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CRITICAL CRITERIA INFLUENCING THE SELECTION OF BID EVALUATION MECHANISM UNDER THE MOST ECONOMICALLY ADVANTAGEOUS TENDER (MEAT)

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ABSTRACT

Most Economically Advantageous Tender (MEAT) is widely adopted in the European Union, where multiple criteria are considered in contract awarding. Although studies have highlighted the potential benefits of adopting MEAT in Sri Lanka, limited attention has been given to the selection of an appropriate bid evaluation mechanism under MEAT, namely price to quality or quality to price, despite its influence on bid evaluation outcomes and contractor behaviour. This study aims to identify the critical criteria influencing the selection of bid evaluation mechanisms under MEAT in the Sri Lankan construction industry. A quantitative method was adopted. Initially, a comprehensive literature review and a preliminary survey were conducted to identify and validate the relevant criteria to Sri Lanka. Subsequently, a questionnaire survey was administered among architects, engineers, and quantity surveyors involved in public construction procurement. The Kruskal-Wallis test was used to examine differences among professional groups, while mean ranking was applied to identify critical criteria. The findings indicate that professional groups hold statistically similar views regarding the influence of the identified criteria. Six out of seven criteria were identified as critical, with the degree of measuring project-specific criteria and the reliability of data used to develop scoring formulas emerging as the most critical. The study contributes to the MEAT implementation in Sri Lanka by providing a structured basis for selecting bid evaluation mechanisms. The findings may assist practitioners in developing evaluation frameworks that better align with project requirements and support the effective adoption of MEAT in the construction industry.

Keywords: *Bid Evaluation Mechanism; Construction Industry; Most Economically Advantageous Tender (MEAT); Value for Money.*

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1. INTRODUCTION

Government is the primary and most influential client in the construction industry particularly in relation to infrastructure projects such as roads, dams, and irrigation works (Uduwage et al., 2026). The selection of a suitable contractor is essential for ensuring the timely delivery and overall success of construction projects (Nemec et al., 2021). The contractor selection process typically consists of two main stages namely prequalification and contract awarding (Acheamfour et al., 2021). During the prequalification stage, contractors are shortlisted based on their technical, financial, and managerial capabilities (Rashvand et al., 2015). Subsequently, the shortlisted contractors are evaluated based on predefined awarding criteria, which is referred to as the contract awarding process (CAP) (Uduwage et al., 2024).

There are two main contract awarding criteria used in CAP, namely bid price and the Most Economically advantageous Tender (MEAT) (Ballesteros-Pérez et al., 2015). The bid price is commonly used contract awarding criterion where the contractor is selected solely based on the bid price, without considering other parameters such as time, safety, and environmental aspects (Chileshe et al., 2020). In contrast, MEAT has emerged as a widely adopted alternative in several regions, including the European Union (EU) (Lehtonen & Virtanen, 2022), the United Kingdom (UK) (Rees et al., 2023), Canada (Trade Commissioner Service, 2025), and Visegrad Group countries (Nemec et al., 2021). MEAT enables procuring entities to assess bids by incorporating qualitative, environmental, and social factors alongside price considerations (Organisation for Economic Co-operation and Development [OECD], 2021). The bid evaluation mechanism under each contract awarding criterion differs. Under the bid price criterion, bids are typically evaluated using the lowest bid price (LBP) or average bid price methods (Uduwage et al., 2026; Ioannou & Awwad, 2010). Under MEAT, bids are evaluated using either the price to quality or quality to price evaluation mechanisms (Stilger et al., 2017). The price to quality mechanism converts the bid price into a score and combines it with quality scores to determine the highest ranked bidder. In contrast, the quality to price mechanism converts quality attributes into monetary values, resulting in a quality adjusted price, where the bidder with the lowest adjusted price is selected (Stilger et al., 2017).

The adoption of MEAT provides several benefits compared to the traditional bid price approach (Abdelrahman et al., 2008). It enables the selection of contractors based on value for money, improves quality performance, and enhances long-term project outcomes by considering multiple evaluation criteria rather than focusing solely on price (Lehtonen & Virtanen, 2022). Therefore, MEAT is considered more suitable for complex construction projects where quality and performance play a significant role (Uduwage et al., 2023). However, under MEAT, the selection of the appropriate evaluation mechanism, either price to quality or quality to price is critical, as it directly influences bid outcomes, contractor pricing strategies, and overall project performance (Rees et al., 2023). Based on the selected evaluation mechanism, the ranking of bidders may vary. Therefore, clearly defining the evaluation mechanism in the bidding documents is essential to ensure transparency and to enable contractors to align their pricing strategies with project requirements.

In Sri Lanka, given that public funds are utilised in government projects, ensuring transparency and accountability in contractor selection is of critical importance (Wu et

al., 2016). Sri Lanka follows the guidelines and manuals issued by the National Procurement Commission (NPC) for contractor selection in public sector projects (Hasantha et al., 2024). According to these guidelines, contract awarding primarily prioritises the lowest bid price (LBP), provided that the requirements specified in the bidding documents are satisfied (Uduwage et al., 2024), which falls under the bid price-based awarding criterion. However, reliance on the LBP method may not be appropriate for all types of construction projects, as it does not necessarily ensure successful project delivery in terms of cost, time, and quality performance (Baldi et al., 2016). Even though NPC guidelines do not explicitly mention the use of MEAT as an awarding criterion (Dinesh et al., 2026; Uduwage et al., 2024), the concept of MEAT and its evaluation mechanisms are reflected in Standard Bidding Document (SBD) 4 published by the Construction Industry Development Authority (CIDA) and Standard Bidding Document, Procurement of General Goods (NPA/Goods/SBD 01), where evaluation can extend beyond price to include factors such as delivery schedule, operating costs, design parameters, and quality (Dinesh et al., 2026; Uduwage et al., 2024; Uduwage et al., 2026).

Although previous studies have highlighted the potential applicability of MEAT to the Sri Lankan construction industry (Uduwage et al., 2026), limited attention has been given to how procuring entities should select the most appropriate bid evaluation mechanism under MEAT. In the absence of structured basis, the selection of the evaluation mechanism is largely based on subjective judgement (Dinesh et al., 2026), which may lead to inappropriate bid evaluation mechanism selection and consequently affect the effectiveness of contractor selection (Uduwage et al., 2026). Therefore, identifying the critical criteria influencing the selection of the appropriate evaluation mechanism is essential. Accordingly, this study aims to identify the critical criteria for selecting appropriate bid evaluation mechanism (quality to price or price to quality) under the MEAT in the Sri Lankan construction industry. To achieve the aim, following objectives were formulated.

1. To identify the criteria influencing the selection of suitable bid evaluation mechanism under MEAT.
2. To examine the statistical differences among construction professionals regarding the criteria for selecting appropriate bid evaluation mechanism under MEAT.
3. To extract the critical criteria influencing the selection of suitable bid evaluation mechanism under MEAT.

2. LITERATURE REVIEW

2.1 CONTRACT AWARDING PROCESS IN SRI LANKA

The development of physical infrastructure is a crucial factor for the economic expansion of any country (Abdullahi & Sieng, 2023). As a country investing public funds in infrastructure, Sri Lanka emphasises transparency and accountability in contractor selection for public sector projects (Abdullahi & Sieng, 2023). Therefore, the Sri Lankan government follows the Procurement Guidelines published by the National Procurement Commission (NPC) for contractor selection to achieve value for money, optimum use of budgetary resources, competitiveness, and enhanced stakeholder trust (National Procurement Commission [NPC], 2024). These guidelines emphasise the selection of the substantially responsive lowest bid for contract award, where the decision is primarily

determined based on bid price after ensuring compliance with technical and qualification requirements. In practice, the contract awarding process in Sri Lanka mainly follows the Lowest Bid Price (LBP) method under bid price-based awarding (Uduwage et al., 2024).

Although NPC guidelines do not explicitly mention the use of multi-criteria evaluation methods, the concept of the Most Economically Advantageous Tender (MEAT) and its bid evaluation mechanisms are reflected in Standard Bidding Document (SBD) 4 and Standard Bidding Document for Procurement of General Goods (NPA/Goods/SBD 01). SBD 04, which is designed for design and build contracts, evaluates bids based on design along with bid price, while NPA/Goods/SBD 01 evaluates bids based on delivery schedule, operating costs, functional performance, and quality (Uduwage et al., 2026). This indicates that MEAT is not a new concept in Sri Lanka. However, due to the dominance of the LBP method, contractor selection based on MEAT has not gained significant attention.

MEAT allows procuring entities to evaluate bids not only based on price but also by considering qualitative, environmental, and social criteria (OECD, 2021). Compared to bid price-based awarding, which primarily focuses on bid price, MEAT enables the incorporation of project specific criteria, improves value for money, and enhances long-term project performance (Abdelrahman et al., 2008; Lehtonen & Virtanen, 2022). Despite these advantages, the effectiveness of MEAT largely depends on selecting an appropriate bid evaluation mechanism, as different mechanisms may lead to different contractor selection outcomes.

2.2 BID EVALUATION MECHANISMS UNDER MEAT

The bids submitted under MEAT can be evaluated under two main mechanisms, namely price to quality and quality to price (Stilger et al., 2015). The selection between these mechanisms is critical, as it directly influences bid evaluation outcomes, contractor behaviour, and overall project performance (Rees et al., 2023).

2.2.1 Price to Quality

In the price to quality evaluation mechanism, the price is transformed into a score and combined with the quality score, making the bid a price adjusted highest quality bid (Bergman & Lundberg, 2013). Here, the term quality refers to project specific attributes such as time for completion, technical merit, overall value and environmental performance (Stilger et al., 2017). The price score is typically derived by normalising the submitted bid price against the lowest submitted bid. The resulting price score is then weighted according to a predetermined price-quality ratio and combined with the quality score (Parikka-Alhola & Nissinen, 2012). The bid achieving the highest composite score is often selected for contract award (Bergman & Lundberg, 2013). Several formulas are used depending on project specific requirements. For instance, Dimitri et al. (2006) used Equation 1 to assess the quality align with the price.

$$Score_i = \frac{P_{Best}}{P_i} W_{price} + Q_i W_{Quality} \qquad (01)$$

where, i= individual bid, P_{Best}= lowest price of all bids, P_i = price of each individual bid, W_{Price} = weight of price, Q_i = quality of each individual bid and $W_{Quality}$ = weight of quality

Similarly, Waara and Bröchner (2006) proposed Equation 2 to assess the quality align with the price.

$$Score_{\ i} = \frac{P_i - P_{Max}}{P_{Max} - P_{Best}} W_{Price} + Q_i W_{Quality} \qquad (02)$$

where, i= individual bid, P_{Best} = lowest price of all bids, P_i = price of each individual bid, P_{Max} = highest price of all bids, W_{Price}= weight of price, Q_i= quality of each individual bid and $W_{Quality}$= weight of quality

Hence, the formula used varies depending on project characteristics, and the selected formula should be clearly stated in the bidding documents.

2.2.2 Quality to Price

In the quality to price evaluation mechanism, quality measures are converted into monetary values and combined with the submitted bid price, making the bid a quality adjusted lowest price bid (Uduwage et al., 2024). In contrast to the price to quality mechanism, where price is transformed into a score and aggregated with quality scores, in the quality to price mechanism, quality attributes such as completion time, sustainably and experience are assigned monetary values and added to the bid price (Bergman & Lundberg, 2013). The bid with the lowest aggregated price is often selected for contract award (Uduwage et al., 2024). For instance, McFarland et al. (1994) proposed Equation 3 to combine project cost and completion time.

$$TCB = ECC + (DRUC \times EPD) \qquad (03)$$

where, TCB = total combined bid, ECC = estimated construction cost for the project, $DRUC$ = daily road user cost and EPD = estimated project duration for project completion.

DRUC represents the estimated economic cost incurred by road users per day due to construction-related disruptions, such as travel time delays, vehicle operating costs, and other user impacts (McFarland et al., 1994).

Overall, the two mechanisms follow different evaluation procedures and require different types of information in the bidding documents. In the price to quality mechanism, the weightage assigned to price and quality attributes and the scoring formula must be specified (Parikka-Alhola & Nissinen, 2012). In the quality to price mechanism, the method used to convert quality attributes into monetary values must be clearly defined (Bergman & Lundberg, 2013). Furthermore, the choice of evaluation mechanism and scoring formula can affect bidder rankings and, consequently, the contract award decision (Uduwage et al., 2026). Different formulae place varying emphasis on price and quality, meaning that the same set of bids may be ranked differently under different evaluation approaches (Dinesh et al., 2026). Therefore, the selected method should be consistent with the procurement objectives and the intended balance between cost and quality (Uduwage et al., 2026). Therefore, prior to preparing bid documents under MEAT, selecting an appropriate bid evaluation mechanism is essential to ensure transparency, consistency in evaluation, and accurate pricing by bidders.

2.3 CRITERIA INFLUENCING THE SELECTION OF BID EVALUATION MECHANISM UNDER MEAT

To facilitate the selection of a suitable bid evaluation mechanism under MEAT, several criteria have been discussed in the literature. A summary of the criteria influencing the selection of the bid evaluation mechanism is presented in Table 1.

Table 1: Criteria influencing the selection of bid evaluation mechanism under MEAT

Criteria code	Criteria	Explanation	Sources
C1	Subjective evaluation	The weighting factors to transform price to quality scoring or quality scoring to price originate from the judgements or the opinions of the experts.	[1], [3], [4], [5], [6], [7], [9], [10], [11], [12], [13], [14]
C2	Simplicity in the evaluation process	Ease of handling the contractor selection process	[2], [3], [4], [7], [9], [11]
C3	Degree of measuring project specific criteria	The extent to which project-specific evaluation criteria can be objectively measured, quantified, and assessed during the bid evaluation process.	[1], [2], [3], [4], [5], [6], [7], [9], [10], [12], [13], [14]
C4	Speed of evaluation process	Expedited contractor selection process	[1], [9]
C5	Efficiency	Ability to evaluate with a minimum of effort, expense or resources	[5], [6], [9]
C6	Reliability of the data used to develop a scoring formula	Accuracy of the data used to develop the weights of the scoring formula (price to quality or quality to price scoring)	[3], [4], [5], [6], [7], [9], [11], [13], [14]
C7	Practicability of the method	Degree of feasibility to apply the selected method on a specific type of project	[5], [6], [7], [11]

[1] Abdelrahman et al. (2008); [2] Parikka-Alhola et al. (2006); [3] Asker and Cantillon (2006); [4] Asker and Cantillon (2008); [5] Ballesteros-Pérez et al. (2015); [6] Ballesteros-Pérez et al. (2016); [7] Dimitri et al. (2006); [8] Idrees et al. (2023); [9] Ioannou and Awwad (2010); [10] Khan (2015); [11] Lahdenperä (2013); [12] Lambropoulos (2013); [13] Lundberg and Bergman (2011); [14] Lundberg and Marklund (2011)

The criteria summarised in Table 1 are extracted from the literature and are not contextualised to the Sri Lankan construction industry. Since bid evaluation mechanisms are influenced by country-specific procurement regulations, market conditions, and stakeholder practices, the relevance and significance of these criteria may vary across different contexts (Uduwage et al., 2026). Further, rather than providing equal attention to all the identified criteria, it is more practical to identify the critical criteria and then focus on those specific criteria in the selection of the bid evaluation mechanism. Focusing on these critical criteria would enable a more structured and context specific approach to selecting the appropriate bid evaluation mechanism under MEAT, thereby improving the effectiveness of contractor selection.

3. RESEARCH METHODOLOGY

The study adopted a quantitative research approach to statistically analyse and extract the critical criteria influencing the selection of the bid evaluation mechanism under MEAT. The target population of the study consists of construction industry professionals, namely Engineers, Architects, and Quantity Surveyors (QS), who are registered as "qualified persons" in the Construction Industry Development Authority (CIDA). For the sampling frame, qualified persons with a minimum of 6 years of experience and involvement in public construction procurement at the precontract stage were considered. To determine the sample size from the target population, the formula developed by Krejcie and Morgan (1970) was used, where the required sample size for the study was derived as 365 (see Equation 4).

$$S = \frac{X^2 N\ P\ (1-P)}{d^2(N-1) + X^2 P(1-P)} \qquad (04)$$

Where, S = required sample size, X^2 = Chi-square value for 1 degree of freedom at the desired confidence level, N = population size, P = population proportion and d = margin of error

A purposive sampling method was used to select respondents due to its ability to gather data from individuals who possess relevant knowledge related to the study objectives (Thiruchelvam & Uduwage, 2025). Figure 1 illustrates the research design of the study.

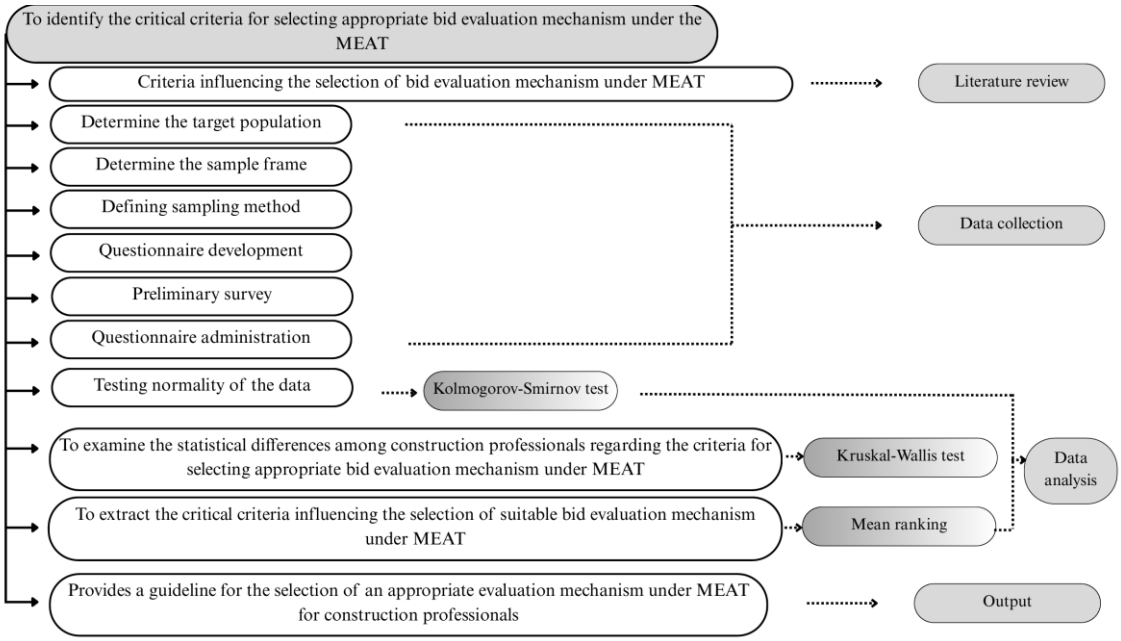

Figure 1: Research design

Initially, a comprehensive literature review was conducted to identify the criteria influencing the selection of the bid evaluation mechanism under MEAT. Subsequently, a preliminary survey was conducted with 10 respondents aligned with the sample frame to validate the literature findings in the Sri Lankan construction industry context. Based on this, a questionnaire survey was developed and distributed to 400 construction

professionals aligned with the sample frame via online platforms such as email, LinkedIn, and WhatsApp to facilitate easy access for respondents.

The questionnaire consisted of three sections. The first section provided the research background and general instructions to the respondents. The second section gathered respondents' demographic information. In the final section, respondents were requested to rate the identified criteria influencing the selection of the bid evaluation mechanism under MEAT based on their level of influence using a five-point Likert scale (1 - negligible, 2 - low, 3 - moderate, 4 - high and 5 - extremely high).

The collected data were then tested for normality using the Kolmogorov-Smirnov test. The hypotheses of the Kolmogorov-Smirnov test are as follows:

- Null hypothesis (H_0): Data follows a normal distribution.
- Alternative hypothesis (H_1): Data does not follow a normal distribution.

If $p > 0.05$ the null hypothesis was not rejected. Otherwise, the null hypothesis is rejected. To achieve Objective 2, the Kruskal-Wallis test was conducted to determine whether there are statistically significant differences among the responses of Engineers, Architects, and Quantity Surveyors regarding the influence of the identified criteria, at a significance level of 0.05 with a 95% confidence level. The hypotheses of the Kruskal-Wallis test are as follows:

- Null hypothesis (H_0): There is no statistically significant discrepancies between the responses of Engineers, Architects and Quantity Surveyors.
- Alternative hypothesis (H_1): There is a statistically significant discrepancies between the responses of Engineers, Architects and Quantity Surveyors.

If $p > 0.05$ the null hypothesis was not rejected. Otherwise, the null hypothesis is rejected. To achieve Objective 3, mean values were calculated for each criterion based on the responses. A criterion was considered critical or significant if its overall mean ($\bar{X}$), is greater than 3.50, while criteria with a mean less than or equal to 3.50 were considered insignificant (Aghimien et al., 2021). Where two or more criteria have the same overall mean ($\bar{X}$), the one with the lowest standard deviation was assigned the higher importance ranking (Chileshe et al., 2020).

4. RESULTS AND DISCUSSION

4.1 RESPONDENTS' DEMOGRAPHIC INFORMATION

The preliminary survey was conducted with 10 construction professionals who are align with the sample frame. Based on the preliminary survey, all seven criteria identified through the literature review were validated as relevant to the Sri Lankan construction industry. Subsequently, a questionnaire survey was developed and distributed to 400 construction professionals aligned with the sample frame. According to Krejcie and Morgan (1970), the required sample size for the study was calculated as 365. However, out of the 400 distributed questionnaires, only 122 were returned with valid responses, resulting in a 30.5% response rate. James (2001) stated that achieving the required sample size is not always practical due to constraints such as budget, time, and resources. In such cases, 100 responses are considered the minimum threshold for obtaining meaningful results in questionnaire surveys (Memon et al., 2020). As the number of responses

collected in this study exceeds this minimum threshold, the sample size can be considered adequate.

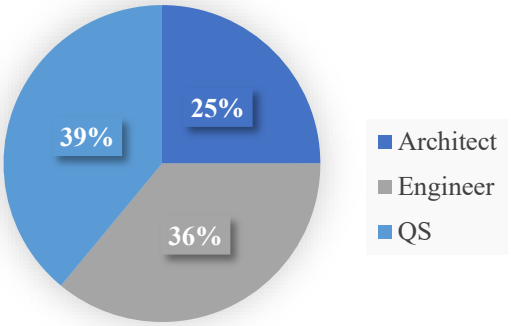

Figure 2: Respondents' profession

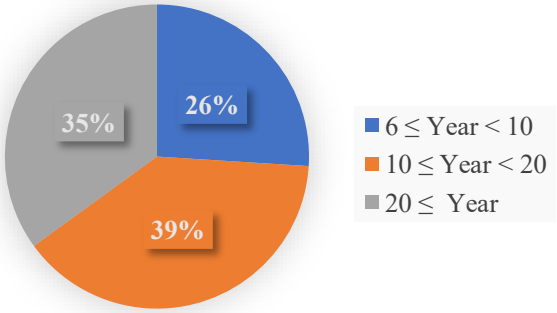

Figure 3: Respondents' experience

As illustrated in Figure 2, data were collected from three professional groups, namely architects, engineers, and quantity surveyors (QS), with proportions of 25%, 36%, and 39%, respectively. The majority of respondents were quantity surveyors, which is justifiable given that QS professionals are more actively involved in the tendering process compared to architects and engineers. In terms of years of experience, as presented in Figure 3, 26% of respondents have 6 - 10 years of experience, 39% have 10 - 20 years of experience, and 35% have more than 20 years of experience. The average years of working experience among respondents was calculated as 16.5 years. This indicates that the respondents possess considerable industry experience. Furthermore, regarding the highest academic qualifications, 65% of respondents hold postgraduate degrees, 32% hold bachelor's degrees, while 2% and 1% hold doctorate and national diploma qualifications, respectively. Overall, the demographic analysis indicates that the respondents possess substantial knowledge of the construction industry, supported by both their academic qualifications and extensive professional experience.

4.2 CRITICAL CRITERIA INFLUENCING THE SELECTION OF BID EVALUATION MECHANISM UNDER MEAT

The collected data first underwent the Kolmogorov-Smirnov (K-S) test to evaluate the normality of the data and to determine the appropriate type of data analysis to be conducted. The results of the K-S test are presented in Table 2. As per the results, all p-values at the 0.05 significance level with a 95% confidence level were less than 0.05 ($p < 0.05$). Thus, the null hypothesis was rejected, indicating that the data do not follow a normal distribution. Therefore, to determine whether there are statistically significant differences among the responses of Engineers, Architects, and QS regarding the influence of the identified criteria, the Kruskal-Wallis (K-W) test, a non-parametric test, was performed. The K-W test results presented in Table 2 indicate that there is no statistically significant difference in the responses of the respondents at the 0.05 significance level with a 95% confidence level.

Table 2: Critical criteria influence the selection of bid evaluation mechanism under MEAT

Criteria code	Architect		Engineer		QS		Overall		K-S Significant at 5% level	K-W P Value	K-W Significant at 5% level
	$\bar{x}$	R	$\bar{x}$	R	$\bar{x}$	R	$\bar{X}$	R			
C3	4.16	1	3.98	2	3.98	1	4.02	1	<0.05	0.528	No
C6	3.94	3	4.00	1	3.91	2	3.95	2	<0.05	0.765	No
C5	4.00	2	3.75	4	3.74	5	3.81	3	<0.05	0.814	No
C7	3.90	4	3.77	3	3.79	4	3.81	4	<0.05	0.273	No
C1	3.68	5	3.64	5	3.87	3	3.74	5	<0.05	0.291	No
C4	3.68	6	3.41	6	3.66	6	3.57	6	<0.05	0.314	No
C2	The criterion is not critical ($\bar{X}$ < 3.5). Therefore, $\bar{x}$ values were not mentioned						3.48	This criterion is not critical ($\bar{X}$ < 3.5). Therefore, K-S, K-W values and significant status were not mentioned			

Notes: $\bar{X}$ = Overall Mean; $\bar{x}$ = Mean of each profession; R = Rank; K-S = Kolmogorov-Smirnov test; K-W = Kruskal-Wallis test

As shown in Table 2, criteria C3, C6, C5, C7, C1, and C4 recorded mean values above 3.5 and were therefore considered as critical criteria influencing the selection of the bid evaluation mechanism under MEAT. The degree of measuring project specific criteria (C3) received the highest ranking and indicates that the ability to measure project specific criteria plays a dominant role in selecting the appropriate bid evaluation mechanism under MEAT. When projects involve significant variation in quality attributes such as technical performance, project duration, and environmental considerations, the selection of the bid evaluation mechanism depends on how effectively these attributes can be incorporated, either through price to quality or quality to price transformation. As stated by Bergman and Lundberg (2013), in the quality to price mechanism, quality attributes need to be converted into monetary values. Therefore, depending on the nature of the project specific attributes and the feasibility of assigning monetary values to them, the selection between price to quality and quality to price mechanisms may vary. Hence, respondents may have ranked C3 as the most critical criterion. This finding is particularly relevant to the Sri Lankan construction industry, where public sector projects vary considerably in terms of complexity, technical requirements, and performance expectations (Uduwage et al., 2026).

Reliability of the data used to develop a scoring formula (C6) was ranked as the second most critical criterion influencing the selection of the bid evaluation mechanism. The scoring formula for both price to quality and quality to price mechanisms is developed based on the weightage assigned to price and quality attributes (Bergman & Lundberg, 2013). For instance, in the price to quality mechanism, price is converted into a score based on assigned weights, making it particularly sensitive to inaccuracies (Parikka-Alhola & Nissinen, 2012). If the underlying data is unreliable, the transformation of price into quality scores may produce misleading results. Similarly, in the quality to price mechanism, unreliable data may affect the accuracy of monetary values assigned to quality attributes. Therefore, respondents may have given higher priority to C6 due to its direct influence on the accuracy and reliability of both evaluation mechanisms. This

finding may reflect practitioners' concerns regarding the availability and quality of project and market data required to support objective decision making, particularly when introducing relatively new evaluation approaches such as MEAT into the Sri Lankan procurement environment.

Efficiency (C5) was ranked as the third critical criterion. In practice, the price to quality mechanism is relatively simpler, as it often involves predefined formulas and requires less effort and resources (Parikka-Alhola & Nissinen, 2012). In contrast, in the quality to price mechanism, quality attributes need to be converted into monetary values during the evaluation stage, which may require additional time and resources. Therefore, respondents may have considered efficiency as an important factor when selecting between the two mechanisms. Practicability of the method (C7) also received the same mean value as C5 ($\bar{X}$ =3.81) and was ranked as the fourth critical criterion based on its standard deviation. Since the conversion of quality attributes into monetary values is relatively complex and requires expert judgment during the evaluation stage, respondents may perceive the quality to price mechanism as less practical in certain contexts. Therefore, respondents may have considered C7 as an important criterion influencing the selection of the evaluation mechanism.

Subjective evaluation (C1) and speed of the evaluation process (C4) were also identified as critical factors. However, they received the lowest rankings among the critical criteria. Since both price to quality and quality to price mechanisms involve a certain degree of subjectivity in assigning weights and evaluating quality attributes, respondents may not have given high importance to C1. With regard to the speed of the evaluation process, the lower ranking indicates that respondents are more concerned with the quality and accuracy of the decision rather than the time taken for evaluation. Notably, simplicity (C2) recorded a mean value below 3.5 and was therefore considered a non-critical criterion influencing the selection of the bid evaluation mechanism under MEAT. This implies that construction professionals are willing to adopt more complex evaluation mechanisms when they provide more reliable and project-specific evaluation outcomes.

Moreover, the results indicate that the selection of the bid evaluation mechanism under MEAT is primarily influenced by the ability to accurately represent project specific requirements and ensure data reliability, while factors such as simplicity and speed are given comparatively less importance. This suggests that construction professionals are more concerned with achieving accurate and project-appropriate contractor selection outcomes than minimising the effort associated with the evaluation process.

5. CONCLUSIONS

Contract awarding for public sector projects in Sri Lanka currently follows procurement guidelines published by the National Procurement Commission (NPC), which primarily emphasise bid price-based awarding, particularly the Lowest Bid Method (LBM). Although the explicit adoption of the Most Economically Advantageous Tender (MEAT) is limited, concept of MEAT and its evaluation mechanisms are reflected in standard bidding documents such as SBD 4 and NPA/Goods/SBD 01. In recent years, research attention on the applicability of MEAT within the Sri Lankan construction industry has increased due to its potential to enhance value for money, quality performance, and long-term project outcomes compared to the Lowest Bid Method (LBM). For effective implementation of MEAT, bid documents need to clearly specify the bid evaluation

mechanism to be adopted, as the choice between price to quality and quality to price mechanisms can influence evaluation outcomes and contractor behaviour. Accordingly, this study identified the criteria influencing the selection of bid evaluation mechanisms under MEAT.

The study initially examined the differences in responses among engineers, architects, and quantity surveyors using the Kruskal-Wallis test, and the findings indicated no statistically significant differences among the professional groups. Subsequently, seven criteria identified through the literature review were analysed using mean ranking, of which six were identified as critical. Among these, the degree of measuring project-specific criteria (C3) and the reliability of data used to develop scoring formulas (C6) were identified as the most critical criteria, ranked first and second, respectively.

The findings provide a basis for industry practitioners and procurement authorities to consider project characteristics and data reliability when selecting suitable evaluation mechanisms under MEAT during procurement planning and bid document preparation. Furthermore, policymakers may consider incorporating guidance on MEAT implementation within existing procurement frameworks to support transparent and structured contractor selection processes. Future research may focus on developing a decision-support framework to assist practitioners in selecting the most appropriate evaluation mechanism under MEAT. The findings of this study may also benefit developing countries with evolving procurement practices, where selecting appropriate evaluation mechanisms based on project characteristics can enhance transparency, reduce inefficiencies, and improve value for money in public projects.

6. REFERENCES

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