MULTI DIMENSIONAL TRADE-OFF MODEL STUDY ON REMUNERATION OF CONSULTANTS IN THE CONSTRUCTION SECTOR

ABSTRACT: The progression of diverse disciplines in the Indonesian context invariably encompasses the engagement of service providers, particularly contractors, in the realm of construction. Consulting services, being professional in nature, demand a specific set of skills rooted in various scientific domains, with a primary emphasis on proficient cognitive capabilities. Within this context, construction consultants assume a pivotal and indispensable role in ensuring the triumphant outcome of any given project. Development project planning consultants encounter the challenge of accurately estimating costs, timelines, and quality parameters to ensure the efficient and effective attainment of project objectives. This study employs a deterministic quantitative methodology, involving numerical computations to inform the decision-making process for policymakers. A quantitative approach is adopted to acquire empirical data, investigate the interplay between these data, and examine their correlation with established theoretical frameworks. The data analysis in this study follows a structured process encompassing four distinct stages. The initial phase involves a descriptive analysis, which aims to elucidate key statistical parameters such as the minimum, maximum, and mean values of the remuneration price offer provided by 91 respondents. The subsequent stage of remuneration computation entails the adaptation of a formula to derive an optimal remuneration figure that aligns with prevailing economic circumstances during project execution. The third stage centers on conducting sensitivity analysis in the context of decision-making, taking into account both non-ideal and worst-case scenarios. The fourth stage entails a multivariate statistical analysis, aimed at ascertaining the structural relationships among diverse exogenous (independent) variables and endogenous (dependent) variables, while quantifying the extent of their direct and indirect influences, as well as the overall impact of the model constructed in this study. The research findings corroborate the following: 1) The pricing offered by consulting experts at the minimum and maximum values closely approximates the standard rates established by Inkindo. 2) Regarding the trade-off of expert remuneration, the calculations reveal that the compensation offered by experts to project planning consultants at both the lowest and highest remuneration levels closely align with the minimum remuneration standard set by Inkindo. 3) The decision-making process for determining the profit amount for consulting service experts involves selecting the lowest profit value during unstable conditions or when there are few available projects. Conversely, during stable conditions or when there are many projects available, the profit amount is determined based on the highest profit value, which is automatically linked to the expert remuneration price offer. 4) It is imperative to offer a competitive salary package to experienced leaders, along with additional expenses, when they are assigned to projects that are in a precarious state or have limited opportunities. Particularly in stable circumstances or when there are numerous projects, the government provides experts with basic salaries and allowances.

Keywords: Multi-Dimensional, Trade Off Model, Remuneration, Experts Staff

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1. Introduction

The challenge for a development project planning consultant is to accurately estimate the cost, time, and quality necessary to efficiently and effectively achieve the project objectives. Cost estimation is a crucial aspect of project cost management. Consultants lacking knowledge of cost components, particularly indirect costs, are more likely to face avoidable failures. The service provider's determination of remuneration, which serves as the unit price in the price offer, is incorrect. This issue may lead to delays in the implementation of procurement of goods and services (PBJ). The effectiveness of the PBJ process relies heavily on the ability to address and resolve conflicts between regional and central laws and regulations. This study aims to compare the remuneration prices for experts among tender winners, specifically

focusing on the standard remuneration set by Inkindo. The remuneration is derived from data obtained from a planning consulting service provider company that successfully secured contracts for projects within the West Java LPSE between the years 2017 and 2021.

Based on the findings of the documentation survey, it has been determined that the minimum compensation is: 1) The consultant offers a minimum remuneration of Rp. 11,000,000 for leader staff, whereas Inkindo's standard minimum remuneration is Rp. 20,750,000. The consultant's offer represents 53% of Inkindo's minimum standard. 2) The remuneration for architects is set at a minimum of Rp. 10,500,000, while Inkindo's standard minimum remuneration is Rp. 19,011,500. Additionally, consultant offers typically reach 55% of Inkindo's minimum standard. 3) The consultant offers a minimum remuneration of Rp. 10,500,000 for mechanical and electrical experts, while Inkindo's standard minimum remuneration is Rp. 19,011,500.

The consultant's offer represents 55% of Inkindo's minimum standard. 1) The leader staff's maximum remuneration is Rp. 42,650,000, while the maximum standard remuneration set by Inkindo is Rp. 44,535,450. The percentage of consultant offers is close to 95% of Inkindo's maximum standard. 2) The consultants offer a maximum remuneration of Rp. 28,000,000 for architects, while the maximum standard remuneration set by Inkindo is Rp. 33,000,000. The percentage of consultant offers, which stands at 84%, is close to the maximum standard set by Inkindo. 3) The consultants offer a maximum remuneration of Rp. 28,000,000 for electrical mechanical workers, while the maximum standard remuneration set by Inkindo is Rp. 31,500,000. The percentage of consultant offers, which amounts to 88%, is close to the maximum standard set by Inkindo.

The findings derived from the scholarly investigation conducted by Okonkwo and Wium (2018): The elimination of the compulsory fee structure and the widespread practise of selecting consulting services based on the lowest bid in South Africa has resulted in increased price competition among engineering services consultants for engineering contracts. This study aims to ascertain the trade-off associated with remuneration offers for experts in the field of consulting services. The determination of the remuneration rate for experts involves the computation of personnel expenses, as stipulated in SEB Bappenas and the Ministry of Finance No. 1203/D. II/03/2000: SE 38/A/2000.

According to the findings of Owusu-Manu et al. (2012), there exist certain deviations from commonly held assumptions pertaining to the perception of value, goals, strategies, cost recovery, competition, and systematic processes. The results of Umdiana and Claudia's (2020) research are as follows: The growth of investment in Indonesia serves as a catalyst for companies to enhance their business operations due to the intensification of competition. The presence of competition within the business realm serves as a catalyst for financial managers to exercise prudence in their decision-making processes, particularly in relation to capital structure. Decisions pertaining to the optimal capital structure can be elucidated through the lens of trade-off theory.

Deciding to offer competitive compensation rates to consulting experts in order to maximize benefits. In his study, Maulanasari and Utomo (2015) examined the efficacy of the Friedman model in decision-making for project tenders with markups of both ≤ 100% and ≥ 100%. The research emphasized the importance for construction companies to consider the factor of courage in risk-taking and its impact on the expected profit, which represents the targeted profits of the construction company. According to Herwitasari and Utomo's (2016) research, the analysis of investments and risks indicates that flat and mall alternatives yield the highest profits with an acceptable level of risk. The hotel alternative is the investment option with the lowest level of profit at an acceptable level of risk.

This study examines the impact of remuneration parameters for consultant experts on the situation and conditions of incoming investment projects. According to the findings of Kholid's study conducted in 2022, remuneration does not have a statistically significant impact on the value of a company. The Covid-19 pandemic had a detrimental impact on company value. Moreover, executive remuneration during the Covid-19 pandemic exceeded pre-pandemic levels. However, the observed average difference lacks statistical significance. This research suggests that the Covid-19 pandemic has led to a decline in company value in Indonesia, prompting investors to exercise caution when investing in the capital market during such a crisis.

While, Shareholders exhibit heightened interest in executive remuneration schemes due to the absence of substantial evidence indicating a positive correlation between executive remuneration and company value. The findings of the research conducted by Utama in 2023 are as follows: The global spread of the Covid-19 pandemic has significantly affected the economy. The negative impact extends to companies of all sizes, including large, medium, and small-scale enterprises.

State-owned enterprises (SOEs), commonly referred to as BUMN companies, encounter similar impacts. Failure to promptly address this situation will result in financial detriment for employees.

2. Data Dan Methods
The research process for reaching a final decision on remuneration involves several stages. 1) it is necessary to compare the remuneration offered by the winning bidder in the tender with the minimum standard set by Inkindo. 2) Assess the computation of expert remuneration in accordance with prevailing economic conditions during project planning. The objective of this task is to revise the remuneration formula of the SEB Bappenas and the Ministry of Finance No. 1203/D. II/03/2000: SE 38/A/2000 in order to enhance its academic quality. The reason for this discrepancy lies in its non-compliance with the regularly updated standard remuneration. 3) Assessing the remuneration level in accordance with the prevailing economic conditions. 4) The implementation of the remuneration decision in a substantial manner will yield financial advantages, which is facilitated by the utilization of statistical analysis during the testing phase.

Descriptive Analysis
This study aims to conduct a descriptive analysis of remuneration price offers for consultants who have successfully won project tenders within the West Java LPSE (Local Procurement Service Unit) and also provide a descriptive analysis of the remuneration standards set by Inkindo (Indonesian Association of Consulting Engineers). The objective of conducting a descriptive analysis is to ascertain the minimum, maximum, and average values of the remuneration price offer utilizing the SPSS version 25 application.

Calculation of Expert Remuneration
Based on calculations and experience in winning project tenders as a planning consultant within the West Java LPSE. Using the formula:

BLP = GD + (BBS + BBU + TP) + K
Information:

BLP: Direct Personnel Expenses
GD: Base Salary
BBS: Social Charge
BBU: General Expenses (Overhead Cost)
TP: Assignment Allowance
K: Profit.

Hurwicz Sensitivitas Analysis
HURWICZ Criteria / compromise between MAXIMAX and MAXIMIN (Leonid Hurwicz) Criteria in which the decision maker is not fully optimistic and perfectly pessimistic, so the decision results are multiplied by the optimistic coefficient to measure the optimism of the decision maker, where the optimism coefficient (a) = 0 ≤ a ≤ 1 With a : 1, means total optimism (MAXIMAX) and a : 0, means very pessimistic/optimistic 0 (MAXIMIN) Or a : optimistic 1-a : pessimistic Weaknesses: - difficult to determine the exact value of a - ignoring some available information (ex: economic prospects are being neglected) (Taylor III, 2013). Decision making formula (expected monetary value):

EMVa = ∑ (probability x expected payoff value)

Statistic Analysis
Statistical analysis is a technique derived from multiple regression analysis. The technique was initially proposed by Sewall Wright in 1934 for the purpose of investigating the correlation between variables. Path analysis is a component of multivariate analysis as it encompasses the examination of relationships among multiple variables. The purpose of the statistical analysis is to determine the structural relationship of various exogenous (independent) variables and endogenous (dependent) variables as well as the magnitude of the influence, both directly and indirectly, as well as the total effect of the model built in the study (Trianto, 2015). Schematic statistical analysis of three sub-structure diagrams. Schematic diagram of the three sub-structures with the formulation of the equation.
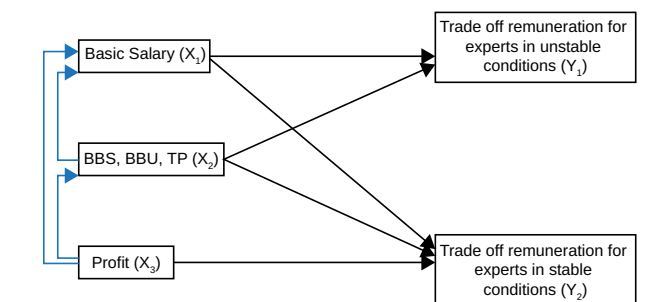

Figure 1: Statistical Structure

The statistical equation can be seen in the following equation:

$Y1 = py1x1 + py1x2 + py1x3 + e\ 1$
$Y2 = py2x1 + py2x2 + py2x3 + e\ 2$
$Y3 = py2y1 + e\ 2.$

3. Research Results
Comparative Statistical Analysis of Remuneration Price Presentation
1) The amount of the remuneration presentation for the consultant offer against the owner's remuneration standard is as shown in table 2 below:

Table 1: Amount of remuneration presentation for consultant offers to owner remuneration.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson	
1	.961ᵃ	.923	.922	1213795.573	.882	
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	6.293	.000
1. (Constant) Penawaran		3910606.968 .926	621389.958 .028	.961	32.564	.000
a. Dependent Variable: Owner						

From table 2 above it can be analyzed that the R Square value is 0.923 or 92.3%. The conclusion is that the amount of the remuneration offer price for the consultant offer is 92.3% close to the remuneration figure set by the owner. Furthermore, the T-count 32.564 is greater than the T-table 1.660, with a significant 0.000 less than 0.05. So the hypothesis is accepted that the consultant's remuneration price offer has a positive and significant effect on the remuneration set by the owner.

2) The amount of remuneration presentation for consultant offers against Inkindo's standard remuneration is as shown in table 3 below:

Table 2: The amount of remuneration presentation for the consultant's offer to Inkindo's remuneration

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	.846ᵃ	.716	.713	2427591,290	. 882	
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1. (Constant) Penawaran		7821213,453 .852	1242779,990 .057	.846	6.293 14.978	.000 .000

Table 3 indicates that the R Square value is 0.716, equivalent to 71.6%. The conclusion is that the consultant's remuneration offer price is approximately 71.6% in line with Inkindo's specified remuneration figure. In addition, the T count exceeds the T table value of 1.660 by a margin of 14.978, indicating a significant difference. The significance level of 0.000 is lower than the threshold of 0.05. The hypothesis that the consultant's remuneration price positively and significantly affects the remuneration set by Inkindo is accepted. 3) Recapitulation of the amount of presentation of remuneration offered by consultants to the remuneration of Owner and Inkindo as shown in table 4 below.

Table 3: Recapitulation of Statistical Analysis Results Comparison of the Percentage of Remuneration Prices

Remunerastion	Remuneration Average Price	Difference	Presentation
Offer Remuneration Consultant	21.393.003,66		
Standard Remuneration owner	23.716.865,48	10 %	92,3 %
Standard Remuneration Inkindo	26.040.727,29	17 %	71,6 %

According to the data presented in Table 4, the average price offered by consultants is Rp. 21,393,003.66. The average price of the owner's standard remuneration is Rp. 23,716,865.48, while the average price of the standard inkindo remuneration is Rp. 26,040,727.29. The consultant's bid price differs from the owner's price by 10%, and the presentation score is 92.3%, which is close to the standard. The consultant's bidding price differs from Inkindo's price by 17%, with a presentation of 71.6%, which is close to the standard.

Calculation of Trade Off Remuneration Prices for Consulting Service Experts
In determining the remuneration price, the team leader refers to the modified formula, namely: **BLP=GD+(BBS+BBU+TP) +K.**

Determination of Basic Salary (GD) is based on DKI Jakarta remuneration standards for 2021, while the index for West Java is 0.853

1) Calculation of the Lowest Price Team Leader Remuneration Trade Off

Table 4: Calculation of Remuneration for Team Leader Position Lowest Price

No	Component Remuneration	Condition	Calculation formulas	Price
1	Base Salary	$1 Education Experience 3 years Associate (Inkindo 2022)	0,853 x 22.750.000	19.405.750
2	BBS, BBU, TP		0,1 x 19.405.750	1.940.575
3	Profit		0,1 x 1.940.575	194.057
The lowest total emuneration for the Team Leader				21.540.383

Based on Table 5, the remuneration amount for consultant leaders in West Java with an index of 0.853 and the lowest offer category is Rp. 21,540,383. According to Inkindo's 2022 standards, the remuneration price for the team leader is Rp. 22,773,350. In summary, the consultant's lowest bid price is approximately 94.6% in line with Inkindo's standard for 2022.

2) Calculation of the Trade Off Price of the Highest Price Team Leader Remuneration

Table 5: Calculation of Remuneration for Team Leader Position Highest Price

No	Component Remuneration	Condition	Calculation formulas	Price
1	Base Salary	S2 Education Experience 9 yrs Main Expert (Inkindo 2022)	0,853 x 41.500.000	35.399.500
2	BBS, BBU, TP		0,2 x 35.399.500	7.079.900
3	Profit		0,1 x 7.079.900	707.990
Total Highest Remuneration Team Leader				43.187.390

According to Table 6, the highest remuneration for consultant leaders in West Java is calculated to be Rp. 43,187,390, with an index of 0.853 and falling under the highest offering category. As per Inkindo's standards for 2022, the maximum remuneration for a team leader is Rp. 44,535,450. In summary, the consultant's bid price of 96.9% closely aligns with Inkindo's highest standard for 2022.

3) Recapitulation of Expert Remuneration Price Calculation Results

Table 7 below summarizes the results obtained from calculations using the researcher's formulation, which determines the lowest and highest remuneration amounts based on Inkindo's 2022 standard reference for remuneration. This summary aims to facilitate understanding:

Table 6: Recapitulation of Expert Remuneration Price Calculation Results

No	Position	Consultant Remuneration Offer price		Inkindo Remuneration price standards 2022		Persentation
		Lowest	Highest	Lowest	Highest	
1	Team Leader	19.405.750	43.187.390	22.773.350	44.535.450	95-96%
2	Arsitectural experts	18.463.185	26.796.995	20.265.450	29.002.650	91-92%
3	M/E experts	18.463.185	26.796.995	19.001.500	29.002.650	92-97%

Table 7 presents data on the calculation results for remuneration offered by experts to project planning consultants. The analysis reveals that the lowest and highest remuneration offers are nearly equivalent to the minimum remuneration standard set by Inkindo in 2022. This closely aligns with the remuneration offer for the winning consultant tender. The current range of percentages observed is 91% to 97%.

Remuneration Decision Making Analysis
The basis for decision making (expected monetary value) using the EMV formula (Taylor III, 2013) is as follows:

$$EMV = \sum (\text{probability x expected payoff value})$$

1) The team leader remuneration (Stable Conditions) can be determined based on the highest offering price of Rp. 43,187,390, with a 20% probability of obtaining a profit. The minimum remuneration for a team leader is Rp. 19,405,750, with a 10% probability of receiving a profit.

The foundation for making decisions:

$$EMV_a = \sum \frac{(\text{probability x expected payoff value})}{= (0,2 x 43.187.390) = 8.637.478}$$

$$EMV_b = \sum \frac{(\text{probability x expected payoff value})}{= (0,1 x 19.405.750) = 1.940.575}$$

Based on the EMV formula calculation, the optimal decision is to select the team leader's remuneration

price offer that yields the highest profit of Rp. 8,637,478, considering various project scenarios and conditions.

2) The determination of team leader remuneration in unstable conditions is based on the highest offering price of Rp. 43,187,390, with a 10% probability of obtaining a profit. The minimum offering price for team leader compensation is Rp. 19,405,750, with a 20% probability of receiving a profit. The foundation for making decisions:

$$EMV_a = \sum(\text{probability x expected payoff value}) = (0,1 x 43.187.390) = 4.318.739$$

$$EMV_b = \sum(\text{probability x expected payoff value}) = (0,2 x 19.405.750) = 3.881.150$$

Based on the application of the Expected Monetary Value (EMV) formula, it is determined that the optimal decision is to select the initial option, which entails accepting the team leader's remuneration price offer at the highest value. This decision is made in light of the limited number of projects available, resulting in a profit of Rp. 4,318,739. The findings suggest that a select few projects necessitate the presence of a proficient team leader who possesses the ability to meticulously coordinate work and effectively navigate challenging circumstances. This enables the successful completion of projects, despite their limited quantity.

Based on the calculations, the recapitulation data obtained. Basis for decision making (expected monetary value) in calculating the amount of remuneration for experts as shown in Table 8:

Table 7: Recapitulation *Expected Monetary Value* (EMV)

No	Position	Stable Condition Profit probability 20%	Unstable Condition Profit probability 10%
1	Leader team	8.637.478	4.318.739
2	Architect Experts	5.359.399	3.692.637
3	M/E experts	5.359.399	3.692.637

Based on the findings presented in Table 8, it can be inferred that bidding remuneration prices for experts consistently yields profitable opportunities. The EMV calculation model is employed to assess the feasibility of project bids in West Java, taking into account the varying degrees of stability and availability of projects. By considering the specific situation and conditions surrounding each project, this model enables companies to determine the likelihood of bid acceptance and the potential for profit. Conversely, the remuneration price offer will be augmented in instances where multiple projects are involved or favorable conditions are present, thereby increasing the likelihood of acceptance by the tender and yielding substantial profits.

Statistical Analysis of the Effect of Expert Remuneration Parameters on the Number of Projects

Figure 2 presents the outcomes obtained from the computation of the direct, indirect, and total impact of various factors, namely basic salary, BBS, BBU, TP, profit, Trade-off remuneration for experts in unstable conditions, and Trade-off for expert remuneration in stable conditions.
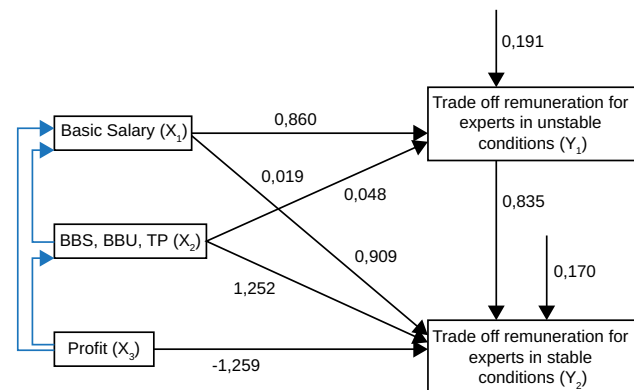

Figure 2: Full Model Statistical Coefficient

Table 8: Direct Influence, Indirect and Total Influence

Variable	Direct Influence	Indirect Influence	Total Influence
Base salary x1 → *Trade-off* unstable condition y1	0,860	-	0,860
BBS,BBU,TP x2 → Trade-off unstable condition y1	0,019	-	0,019
Keuntungan x3 → Trade-off unstable condition y1	0,048	-	0,048
Gaji Dasar x1 → Trade-off Stable condition y2	0,909	-	0,909
BBS,BBU,TP x2 → Trade-off kondisi banyak proyek y2	1,252	-	1,252
Profit x3 → Trade-off Stable condition y2	-1,259	-	-1,259
Trade off unstable condition y1 → Trade off Stable condition y2	0,835	-	0,835
Base salary x1 → Trade-off stable condition y2 through Trade off unstable conditions yl	-	0,718	0,718
BBS,BBU,TP x2 → Trade-off stable condition y2 through Trade off unstable conditions yl	-	0,016	0,016
Profit x3 Trade-off stable condition y2 through Trade off unstable conditions yl	-	0,040	0,040

Based on Table 9 it can be explained that: The direct effect of basic salary (x1) on the Trade-off of unstable conditions (y1) is 0.860. The direct effect of BBS, BBU, TP (x2) on the Trade-off of unstable conditions (y1) is 0.019. The direct effect of profit (x3) on the Trade-off of the unstable conditions (y1) is 0.048. The direct effect of basic salary (x1) on the Trade-off of stable condition (y2) is 0.909. The direct effect of BBS, BBU, TP (x2) on the Trade-off of stable conditions (y2) is 1.252. The direct effect of profit (x3) on the Trade-off f condition of stable condition (y2) is -1.259. The direct effect of the trade-off for unstable condition (y1) on the trade-off for stable condition (y2) is 0.835.

The indirect effect of basic salary (x1) on the trade-off for stable condition (y2) through the trade-off for few projects (y1) is 0.718. The indirect effect of BBS, BBU, TP (x2) on the tradeoff of stable condition (y2) through the Trade-off of few project conditions (y1) is 0.016. The indirect effect of profit (x3) on the trade-off of stable condition (y2) through the trade-off of unstable condition (y1) is 0.040.

Hypothesis Testing Results

Hypothesis 1: The effect of basic salary remuneration on the trade off of experts unstable conditions

Table 9: Results of Statistical Data Analysis

Influence	Coefficient value	t-statistic	t-table	P-value
βY₁X1	0,860	11,107	1,660	0,000

The coefficient value X1 is 0.860, and the t-count value is 11.107, which is greater than the t-table value of 1.660. The significance level is 0.000, which is less than the threshold of 0.05. Therefore, we reject the null hypothesis (H0) and accept the alternative hypothesis (Ha). In other words, there is a significant effect of basic salary remuneration on the trade-off of experts in low conditions projects. The contribution made is 0.860 x 0.860 x 100 = 73.96%.

Hypothesis 2: The Effect of BBS, BBU, TP Remuneration on the tradeoff of experts in unstable conditions

Table 10: Results of Statistical Data Analysis

Influence	Coefficient value	t-statistic	t-table	P-value
βY₁X₂	0,019	0,394	1,660	0,694

The coefficient value for X2 is 0.019. The t-count value of 0.394 is less than the critical t-table value of 1.660, indicating that the result is not statistically significant (p > 0.05). Therefore, the null hypothesis (H0) is accepted and the alternative hypothesis (Ha) is rejected. In other words, there is no evidence to suggest that BBS, BBU, and TP remuneration have an effect on the labour trade-off expert in a few project conditions. The contribution made is 0.019 x 0.019 x 100 = 0.04%.

Hypothesis 3: The effect of profit remuneration on the tradeoff of experts in unstable conditions

Table 11: Results of Statistical Data Analysis

Influence	Coefficient value	t-statistic	t-table	P-value
βY₁X₃	0,048	0,632	1,660	0,529

For the coefficient value X3 = 0.048, a t-count value of 0.632 < t-table 1.660 is obtained with a significant 0.529 > 0.05, then H0 is accepted and Ha is rejected or in other words there is no effect of profit remuneration on the tradeoff of experts in low conditions project. The contribution made was 0.048 x 0.048 x 100 = 0.23%.

Hypothesis 4: Effect of BBS, BBU, TU basic salary remuneration and simultaneous profits on Trade-off remuneration of experts in unstable conditions.

Table 12: Results of Statistical Data Analysis

Influence	Coefficient value	t-statistic	t-table	P-value
$\beta Y_1 X_2 X_3$	0,927	128,104	3,950	0,000

The coefficient values X1, X2, and X3 have a combined value of 0.927. The obtained F-count value is 128.104, which exceeds the critical F-table value of 3.950 at a significance level of 0.05. Therefore, the null hypothesis (H0) is rejected, and the alternative hypothesis (Ha) is accepted. In other words, there is a significant influence on the basic salary remuneration of BBS, BBU, TU, and the simultaneous advantage of trade-off remuneration of experts under unstable conditions. The contribution made was 0.927 x 0.927 x 100 = 85.93%.

Hypothesis 5: The effect of basic salary remuneration on the tradeoff of experts in stable conditions

Table 13: Results of Statistical Data Analysis

Influence	Coefficient value	t-statistic	t-table	P-value
$\beta Y_2 X_1$	0,909	12,734	1,660	0,000

For the coefficient value X1 = 0.909, the t-count value is 12.734 > t-table 1.660 with a significant 0.000 <0.05, then H0 is rejected and Ha is accepted or in other words there is an effect of basic salary remuneration on the tradeoff of experts in stable conditions. The contribution made was 0.909 x 0.909 x 100 = 82.63%.

Hypothesis 6: The Effect of BBS, BBU, TP Remuneration on the tradeoff of experts in stable conditions

Table 14: Results of Statistical Data Analysis

Influence	Coefficient value	t-statistic	t-table	P-value
$\beta Y_2 X_2$	1,252	3,592	1,660	0,001

The coefficient value for X2 is 1.252, and the t-count value is 3.592, which exceeds the critical t-table value of 1.660 at a significance level of 0.001. Therefore, we reject the null hypothesis (H0) and accept the alternative hypothesis (Ha), indicating that there is an effect of BBS, BBU, and TP remuneration on the trade-off of experts in stable conditions. The contribution given was 1.252 or 125.2%.

Hypothesis 7: The effect of profit remuneration on the tradeoff of experts in stable conditions

Table 15: Results of Statistical Data Analysis

Influence	Coefficient value	t-statistic	t-table	P-value
$\beta Y_2 X_3$	-1,259	-3,592	1,660	0,001

The coefficient value X3 is -1.259, and the t-count value is -3.592, which is less than the critical t-value of 1.660 at a significance level of 0.001. Therefore, we accept the null hypothesis (H0) and reject the alternative hypothesis (Ha), indicating that there is no significant effect of profit remuneration on the expert trade-off under stable conditions. The contribution made is -1.259 or -125.9%.

Hypothesis 8: The effect of BBS, BBU, TU basic salary remuneration and simultaneous profits on the trade-off of expert remuneration in stable conditions

Table 16: Results of Statistical Data Analysis

Influence	Coefficient value	t-statistic	t-table	P-value
$\beta Y_2 X_2 X_3$	0,902	147,802	3,950	0,000

The coefficient values X1, X2, and X3 have a combined value of 0.902. The obtained F-count value of 147.802 is greater than the critical F-table value of 3.950, with a significance level of 0.000, which is less than the predetermined threshold of 0.05. Therefore, the null hypothesis (H0) is rejected, and the alternative hypothesis (Ha) is accepted. In other words, there is a significant influence on the basic salary remuneration of BBS, BBU, and TU and the simultaneous benefits of trade-off remuneration for experts in stable conditions. The contribution given was 0.902 or 90.2%.

4. Discussion, Conclusion and Implications Discussion

After analysing the remuneration data for experts, the subsequent step involves researchers engaging in a comprehensive discussion of the responses to the problem formulation pertaining to: 1) What is the comparison between the remuneration prices of the tender winner and the current year's Inkindo standard? 2) Determining the trade-off model for expert remuneration offers. 3) How to make Strategies for determining profit margins. 4) What impact does the remuneration parameter have on the development conditions of existing projects?

Understanding the calculation of remuneration enables consultant service providers to strategically determine appropriate compensation rates for experts involved in project tenders. In the concluding phase of this study, we aim to develop an equation that project planning consultant service providers can utilise to predict the expert remuneration price. This will aid in the facilitation of preparing the offering price. This research aims to develop a model for determining the trade-off between remuneration and consultant service expertise in projects within the LPSE environment. The model obtained is an adjusted calculation for determining the direct cost of personnel or expert compensation.

The average bidding price of the consultant is 10% lower than the owner's price, with a presentation rate of 92.3%, which is close to the standard. The consultant's bidding price differs from Inkindo's price by 17%, with a presentation of 71.6%, which is close to the standard. The price comparison presented is derived from the documentation data of project tender winners spanning from 2017 to 2021. The minimum consultant remuneration price is set at 53% of the standard established by Inkindo. The consultant's highest offered remuneration price was 84%.

The trade-off in determining the remuneration price for the latest experts discovered by researchers in 2023 is the simultaneous consideration of basic salaries for BBS, BBU, TU, and profits in a limited number of projects. This trade-off affects the calculation of expert remuneration in specific project conditions. The consultant's offer is Rp. 21,540,383, which is 94.6% of Inkindo's standard. In the case of many projects, the calculation of the remuneration price for the basic salaries of BBS, BBU, TU and the simultaneous profit of the Trade-off remuneration of experts in the condition of many projects. The offer determined by the consultant with the highest price of Rp. 43,187,390 or 96.9% of Inkindo's standard.

Consultants can use the Hurwicz criteria to determine the expert's remuneration. By applying this criterion, consultants can ensure that they always secure profitable opportunities when bidding for the remuneration price. The EMV calculation model is used to determine the profitability of project bids in West Java, taking into account the varying conditions and available projects. This allows companies to accept bids and maximise profit opportunities, considering both unstable/little conditions and stable conditions/many available projects. In contrast, the remuneration price offer will be raised when multiple projects are involved or when favourable conditions are present, ensuring acceptance by the tender and resulting in profitable outcomes.

To strengthen a decision, statistical analysis is used on the parameters of remuneration for experts based on the condition of the number of projects. There is an effect of basic salary remuneration, BBU, BBS, TP, and simultaneous benefits on the trade-off of experts in the case of a few projects. Based on the analysis of significant influence, the calculation of the amount of base salary remuneration for BBS, BBU, and TU and the simultaneous profit on the expert remuneration trade-off in the condition of many projects proposed by the consultant with the highest price have a significant effect so that the expert remuneration price offer can be continued.

5. Conclusion

1. The price range offered by consulting experts closely aligns with the standard price set by Inkindo. This implies that the consultant's bidding price has satisfied the tender requirements, resulting in the acceptance of their offer and declaration as the winning bid.

2. The remuneration offered by experts to project planning consultants varies, but it is generally close to the minimum remuneration standard set by Inkindo.

3. The decision-making process for determining the profit amount for consulting service experts involves selecting the lowest profit value during unstable conditions or when there are limited projects available. Conversely, during stable conditions or when there are numerous projects available, the profit amount is determined based on the highest profit value, which is automatically linked to the expert remuneration price offer.

4. The impact of compensation factors on inbound investment circumstances. It is imperative to offer a competitive salary to proficient leaders, along with additional expenses, when engaging their services for projects that are either unstable or scarce in availability. Experts are provided with basic salaries and allowances as determined by the government, particularly during stable periods or when there are numerous projects.

6. Implications of Research Results

Conceptually, this study aims to produce an equation model that can be used to predict the amount of the trade off in the offer of remuneration prices for project planning consultants.

Based on the model analysis carried out and the conclusions obtained, this study has the following implications:

1. The author anticipates that this work can serve as a valuable point of reference for determining the remuneration amounts in project planning consulting service bids.

2. It is the aspiration that companies involved in consulting services find this study a useful guideline and point of reference when preparing their price proposals for expert remuneration in the context of West Java LPSE projects.

3. The LPSE is encouraged to consider and incorporate the trade-off calculation model for expert remuneration prices developed by the author into their decision-making processes.

4. Prospective entrepreneurs looking to establish consulting service businesses are encouraged to utilize this work as a guiding reference for calculating trade-offs related to expert remuneration.

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