The detailed procedure of the Entropy Weight Method is as follows:

Step 1: Standardization of the original values of the indicators.

For positive indicators:

$$X'_{ij} = \frac{X_{ij} - \min(X_j)}{max(X_j) - \min(X_j)}. \tag{B1}$$

For negative indicators:

$$X'_{ij} = \frac{\max(X_j) - X_{ij}}{\max(X_j) - \min(X_j)}, \tag{B2}$$

where X_{ij} is the original value of the ith evaluation object on the j-th indicator, X'_{ij} is the standardized value, $\min(X_j)$ is the minimum value, and $\max(X_j)$ is the maximum value.

Step 2: Calculate the proportion of the ith evaluation object on the j-th indicator:

$$Y_{ij} = \frac{X'_{ij}}{\sum_{i=1}^{m} X'_{ij}}. \tag{B3}$$

Step 3: Define the entropy of each evaluation indicator:

$$e_j = -k \sum_{i=1}^{m} (Y_{ij} \times \ln Y_{ij}) Y_{ij} > 0, \tag{B4}$$

where $k = 1/lnm$, m is the number of samples.

Step 4: Calculate the redundancy of the entropy:

$$d_j = 1 - e_j. \tag{B5}$$

Step 5: Determine the entropy weight of each evaluation indicator:

$$w_j = d_j / \sum_{j=1}^{n} d_j. \tag{B6}$$

Finally, compute the comprehensive score of the indicators using the following formula:

$$AI_i = \sum_{j=1}^{n} I_{ij} \times w_j, \tag{B7}$$

where AI_i represents the Artificial Intelligence Index, n is the number of indicators, I_{ij} represents the value of the j-th indicator in the i-th unit, and w_j represents the weight of each indicator.