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The Modeling of Zakat Using AHP technique in Sabah

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Abstract

The distribution of zakat to the asnaf is able to improve the living standards of the asnaf, especially from the social, economic, educational, and economic angles. In addition, it can also help elevate the Islamic teachings and enhance the dignity of the ummah. Therefore, the main goal of this study is to examine the practise of zakat distribution to asnaf in Sabah. This study uses a mix method (mix methods), which is a qualitative method and a hierarchical process of analysis based on linguistic fence (PHA). To obtain preliminary information, semistructured interviews were conducted with five informants, consisting of top management and officers of the Zakat and Fitrah Divisions of the Sabah Islamic Religious Council. Data from the interviews was analysed using a linguistic fence-based analysis (PHA) hierarchical process to determine the decision making weights for an attribute in the evaluation process. Two forms of linguistic fencing, namely concentration and dilation, were used to measure the relative importance of weights for each of the criteria studied. There are five steps used in decision making using the PHA method, namely defining the question, creating a hierarchical structure, generating a paired matrix, normalising the data, calculating the vector eigenvalues, and testing the consistency of the data. To test the applicability of the proposal method, an empirical example of a study proposal to select asnaf eligible to receive zakat has been shown in this paper. The findings show that this approach is very suitable and efficient as a tool to solve the problem of decision making of various criteria in the distribution of zakat. Therefore, it can help decision makers (PK) make their decisions in a simpler and more systematic way.

Keywords: Zakat Distribution, Asnaf, Qualitative, Process Hierarchy Analysis (PHA)

Introduction

Zakat in terms of language is clean, growing, blessing, and praise (Manzur, 2010). whereas zakat, according to syarak, is a certain rate deducted from a specific part of the property that must be given to a specific group when certain conditions are met. From this definition, it is clear that zakat is an obligation to all Muslim individuals when it satisfies the conditions and

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criteria prescribed by Islam (Ngadiman et al., 2016). The provision of zakat has great wisdom for the entire life of Muslims. One of the main goals of zakat law is to reduce and get rid of poverty and help the less fortunate change their income.

The zakat management and administration system in Malaysia is under state authority through the State Islamic Religious Council (MAIN) (Wahid et al., 2017). MAIN in each state has established institutions in their respective states to carry out the process of collection and distribution of zakat. Since 1990, these institutions have been incorporated as institutions that have full responsibility regarding the collection and distribution of zakat in each state (Hidayatie, 2018). The first institution to be incorporated was the Federal Territory Zakat Collection Center in 1991, followed by the Selangor, Pahang and Penang Zakat Centers in 1995, the Negeri Sembilan and Melaka Zakat Collection Centers in 2000, the Sarawak Baitulmal Fund in 2001, and the last, The Sabah Zakat Center, was incorporated in 2007. Currently, there are only three institutions that have been fully corporatised to manage the collection and distribution of zakat, namely Selangor, Penang, and Sabah (Hidayatie, 2018).

The collecting and distribution of zakat in Malaysia are governed by the Malaysian legal system, namely syariah law under state jurisdiction, as legislated by the State Legislative Assembly (DUN) (Wahid et al., 2017). The passed and published law is adopted by MAIN. Consequently, the zakat institution in Malaysia has a different approach for zakat collecting and distribution. Through the Sabah State Zakat and Fitrah Enactment 1993, the obligation to pay zakat is enforced in the state of Sabah. This is a resolution to streamline the administration of zakat, including the determination of zakat-eligible individuals and the implementation of zakat collection and distribution. To facilitate the collection and distribution of zakat, the Sabah Zakat Division has expanded its operating territory to cover five divisions: West Coast, Interior, Kudat, Sandakan, and Tawau (Hidayatie, 2018).

In terms of governing the collection and distribution of zakat, Malaysia's zakat administration has demonstrated substantial growth and progress from year to year. Various changes have been made to empower zakat institutions, particularly with regard to aiding the asnaf (Rahman and Yeap, 2019). Nonetheless, zakat facilities in Malaysia continue to be associated with a number of obstacles and difficulties, particularly in terms of the effectiveness of zakat distribution to the asnaf. Frequently, the distribution of zakat does not reach the actual asnaf, the amount of coverage received by the asnaf remains low, and the cost of assistance to the asnaf does not match to the current cost of dependents.

In addition, the decision of the distribution of zakat to the asnaf group is a topic worthy of significant consideration and discussion. This is demonstrated by the fact that the poor asnaf fakir continue to receive insufficient zakat assistance, resulting in a rising population (Rohaizan et al., 2020). As an Islamic institution with its own authority, the Zakat centre faces a number of integrity challenges, including bureaucracy, lack of transparency, and inefficiency in the administration and implementation of standard operating procedures when collecting or distributing zakat funds (Yassin, 2020). This is evidenced by the fact that certain amils lack the required qualifications and others are permitted to collect zakat fitrah on their behalf (Bernama, 2017). Therefore, the purpose of this study is to investigate the Division of Zakat and Fitrah Sabah's practise of distributing zakat to the poor, needy, and fisabilillah asnaf. This study primarily employs qualitative methodologies through semi-structured interviews and linguistic fence-based analysis (PHA) methods to achieve the objectives.

Asnaf Background

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The interpretation of an asnaf depends on the determination made (Solehah& Adnan, 2018). However, amil should not be burdened with trust in managing zakat alone. The auditors constantly monitor the amil such as auditing the tasks performed by the amil. A distribution of zakat depends on the interpretation made by certain parties. Therefore, the interpretation of each asnaf is very important so that the result of the distribution is more effective and in line with what is commanded by Allah. Ancient and contemporary scholars have many interpretations on asnaf, especially the fisabilillah asnaf group. There are many studies that have been done that focus on the interpretation of fisabilillah asnaf (Solehah & Adnan, 2018).

Previous studies have shown that there are eight groups of asnaf zakat that need to be focused on, among them are asnaf fakir, miskin, Amil, Muallaf, al-riqab, al-gharimin, fisabilillah and ibnu sabil (Rahman et al., 2016). These asnafs receive various forms of assistance which include education, da'wah and other activities in upholding Islamic teachings. (Solehah &Adnan, 2018). The distribution of zakat to the asnaf can be clearly understood based on the following verses of the Qur'an:

Meaning: Zakat is for the poor and for the needy and for those employed to collect (Zakat). And for those whose hearts will be brought together (for Islam) and for slaves and for those in debt and for (those) on the Way of Allah and for the travelers - an obligation by Allah. And Allah is All-Knowing, All-Wise (At-Tawbah -60)

The interpretation of an asnaf is important and very necessary so that the distribution of zakat is done in accordance with Islamic law and does not deviate from the purpose of the provision. (Solehah & Adnan, 2018). Therefore, understanding the text of the Qur'an and Hadith is one of the main ways in determining the interpretation of asnaf in accordance with the requirements of sharia. In terms of determining the eight asnaf, it has been agreed by all scholars but from the point of view of interpreting and determining an asnaf, most scholars have different opinions, especially fisabilillah asnaf. Each of them has their own way of interpreting these asnafs. For example most of the earlier scholars specialized asnaf fisabilillah to those involved in war, namely jihad qital. Mazhab Syafie, on the other hand, specifies that this portion of asnaf should be given to those involved in the war who are not paid a salary by the government. However, there are also scholars who expand the meaning of fisabilillah, they do not focus on individuals involved in war only, but expand its meaning to include all matters related to the interests of Muslims, especially in elevating sharia law (Zahlan et al., 2016).

While previous studies have also discussed the inconsistencies in the interpretation of asnaf fisabillah, including the study of (Ghani & Zulkifli, 2003; Solehah & Adnan, 2018; Som et al., 2016; Rahman et al., 2016; Sukiati, 2015). These studies show some differences in the interpretation of asnaf fisabilillah from some sects. in general, the interpretation of fisabilillah according to the four schools or jumhur ulama is by limiting the scope of fisabilillah to the meaning of jihad and matters related to it. While the interpretation is detailed, each sect has its own interpretation. This is due to differences of opinion in understanding the meaning of fi and lil contained in the verse mustahiq zakat, that is, those who are eligible to receive zakat.

In this regard, contemporary scholars such as al-Qardawi (2001) give opinions that are relevant and appropriate and compatible with current needs, especially in Malaysia. Not only among the scholars there are different opinions in understanding the scope of fisabilillah asnaf but also in Malaysia there are different interpretations of fisabilillah in most states but

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there are also similarities in some states. Similarly in terms of distribution targets there are different and the same (Rahman et al., 2016). Among them, the Federal Territory Religious Council continues asnaf fisabilillah to individuals or organizations involved in activities that uphold, defend and preach as well as the welfare of Islam. Penang and Pahang, on the other hand, proceed to actions and matters to the needs and maslahah to uphold Islamic teachings (Rahman et al., 2016).

In summary, the interpretation of fisabilillah in the present time covers all aspects of life, namely jihad in the field of religion, economy, education, politics, culture which aims to preserve the religion of Islam. Here it can be seen, the zakat center focuses on educational activities, da'wah, forms of skills and so on. It is also in line with the current situation because jihad in the form of war in Malaysia is no longer what happened in the past. However, a reevaluation or change of law does not mean rejecting the views of the scholars of the past but rather it is a conclusion of the law by using the same scales and weights. Moreover, it is possible that the views of the ancient scholars were only appropriate for the time and circumstances of the time.

Had Kifayah

In principle, the Had al-Kifayah is the appropriate rate (economic capability) to ensure the existence of an individual and his dependents. It is not only the assessment of the minimum limit, but also the decision of the acceptable level to ensure a person's existence and that of his dependents (Sulaiman et al., 2017). While its calculation is based on purchasing power according to time and place, this limit cannot be decreased (al-Fanjari & Shauqi, 2010). Other phrases widely used to describe the Had al-kifayah include al-hajah al-asliyyah (basic necessities) according to the Fuqaha al-Hanafiyah (Hanafi school) as well as the limit of al-Ghina (wealth level) (Al-Fanjari & Shauqi, 2010).

Additionally, the Had Kifayah serves as the dividing line between those who are eligible to receive zakat and those who must pay zakat. This is consistent with the findings of Mansor et al (2017), who said that the Had Kifayah is a criterion for deciding whether a person has enjoyed economic sufficiency for life. In addition, the schools of fiqh have examined the boundaries of Had Kifayah, such as for the faqir and the poor (Sulaiman et al., 2017). According to al-Shafi'iyyah and al-Hanabilah, a faqir is a person whose property and income are insufficient to support his necessities (kifayah) or desires. Their necessities for food and water, clothing, and shelter are insufficient. In other words, when compared, they barely meet 30% of the needs that should be met.

A person is considered to be poor if the income he uses to maintain himself is insufficient. Thus, his salary is insufficient to meet 80 percent of his needs for food, clothing, and accommodation (al-Nawawi & Ibn Sharf, t.th.). Those whose income is only sufficient for 80 to 99 percent are considered to be within the limits of al-Kafaf, i.e., their income is still inadequate but sufficient to cover their fundamental necessities. (Sulaiman et al., 2017). Furthermore, the determination of the Had Kifayah in each distribution of zakat refers to the goal of the five Maqasid Shariah legislation, which is to preserve religion, intellect, life, lineage, and property in order to make sure the well-being of asnaf fakir and the poor (Zahid, 2010). The basic requirements that consider the five maqsid shariah principles indicated in the determination of had al-kifayah also consider the factors listed in Table 1. (JAWHAR, 2007).

Table 1

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Fundamental Conditions for Establishing Had Kifayah

Basic	Description
requirements	
Protection	Expenses provide coverage for the entire household, including rent, utility bills, telephone bills, and other related expenses.
Food	All food and beverages consumed by household members, including those consumed outside the home.
Clothes	All types of clothing worn by household members, including school, work, and other attire.
Healthcare	refers to all forms of medication taken by household members, includes rural clinics, village medicine, public hospitals, and private hospitals.
Education	All costs associated with the education of household members, include school fees, university or college tuition, and books, are related.
Transportation	All costs, such as petrol, fares, and other relevant expenses, are paid by household members.

According to Talib & Ahmad (2019), because zakat falls under the jurisdiction of the state religion, the had kifayah rate for each state differs from the calculation by the Economic Planning Unit (EPU), which is more consistent in determining the poor and hardcore poor based on Poverty Line Income (PGK). Based on a 6-person household (Husband and Wife, Children aged 18 years and above who study at IPT, Secondary School Level, Primary School, and Kindergarten). The calculation table and determination of the had kifayah rate revealed a considerable disparity in the rate between the states. Similarly, there is discrepancy in establishing the rate of kifayah limit across those with and without a home (Rahman, 2016). In fact, the rate of kifayah limit vary between states based on geography or settlement criteria, with certain states distinguishing the kifayah limit between those living in urban and rural areas. However, other states, such as Melaka, Pahang, and Kedah, do not differentiate between urban and rural areas (Talib & Ahmad, 2019).

Metodology

This research uses two research designs: qualitative case studies and linguistic fence-based analysis (PHA). To collect preliminary data, the researcher conducted a semi-structured interview with six informants from the Sabah zakat division, that included senior officers and officers. The subjects for this study were chosen using a purposeful sampling strategy; only those with specific characteristics were chosen as informants (Palinkas et al., 2013). Informants are people who are directly involved in the collecting and distribution of zakat in Sabah. The researcher employed thematic analysis to extract the significant topics connected to the study during the data analysis phase (Braun and Clark, 2006). Throughout the analysis process, the researcher performs five steps: data collection, code generation, topic formation, theme review, and final theme determination. Following that, the study's findings were examined utilising a hierarchical procedure of linguistic fence-based analysis (PHA) to determine the decision making weight for an attribute in the evaluation process. To assess the relative importance of weights for each of the parameters explored, two types of linguistic fencing were used: concentration and dilation. The PHA approach involves five steps: identifying the question, creating a hierarchical structure, generating a paired matrix,

normalising the data, calculating the vector eigenvalues, and verifying the consistency of the data.

Preliminary: Theoretical Background

This section summarises some of the essential concepts and attributes of fuzzy sets as defined by (Zadeh, 1975; Cheng et al., 1999; Cox, 1994). Unless otherwise noted, this article will make use of the following fundamental definitions and notations.

Definition 1 A fuzzy set A in a discourse universe X is defined by the membership function $\mu_{\widetilde{A}}(x)$ which connects a real number in the interval [0,1] with each element x in X. The result of the function $\mu_{\widetilde{A}}(x)$ is referred to as the x grade of membership in \widetilde{A} (Zadeh,1975).

Definition 2 A *linguistic hedge* or a *modifier* is an operation that affects the meaning of a word, or more broadly, a fuzzy set. If \widetilde{A} is a fuzzy set, the modifier k produces the (composite) expression $\widetilde{B} = k(\widetilde{A})$.

i. Concentration - When fuzzy sets are concentrated, their membership functions shrink in size and become more concentrated around points with a higher membership grade, as shown by the equation

$$\mu_{con(\widetilde{A})}(x) = \left[\mu_{\widetilde{A}}(x)\right]^{w}, \text{ where } w > 1$$
 (1)

ii. *Dilation* – The *dilation* is the inverse of concentration and is created by exponentially transforming the membership function with an exponent smaller than 1, as follows:is the inverse of concentration and is created by exponentially transforming the membership function with an exponent smaller than 1, as follows:

$$\mu_{dil(\widetilde{A})}(x) = \left[\mu_{\widetilde{A}}(x)\right]^{1/w}, \text{ where } w > 1$$
 (2)

According to Cheng et al. (1999) and Cox (1994), the logical range value for the *dilation* power $w \in [1,4]$ and the *concentration* power $w \in [1,8]$. The following table categorises the language hedges and their approximate meanings.

Table 2
The hedge values of the specific dilation and/or concentration

Linguistic hedges	Meaning	Hedge type	Hedge values (w)
Extremely I	Intensify a fuzzy region	Concentration	$[\mu_{\text{extremely I}}(x)]^3$
Very I	Contrast intensification	Concentration	$[\mu_{very}(x)]^2$
I (no hedges)	-	-	$[\mu_l(x)]^1$
Somewhat I	Contrast diffusion	Dilation	$[\mu_{somewhat} I(x)]^{1/2}$
Less I	Dilate a fuzzy region	Dilation	$[\mu_{less} (x)]^{1/4}$
Between above	Intensify/contrast/dilate	Concentration/dilation	between above
linguistic hedges			two hedges' value
			range

Note: I ~ Important Source : Cox (1994)

Proposed Approach

One downside is that, owing to the subjective and intangible nature of information, the yield may not fulfil the intended objective. While the AHP approach has been criticised for various aspects, it continues to be immensely popular owing to its ability to organise a difficult, multi-

person, multi-attribute issue hierarchically. To make our suggested technique for MCDM difficulties more understandable, we finish the process with the following five essential procedures:

Step 1: Defining and formulating the issue

While the AHP approach has been criticised for various aspects, it continues to be immensely popular owing to its ability to organise a difficult, multi-person, multi-attribute issue hierarchically. As seen in Figure 1, the structure has at least three layers of hierarchy, beginning with the study target or goal at the top, followed by some significant criteria supporting the problem's objective at the next level, and finally the alternative at the bottom.

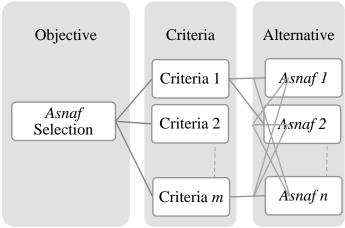


Figure 1: Hierarchy structure

Step 2: Datasets of performance

To undertake quantitative data analysis, we collaborate with relevant specialists to create membership functions for the first three criteria (i.e., income, C_1 , household members, C_2 and "Had kifayah," C_3 . (See Table 2). Meanwhile, qualitative input information (document status, C_4) may be immediately deduced for the purpose of assessing criteria from the specification in Table 3. Thus, we use AHP based on linguistic hedges to analyze each feature in order to identify the worthiest Asnaf.

Table 3
The membership functions for quantitative data

Criteria	Membership Function	
Income, $oldsymbol{\mathcal{C}}_1$	$\mu_{c_1} = \begin{cases} 0; & 1700 \le x \\ 1 - \frac{x}{1700}; & x < 1700 \end{cases}$	(3)
Household members, $oldsymbol{\mathcal{C}}_2$	$\mu_{c_2} = \begin{cases} \frac{x-1}{5}; & 2 \le x < 5\\ \frac{x}{10}; & 5 \le x < 10\\ 1; & x \ge 10 \end{cases}$	(4)
Had kifayah , $oldsymbol{\mathcal{C}}_3$	$\mu_{c_3} = \begin{cases} 0.4 \; ; x < 700 \\ 0.7 \; ; 700 \le x < 1200 \\ 1 \; ; x \ge 1200 \end{cases}$	(5)

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Table 4
The four difference definitions of document status C_4

Membership values	Description (DS)
0	DS_1 : If the asnaf does not provides all required documents
0.3	DS_2 : If the <i>asnaf</i> does not provides two or more required documents
0.7	DS_3 : If the <i>asnaf</i> does not provides less than two required documents
1	DS_4 : If the <i>asnaf</i> have complete documents

Step 3: Create a performance matrix

Calculate all possible $\tilde{P}_{m \times n}$ scores that satisfy the criterion:

$$\tilde{P}_{m \times n} = \begin{bmatrix} A_1 \\ A_2 \\ \vdots \\ A_m \end{bmatrix} \begin{bmatrix} \mu_1(\dot{x}_1) & \mu_1(\dot{x}_2) & \cdots & \mu_1(\dot{x}_n) \\ \mu_2(\dot{x}_1) & \mu_2(\dot{x}_2) & \cdots & \mu_2(\dot{x}_n) \\ \vdots & \vdots & \vdots & \vdots \\ \mu_m(\dot{x}_1) & \mu_m(\dot{x}_2) & \cdots & \mu_m(\dot{x}_n) \end{bmatrix}$$
(6)

Step 4: Dilation or concentration

Calculate the dilatation or concentration power for each criteria and multiply by the DM's judgement, represented as:

$$\widetilde{DC} = \begin{bmatrix} \mu_{11}^{(w_1)} & \mu_{12}^{(w_2)} & \cdots & \mu_{1n}^{(w_n)} \\ \mu_{21}^{(w_1)} & \mu_{22}^{(w_2)} & \cdots & \mu_{2n}^{(w_n)} \\ \vdots & \vdots & \vdots & \vdots \\ \mu_{m_1}^{(w_1)} & \mu_{m_2}^{(w_2)} & \cdots & \mu_{m_n}^{(w_n)} \end{bmatrix}$$

$$(7)$$

Step 5: Select on the asnaf who are more eligible to receive zakat

Using the following formula, the ideal alternative may be determined by optimising the least membership value across all criteria:

$$\mu_{\widetilde{DC}}(x_n) = \frac{\sum_{n=1}^{i} \mu_{mn}^{w_n}}{n} \tag{8}$$

Prior to the ranking of the n alternatives, $A_1 \ A_2 \ \ldots \ A_n$ the order in which they are rated may be decided, where the symbol ' $\$ ' signifies 'preferred more to'.

Numerical Example

To illustrate the preceding steps, we offer a numerical example of the suggested technique in this section. As an example, suppose four *asnaf* have applied for zakat. The three memberships functions are used to obtain the scores for three criteria (C_1 , C_2 , and C_3) from the raw datasets in Table 2. Meanwhile, for the last criteria (C_4), we use the specification in Table 3 to determine the document's status. Five DMs are engaged, each of whom makes a decision based on their knowledge and experience. Special Panel on Zakat Distribution in the selection of asnaf who are eligible to receive zakat are: Chairman of Majlis Ugama Islam Sabah (MUIS) (D_1); Deputy Chairman of MUIS (D_2); Chairman of the Zakat and Fitrah Committee (D_3); Secretary of MUIS (D_4); and Secretary of the Zakat and Fitrah Committee (D_5). As

demonstrated in Table 6, the finalised assessment for each group reflects their mutual agreement. According to the preceding section, the computational technique is as follows:

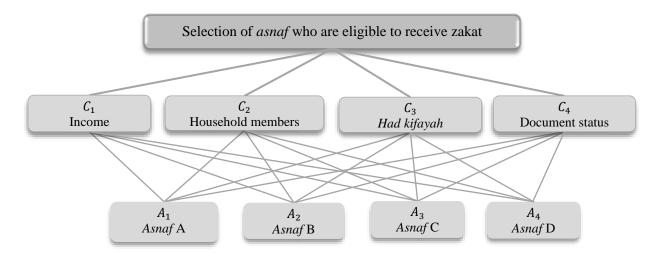


Figure 2: Hierarchical structure for selection of asnaf who are eligible to receive zakat

Step 1: Decompose the issue (identify the objective, the criteria, and possible solutions) and create the hierarchical structure shown in Figure 2.

Step 2: Performance datasets were created by calculating all the scores (membership values) for each criterion (C_i ; I = 1,2,3) using the membership functions from Table 2, while for the document status (DS) criterion (C_4), membership values were calculated directly using the definition in Table 3 and summarising the results as shown in Table 4. Then, as shown in Table 5, we acquire all of the membership values.

Table 5
The raw datasets for four criteria

Critoria (C i = 1.2.2.4)	Asnaf			
Criteria (C_i ; i = 1,2,3,4)	A_1	A_2	A_3	A_4
C_1 : Income (RM)	1050	900	1200	1500
$oldsymbol{\mathcal{C}_2}$: Household members	8	4	7	10
C_3 : Had kifayah (RM)	1100	650	1250	1400
$oldsymbol{\mathcal{C}_4}$: Document status	DS_4	DS_4	DS_3	DS_2

Table 6
The membership values derived from Table 4

Critoria (C i = 1.2.2.4)	Asnaf				
Criteria (C_i ; i = 1,2,3,4)		A_1	A_2	A_3	A_4
C_1 : Income (RM)	(0.38	0.47	0.29	0.12
$oldsymbol{\mathcal{C}_2}$: Household members	(0.8	0.6	0.7	1
${m C}_3$: Had kifayah (RM)	(0.7	0.4	1	1
C ₄ : Document status	í	1	1	0.7	0.3

Step 3: Calculate each performance score, and the resulting matrix is displayed below:

$$\tilde{P}_{m \times n} = \begin{pmatrix} 0.38 & 0.80 & 0.70 & 1.00 \\ 0.47 & 0.60 & 0.40 & 1.00 \\ 0.29 & 0.70 & 1.00 & 0.70 \\ 0.12 & 1.00 & 1.00 & 0.30 \end{pmatrix}$$

Step 4: Assemble the DMs' judgments and calculate the power of dilation or concentration for each criterion using the significant hedges for all criteria (See Table 6).

Table 7
The important hedges for all criteria based on DMs judgement

Criteria	Decision Makers (DMs)				
	D_1	D_2	D_3	D_4	D_5
C_1	Extremely I	Very I	Extremely I	Extremely I	Very I
C_2	Extremely I	Extremely I	Very I	Extremely I	1
\mathcal{C}_3	Very I	Very I	1	Very I	Very I
C_4	1	Very I	1	Very I	1

Note: I ~ Important

Based on Table 1, the average aggregated power of dilation or concentration for the first criterion, C_1 may be estimated as $w_1 = (3 + 2 + 3 + 3 + 2)/5 = 2.6$. Similarly, the values of w_2 , w_3 , and w_4 for criterion C_i (I = 2, 3, 4) can be obtained as 2.4, 1.8, 1.4, respectively and the results are given by the following matrix:

$$\widetilde{DC} = \begin{pmatrix} 0.0808 & 0.5854 & 0.5262 & 1.0000 \\ 0.1404 & 0.2935 & 0.1922 & 1.0000 \\ 0.0400 & 0.4249 & 1.0000 & 0.6069 \\ 0.0040 & 1.0000 & 1.0000 & 0.1853 \end{pmatrix}$$

Step 5: Determine the optimal option by ranking them in decreasing order using Eq.8. The performance index for each choice is as follows: A_1 = 0.5481, A_2 = 0.4065, A_3 = 0.5179, and A_4 = 0.5473 respectively. Clearly, the sequence in which the n options are rated is as $A_1 \rangle A_4 \rangle A_3 \rangle A_2$ where the symbol ' \rangle ' represents 'preferred more to' (see Table 7).

Table 8

Overall performance index and its ranking

$Asnaf(A_n; n = 1,2,3,4)$	Performance Index	Ranking
A_1	0.5481	1
A_2	0.4065	4
A_3	0.5179	3
A_4	0.5473	2

Conclusion

This paper proposes an AHP based on linguistic hedges for selecting on the *asnaf* who are more eligible to receive zakat. In the selection process, we emphasize the opinion of the DMs group in identifying the weights of each criterion based on their experience and knowledge. This is accomplished by using the power of linguistic hedges, specifically concentration or dilatation, to assess the degree of each significant criteria from their viewpoint. The technique has a considerable influence on the final ranking, successfully handles complexity, and may

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provide more accurate findings. In addition, the technique contains intuition that considers the human rethinking-model consistent with the human propensity to employ verbal phrases as an assessment mechanism for monitoring criteria subjectivity. Consequently, it enables DMs to make decisions in a straightforward and methodical way.

As an extension of this method, a digital application based on step-by-step calculation can be established specially for the selection who are eligible to receive zakat. Throughh this research, can assist the government particularly zakat institutions in Malaysia, in offering direction and choosing the best asnaf group to send zakat aid through. Besides that, this model improves community awareness of zakat distribution and accelerates delivery to the asnaf group. This model also provides a collective guide to academia on a more complete method of determining zakat giving to the asnaf group and assists academia in producing new idea.

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