Total Cost of Ownership AHP Results

# Engineer 1

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 3.0000 | 3.0000 | 3.0000 | 3.0000 |
| 0.3333 | 1.0000 | 3.0000 | 3.0000 | 3.0000 |
| 0.3333 | 0.3333 | 1.0000 | 3.0000 | 3.0000 |
| 0.3333 | 0.3333 | 0.3333 | 1.0000 | 3.0000 |
| 0.3333 | 0.3333 | 0.3333 | 0.3333 | 1.0000 |

Weights:  
 [0.40005673 0.25779416 0.16612102 0.10704739 0.0689807 ]

Max Eigenvalue: 5.4989+0.0000j

Consistency Index (CI): 0.1247+0.0000j

Consistency Ratio (CR): 0.1114+0.0000j

Random Index (RI): 1.1200

# Engineer 2

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 3.0000 |
| 1.0000 | 1.0000 | 1.0000 | 3.0000 | 3.0000 |
| 1.0000 | 1.0000 | 0.3333 | 1.0000 | 3.0000 |
| 1.0000 | 0.3333 | 0.3333 | 0.3333 | 1.0000 |

Weights:  
 [0.18871137 0.22611942 0.29734338 0.18871137 0.09911446]

Max Eigenvalue: 5.2991+0.0000j

Consistency Index (CI): 0.0748+0.0000j

Consistency Ratio (CR): 0.0668+0.0000j

Random Index (RI): 1.1200

# Engineer 3

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 3.0000 | 3.0000 | 1.0000 |
| 1.0000 | 1.0000 | 9.0000 | 3.0000 | 5.0000 |
| 0.3333 | 0.1111 | 1.0000 | 1.0000 | 3.0000 |
| 0.3333 | 0.3333 | 1.0000 | 1.0000 | 9.0000 |
| 1.0000 | 0.2000 | 0.3333 | 0.1111 | 1.0000 |

Weights:  
 [0.25027235 0.39276667 0.10041159 0.1838923 0.07265708]

Max Eigenvalue: 6.2676+0.0000j

Consistency Index (CI): 0.3169+0.0000j

Consistency Ratio (CR): 0.2829+0.0000j

Random Index (RI): 1.1200

# Engineer 4

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.2 0.2 0.2 0.2 0.2]

Max Eigenvalue: 5.0000

Consistency Index (CI): -0.0000

Consistency Ratio (CR): -0.0000

Random Index (RI): 1.1200

# Engineer 5

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 0.1111 | 0.1111 | 0.1111 | 0.1111 |
| 9.0009 | 1.0000 | 1.0000 | 1.0000 | 3.0000 |
| 9.0009 | 1.0000 | 1.0000 | 1.0000 | 3.0000 |
| 9.0009 | 1.0000 | 1.0000 | 1.0000 | 3.0000 |
| 9.0009 | 0.3333 | 0.3333 | 0.3333 | 1.0000 |

Weights:  
 [0.02606837 0.28306867 0.28306867 0.28306867 0.12472563]

Max Eigenvalue: 5.1508+0.0000j

Consistency Index (CI): 0.0377+0.0000j

Consistency Ratio (CR): 0.0337+0.0000j

Random Index (RI): 1.1200

# Engineer 6

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.2 0.2 0.2 0.2 0.2]

Max Eigenvalue: 5.0000

Consistency Index (CI): -0.0000

Consistency Ratio (CR): -0.0000

Random Index (RI): 1.1200

# Engineer 7

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 5.0000 |
| 1.0000 | 1.0000 | 5.0000 | 3.0000 | 3.0000 |
| 1.0000 | 0.2000 | 1.0000 | 3.0000 | 7.0000 |
| 1.0000 | 0.3333 | 0.3333 | 1.0000 | 7.0000 |
| 0.2000 | 0.3333 | 0.1429 | 0.1429 | 1.0000 |

Weights:  
 [0.20245769 0.38607119 0.21637763 0.1493687 0.0457248 ]

Max Eigenvalue: 5.8427+0.0000j

Consistency Index (CI): 0.2107+0.0000j

Consistency Ratio (CR): 0.1881+0.0000j

Random Index (RI): 1.1200

# Engineer 8

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 5.0000 | 1.0000 | 1.0000 | 5.0000 |
| 0.2000 | 1.0000 | 1.0000 | 0.2000 | 5.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 5.0000 |
| 1.0000 | 5.0000 | 1.0000 | 1.0000 | 5.0000 |
| 0.2000 | 0.2000 | 0.2000 | 0.2000 | 1.0000 |

Weights:  
 [0.30794024 0.12513898 0.21581711 0.30794024 0.04316342]

Max Eigenvalue: 5.4336+0.0000j

Consistency Index (CI): 0.1084+0.0000j

Consistency Ratio (CR): 0.0968+0.0000j

Random Index (RI): 1.1200

# Engineer 9

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 3.0000 | 5.0000 | 5.0000 |
| 1.0000 | 1.0000 | 3.0000 | 1.0000 | 3.0000 |
| 0.3333 | 0.3333 | 1.0000 | 5.0000 | 5.0000 |
| 0.2000 | 1.0000 | 0.2000 | 1.0000 | 3.0000 |
| 0.2000 | 0.3333 | 0.2000 | 0.3333 | 1.0000 |

Weights:  
 [0.35976192 0.26499225 0.21346261 0.11139438 0.05038884]

Max Eigenvalue: 5.7651+0.0000j

Consistency Index (CI): 0.1913+0.0000j

Consistency Ratio (CR): 0.1708+0.0000j

Random Index (RI): 1.1200

# Engineer 10

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.2 0.2 0.2 0.2 0.2]

Max Eigenvalue: 5.0000

Consistency Index (CI): -0.0000

Consistency Ratio (CR): -0.0000

Random Index (RI): 1.1200

# Engineer 11

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 5.0000 | 7.0000 |
| 1.0000 | 1.0000 | 1.0000 | 5.0000 | 3.0000 |
| 1.0000 | 1.0000 | 1.0000 | 7.0000 | 5.0000 |
| 0.2000 | 0.2000 | 0.1429 | 1.0000 | 3.0000 |
| 0.1429 | 0.3333 | 0.2000 | 0.3333 | 1.0000 |

Weights:  
 [0.30232247 0.26378017 0.31054023 0.07251815 0.05083898]

Max Eigenvalue: 5.2762+0.0000j

Consistency Index (CI): 0.0690+0.0000j

Consistency Ratio (CR): 0.0616+0.0000j

Random Index (RI): 1.1200

# Engineer 12

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 0.1111 | 0.1429 | 0.1111 | 0.2000 |
| 9.0009 | 1.0000 | 0.1429 | 0.2000 | 0.2000 |
| 6.9979 | 6.9979 | 1.0000 | 7.0000 | 7.0000 |
| 9.0009 | 5.0000 | 0.1429 | 1.0000 | 7.0000 |
| 5.0000 | 5.0000 | 0.1429 | 0.1429 | 1.0000 |

Weights:  
 [0.02449214 0.06699431 0.55879829 0.24613808 0.10357717]

Max Eigenvalue: 6.5265+0.0000j

Consistency Index (CI): 0.3816+0.0000j

Consistency Ratio (CR): 0.3407+0.0000j

Random Index (RI): 1.1200

# Engineer 13

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 5.0000 | 5.0000 | 5.0000 | 5.0000 |
| 0.2000 | 1.0000 | 3.0000 | 5.0000 | 7.0000 |
| 0.2000 | 0.3333 | 1.0000 | 5.0000 | 3.0000 |
| 0.2000 | 0.2000 | 0.2000 | 1.0000 | 5.0000 |
| 0.2000 | 0.1429 | 0.3333 | 0.2000 | 1.0000 |

Weights:  
 [0.50412728 0.24017437 0.13907246 0.07660761 0.04001828]

Max Eigenvalue: 5.9181+0.0000j

Consistency Index (CI): 0.2295+0.0000j

Consistency Ratio (CR): 0.2049+0.0000j

Random Index (RI): 1.1200

# Engineer 14

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 5.0000 | 5.0000 | 1.0000 | 1.0000 |
| 0.2000 | 1.0000 | 1.0000 | 1.0000 | 5.0000 |
| 0.2000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 3.0000 |
| 1.0000 | 0.2000 | 1.0000 | 0.3333 | 1.0000 |

Weights:  
 [0.36950106 0.19352144 0.11624353 0.20366404 0.11706993]

Max Eigenvalue: 6.0597+0.0000j

Consistency Index (CI): 0.2649+0.0000j

Consistency Ratio (CR): 0.2365+0.0000j

Random Index (RI): 1.1200

# Engineer 15

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 3.0000 | 3.0000 | 3.0000 |
| 1.0000 | 0.3333 | 1.0000 | 3.0000 | 3.0000 |
| 1.0000 | 0.3333 | 0.3333 | 1.0000 | 3.0000 |
| 1.0000 | 0.3333 | 0.3333 | 0.3333 | 1.0000 |

Weights:  
 [0.18185335 0.35155563 0.22654034 0.14598124 0.09406944]

Max Eigenvalue: 5.4989+0.0000j

Consistency Index (CI): 0.1247+0.0000j

Consistency Ratio (CR): 0.1114+0.0000j

Random Index (RI): 1.1200

# Engineer 16

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 5.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 0.2000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.18737005 0.29469315 0.18737005 0.14319671 0.18737005]

Max Eigenvalue: 5.3370+0.0000j

Consistency Index (CI): 0.0843+0.0000j

Consistency Ratio (CR): 0.0752+0.0000j

Random Index (RI): 1.1200

# Engineer 17

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 5.0000 | 3.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 3.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 3.0000 |
| 0.2000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 0.3333 | 0.3333 | 0.3333 | 1.0000 | 1.0000 |

Weights:  
 [0.32606707 0.22194364 0.22194364 0.13871054 0.09133512]

Max Eigenvalue: 5.3287+0.0000j

Consistency Index (CI): 0.0822+0.0000j

Consistency Ratio (CR): 0.0734+0.0000j

Random Index (RI): 1.1200

# Engineer 18

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.2 0.2 0.2 0.2 0.2]

Max Eigenvalue: 5.0000

Consistency Index (CI): -0.0000

Consistency Ratio (CR): -0.0000

Random Index (RI): 1.1200

# Engineer 19

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.2 0.2 0.2 0.2 0.2]

Max Eigenvalue: 5.0000

Consistency Index (CI): -0.0000

Consistency Ratio (CR): -0.0000

Random Index (RI): 1.1200

# Engineer 20

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.2 0.2 0.2 0.2 0.2]

Max Eigenvalue: 5.0000

Consistency Index (CI): -0.0000

Consistency Ratio (CR): -0.0000

Random Index (RI): 1.1200

# Engineer 21

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.2 0.2 0.2 0.2 0.2]

Max Eigenvalue: 5.0000

Consistency Index (CI): -0.0000

Consistency Ratio (CR): -0.0000

Random Index (RI): 1.1200

# Engineer 22

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 0.1111 | 1.0000 | 0.1111 |
| 1.0000 | 1.0000 | 1.0000 | 9.0000 | 9.0000 |
| 9.0009 | 1.0000 | 1.0000 | 9.0000 | 1.0000 |
| 1.0000 | 0.1111 | 0.1111 | 1.0000 | 0.1111 |
| 9.0009 | 0.1111 | 1.0000 | 9.0009 | 1.0000 |

Weights:  
 [0.08087824 0.41258709 0.26433565 0.02936916 0.21282987]

Max Eigenvalue: 7.1199+0.0000j

Consistency Index (CI): 0.5300+0.0000j

Consistency Ratio (CR): 0.4732+0.0000j

Random Index (RI): 1.1200

# Engineer 23

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 3.0000 | 5.0000 | 5.0000 | 5.0000 |
| 0.3333 | 1.0000 | 5.0000 | 5.0000 | 3.0000 |
| 0.2000 | 0.2000 | 1.0000 | 3.0000 | 5.0000 |
| 0.2000 | 0.2000 | 0.3333 | 1.0000 | 5.0000 |
| 0.2000 | 0.3333 | 0.2000 | 0.2000 | 1.0000 |

Weights:  
 [0.44881973 0.28483788 0.13208093 0.08733269 0.04692877]

Max Eigenvalue: 5.8711+0.0000j

Consistency Index (CI): 0.2178+0.0000j

Consistency Ratio (CR): 0.1944+0.0000j

Random Index (RI): 1.1200

# Engineer 24

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.2 0.2 0.2 0.2 0.2]

Max Eigenvalue: 5.0000

Consistency Index (CI): -0.0000

Consistency Ratio (CR): -0.0000

Random Index (RI): 1.1200

# Engineer 25

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 3.0000 | 1.0000 |
| 1.0000 | 1.0000 | 0.3333 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.19414572 0.19414572 0.25663329 0.16092955 0.19414572]

Max Eigenvalue: 5.1508+0.0000j

Consistency Index (CI): 0.0377+0.0000j

Consistency Ratio (CR): 0.0337+0.0000j

Random Index (RI): 1.1200

# Engineer 26

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 5.0000 | 5.0000 | 5.0000 | 5.0000 |
| 0.2000 | 1.0000 | 5.0000 | 5.0000 | 5.0000 |
| 0.2000 | 0.2000 | 1.0000 | 5.0000 | 5.0000 |
| 0.2000 | 0.2000 | 0.2000 | 1.0000 | 5.0000 |
| 0.2000 | 0.2000 | 0.2000 | 0.2000 | 1.0000 |

Weights:  
 [0.49447337 0.25974961 0.13644792 0.07167685 0.03765225]

Max Eigenvalue: 6.1118+0.0000j

Consistency Index (CI): 0.2779+0.0000j

Consistency Ratio (CR): 0.2482+0.0000j

Random Index (RI): 1.1200

# Engineer 27

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 5.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 3.0000 |
| 1.0000 | 0.2000 | 1.0000 | 0.3333 | 1.0000 |

Weights:  
 [0.18766316 0.27570413 0.18766316 0.23168365 0.1172859 ]

Max Eigenvalue: 5.3287+0.0000j

Consistency Index (CI): 0.0822+0.0000j

Consistency Ratio (CR): 0.0734+0.0000j

Random Index (RI): 1.1200

# Engineer 28

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.2 0.2 0.2 0.2 0.2]

Max Eigenvalue: 5.0000

Consistency Index (CI): -0.0000

Consistency Ratio (CR): -0.0000

Random Index (RI): 1.1200

# Engineer 29

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 3.0000 | 3.0000 | 3.0000 | 3.0000 |
| 0.3333 | 1.0000 | 3.0000 | 3.0000 | 1.0000 |
| 0.3333 | 0.3333 | 1.0000 | 3.0000 | 1.0000 |
| 0.3333 | 0.3333 | 0.3333 | 1.0000 | 3.0000 |
| 0.3333 | 1.0000 | 1.0000 | 0.3333 | 1.0000 |

Weights:  
 [0.38776905 0.22448329 0.14710758 0.12603014 0.11460994]

Max Eigenvalue: 5.7366+0.0000j

Consistency Index (CI): 0.1841+0.0000j

Consistency Ratio (CR): 0.1644+0.0000j

Random Index (RI): 1.1200

# Engineer 30

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.3333 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 3.0003 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.16092614 0.19414465 0.19414465 0.19414465 0.25663992]

Max Eigenvalue: 5.1508+0.0000j

Consistency Index (CI): 0.0377+0.0000j

Consistency Ratio (CR): 0.0337+0.0000j

Random Index (RI): 1.1200

# Engineer 31

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.2 0.2 0.2 0.2 0.2]

Max Eigenvalue: 5.0000

Consistency Index (CI): -0.0000

Consistency Ratio (CR): -0.0000

Random Index (RI): 1.1200

# Engineer 32

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 0.1111 | 0.1429 | 0.1429 | 0.1429 |
| 9.0009 | 1.0000 | 0.1111 | 0.1111 | 0.1111 |
| 6.9979 | 9.0009 | 1.0000 | 0.1111 | 0.1429 |
| 6.9979 | 9.0009 | 9.0009 | 1.0000 | 0.1111 |
| 6.9979 | 9.0009 | 6.9979 | 9.0009 | 1.0000 |

Weights:  
 [0.02176996 0.0471313 0.10801016 0.2537659 0.56932268]

Max Eigenvalue: 7.3523+0.0000j

Consistency Index (CI): 0.5881+0.0000j

Consistency Ratio (CR): 0.5251+0.0000j

Random Index (RI): 1.1200

# Engineer 33

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.2 0.2 0.2 0.2 0.2]

Max Eigenvalue: 5.0000

Consistency Index (CI): -0.0000

Consistency Ratio (CR): -0.0000

Random Index (RI): 1.1200

# Engineer 34

Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Weights:  
 [0.2 0.2 0.2 0.2 0.2]

Max Eigenvalue: 5.0000

Consistency Index (CI): -0.0000

Consistency Ratio (CR): -0.0000

Random Index (RI): 1.1200

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Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 5.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 5.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 5.0000 |
| 1.0000 | 1.0000 | 1.0000 | 1.0000 | 5.0000 |
| 0.2000 | 0.2000 | 0.2000 | 0.2000 | 1.0000 |

Weights:  
 [0.23809524 0.23809524 0.23809524 0.23809524 0.04761905]

Max Eigenvalue: 5.0000

Consistency Index (CI): -0.0000

Consistency Ratio (CR): -0.0000

Random Index (RI): 1.1200

# Aggregate Results

Aggregate Pairwise Comparison Matrix:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1.0000 | 0.9736 | 0.9049 | 1.0475 | 1.1444 |
| 1.0271 | 1.0000 | 1.0000 | 1.0759 | 1.5208 |
| 1.1050 | 1.0000 | 1.0000 | 1.2072 | 1.4467 |
| 0.9546 | 0.9295 | 0.8283 | 1.0000 | 1.4135 |
| 0.8738 | 0.6576 | 0.6912 | 0.7075 | 1.0000 |

Aggregate Weights:  
 [0.20056998 0.21980439 0.22588621 0.19973791 0.15400151]

Aggregate Max Eigenvalue: 5.0080+0.0000j

Aggregate Consistency Index (CI): 0.0020+0.0000j

Aggregate Consistency Ratio (CR): 0.0018+0.0000j

Aggregate Random Index (RI): 1.1200