

Given information system

Normalized decision matrix

$$P_{ij}^k = \begin{cases} ([\eta_{C_r}^-, \eta_{C_r}^+] e^{i2\pi[\eta_{C_r}^-, \eta_{C_r}^+]}, [\psi_{C_r}^-, \psi_{C_r}^+] e^{i2\pi[\psi_{C_r}^-, \psi_{C_r}^+]}) & \text{for benifite attribute } C_r \\ ([\psi_{C_r}^-, \psi_{C_r}^+] e^{i2\pi[\psi_{C_r}^-, \psi_{C_r}^+]}, [\eta_{C_r}^-, \eta_{C_r}^+] e^{i2\pi[\eta_{C_r}^-, \eta_{C_r}^+]}) & \text{for cost attribute } C_r \end{cases}$$

Use Definition 6 or Definition 8 to aggregate the decision matrix G_k ,

$$P_i^k = CIVq-ROFWAM_E(P_{i1}^k, P_{i2}^k, P_{i3}^k, \dots, P_{im}^k),$$

or

$$P_i^k = CIVq-ROFWGM_E(P_{i1}^k, P_{i2}^k, P_{i3}^k, \dots, P_{im}^k)$$

Aggregate the difference preferences $P_i^k, i=1,2,3,\dots,m$ into P_i by applying Definition 6 or Definition 8,

$$P_i = CIVq-ROFWAM_E(P_i^1, P_i^2, P_i^3, \dots, P_i^l)$$

or

$$P_i = CIVq-ROFWGM_E(P_i^1, P_i^2, P_i^3, \dots, P_i^l).$$

Compute the score values or accuracy values of the aggregated values

Determine which selection is better by ranking each one based on score values or accuracy values.