# Criteria Analysis

## Engineer 1

Pairwise Comparison Matrix:  
[[1. 1. 3. ]  
 [1. 1. 1. ]  
 [0.333 1. 1. ]]

Weights:  
[0.46, 0.319, 0.221]

Max Eigenvalue: 3.136

Consistency Index (CI): 0.068

Consistency Ratio (CR): 0.117

Random Index (RI): 0.58

## Engineer 2

Pairwise Comparison Matrix:  
[[1. 1. 1. ]  
 [1. 1. 3. ]  
 [1. 0.333 1. ]]

Weights:  
[0.319, 0.46, 0.221]

Max Eigenvalue: 3.136

Consistency Index (CI): 0.068

Consistency Ratio (CR): 0.117

Random Index (RI): 0.58

## Engineer 3

Pairwise Comparison Matrix:  
[[1. 3. 1. ]  
 [0.333 1. 3. ]  
 [1. 0.333 1. ]]

Weights:  
[0.46, 0.319, 0.221]

Max Eigenvalue: 3.561

Consistency Index (CI): 0.28

Consistency Ratio (CR): 0.483

Random Index (RI): 0.58

## Engineer 4

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 5

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 6

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 7

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 8

Pairwise Comparison Matrix:  
[[1. 9. 5. ]  
 [0.111 1. 0.111]  
 [0.2 9.001 1. ]]

Weights:  
[0.711, 0.046, 0.243]

Max Eigenvalue: 3.295

Consistency Index (CI): 0.147

Consistency Ratio (CR): 0.254

Random Index (RI): 0.58

## Engineer 9

Pairwise Comparison Matrix:  
[[1. 3. 1. ]  
 [0.333 1. 5. ]  
 [1. 0.2 1. ]]

Weights:  
[0.449, 0.369, 0.182]

Max Eigenvalue: 3.872

Consistency Index (CI): 0.436

Consistency Ratio (CR): 0.751

Random Index (RI): 0.58

## Engineer 10

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 11

Pairwise Comparison Matrix:  
[[1. 3. 1. ]  
 [0.333 1. 3. ]  
 [1. 0.333 1. ]]

Weights:  
[0.46, 0.319, 0.221]

Max Eigenvalue: 3.561

Consistency Index (CI): 0.28

Consistency Ratio (CR): 0.483

Random Index (RI): 0.58

## Engineer 12

Pairwise Comparison Matrix:  
[[1. 1. 0.2]  
 [1. 1. 1. ]  
 [5. 1. 1. ]]

Weights:  
[0.177, 0.304, 0.519]

Max Eigenvalue: 3.295

Consistency Index (CI): 0.147

Consistency Ratio (CR): 0.254

Random Index (RI): 0.58

## Engineer 13

Pairwise Comparison Matrix:  
[[1. 3. 3. ]  
 [0.333 1. 5. ]  
 [0.333 0.2 1. ]]

Weights:  
[0.567, 0.323, 0.11]

Max Eigenvalue: 3.295

Consistency Index (CI): 0.147

Consistency Ratio (CR): 0.254

Random Index (RI): 0.58

## Engineer 14

Pairwise Comparison Matrix:  
[[1. 3. 1. ]  
 [0.333 1. 1. ]  
 [1. 1. 1. ]]

Weights:  
[0.46, 0.221, 0.319]

Max Eigenvalue: 3.136

Consistency Index (CI): 0.068

Consistency Ratio (CR): 0.117

Random Index (RI): 0.58

## Engineer 15

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 16

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 17

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 18

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 19

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 20

Pairwise Comparison Matrix:  
[[1. 5. 1. ]  
 [0.2 1. 1. ]  
 [1. 1. 1. ]]

Weights:  
[0.519, 0.177, 0.304]

Max Eigenvalue: 3.295

Consistency Index (CI): 0.147

Consistency Ratio (CR): 0.254

Random Index (RI): 0.58

## Engineer 21

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 22

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 23

Pairwise Comparison Matrix:  
[[1. 1. 3. ]  
 [1. 1. 3. ]  
 [0.333 0.333 1. ]]

Weights:  
[0.429, 0.429, 0.143]

Max Eigenvalue: 3.0

Consistency Index (CI): -0.0

Consistency Ratio (CR): -0.0

Random Index (RI): 0.58

## Engineer 24

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 25

Pairwise Comparison Matrix:  
[[1. 3. 1. ]  
 [0.333 1. 1. ]  
 [1. 1. 1. ]]

Weights:  
[0.46, 0.221, 0.319]

Max Eigenvalue: 3.136

Consistency Index (CI): 0.068

Consistency Ratio (CR): 0.117

Random Index (RI): 0.58

## Engineer 26

Pairwise Comparison Matrix:  
[[1. 3. 3. ]  
 [0.333 1. 3. ]  
 [0.333 0.333 1. ]]

Weights:  
[0.584, 0.281, 0.135]

Max Eigenvalue: 3.136

Consistency Index (CI): 0.068

Consistency Ratio (CR): 0.117

Random Index (RI): 0.58

## Engineer 27

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 28

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 29

Pairwise Comparison Matrix:  
[[1. 5. 3. ]  
 [0.2 1. 5. ]  
 [0.333 0.2 1. ]]

Weights:  
[0.637, 0.258, 0.105]

Max Eigenvalue: 3.521

Consistency Index (CI): 0.26

Consistency Ratio (CR): 0.449

Random Index (RI): 0.58

## Engineer 30

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 31

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 32

Pairwise Comparison Matrix:  
[[1. 0.111 0.143]  
 [9.001 1. 0.111]  
 [6.998 9.001 1. ]]

Weights:  
[0.048, 0.191, 0.761]

Max Eigenvalue: 3.704

Consistency Index (CI): 0.352

Consistency Ratio (CR): 0.607

Random Index (RI): 0.58

## Engineer 33

Pairwise Comparison Matrix:  
[[1. 1. 0.333]  
 [1. 1. 1. ]  
 [3. 1. 1. ]]

Weights:  
[0.221, 0.319, 0.46]

Max Eigenvalue: 3.136

Consistency Index (CI): 0.068

Consistency Ratio (CR): 0.117

Random Index (RI): 0.58

## Engineer 34

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Engineer 35

Pairwise Comparison Matrix:  
[[1. 1. 1.]  
 [1. 1. 1.]  
 [1. 1. 1.]]

Weights:  
[0.333, 0.333, 0.333]

Max Eigenvalue: 3.0

Consistency Index (CI): 0.0

Consistency Ratio (CR): 0.0

Random Index (RI): 0.58

## Aggregate Results

Aggregate Pairwise Comparison Matrix:  
[[1. 1. 1.056]  
 [1. 1. 1.056]  
 [0.947 0.947 1. ]]

Aggregate Weights:  
[0.339, 0.339, 0.321]

Aggregate Max Eigenvalue: 3.0

Aggregate Consistency Index (CI): 0.0

Aggregate Consistency Ratio (CR): 0.0

Aggregate Random Index (RI): 0.58