1 |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | A3 | 1,7321 | 2 |
| A2 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | A3 | 3 | 3 |

****

**Kuesioner perbandingan berpasangan antar hubungan sub-kriteria**

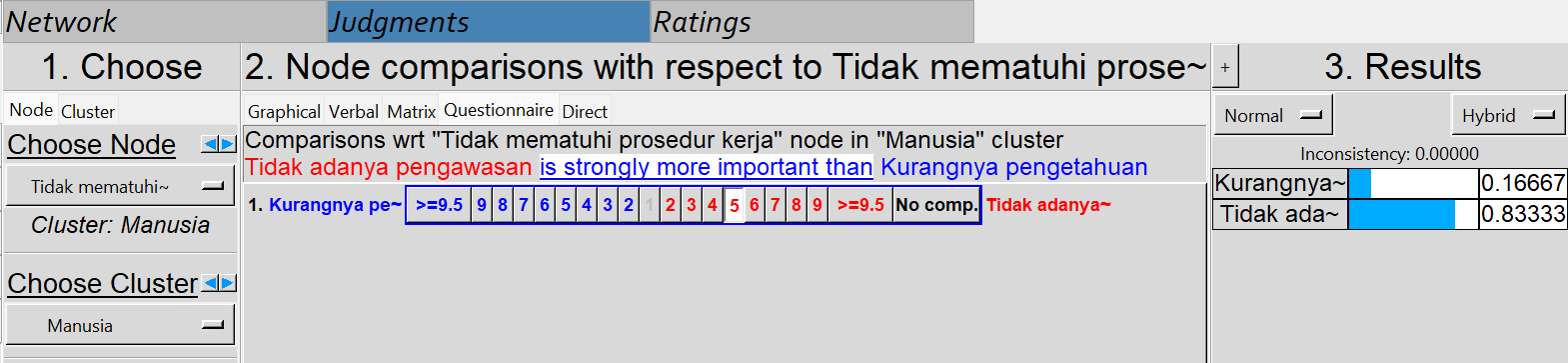
**Suhu ruangan**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| L2 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | L3 | 1,7321 | 2 |

****

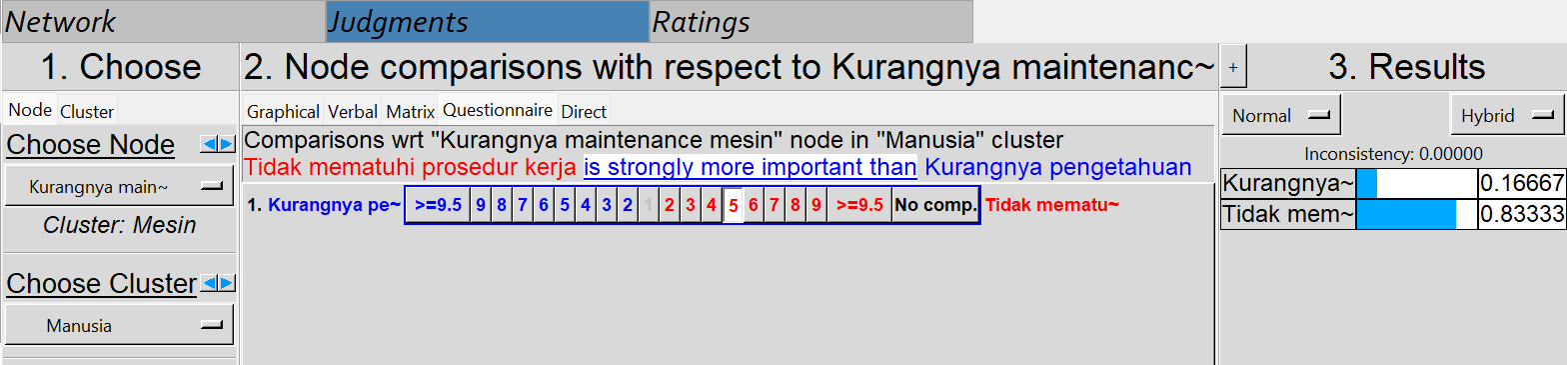
**Tidak mematuhi prosedur kerja**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| P1 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | P2 | 5 | 5 |

****

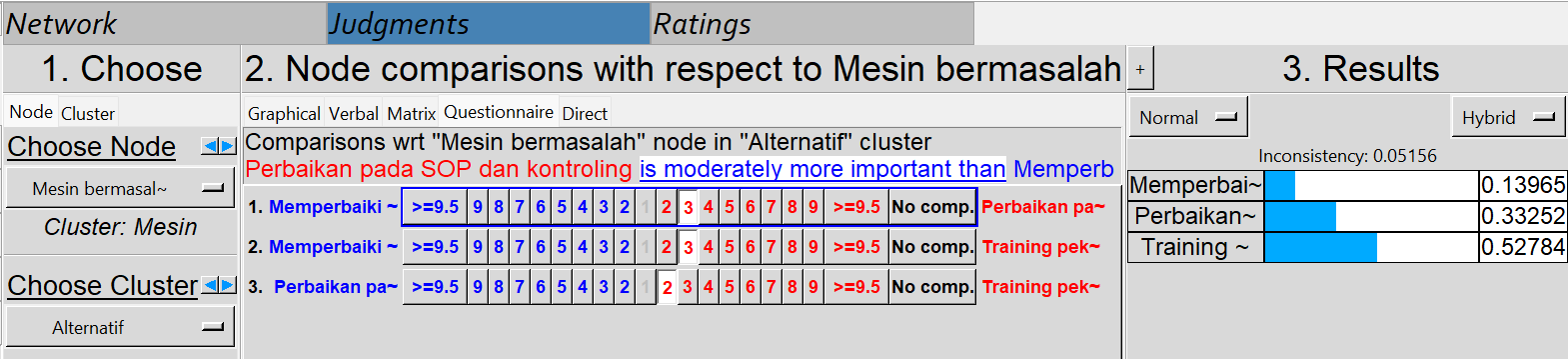
**Kurangnya maintenance mesin**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| P1 |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  |  |  | P3 | 5 | 5 |

****

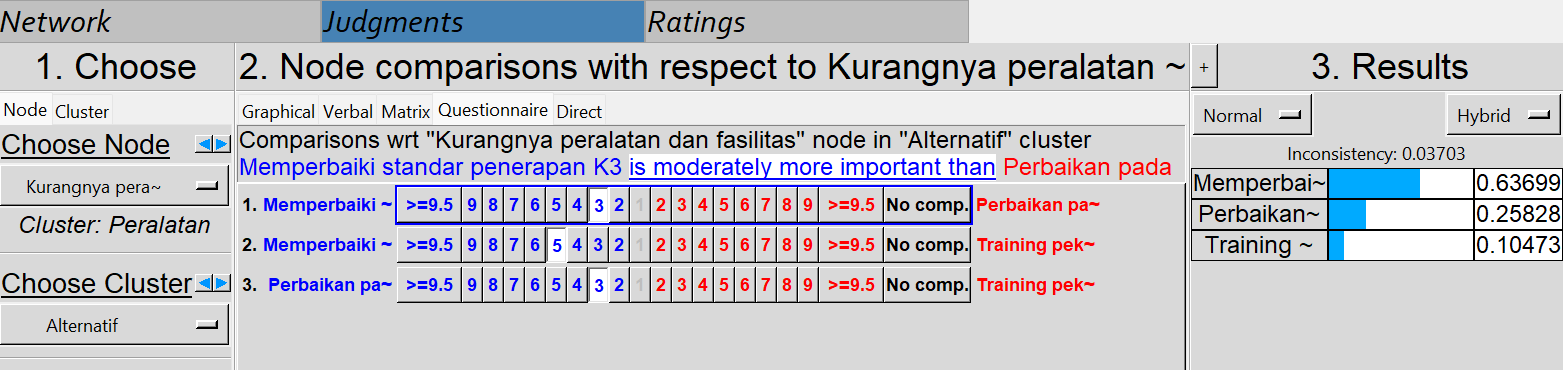
**Mesin bermasalah**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| M1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | M3 | 5 | 5 |

****

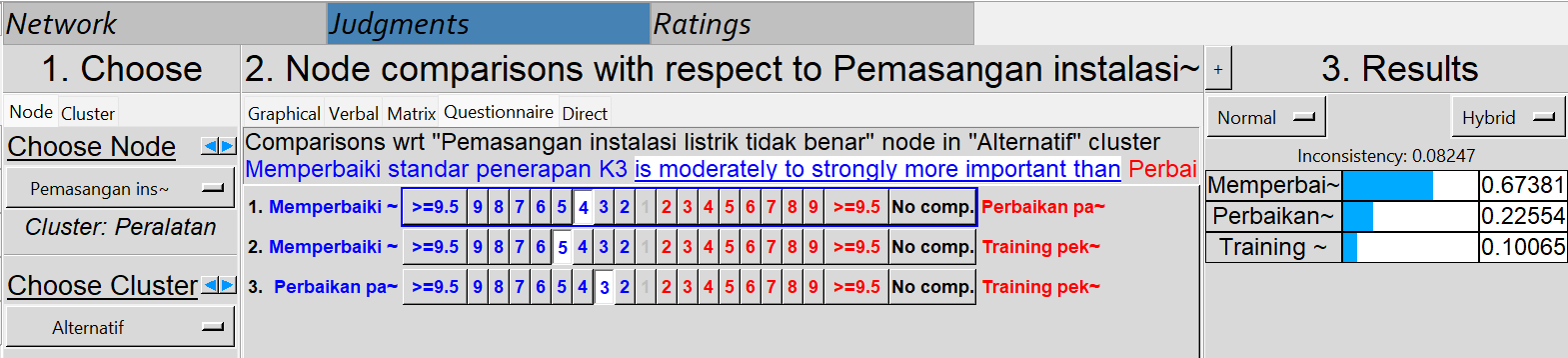
**Kurangnya perawatan peralatan**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| P1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | P3 | 3 | 3 |

****

**Pemasangan instalasi listrik tidak benar**

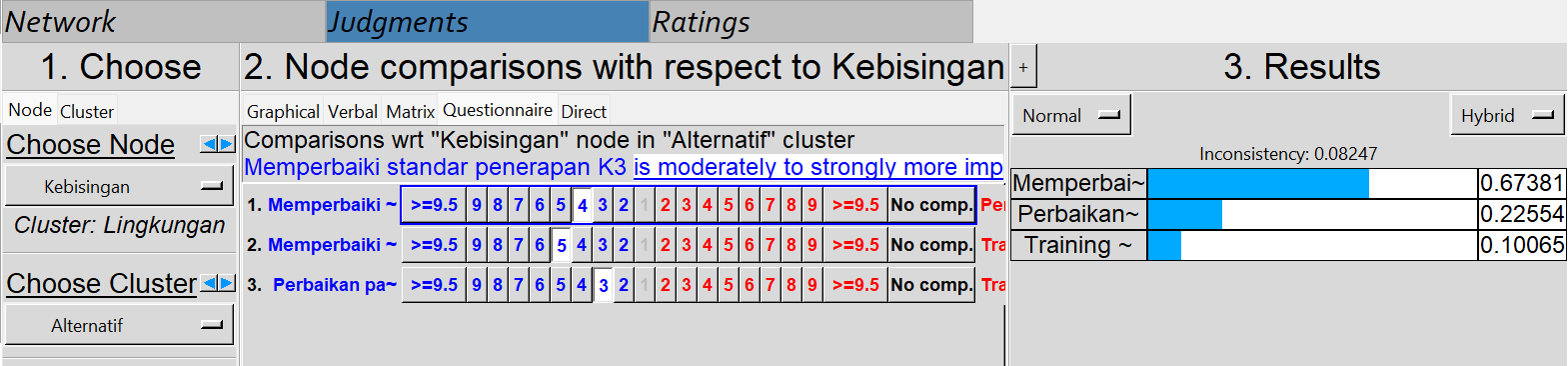
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| P1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | P2 | 3 | 3 |

****

**Kesioner perbandingan berpasangan antar sub-kriteria dengan alternatif**

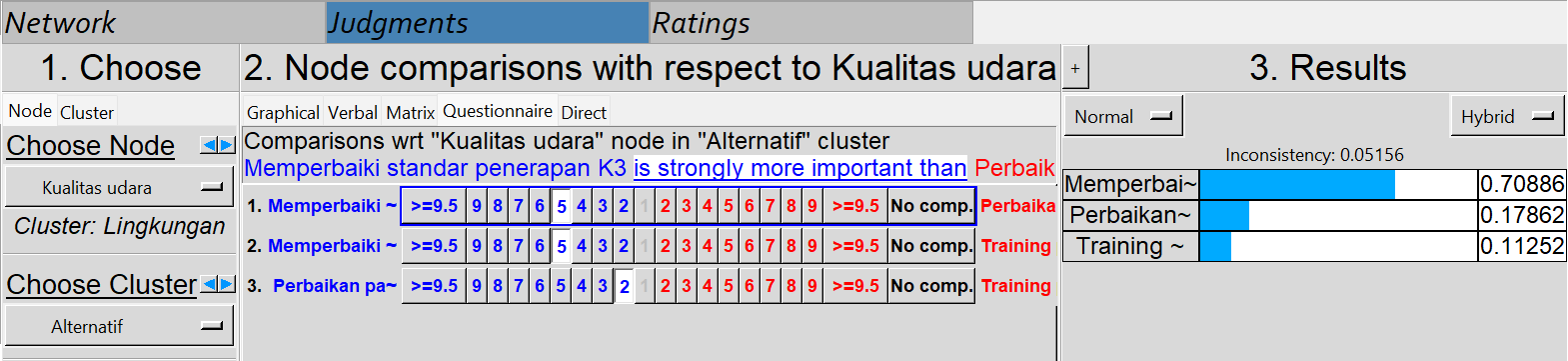
**Kebisingan**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  | 5 |  | 3 |  |  |  |  |  |  |  |  |  |  | A2 | 3,873 | 4 |
| A1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A3 | 5 | 5 |
| A2 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | A3 | 3 | 3 |

****

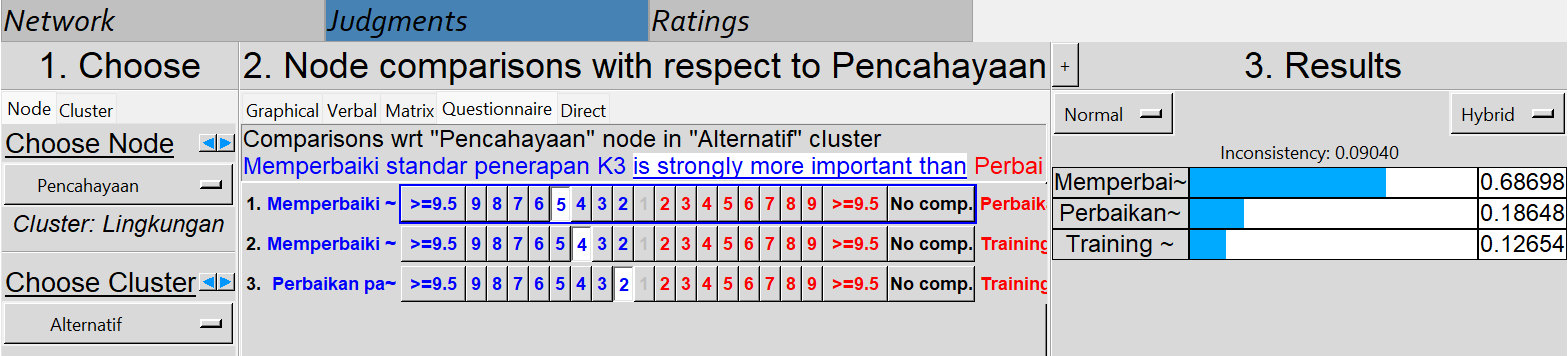
**Kualitas Udara**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A2 | 5 | 5 |
| A1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A3 | 5 | 5 |
| A2 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | A3 | 1,732 | 2 |

****

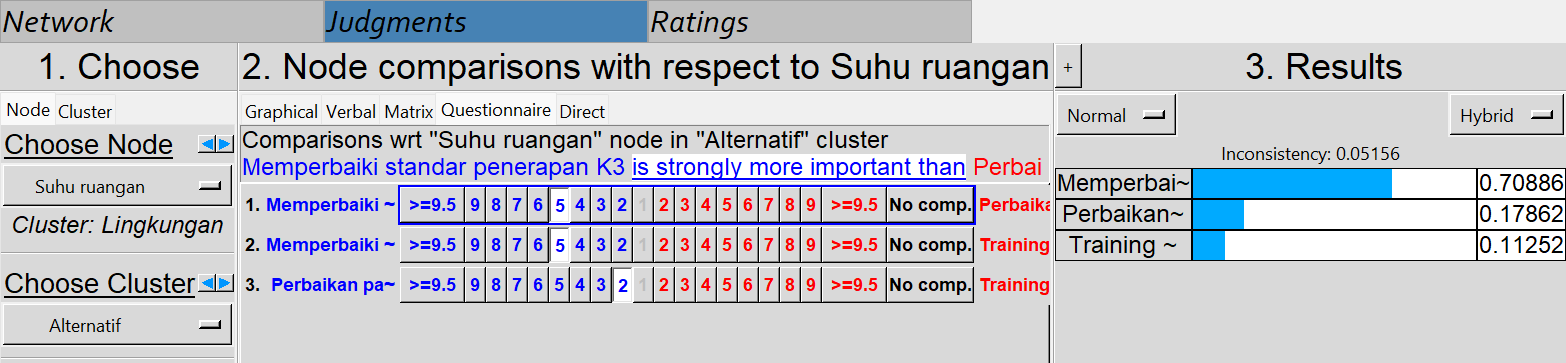
**Pencahayaan**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A2 | 5 | 5 |
| A1 |  |  |  |  | 5 |  | 3 |  |  |  |  |  |  |  |  |  |  | A3 | 3,873 | 4 |
| A2 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | A3 | 1,732 | 2 |

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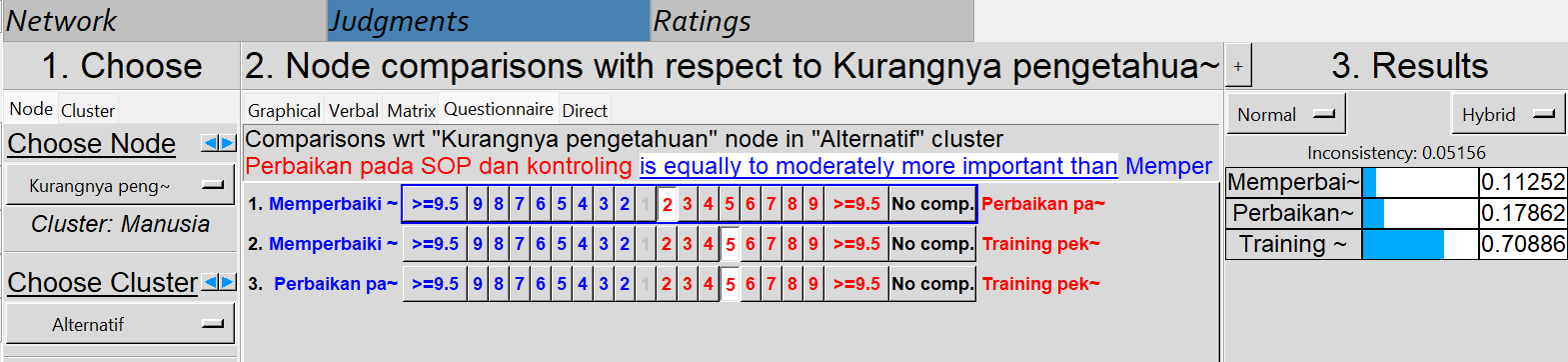
**Suhu Ruangan**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A2 | 5 | 4 |
| A1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A3 | 5 | 4 |
| A2 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | A3 | 1,732 | 2 |

****

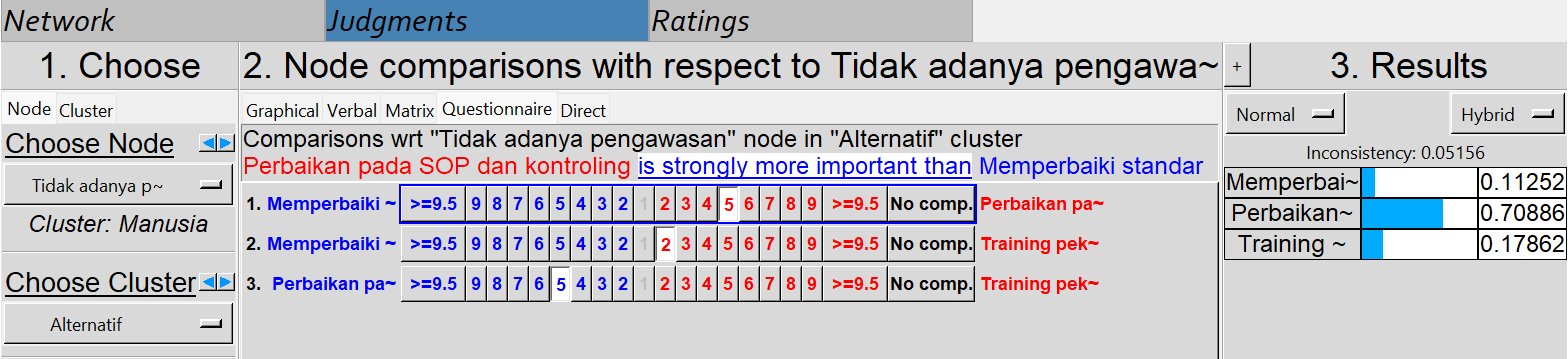
**Kurangnya Pengetahuan**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | A2 | 1,732 | 2 |
| A1 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | A3 | 5 | 5 |
| A2 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | A3 | 5 | 5 |

****

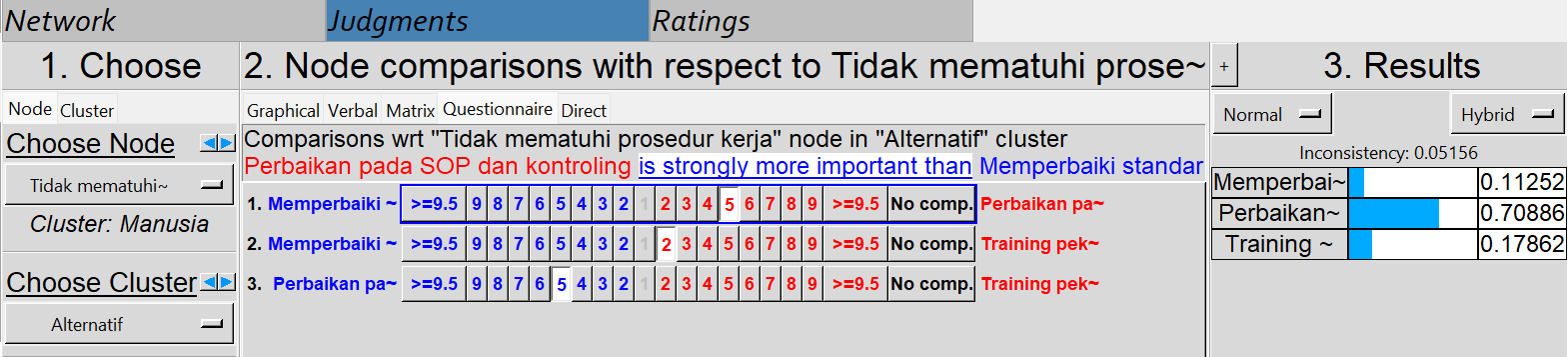
**Tidak Adanya Pengawasan**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | A2 | 5 | 5 |
| A1 |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | A3 | 1,732 | 2 |
| A2 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A3 | 5 | 5 |

****

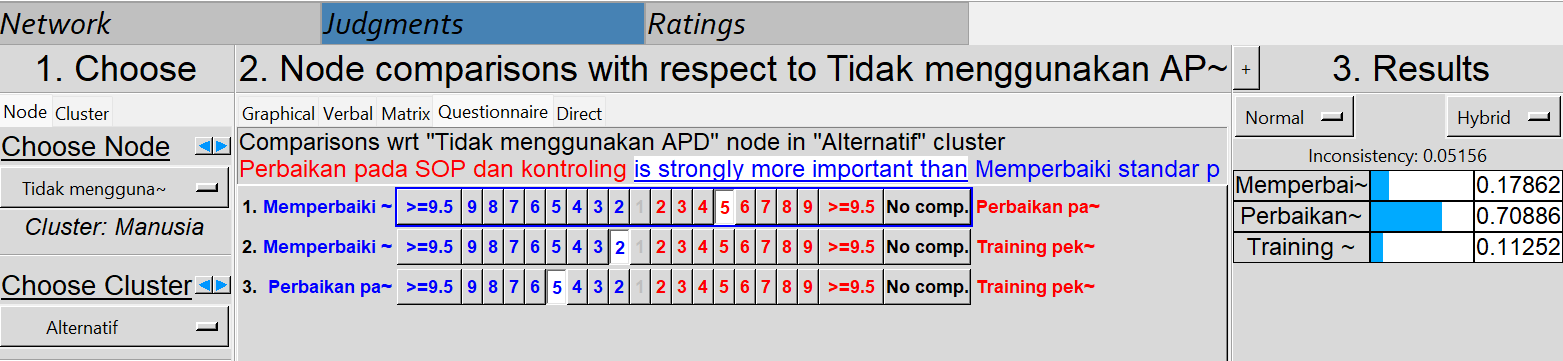
**Tidak Mematuhi Prosedur Kerja**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | A2 | 5 | 5 |
| A1 |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | A3 | 1,732 | 2 |
| A2 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A3 | 5 | 5 |

****

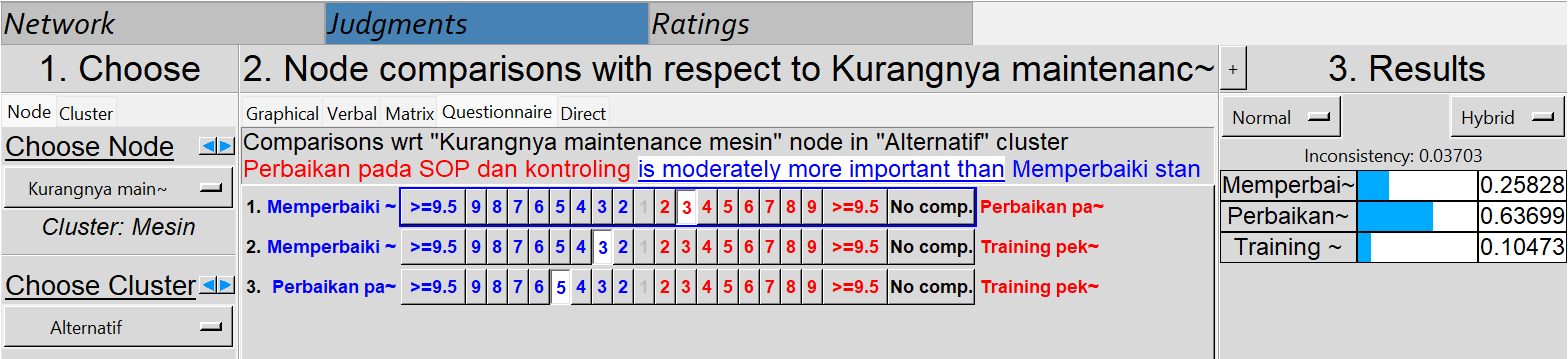
**Tidak Menggunakan APD**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | A2 | 5 | 5 |
| A1 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | A3 | 1,732 | 2 |
| A2 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A3 | 5 | 5 |

****

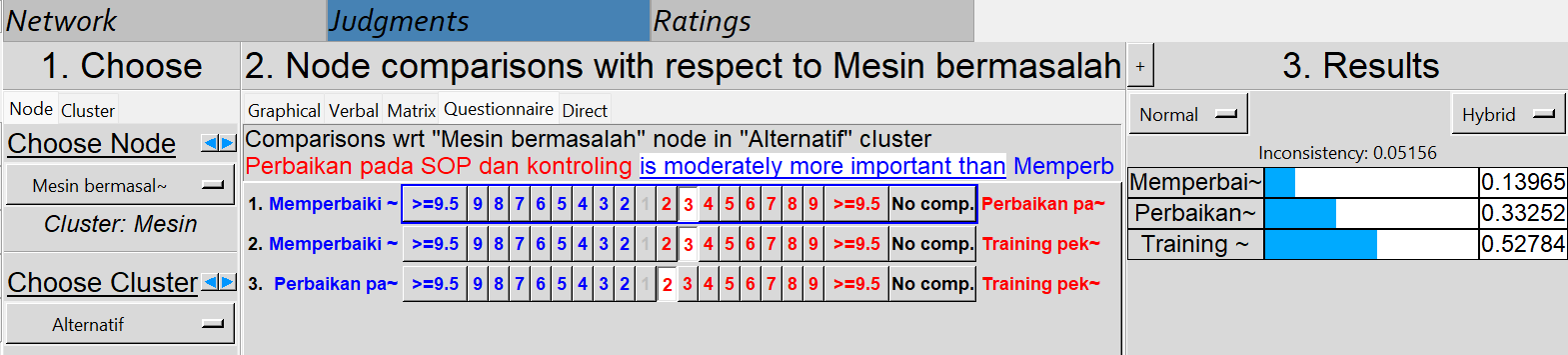
**Kurangnya Maintenance Mesin**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | A2 | 3 | 3 |
| A1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | A3 | 3 | 3 |
| A2 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A3 | 5 | 5 |

****

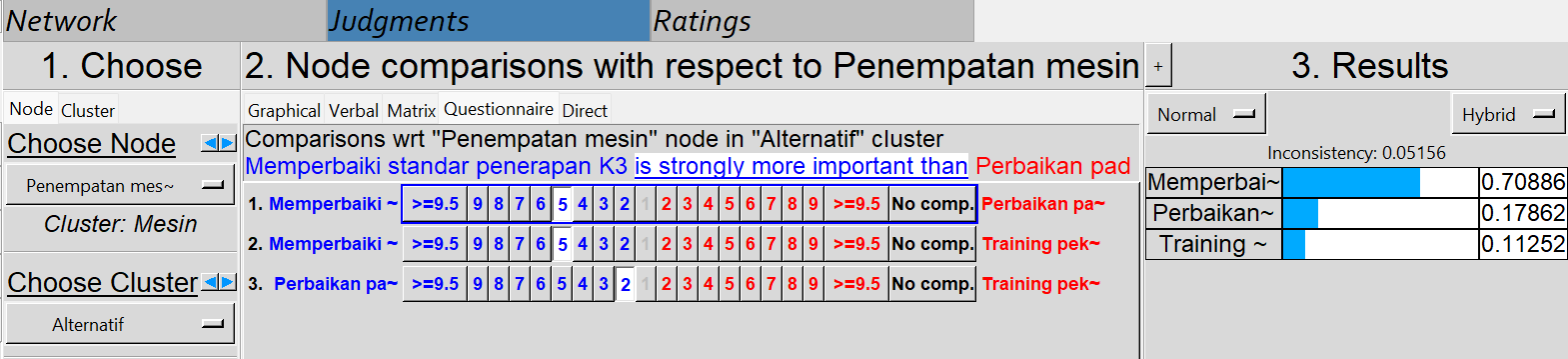
**Mesin Bermasalah**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | A2 | 3 | 3 |
| A1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | A3 | 3 | 3 |
| A2 |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | A3 | 1,732 | 2 |

****

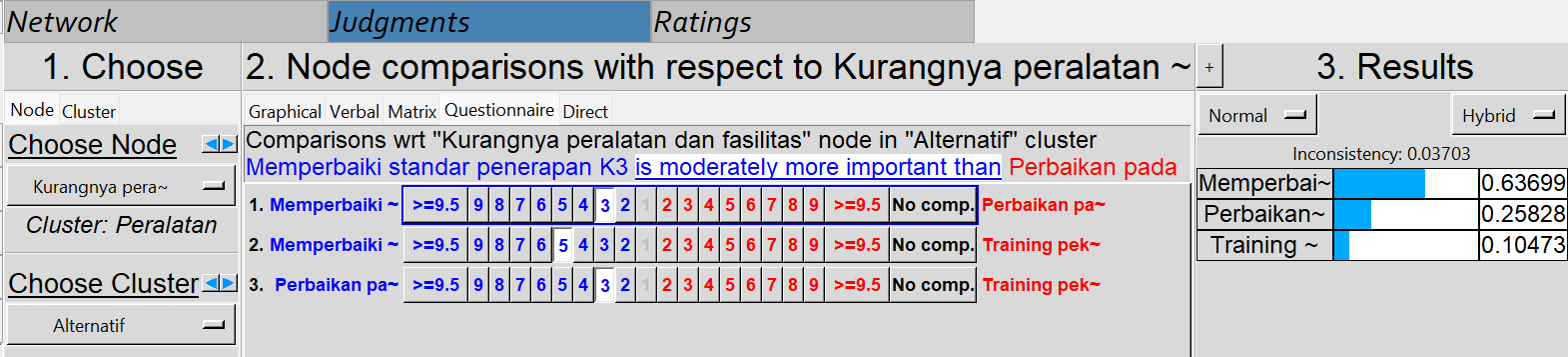
**Penempatan Mesin**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A2 | 5 | 5 |
| A1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A3 | 5 | 5 |
| A2 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | A3 | 1,732 | 2 |

****

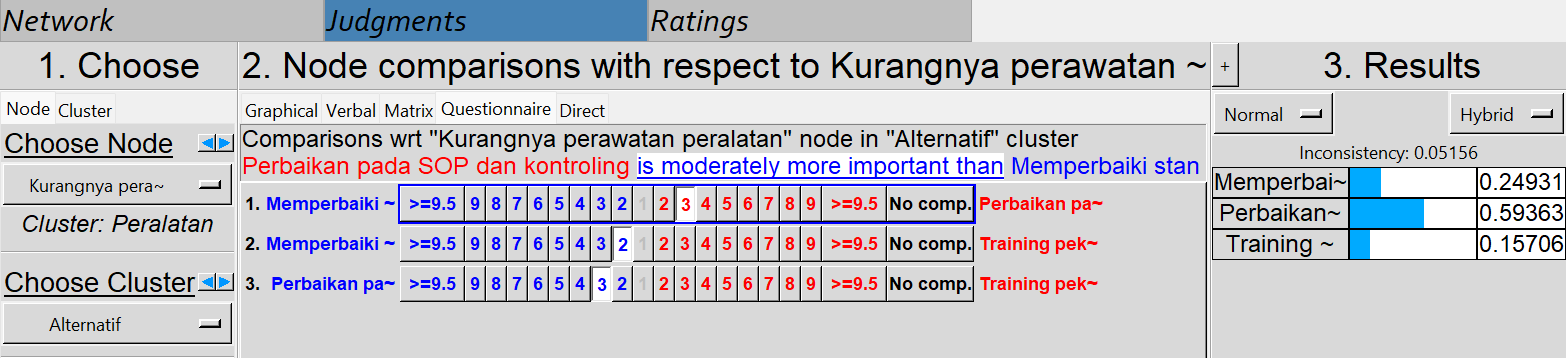
**Kurangnya Peralatan Dan Fasilitas**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | A2 | 3 | 3 |
| A1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A3 | 5 | 5 |
| A2 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | A3 | 3 | 3 |

****

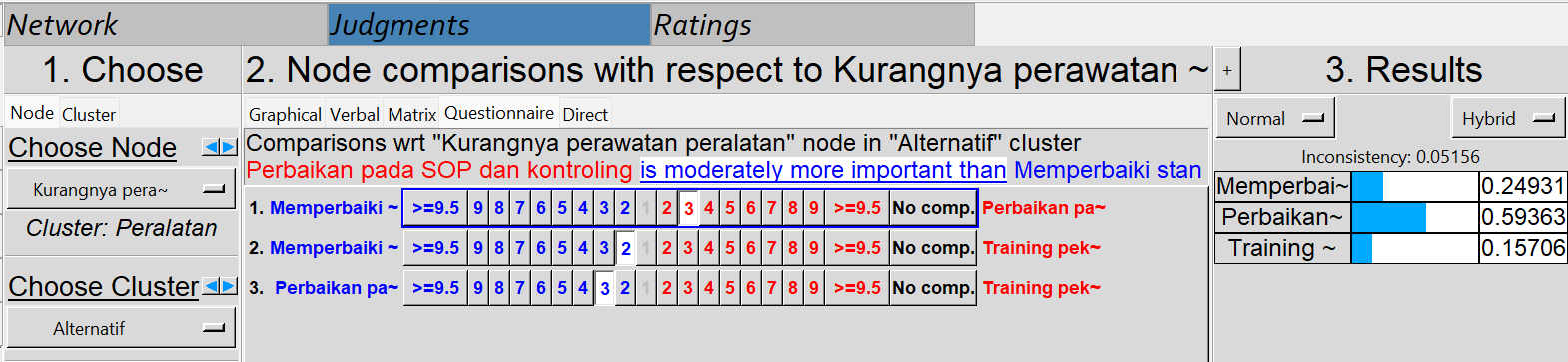
**Kurangnya Perawatan Peralatan**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | A2 | 3 | 3 |
| A1 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | A3 | 1,732 | 2 |
| A2 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | A3 | 3 | 3 |

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**Pemasangan Instalasi Listrik Tidak Benar**

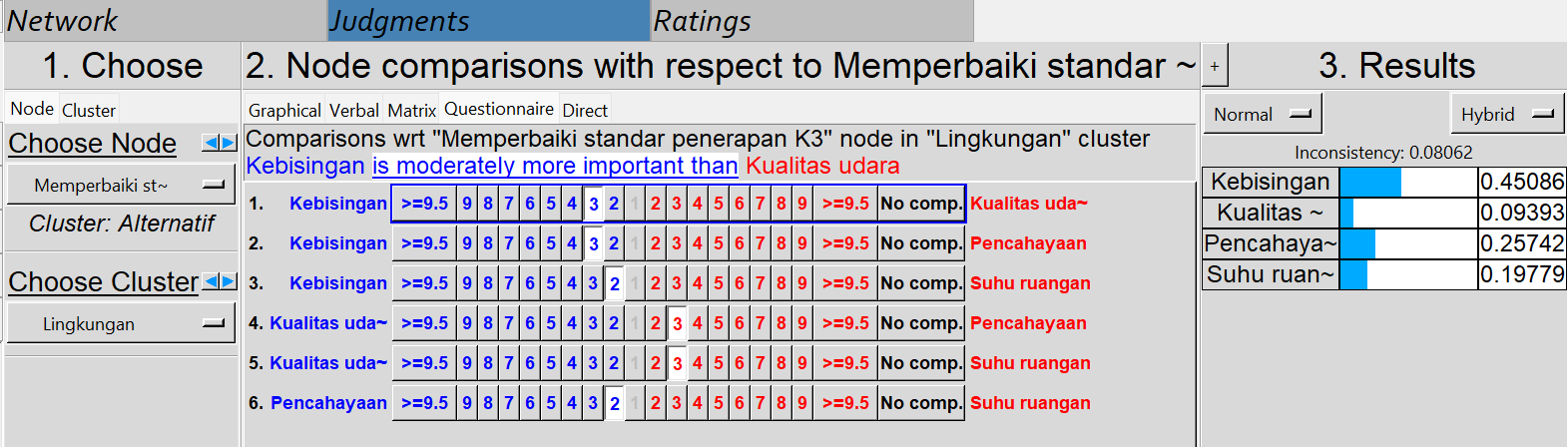
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| A1 |  |  |  |  | 5 |  | 3 |  |  |  |  |  |  |  |  |  |  | A2 | 3,873 | 4 |
| A1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | A3 | 5 | 5 |
| A2 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | A3 | 3 | 3 |

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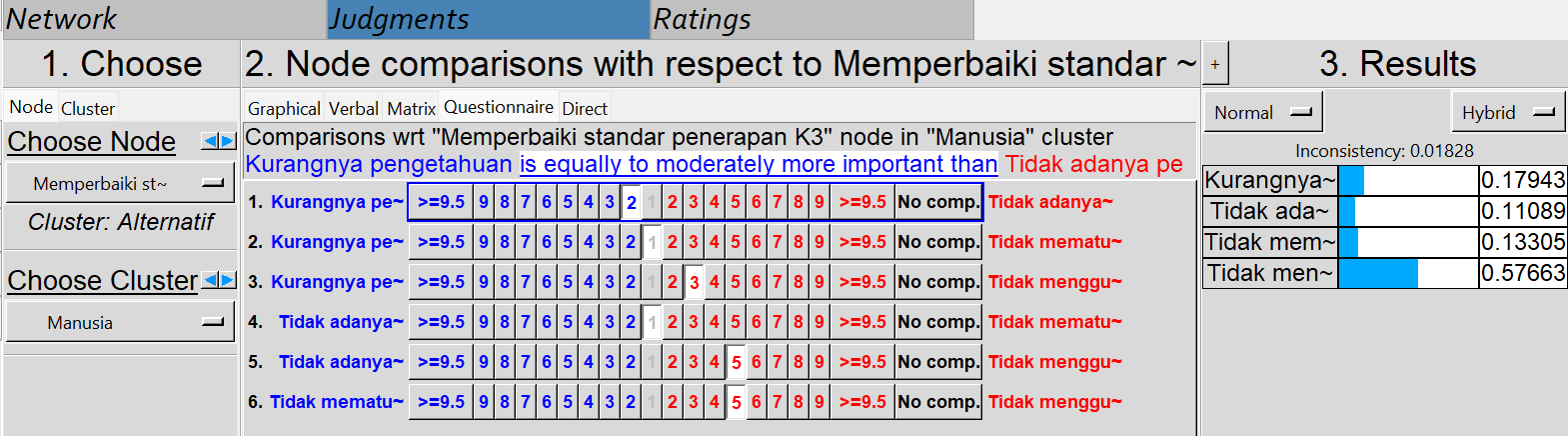
**Kuesioner perbandingan berpasangan antar alternatif dengan sub-kriteria**

**Memperbaiki standar penerapan K3**

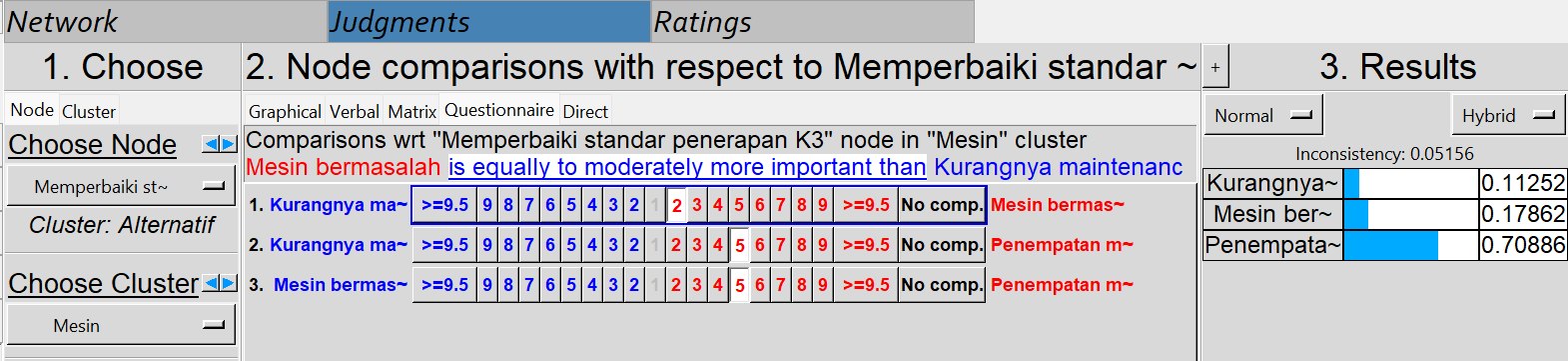
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| L1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | L2 | 3 | 3 |
| L1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | L3 | 3 | 3 |
| L1 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | L4 | 1,73 | 2 |
| L2 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | L3 | 3 | 3 |
| L2 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | L4 | 3 | 3 |
| L3 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | L4 | 1,73 | 2 |

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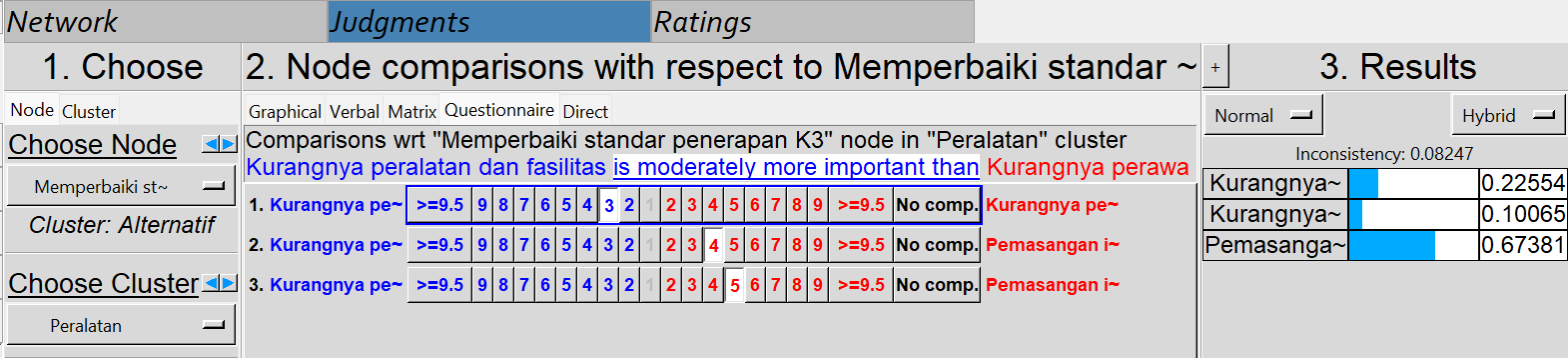
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| P1 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | P2 | 1,73 | 2 |
| P2 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  | P3 | 1 | 1 |
| P3 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | P4 | 3 | 3 |
| P2 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  | P3 | 1 | 1 |
| P2 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | P4 | 5 | 5 |
| P3 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | P4 | 5 | 5 |

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|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| M1 |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | M2 | 1,73 | 2 |
| M1 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | M3 | 5 | 5 |
| M2 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | M3 | 5 | 5 |

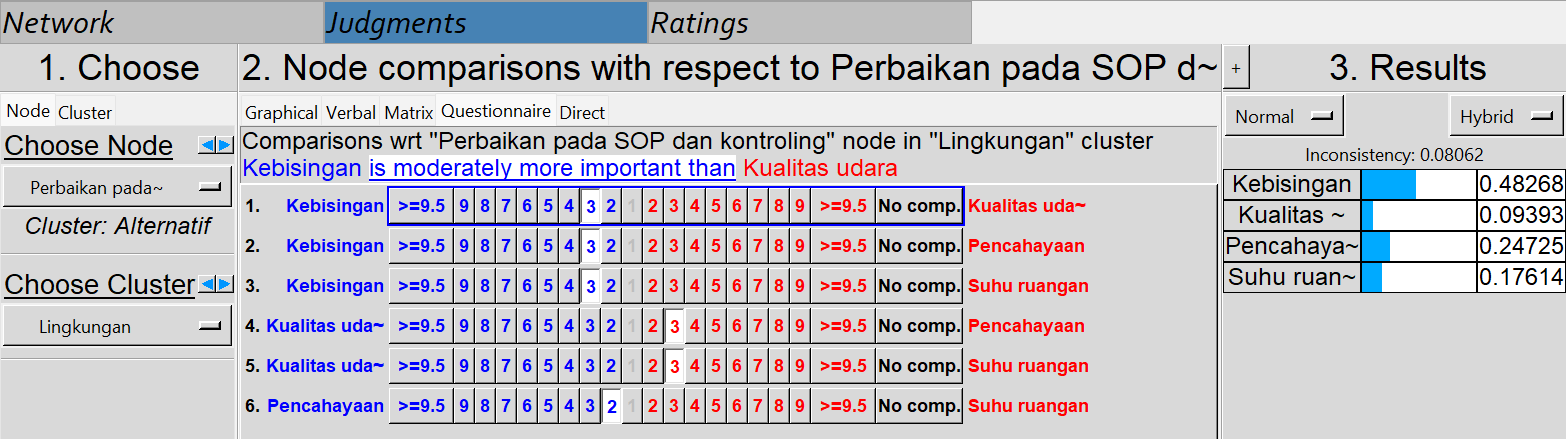
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|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| T1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | T2 | 3 | 3 |
| T1 |  |  |  |  |  |  |  |  |  |  | 3 |  | 5 |  |  |  |  | T3 | 3,87 | 4 |
| T2 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | T3 | 5 | 5 |

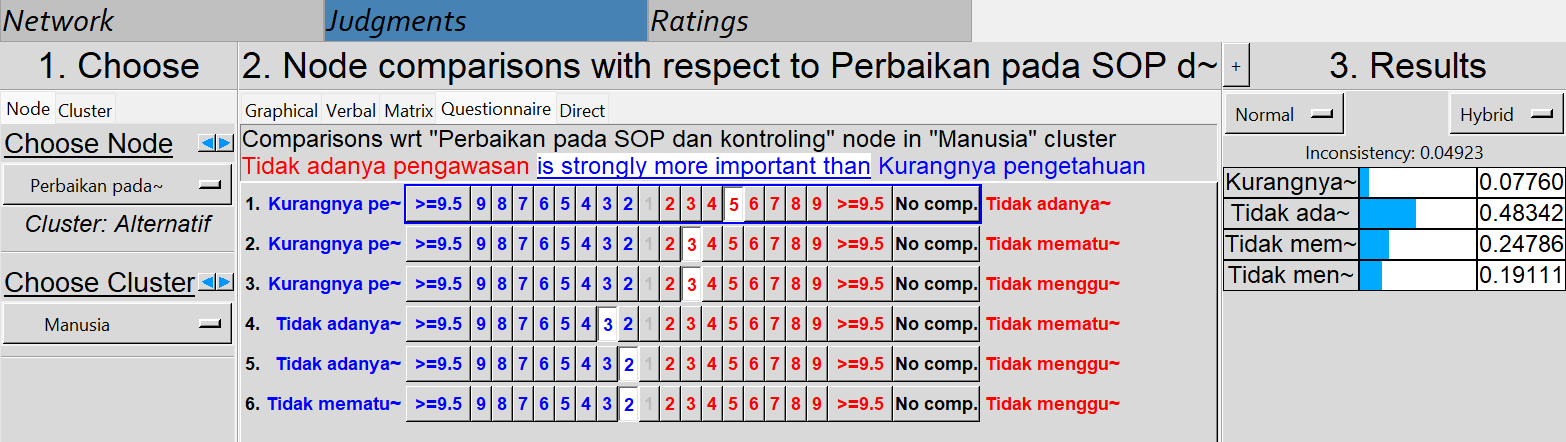
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**Perbaikan terhadap SOP dan kontroling**

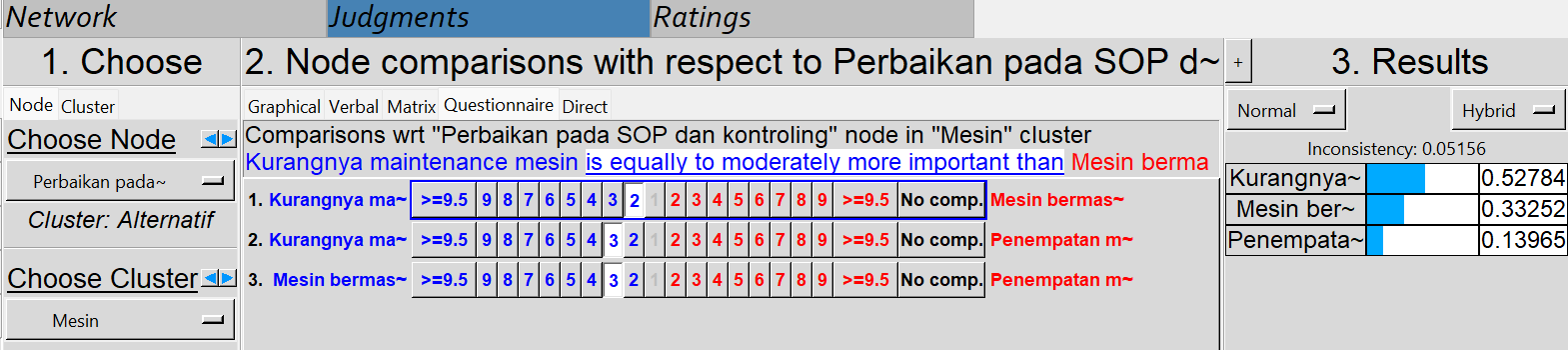
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| L1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | L2 | 3 | 3 |
| L1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | L3 | 3 | 3 |
| L1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | L4 | 3 | 3 |
| L2 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | L3 | 3 | 3 |
| L2 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | L4 | 3 | 3 |
| L3 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | L4 | 1,732 | 2 |

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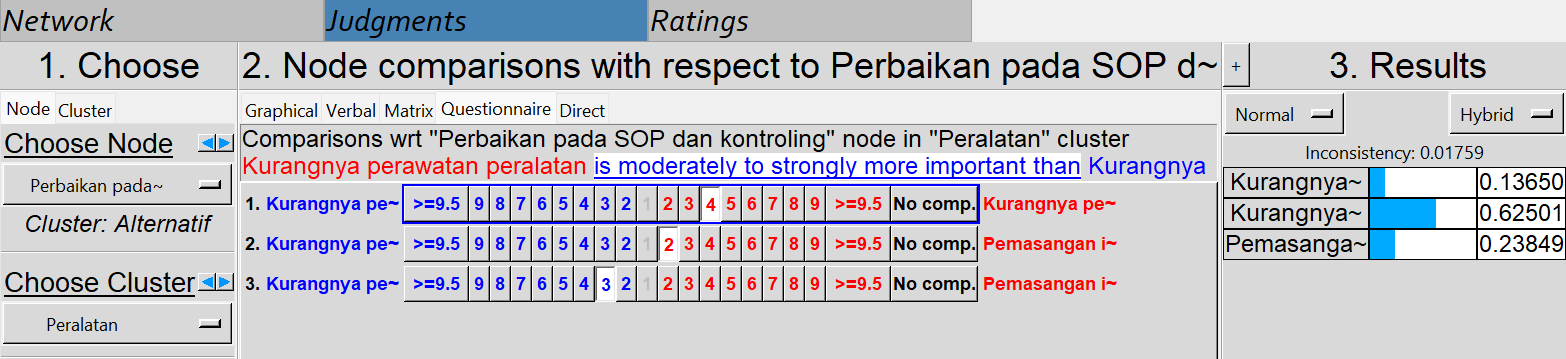
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| P1 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |  |  |  |  | P2 | 5 | 5 |
| P1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | P3 | 3 | 3 |
| P1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | P4 | 3 | 3 |
| P2 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | P3 | 3 | 3 |
| P2 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | P4 | 1,732 | 2 |
| P3 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | P4 | 1,732 | 2 |

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|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| M1 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | M2 | 1,732 | 2 |
| M1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | M3 | 3 | 3 |
| M2 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | M3 | 3 | 3 |

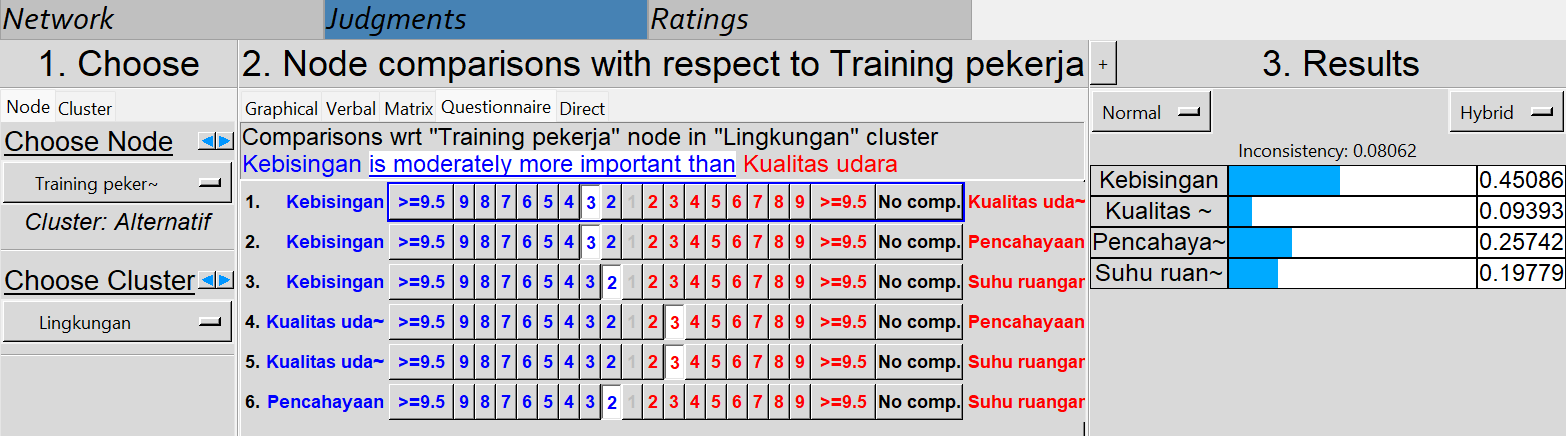
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|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| T1 |  |  |  |  |  |  |  |  |  |  | 3 |  | 5 |  |  |  |  | T2 | 3,873 | 4 |
| T1 |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | T3 | 1,732 | 2 |
| T2 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | T3 | 3 | 3 |

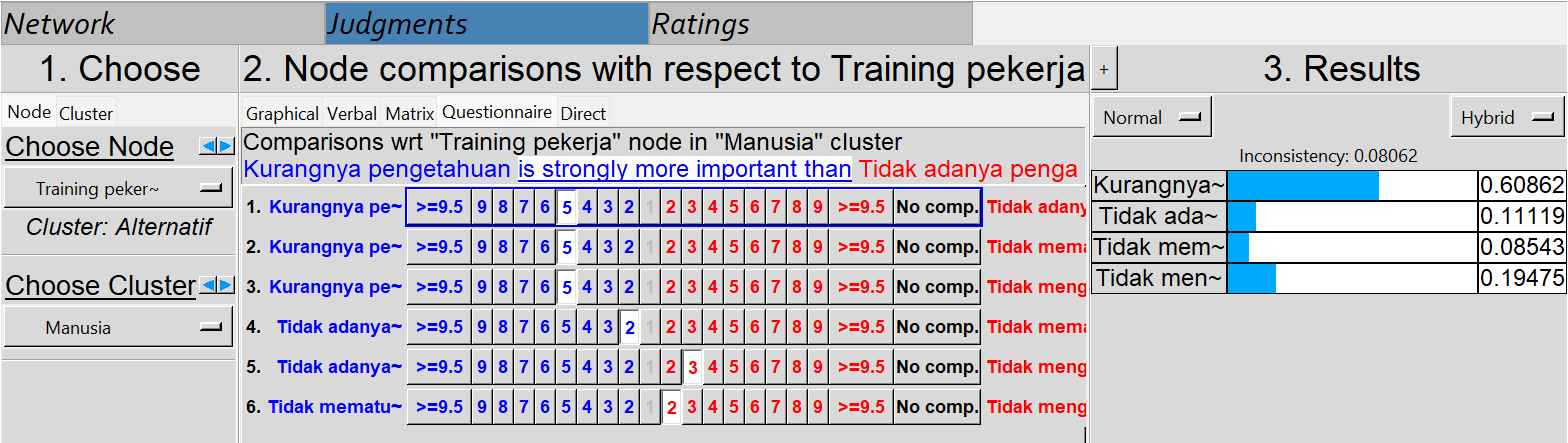
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**Training pekerja**

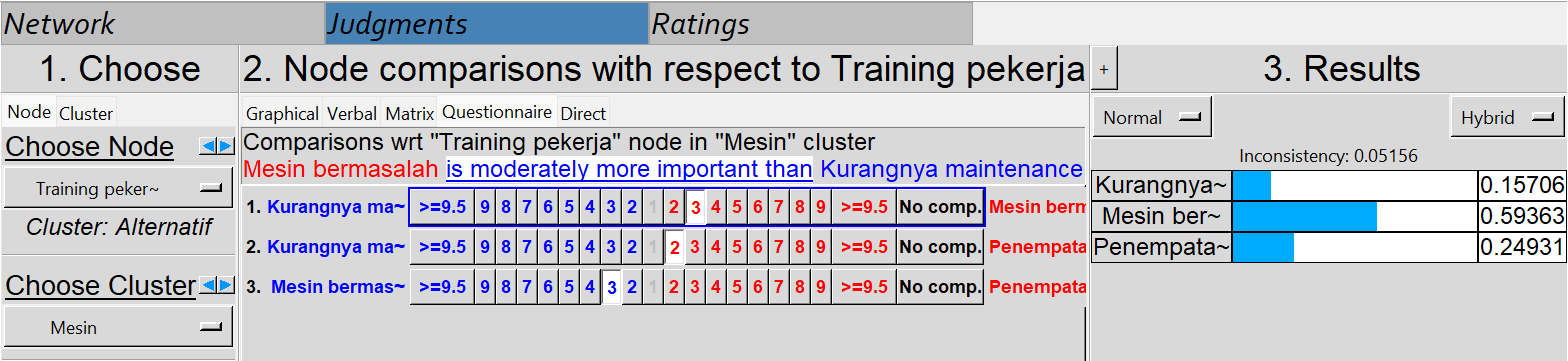
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| L1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | L2 | 3 | 3 |
| L1 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | L3 | 3 | 3 |
| L1 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | L4 | 1,732 | 2 |
| L2 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | L3 | 3 | 3 |
| L2 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | L4 | 3 | 3 |
| L3 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | L4 | 1,732 | 2 |

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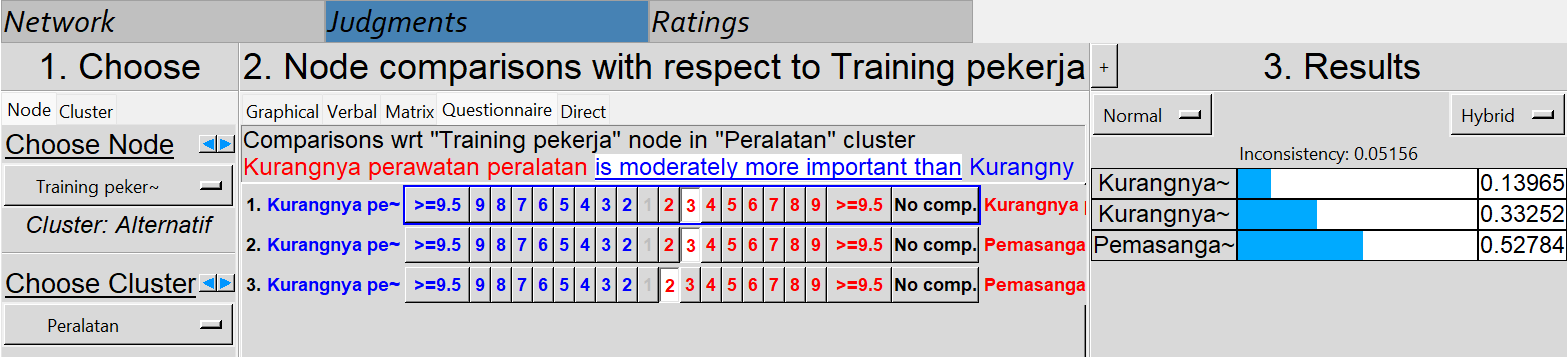
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| P1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | P2 | 5 | 5 |
| P1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | P3 | 5 | 5 |
| P1 |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  | P4 | 5 | 5 |
| P2 |  |  |  |  |  |  | 3 |  | 1 |  |  |  |  |  |  |  |  | P3 | 1,732 | 2 |
| P2 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | P4 | 3 | 3 |
| P3 |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | P4 | 1,732 | 2 |

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|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| M1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | M2 | 3 | 3 |
| M1 |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | M3 | 1,732 | 2 |
| M2 |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  | M3 | 3 | 3 |

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|  | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  | GM | RU |
| T1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | T2 | 3 | 3 |
| T1 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | T3 | 3 | 3 |
| T2 |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |  | T3 | 1,732 | 2 |

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