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AUTHOR CORRECTION

Correction to: Applying fuzzy AHP–TOPSIS technique in identifying the content strategy of sustainable manufacturing for food production

Lanndon A. Ocampo[1]

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Unfortunately, the below equations have been published incorrectly in the original publication. The correct equations are provided below:

Equation (11):

$$X = \left(x_{ij}\right)_{m\times n} = \left(\sum_{k=1}^{K}\left(\omega_k * x_{ij}^{k}\right)\right)_{m\times n}. \tag{11}$$

In Step 4 appearing above Eq. 13, the notation v_{ij} is written twice. It should be read as:

Calculate the weighted normalized decision matrix $V=(v_{ij})_{m\times n}$. The weighted normalized value v_{ij} is calculated as follows:

$$v_{ij} = r_{ij} \times w_j, \tag{13}$$

where w_j is the weight of the jth criterion or attribute defined by a pre-defined prioritization (weighting) process and $\sum_{j=1}^{n} w_j = 1$.

Equations (14), (15), (16) and (17) should be read as:

$$A^{+} = \left\{\left(\max_i v_{ij} | j \in C_b\right), \left(\min_i v_{ij} | j \in C_c\right)\right\} = \left\{v_j^{+} | j = 1, 2, \ldots, n\right\} \tag{14}$$

$$A^{-} = \left\{\left(\min_i v_{ij} | j \in C_b\right), \left(\max_i v_{ij} | j \in C_c\right)\right\} = \left\{v_j^{-} | j = 1, 2, \ldots, n\right\}, \tag{15}$$

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✉ Lanndon A. Ocampo
lanndonocampo@gmail.com

[1] Department of Industrial Engineering, Cebu Technological University, Corner M.J. Cuenco Ave. & R. Palma St., 6000 Cebu City, Philippines

where C_b and C_c are the set of maximizing and minimizing criteria, respectively.

$$S_i^+ = \sqrt{\sum_{j=1}^{n} \left(v_{ij} - v_j^+\right)^2}, \quad i = 1, 2, \ldots, m \tag{16}$$

$$S_i^- = \sqrt{\sum_{j=1}^{n} \left(v_{ij} - v_j^-\right)^2}, \quad i = 1, 2, \ldots, m. \tag{17}$$

Correct Step 7, and Eq. (26) appearing below Table 7 in the original article should be read as:

7. The aggregate fuzzy numbers were then normalized into $\tilde{r}_{ij}$ using Eq. (26)

$$\tilde{r}_{ij} = \left(\frac{X_{ija}}{d_j^*}, \frac{X_{ijb}}{d_j^*}, \frac{X_{ijc}}{d_j^*}\right), \tag{26}$$

where $d_j^* = \max_c X_{ijc}$.

Correct Steps 8 and 9 appearing below Table 7 must be read as below:

8. The fuzzy weighted normalized decision matrix $\tilde{V} = \left(\tilde{v}_{ij}\right)_{m\times n}$ is then found by multiplying the normalized aggregated fuzzy matrix $\tilde{R} = \left(\tilde{r}_{ij}\right)_{m\times n}$ and the global weight vector (w) of decision options which is obtained in Step 5.

$$\tilde{v}_{ij} = \tilde{r}_{ij} \times w_j. \tag{27}$$

9. By using the vertex method, the separation distance is computed for each option from the fuzzy positive ideal solution (A^+) and fuzzy negative ideal solution (A^-).

$$A^+ = \left\{\tilde{v}_1^+, \tilde{v}_2^+, \tilde{v}_3^+, \ldots, \tilde{v}_n^+\right\} \tag{28}$$

$$A^- = \left\{\tilde{v}_1^-, \tilde{v}_2^-, \tilde{v}_3^-, \ldots, \tilde{v}_n^-\right\} \tag{29}$$

$$d\left(\tilde{v}_{ij}, \tilde{v}_j^+\right) = \sqrt{\frac{1}{3}\left[\left(\tilde{v}_{ija} - \tilde{v}_{ja}^+\right)^2 + \left(\tilde{v}_{ijb} - \tilde{v}_{ja}^+\right)^2 + \left(\tilde{v}_{ijc} - \tilde{v}_{ja}^+\right)^2\right]} \tag{30}$$

$$d\left(\tilde{v}_{ij}, \tilde{v}_j^-\right) = \sqrt{\frac{1}{3}\left[\left(\tilde{v}_{ija} - \tilde{v}_{ja}^-\right)^2 + \left(\tilde{v}_{ijb} - \tilde{v}_{ja}^-\right)^2 + \left(\tilde{v}_{ijc} - \tilde{v}_{ja}^-\right)^2\right]} \tag{31}$$

$$d_i^+ = \sum_{j=1}^{n} d\left(\tilde{v}_{ij}, \tilde{v}_j^+\right) \tag{32}$$

$$d_i^- = \sum_{j=1}^{n} d\left(\tilde{v}_{ij}, \tilde{v}_j^-\right). \tag{33}$$